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Reconstructive Description of Eighteenth-century Xinka Grammar

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Foreword

My interest in Xinka was sparked in 1997 when my colleague and friend Christian Prager showed me the microfilm of a colonial manuscript labelled as *Arte de la lengua szinca* that he had ordered from Harvard University's Tozzer Library. This colonial grammar had not been subject to intensive research before and Xinka, the language described in it, seemed to be a true enigma: genetically unaffiliated to any other Mesoamerican language, moribund to extinct, and chronically under-described; and the general information available about language and culture was rather scarce.

A year later, I submitted a M.A.-thesis to the University of Bonn titled as *Analyse der kolonialzeitlichen Beschreibung einer Xinka-Sprache des Maldonado de Matos* (1770). The subject-matter of the thesis was to prepare a transcription and linguistic analysis of the late eighteenth-century grammar. The analysis was based solely on the language data from the colonial grammar itself - other sources on Xinka, such as the concise grammatical description of the Xinka of Guazacapán by Otto Schumann (1967), were drawn on only peripherically to compare the results of the linguistic analysis with modern Xinka. The differences between the colonial and the other language data were rather striking but could not be bridged at that point, as the available comparative sources did not contain sufficient data on morphosyntax.

At the time when I was writing the thesis, Xinka was considered to be an extinct language and I assumed that the documentation of further linguistic data, exceeding the known materials would not be possible. What I learned from the relevant literature about the linguistic and cultural situation in the area and from personal communication with the scholars who had worked in the field (Lyle Campbell, Terrence Kaufman and Lawrence Feldman), did not suggest that the Xinka were still a viable speech community. Willem Adelaar cautioned me not to assume that Xinka was completely extinct and that it would always be worthwhile to go and find out for myself.

In 1999, I went to Guatemala to study K'iche'. In an article in the newspaper SigloXXI I had read about a group of Xinka activists in Santa Rosa who were undertaking first steps in the revitalisation of their culture. I successfully made contact and was meeting representatives of the *Consejo del Pueblo Xinka de Guatemala* (COPXIG) in Guatemala City as well in Chiquimulilla, Santa Rosa. Presenting them with a copy of my transcription of the *Arte de la lengua szinca*, I inquired about remaining Xinka speakers. The COPXIG confirmed the existence of such speakers and showed interest in any future project of linguistic documentation, for which they assured me of their support. This was the incentive for me to continue research on Xinka for my doctoral dissertation.

To finance field research in Santa Rosa, I applied to the *Foundation for the Advancement of Mesoamerican Studies, Inc.* (FAMSI) and was generously granted funding in January 2000. In the years 2000, 2001 and 2003, I went to the field four times to document and record linguistic data. The first two field campaigns, in February-March and October-November of 2000, were financed with the FAMSI grant. As the COPXIG managed to localise more speakers, additional field research became necessary in March-April 2001 as well as in March-April 2003. For this last

field campaign I received a grant from the DAAD (*Deutscher Akademischer Austausch Dienst*).

Field research would not have been possible without the cooperation of the COPXIG. The COPXIG was founded in March 1996 in Chiquimulilla, Santa Rosa, as the first official representative organisation of the Xinka people of Guatemala. In the meantime, other local and regional activist groups have emerged. In 2002 the *Consenso de la Unidad del Pueblo Xinka* (CUPXIG, later CONXIG) was formed that became the *Parlamento del Pueblo Xinka de Guatemala* (PAPXIGUA) in 2003. The COPXIG continued to exist as a separate organisation. Both organisations have been rivalling for political authority in the process of Xinka revitalisation. The COPXIG's main objectives are the redefinition of Xinka culture and the political integration of the indigenous population of the Xinka area on the national level. They have shown particular interest in preserving and reviving the language as a sign of their re-awakened ethnic identity. In 1996, some of the COPXIG-members made an effort to document and learn the language by taking language lessons with Julian de la Cruz, the last Xinka speaker of Chiquimulilla, who died later the same year.

The cooperation with the COPXIG facilitated the process of locating remaining speakers and establishing contact with informants. The degree of reservation that especially elderly people in the area show towards foreigners made the COPXIG indispensable to the project. Demetrio López de la Cruz and Felipe de la Cruz López as well as Ever Benito Benito (who later became a member of PAPXIGUA) accompanied me on all visits and interview sessions. Informants were more comfortable interacting and communicating with them, rather than directly with me. Local activists have since been very involved in language documentation and revitalisation. Copies of all documented data, including audio recordings as well as interview transcripts, were left with the COPXIG in Chiquimulilla.

The purpose of field research was the documentation of data on Xinka morphosyntax. The last speakers' language information turned out to be rather fragmentary and answers provided by the informants were quite deviant. I had tried to solve the difficulties methodologically by applying a reconstructive approach to the data, but when Lyle Campbell kindly invited me over to Salt Lake City in October 2005 to take a look at the language materials that he and Terrence Kaufman had documented in the 1970s, I was faced with the fundamental problems regarding the quality of my data and the chosen approach. Their extensive and detailed documentation of three Xinkan languages confirmed that a description of the modern Xinka of Guazacapán based on my field data alone was not practical. To avoid an overlap with Campbell's project, I decided to change the thematic orientation of the dissertation and concentrate on the colonial grammar instead, making use of my primary data from Guazacapán to enhance and expand the description of colonial Xinka that I had started with my M.A. thesis.

I hope that this dissertation can complement the research on Xinka carried out by Lyle Campbell, Terrence Kaufman, Roberto Zavala, Chris Rogers and others who are associated with the research group at the Center of American Indian Languages (CAIL) of the University of Utah in Salt Lake City.

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My thanks go to the *Abteilung Altamerikanistik und Ethnologie* of the *Institut für Griechische, Lateinische, Romanische Philologie und Altamerikanistik* of the University of Bonn for years of hiring me as a research assistant, temporary faculty member and course lecturer (*Lehrbeauftragte*), and for continuing to provide me with an "academic home".

Prof. Dr. Lyle Campbell has been very supportive, inviting me to Salt Lake City and allowing me to take a look at his and Terrence Kaufman's Xinka data from the 1970s. He permitted me to moderately reference and cite this unpublished linguistic material, and I would like to thank him very much for his help.

I am indebted to my Xinka informants and to the members of the *Consejo del Pueblo Xinka de Guatemala* who made field research possible and who accompanied me on all occasions: Demetrio López de la Cruz, Ramiro López Ramírez, Felipe de la Cruz López and the entire family López Díaz. I also thank Ever Benito Benito for his help in 2003. With deep gratitude I would like to name my informants: Pablo Esquite García (†), Raymundo Hernández, Sebastián Hernández (†), José Antonio López Perez (†), Juan Antonio Santos Benito and all the other elders from Guazacapán and Chiquimulilla who contributed. Many of them have passed away since and I treasure the time they have granted me.

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Meinen lieben Eltern

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Abbreviations

Morphosyntactic and descriptive categories

1	first person
2	second person
3	third person
p	plural
s	singular
A	agent, transitive subject argument
A _{DEP}	agent (dependent-marking)
ACC	accusative
ACT	active
ADJ	adjective
ADV	adverb, adverbial
AGT	agentive
ANIM	animate
ANT	anterior/perfect
AP	antipassive
ASP	aspect
AUG	augmentative
AUX	auxiliary
AVC	auxiliary verb construction
BEN	beneficative
CAUS	causative
CENT	centric marker
CL	classifier
COM	complement clause, complement
COMIT	comitative
COND	conditional
DC	deictic centre
DECL	declarative
DEF	definite
DEM	demonstrative
DEP	dependent marker
DER	derivational
DET	determiner
DETRANS	detransitive
DIM	diminutive
DIR	directional
DISTR	distributive
DO	direct object
E	extended argument
EXCL	exclamation
EXIS	existential
EXO	exocentric marker
EXH	exhortative
FOC	focus
FT	field translation
FUT	future
IMP	imperative

IMP.VI	imperative marker on intrans. verb
IMP.VT	imperative marker on trans. verb
IMPFV	imperfective
INANIM	inanimate
INC	incompletive
INCH	inchoative
INDEF	indefinite
INF	infinitive
INSTR	instrumental
INT	interrogative
INTENS	intensifier
INTR	intransitiviser
IO	indirect object
IRR	irrealis
LD	left dislocation
LIG	ligature
LOC	locative
LVC	light verb construction
MOD	modifier
N	noun, nominal, nominaliser
NEG	negation
NOM	nominaliser
NP	noun phrase
NPAST	nonpast
NUM	numeral
O	object argument
OBL	oblique argument
OPT	optative
O-COM	complement clause in O function
OT	original translation
P	patients
Pd	possessum
Px	possessor
PASS	passive
PART	participle
PART.ACT	active participle
PART.PF	perfect participle
PAST	past tense
PAST.ACT	active/agentive past
PF	perfect
PFV	perfective
PL	plural
POS	positional
POSS	possessor, possessive
PP	prepositional phrase
PN	pronoun
PREP	preposition
PREP.CAUS	causal preposition
PROG	progressive
QUANT	quantifier
REDUP	reduplication
REFL	reflexiv

REL	relative clause, relativised
S	subject, intrans. subject argument
S _{DEP}	subject (dependent-marking)
STAT	stative-resultative, stative participle
SUB	subordinate clause, subordinate
SUBJ	subjunctive
S-COM	complement clause in S function
TAM	tempus – aspekt – modus
TOPN	toponym
TRANS	transitiviser
V	verb, verbaliser (only in morphosyntactic description)
VI	intransitive verb
VN	verbal noun
VT	transitive verb
Ø	zero, zero person

V	vowel (only in phonological explanation)
C	consonant
[...]	phonetic representation
/ ... /	phonemic representation
< ... >	graphemic representation
{ ... }	morphological structure
-	morpheme boundary
=	1) clitisation (in gloss) 2) corresponds with... (in literal English translation of glosses and all other contexts)
*	reconstructed form
>	changes to...
<	derives from...
→	sound change in synchronic data
~	varies with...
/ _	contextual environment of a process, _ indicates the position of a specific change, e.g. C' > C'
/V _ V	
#	word boundary

Xinka languages

ALS,	Arte de la lengua szinca
X _M	Maldonado-Xinka
Ch, X _{Ch}	Xinka of Chiquimulilla
G, X _G	Xinka of Guazacapán
Ja, X _{Ja}	Xinka of Jalapa
Jum, X _{Jum}	Xinka of Jumaytepeque
Jut, X _{Jut}	Xinka of Jutiapa
S, X _S	Xinka of Sinacantán
Y, X _Y	Xinka of Yupiltepeque

References Xinka-sources

C	Calderón (Ch, Y 1908)
Cam	Campbell (G, Ch 1972)
C&K	Campbell & Kaufman field notes (1971-1979)
F	Fernández (Ch 1938)
Gav	Gavarrete (S 1868)
JAP	José Antonio Pérez (G 2001)
JC	Julio Cruz (Ch 1996)
JS	Juan Santos (G 2000)
Jum	various data from Jum (1990s)
L	Lehmann (copy from Sapper Ch, Y 1911)
MA	McArthur (G, Ch 1966)
MM	Maldonado de Matos (~1773)
MQ	McQuown (Ch 1948)
P	Pineda Pivaral (Ch 1969)
PE	Pablo Esquite (G 2000)
RHG	Raymundo Hernández Godínez (G 2003)
S	Schumann (Ch 1966, G 1967)
SH	Sebastián Hernández (G 2000)
V	Valdéz (Y, Jum or Ja 1868)
Z	Zeeje ms. /Morales (Ch 1812)

Loans

L-M	Mayan loan
L-N	Nahuan loan
L-S	Spanish loan
L-MZ	Mixe-Zoque loan

Language branches [after Kaufman 2003]

CM	Central Maya (WM + EM)
EM	Eastern Maya (GK + GM)
GK	Greater K'iche'an (Yuk + GTz)
GLL	Greater Lowland Maya
GQ	Greater Q'anjob'alán
GTz	Greater Tzeltalan
LL	Lowland Maya: Yukatekan + Ch'olan
pCh	proto-Ch'olan
pCM	proto-Central Maya
pK	proto-K'iche'an
pM	proto-Mayan
pQ	proto-Q'anjob'al
pY	proto-Yukatekan
WM	Western Maya: GTz + GQ

Cited languages [after Kaufman 2003]

CHIK	Chikomuselteko
CHL	Ch'ol
CHN	Chontal
CHR	Ch'orti'

CHT	Ch'olti'
IXL	Ixil
KAQ	Kaqchikel
KCH	K'iche'
LAK	Lakandon
MAM	Mam
MOP	Mopan
PCH	Poqomchi'
POP	Popti'
POQ	Poqom
PQM	Poqomam
QAN	Q'anjob'al
QEQ	Q'eqchi'
TEK	Teko
TOJ	Tojolab'al
TUZ	Tuzanteco
TZE	Tzeltal
TZO	Tzotzil
TZU	Tz'utujil
WAS	Wasteko
YUK	Yukateko

No-Mayan languages & branches

pMi	proto-Mixe
Pmz	proto-Mixe-Zoque
pOM	proto- Oacaxa-Mixe
Pvm	proto-Veracruz-Mixe
Pz	proto-Zoque
CAC	Cacaopera
HUA	Huave
LEN	Lenka
MAT	Matagalpa
MIS	Miskito
MIX	Mixe
NAH	Nahuatl
OTO	Otomanguean
PAY	Paya
PIP	Pipil
SUM	Sumu
TEQ	Tequistlatec (Chontal)
TOTO	Totonakan
ZOQ	Zoquean

References loanwords

[BV-91]	Barrera Vásquez 1991
[C-71, ..., 85]	Campbell 1971, ... , 1985
[C&K-76]	Campbell & Kaufman 1976
[Ch-99]	Christenson 1999

[D-97]	Dienhart Mayan Languages Database (Dienhart 1997)
[E-65]	Edmonson 1965
[H-05]	Hull 2005
[K-92]	Karttunen 1992
[K-03]	Preliminary Maya Etymological Dictionary (Kaufman 2003)
[L-20]	Lehmann 1920
[La-88]	Laughlin 1988
[M-66]	Mayers 1966
[Mo-35]	Morán 1935
[S-73, 77]	Schumann 1973, 1977
[SM-89]	Smailus 1989
[W-95]	Wichmann 1995

Linguistic forms, examples and phonological rules are represented following the IPA-standard including North American symbolic conventions. Otherwise the text follows British English conventions.

Original data are cited by source (e.g. ALS, G-S, Ch-C, G-RHG); analysed or phonemicised data are cited by regional origin/category (e.g. X_M , X_G , X_{Ch})

Introduction

... había gente que hablaba el idioma ... había ... pero todos esos ya murieron ... todos ... (Sebastián Hernández 27.10.2000)

Languages die with those who speak them. Sebastián Hernández, one of the last Xinka speakers from Guazacapán in Santa Rosa, Guatemala, told me that he learned to speak the *idioma de antes* (ancient language) from an elderly woman when he was child. Xinka¹ had already become a language of the old generation by that time and young speakers could only rarely be found. At the end of the twentieth century, Xinka was already believed to be mostly extinct (cf. Campbell 1972a:187; Suárez 1983:xvii), and with the arrival of the year 2000 just a small handful of speakers with some fragmented language knowledge was left.

Xinka is a family of closely related languages that were formerly spoken in the Guatemalan *suroriente*. The language area comprises the southeastern coastal plain and the adjacent highlands, which corresponds roughly to the territory of the modern departments of Santa Rosa, most of Jutiapa, as well as the southern part of Jalapa. Dominated by a Spanish-speaking ladino population, the Guatemalan *oriente* and the *costa sur* seemed to be of little scientific interest to linguists, ethnographers and historians, which leaves us today with a scarce number of data sources and a profound lack of cultural and linguistic information. Most studies focussed on the question of the genetic affiliation of the Xinka language, which has to date not been convincingly clarified (see Campbell, Kaufman & Smith-Stark 1986; Suárez 1983). In 1944, Franz Termer described the state of documentation as follows:

Aus jüngster Zeit besitzen wir nur über die Sprache der Xinka, die von jeher die Linguisten interessiert hat, einiges Material, das aber noch keine ausreichende Grundlage zur Erkenntnis des Sprachaufbaus und der Sprachverwandtschaft bildet, zumal uns Texte im Xinka völlig fehlen (Termer 1944:100).²

This situation is mainly unchanged and to the present day we still lack a thorough analysis and description of Xinka grammar.³

¹ Information on pronunciation: ['šinka] or ['sinka]. The use of grapheme <x> to indicate the sound [š] corresponds to the convention after La Parra (see Campbell 1977:20) that was introduced and followed in Guatemala in colonial times and has survived in the standardised official orthography of the modern Maya languages of Guatemala (cf. Oxlajuuj Keej Maya' Ajtz'iib' 1993).

² "On the language of the Xinka that has always been of interest to the linguists we have recently acquired some material which, however, does not yet constitute a sufficient basis for conclusions regarding the language's structure and affiliation, especially since we are lacking Xinka texts altogether."

³ In the 1970s, Lyle Campbell and Terrence Kaufman undertook extensive linguistic research of several Xinka varieties. The results of their thorough investigation have to date only been published partially. However, Lyle Campbell has included the databasing and analysis of the written documentation and recordings into the project "Xinkan, Pipil and Mocho': Bringing Three Endangered Language Documentation Projects to Completion" which is funded by the National Science Foundation and based at the Center for American Indian Languages (CAIL) at the University of Salt Lake City (see also § 2.2.2.11).

The situation of Xinka may be seen as representative for that of many other minority languages in Latin America. Although supposedly once the area with the highest language density in the world, the Spanish conquest and its colonial repercussions left many languages of the Americas extinct (see e.g. Campbell 1997a:3-4). Epidemics, slavery and genocide caused the depopulation of vast areas, and the remaining indigenous population was exposed to a dominant European culture. Ethnic intermixture (*mestizaje*) generally went in favour of Spanish culture and, thus, Spanish as the primary language. In other areas, the invaders promoted the use of native *lingua francas*, such as Nahuatl in Guatemala, to facilitate administration and christianisation – a practice that contributed to the loss of local languages (see Adelaar 1991:45-46). As a result, many languages of the Americas have disappeared without trace or record. The significant number of language isolates can be seen as a sign of the rich linguistic diversity that is now lost. Ethnonyms and toponyms are sometimes the only indication of the former existence of a language in a specific area. Also, local varieties of Spanish or Portuguese may still reflect traits of an otherwise lost substrate (Adelaar 1991:45, 49).

Language death has accelerated in the Americas as much as in other parts of the world.⁴ It cannot be ascertained precisely how many Amerindian languages are still spoken today. Languages are often assumed to be dead for reason of ignorance of elder's knowledge in the younger generations (Adelaar 1991:49). And in some cases languages and dialects that were thought to be extinct have been rediscovered in isolated areas and at peripheries of settlements – sometimes it is only a single family or a very remote hamlet where knowledge about a specific language is still preserved (Adelaar 1998:12; Wurm 1998:193).

With language being a fundamental and central component of culture, language death reduces not only the typological variety among the world's languages, but also the cultural and intellectual diversity of humankind (cf. Hale 1992:1 & 1998; Krauss 1998:109-110; Matsumura 1998:v; Mithun 1998; Yamamoto 1998:228-229). Every language reflects and encodes a unique worldview, specific forms of thought, belief and insights, as much as the culturally accumulated achievements of a respective speech community to deal with their environment (Wurm 1991:7; cf. as well Krauss 1998:109-110). Failing to document an endangered language results in the irretrievable loss of human knowledge and precludes the reconstruction of cultural history in those parts of the world where historical information in written form is missing. With each undocumented language that becomes extinct in the Americas, we lose information about genetic affiliations and cultural contacts, and thus, about cultural histories and population movements in prehistoric America (see Adelaar 1998:2-3). In particular, the thorough documentation and analysis of linguistic isolates can be of eminent consequence for clarifying the cultural past of a given region (cf. Brenzinger 1998:96).

With a few exceptions in Amazonia, there are not many languages in Latin America that are entirely undocumented (Adelaar 1991:47). We owe the vast majority of the available language data to Christian missionary efforts. During the colonial times it was the Roman-Catholic missionaries, and in the twentieth century

⁴ It is an estimate that about half of all known languages in the world have become extinct over the past 500 years and that two-thirds of the roughly 6000 languages still spoken today will not survive the next century (cf. Sasse 1992a:7, Payne 1997:1, Grenoble & Whaley 1998:vii).

particularly the linguists sent out by the Summer Institute of Linguistics, who produced linguistic descriptions of local languages for the purpose of evangelisation. However, detailed reference grammars have been written only for a comparably small number of Amerindian languages (Adelaar 1991:47-48). The greater part of language documentation has to be considered as insufficient with regard to the quality of linguistic information provided. Especially the subtleties and finer complexities of grammar still remain highly understudied and underdescribed aspects even for those languages that are apparently well-documented (e.g. Mayan languages).

In response to this situation, ever more researchers from the linguistic and the social sciences have started initiatives to document and properly describe Amerindian languages. In the sight of increasing language loss, linguistic research is thought to have two main responsibilities: documentation and theoretical reflection. Linguists are demanded to make the description of undocumented endangered languages the main focus of their investigation, and to show more interest in the methods of linguistic documentation and the preservation of linguistic data (cf. Yamamoto 1998:225, 228; Adelaar 2001:69).⁵ Such a shift in focus would (a) extend the empirical basis of language data for linguistic research, (b) permit theoretical reflection about the processes of language endangerment/death, and thus, broaden our understanding of the phenomenon as such, and (c) produce the data relevant for the preparation of educational materials for language revitalisation (besides creating awareness in the speech community) (cf. Brenzinger 1998:87; Robins & Uhlenbeck 1991:xiii).

As important as fieldwork and 'rescue linguistics' is research that aims at extracting more information about endangered languages from historic, ethnographic and other similar sources (cf. Wurm 1998:195-196). The documentation of Amerindian languages started in the early colonial era. With the help of native informants, members of the clergy diligently compiled and prepared dictionaries and grammars as well as confession manuals, religious/biblical texts and sermons for the purpose of the Christian mission (see Smailus 1989b:17). These materials are not rarely of an incredible accuracy and provide insights into the structure and lexicon of languages which have since changed. Furthermore, the indigenous nobility –in Mesoamerica more than in other areas– made use of the newly introduced Latin alphabet to record histories, claims for land, wills etc. in

⁵ As a theoretical response to the increase of dying languages in the twentieth century, a new field of study has emerged that concentrates on socio-cultural as well as structural-linguistic aspects related to the phenomenon (cf. Sasse 1992a:7, Wurm 1991:1). The strong interest in the topic has yielded many recent studies which focus on specific aspects of language endangerment (Robins & Uhlenbeck 1991; Grenoble & Whaley 1998; Matsumura 1998), language obsolescence (Dorian 1989) and language death (Sasse 1990 & 1992; Brenzinger 1992; Crystal 2000). The terminology used in this new field of research is still unstandardised. The terms 'endangerment', 'obsolescence' and 'death' are used in an interchangeable and variable way, which can be attributed to the circumstance that the investigations have varying thematic foci. Sociocultural factors that lead to language endangerment and structural language loss are mostly being treated as separate phenomena (cf. Brenzinger 1998:86, 91; see as well Sasse 1992a:9; cf. Campbell & Muntzel 1989:185). Language death is perhaps the most appropriate term to cover all the phenomena involved in the process. In current usage, this term has been applied to refer to language loss itself as much as to the sociolinguistic and structural processes involved in a situation of language shift (cf. Brenzinger *et al.* 1991:20).

their native languages, producing text documents that are invaluable ethnohistoric and linguistic resources. For some languages that are today extinct, colonial grammars (e.g. Alexander-Bakkerus 2005) or indigenous language texts (e.g. Smailus 1973) constitute the only source of documentation and basis for language description.

In Mesoamerican studies, colonial dictionaries and grammars have been traditionally employed as "access-keys" to indigenous text sources (e.g. the Nahuatl *Codex Chimalpopoca* or the K'iche' *Popol Vuh* among many others) and, as a result, the focus was laid on the description of "Classic" varieties of modern languages such as Nahuatl (cf. Newman 1967; Andrews 1975), Yucatek (McQuown 1967) or K'iche' (Edmonson 1967; Dürr 1987).⁶ The past decade has seen an increasing interest among linguists to deal with the contents and methods of analysis of colonial missionary language testimonies (see Hovdhaugen 1996; Zimmermann 1997; Dedenbach-Salazar Sáenz & Crickmay 1999; Zwartjes & Hovdhaugen 2004, among others). Naturally, most studies dealing with modes of linguistic representation or the overall language competence of colonial grammarians concentrate on colonial documentation of languages that are well documented in past and present such as Nahuatl or Quechua (see Hernández Sacristán 1997; Launey 1997).

For Xinka, the corpus of language documentation includes colonial and postcolonial materials: In the late eighteenth century the secular priest Manuel Maldonado de Matos wrote the *Arte de la lengua szinca*, which is to current knowledge the earliest and – with roughly 1300 lexical entries and 108 folios of grammatical description – the most comprehensive source on a Xinkan language. The only existing early Xinka text source, dating to 1812, is an almost literal, word-by-word translation of a Spanish proclamation against Napoleon written in the Xinka of Chiquimulilla. The majority of documented materials stem from the second half of the nineteenth and the first half of the twentieth century, including various vocabularies, or lexical item lists, and concise grammatical sketches of different regional origin (see Calderón 1908; Schumann 1967). All this colonial and postcolonial documentation on Xinka has to date not been sufficiently studied and compared. Our understanding of Xinka grammar is still very limited, even though the results of the linguistic investigations that were carried out and partially published by Lyle Campbell and Terrence Kaufman in the 1970s (cf. Campbell 1971, 1972, 1978a; Campbell, Kaufman & Smith-Stark 1986) are now being disseminated (see footnote 3).⁷

⁶ Newman based his linguistic analysis of Classical Aztec on the dictionary by Molina [1571] as well as on five colonial grammars (Olmos [1547], Molina [1571], Rincón [1595], Galdo Guzmán [1642] and Carochi [1645]), including modern language documentation of Nahuatl dialects (Newman 1967:181). McQuown's description of Classical Yucatec draws on the Motul-dictionary [1577] and the grammar by Coronel [1620] as well as on modern language data in form of Andrade's grammar (McQuown 1967:203). Edmonson (1967) does not specify the sources for his analysis of Classical K'iche', but his *Quiche - English* dictionary includes an array of different, unpublished colonial dictionaries and grammars, including his own contemporary language documentation from the 1950s-60s.

⁷ Audio files of the interviews recorded by Campbell in the early 1970s have been made available on AILLA (The Archive for the Indigenous Languages of Latin America) in Spring 2008 (www.ailla.utexas.org).

The present study will focus on the colonial documentation of Xinka. The objective of the dissertation is the analysis and description of Xinka grammar based on the language information documented by Maldonado de Matos (henceforward 'Maldonado-Xinka') in the *Arte de la lengua szinca* (henceforward 'ALS'). The analysis will draw on comparative Xinka data, including (a) primary language data that I recorded with the last semi-speakers in the town of Guazacapán in the years 2000-03, and (b) all of the aforementioned sources of diverse regional origin (henceforward referred to as 'secondary data') that were available to me at the time of writing.⁸ I choose this comparative approach because the scarcity of Xinka language documentation and the descriptive modes of colonial grammars pose certain constraints for understanding morphosyntactic categories and processes. To compare the patterns and categories from the ALS with other primary and secondary data on Xinka also means to compare language documentation of different times, diverse regional origin and varying documental contexts, or formats.

One subject-matter of the dissertation are the problems and constraints of colonial, secondary and terminal language data, and how these may be dealt with methodologically. It will be shown that in order to identify the morphosyntactic categories and typological properties of Maldonado-Xinka, we will have to determine which forms in the corpus of data reflect regular linguistic change, structural effects of language decay, distinctive descriptive modes or even imperfect documentation. The approach to the analysis and description of colonial Xinka grammar is therefore essentially reconstructive (cf. other typological studies with reconstructive approach, e.g. Givón 2000; Aikhenvald 2000; Gildea 1998, 2000). However, reconstruction cannot overcome the lacuna caused by insufficient documentation, and it can never substitute for detailed language documentation – as provided by the aforementioned extensive data collection of Campbell and Kaufman (see above and § 2.2.2.11).

To sum up, the objective of the present dissertation is to describe the grammar of eighteenth-century Maldonado-Xinka by means of reconstructing the morphosyntactic categories from a temporally and regionally diverse corpus of comparative language data. The following chapter summarises the current state of research about the language and its cultural context and outlines related thematic issues that are relevant to the linguistic analysis. Chapter 2 defines, describes and characterises the corpus of linguistic data that will be the basis of analysis. Chapter 3 is concerned with methodological aspects of language description by means of grammatical reconstruction. Chapter 4 focuses on the analysis and reconstruction of the phonology of Maldonado-Xinka. The reconstructive description of the eighteenth-century Xinka grammar extends over chapters 5-17.

The main text is accompanied by several appendices. Appendix 1 contains a systematic outline of the Latin descriptive categories in the ALS. Appendix 2 gives a complete concordance of all Xinka forms that are found in the colonial Xinka grammar. It does not include the sample phrases, which are analysed and listed in Appendix 3. The concordance (including Appendix 3) serves as main reference material for the phonological and morphosyntactic description; all examples from the ALS are cited by the number given in the concordance. Appendix 4 contains a

⁸ This excludes the primary data documented by Campbell in the 1970s and the interviews recently posted by Roberto Zavala on AILLA (see footnote 7) which I chose not to include.

lexicon of Maldonado-Xinka that includes all the lexical data that can be extracted from the ALS. Appendix 5 lists the loanwords that can be identified in the ALS. In Appendix 6 the examples from the primary field data that are referenced in the text are given with their original field translation contexts. Appendix 7 provides an overview of the interviews that were recorded during field research in the Xinka area.

Organisational remarks

Cross-references of chapters and sections are preceded by §. Examples are numbered separately for each chapter; cross-references indicate the chapter number; i.e. 9.1. = chapter 9, example 1.

Examples taken from the ALS and the secondary sources are indicated with interlinear morpheme glosses and original orthography. The reference language of the gloss and translation is English. The original translations of examples from the ALS and the secondary sources are preserved for transparency and marked as OT (original translation). Where original translations are missing in the data, the source of the example is indicated following the English gloss. Field translations of the primary data (i.e. translations and semantic contexts provided by the speakers during interviewing) are provided for reference in Appendix 6. In the phonology chapter (§ 4) all translations are given in English. Lexical morphemes are glossed in lower case; grammatical morphemes are glossed in capital letters. The examples from the ALS are referenced by their number in the concordance of ALS-entries in Appendix 2. Examples from the corpus of comparative data are specified as such.

With the exception of the phonology chapter, examples are given in phonemic spelling. In examples from the ALS and the secondary sources, inserted Spanish forms are given in Spanish orthography and italics, unless they have undergone phonetic assimilation and can be identified as loanwords. The correction of typos and other erratic forms in the original orthography of examples from the ALS and other prephonemic comparative sources is indicated with *. Corrected original translation contexts are marked the same way. The phonemicisations of examples from the Maldonado-grammar are given in bold letters to visually distinguish them from the comparative examples.

1 The language and its cultural context

This chapter provides an overview about previous research and the current state of information about Xinka language and culture. A rather cursory outline of the available resources on Xinka culture (§ 1.1) will be followed by a more detailed treatment of aspects regarding the geographical distribution (§ 1.2), the linguistic classification of the language (§ 1.3) and the prehistoric cultural contacts, which can be reconstructed based on loanwords in the Xinka lexicon (§ 1.4). The following section describes the process of Xinka language death and the actual situation of the language in the light of contemporary studies about language obsolescence (§ 1.5). The final section will deal with ethnography and the history of the Xinka as an ethnic group (§ 1.6), including reflections on the sociolinguistic settings of Xinka language death. The gradual process of Xinka language death is treated here in some detail, as it determines the objective and methodology of the present study.

1.1 Historical sources and previous research

The *oriente* and adjacent *costa sur* are generally regarded to be the "least indigenous" areas of Guatemala. With its predominant Ladino population, eastern Guatemala has never been a region of high interest to historians or anthropologists. Sources and data are limited and the Xinka turn out to be the least known and certainly least studied of all ethnic groups in Guatemala. General publications on the ethnography of Mesoamerica (e.g. Nash 1967, Vogt 1969) have either utterly ignored their existence or have emphasised the scarcity of information and the urgent need for proper ethnographic fieldwork in the region (Olson 1991:404). Not a single ethnographic monograph on Xinka culture was produced in the 20th century. This can be attributed to the fact that the Xinka had already adapted to local Ladino culture at the time when anthropology emerged as a discipline and academic interest in the indigenous people of Guatemala became *en vogue*. Travelling through southeastern Guatemala in the year 1938, Franz Termer described the Xinka as a mostly "hispanised ethnic group" (Termer 1944:108). His concise article in the anthropological journal *Ethnos* has for a long time been the only study exclusively concerned with Xinka ethnography. Additional ethnographic information is provided by Otto Schumann Galv  z in his Master thesis from 1967. The thesis is, however, primarily focused on the linguistic analysis of the Xinka language of Guazacap  n.

Written by Eduardo Pineda Pivaral in 1969, the *Monograf  a de Santa Cruz Chiquimulilla*, a compilation of contemporary and historical information about the *municipio* of Santa Cruz Chiquimulilla, mentions the Xinka only briefly. More information about Xinka culture can be found in the works of Brinton (1885a), Sapper (1904), Lehmann (1910, 1920), Stoll (1886, 1958), Termer (1948), Rambo (1965), Campbell *et al.* (1975), and Olson (1991). In general, the information provided by these studies is brief and not very detailed. Only very recently, some retrospective ethnographic observations have been collected by members of the COPXIG and representatives of MINUGUA who started to interview among the

elders of Chiquimulilla and Guazacapán about the lost and forgotten traditions (Dirección Departamental de Educación de Santa Rosa 2000, COPXIG 2004).⁹ The available ethnographic data mostly concern aspects of economic and material culture, while our knowledge about the more abstract aspects of former Xinka life, such as social structure or religion, is insufficient. In the most recent years, more anthropological research has been carried out that provides us with information about oral and cultural traditions in the Xinka area. Most of these studies are influenced by issues regarding the role of the Xinka in the cultural rights movement and other socio-political questions (see Dary Fuentes 2003 and 2008, Letona Zuleta *et al.* 2003).

There are very few colonial sources that provide information about southeastern Guatemala. Feldman (1974) presented an inventory of all available manuscripts and documents from and about the area; the list in this paragraph is taken from his compilation. Some information is provided by the account of the conquest in Pedro de Alvarado's second letter to Hernan Cortés written on the 28th of July 1524 (Alvarado 1973 [1524], see as well Termer 1948). Further sources from the sixteenth century that give general information about the Guatemalan *oriente* include Alonso Cerrato's *Tasaciones y tributos* (1549-1555), Juan López de Velasco's *Geografía y descripción universal de las Indias* (1552 [1571-1574]), Diego García de Palacio's *Carta relación ... a Felipe II sobre la Provincia de Guatemala* (1583 [1576], see as well Acuña 1982), and Juan de Pineda's *Descripción de la provincia de Guatemala* (1525 [1594]). The historical writings of Francisco Antonio de Fuentes y Guzmán (*Recordación Florida* [late 17th c.]) and Domingo Juarros (1937 [1808-18]) extend Alvarado's report about the conquest by information from unverified and lost sources (cf. Carmack 1971:183ff.). An anonymous document from 1728 as well as Bernardo Mariano Ximenez [1765] and Julian Fernandez de Bulolon [1790] have more information about the province in the eighteenth century (see Feldman 1974).

Details about the distribution of indigenous languages and the numbers of Xinka speakers are provided by Cortés y Larráz (1958 [1768-70]) and Crespo (Lehmann 1920 [1740]). Following his appointment as archbishop of Guatemala in the year 1768, Pedro Cortés y Larráz issued a census about population density, languages, agricultural production and wealth, as well as social organisation and settlement patterns of all those parishes that belonged to the diocese of Guatemala. He compiled the information sent to him by the priests and his own observations that he had recorded during his extensive first travel through the diocese in a comprehensive work named *Descripción geográfico-moral de la diócesis de Goathemala* (Cortés y Larráz 1958 [1768-1770]; see as well Fowler 1989:30-31). This compilation is regarded the best and most detailed account of this kind for eighteenth-century Guatemala (Jones 1994:72). Preceding Cortés y Larráz' major work, Alonso Crespo's *Relación geográfica del Partido de Escuintla* from the year 1740 had listed some data about population figures and the number of speakers of the various indigenous languages in Guatemala, including Xinka. Both sources have

⁹ Within the framework of a research project about cultural identity and ethnicity in Guatemala that had been initiated by the *Centro de Investigaciones Regionales de Mesoamerica* (CIRMA) in 1998, Rosa Mari Vallverdú carried out a systematic ethnographic investigation of the Guatemalan Southeast (cf. Adams & Bastos 2003).

found consideration in the writings of Brinton (1885a), Lehmann (1920), Termer (1944, 1948), Busto (1962) and Solano (1974).

Historical archives hold unedited colonial documents from and about the region. From the writings of Busto (1962) and Solano (1974) we know that the *Testimonios de las cartas respuestas* (legajo 948) from the *Archivo General de Indias* (AGI), several documents from the *Archivo Arzobispal* in Guatemala City and more than 150 *legajos* of the *partido de Guazacapán* from the *Academia de Geografía e Historia de Guatemala* (AGHG) provide information about southeastern Guatemala. There are further documents in local archives and private collections. For example, the indigenous community in Santa María Ixhuatán, the former *encomienda* of the chronicler Fuentes y Guzmán, is in the possession of some valuable documents that include, among local confraternity documents, a land title written in Nahuatl from the year 1620. This document comprises 109 folios and contains information about the estates and municipal properties at the beginning of the seventeenth century (cf. Ichon & Grignon 1998:327).¹⁰ Feldman (1981) compiled an overview of all colonial sources that provide information about the present-day departments of Jalapa, Jutiapa and Santa Rosa.

Several historical studies have focused on the socio-economic conditions in southeastern Guatemala after the Spanish conquest (Fowler 1989, Orellana 1995, Solano 1974). Feldman (1972, 1979, 1985, 1989 and 1992) paid particular attention to the social and economic integration of the Xinka into the colonial system. But on the whole, our knowledge about colonial Xinka culture is fairly limited. Being the most salient diacritical marker of Xinka culture, the Xinka language has received most scholarly attention, and the scarce ethnographic details are mostly found as supplementary information in publications concerned with the language (cf. Calderón 1908, Lehmann 1920, Schumann 1967).

Archaeological records would be the main source of information about the precolonial population of southeastern Guatemala. Yet, the departments of Santa Rosa, Jutiapa, and Jalapa form one of the archaeologically least studied areas in Guatemala (Estrada Belli & Kosakowsky 1996:29, Estrada Belli *et al.* 1996:110; Ichon & Grignon 1998: 327). Up until now only few excavations have been carried out and the majority of precolonial artefacts from the region are accidental finds or looted objects.¹¹ The known archaeological sites are very often situated on private

¹⁰ The manuscript was discovered and photocopied by Lyle Campbell in the 1970s (Campbell: personal communication, 2001). In 1986, Christopher Lutz and Lawrence Feldman took photographs of the manuscript (Feldman: personal communication, 1998) and in 1990 the fragile document was again photocopied by Alain Ichon and Rita Grignon (cf. Ichon & Grignon 1998:327). Ichon and Grignon have produced a transcription and translation of the Nahuatl text that has never been edited or published. I have not been able to find out whether their work will be made available or whether a copy may be obtained somewhere. I am indebted to Lyle Campbell who has been so generous to send me a copy of the xerox-copy he made in the 1970s.

¹¹ The prehispanic settlements of the area were first surveyed by Franz Termer (1948) and Edwin Shook (1965) who showed a particular interest in the Cotzumalhuapan stone sculptures (cf. Estrada Belli *et al.* 1996:110). In 1974-75, the University of Missouri carried out further archaeological investigations at Postclassic sites including an excavation at the site of Atiquipaque (Feldman & Campbell 1975; Feldman & Walters 1980). In 1986, Alain Ichon (*Centre National de la Recherche Scientifique*) and Rita Grignon (*Universidad San Carlos de Guatemala*) began an extensive archaeological survey and mapping project of the region (Ichon & Grignon 1986-91); the Misión Franco-Guatemalteca mainly concentrated in 1988-

property and the destruction of remains caused by expanding agriculture, settlements and looting is especially in Santa Rosa a severe problem (Estrada Belli & Kosakowsky 1996:29, Pineda Pivaral 1969:129-135).

1.2 Language geography

The Xinka formerly settled in the southeastern pacific piedmont and the adjoining highlands, in an area between the Río Michatoya in the west and the Río Paz in the east, which marks the border between Guatemala and El Salvador (see Map 1). This area corresponds roughly to the present-day departments of Santa Rosa, large parts of Jutiapa, as well as southern Jalapa. In the south, the two volcanoes Tecuamburro (1950m) and La Consulta (1720m) dominate the geography of the area; in the valley between those volcanoes, the Río Los Esclavos finds its way towards the Pacific Ocean. The climate of the Pacific Piedmont is hot and humid; the highland areas of Santa Rosa are more temperate (cf. Estrada Belli *et al.* 1996:111).

Since the colonial times, Xinka culture has been primarily associated with the municipal towns of Chiquimulilla, Guazacapán, and Taxisco that are located along the Pacific route of the Interamerican highway (cf. Termer 1944:101). Beyond this core area, the former distribution of Xinka can only be reconstructed on the basis of historical and linguistic evidence. As the indigenous population of southeastern Guatemala has largely assimilated to local Ladino culture, the former ethnic and linguistic affiliations of indigenous communities in the area are not evident.

1.2.1 Ethnonymic references

The historical and linguistic sources indicate that several ethnic and linguistic groups inhabited southeastern Guatemala at the time of the conquest and its colonial aftermath. The main difficulty in reconstructing the former regional distribution of the Xinka language is constituted by the ambiguities of ethnonymic references in the relevant sources.

Imprecise ethnonymic references are one of the main problems for ethnohistoric research in Mesoamerica in general, as chosen denominations often reflect the author's perspective rather than actual ethnic categories (cf. Fowler 1989:50). There are many cases where it remains unclear whether a specific name refers to an ethnic group, to a language or to a political entity. The ethnonym "Xinka" does not appear in the autochthonous sources and so far the Xinka are not historically identified. There were attempts to associate them with the barbaric Ch'ol tribe (*chol amak*) (cf. Brinton 1885a:97; Lehmann 1920:723-724; Schumann 1967:8), with the Nonoalca-Xulpiti (Lehmann 1920:724) or with the Ikomagi (Brinton 1885b:66, 100, 124, Lothrop 1939:42) –all mentioned in the *Memorial de Sololá* (*Anales de los*

89 on the high density of Classic sites with acropolis architecture at the Río Los Esclavos (Estrada Belli *et al.* 1996:110). Between 1995 and 1997 the Southeastern Coast Survey Project of the Boston University surveyed and tested a large number of archaeological sites in Santa Rosa and Jutiapa, focussing on the development of settlement patterns and complex societies on the basis of demographic, political and land use patterns (cf. Estrada Belli 1999; Estrada Belli & Kosakowsky 1996, 1998).

Cakchiqueles). However, there is no evidence for any of these hypothetical speculations.¹²

One of the earliest references to the peoples of southeastern Guatemala is found in Juan López de Velasco's *Geografía y descripción universal de las Indias* (1571-1574) where Pipiles, Popolucas, Apis and Apayes are mentioned (López de Velasco 1952:35 *apud* Feldman 1974:16).¹³ García de Palacio describes the southeast as inhabited by Pipil, Popolucan and Chontal speakers (cf. García de Palacio 1982:264).¹⁴ Fuentes y Guzmán ([1690] 1972) mentions only the Pipil and the Popolucan. The ethnonym "Xinka" [xingua] appears in the sources and records for the first time in the eighteenth century (see Crespo [1740]).¹⁵ It is not uncommon for languages to be referred to by various names. Besides "Xinca" (e.g. Schumann 1966, 1967; Campbell 1971, 1972), and its orthographic variants "Szinca" (Maldonado de Matos ca. 1773) and "Sinca" (Fernández 1938, Juarros 1937), we also find the designations "Xinca-Popolucan" or just "Popolucan" (Calderón 1908, 1939), and "Pipil" (Pineda Pivaral 1969), all of which are used to refer to sources that provide linguistic data on Xinka. These varying and at times imprecise references to language and ethnic group are the result of insufficient differentiation of auto-denomination and external references, or outsiders' terms.

Schumann mentions that the Xinka originally referred to themselves as "Sinacamecayo" (Nahuatl *çinaka* + *mekayo-tl* "linaje de los murciélagos")

¹² The text of the *Memorial de Sololá*, or Annals of the Kaqchikel, tells us about the Kaqchikel progenitors' migrations through the highlands. On their way they meet the barbaric people (*chicop* "animals") of the *chol amak* who they talk to in their own language with the words "*vaya vaya ela opa*". Lehmann hypothesized that the people of the *chol amak* mentioned in the text were Xinka since the term *ela* means "tongue" in Xinka (Lehmann 1920:724). However, the text is largely mythological in content and the identification thus rather speculative. According to the mythic migration account in the *Memorial de Sololá*, the progenitors of the Kaqchikel fought against the Nonoalca-Xulpiti on their way back from Tulan Zuywa. Most historical interpretations of these mythic sections place this unknown ethnic group on the basis of toponymic evidence in the Gulf Coast area (cf. Carmack 1981:43). Ruud van Akkeren (2000:126) suggests that the mythic battle might likewise have taken place at the Pacific Coast and points out that "Nonoalca" is derived from Nahuatl *nontli* 'mute' and Xulpiti from Nahuatl *xolopiti* 'stupid, idiot, crazy', possibly referring to a non-Mayan-speaking ethnic group.

¹³ Feldman identifies the Popolocas as Xinka, the Apis as the enigmatic population around the volcano Moyutla and the Apayes as Ch'orti Maya (1974:16).

¹⁴ "Y en cada una dellas [provincias] hay y hablan los naturales diferentes lenguas; que parece fue el artificio, más manos que el demonio tuvo en todas estas partes para plantar discordia, confundiendo con tantas y tan diferentes lenguas como tienen, que son: En la de Chiapa: chiapaneca, zoque, mexicana, zotzil, zeldal, quelén. En la de Soconusco: la mexicana corrupta, y la materna y uhtlateca. En la de Suchitépéquez y Cuauhtemala: mame y achí, cuauhtemalteca, chicnauteca, utateca, chirrichota. Los Izalcos y costa de Guazacapán: la *popolucan* y *pipil*. La Verapaz: poconchí, cacchí, colchi. La de San Salvador: *pipil* y *chontal*. El Valle de Acacuatlán y el de Chiquimula de la Sierra: hacacuatleca y apay. En la de San Miguel: pocón y taulepa, ulúa. La Choluteca: mangue, chontal. En Honduras: ulúa, chontal y pipil. Nicaragua: pipil corrupto, mangue, marivio, potón y chontal. En la de Teguzgalpa: la materna y mexicana. Y en la de Costa Rica y Nicoya: la materna y mangue" (García de Palacio 1982:263-264).

¹⁵ This statement does not exclude the possibility that there may be earlier ethnonymic references to the Xinka in unpublished and unedited documents and sources that I have not included in my analysis (see chapter 2.1).

(Schumann 1967:13). Although he does not specify the source of his information, the suggestion seems to be an appropriate inasmuch as it provides an etymological connection to the toponym "Sinacantán". As indicated by the place name, Sinacantán is said to have been the seat of the legendary and mythic *Rey Sinacán*, who is very prominent in local oral tradition. Sinacantán may well have been the former political centre of the Xinka area (cf. Pineda Pivaral 1969:132-134, 484) and it would seem logical if the name "Xinka", or "Sinca", derived from the full form "Sinaca(mecayo)".¹⁶ To date, I am not aware of any alternative interpretations of the etymology.¹⁷

The derogatory Nahuatl term *popoloca* "hablar lenguaje bárbaro" (Karttunen 1983:203) has been applied to various languages and ethnic groups within Mesoamerica. It was Calderón who first presented evidence that the Popoloca spoken by the population of Yupiltepeque in Jutiapa was undoubtedly related to the so-called Sinca spoken in Chiquimulilla, Santa Rosa (Calderón 1908:5). A relation of Xinka with other "Popolucan languages" has been occasionally suggested (Calderón 1908:4, cf. also Termer 1944:117). On the basis of linguistic evidence we can, however, exclude that Xinka is related to the Popolocan languages of Puebla in Mexico, which are classified as Otomanguean (see Suárez 1982:xvi; Gordon 2005), or with the Popolucan of Veracruz that is part of the Mixe-Zoquean family (Suárez 1982; Wichmann 1995; Gordon 2005).

It is unclear whether the external term "Popoloca" refers exclusively to the Xinka-speaking population, or whether the ethnonym included speakers of other indigenous languages from the region. There is still some confusion about the possible existence of a non-Xinka language referred to as "Popoloca de Conguaco", which was apparently spoken east of the Xinka core area in the villages around the volcano Moyutla in Jutiapa (Juarros 1937). On the basis of geographical proximity and toponymic evidence, Campbell has argued convincingly that this language must have been a variant of Xinka (Campbell 1979:947, 954; 1997:14). However, there is no secure evidence for this identification, as the Popoloca de Conguaco remained entirely undocumented. It is also possible that the Popoloca de Conguaco was the language of the so-called Chontales that were mentioned by García de Palacio.

With respect to this, Pineda Pivaral makes an interesting remark, mentioning oral histories from elders in Chiquimulilla who relate that there used to be a *barrio* with Jicaque-speaking population in Sinacantán, and that these Jicaques were originally tributaries (*sujetos*) to the legendary *Rey Sinacán*. It is not clear whether this report bears historical fact or comes from the realm of myth (Pineda Pivaral 1969:132-133). According to Pineda Pivaral's informant, the Jicaque were distinguished from the remaining population of Sinacantán by outer appearance and cultural tradition (id:134).

¹⁶ Sinacamecayo is also a formerly Pipil speaking settlement in the vicinity of Escuintla.

¹⁷ With regard to this we may note that in twentieth-century Xinka the sounds *s* and *š* are not phonemically contrastive, and that the sound change of *š* > *s* is also attested for other loans from Nahuatl into Xinka (see ch. 4.5.2.2). The name *tzinacamecayotl* "Lineage of the Bat", or its Mayan language version *soz't'il*, can be identified in various contexts in the Maya area throughout time. Besides referring to the well-known Tzotzil community of Zinacantán in Chiapas, it was also the name of one of the leading Kaqchikel lineages from Late Postclassic Iximché'. Ethnic or political relations may, however, not be derived from these nominal correspondences.

...al sur del pueblo primitivo, existía una tribu de indígenas, dicen que eran sujetos que infundían pánico con su presencia, eran desnudos, gordos, bajos de estatura, casi enanos, muy velludos del cuerpo, con el pelo largo, y poco respetuosos a las demás personas y a las leyes del poblado... (Pineda Pivaral 1969:483).

Whether these Jicaque were precolonial immigrants to the area, and which relation they had with the local Xinka and Pipil population, remains unclear.¹⁸ The information provided by Pineda Pivaral is certainly too vague to postulate a Jicaque-origin for the Chontales mentioned by García de Palacio, or the Popoloca de Conguaco.

It is striking that all ethnonymic references for the Xinka, including auto-denominations and external reference alike, are drawn from Nahuatl. Moreover, linguistic data on Xinka may even be labelled as "Pipil". In fact, some of the remaining speakers refer to the language as the "dileyto pipil" (Pipil dialect). It is a well-known phenomenon that ethnonymic references and language names do not necessarily coincide with a specific language's affiliation. We may therefore raise questions about the cultural and linguistic relations between Pipil and Xinka population. It certainly needs to be taken into account that some of the ethnonymic references to the Pipil in the historical sources about the region may include, or actually refer to, the Xinka-speaking population. It has been pointed out that there is an overt Pipil influence in the local culture of southeastern Guatemala, which manifests itself mainly in religious belief and oral traditions (Termer 1944:116-117, Schumann 1967:123-131).¹⁹ Termer even mentioned physical similarities between the Xinka and the Pipil (1944:106), inferring that the Xinka may have been the original local population of the area that settled among the Pipil population, albeit with a greater preference for settling on the volcanic slopes than in the valleys (1944:101-102, cf. §1.2). García de Palacio reports that the population of the region had been bilingual in *mexicano* and *popoloca* since the early colonial times.²⁰ Unfortunately, there is no indication whether the chronicler's *mexicano* refers to local Pipil or to Nahuatl, which was the *lingua franca* of early colonial Guatemala. Although the idea that the Xinka were local vassals to Pipil-speaking noble houses would bear some logic for the general reconstruction of ethnic relations and hierarchies in precolonial Guatemala, it is hypothetical and unproven.

¹⁸ Termer's concise ethnographic account provides an interesting detail on this issue. His local informant reported that on pilgrimages to Esquipulas *indigenas* from Chiquimulilla communicated particularly well with people from Oaxaca in their own native languages (Termer 1944:117). It seems likely that this report refers to a local Jicaque population rather than to the Xinka, since Jicaque and the Chontal from Oaxaca have been suggested to be related (cf. Suárez 1983:xvi).

¹⁹ Termer (1944) and Schumann (1967) detect Pipil influence especially in the local narratives. Many of the oral traditions from the Guatemalan southeast are known from the Maya highlands, other stories resemble indeed mythic elements from Central Mexico and again other are unique to the area (Pineda Pivaral 1977). However, the significance of cultural concepts and ideas that may be extracted from oral traditions should not be overemphasised, since narratives may spread quickly and independently from language and cultural identity. The same holds true for religious concepts.

²⁰ "Los indios desta provincia son humildes y de buena condición. Corre entre ellos la lengua mexicana, aunque la propia es el popoloca. En su gentilidad, usaban de los ritos e idolatrías, sueños y supersticiones, que los pipiles y chontales, sus vecinos, de que trataré adelante..." (García de Palacio 1982:264).

Nevertheless, we may take into account that the Pipil were hostile to the Kaqchikel who had expanded far into Pipil territory on behalf of their dominant allies, the K'iche', who tried to gain political control over the entire Pacific piedmont and its riches. The conflict between the Kaqchikel and the Pipil manifested itself in territorial disputes that continued well into the colonial era (cf. Orellana 1995:26). The Xinka borrowed the terms *ači* 'man' and *winaq* 'human, people' from Kaqchikel. The concepts have been semantically redefined in Xinka as *ači* 'foreigner' and *wunak* 'witch', which may indicate that cultural relations between the Xinka and the Kaqchikel were at least antagonistic, if not hostile (cf. Campbell 1972a:188). There is not sufficient evidence to reconstruct and specify the historical relations between the Xinka and their Kaqchikel and Pipil neighbours.

1.2.2 *Reconstruction of the language area*

The former Xinka language area has to be reconstructed on the basis of written sources that provide information about Xinka-speaking population in particular villages and towns (e.g. Crespo [1740] or Cortés y Larraz [1768-70]), or about the regional distribution of languages in general (e.g. Alvarado [1524], García de Palacio [1567]). Further indications for former Xinka settlements are (a) linguistic documentation from villages where the language was once spoken and (b) the distribution of Xinka toponyms (cf. Campbell 1978a:37). This information is of secondary nature and it is in most cases not possible to differentiate between precolonial and colonial Xinka settlements. Moreover, Nahua and Maya toponyms do not preclude the existence of Xinka-speaking population at a specific place (cf. Fowler 1989:50).

There are no secure indications about the exact extension of the Xinka settlement area at the beginning of the colonial era. It is generally understood that Alvarado's account of the conquest is the earliest written evidence for Xinka population in southeastern Guatemala (cf. Lehmann 1920:727, Brinton 1885a:90, Schumann 1967:12-13, Solano 1974:234). Alvarado lists the following villages as stages of his conquest expedition to El Salvador: Atiepar or Atiquipaque (see Termer 1948:84), Tacuilula, Taxisco, Nacendelan or Nancinta (see Termer 1948:84), and Pazaco (cf. Lehmann 1920:727, Termer 1948:45-46). There is one passage in the text that gives information about the inhabitants of these places and suggests that the area may have been settled by the Xinka:

Y deseando calar la tierra y saber los secretos della para que su majestad fuese más servido y tuviese y señorease mas tierras determine de partir de allí y fuí a un pueblo que se dize Atiepac don fuy rescibido de los señores y naturales del y este es otra lengua y gente por sí (Estrada Monroy 1973:35)

The fact that Alvarado mentions the population on the other side of the river, supposedly the Michatoya or María Linda, as speakers of a language different from the Pipil of Escuintla, might be seen as a reference to the Xinka (cf. Busto 1962:105). However, the ethnonym "Xinka" is not mentioned by Alvarado nor Fuentes y Guzmán, who expands on the five villages mentioned by Alvarado, adding the settlements of Guazacapán, Tepeaco, Nextiquipaque, Sinacantán, Tecuaco, Chiquimulilla, Guaymango, Guanagazapan, Jumay (Jumaytepéque),

Izguatlán (Ixhuatán), Comapa, and Jalpatagua as further stages of Alvarado's journey (Fuentes y Guzmán 1972:78-100).²¹

The earliest evidence that these villages and towns were indeed former Xinka settlements is found in the sources from the eighteenth century (cf. as well Termer 1944:98, Fowler 1989:50). Cortes y Larráz (1958) and Crespo (1740) provide first-hand information about the Xinka, their language and population figures. For the early eighteenth century, Crespo (1739) identified Xinka speakers in Guanagazapan, Guaymango, Itiquipaque [Atiquipaque²² or Nextiquipaque²³], Tepeaco, Tacuilula, Taxisco, Guazacapán, Chiquimulilla, Sinacantán, Nancinta, Tecuaco, Ixhuatán, and Jumaytepéque; he furthermore mentioned Jalpatagua as a formerly Xinka speaking village (see Lehmann 1920:729). Cortes y Larráz (1768-1770) indicates higher numbers of speakers than Crespo for all of villages, and adds the towns of Jutiapa, Comapa, Yupiltepeque, Atescatempa, La Zacualpa, Contepeque and Achuapa in the department of Jutiapa, as well as the settlements Valle Tierra Blanca (parish of Tacuilula) and Santa Ana (parish of Xinacantán) (Cortes y Larráz 1958:217-236, Solano 1974:235-236). San Juan Mixtán, at the western periphery of this language area, is mentioned as a trilingual village where the population also spoke *mexicano*, besides Spanish and Xinka (Solano 1969:184; Orellana 1995:75). The data from both sources prove the existence of Xinka speakers in both departments, Santa Rosa as well as Jutiapa, in the eighteenth century. Linguistic surveys and documentation from the late nineteenth and early twentieth century confirm this information and provide further evidence that Xinka was spoken in the southern department of Jalapa as well as in the northern part of Santa Rosa (Jumaytepéque, Nueva Santa Rosa) (Calderón 1908:6, Lehmann 1920:731, Campbell 1978a:36).

An originally wider extension of Xinka population to the north and to the east can be concluded from the distribution of Xinka toponyms (Fernandez 1938:84, Campbell 1978a:36-37). Campbell has identified place names with the Xinka locative prefixes *ay-* "place of" (Ayampuc, Ayarza), *al-* "place of" (Alzatate), *san-* "in" (Sansare, Sansur) or with the locative suffixes *-(a)gua* or *-hua* "town, dwelling" (Pasasagua, Jagua, Anchagua, Xagua, Eraxagua) and took these as indications for former Xinka-speaking population (1978a:36-37).²⁴ Such Xinka toponyms can be found in areas that are today inhabited by speakers of Poqom (Alzatate, Pinula), Kaqchikel (Ayampuc), or Ch'orti' (Ipala).

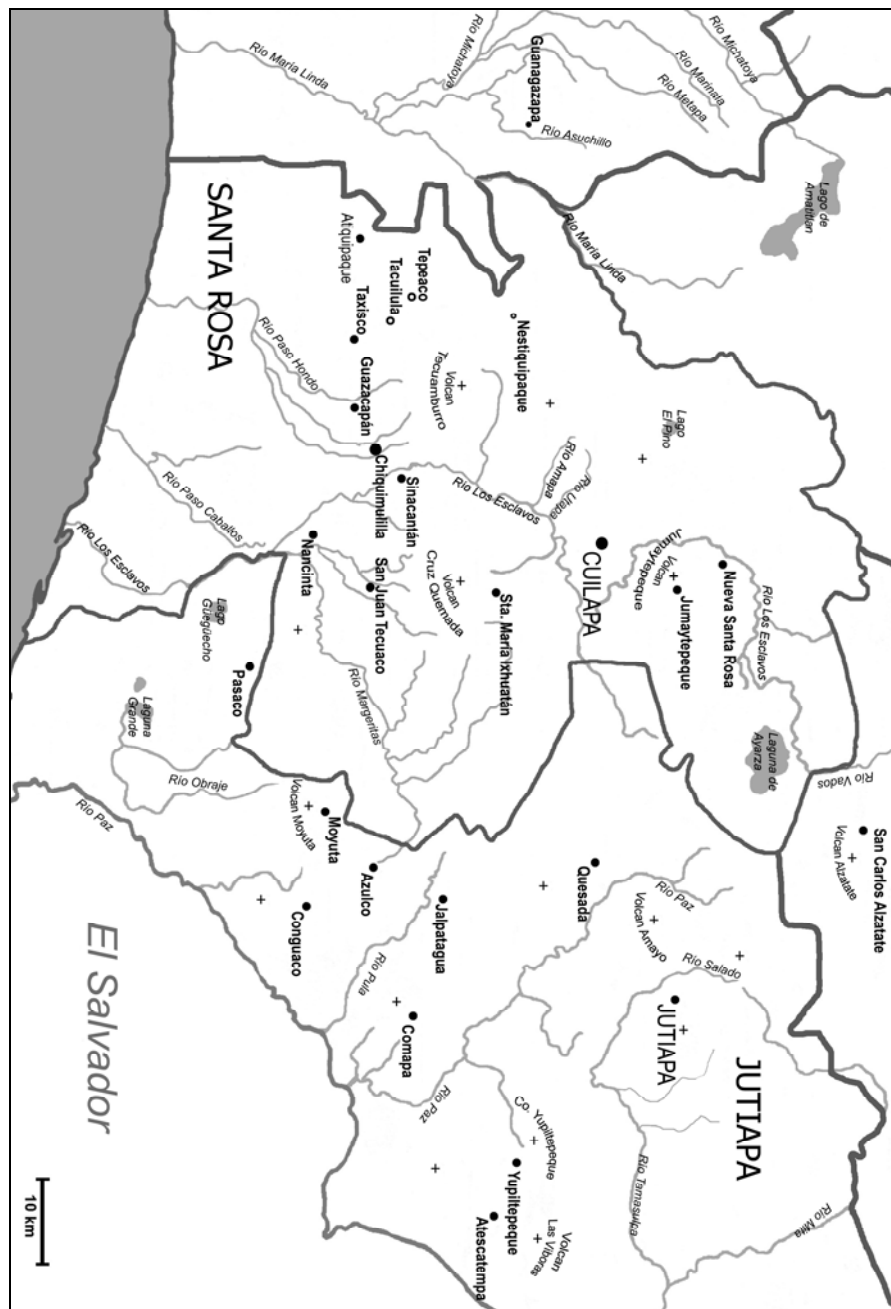
²¹ As Fuentes y Guzman was the *encomendero* of Ixhuatan, we can assume that he simply added those Xinka settlements to the account. The unreliability of Fuentes y Guzmán's chronicle has been widely discussed (Carmack 1973:183-187, Fowler 1989), but since most of the cited sources that Fuentes y Guzman drew on have been lost (e.g. the account of Pedro de Alvarado's brother Jorge), it remains a difficult task to judge which parts of his account are historical fact and which are mere fiction (Carmack 1973:183-187).

²² Lehmann (1920:729)

²³ Termer (1948:84)

²⁴ Based on the distribution of toponyms, Campbell argued that the undocumented Alagüilac language that according to Juarros was spoken in San Cristobal Acasaguastlan in the Motagua Valley may have to be identified as a Xinkan language (Campbell 1972b:203).

Figure 1. 1: Map of the Xinka language area



The odd distribution of Xinka place names raises questions as to how far back in time we may project Xinka presence at the respective places. Campbell (1978:37) mentioned that the fact that Xinka toponyms have survived until today would be an indication for such settlements being rather recent. The survival of Xinka toponyms may also suggest the co-existence of several language groups at a specific place and that Maya dominance in the region may be a colonial phenomenon. Although the distribution of toponyms can provide an indication for former Xinka-presence at a place, the exact time-depth of such a settlements cannot be determined. The majority of Xinka settlements in the core area have official place names that are etymologically Nahua. However, for many of these villages and towns, unofficial Xinka toponyms exist (mentioned in Maldonado de Matos ~1773, Schumann 1967), which are in most cases literal translations of the official Nahua version. Which one of the toponyms is the earlier one, is unclear. While it seems most likely to assume that the Nahua toponyms are colonial or conquest-time translations of original Xinka place names, as it is the case elsewhere in Guatemala (cf. Termer 1944:98, Orellana 1995:26), the precolonial presence of Nahua-speaking population in the area may also suggest the reverse. It also needs to be borne in mind that several of the towns are colonial reductions that did not exist before the conquest. It is also possible that the use of Nahua and Xinka toponyms may reflect a population of mixed ethnic origin, as suggested by Termer (1944:101-102).

Whether the reconstructed distribution of Xinka reflects a continuous Xinka settlement area at any point in history, remains unclear. What is certain is that throughout the colonial times the number of villages with Xinka-speaking population dropped and the Xinka area was gradually reduced. Several factors contributed to a change in settlement patterns in the region since the Spanish conquest (cf. Orellana 1995:61-63). The impact of epidemics and slavery in the *oriente* was drastic and brought about a significant demographic decline in the early colonial era. For better control of the population and to aid the process of conversion, the colonial administration began in 1547 to gather the indigenous population that was dispersed in small hamlets all over the area, and to resettle them in newly founded villages, so-called *congregaciones*. From 1591 onwards, the Spanish populations began to get hold of titles from the crown for their estates and other properties, including communal lands, which caused a further repression of the indigenous population (cf. MacLeod 1973:221-223). A few villages, such as Tacuilula, Atiquipaque, Guaymango and Nextiquipaque, were given up or abandoned as a result of economic change, administrative acts and resettlement policies; some of them continue as isolated hamlets on what is today private territory of *finqueros* (cf. Ichon & Grignon 1998:336-337). With the decline of the cacao industry at the late colonial era, Tacuilula, Tepeaco and Atiquipaque suffered from mass departure of the inhabitants, which caused such a significant demographic fall in the course of which the villages were nearly deserted by the beginning of the nineteenth century, so that the church decided to resettle the few remaining villagers to Taxisco and Guazacapán (cf. Orellana 1995:132). In the case of Sinacantán, that was founded in the Postclassic era (Estrada Belli *et al.* 1996:113) and was still regarded an important settlement by Cortés y Larraz, gradual abandonment caused the formerly independent village to become incorporated as an *aldea* into the *municipio* of Chiquimulilla (Pineda Pivaral 1969:132).

Table 1. 1: Toponyms in the Xinka area

Official Toponym (= Nahuatl)		Xinka-Toponym (after Maldonado de Matos)	
Chiquimulilla	chiquimolo-tlan ?-LOC 'place of ...'	<txege> ²⁵	ç'ehe N "?"
Taxisco	tlalix-co ²⁶ N-LOC 'plain'	kuku ²⁷	kuku N "?"
Tecuaco	tecoa-co ?-LOC 'place of ...'	tuhkuwa	tuhku-wa ?-LOC 'place of ...'
Guazacapán	guazaca-pan snake weed-LOC 'place of snake weed'	<tximaja>	ç'ima- ~~ta~~ ²⁸ gourd-AGT 'potters'
Nancinta	nancin-tlan nance(-tree)-LOC 'place of nance trees' ²⁹	kiša	kiša ³⁰ bat '(place of) bats'
Sinacantan	tzinacan-tlan bat-LOC 'place of bats'	kištamay	kiš-tamay bat-? 'bat + ? (-place)'
Ixhuatan	ix-huat-tlan PREP-leaf-LOC 'place of at/below leafs'	šampiya	šam-piya PREP-leaf 'place of/at leafs'
Pasaco	patza-co "water"-LOC 'place of water' ³¹	šanšowe	šan-šowe PREP-? 'place of/at ?'
Atiquipaque	aticpa-c ?-LOC 'place of ...'	šamipiy	šam-ipiy PREP-? 'place of/at ?'
Tepeaco	tepea-co ?-LOC 'place of ...'	tahti šami piya	tahti-šami-piya savana-PREP-leaf 'savana at the leafs'
Tacuilula	tlacuilo-tlan ?-LOC 'place of ...' ³²	uru†	ʔuru-† fall?-PART.ACT/AGT 'fall'

²⁵ Pineda Pivaral (1969): *ç'ehe* "tierra de tejedores y constructores de matates". The translation refers to the Nahuatl toponym, as the etymology of the Xinka term is unclear and not otherwise attested in the corpus.

²⁶ Termer translates the toponym as "Place of Magic" and suggests that it might refer to a species of tree, the Taxicó = *Perymenium Tückheimii* Vatke which does however not grow in the Pacific Coast (Termer 1944:98).

²⁷ Pineda Pivaral (1969): *taxisco* "tierra de hombres que comen pululo". The etymology is unclear and unattested in the corpus of Xinka data.

²⁸ The original orthography in the ALS gives <tximaja> (= *ç'imaha*); however, the form is morphologically transparent, and thus, is phonemicised as *ç'ima†a*. The sound change of *† > h* is attested in the corpus data (see § 4.3.1.4.2, §4.3.1.5.2).

²⁹ Translation after Termer (1944:99).

³⁰ Pineda Pivaral (1969): *nancinta* "tierra donde habitan muchos murciélagos".

³¹ Termer suggested that this may be the same lexical root that serves to designate the nearby river *Paz* or *Pax* (1944:99). The suffix *-co* suggests that the term is Nahuatl. The root *patz-* in Nahuatl occurs in constructions which have to do with water or liquid, e.g. *patztoca* "to submerge something" (cf. Karttunen 1992:189).

³² Termer translates "lugar de escribantes" (1944:98)

Given the vagueness of the geographical reconstruction of the language area, the identification of potential contact languages of Xinka is rather problematic. We may assume that at the time of the Spanish conquest Xinka-speaking settlements were surrounded by the Pipil in the west and by Mayan-speaking population (including Kaqchikel, Poqomchi', Poqomam and Ch'orti') in the north (cf. Brinton 1885a:89; Schumann 1967:12). The significant number of loanwords from Western and Eastern Mayan languages proves intensive cultural contacts between Xinka and Maya speakers, although the time-depth of these contacts is another matter of discussion (cf. Campbell 1972a). East of the Xinka area, the contact situation is even more opaque, as the linguistic affiliation of the extinct Popoluca de Conguaco is unclear (see above, §1.2.1) and the exact expansion of Pipil and Lenka is not known.

1.2.3 *Internal classification and dialectology*

The available linguistic data on Xinka originate from the villages of Guazacapán, Chiquimulilla, Jumaytepeque, Yupiltepeque, Jutiapa and Sinacantán. Comparative vocabularies and side-remarks in the relevant sources illustrate that the nineteenth-century scholars had already defined the Xinka data from different villages as local language varieties (cf. Berendt 1875; Calderón 1908). This former regional variation is still remembered by some of the last speakers of Guazacapán, who frequently pointed out that the language of Chiquimulilla used to be a different one.

The sources do not provide us with precise information regarding the degree of mutual intelligibility between the varieties. In the case of endangered and not well documented languages, exact linguistic boundaries, or isoglosses, can often only be defined with difficulty (Adelaar 1998:3; Annamalai 1998:22). The distinction between a dialect and a language is basically an issue of linguistic categorisation, which may not correspond to the speakers' perception of what is a language and what is not. Especially non-literate speech communities tend to define language boundaries where, from the linguistic point of view, one would define a dialect (Annamalai 1998:21). Every language exhibits variation and a continuum of linguistic differentiation. Once members of a speech community form separate groups, either geographically or by socio-political conditions, the loss of communication and identity processes lead to the emergence of new varieties, dialects and subsequently individual languages (cf. Dixon 1991:232).

Based on the linguistic data that they documented in the 1970s (see §2.2.2.11), Campbell and Kaufman have defined the varieties of Chiquimulilla, Guazacapán and Jumaytepeque in Santa Rosa and of Yupiltepeque in Jutiapa as different Xinka languages (Campbell 1972a:187). Kaufman once suggested a lexicostatistic distance of 12 m.c. for the entire Xinka language family (Campbell 1978a:36), whereby he corrected Swadesh's calculation of 17 m.c. distance between the varieties of Guazacapán and Chiquimulilla (Swadesh 1967:98-99).

The Xinka of Jumaytepeque (X_{Jum}) in the north of the department of Santa Rosa was first discovered and documented by Campbell and Kaufman (Campbell 1972a:187, Kaufman 1997: pers. comm.). However, prior information about the presence of Xinka speakers in Jumaytepeque had already been provided by Calderón (1908), who visited this village in 1890 (Calderón 1908:6).

The Xinka of Yupiltepeque (X_Y) is clearly the most divergent of the Xinka varieties (Campbell 1978a:36, 1979:938). Calderón reported that speakers from

Yupiltepeque and from Chiquimulilla could not communicate without great difficulty (Calderón 1908:5). X_Y has only been preserved in the linguistic data documented by Calderón in 1890/91 (Calderón 1908, 1939; in Lehmann 1920) and by Sapper (see Lehmann 1920) as well as in the comparative vocabulary of Gavarrete & Valdéz from 1868 (Berendt 1875). These vocabularies, however, make it clear that a distinctive Xinka variety was spoken in the department of Jutiapa. It remains unclear whether the Xinka of Jutiapa/Yupiltepeque was similar to the one spoken in Jalapa; there are data in the Valdéz vocabulary of which we do not know precisely whether they originate from Jutiapa or Jalapa (see §2.2.2.2).

For the department of Santa Rosa, there are various sources of linguistic data from Chiquimulilla, Guazacapán, and Sinacantán. The varieties spoken in Chiquimulilla (X_{Ch}) and Guazacapán (X_G) exhibit overt differences. Xinka was spoken in all indigenous *barrios* of Guazacapán and there are no reports that the language between the quarters differed (cf. Schumann 1967). Calderón (1908:6) and McQuown (1948) indicate that in Chiquimulilla, there were two different varieties with fairly significant lexical divergence in the *barrios* of San Sebastian and Santiago. McQuown documented some lexical material of the variety from the *barrio* of Santiago. The degree of linguistic divergence between these two Chiquimultecan quarters and the internal classification of the Xinka spoken in the *barrio* of Santiago have never been clarified. Equally cloudy is the classificatory position of the variety from Sinacantán (X_S). Only a short list of lexical items has been preserved from Sinacantán (Gavarrete 1868, in Brinton 1885a:91-93; Lehmann 1920:723-734). Yet, this lexical inventory suggests that the X_S was not identical with the geographically close by varieties of Guazacapán and Chiquimulilla.

While the significant linguistic differences of the Xinka varieties in the departments of Jutiapa and Santa Rosa may easily be explained with geographical distance, the dense concentration of different varieties in the area around the volcano Tecumburro poses some questions. The villages of Guazacapán, Chiquimulilla, and Sinacantán are situated at about 5 km distance apart from each other (see Map). Although the terrain is roughened by ravines and hills, there are no insurmountable landmarks such as wide rivers or high mountains that would make the degree of linguistic diversification obvious. It is subject to speculation whether the differences reflect former social bonds or political alliances between the villages, as they were reported by Fuentes y Guzmán.³³ The distribution of languages or dialects may also have been caused by Postclassic Maya migrations that forced the Xinka to retreat to the southeastern corner of Guatemala where they may have re-settled in different formation (cf. Campbell 1978a:36-37). The variation and in particular the fact that different varieties were spoken in the two indigenous *barrios* of Chiquimulilla (Calderón 1908; McQuown 1948), might still be most convincingly explained as the result of colonial *congregaciones*, as has been suggested by Termer who saw the

³³ Fuentes y Guzmán reported that there were two major alliances: Guazacapán, Chiquimulilla, Nextiquipaque, Guaymango, and Guanagazapa on the one side - "Guazacapán, y sus sujetos y aliados, Nextiquipaque, y Chiquimulilla, los de Guaymango, y Guanagazapa, bien que distantes..." (1972:81), and Sinacantán, Nancinta, and Tecuaco on the other - "... este pueblo de Pazaco se hacía inexpugnable y temido; [...] y la alianza de los circunvecinos y parciales Sinacantán, Nanzinta, y Tecuaco, ... " (1972:83). Such a formation could at least explain the overt differences between the Xinka of Sinacantán and the other varieties from the core area.

villages of Guazacapán and Chiquimulilla as newly-founded colonial settlements (Termer 1944:110).³⁴

The linguistic information that we have about the different varieties supports the idea of population migration and re-settlement in the area. Language data of the regional varieties show differences with regard to phonology and grammar. As Campbell and Kaufman point out in their field notes, the classificatory pattern suggested by phonological similarities of the varieties is not consistent with the patterns of grammatical similarities. Comparison of phonological traits and lexical forms indicates similarities between X_Y , X_{Jum} and X_S on one side and between X_G and X_{Ch} on the other (see § 4.5.1). Grammatical resemblance suggests a grouping of X_{Ch} and X_{Jum} , and possibly of X_G and X_Y (see Campbell & Kaufman: field notes). This pattern may be best explained as the result of migration, although the time-depth of such population shifts is not easily determined.

Table 1. 2: Phonological and structural similarities between Xinka varieties

phonological traits	X_G, X_{Ch}	$\neq$	X_Y, X_{Jum}, X_S
grammatical traits	X_G, X_Y	$\neq$	X_{Ch}, X_{Jum}

1.3 Genetic affiliation and theories of origin

Xinka is an unclassified language isolate for that no affiliation within or beyond the Mesoamerican linguistic area could be established thus far.³⁵ The idea that Xinka constitutes an isolate of its own with no identifiable genetic relatives among the other Middle American language families goes back to Brinton (1885a:97) and has been reaffirmed in subsequent studies (Stoll 1886:304 and 1958:247-48, Lehmann 1920:731, Fernández 1938:85, Schumann 1967:8, Campbell & Kaufman 1980:854, Suárez 1983:xiv-xvii, Olson 1991:404, Greenberg 1987:382).

Several attempts have been made to determine the external genetic classification of Xinka. Any of the proposed affiliations rests on the respectively chosen approach to linguistic classification, and on the criteria according to which similarities between Xinka and other languages are defined as genetically indicative (cf. Campbell & Mithun 1979:3-69). The mingling of diffusional and genetic similarities is the main source of erroneous genetic classification.

Former suggestions for the genetic affiliation of Xinka included Mixe-Zoquean (Calderón 1908:56; Lehmann 1915:12, 1920:725; Fernández 1938:85; Stoll

³⁴ Termer points out that it is rather striking that both settlements, if they really existed at the time of the conquest, are not mentioned by Alvarado in his letter to Cortés (cf. 1944:110-113); however, there is no further evidence that can be presented to support this line of reasoning.

³⁵ Mesoamerica is defined as the cultural area between the Río Pánuco in Northern Mexico and the Río Lempa in El Salvador (Campbell 1997:156). The languages in this area have been defined to form a linguistic area that is widely consistent with the cultural area and includes North and Middle American languages (id., Campbell, Kaufman & Smith-Stark 1986). In the literature the distinction of "Middle American languages" and "Mesoamerican languages" is often not carefully met. Campbell understands most Middle American languages, i.e. languages spoken in Mexico and Central America, as belonging to Mesoamerica (1997:157). In the remainder of the text, all languages within the cultural area will be referred to as Mesoamerican languages.

1958:247; Solano 1974:234), Chontal of Oaxaca (Lehmann 1920:725), Cuitlatec of Guerrero (Hendrichs Pérez 1947 *apud* Campbell 1997a: 166), Subtiaba-Tlappanec (Lehmann 1915, 1920:725), the Californian languages Seri, Chumash-Salinan, Hokan (Lehmann 1920:725), Arawakan (Lothrop 1939), as well as the reconstructive attempts of the language phylae Penutian (Sapir 1949:177; Dixon 1969), Macro-Mayan (Swadesh 1967:85)³⁶ and Chibchan-Paezan³⁷ (Greenberg 1987:106; Voegelin & Voegelin 1977:112). Further unsubstantiated proposals do not even meet the standard of contemporary approaches to classification, such as the categorisation of Xinka within a "Maya-Quiche-Carib-Arawak" phylum by Schuller (Fernández de Miranda 1967:77), the association of Xinka with Miskito by Schmidt (id.; Campbell 1979:942), or the definition of Xinka as a daughter language of the family "Mame-Huastèque" by Charencey (1883) (Campbell 1977:78).

Table 1. 3: Classification attempts

Year ³⁸	Suggested Affiliation	Source
1883	Mame-Huastèque (phylum)	Charencey
1885	Xinka-Lenka	Brinton, Lehmann
1908	Mixe-Zoquean	Calderón, Lehmann, Fernández, Stoll, Solano
1915	Subtiaba-Tlappanec	Lehmann
1920	Chontal of Oaxaca	Lehmann
1920	Seri, Chumash-Salinan, Hokan	Lehmann
1939	Arawakan	Lothrop
1947	Cuitlatec of Guerrero	Hendrichs Pérez
1949	Penutian (phylum)	Sapir, Dixon
1967	Maya-Quiche-Carib-Arawak (phylum)	Schuller
1967	Macro-Mayan (phylum)	Swadesh
1977	Chibchan-Paezan (phylum)	Voegelin & Voegelin; Greenberg
1979	Miskito	Schmidt

The most well-known classificatory attempt is the so-called "Xinka-Lenka hypothesis". The idea that Xinka is related to the likewise isolated Lenka languages in Honduras and El Salvador goes back to Brinton (1885a:96). Lehmann (1920:727) took up the idea and simply compared varieties of the two language families with each other,³⁹ which was later misunderstood as an attempt to define Xinka and

³⁶ This hypothesis grouped Mayan, Mixe-Zoquean, and Totonacan together, however, all phonological, grammatical and lexical traits that define the *phylum* can be attributed to diffusion (Campbell 1978b:598, 1991b:73).

³⁷ In the history of American Indian linguistic studies there have been several attempts of to reduce the high number of languages to a few linguistic families that would provide explanations about the prehistoric developments on the continent. Notwithstanding repeated and vehement criticism as to their methodological standards (Adelaar 1989; Campbell & Goddard 1991; Campbell 1998), such attempts of distant genetic relationships still prevail in the linguistic literature which is especially unfortunate when it comes to the classification of otherwise unaffiliated isolates in these largely unattested super-groups.

³⁸ The year of publication of the earliest suggestion is cited here.

³⁹ Lehmann's comparison concerned Xinka and Lenka numerals (XIN *ical* ~ LEN *etta, itta* "one"; XIN *bi-al, pi-ar, pi* ~ LEN *pe* "two", XIN *vuaal-al, hual-ar* ~ LEN *laagua, lagua* "three", XIN *iri-ar* ~ LEN *heria, erio* "four") and the terms for "water" (XIN *uy* ~ LEN *cuy*), "night" (XIN *suma* ~ LEN *ts'ub*), "dark, black" (XIN *ts'ama* ~ LEN *ts'ana-uamba*), "shade" (XIN *ti-tzuma* ~ LEN *saba*), "dog" (XIN *xusu* ~ LEN *shushu*),

Lenka as a common linguistic branch (cf. Schumann 1967:8; Longacre 1967:120-121). The so-called 'Xi-Le family' gained further acceptance when Swadesh presented lexicostatistic evidence for his classification of Mesoamerican languages (cf. Swadesh 1967:98). Criticising the methodology of lexicostatistics, Campbell (1978a:43, 1978b:600-604, 1979:961) rejected the hypothesis, arguing that Swadesh had calculated basically the same distance for Xinka and Chilanga-Lenka (45 m.c.) as for Lenka and Nahua (45 m.c.) and for Lenka and K'iche' (47 m.c.) (cf. Swadesh 1967:90). Campbell identified lexical, typological and phonological similarities to be the result of diffusion and showed that there is not evidence for a close relation of Xinka and Lenka (Campbell 1978b:602-603, 1979:961). Despite a few grammatical and lexical similarities of Xinka and Lenka that still require explanation, a direct genetic relation of both languages cannot be proven (Campbell & Kaufman 1980:855).⁴⁰

Lexical and phonological correspondences of Xinka with other languages may be attributed to diffusional factors (Kaufman 1977:67; Campbell 1978b:603). In their study from 1986, Campbell, Kaufman and Smith-Stark identified several traits that may define Mesoamerica as a linguistic area, some of which are attested in Xinka.

Along with cultural distinctiveness and physiognomy (see below, cf. Calderón 1908:4-5, Termer 1944:106), the isolated status of Xinka gave rise to speculations about the origin of the ethnic group. The ethnic diversity of the Guatemalan *oriente* resulted from various waves of migrations. Around 800-900 A.D., Nahua speakers (Pipil) immigrated from Xoconochco in the north and soon extended over vast parts of the Pacific Coast of Guatemala, El Salvador and Honduras. In its largest extension, the Pipil territory stretched from Escuintla into El Salvador and into the Upper Motagua-Valley. The Postclassic expansion of the K'iche' and the other Maya groups pushed the Pipil out again, and they had to give up large parts of the area (Orellana 1995:26). To what extent other ethnic groups might have been involved in the conquest of the *oriente* by Pipil and Maya groups, remains unclear, but it seems that the origin and interethnic relations of the Xinka have particular relevance for the reconstruction of the cultural development in the area.

There has been much speculation over the precise geographic origin of the group. One theory identifies the Xinka as an archaic culture that had already inhabited Guatemala before Maya and Nahua speakers moved into the territory and pushed them towards the Pacific coast (cf. Lehmann 1910:692-693 and 1920:723, Lothrop 1939:42, Termer 1944:102 and 1948:83, see also Calderón 1908). Other ideas see them as Postclassic immigrants to Guatemala who first displaced the local Pipil population and then later fell victim to Highland Maya expansion (Fernandez

"cough" (XIN *oyo* ~ LEN *hoo*), "maize" (XIN *au*, *aima* ~ LEN *ama*, *aima*), and "bean" (XIN *xinak* ~ LEN *shinag*). Campbell demonstrated that these terms were either borrowed from Mayan by both languages (maize, bean) or onomatopoeic (dog, cough) as well as that Lehmann had erroneously differentiated identical etymons (night, shade) (Campbell 1978a:39). The numerals were according to Campbell widely borrowed in Central America and therefore did not count as evidence either.

⁴⁰ Campbell points out: "Lenca is rather different in word order, with its SOV, from Xinka's VOS, nevertheless they seem to share the definite article, *na* preceding the noun in Xinka, *-na* suffixed to the noun in Lenca. Since Xinka seems to have gotten its basic word order from Mayan influence, this may not be a relevant difference in comparing Xinka and Lenca" (Campbell 1978b:603).

1938:84, Campbell 1978a:35-36). Xinka borrowed many terms characteristic for the environment of the coastal and piedmont area from Mayan languages and from Nahuatl, which might indicate that the Xinka arrived comparably late and posterior to the Pipil in southeastern Guatemala (cf. Campbell 1976b:21; Orellana 1995:35). A large number of loanwords from Western Maya and Proto-Mixe-Zoque, however, seems to suggest that the Xinka could have been present in Mesoamerica well before the Postclassic (see § 1.4).

Archaeological horizons in the area range from the Postclassic far into the Early Preclassic period (cf. Estrada Belli *et al.* 1996:113; Estrada Belli, Kosakowsky & Wolf 1998:55). Until the Postclassic, the archaeological finds from the southeast show the same characteristics and typical patterns of the Preclassic and Classic cultural horizons of the Pacific coast area (Estrada Belli, Kosakowsky & Wolf 1998:55-58). The settlement patterns and ceramic complexes of Postclassic sites deviate significantly from the earlier horizons (Estrada Belli & Kosakowsky 1996:24).⁴¹ Local ceramic types, however, exhibit a certain homogeneity throughout all horizons (id.:29, Estrada Belli *et al.* 1996:114), so that the patterns do not show evidence of any cultural disruption that could be attributed to the linguistically and ethnohistorically attested Postclassic immigration of Pipil and Xinka groups (Estrada Belli & Kosakowsky 1996:24).⁴² The typical Postclassic settlement pattern found in the region has been tentatively associated with the precolonial Xinka population (Ichon & Grignon 1998). However, caution is needed with such identifications. The fact that Xinka-speaking population settled at these sites in colonial times (e.g. at Atiquipaque, see Feldman & Walters 1980) only proves that the Xinka were late beneficiaries, but not necessarily the builders of the characteristic platform architecture (id., cf. Schumann 1967:15, 17). It is unclear whether the colonial settlement patterns reflect the prehispanic situation, i.e. whether the Xinka founded their own centres, settled at already established sites or cohabited with the other ethnic groups.

In search for an origin of the Xinka outside of Guatemala, researchers have speculated about both possible directions: immigration from the north, or Mexico, as much as immigration from southern Central America, or even South America. Termer suggested physiognomic similarities with the Chontal of Oaxaca in Mexico as a main argument for an immigration from the north (1944:106).⁴³ However, his

⁴¹ As in the Guatemalan highlands, Postclassic sites are located strategically easy to defend at the slopes of the volcanos (e.g. Sinacantán, Taxisco, Guazacapán). Postclassic sites of the area exhibit an characteristic settlement pattern (cf. Estrada Belli *et al.* 1996:113, Estrada Belli & Kosakowsky 1996:6, Ichon & Grignon 1998:335). This pattern is observed at sites that have been settled by Xinka population in the colonial era (cf. Walters & Feldman 1980, Estrada Belli & Kosakowsky 1996:7, Ichon & Grignon 1998:335).

⁴² The accounts of the conquest suggest that the Xinka already populated their later core area in precolonial times. This is however the only ethnohistoric testimony we have.

⁴³ "Die Xinka selbst sind ein verhältnismäßig hochgewachsener Menschengeschlag, schlank, sehnig. Die Hautfarbe ist bei vielen Individuen ein dunkles Kaffeebraun mit einem Stich ins Bronzefarbene, wodurch sie sich etwas gegen die Hochlandindianer abheben. Die Gesichtstypen zeigen sowohl ein ausgesprochen breitknochiges Antlitz, wie man es bei den Hochlandmaya antrifft, als auch einen feineren Typ mit einem ovalen Gesichtsumriss, bei dem eine leicht gebogene fleischige Nase auffällt. Die grossen, leicht hervorquellenden Augen verleihen diesem eine auffallende Ähnlichkeit mit Indianern der mexikanischen

hypothesis cannot be proven on linguistic grounds.⁴⁴ The main reason to look for an origin of the Xinka south of Mesoamerica is the similarity of Xinka material culture with neighbouring Central American groups (see §1.6). Lehmann (1920:724) speculated that the Xinka might be identical with the Nonoualca-Xulpit from the coastal area of Acallán mentioned in the *Memorial de Sololá* who are said to have used 'terrible arrows' (*q̄içix tišib'in keč'ab'in keč'alo* "en verdad que eran temibles para disparar sus flechas" (Otzoy 1999:104, 159)). Fuentes y Guzmán ([1690] 1972) and Juarros ([1808-18] 1937) reported that the Xinka fought with poisoned arrows against the Spanish.⁴⁵ Whether the Xinka indeed used poisoned arrows is discussed by Lehmann (1920:728) and Termer (1948:84). The use of poisoned lances and swords made from poisoned wood is reported for the indigenous groups of El Salvador and Honduras (see Lehmann 1920:728), and it seems therefore not unlikely that the Xinka may have applied similar techniques.

1.4 Cultural contacts

Cultural contacts between the Xinka and neighbouring groups can be reconstructed on the basis of loanwords in the Xinka lexicon and inferences in the grammar. Xinkan has borrowed a significant number of lexical items from Mayan, Mixe-Zoquean (MZ) and Central American languages, Nahuatl and in colonial times also from Spanish. The large number of loanwords suggests a certain degree of bilingualism in Xinka society throughout time, which has been interpreted as a sign of cultural inferiority and that the Xinka were dominated by other groups (Campbell 1977:112; 1978a:46).

Most insights regarding Xinka-Maya interaction have been gained by Lyle Campbell in his pioneering studies on Mayan loanwords in Xinkan languages (1971, 1972, 1978a). Campbell & Kaufman (1976) also identified a significant number of Mixe-Zoquean loans in Xinkan that are the result of general diffusion. Nahuatl and Spanish loans have not been duly studied yet.

Golfküste, die durch den zierlichen Körperbau noch unterstrichen wird. Mir drängt sich der Gedanke auf, daß sich hier vielleicht Reste der alten Pipil noch erhalten haben könnten" (Termer 1944:106)

⁴⁴ Xinka activists today prefer the idea that they immigrated from the north, it is however not likely that this idea is based on oral tradition (cf. Pipil mythology) and may be an instance of copying Maya highland tradition. It rather seems that this preference is the result of globalisation and merely reflects individual dreams and prospects about the United States.

⁴⁵ The use of arrow poison is mentioned in the *Recordación Florida*: "adobadas las púas con pestilentes yerbas, morían los tocados con de su veneno con sed impagable, en dos otros días aunque la herida fuese tan ligera y que de ella hubiera vertido una sola gota de sangre..." [the spines smeared with pernicious herbs, those struck by this poison died from unquenchable thirst within two days, even if the wound was light and only one single drop of blood had been shed...] (Gaitan Lara 1999:186). As Termer points out, the information Fuentes y Guzmán provides on this matter cannot be regarded reliable, as the text was only written in the 17th century and the primary source for the conquest, Pedro de Alvarado, does not mention the use of poisoned arrows (cf. Termer 1948:84). However, we know that Fuentes y Guzmán did have further documents about the conquest which are lost today, so that we cannot entirely rule out that his report might be based on historical fact.

Mayan loans

The majority of loanwords in Xinkan are from Mayan languages. Mayan loans fall into the semantic domains of material culture, crops, agriculture, flora/fauna, trade, religion and politics (Campbell 1971:335; 1972a:190; 1978a:39). According to Campbell, the large number of loans from these domains suggest intensive cultural contacts that were hierarchical and dominated by the Mayan speakers, involving the agriculturalisation of the Xinka, trade relations and the adaptation of ritual practice and other cultural knowledge. Borrowing was unidirectional as the number of potential Xinkan loans in Mayan languages is very small.

Campbell identified loans from Western Maya (WM) and Eastern Maya (EM). Specific WM loans are mostly attested in Ch'olan, while EM loans are from K'iche'an proper, most likely from Kaqchikel, which was a contact language (see § 1.2.2), and from Poqom (Campbell 1978a). For a number of Mayan loans the exact donor language cannot be determined, as their cognates are identical in both branches. In other cases lexical items in a specific domain have been borrowed from a single branch or subgroup and provide indications about the relative chronology and quality of contacts. Most loans from WM and the unspecific loans attested in both branches seem to be rather early, and are not likely contemporaneous with K'iche'an and Poqom loans (see below).

Xinkan borrowed most of its vocabulary relating to agricultural subsistence (i.e. maize production and processing, edible and non-edible cultigens and crops, food preparation, consumption and taste) from both, WM and EM (Campbell 1978a:39). Campbell concluded from the high number of loans from this domain that the Xinka only turned into an agricultural society under the influence of Maya culture (Campbell 1971:335; 1972a:190; 1978a:39). The fact that nearly all Xinka terms relating to maize and food production have come from Mayan supports this idea. Some of these terms are ultimately from MZ languages (see *waya* 'milpa', *ṽwa* 'to form tortillas', *pač'i* 'to grind corn', *ṽuč'i* 'nixtamal'). There are, however, also MZ terms in the Xinka domain of agriculture and cultigens that have not been borrowed via Mayan, but seem to be the result of direct contact or general diffusion in Central American languages (see Campbell & Kaufman 1976). Along with the agricultural vocabulary, Xinka has borrowed terms for food consumption and taste from Mayan languages (e.g. *nṽma* 'to eat', *šaya* 'bitter', *č'ami* 'sour', *ṽsṽč'i* 'tasty').

A small number of Mayan loans in the domain of trade and commerce (e.g. *kunu* 'to buy', *kayi* 'to sell') were most likely borrowed from WM languages (Campbell 1972a:190). Campbell points out that the loan *kunu* 'to buy' preserves an initial *k*, which indicates that it has been borrowed prior to the Ch'olan shift *k* > *č*, if not from a non-Ch'olan WM language (cf. Campbell 1972:189; 1977; Kaufman & Norman 1984:118). Xinka also seems to have borrowed terms from WM that may have been used to describe the state and quality of crops or trade goods (e.g. *č'ama* 'good', *čṽ* 'little, few'), although some of these forms seem to be more widely diffused within Central America.

Terms from the domain of material culture have been taken from both, EM as well as WM languages (e.g. *pak'a* 'nail'; *č'ṽm'i* 'rope'). Reference terms for dishes and containers, which are related to the domain of food production and may have served as trade goods, may come from EM alone (e.g. *ṽautak* 'tortilla griddle', *kuṽku* 'pot, bowl', *suk'sin* 'gourd', *č'ima* 'calabash'). EM loans for clothing are probably rather recent (e.g. *pote* 'huipil, cloth', *sak'alawiš* 'white trousers', *tuti* 'palm-leaf rain cape').

Xinka has borrowed a significant number of terms referring to fauna and flora. Particularly striking is the number of Mayan bird names. The borrowing of animal names is not uncommon in Mesoamerica, e.g. in several Mayan languages the Nahuatl term *masatl* has replaced the Mayan term for 'deer'. Xinka shares a few animal names with other Central American languages (see below), but many terms also seem to be genuinely Xinka (e.g. *tuma* 'deer'). The fact that it is mostly bird names that were borrowed may indicate that the Xinka were bird hunters who traded with feathers, or that – just as the Nahuatl term *masatl* for 'deer' – bird and animal names have been borrowed along with religious concepts, e.g. offerings of birds were a common practice in Maya rituals.

Mayan influence on Xinka ritual practice reflects in the borrowing of terms such as *pumu* 'copal', *m̥ʃa* 'to bury' or *yoʔe* 'to scatter (flowers)'. Borrowed terms for diseases and body parts may indicate that Xinka healing practices could have been influenced by Maya culture as well. Mayan loans in this domain are attested in WM and EM alike.

Mostly from WM are verbal loans referring to conflict, destruction or oppression. Some of these terms describe actions that may refer to hunting as much as to combat (e.g. *piʔa*, *tuʔu* 'to shoot', *poko* 'to break'). These loans may suggest that Xinka-speakers were involved in Maya fighting/hunting activities (e.g. as vassals or slaves). The Xinka verb *tak'ani* 'to impose, force' is attested in both Mayan branches and therefore also be a rather early (pM **taq* 'to send, oblige sb.'). Xinka has also borrowed reference terms for age groups from WM (i.e. *ʔone* 'infant', *turi* 'child', *peʔeʔ* 'bachelor'), which suggests intensive cultural contact with WM speakers.

As for the time-depth of this Xinka–WM interaction, the phonological evidence of WM and pM loans (see above) presented by Campbell suggests that it could reach back as far as the Early Classic and beyond. The question of place, i.e. where these Xinka–WM contacts occurred, is less easy to answer. As Campbell points out, the distribution of Xinka toponyms suggests that the Xinka originally settled further northwards (§ 1.2.2) where they could easily have been in contact with speakers of WM languages. But other theories have been brought forward that Ch'olan-Tzeltalan speakers may have been present in the Highlands and on the Pacific coast before the Postclassic expansion of K'iche'an groups, and that they might even be identified as the Late Preclassic population of Kaminaljuyú or the builders of Chalchuapa (Campbell 1978a; Mora-Marín 2005). Both ideas do not necessarily contradict each other.

Campbell argues that the borrowing of terms referring to coastal flora may point towards a late arrival of the Xinka in the piedmont area (1978a:46). He reconstructs that intruding Poqom-Maya may have pushed the Xinka further southwards into the territory of the Pacific corridor where they were settling at the time of the conquest.

A hierarchical and almost hostile relationship between the Xinka and their Postclassic (or even colonial) K'iche'an neighbours can be read from 'derogatory loans', e.g. the EM term **winaq* 'human, man' was borrowed into Xinka with the changed meaning of 'witch' and the K'iche'an adjective *me:m* 'mute, dumb' became the term for 'crazy' in Xinka (see Campbell 1972:188). This and the significant number of loans from Kaqchikel may indicate that the Xinka were dominated by the Kaqchikel in Postclassic/Conquest times. This may be supported by the fact that there is historic evidence that the Kaqchikel controlled the cacao plantations on the Pacific coast in Late Postclassic/early colonial times (Orellana 1973).

Mixe-Zoquean loans and Central American diffusion

In their contribution about the language of the Olmecs, Campbell and Kaufman (1976) identified several Mixe-Zoquean (MZ) loanwords in Xinka (see Appendix 5). Most MZ loans have been borrowed into Xinka through Mayan languages (Campbell & Kaufman 1976; cf. pMZ etymons in Jicaque and Paya, see Suárez 1983:156).

A few MZ forms in Xinka cannot be identified in Mayan languages. These etymons may have been borrowed through other Mesoamerican and Central American languages, or they may be direct loans, which would provide evidence for an early Xinka occupation in Mesoamerica (cf. Campbell 1978a). However, there is no linguistic evidence that Xinka borrowed any of these terms directly from a MZ language. Campbell and Kaufman (1976) have shown that MZ terms have diffused into languages all over Meso- and Central America.

MZ-loans fall in the semantic domains of cultigens, maize preparation, ritual and calendrics, as well as material culture and environmental terms including animal names. Xinka seems to have borrowed only a few MZ terms for cultigens via Mayan. In this context it is interesting to note that Xinka has genuine terms for some of the cultigens for which other Mesoamerican languages use MZ terms (e.g. *tuwa* 'cacao'; *ʔiti* 'tomate'; *huwa* 'zapote'). Most Xinka terms related to maize production and consumption derive from MZ, although it cannot be determined whether they entered the language through direct contact or whether they have been borrowed via Mayan or other languages.⁴⁶

Lexical correspondences with other Mesoamerican and Central American languages are attested. It may be still subject to some speculation whether these may have to be interpreted as loans or as lexical indications for genetic relationship. Some of these terms are widely diffused in Central American languages and a precise source of origin cannot be identified. Furthermore, similarities may be casual, as many Amerindian languages share certain characteristics and lexical forms.

Mayan and Mixe-Zoquean terms are attested as loans in Central American languages such as Lenka, Jicaque, Matagalpa, Sumu, Miskito, Cacaopera, e.g. maize, ayote ...; other Mayan loans into these languages include bean, posol, crab, hummingbird, cotton etc. With such widely diffused terms, the exact donor language from which Mayan and MZ loans have been borrowed into Xinkan languages is often not entirely clear. This is even more so, as Xinkan can be shown to have been part of a wider Central American language area: Xinkan languages share a number of terms with the aforementioned Central American languages, including animal and environmental terms (e.g. *weren* 'frog', *šuruʔi* 'squirrel', *punpun ʔhwi* 'owl' etc.). The direction of borrowing is mostly unclear.

⁴⁶ For example, the Xinka term *ʔuʔi*, *huʔi* 'nixtamal' preserves the affricate sound *ʔ* of pMZ **hʔ* 'to grind (nixtamal)' which suggests that this may be either a direct loan, or a very early loan from Mayan before *ʔ* > *ɛ*. However it needs to be borne in mind that the Xinka phonemic inventory does not originally include *ɛ* which allows also for a scenario in which pMZ *ʔ* > Mayan *ɛ* > Xinkan *ʔ*.

Nahuan loans

Compared with the strong influence of Mayan and Spanish, the number of Nahuan loans in Xinka is rather small. Furthermore, most of the Nahuan loans attested in Xinka are so widespread in the highland Mayan languages, that they might have to be regarded the result of general Postclassic and Colonial diffusion. They may have entered Xinka through Mayan contact languages (i.e. Kaqchikel, Poqom)⁴⁷ in Late Postclassic times as well as in the early Colonial times, when Nahuatl functioned as the *lingua franca* of the area (see Suárez 1983:164/5). A number of loans can be identified to have been borrowed from Pipil, which must have been a contact language at some point (see § 1.2). It is not entirely clear whether the presence of the suffix *-t / -ti* in a Nahuan loan can be regarded as an indication for its Pipil origin, or whether it is simply the result of phonological assimilation of Nahuan forms to Xinka (see § 4.5.2.2).

The semantic domains from which Nahuan loans have been borrowed are mainly environmental terms (fauna, flora), food products, political and administrative terms, material culture, colour terms and terms of diseases and human conditions (see Appendix 5.D).

Spanish loans

The influence of colonial Spanish on Xinka is reflected in a vast number of Spanish loans that underwent phonological assimilation as well as grammatical integration (see § 4.5.2.3).

Spanish loans fall into the semantic domains of material culture, colonial imports of foods, crops and animals, Christian religion, references to colonial office/authority and people, colonial work activities, forms of obedience, trade and commerce, as well as some environmental terms. Xinka has also borrowed a number of function words (conjunctions etc.) and verbs from Spanish (see Appendix 5.E). These are exactly the semantic domains one would expect, as they reflect the cultural impact of the Spanish colonial administration.

Some Spanish loans are more interesting as they can tell us even more about the colonial interaction between the Xinka and their Mayan neighbours. Spanish loanwords ending in *-š* seem to have been borrowed into Xinka not directly, but most likely through a K'iche'an language. It is quite a common phenomenon to find Spanish loans in Mesoamerican languages that have become diffused through other indigenous languages (Suárez 1983:156).

The main argument for this hypothesis is that Xinka forms regularly end in vowels. Campbell showed that CVC-roots borrowed from Mayan into Xinka add a final vowel (e.g. EM **naq* 'seed' > XNK *nak'i* 'chilli'; Campbell 1972a). As the relevant Spanish forms all end in vowels, there would not be any need to add a final fricative *-š* when borrowing the term directly. Moreover, the alveo-palatal fricative *š* is not regularly attested in Xinka as a final consonant and occurs in that position

⁴⁷ The term *tunati* 'to play an instrument' was borrowed from a K'iche'an language which have derived the verb *tuna:x* 'to play music, beat drum' from the term *tu:n* 'tambor' that is borrowed from Pipil *tuntun* 'concha (de mar)' (Campbell 1985); Kaufman remarks that this term has diffused throughout the region. The same seems to hold true for the term *masa* 'pineapple' that must have been borrowed from K'iche'an *masati*. If this was a direct loan, Xinka would probably have preserved the *ç* in *maçahli*.

only with Spanish and Mayan loans (§ 4.4.1.2, § 4.5.2.1). In K'iche'an languages, early Spanish loans are likewise attested as ending in *-š*; many of which attest a final *-š* although the original Spanish term does not end in a consonant. These forms have been borrowed preserving the Spanish plural marker *-s* and changing it into final *-š* (Campbell 1977). All of this seems to suggest that Spanish loans ending in *-š* have been borrowed into Xinka from K'iche'an languages.

Table 1. 4: Spanish loans ending in *-š*

	Xinka	K'iche'an	Spanish
<i>cow</i>	wakaš	< POQ/KAQ, CHR wakaš	< Sp. vaca
<i>dove</i>	palumaš	< KCH/KAQ palomaš	< Sp. paloma
<i>orange</i>	aranšaš	< KCH, POQ aranšeš	< Sp. naranja
<i>lemon</i>	lamuniš	< POQ lamuniš	< Sp. limón
<i>duck</i>	patuš	< POQ patušk, KAQ patš	< Sp. pato
<i>scissors</i>	tašelaš	< KCH tišeraš	< Sp. tijeras
<i>key</i>	lawš	< KCH lawe	< Sp. clavo
<i>mare</i>	yewaš	-	< Sp. yegua

1.5 Xinka language death

Xinka may be characterised as a moribund language family past the verge of extinction, with the only remaining speakers being terminal semi-speakers (from Guazacapán, and maybe Jumaytepeque) who do not use the language for regular communication anymore. The terminal state of Xinka is the result of a long-term process of gradual language shift to the dominant Spanish language. Language shift is the technical term applied to describe a situation of cultural contact in which a bilingual speech community changes, or shifts, almost simultaneously from their primary language or mother tongue (L_1) to their secondary, acquired contact language (L_2). Language shift is the result of the conscious decision of adults not to transmit their own maternal language to their children and consequently give up the L_1 in favour of a dominant L_2 (cf. Brenzinger *et al.* 1991:20-21; Sasse 1992a:13; Metzler 1993:587; Thomason 2001:227). This decision results in the interruption of regular language transmission in the L_1 (Sasse 1992a:13). The L_2 becomes the L_1 of the group, while at the same time the former primary language is reduced to a secondary language, suffers structural decay and is eventually lost by the following generations (cf. Brenzinger *et al.* 1991:20-21; Metzler 1993:587). Campbell and Muntzel applied the term 'gradual death' to situations of language shift in which there is an ongoing shift from L_1 to L_2 in a continuing contact situation that implies an intermediate stage of bilingualism (cf. Campbell & Muntzel 1989:182-186).⁴⁸

⁴⁸ Campbell and Muntzel (1989:182-186) distinguish this prototypical situation of language death from other forms of language shift, such as 'radical language death', in which speakers give up their language abruptly for fear of political repression, or 'bottom to top language death', in which language shift regards only the domestic context and is restricted to domains of daily life, while the L_1 continues to be used in non-daily domains only, foremost in ritual contexts (e.g. Latin, as well as Chiapanec and Southern-Tzeltal, see Campbell & Muntzel 1989:185-186). The death of a language has also been caused by the physical death of a speech community caused either by natural disasters such as epidemics, earthquakes, floodings, volcanic eruptions etc., or as a consequence of war and genocide. Such a physical death of a speech community is usually a rather sudden and abrupt event (cf. Dixon 1991:231; Wurm 1991:2;

The gradual death of Xinka may be reconstructed –only very insufficiently– on the basis of rather scarce statistical information in various sources from the eighteenth century onwards.⁴⁹ These data suggest a continuous decline of Xinka speakers from an indefinite number in the sixteenth century to about 10.000 in the eighteenth century to less than a hundred speakers in the twentieth century (see Table 1. 5). The figures from the twentieth century vary enormously and range from the statement about Xinka being completely extinct (Fernandez 1938:85) up to the official, census-based record of 306 speakers (INGUAT, Museo Ixchel 1996). An unpublished statistical survey that was carried out by the *Proyecto Lingüístico Francisco Marroquín* (PLFM) in 1997 even wants to identify 9% of the entire population of the *municipio* Guazacapán as Xinka speakers.⁵⁰ In the summer of 1999, the COPXIG estimated the total number of more than a hundred speakers in the entire area and several dozen full speakers in Guazacapán alone. However, their estimation turned out to be too high and the number of remaining Xinka speakers needed correction to a considerably smaller figure. Campbell described the speaker's situation of Xinka for the 1970s and defined a proficiency continuum that ranges from a few fully competent speakers (in Guazacapán and Chiquimulilla) over imperfect semi-speakers (in Guazacapán, Chiquimulilla and Jumaytepeque) to weak semi-speakers and rememberers with command over a few words and isolated phrases only. Less than ten speakers were counted in each of the three villages, only for Guazacapán a weak proficiency continuum, comprising speakers of all competence levels, was indicated (Campbell & Muntzel 1989:182).

The variation in the data can be attributed to differences in understanding the terminological concept of a 'speaker'. In moribund speech communities there are several social, political and economic factors that determine collective opinion about who is regarded as a speaker and who is not. The community's judgement does not necessarily correspond to the linguist's assessment of the situation (cf. Yamamoto 1998:221-222; Evans 2001:260). From the local point of view, everyone who has some knowledge of the *idioma de antes* – irrespective of quantity and quality – is considered a *hablante*, or "speaker". Like this, individuals who only remember a few lexical items and do not have any grammatical competence at all, can still be regarded as speakers according to their own or their neighbour's definition.

Annamalai 1998:22). In the case of a situation of radical language shift the generation of speakers who use the L₂ as their first and the L₁ as their neglected secondary language is missing; radical language shift therefore never implies structural decay and is thus not of foremost interest to linguistic research (cf. Campbell & Muntzel 1989:184; Brenzinger *et al.* 1991:21; Sasse 1992a:6, 22).

⁴⁹ These data cannot be regarded reliable as they show several inconsistencies that may have to be attributed to the way the data were investigated and recorded as much as to deviating local references. Generally, the sources do not differentiate bilingual and monolingual population.

⁵⁰ This incredibly exaggerated figure was communicated to me during a visit at PLFM in the year 2000, although I did not have a look at the report with the survey data myself. I have not returned to PLFM to ask for the data, because I consider these survey data to be in fact of very little relevance for the actual linguistic situation in the area. The reason why I mention the PLFM source here is to exemplify that there is a considerable degree of confusion about the actual number of Xinka speakers and the linguistic situation in the area.

Table 1. 5: Language demographics

Year ⁵¹	Source	Number of Speakers
1739	Crespo	8047
1770	Cortés y Larraz (Solano)	14832
1808	Juarros	7864
1891/2	Calderón	7500
1918	Saville	5000
1938	Fernández	0
1967	Schumann	300
1972	Campbell	100
1975	Tujab	55
1979	Campbell	few
1981	census data	107
1987	Tujab	6
1989	Campbell/Muntzel	less than 30
1990	Herrera	107
1994	census data	69
1996	Museo Ixchel/INGUAT	306
1996	SigloXXI	100

In trying to locate surviving Xinka speakers, one runs into many obstacles, and it is therefore difficult to estimate how many speakers of which varying levels of proficiency still live in the area. There seem to be no speakers left in Chiquimulilla. Only in the indigenous *barrio* of San Sebastian in the north of the settlement a few elderly individuals still remember single lexical items. Speakers with a more complex knowledge of Xinka could only be located in the *municipio* of Guazacapán. Many of those speakers used to live in small hamlets outside the municipal centre. Over the past decades, the former communitary lands surrounding the town were converted into private properties. Many Guazacapanecos from the indigenous *barrios* chose to leave the municipal centre and resettled on their own land. Many of those who did not move have sold their property to people from the outside. Thus, the old social corporate groups from the centre only rarely continued in these newly emerging *aldeas*, and residents of mixed local origin often do not know their neighbours very well. Searching in the *aldeas* for people whose parents or grandparents still spoke Xinka turned out to be a difficult task, as people often could not give any information about their neighbours; sometimes they are still more acquainted with families in the centre of Guazacapán. It was not possible to confirm the number of remaining Xinka speakers in the *municipio* of Jumaytepeque as local activists from this town did not agree to establish any contacts, or accept my visit.

This last case illustrates the dependency of the search for speakers on the willingness of local mediators to cooperate. The indigenous population in the area can be rather reserved and unforthcoming, and individual language knowledge is

⁵¹ The numbers of estimates listed here do not go beyond the year 1996. The more recent estimates are based on census figures about ethnic self-identification in the area (see Adams & Bastos 2003) that reflect the young political process of ethnic revival and include youngsters who attempt to learn the language again and therefore identify as speakers. These figures are not representative for the actual situation. Other official figures, as used by the COPXIG, are influenced by my own research (see further on) and need not to be listed in the table.

often concealed and even denied. Centuries of continuous suppression of indigenous languages in Guatemala – and especially in the *oriente* – lead to a loss of prestige for Xinka and, thus, knowledge of this language is regarded embarrassing rather than valuable by some of the speakers. Moreover, the discrimination of indigenous groups and a progressive process of ladinisation in the *oriente* and at the *costa sur* have produced a general suspicion and mistrust of inquisitive foreigners within the remaining indigenous communities of the area (cf. Schumann 1967:8). Hence, some speakers try not to give any information or details about their culture and deny any competence in the language at all.⁵² The informant José Antonio López Pérez explains this behaviour as follows:

... este [señor]⁵³, donde pasaron, me llevó dato de que dijo que no podía, que no sabe ... ¿cómo que no? ... puede ... sabe ... pero no quiere dar idioma porque se les oponen, dice que algo les puede suceder despues ... ah ... yo le contesté que me contó él que sólo Dios, él está por sobre todas las cosas ... (José Antonio López Pérez, 28 March 2001)

The reasons why speakers refused to participate in the project and denied their knowledge can also be attributed to social constraints. The most illustrative example regards the wife of Sebastián Hernández, one of my main informants. She refused to participate in the interview sessions and vehemently stated that she could neither speak nor understand the language. During the sessions, however, she repeatedly cut in on the conversation and helped to clear up misunderstandings between me and her husband. In these situations she proved that she was indeed a competent speaker with enough proficiency to translate from Spanish into Xinka and reversely from Xinka into Spanish, but when asked directly she refused to give any information. She would not participate in the sessions, nor give an interview on her own, nor allow me to accompany her on the way to the market or on other errands. From knowing the socio-cultural conditions in that family, it can be assumed that her personal situation and the relation between the spouses were the decisive factors for her refusing behaviour (see the description of a similar situation in Evans 2001:269, 272).

It is not clear to what extent mistrust and refusal are instrumentalised by some of the presumed speakers to maintain social prestige. Some of them might have only some minimal knowledge of Xinka, but live with the fame of being a speaker inside their *aldea* or *barrio* and fear that this status could be endangered with their participation in the project. Not entirely unrelated to this phenomenon is the issue that some informants were fully aware of the favoured position they had as last speakers of Xinka and tried repeatedly to take monetary advantage of the situation and commercialise their language knowledge. In one case an informant forced up prices by charging USD 10 for each word. When his demand was not responded to, he totally refused any further cooperation. Those commercially oriented informants

⁵² This behaviour may be properly termed as an "ethos of refusal"; Demetrio López de la Cruz and Ramiro López of the COPXIG explained to me that many elders give away information only with great reluctance. Revealing secrets about culture and language is considered as selling-out the knowledge that cannot be restored.

⁵³ Name deleted.

proved not to be extremely cooperative in the interview sessions and deliberately gave incorrect information or modified the quality of their data.

During the four campaigns of field research in the years 2000-2003, the COPXIG and I could locate in total eleven speakers – besides a larger number of rememberers. Only five of these speakers became regular informants who gave useful information; the other six either refused their participation or were already of such advanced age that their general health condition and the physical constraints resulting from their age, such as mental disturbance or deafness, did not permit us to work with them. In the specific case of one presumed speaker from Jumaytepeque, the local cultural activists refused to establish the contact. There are reports about further speakers – apparently there are still some speakers who live in a *finca* north of Taxisco⁵⁴, others in small *aldeas*, and even others who have moved together with their families to Guatemala City or Antigua. However, these reports remain unconfirmed and any estimates exceeding the number of 25 remaining semi-speakers should be deemed as unrealistic and unreliable. As a matter of fact, the intensive linguistic research started by PAXIGUA in the area in 2005 did not lead to the finding of many more individuals than the ones who have already contributed to the present study.⁵⁵

The remaining Xinka speakers all preserve a very imperfect form of the language and fall into various degrees of proficiency and language competence. In the recent literature on language endangerment and language death, the criteria for distinguishing and classifying individual degrees of language competence are rather diverse. Relative age of the speakers is taken as much as a basis of definition as different levels of linguistic perfection, degrees of structural reduction, or whether the language is still transmitted to the younger generation.⁵⁶ The various degrees of language competence among speakers of obsolescent languages may be explained most convincingly as the result of different language acquisition strategies (Sasse 1990:34).

Sasse (1990:32-34 & 1992b:61, 63) has categorised three types of imperfect speakers in language death situations: (1) former *full speakers*, or forgetters, who acquired the L₁ during early childhood in a still fully operative context but have abandoned it later lacking an opportunity for regular communication - their imperfection is merely the result of not having used the L₁ in a long time and of having lost performative competence (see also Dressler 1981:13-14; Sasse 1990:34).; (2) *rusty speakers*, who were raised in a social sub-group, in which the

⁵⁴ Supposedly, this is the former village of Tacuilula. I did not have the chance to verify this information since the members of the COPXIG advised me not to visit this place for reasons of safety. They themselves refused to accompany me. I have not learned whether it is indeed dangerous to enter the place.

⁵⁵ According to Gustavo Herrarte PAXIGUA officials established contact with a few elders in Jumaytepeque.

⁵⁶ While Dorian (1981:114 ff.) distinguishes the three categories of "older fluent", "younger fluent" and "semi-speakers", Dressler classifies speakers as "healthy", "preterminal" and "terminal" (cf. 1981:14). Whereas terminal speakers have lost the ability to transmit the L₁ to the younger generation, preterminal speakers still do so, although in an already structurally reduced way (id.). The language of terminal speakers is reduced to a considerable degree (id.). Campbell & Muntzel distinguish according to general linguistic competence the speaker categories of "nearly fully competent", "imperfect but reasonably fluent", and "weak" as well as "rememberers" (1989:181, 183-84).

recessive language of the speech community was still spoken, and who were at first exposed to the L_1 and shifted to the dominant L_2 in a later stage of their language acquisition process - they have comparatively good control over the grammatical system and show almost perfect passive language competence, but their active memory of the lexicon and of complex grammatical structure is incomplete (Sasse 1992b:61-2); and (3) *semi-speakers*, who did not acquire the language in any kind of natural acquisition process but were rather randomly exposed to it; their linguistic competence in the L_1 is a matter of chance rather than the result of any strategic transmission. They acquired only those elements of the L_1 they were casually and occasionally exposed to. Their language competence is largely imperfect and they produce only pathological forms as the lack of corrective mechanisms prevented them from acquiring complex forms and developing a full grammatical system (cf. Sasse 1990:32-34, 1992a:14-16, 1992b:61-63; Thomason 2001:226). According to this model structural decay, as it occurs in situations of gradual language shift, is to be understood as the consequence of the interruption of strategic language transmission, which is the inevitable result of a decreasing functionality and applicability of the L_1 (Sasse 1992a:14-15; Brenzinger 1998:90-91; Thomason & Kaufman 1988:35) that, again, is determined by external settings and changes in speech behaviour favouring the L_2 over the L_1 (Sasse 1990, 1992a, b). Defective language acquisition in the younger generation leads to further reduction of functionality and applicability of the L_1 (Sasse 1992a:15; Thomason 2001:225-226), and like this gradual language death implies a continuum of regression and different stages of formal disintegration from a formerly fully-functional to a dysfunctional language (cf. Campbell & Muntzel 1989:186-195; Kibrik 1991:257; Krauss 1998:102; Wurm 1998:192).⁵⁷

⁵⁷ Sasse's model explains language decay as the structural consequence of language shift and the interruption of regular language transmission strategies (Sasse 1992a, 1992b). Highlighting the interconnection between the social conditions which cause language shift and the structural disintegration of a language, he distinguishes three interdependent factors which form an implicational chain: (1) external settings, i.e. cultural, social, historical and economical conditions, (2) speech behaviour of the respective speech community, i.e. the regularity of language use depending on social parameters, and (3) structural consequences in the language corpus itself, i.e. linguistic phenomena and processes of language change in the phonology, morphosyntax and lexicon of the language in question (cf. 1992a:9-10). External settings determine a changed and reduced speech behaviour which again causes the structural disintegration of the language system. All three factors remain operative during the entire process of gradual language death (Sasse 1990:8; 1992a:12). Thus, structural decay and language loss may be understood as the ultimate consequence of the individual speaker's change in speech behaviour in response to external settings (cf. Brenzinger *et al.* 1991:34; Dixon 1991:231; Sasse 1992a:10-11, 20). The term speech behaviour refers to the patterns of language usage; i.e. the domains and styles applied, and the attitude shown by the speakers towards using one language or the other (Sasse 1992a:10). The increase of bilingualism in a speech community entails a change in speech behaviour and a gradual expansion of the L_2 to further functional domains (cf. Dixon 1991:236; Sasse 1992a:14; Annamalai 1998:18-19, 23, 27; Bradley 1998:54). Restriction of the recessive L_1 to an ever more limited range of domains leads to the gradual loss of lexical inventory, i.e. the language's most typical features connected with traditional culture (Wurm 1991:6-7; Sasse 1992a:14). The loss of functionality of the L_1 results in interferences from the L_2 and further simplification. What follows is the deliberate interruption of strategic language transmission which brings about defective language acquisition in the younger generation (cf. Sasse 1992a:14-15; Brenzinger 1998:90-91; Thomason & Kaufman 1988:35; Thomason 2001:225-226).

Most of the Xinka speakers were advanced terminal semi-speakers with no grammatical and very little lexical competence; their lexical inventory rarely exceeds 20 items. There were no formerly fully competent speakers among the informants who participated in the project, i.e. no speakers who have been raised with Xinka as their primary language. Most informants indicated that they did not learn the language from their parents but from elders in their grandparent's generation.⁵⁸ All informants produced linguistic forms that were to a considerable degree pathological, exhibiting grammatical weakness and paradigmatic gaps. Speakers complemented copious lexical gaps randomly with Spanish forms and substituted any structural form or category unknown they lack in Xinka with a form from the dominant language.

Most informants were older than 75 years, all were illiterate farmers and workmen. There were no indications that Xinka would still be transmitted to the younger generation in any form of a natural acquisition process. There was furthermore no indication that the remaining speakers formed a speech community or still used the language in any kind of context.⁵⁹ Although some of the informants have known each other and were in two cases even in-laws, their dispersed settling in different *aldeas* combined with their age-conditioned immobility suggest that contacts are sporadic at best. Besides the problem of mobility, the informants were not interested in meeting the other speakers and in some cases even refused the idea. The reason for this might be a sense of competitiveness as much as serious personal differences; some informants declared they were at feud with each other. Despite the fact that all informants denied the question whether they still used the language in any specific context, we may have to take into account that three of them were locally renowned religious specialists designated as *brujos* "sorcerers", *voladores* "flyers"⁶⁰, or *hacedores de lluvia* "rain makers" and that Xinka might still have some function in concealed, local religious contexts.

⁵⁸ In the case of the informant Juan Santos we may assume that he was at least partially socialised in Xinka, since his mother, Elena Santos, is known to us as a speaker, too. However, Elena Santos is a semi-speaker herself and language transmission may at best have been limited to a few domains, which is reflected in Juan Santos' degree of linguistic competence.

⁵⁹ It could not be established whether the informant Sebastián Hernández and his wife used the language for communication among each other at all. On every occasion that we visited them, they spoke Spanish to each other. This has been confirmed by other members of the COPXIG who had been to Sebastián Hernández' home for reasons of religious consultation – in none of these case Don Sebastián or his wife ever used Xinka.

⁶⁰ This is how Guatemalan folk culture refers to people who are said to be able to leave their bodies at nighttime and have visions.

The actual situation of Xinka may be defined as that of a moribund⁶¹ language in an advanced terminal stadium. At which point in the continuum of endangerment we may mark the transition from a moribund to an extinct language has thus far been a matter of definition (Sasse 1992a:17). Opinions differ as to whether a language only becomes extinct with the physical death of its last imperfect speaker (cf. Dorian 1981:94), or whether its structural death is already implied in the lack of fully competent speakers (cf. Dressler 1981:5; Brenzinger 1998:98; Thomason 2001:227). The mediating position between these two extremes would define a language shift situation as completed the moment the L₁ ceases to be regularly used for any communicative purpose (Brenzinger & Dimmendaal 1992:3; Sasse 1992a:18). According to this definition, language death occurs when regular active communication in the L₁ ends and a speech community has become entirely monolingual in the L₂ (cf. Sasse 1992a:20, 23).

Thus, the lack of evidence for a still existing speech community together with the degree of structural disintegration may be sufficient to define Xinka as an extinct language. Nevertheless, despite their assumed lack of performance, it was possible to work with the remaining semi-speakers and document extensive and valuable linguistic data. Semi-speakers have proven to be invaluable informants in comparable instances of moribund languages (Evans 2001:260). As it is not possible to define the exact number of remaining speakers and as it cannot be entirely excluded that Xinka may still be used in some, though concealed contexts, I shall continue to refer to Xinka as moribund language that is on the verge of extinction rather than as a dead language.⁶²

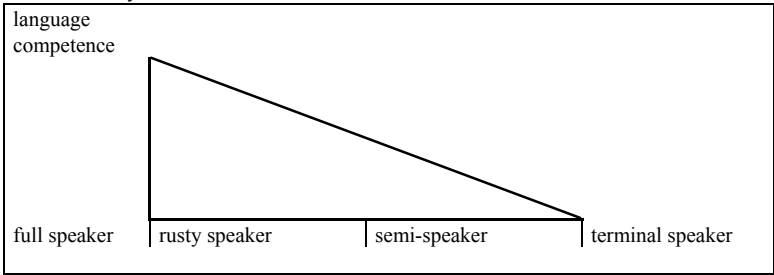
The various conditions that govern the process of language acquisition of a recessive L₁ create speakers of various degrees of linguistic competence within one generation. They form a proficiency continuum that may encompass all types of speakers (see Figure 1. 2), ranging from full speakers with a regular acquisition process to different degrees of imperfect speakers, on to terminal speakers who may be defined as the last semi-speakers (cf. Campbell & Muntzel 1989:181; Sasse 1992b:63). The proficiency continuum usually reflects a typical distribution pattern of linguistic competence among several generations of L₁-speakers: the younger the speakers, the more reduced is their individual linguistic competence in the L₁ (Dorian 1981:114, Campbell & Muntzel 1989:185, Brenzinger *et al.* 1991:34). In situations of gradual language death, intra-generational communication leads to a collective acceptance of reduced grammatical forms in the younger generation. As a consequence, each following generation knows less than the previous one (cf. Evans

⁶¹ Endangered languages may be classified according to the following categories: (1) *potentially endangered languages*, that is, languages that have started to lose speakers from the infant generation due to bilingual adults who only use the language as their secondary language with reduced lexical inventory; (2) *seriously endangered or threatened languages*, that is, languages that are used as a primary language only by the elder generations and that are used by members of the younger generation only in a reduced and simplified form; and (3) *moribund languages*; that is, languages that are already lost in their full complexity and functionality and that are only preserved in a modified and simplified manner by a handful of elderly speakers (cf. classifications according to Dixon 1991, Kibrik 1991, Krauss 1998 and Wurm 1998).

⁶² I am fully aware that the preference for this designation is socially and politically motivated and does not reflect the attested criteria that should apply.

2001:250). But age is not the only additional factor in the proficiency continuum, we also have to take social and spatial variables into account and allow for the L₁ to continue in certain socially or regionally identifiable subgroups. Other significant factors are individual talent for acquiring a language, the exposure to the L₁ (e.g. regular or irregular contact with elder family members who have linguistic competence), as well as the degree of actual performative usage of the language.

Figure 1. 2: Proficiency continuum



In situations of gradual language death, language shift does not occur in all parts of the speech community simultaneously (see Figure 1. 3). While some families become bilingual and shift to the L₂ at a rather early stage (e.g. family A), others stay monolingual or preserve the L₁ in the bilingual context as their primary language (e.g. family E); generally this happens in certain subgroups of the society. The more gradual a language shift in the speech community, the less proficient are the remaining semi-speakers. The number of remaining fully competent L₁ speakers can be seen as a key factor to the degree of overall proficiency in the L₁. If the number of fully competent speakers decreases, members of the younger generation – irrespectively of their individual conditions of language acquisition – have a lesser chance to acquire a regular and functional L₁-system.

Figure 1. 3: Gradual language shift

	Family A	Family B	Family C	Family D	Family E	
Generation 1	L ₁ / L ₂	L ₁	L ₁	L ₁	L ₁	
Generation 2	L ₂ / L ₁	L ₁ / L ₂	L ₁	L ₁	L ₁	
Generation 3	L ₂ (L ₁)	L ₂ / L ₁	L ₁ / L ₂	L ₁	L ₁	
Generation 4	L ₂	L ₂ (L ₁)	L ₂ / L ₁	L ₁ / L ₂	L ₁	
Generation 5	L ₂	L ₂	L ₂ (L ₁)	L ₂ / L ₁	L ₁ / L ₂	
Generation 6	L ₂	L ₂	L ₂	L ₂ (L ₁)	L ₂ / L ₁	language shift
Generation 7	L ₂	L ₂	L ₂	L ₂	L ₂ (L ₁)	

The last stage in the continuum is the terminal speaker. In situations of gradual language death, terminal speakers are the ultimate semi-speaker generation - those who have themselves only be exposed to deficient language knowledge from other semi-speakers. Such terminal speakers show the maximum degree of linguistic disintegration and pathological language, their competence may not go beyond the preservation of a few lexical items from the L₁ (cf. Brenzinger 1998:98).

The remaining Xinka speakers are terminal semi-speakers. Depending on personal context and upbringing, the individual exposure of informants to the language has been different in each case. They thus show various degrees of

proficiency and language competence including phonetic realisation, grammatical forms and lexical items. This may be attributed to the fact that Xinka ceased to be spoken by an integrated speech community well before their acquisition process even began. Different families, and *barrios*, preserved different language forms and developed certain idiosyncrasies that were randomly acquired by the surviving terminal speakers. Thus, the Xinka preserved by the last speakers does not represent a coherent language system anymore.

1.6 Cultural change and language shift

Languages do not exist independently from their speakers. Changes in the language's ecology, i.e. changes in the cultural, historical, socio-political and economic conditions in form of cultural contact or cultural confrontation, constitute the main factor for endangerment and loss of minority languages (cf. Annamalai 1998:18; Bradley 1998:51; Brenzinger *et al.* 1991:31; Dixon 1991:236; Thomason 2001:225; Wurm 1991:3).

Language shift is the result of shifting cultural identities, as cultural contact and domination lead to changes in the individual language behaviour within a speech community (cf. Brenzinger *et al.* 1991:22). Although language itself may not be viewed as the sole determinative factor for developing ethnic identity, the cultural identity of individual group members generally reflects in the viability of their language and thus affects status and degree of institutionalisation of the L_1 (cf. Brenzinger *et al.* 1991:30, 34, 35-37; Brenzinger & Dimmendaal 1992:4). Language shift occurs in groups in which collective identity has been abandoned for the benefit of individual identity. Speech communities with "healthy" collective identity may survive even in a situation of long-term cultural domination without losing their language loyalty, provided that demographic factors do not let the number of speakers drop below a crucial mark (Adelaar 1991:51). Along with the loss of socio-cultural or ethnic independence, cultural contact may lead to a general change of the social values within a speech community, which entails the loss of cultural traditions, the acquisition of new cultural patterns and a general adaptation of daily domains to the changed political and economic conditions. When a dominant L_2 is not exclusively used in the economic domain but has become a means of cultural influence or even political control, it is likely that the esteem for language and culture within the speech community decreases gradually (cf. Annamalai 1998:18; Wurm 1991:5-6). The shift to the L_2 is then regarded as an individual strategy to overcome the low social status that is associated with traditional cultural identity and the minority language L_1 (Brenzinger *et al.* 1991:37; Sasse 1992:7).

The gradual language death of Xinka is the result of identifiable socio-cultural processes and external conditions that have caused a general loss of linguistic and cultural diversity in the entire Guatemalan *oriente*. Although there are social units of indigenous communities that have survived in the region, specific cultural traits, ethnic markers and the former language affiliation (Xinka, Pipil, Jicaque or Maya) are not observable (cf. Adams & Bastos 2003:76, 291).

Already in the eighteenth century, Cortés y Larraz remarked on the high degree of Spanish speaking and bilingual population in the area (1958:220, 226, 230, 233). This early hispanisation may be attributed to the fact that the dominant Spanish elite

exerted unyielding administrative and economic control in their strive to exploit the riches of the *oriente* ever since the beginning of the colonial era (cf. Gaitán Lara 1999:187; Adams & Bastos 2003:78). Shortly after the conquest, epidemics and slavery had decimated the population of the Pacific Coast so much that the physical loss of labour force on the cacao plantations had to be compensated by resettling indigenous population from the highlands, mostly by Mam, Chuj, K'iche' and Kaqchikel (cf. Solano 1974:257). Inter-marriage between these culturally and linguistically heterogeneous groups created an environment where Spanish was increasingly used as the language of daily communication.⁶³ Inevitably, it became also the primary missionary language of the area, a circumstance that was repeatedly criticised by the archbishops Cortes y Larraz and Francos y Monroy (id., Fernández 1938:84; Gaitán Lara 1999:188).

These factors produced a situation of constant cultural pressure from Spanish colonial society, which caused the autochthonous population of the *oriente* and the coastal areas to change their individual living conditions by abandoning precolonial practices and adjusting to cultural patterns from dominant Ladino culture. To arrive at a better understanding about the changes that local Xinka culture underwent in this process of assimilation, we may take a brief look at what is meant by 'ladinisation' in the *oriente*.

The term *ladino*, which replaced in Guatemala the term *mestizo*, refers not only to people of mixed parentage but to any person who is by culture and descent non-indigenous (cf. Smith 1990 *apud* Warren 1998:10). Indigenous identity is hereby understood as a multi-dimensional product of various historic and socio-economic processes: (a) individual membership in a group whose culture has its roots in the precolonial era and persists in contemporary cultural practices, (b) the sixteenth-century colonial division of labour along the ethnic boundary of ruling Spaniards and indigenous labourers, and (c) the socio-political development of the nineteenth century that led to the expropriation of communal lands and forced the indigenous population into labour on the coffee plantations (cf. Warren 1998:70-71; Adams & Bastos 2003:119). The division of labour in the nineteenth and twentieth century left all those as Ladinos who were not dependent on the coffee harvest.

Confiscation of communal lands was a lesser problem in the *oriente*, and there are even cases where confiscated properties and lands were restored to the indigenous communities in the 1940s (Taracena Arriola 2002:381ff.; Adams & Bastos 2003:106-111). Hence, the defining criteria of indigenous identity in Guatemala, i.e. the expropriation of land and the dependence on the coffee harvest, are missing in the *oriente*. This had consequences for the definition of indigenous identity. While the expropriated Maya speaking population in the western highlands mainly defined their ethnic identity by the diacritic markers of language, traditional dress and religion, the indigenous communities in the *oriente* made economic dependence from communal lands and individual participation in all the economic and social activities of the corporate group associated with a specific *terreno communal* the principal defining criterion for group membership (cf. Adams &

⁶³ Inter-marriages that lead to *mestizaje* may be viewed as one of the crucial factors in Latin America that cause cultural change and language shift (cf. Adelaar 1991:45-6); inter-marriage, however, is a universal phenomenon that always has an effect on language behaviour and identity (cf. Brenzinger *et al.* 1991:32, Wurm 1991:4).

Bastos 2003:76, 289-290). Until the present day, access to communal lands is in most indigenous communities of the *oriente* granted on the basis of indigenous descent (Adams & Bastos 2003:106). The better economic integration of the local indigenous groups with communal lands in the *oriente* made language and dress less important criteria for group identity and thus encouraged the process of ladinisation within the communities. In the middle of the twentieth century, the Xinka were described as examples of ladinised indigenous people ("ejemplos sobresalientes de indígenas ladinizados") (Adams 1956 *apud* Schumann 1967:6), who had given up their language, traditional dress and specific cultural practices and did not distinguish themselves as a group from the local Ladino population (Termer 1944:106; Rambo 1965:105).

Even though the actual degree of cultural assimilation is nothing that one could measure, we may nevertheless have to concede that in the second half of the twentieth century the Xinka have ceased to exist as a distinct ethnic group (cf. Schumann 1967:6-7). The administrative units of the *barrio*, *aldea*, *municipio* (e.g. Guazacapaneco, Chiquimulteco), *departamento* and the national state became the only functional levels of individual identity. The term *indígena*, and in the extreme case even *indio*, is the main autoreferential denomination that is still used by the inhabitants of the indigenous communities. Very rarely, people still remember the original ethnonymic references or language names. Although the term "Xinka" was still attested and used until the middle of the twentieth century (cf. Termer 1944; Schumann 1967), none of the last Xinka speakers did actually remember the ethnonym. The language is generally just referred to as *idioma de antes* (former language), *idioma antiguo* (ancient language), *tribilec* ("tribal-dialect") or even *dileyto pipil* (Pipil dialect).

The autoreferential term *indígena* reflects individual ethnic status as indicated by the records at the municipal registration offices where citizens are apparently divided into the categories "*indígena*" and "*no indígena*" (Demetrio López de la Cruz: pers. comm.). In the *oriente*, the category of *indígena* comprises all descendants of the former indigenous speech communities Xinka, Pipil, Jicaque, "Popoluca" as well as the resettled Mam, Chuj, Kaqchikel and K'iche' speakers from the Mayan highlands (cf. Adams & Bastos 2003:77). In most indigenous communities, the right to participate in community activities and profit from communal lands is granted on the basis of descent from at least one indigenous parent with earned local rights (Taracena Arriola 2002:383; Adams & Bastos 2003:109). Consequently, people of mixed parentage may inherit the right to access communal lands and like this remain integrated in the community. Within the indigenous communities, however, individual identity does not necessarily correspond to actual descent and municipal records. Many members of the *comunidades* reject an indigenous identity and intermarriages with ladinos are often used to change individual status, even if this entails the loss of communal rights.

The national peace process and the emergence of the Maya Movement have in the recent past triggered a process of ethnic redefinition in the Xinka area (cf. Adams & Bastos 2003:78). As a result of this process, the indigenous communities of the towns and villages Jutiapa, Santa Catarina Mita, Yupiltepeque, Comapa, Jalpatagua, Conguaco, Moyuta, Pasaco, San Juan Tecuaco, Chiquimulilla, Taxisco, Santa María Ixhuatán, Guazacapán and Nueva Santa Rosa have officially identified themselves as *comunidades xinkas* (Adams & Bastos 2003:77). In the department of

Jutiapa, the registration records have recently counted more than 90.000 *indígenas* as "Xinka"; while the census data from 1994 listed only 20.000 indigenous citizens in the 15 *municipios* of the department that once had Xinka-speaking population (Adams & Bastos 2003:76). It needs to be stressed that this is mainly a political process that aims at constructing and defining a new Xinka ethnic identity. The figures from the municipal records cannot be regarded as a reliable source for the actual size of present Xinka population. All such estimates must be vague since all these counts are based on former linguistic identity of specific indigenous communities as the main criterion, while census-based individual identities are not properly taken into account. Olson, for instance, counted in 1987 about 3500 Xinkas, but only six Xinka speakers (1991:404, see Tujab 1987).

Besides former linguistic identity, Xinka cultural activism draws on other diacritics to define modern Xinka identity, including particular physiognomic traits –Termer reported that the Xinka differed from the Highland Maya in that they were taller, had lighter skin and a prominently large nose (cf. 1944:106)– and cultural diacritics that are reconstructed from the ethnographic and historic record. Compared to the other groups in the *oriente* (e.g. the Pipil), the Xinka have maintained their language and cultural independence much longer. This might be attributed to the peculiar backwardness and reservation, or even hostility to foreigners that has been described as typical for Xinka communities (Calderón 1908:4-5; Schumann 1967:5-6).⁶⁴

Los indios son de una fisonomía diferente ... son los verdaderos Pupulucas, dando á esa palabra su significado de bárbaro, hombre tosco, que ella en sí expresa en el lenguaje Pipil. Son gente ruda y viril, celosa de conservar su aislamiento relativo ... (Calderón 1908:4-5)

The Xinka are portrayed as not very complex agrarian society (Brinton 1885a:97; Termer 1948:83; Schumann 1967:91). Traditionally, they practiced subsistence agriculture and worked in the *fincas* and plantations of the Pacific coast (Schumann 1967:93). In addition to the typical Middle American crops (corn, beans, chilli, squash etc.), the Xinka also cultivated rice throughout the colonial times, which distinguished them from other indigenous groups in Guatemala (Termer 1944:108; Schumann 1967:91-92; Campbell & Feldman 1975:41-42).⁶⁵ Until the present day, most families have fruit trees, especially mango trees, and they breed pigs and chicken. Hunting, fishing and the collection of all sorts of crabs and seafood at the coast and from the various rivers of the region provided for a significant part of the local diet (Schumann 1967:91). Traditional crafts included ceramic production – especially in Guazacapán – the fabrication of nets for fishing or for carrying goods (*matates*), all sorts of palm weavings (such as mats, hats, brooms) as well as cotton production and cotton weaving (Schumann 1967:92). With the sole exception of the ceramic production that was traditionally only

⁶⁴ The Pipil from Escuintla have been described as mostly ladinised as early as in the nineteenth century (Orellana 1995:75).

⁶⁵ Rice cultivation in southeastern Guatemala is certainly a colonial phenomenon. Termer suggested that the typical rice grinders from the coastal area were introduced by laborers and slaves of African descent who worked in the local plantations (1944:105).

practised by the Xinka, the other economic activities do not distinguish the Xinka from the remaining local population (Schumann 1967:92).

The material culture of the Xinka is very simple, which reflects in local ceramic forms (Busto 1962:110; Spicknall 1975) as much as in the traditional house-building techniques. Today, traditional Xinka houses are a rare sight. Termer described them as wattle and daub constructions with unsmoothed mud-finishing and a gable-ended roof with palm cover (Termer 1944:103-4). The housing sites were quadrangular and with usually only one family as the resident household (Schumann 1967:97). Traditional dress was suitable for the hot climate of the region and did not differ from the cotton clothing commonly used in the rest of Central America: according to the elders, men used a white cotton shirt and white cotton trousers; working in the fields they used a traditional loincloth (*maxtate*). The Xinka were famous for their "notorious nakedness" (Calderón 1908:5; Termer 1944:106-107; Gaitán Lara 1998:185). Traditionally, women did not use a blouse; their dress consisted merely of a simple cotton wrap-around skirt that was tied with a knot on the hip. Children stayed undressed until well into puberty, though boys used a loincloth when accompanying their fathers or grandfathers on their work. They received a pair of cotton trousers or a wrap-around skirt only when they reached marriageable age. Today, the indigenous population uses normal western-style clothing, though generally a little bit more traditional in cut and style than that of local Ladinos. Only very rarely one can still see an elderly woman in her traditional wrap-around skirt.

In Guazacapán and Chiquimulilla, the town-quarters, or *barrios*, were traditionally referred to as *calpul* and constituted the original unit of social, political and economic organisation (Termer 1944:102, 107-108; Schumann 1967:106ff.).⁶⁶ The *barrios* were connected to the communal lands surrounding the *cabecera*. The *barrios* San Miguel and San Sebastian of Guazacapán, for instance, farmed communally about 530 acres of land (Termer 1944:107; Schumann 1967:93). In the northern *barrio* San Sebastian in Chiquimulilla, the indigenous families who participate in the farming the communal land Las Lomas, on the slopes of the Tecumburro, still form a corporate group. Schumann described that until well into the 1920s the individual *barrios* of Guazacapán were specialised on particular crafts (e.g. ceramic production, weaving) or commercial activities (e.g. fishing, salt trade) but that these specialisations did not exist anymore in the 1960s (Schumann 1967:111).

The sale of communal lands, better employment opportunities and professional diversification contributed to the social and economic disintegration of the land-based indigenous communities (*comunidades con terreno comunal*). In Guazacapán and in some *barrios* of Chiquimulilla, political decisions have been taken to split the

⁶⁶ Traditionally, the Nahuatl term *calpulli* (cal-pul-li [house-large-absolute] = a large house) refers to a descent-based system of hierarchical lineages in Central Mexico. In the Guatemalan sources, various forms and systems of social organisation came to be subsumed under this term (cf. Fowler 1989:200). It may be assumed that the Pipil and Nicaraó referred to their noble lineages as *calpul*, while the K'iche' understood it mainly as a territorial unit controlled by lineages that were connected by intermarriage (Fowler 1989:202). As we are short of information about Xinka social structure and Xinka lineage organisation, it is uncertain which social category or unit the Xinka *calpul* actually referred to. Termer (1944:107) and Schumann (1967:106) suggest that the Xinka *calpul* was an endogamous corporate group that was comprised of several lineages.

communal lands into private properties and divide the lots among the entitled community members, who then either moved to the property themselves or sold the land to people from outside the community. The availability of land outside the town caused something like an indigenous flight from the municipal centres, and consequently more outsiders moved into the indigenous barrios. Within the *barrios* that still hold communal lands, missionary activities and the increasing conversion of formerly Catholic community members to protestantism have contributed to the further disintegration of the indigenous communities. Formerly, each indigenous *barrio* had their own cofraternal organisation that was linked to the Catholic church and administered any communal work (Schumann 1967:108). The gradual conversion of members in the economic community to protestantism has weakened these Catholic institutions and therefore the system of social organisation within the corporate groups as such.

The ongoing disintegration of the indigenous communities is a clear sign of the process of individualisation that can be defined as indicative for language loss. Even though the abandonment of a language does not necessarily involve the loss of ethnic identity, in the case of the Xinka both phenomena, i.e. cultural change and language shift to Spanish, go hand in hand. Thus, the cultural context cannot be drawn on to identify structural consequences of language shift in the Xinka data, as it this would be possible in other cases of dying languages. Quite for the contrary, linguistic data are the only remaining source of cultural information about the Xinka, including origin, cultural contacts and historical conditions. A hypothetical Postclassic immigration of the Xinka, for instance, is only reasonable if attested divergences between the varieties do not exceed this given time-frame – otherwise we would have to project a presence of the Xinka in southeastern Guatemala that extends further into the past. Similarly, cultural relations between the Xinka and the other groups of the area, especially the relationship with the Pipil and Maya groups, can only be attested by traces of these languages in the Xinka lexicon and language structure.

2 The corpus of linguistic data

The *Arte de la lengua szinca* (ALS) will be analysed in the context of comparative data. The comparative corpus consists of (a) the 'primary data' that were recorded by me in Guazacapán in the years 2000-2003 and (b) all the 'secondary data' on Xinkan languages, which I had access to at the time of writing.⁶⁷ Comprising sources that are chronologically diverse and of different geographical origin, this heterogeneous corpus is rather constrained in serving as a basis of linguistic description, since both, primary and secondary data, show certain inadequacies and deficiencies.

This chapter describes the data exploited for the linguistic analysis, including details about the origin, documentary context and past scientific perception, as well as particular deficiencies and idiosyncrasies of each individual source.

§ 2.1 provides a detailed description of the colonial main source written by Maldonado de Matos. This information has been disseminated before in the introductory chapter to the recent text edition of the ALS (Sachse 2004). It is repeated here just cursorily inasmuch as it concerns the subject of the dissertation. Some further remarks are added about the descriptive format of the colonial grammar (§ 2.1.4).

§ 2.2 gives an overview of the comparative data. The primary language information is described including an account of the interview conditions and individual informants (§ 2.2.1). All the secondary language sources that have been drawn on for the linguistic analysis are introduced in § 2.2.2.

In § 2.3 we will discuss the methodological implications for linguistic analysis and language description that are created by the database. The characteristics and constraints imposed by the colonial data from the ALS and the other secondary sources are the subject-matter of § 2.3.1. Moreover, we will examine to what extent the selection, quality and internal structure of the primary data is determined by the moribund state of the language (§ 2.3.2).

2.1 Maldonado de Matos: *Arte de la lengua szinca* (~1773)

The *Arte de la lengua szinca* is the earliest source on the Xinka language. Written around 1773 by the secular priest Manuel Maldonado de Matos in Santiago Sacatepequéz, Guatemala, this colonial document contains a detailed grammatical description and a comprehensive vocabulary of about 1300 items.

⁶⁷ In this study, the terms "primary" and "secondary" are not applied in the usual way, i.e. that secondary sources refer to sources which compile or build upon the data from primary sources (cf. Croft 1990:25). Here the terms qualify my personal access to the source of data. Thus, I consider those data sources as primary that I have documented myself (or that would permit direct access because they exist as an audio recording). Accordingly, all other data sources that are available to me only in written form are defined as secondary.

2.1.1 *Manuscript history*

The early history of the ALS, which comprises 153 folios, is unknown. In the winter of 1917, Marshall Saville found the manuscript in the possession of the Franciscan Father and collector Daniel Sánchez García in Guatemala City and acquired it in 1918 on behalf of Charles Bowditch (Saville 1918:339-340). From the Bowditch Collection the ALS found its way into the holdings of the Tozzer Library at Harvard University's Peabody Museum, where it is kept today in the Rare Book Room under the call number C.A.6 M29. In the same year of its acquisition, Bowditch issued the reproduction of the text in form of a photostatic copy (Maldonado de Matos 1918).

On the title page of the manuscript in the Tozzer Library we find the date "1770" annotated with a pencil and in a style of hand writing that could be attributed to Saville or Bowditch. The dating to 1770 has most likely been inspired by the author's dedication of the grammar to the first Guatemalan archbishop Pedro Cortes y Larráz (1768-1779). The *Descripción geográfico-moral de la diócesis de Guatemala* summarises the initial results of an intensive survey the archbishop initiated after assuming his office. The document in which he laments the state of the Christian mission and the lack of knowledge of indigenous languages among the missionaries is dated to 1768-1770. Thus, the ALS could be interpreted as a response to Cortes y Larráz' assessment. The title page further indicates that the author had been the parish priest of Santiago Sacatepéquez at the time of writing, which suggests that the text was completed between the years 1772-1774 when Maldonado de Matos was administering in this community (see § 2.1.2; Sachse 2004:11, 12, 14).

The linguistic information provided by the ALS has thus far not been extensively exploited, despite the good accessibility of the document. In the same year in which Saville purchased the manuscript, a photographic (photostat) edition of grammar and vocabulary was produced to make the data available for research (Saville 1918:340). In 1928, Lehmann copied parts of the manuscript; the copy which he made in New York from the photostat is now among his manuscripts in the Iberoamerican Archive (*Iberoamerikanisches Institut*) in Berlin (Lehmann 1928). The vocabulary of the ALS served to a few researchers as a source of reference. Feldman (1986) referred to it for his toponymic study of southeastern Guatemala and Greenberg (1987) used a few terms of the Maldonado-Xinka together with other examples from Guazacapán, Chiquimulilla and Yupiltepeque as evidence for his classification of Amerindian. Campbell and Kaufman draw on the data in their field notes (see § 2.2.2.11).

2.1.2 *Author*

Not much is known about the identity of the author. The manuscript itself contains very little detail about his person. According to the title page he was "maestro" and "cura propio del partido de Santiago de Sacatepéquez" at the time of completion of the ALS.

Several documents from the *Archivo Arzobispal* (AA) and the *Archivo General de Centro America* (AGCA) in Guatemala City give us information that Manuel Maldonado de Matos had been entrusted with various administrative responsibilities in the parishes of Guazacapán, Chiquimulilla, Taxisco, Tacuilula, Guanagazapan

and Sinacantán for an undetermined time in the period between the years 1745 and 1764. He then moved to the Kaqchikel-speaking area, serving as a priest in San Juan Alotenango between 1764-1772, in Santiago Sacatepéquez between 1772/3 and 1774, and from 1774 onwards in San Lucas Sacatepéquez where he died on the 25 March 1790. For a detailed reconstruction of his life, I refer to chapter 2 of the introduction to the edition of the ALS (Sachse 2004:6-12).⁶⁸

It is noteworthy that Maldonado de Matos composed the ALS at a time when he had already been residing in the Kaqchikel area for almost ten years. This leaves us with the question about the source of his information on Xinka language data. Although we cannot entirely rule out the possibility that he might have worked from earlier drafts or even by bringing a Xinka-speaking informant to Sacatepéquez, there are some indications which suggest that Maldonado de Matos actually drew on his own language knowledge to write the ALS.

In a legal document from the *Archivo Arzobispal*, with which he apparently applied for transfer to another parish, Maldonado de Matos included some personal information. Stressing his legitimacy as the son of Juan Martín Maldonado de Matos and Theresa de Escobar, he mentions the Spanish ancestry of his parents: "... que los dichos mis padres sus ascendientes fueron españoles notoriamente conosidos..." (AA:A4-18.T2;1.41:fol.19v), which may suggest that he and his parents were of *ladino* background. The document also clarifies that he received a proper education of grammar, arts and theology in the *Colegio de San Francisco de Borjas* in the capital city of Guatemala. His supposedly mixed origin and education explain Maldonado de Matos' apparently significant knowledge of several indigenous languages. The full title of the "Arte de la lengua szinca con algunas reflexiones criticas al arte cakchiquel" and his comment in the same text "con toda la dilatada practica que en los ydiomas tengo" (fol. 6v) suggest that the priest had knowledge at least in Kaqchikel. In the document from the *Archivo Arzobispal*, Maldonado de Matos states - besides having fluency in Mam, K'iche' and Kaqchikel - that Xinka was his mother tongue:

...que soi lengua materno en la xinca pupuluca, y examinado y aprobado en la dicha, y en la man, y con principios y fasilidad, en la quiché y cagchique... (AA:A4-18.T2;1.41:fol.19r)⁶⁹

Whether Xinka was indeed the author's mother tongue, which would imply that he was raised in the area or that his mother came from there, or whether he just used the term "lengua materno" to underline his fluency in the language of the area where he served as a priest for nineteen years, cannot be fully clarified. In both cases, we may assume his knowledge of the language to have been profound, which is why the

⁶⁸ The documents that the reconstruction is based on comprise two legal papers from the section A1, *legajo* 100 (expediente 2138: fol. 15 & fol 45) and *legajo* 4247 (expediente 33832) from the *Archivo General de Centroamerica* as well as three books from the *Archivo Arzobispal*: the book of the *Congregación de San Pedro, 1733*, the *Autos instruídos sobre provisiones de curatos de este arzobispado desde 1764 hasta 1769*, and the *Visitas Pastorales, tomo 25* (fol. 15-33) that was compiled by Pedro Cortes y Larráz dating to 1769, 1774 and 1775.

⁶⁹ "... for I am a maternal speaker of Xinca-Pupuluca and have been examined and approved in this [language] and in Mam, and with commencement and facility in K'iche' and Kaqchikel..."

linguistic data from the ALS are very consistent and can be regarded as reliable to a certain degree.

Table 2. 1: Biographical data of Manuel Maldonado de Matos

? *	(date of birth unknown)
	education in the Colegio San Francisco de Borjas and the Sagrada Compañía de Jesús de la ciudad de Guatemala
~ 1745	administrative obligations as a priest in the parishes of Guazacapán, Chiquimulilla, Taxisco, Tacuilula, Guanagazapán and Sinacantán in the Xinka region, as well as in parishes of Escuintla in the Pipil-region, of Sonsonate and San Juan Sacatepéquez in the Kaqchikel-region and of San Felipe Extramuros in the capital
	in Guazacapán he was <i>coadjutor</i> and <i>cura interino</i> , later he obtained the titles of <i>vicario provincial</i> and <i>juéz eclesiástico</i> of this province
	admission to the <i>Congregación de San Pedro</i> in 1752
1764	application for new parishes
1764 - 1772	priest in San Juan Alotenango
1773 – 1774	priest in Santiago Sacatepéquez
1774 - 1790	priest in San Lucas Sacatepéquez
1790 †	died in San Lucas Sacatepéquez

2.1.3 Classification of Maldonado-Xinka

The text does not give any information about the geographic origin or affiliation of the Xinka variety described by Maldonado de Matos. Some indication may be provided by the Xinka toponyms of towns and villages in Santa Rosa that are listed in the vocabulary. Given that the author had clerical responsibilities in the parishes of Guazacapán, Chiquimulilla, Sinacantán, Taxisco, Tacuilula and Guanagazapan in the years 1745 to 1764, it is most likely that the ALS describes either the language of one of these places, or a generalised Xinka of the central region. However, linguistic data have only been documented in the first three of the mentioned villages and comparative data from the colonial times are lacking altogether.

A comparison of Maldonado-Xinka with the contents of the proclamation manuscript of the *Idioma Zeeje* (Morales 1812) (see § 2.2.2.1) would suggest that lexical and grammatical differences between the Xinka of Guazacapán (X_G) and the Xinka of Chiquimulilla (X_{Ch}) were less overt at the time of Maldonado de Matos - though, again, the comparative source is just a translation of which we do not know how it was produced. It needs to be taken into account that Maldonado de Matos might have compiled linguistic information from various towns; we do not have any indication whether the ALS was written with the help of one or several informants.

Based on the phonological/lexical and grammatical properties of the language described in the ALS, Maldonado-Xinka seems to be closest to the Xinka of Guazacapán (Kaufman: pers. comm. 2001). There are, however, some lexical forms and patterns in the colonial grammar that are not attested in the Xinka of Guazacapán, but only in other varieties. Any classification attempt of Maldonado-Xinka needs to take into account that the Xinka of Guazacapán is simply the grammatically best documented of the Xinkan languages, and that the colonial author may have described the variety of a town in the central area of which no other data have survived, such as Taxisco, Tacuilula or Guanagazapán.

2.1.4 The "Arte de la lengua metropolitana" (1753)

As indicated in the title "*Arte de la lengua szinca con algunas reflexiones críticas al arte cakchiquel*", Maldonado de Matos writes his Xinka grammar as a refutation of a Kaqchikel grammar that he does not mention by title or by reference to the author's name. He introduces the grammar with the following words:

He visto un pedazo de arte kakchiquel, que anda por ahí, impresso en Guathemala, viciado de algunos errores, ... (*Arte de la lengua szinca*, fol. 1v).

As I have argued before, the grammar Maldonado de Matos is referring to can be identified as the *Arte de la lengua metropolitana del reyno cakchiquel* written in 1753 by the Franciscan priest Joseph Ildefonso Flores (see Sachse 1998:24-25; 2004:13). Maldonado de Matos refers to the Kaqchikel grammar as a printed piece that was known in Guatemala at the time of composition of the ALS, i.e. ~ 1773. Several copies were printed of Flores' Kaqchikel grammar. Furthermore, Maldonado de Matos includes a few literal citations from the Kaqchikel grammar that can be identified in the text of the *Arte de la lengua metropolitana*. Table 2. 2 contrasts the relevant references from the ALS with the original text passages in the Flores grammar.

Table 2. 2: Comparison of ALS with Flores' *Arte de la lengua metropolitana*

Arte de la lengua szinca (~ 1773)	Arte de la lengua metropolitana (1753)
1. "Y para que se vea, que la resolución arriba dicha, vâ realzada, con sobrados fundamentos, concluirè este [parágrafo] con el mismo arte kakchiquel, el que dice así: «todo esto es para advertir, que aunq[u]e estos no tienen G (habla de los yndios) en su abecedario, pronuncian claro como nosotros: Gua, Gue, Gui, Guo, solamente con la U: Va, Ve, Vi, Vo» (fol. 7r)	<i>Capitulo Proemial</i> , parágrafo 9 (pág. 12): "Todo esto es para advertir, q(ue) au(n)que estos no tienen g. en su abecedario pronuncian claro como nosotros: gua, gue, gui, guo, solamente con la V. va, ve, vi, vo..."
2. [num. 3. pag. 5. Arte (al margen)] "Y yo no sè que razon pudo tener al autor de aquel arte para decir: que solo los yndios kakchiqueles, le dán á la X su verdadera pronunciación, y que nosotros los españoles la confundimos,..." (fol. 9v)	<i>Capitulo Proemial</i> , parágrafo 3 (pág. 5): "La pronunciacion de la X en esta le(n)gua, no es como en el Castellano, porque en verdad, que ninguna lengua la pronu(n)cia con mas propiedad que la Cakchiquel, ..."

3. [Art. n.º 4 pag. 102 (al margen)] "En la primera exposición q[u]e haze el arte del verbo, y su division. Al explicar esta clase de verbos neutros, trahé por exemplo de ellos a los verbos comer, subir, quando dice: Yo como, Yo subo. Y es cierto, que es un yerro este tan enorme respecto a quién lo dice, que aun viendolo, es difícil de creer." (fol. 37v)	Cap. IV - del verbo; § III. de los verbos activos; parágrafo 4 (pág. 102): "Verbo neutro, que por si dà á entender, que ni es vno, ni es otro, como Yo duermo, Yo como, Yo subo, Yo baxo &c. ..."
4. [Arte pag. 272, num. 8 (al margen)] "Yo no sè que razon pudo tener el arte kakchiquel para señalar por adverbios los que son puramente nombres, y verbos; dice que Jun Abír, Ex Jun Abír, Ca Habír, Oxabír, son adverbios, quando no son otra cosa que concordantes de substantivo, y adjetivo, que significan "un año", "dos años", y "tres años". El substantivo es "el año", y los adjetivos son, "uno", "dos", y "tres". Con que Yo no sè como puedan ser adverbios."	Cap. VII del adverbio, parágrafo 8 (pág. 272): "Hunabir, vel Xhunabir. ahora vn año. Cababir ahora dos años. Oxabir ahora tres años. Cahabir ahora quatro años. Vooabir ahora cinco años, y assi se va co(n)tando por la quenta general. A los dichos se antepone una X para significar desde, ò despues de; vg. Xhunabir; Xcababir, Xoxabir &c."
5. [id. num(er)o 9 (al margen)] "Tambien dice, que Tayèg es adverbio, Yo no sè donde avrà visto el autor adverbio que mude numero, y persona. Porq[u]e Tayèg es una palabra compuesta de dos dicciones, q[u]e son Tà, y Yeg." (fol. 106v)	Cap. VII del adverbio, parágrafo 9 (pág. 272): "Adverbios para dar prieza, ò despacio. [...]. Tayefj aprieza..."

Maldonado de Matos criticises Flores' use of specific orthographic conventions and descriptive categories and, accordingly, does not use these in his description of the Xinka language. Instead he defines his own descriptive standard that is further explained and justified in the text. In this Maldonado de Matos proved his excellent education, as he did not simply copy the grammatical paradigm of another author but analysed the language—at least in part—within self-defined categories.

2.1.5 Grammatical description

The degree of reliability of the linguistic information in the ALS is determined by the mode of representation. Colonial grammars may vary as to their underlying concept of linguistic description depending on authorship and time of writing (cf. Zimmermann 1997:13).

Like colonial grammars the linguistic description in the ALS follows in its structure and categories the Latin-style model of grammar. All grammars of the time were written on the basis of the ideal grammatical example given by Antonio de Nebrija's *Introductiones Latinae* (1486) and *Gramática Castellana* (1492) (McQuown 1976:108; Newman 1967:179-180; López García 1995:250). Although the *Introductiones Latinae* were the general model that had been adopted by the church for the description of vernacular languages (Zimmermann 1997:13), colonial

grammars frequently include paradigms from the *Gramática Castellana* (see López García 1995:250; Monzón 1995:253; Nansen Diaz 1995:264).⁷⁰ A comparison of the structure and descriptive categories of the ALS with the two Nebrija-grammars shall give us an idea about the model used by Maldonado de Matos and the conception of categories in his own grammar.

A systematic overview of the descriptive categories of the ALS and the associated Xinka forms can be found in Appendix 1 (which the reader may refer to for clarification of the following argumentation).

The ALS is organised in seven chapters. The first deals with sound system and orthographic conventions. The second chapter describes the categories of case declinations and plural formation in nominal word classes, *nombres* and *pronombres*, while the following chapters 3-6 describe and list the paradigms of verb conjugation. The final chapter contains a concise explanation of the remaining lexical classes of *participio*, *preposición*, *adverbio*, *interjección* and *conjunción*.

The description of the sound system in the introductory chapter corresponds to Nebrija's model (1980 [1492]:103-131) and can be considered a standard in colonial grammars to Amerindian languages. This very detailed account and reflection of the particulars of Xinka pronunciation suggests that the author had indeed adequate competence in the language.

The following grammatical description covers the eight word classes of the Latin grammar as found in Nebrija's *Introductiones Latinae*. Unlike Flores, who dedicates an individual chapter to each word class, Maldonado de Matos puts more emphasis on the formation of nouns and verbs.⁷¹ In chapter 2 he explains the structure of his *Arte*:

Las partes de la oración son ocho nombre, pronombre, verbo, participio, preposicion, adverbio, interjecion y conjuncion. De estas ocho, las tres primeras, son *simpliciter* necesarias para la oración, y las otras cinco restantes, solo lo son *secundum quid*. Son *simpliciter* necesarias las tres primeras, porque sin verbo, y nombre, ó pronombre, no puede aver oracion. Las otras cinco [...], muchos grammaticos las negaron por partes de la oracion y solo afirmaron por partes lexítimas à las tres primeras (fol. 13r-13v).

Further deviations between the ALS and Nebrija or Flores concern the description of the declination of *nombres* and *pronombres* in one single chapter (cf. Nebrija 1980 [1492]:231-236 and Flores, chapter II.2 and II.3). However, the pronouns (fol. 19v-20r) correspond largely with those in Nebrija (1980 [1492]:234-235). The pronominal categories "el mismo" (fol. 21r-21v), "si alguno" (fol. 23r)

⁷⁰ For quite a while, Nebrija's *Gramática castellana* was erroneously understood as a mere translation of his earlier Latin grammar, but in fact both works differ in structure and grammatical categories (see Quilis 1980:83). These different grammatical conceptions reflect in many colonial grammars of Indian vernaculars.

⁷¹ With regard to the definition of the "elementos de la oración", Nebrija's Latin and Spanish grammars differ. In the *Introductiones latinae* the word classes that are defined are: "ocho partes: nombre, pronombre, verbo, participio, preposición, adverbio, interjección y conjunción" which also include "gerundio" and "supino"; whereas in the *Gramática castellana*, Nebrija defines ten word classes: "nombre, pronombre, artículo, verbo, participio, gerundio, participial infinito, preposición, adverbio y conjunción" (see Quilis 1980:23).

and "ninguno" (fol. 23r-23v) cannot be found in Nebrija, but they are attested as *pronombres recíprocos* in Flores (chapter III.3).

Maldonado de Matos dedicates four chapters of the ALS to the description of the verbal system and conjugations. He explicitly distinguishes his statements about the verbal system from those in the Flores grammar. Based on the final vowel of the conjugated verb, the author defines six verb conjugations – the individual person markers, however, do not show any dependence on the final vowel. The conjugation follows the same template of *tempi* and *modi* that are defined in Flores and Nebrija's *Introductiones Latinae*, i.e. *presente*, *pretérito imperfecto*, *pretérito perfecto*, *pretérito plusquamperfecto*, *futuro imperfecto*, *futuro perfecto*, *circumloquio segundo*, *supinum*, *gerundios* and *participios* (see Appendix 1).⁷² Besides *imperativo* and *infinitivo*, Maldonado de Matos conjugates the verbs in the *modi* of *indicativo* and *subjuntivo*, whereby he deviates from Nebrija (1980 [1492]:253-255), who defines the additional category of an optative mode.⁷³

As regards the definition of lexical classes, Maldonado de Matos rejects the representation of the verb system by Flores (fol. 36r) who employs the categories of the *Introductiones Latinae* and distinguishes the lexical classes of *verbos activos*, *absolutos*, *pasivos*, *neutros*, *instrumentales*, *frequentativos*, *distributivos* and *anomalos* (fol. 36r). Following the model of modern grammarians and Nebrija's *Gramática castellana* (cf. López García 1995:249), Maldonado de Matos distinguishes only between transitive and intransitive verbs that he names *verbos normales* and *verbos comunes*, or *activos* and *pasivos* (fol. 36r).⁷⁴ He especially rejects Flores' definition of *verbos neutros* and rationalises this as follows:

...a cada paso encuentran con aquella nota nona añadida en el arte de Nebrija. En la que claram[en]te se ven excluidos de la gramática los verbos neutros con los muchos exemplos que allí se expresan. (fol. 37r-37v).

Although Maldonado de Matos mentions Nebrija explicitly in the text, it is unclear whether he derives his definition of verb classes from the *Gramática castellana*, or whether he copies other colonial grammars. The designation of transitive and intransitive verbs as *activos* and *pasivos* does not correspond to the terminology used by Nebrija, who refers to these as *activos* and *absolutos* (Quilis 1980:31) and rejects the existence of passive verbs in Spanish (see López García

⁷² Nebrija's definition of the Spanish tense system deviates from his Latin grammar inasmuch as he employs the following categories: "presente, pasado no acabado, pasado acabado, pasado más acabado, venidero" (see Quilis 1980:32). It is therefore clear that Maldonado de Matos did not follow the outline of the *Gramática castellana*.

⁷³ The term *partícula optativa* (fol. 130r) is used in the *Arte de la lengua szinca* in the context of a description of elements of a subjunctive construction, which implies that the author assumes these categories to be interchangeable.

⁷⁴ Quilis describes the change in the categories of the *Gramática castellana* as follows: "'Género en el verbo es aquello por que se distingue el verbo activo del absoluto.' En este punto se aparta Nebrija de las *Introductiones*. En éstas, contempla los cinco géneros más frecuentemente considerados por los gramáticos latinos: *actiuum*, *passiuum*, *neutrum*, *commune*, *deponens*. La distinción realizada por Nebrija en este punto se refiere al verbo transitivo (activo)..." (Quilis 1980:31)

1995:249; Quilis 1980:36).⁷⁵ Besides Nebrija, Maldonado de Matos mentions other grammarians who postulate the differentiation of transitive and intransitive verbs:

Porque solo que aquel arte se huvièse escrito antes que Escaligero, y Fran[cis]co Sanchez escribiesen; le valdría la disculpa, de que en ese tiempo estaba corriente, y bien recibida de los grammaticos esta division. Pero haviendose escrito mucho despues que estos famosos authores escribieron sobre la lengua lâtina, y trabajaron tanto por desterrar de la grammatica los dichos verbos, no hallo razon que pueda minorar su culpa, maiormente, quando Agustin Saturno, Gaspar Sciopio, y otros a quienes cita, y sigue Barbadiño, hicieron lo proprio. (fol. 37r)

It is not possible to ascertain whether Maldonado de Matos had a master model for the ALS. The variant use of categories derived from both of Nebrija's grammars is also attested for other colonial grammars (López García 1995:250). However, it remains unclear to what extent Maldonado de Matos modifies the categories himself and to what extent he resorts to other colonial language descriptions or the mentioned grammarians. The author's knowledge about grammar may also reflect the teachings of the clerical school in the capital of Guatemala, where he received a proper education in grammar (see §2.1.2).

For the linguistic analysis of the Maldonado-Xinka it needs to be taken into account that the author may define his descriptive categories deviating from Nebrija's; this would affect the semantic context of the forms described in the manuscript.

Although we have shown that the colonial Xinka grammar employs a mixture of Spanish and Latin descriptive categories (cf. Quilis 1980:83), we shall refer to the original descriptive model of the ALS generally as a "Latin model".

2.2 Comparative data

The comparative data include the entire language information that was recorded with the last Xinka speakers in Guazacapán (§ 2.2.1) as well as all the other documented language data on Xinka, which are drawn on in this dissertation (§ 2.2.2). It needs to be noted that the term 'comparative' refers here to the function of the language data within the present study, i.e. forms within the colonial corpus of the ALS are analysed and clarified by comparison with the other language data. The term 'comparative' is not used in its rather strict sense within the field of historical linguistics where it refers to the linguistic material of daughter languages used to reconstruct a common proto-language.

2.2.1 Primary sources

Primary data include the entire language information that was recorded with the last speakers of Guazacapán between 2000 and 2003.

⁷⁵ "Para Nebrija: 'El latín tiene tres bozes: activa, verbo impersonal, passiva; el castellano no tiene sino sola el activa. [...] La passiva suple la por este verbo *so, eres* y el participio del tiempo pasado...'" (Quilis 1980:36).

Altogether, 17 informants were interviewed in 46 sessions that comprise a total of 3350 min. (= 55,8 h) (see Appendix 7). Of these, 37 recordings of 3115 minutes (= 52 h) have been included into the corpus. The majority of informants merely remembered a few lexical items and single phrases. Thus, ten out of seventeen informants were only interviewed once, another three were visited twice. Only five informants turned out to be adequate semi-speakers who preserved some grammatical competence. These five speakers were interviewed on a more regular basis, and a total of 2770 minutes ($\approx$ 46 h) was recorded in 32 interviews sessions; each interview lasting between 45 and 180 min. Duration and length of the interviews vary, and quantity and quality do not correspond.

All informants were of advanced age, all of them were men. The few women who could still be located were either too ill to give information or refused to participate.⁷⁶ With only one exception (José Antonio López Perez), none of the informants was literate.

2.2.1.1 Interview conditions

All linguistic data were recorded in Guazacapán. It was not possible to locate or contact any further speakers outside this *municipio*. Two weak rememberers from Chiquimulilla were interviewed, but as the language information they provided was so fragmentary, the data have not been included in the analysis.

All contacts with the speakers were established through the members of the COPXIG who also accompanied me to all interviews. During the first field campaign it became apparent that the COPXIG, originating by majority from Chiquimulilla, was in a rather adverse position to establish contacts with informants in the neighbouring *municipio* of Guazacapán. The local population in Guazacapán was very cautioned and reserved and did not deliberately give information. Only with the help of recognised and reputable local mediators information could be obtained about remaining last speakers. Still, in several cases not even these mediators were able to build up contact or convince presumed Xinka speakers to cooperate in the project.

In some cases elderly people who were reported as speakers by other locals simply denied to have any linguistic competence. Under these conditions it proved far more complicated than first expected to gain even access to potential informants. Since all those people who still preserved some knowledge about the language were without exception of rather advanced age, searching for speakers ended up being a race with time. In four instances presumed speakers had died before the COPXIG had knowledge of them or could establish contact. This was particularly distressing in the case of two elderly women who had passed away in November 1999 and in January 2000, just right before I took up field work. In later campaigns, we had two further incidents in the hamlets of El Astillero and El Palmar, where relatives reported that their elders who had knowledge of the *idioma de antes* had just recently passed away (i.e. September 2000 and January 2003).

⁷⁶ Women usually preserve language knowledge longer than men. Although Xinka seems to provide a case for the opposite phenomenon, the alleged dominance of male Xinka informants could simply be attributed to the women's inferior social status and their reluctance to reveal any language knowledge.

All interviews were held at the informants' homes. Generally, speakers sat in their favourite places with other family members nearby. Recording conditions were rarely acceptable and disturbances in form of noise or interrupting relatives and neighbours were common. It is certainly true that such a domestic context with all kinds of disturbances and a moderate degree of publicity is not an ideal setting for any form of linguistic interviewing or audio recording. However, the advanced age of the informants did not permit to bring them to any other place where the conditions for recording the interview sessions would have been more acceptable.

In fact, it turned out that most informants were quite comfortable with being visited, and found it rather prestigious to be interviewed at their small *ranchos* or houses. Thus, home visits had indeed a positive effect on the willingness of some speakers to cooperate in the project. Being interviewed in their natural and daily context also helped the speakers to feel less intimidated and give up their reservation and reluctance. For their cooperation informants received some fixed payment set by the COPXIG and occasionally small gifts they requested, such as clothing, food or specific tools.⁷⁷

Last speakers of moribund languages are a limited resource. It is therefore often demanded that field work should be planned with time and include frequent visits and regular work with the informants in order to improve their linguistic competence. Evans (2001:263-64) suggests that linguists should learn the language themselves to help last speakers to improve their conversational ability in a monolingual interview context; last speakers should furthermore be brought together in joint sessions to create new communicative situations. In the case of Xinka, the informants' health conditions as well as their personal feuds among each other made any form of reunion of the last speakers impossible.⁷⁸ The heterogeneity of the linguistic information provided by the different informants confirms that the immobility of the speakers turned out to be rather beneficial. As languages are not static or unalterable systems, and as interlocutors always adjust to each other, artificially created communicative contexts may generate a new linguistic code. This active shaping of the linguistic record or the individual competence of the speakers was avoided. Like this, structural changes related to language decay became more apparent and easier to detect.

The interview situation as such affects the quality and nature of the linguistic data. The moment, duration and development of an interview are determined by the informant's individual disposition. Generally, speakers got tired and lost their

⁷⁷ The *propina* "tip" the informants received was paid on advice of the COPXIG – generally not more than US\$10 for a long interview. Retrospectively, however, this practice turned out to be a problem as informants expected to receive a tip, which made it more difficult for the COPXIG to go on and record more interviews once I had left the field.

⁷⁸ It is certainly true that reuniting the speakers and involving them in interactive discourse would have provided more information about passive and active competence or performance behaviour, several factors made it however impossible to bring the last speakers together: 1. physical conditions of the speakers – Sebastián Hernández and Raymundo Hernández were already too frail to leave the site of their house. 2. demanding exclusivity of information – Juan Santos, Elena Santos, Pablo Esquite declared that they were the only surviving speakers and that all the others who once knew had already passed away. 3. Sebastián Hernández and Antonio López were at feud with each other and Antonio López who was still fairly mobile rejected the idea of accompanying us to Don Sebastián's house.

concentration after one hour. Depending on the individual speaker, the data may vary significantly with respect to their extent, contents and quality. Elicitation and interviewing of each informant always started with the same strategies that were later varied according to the situative interview context and the speakers' personality and temperament. Most speakers did not want to talk to me directly and only accepted the accompanying COPXIG-representatives as a communicative partners. Therefore, questions had to be mediated, which affects the quality of the data.

Interview sessions were recorded in different audio formats (ordinary tape and mini disc recordings), accompanied by written notes.

2.2.1.2 *Informants*

In this section I will introduce the informants and give a short description of the individual documentary conditions and quality of the recorded linguistic data.⁷⁹ In the remainder of the text, the informants will mostly be referred to in abbreviated form (e.g. PE for Pablo Esquite); the abbreviations are indicated in the paragraphs.

Pablo Esquite García (* 1920 - † 2007), Barrio San Miguel (Guazacapán)

Pablo Esquite (PE) was the first informant I worked with in February 2000. Within the Barrio San Miguel he was regarded a prominent *brujo*, *volador* and Xinka speaker. Pablo Esquite had wide lexical competence but only very limited active grammatical competence. He had not been socialised in Xinka nor did he learn the language within the context of the family but as a young man from elderly speakers. Only two interviews of 225 minutes in total were recorded. Pablo Esquite was a renowned storyteller and further visits at his place were rewarded with the narration of local oral traditions. He died in 2007.

Sebastián Hernández (* 1912 – † 2004), Aldea Poza de Agua (Guazacapán)

Sebastián Hernández (SH) was the most cooperative and most competent of the informants. In total, 14 interviews of 1490 minutes could be recorded, and thus the major part of the primary data. Don Sebastián was interviewed in the years 2000 and 2001, in 2003 he was already very weak and ill and by then his advanced deafness made any further work impossible. He died in May 2004. Sebastián Hernández was an archetypal semi-speaker. He declared that he did not speak the language with his parents but with other relatives from the grandparent's generation. He mentioned that his wife came from a family that spoke the language, and indeed, Doña Carmen,

⁷⁹ It is always considered problematic to reveal the identity of informants. Keeping them anonymous is often the only secure way to protect informants and their families from reprisal and other disadvantages. The COPXIG has asked me to mention the names of the last Xinka speakers that provided information for this study. In this way, I would like to thank the informants and express my gratitude and respect for their participation in the project. Furthermore, I hope that revealing the identities of the speakers may contribute to more transparency in the research on Xinka. As it may be possible that other investigators have worked with the same informants before, the identity of the speakers who have contributed to my research may help to compare these data with possibly existing earlier recordings of the same informants. Some of the same informants are also indicated on the AILLA-website, which suggests to me that PAPXIGUA likewise approves of the mentioning of the last Xinka speakers from Guazacapán.

showed us repeatedly that she had proper competence, but utterly refused to cooperate in the project. Don Sebastián remarkably improved his speaking ability during the regular interview sessions.

Sebastián Hernández was a famous *hacedor de lluvia* 'rain maker' and known well beyond the municipal boundaries, which brought the COPXIG and MINUGUA to work with him on cultural revitalisation as early as 1996. Don Sebastian was therefore quite used to giving interviews and interacting with strangers. Having been associated with the COPXIG for a while, he was the only speaker who referred to the language as *idioma xinka*, although he repeatedly pointed out that this was not what he used to call it before. He was acquainted with the procedure and the purpose of linguistic documentation. Otto Schumann mentioned him as one of his younger informants (1967:9)⁸⁰ and he himself told me that about 30 years ago (i.e. in the 1960s-1970s), he had given information about the language to two North American linguists. He remembered them as having been associated with the church. It is possible that his report either refers to the project of linguistic documentation by Campbell and Kaufman, or to McArthur from the SIL who worked in the area in the 1960s.

Raymundo Hernández Godínez (*1919), Barrio San Miguel (Guazacapán)

The contact with Raymundo Hernández Godínez⁸¹ (RHG) was not established until 2003. Don Raymundo granted us seven interview sessions with a total of 420 minutes of recordings. He was the only informant who referred to the language as *tribilec*. Don Raymundo was very kind and cooperative, but several strokes had left their mark and he was sadly and visibly suffering. He got tired very soon and the disease had weakened his memory and language creativity. Yet, his health condition also minimised his capability to modify linguistic information. Don Raymundo's data are thus very exact and consistent as he produced just the undistorted and unfiltered linguistic forms that he could relocate in his long-term memory. It was a pleasure to work with Don Raymundo.⁸²

Juan Antonio Santos Benito (* ~1924), Barrio San Miguel (Guazacapán)

In the year 2000, I worked with Juan Santos (JS). Only six interview sessions of a total length of 300 minutes were recorded. Juan Santos granted us little time, trying to gain a little bit more financial profit from the interviews, and sometimes he refused to give any information at all. Don Juan also tried to control the interviews by defining the questions he would answer himself. Nevertheless, he could be very communicative once he was in the right mood and the information he provided

⁸⁰ Schumann estimated the relative age of his informants assuming Sebastián Hernández to have been around 35 years which is considerably too young. Sebastián Hernández himself told us that he had to serve in the military during the reign of Ubico (1931-1944), the information he provided about his age may therefore be considered reliable.

⁸¹ It seems likely that Don Raymundo is the son of Schumann's main informants Agustín Hernández Vázquez and María Godínez de Hernández (cf. Schumann 1967:9), even though he could not remember whether his parents ever participated in a project of linguistic documentation.

⁸² Don Raymundo has more recently worked with Roberto Zavala; the interviews were posted on the AILLA-website (see footnote 7).

proved invaluable. Juan Santos is Elena Santos' son (see below). Hence, we may assume that he has been exposed to Xinka during his language acquisition phase. However, this does not reflect in his overall language competence as the complexity of his language information is behind that of Sebastián Hernández, Raymundo Hernández and Antonio López. Juan Santos is a *curandero* and religious specialist. I could not confirm whether he was making use of the *idioma local* in such contexts.

José Antonio López Pérez (* ~1916 – † September 2002), Aldea Poza del Agua (Guazacapán)

Only four interview sessions of 45 minutes length each were recorded with Antonio López (JAP) in March 2001. The degree of his language competence could only be assessed with difficulty, but it was obvious that Antonio López knew more than he told us and that his competence must in fact have been higher than he suggested. His lexical command was therefore surprisingly low while he managed grammar and especially the verbal system much better than Sebastián Hernández – we may assume that he held back with his lexical knowledge, which was easier for him to hide than grammar.

Antonio López did not give us any details whether he had worked with other linguists before, but he repeatedly mentioned his contacts to apparently influential Ladinos from Chiquimulilla whom he had given information about the language. It has to be noted that Antonio López was literate, which may explain why he was able to pass on information about the language in a very selective way. He was the only informant that referred to Xinka as the *dileyto pipil*. Antonio López was an in-law of Sebastián Hernández, namely his brother-in-law. But as both informants were a feud with each other, they had no inclination to meet and talk to, or even about, each other. In September 2002, Antonio López died as a consequence of a traffic accident.

In addition to the linguistic data provided by these five main informants the primary database also includes selected data from interviews with other informants who –for various reasons– provided only limited lexical data and can be suspected to have withheld some of their knowledge. Although the lexical material documented with these informants confirms or even complements the data of the main informants, these data have not been cited in this dissertation. The language information provided by the rememberers, i.e. terminal speakers with very limited lexical and no grammatical competence, has not been included at all.⁸³

María Cruz Martínez (* ~1920), Barrio San Sebastián (Guazacapán)

Contact with María Cruz was only established in 2003. As Doña María spent most of her time in Guatemala City where she was living with her daughter, it had not been possible to interview her in earlier years. She was very reserved about giving any information and broke off the interview quite soon postponing the

⁸³ The rememberers that were interviewed and whose data have not been included are: Eliodoro Soliz (barrio San Sebastián), Mercedes Gómez (barrio San Pedro), Gilberto Hernández and Doña Nacha (both barrio San Miguel), as well as with Don Herlindo and Antonio Esquite (both from the aldea Poza de Agua).

session to the following week. When we arrived to meet her, however, she had again left for the capital to avoid any further encounter.

Felix Hernández (* ~1925), Barrio San Pedro (Guazacapán)

In the years 2000 and 2001, Don Felix had refused to give us any information and it was not until 2003 that it was possible to establish a personal contact with him. Don Felix could be persuaded to give us one interview. During this interview he presented himself as a rememberer of very limited competence, but some of the items and forms he used indicate that his actual competence goes well beyond that stage. The sacristan of the Catholic church in the centre of Guazacapán confirmed that he was a fully competent speaker. Don Felix refused to give us any further interviews, but has more recently worked with Roberto Zavala.⁸⁴

Carlos Martínez Hernández (* ~1922), Barrio San Miguel (Guazacapán)

The contact with this informant was likewise established in 2003. Carlos Martínez is a true rememberer of lexical items and few phrases. Only one interview session was recorded, which took place in the house and presence of his nephew and other family members. These spectators interrupted the interview quite soon to raise issues of political relevance regarding local cultural revitalisation and the COPXIG. Due to the apparent tensions between Carlos Martínez's family and the COPXIG it was not possible to continue the work with him and the family rejected a further request for an interview.

Elena Santos (* before 1910 - † 2004), Barrio San Miguel (Guazacapán)

Well over 90, Elena Santos was one of the last elderly women who still used the traditional wrap-around skirt. In 1996, the COPXIG and MINUGUA had made photographs of her for an exposition in Chiquimulilla titled *Exposición de la Cultura Xinka*. As Elena Santos was known to speak the language, she was one of the first informants who were contacted in February 2000. She is the mother of informant Juan Santos. Because of her advanced age, systematic work with Doña Elena proved to be an unfeasible task. In two interview attempts a few isolated lexical items and phrases were documented, but systematic elicitation was not possible and at the same time very distressing for Doña Elena. Therefore, I waived further visits to her place. The linguistic data she provided are useful to a very limited extent only. Elena Santos mentioned that she had worked with other linguists before but the identity of the investigators could not be established.

Francisco Godínez (* ~1934), Aldea Poza de Agua (Guazacapán)

This was the youngest among the informants. Francisco Godínez was contacted in 2000 as well as in 2003. In both years, only one interview session was recorded. Don Francisco was very cautious about giving information and on both occasions was deliberately creative about the linguistic items that he provided. Yet, some of his data suggest that his overall competence must be better than he suggested. The reasons for his refusal are not entirely clear. Francisco Godínez is likewise an in-law of Sebastián Hernández.

⁸⁴ Interviews with Felix Hernández have been posted by Zavala on the AILLA-website (see footnote 7).

2.2.2 *Secondary sources*

The corpus of secondary data comprises all the language documentation on Xinka that was available to me at the time of writing. These data include lexical compilations in form of lexical item lists and vocabularies, grammatical sketches ranging from colonial style to structuralist descriptions as well as a few linguistic observations about phonology, morphophonemics and loanwords. These data are quite heterogeneous and inconsistent in that they stem from diverse regional and chronological contexts, written by different authors with varying objectives of research.

Secondary data originate from Chiquimulilla, Guazacapán, Yupiltepeque as well as Sinacantán and Jutiapa (see § 1.2.2). The Xinka of Guazacapán is the grammatically best documented variety, whereas the secondary lexical inventory is more comprehensive for the Xinka of Chiquimulilla. The variety from Yupiltepeque is only documented in the work of Calderón (1908, 1938) as well as in a short word list by Valdéz that is part of a concise comparative vocabulary from Yupiltepeque, Sinacantán and Jutiapa compiled by Carl Hermann Berendt (1875).

The corpus of secondary data as listed in Table 2. 3 includes only original documentation, i.e. data that have been documented by the mentioned author himself (e.g. McQuown 1948) or have been made accessible for the first time (e.g. Berendt 1875). Re-publications of data, such as the use of the Berendt vocabularies by Brinton (1885a), or compilations that are based on the documented materials of others (with the exception of Lehmann 1920), are not considered in Table 2. 3. To provide a comprehensive overview of the stock of data on Xinkan languages, the *Arte de la lengua szinca* has been added to the table.

The majority of the documented language materials are from the second half of the nineteenth century and the first half of the twentieth century. The data comprise mainly lexical compilations (Gavarrete & Valdéz 1868; Calderón 1908; Sapper [apud Lehmann 1911]; Fernandez 1938; McQuown 1948; McArthur 1966; Schumann 1966 & 1967 as well as Campbell 1971 & 1972) and two concise grammatical descriptions (Calderón 1908; Schumann 1967), as well as brief reflections regarding the linguistic affiliation (e.g. Dixon 1969 [1924]), loanwords (Campbell 1972a) or the phonology (Schumann 1966) of Xinka. Examples of coherent language are restricted to individual sentences and phrases in some of the lexical compilations (Calderón 1908; Fernandez 1938; Schumann 1966) and to the earliest known text source in Xinka, the *Zeeje*-manuscript (Morales 1812, see below in § 2.2.2.1).⁸⁵ Linguistic sources in the widest sense are also colonial registers with surnames from the region (Feldman 1976, 1991), yet, these have not been included in Table 2. 3.

⁸⁵ Although the *Zeeje*-manuscript is a text document which would in principle allow for primary analysis, the source is treated here as a secondary source as the translation is strikingly literal and parallel to the Spanish original and it may therefore be assumed that the Xinka data may have been modified by the process of translation and do not reflect natural Xinka language of the eighteenth century.

Table 2. 3: Sources of linguistic data on Xinka

Year	Author	Source	based on	Origin	Type ⁸⁶
~1773	Maldonado de Matos	Arte de la lengua szinca	original	?	Gr, V
1812	Morales	Idioma Zeeje ...	original	X _{Ch}	T
1875	Berendt	Vocabularios de la lengua xinca	Gavarrete/Valdéz	X _S /X _Y /X _{Jut}	V
1885	Brinton	Vocabularios de la lengua xinca	Gavarrete/Valdéz	X _S /X _Y /X _{Jut}	V
1908	Calderón	Estudios lingüísticos	original	X _Y /X _{Ch}	V, Gr
*1911	Lehmann	manuscript	Sapper Seler's copy of Sapper	X _Y /X _{Ch}	V
1920	Lehmann	Zentral-Amerika	Gavarrete/Valdéz Calderón (1908) Sapper (1911)	X _S /X _Y /X _{Jut} X _Y /X _{Ch} X _Y /X _{Ch}	V, Gr
o.J.	Lehmann	manuscript	*Calderón (1908)	?	V
[1924]	Dixon	Zoque and Xinka compared	?	?	V
*1928	Lehmann	manuscript	Maldonado d.M.	?	Gr, V
1938	Fernandéz	Diccionario del sinca	original	X _{Ch}	V
1939	Calderón	Ensayo lingüístico	Calderón (1908)	X _Y /X _{Ch}	V
1948	McQuown	Vocabulario Xinka	original	X _{Ch}	V
1966	McArthur	Xinka	original	X _{Ch} /X _G	V
1966	Schumann	Fonemica del dialecto xinca de Chiquimulilla	original	X _{Ch}	V
1967	Schumann	Xinka de Guazacapán	original	X _G	Gr, V
1971	Campbell	Historical linguistics...	original	X _{Ch} /X _G	V
1972	Campbell	Maya loan words in xinca	original	X _{Ch} /X _G	V
1975	Campbell & Feldman	Some comments on...	original	X _{Ch} /X _G	V
1970-79	Campbell & Kaufman	Field Data	original	X _{Ch} /X _G /X _{Jum}	V, Gr, T
1996	Cruz, Julian	Notes	original	X _{Ch}	V
1997	Cruz, Felipe	Notes from Jumaytepeque	original	X _{Jum}	V

2.2.2.1 Zeeje-Document (1812)

The earliest surviving Xinka text is a proclamation against Napoleon that was translated into several native languages. The document from the year 1812 is kept in the *Archivo General de Indias* in Sevilla (AGI, leg. 943).⁸⁷ The Xinka text is a literal translation from Spanish that – according to the title of the manuscript – has been produced by the "Indian priest" Hermenegildo Morales (cf. Laughlin 2001). The manuscript comprises 16 folios. The text is written in parallel columns with the original Spanish text in the left and the Xinka translation in the right column. The translation is very literal, interspersed with Spanish terms and mirroring the Spanish syntax of the proclamation. The title page of the manuscript has been written by a different hand than the rest of the text; it may simply be copy of the original title:

⁸⁶ Abbreviations: Gr = grammatical information, T = textual information, V = vocabulary/lexical source.

⁸⁷ I am indebted to Lawrence Feldman and Joseph Hall who provided me with a copy of this document.

Proclama traducida del castellano al idioma zeeje (que se habla en algunos pueblos del Arzobispado de Guatemala) por D[o]n Hermenegildo Morales, Presbítero Indio.

The language into which Morales translated the proclamation is designated in the title as "idioma zeeje". The identification of this *zeeje*-language as Xinka is to be attributed to Terrence Kaufman (Kaufman: personal communication, 1997; Laughlin 2001:32). Both, the AGI and Kaufman have read the title as *zeeje* instead of *zeeje*, a misunderstanding that certainly occurred when the manuscript was filed in the AGI. In the text we can clearly read "zeeje" (/ç'ehe/), i.e. the Xinka toponym for Chiquimulilla. Linguistic analysis of the text supports this reading, as the Xinka in the text can lexically and grammatically be identified as the variety of Chiquimulilla.

In total, the text contains about 1600 Xinka lexical forms; many of these are repetitive.

2.2.2.2 Gavarrete & Valdez: *Vocabularies of the nineteenth century*

The mid-nineteenth century vocabularies from Juan Gavarrete and Sebastián Valdéz (1868) have only been preserved in a manuscript copy by Carl Hermann Berendt from the year 1875 that is titled as *Vocabularios de la lengua xinca de Sinacantan por D. Juan Gavarrete y de Yupiltepeque y Jalapa por D. Sebastián Valdez, cura de Jutiapa* (cf. Weeks 1990:107). Berendt's copy lists the lexical items of the three variants in form of a comparative table. The material is only lexical and contains 88 items from Jutiapa, 65 from Yupiltepeque and 104 from Sinacantán.

The precise origin of some of these lexical data is uncertain. The third column of the comparative table is titled with the geographic reference "Jalapa" that has been corrected by Berendt who annotated: "Jutiapa (Berendt)". To what extent his correction, which presumably regards Gavarrete's original indications, may be accurate cannot be clarified without the lost original manuscript at hand. Nevertheless, since Sebastián Valdez was a priest in Jutiapa, it is most likely that the data are likewise from Jutiapa. Jalapa is, however, attested as a town with Xinka-speaking population during the nineteenth century (Calderón 1908:6; Lehmann 1920:731). Brinton (1885a:91-93) as much as Lehmann (1920:732) who made use of the Berendt manuscript adopted the correction, i.e. "Jutiapa" as the origin of the data.

2.2.2.3 Calderón: *Estudios lingüísticos* (1908)

Intending to save "unos cuantos restos que aún quedan de las lenguas indias del Sudeste de Guatemala" (1939:74), the physician Eustorgio Calderón travelled through the southeastern region in the years 1890/91 and documented valuable linguistic data in the towns of Yupiltepeque and Chiquimulilla. In 1908, Calderón published the results of his language studies in a concise volume titled as *Estudios Lingüísticos*, which also contained a vocabulary on the Mixe languages of Oluta, Sayula and Texistepec at the Isthmus of Tehuantepec, Mexico.

The publication comprises early reflections on Xinka phonology, a very concise *Gramática del Sinca de Yupe y del Chiquimulteco del Norte*, an example for a short

Xinka dialogue, as well as a comprehensive vocabulary that lists more than 1000 foremost lexical items from both towns. The grammatical data have to be viewed in the context of their time. Calderón presents the typical verbal and nominal paradigmata from the Latin grammatical tradition, but does not provide any analysis of verbal or nominal morphology. Calderón's documentation provides the most detailed and comprehensive data on both Xinka varieties and is therefore of invaluable importance. Equally important are his observations regarding the distribution of the language, such as his report about the existence of two Xinka dialects in Chiquimulilla (Calderón 1908:5).

In 1939, Calderón's vocabulary was re-published in the Guatemalan journal *Anales de la Sociedad de Geografía e Historia de Guatemala* under the title *Ensayo lingüístico sobre el Pupuluca y otra lengua india del Sudeste de Guatemala*, congeneres del Pupuluca. The accompanying introduction is from 1890. Later, Walther Lehmann (1920) made use of Calderón's vocabulary and grammar, modifying and correcting the data quite arbitrarily.

Calderón's vocabulary contains 1017 entries consisting of 1921 individual lexical items from the Xinka of Chiquimulilla, and 1250 entries including 2310 lexical items from the Xinka of Yupiltepeque. The number of items includes redundant and repeated forms. In some cases the entries for Chiquimulilla and Yupiltepeque are identical. Most of these cases concern grammatically more complex entries. As we cannot assume that both Xinka varieties showed that much resemblance at the more complex grammatical level, it has to be assumed that Calderón complemented data he had missed to document with the available entries from the other variety. It is also possible that the data were confused in the printing process. Nevertheless, the analysis of Calderón's data has to allow for this as a possible source of error.

2.2.2.4 *Lehmann: Copy of manuscript from Karl Sapper (1911)*

Walter Lehmann's extensive publication on the Central American languages includes a chapter about Xinka (1920:727-768). The language data that he reproduces in this volume are taken from Berendt's manuscript of the Gavarette/Valdéz vocabulary (§ 2.2.2.2), from Calderón's *Estudios lingüísticos* (§ 2.2.2.3) as well as from an unedited manuscript of Karl Sapper. From Lehmann's description, which states that Sapper "collected" the valuable data, it is not clear whether Karl Sapper had actually documented the material himself or whether he had copied it from another source.

In 1911 Lehmann made a copy of the original Sapper manuscript, which includes a comparative vocabulary of Xinka data from Yupiltepeque and Chiquimulilla. He had also had access to a copy of Sapper's Yupiltepeque data that Eduard Seler had produced from Sapper's original. The Seler manuscript was copied by Lehmann in 1910. Both of Lehmann's copies are housed in the library of the Iberoamerican Institute in Berlin under the same call number (Y/3180:4), which also includes Lehmann's copy of the Berendt manuscript. The whereabouts of Sapper's original manuscript as well as Seler's copy thereof are not known; the material will therefore be cited as pertaining to Lehmann. The manuscript copies include typographic inconsistencies that were corrected by Lehmann in the publication of the comparative Sapper vocabulary in *Zentralamerika* (1920:734-739). Examples are therefore cited after the publication and not taken from Lehmann's manuscripts.

The comparative Sapper vocabulary includes 306 lexical items and 27 phrases from Chiquimulilla and 204 lexical items and 26 phrases from Yupiltepeque. The data are very similar in content and orthography to the more extensive material documented by Calderón (1908) and Fernández (1939).

2.2.2.5 *Fernández: Diccionario del sinca (1938)*

The *Diccionario Sinca* was published in 1938 by the priest Jesús Fernández in the journal *Anales de la Sociedad de Geografía e Historia*. The vocabulary of Fernández comprises 1299 entries and 204 concise phrases and examples of inflected forms which in total yield 2278 lexical items including redundancies. The origin of the data is not entirely clear. The majority of forms may have been taken from the vocabulary of Calderón (1908) as Fernandez himself indicates:

El Doctor Eustorgio Calderón publicó hacia 1908 un opusculito sobre el sinca de Yupiltepeque y Chiquimulilla, ya es muy raro, consignando lo que pudo recoger en 1891.

Recopilada ya la mayor parte de mi trabajo, por fina atención del Doctor Azurdia pude ver con provecho el trabajo aludido.

Entonces todavía era lengua viva; hoy ya lo es muerta ... (Fernandez 1938:84-85).

Although Fernández states that the language was at that point in time only spoken by the elderly population of Guazacapán, his vocabulary contains mostly lexical forms from Chiquimulilla. According to Busto, Fernández documented the comprehensive vocabulary while he was serving as a priest in Chiquimulilla (1962:110).

2.2.2.6 *McQuown: Vocabulario Xinca (1948)*

The *Vocabulario Xinca* is the product of the *Linguistic survey of the Republic of Guatemala* that was undertaken jointly by the Carnegie Institution of Washington and the University of Chicago. It contains mostly lexical data that Norman McQuown recorded in Chiquimulilla on two consecutive days (November, 29th and 30th 1948). His informants were Mauricio García (*barrio* Santiago) and Desiderio García González (*barrio* San Sebastián). Today, the data are available in form of a microfilm from the University of Chicago Library.

McQuown used a form or questionnaire with a basic survey vocabulary and elicited lexical items for about half of the given data, which he wrote down in phonetic notation. He added a few more notes about verbal morphology. In total, his documentation comprises 751 lexical entries.

McQuown's *Vocabulario Xinca* is the only documentation that contains data from both indigenous *barrios* of Chiquimulilla. The lexical data both informants provide vary to a certain degree, which might indicate that two different language varieties or dialects were spoken in the town quarters, as suggested by Calderón (1908:5, cf. § 2.2.2.3).

2.2.2.7 *McArthur: Xinka (1966)*

In order to present evidence that Xinka was still spoken by a few elderly people, Harry McArthur documented a limited number of lexical items from Chiquimulilla and Guazacapán in 1959. These two short word lists have been published in Marvin Mayers' edited volume *Languages of Guatemala* in 1966. McArthur checked the standard 100-item-list and recorded 77 lexical items from Chiquimulilla and 40 from Guazacapán. He does not give any information about the identity of his informants.

2.2.2.8 *Schumann: Fonémica del dialecto Xinka de Chiquimulilla (1966)*

This concise contribution from the Mexican linguist Otto Schumann on the Xinka of Chiquimulilla is based on data that he documented in the northern *barrio* San Sebastian in 1964. The paper contains a description of the phonemic system and individual phonemes presenting several lexical examples as well as a vocabulary with 277 entries including a few grammatical forms.

2.2.2.9 *Schumann: Xinka de Guazacapán (1967)*

Schumann's Master thesis on the *Xinka de Guazacapán* that he presented at the *Escuela Nacional de Antropología e Historia* (UNAM) in Mexico City in 1967 is to date the most detailed grammatical description of Xinka that follows modern descriptive standards. Besides information about ethnography and oral traditions, Schumann's work contains a brief description of Xinka phonology, morphophonemics, morphology and syntax. The representation of grammatical categories is complemented by examples of inflectional morphology and word formation. The syntactic analysis is based on very few examples. A vocabulary of about 450 entries is added to the description. On the whole, the linguistic description makes up only a rather concise part of Schumann's thesis that is, besides McArthur (1966) and Campbell (1972), the only documentation available for the Xinka of Guazacapán.

2.2.2.10 *Pineda Pivaral: Palabras de la lengua Xinka (1969)*

In 1969, the teacher Eduardo Pineda Pivaral from Chiquimulilla published the *Monografía – Santa Cruz Chiquimulilla*, a comprehensive description of presence and past of the *municipio* Chiquimulilla. Besides vast information about the town and its aldeas the Monografía contains a vocabulary titled as "Palabras de la lengua Xinka, rama Pipil y su traducción al castellano que se habló en Chiquimulilla". The vocabulary contains 441 entries of words, phrases and full sentences that consist of 725 mostly redundant lexical items. These are basically raw data that Pineda Pivaral simply lists without commentary. Especially the sentence examples have to be regarded as particularly valuable for the analysis of morphosyntactic structure of the Xinka of Chiquimulilla. Pineda Pivaral mentions the source of the linguistic information – the elder Güicho Cutin. It has to be noted that Pineda Pivaral classifies Xinka –presumably following local tradition– as a language from the *rama pipil* (cf. § 1.3)

2.2.2.11 Campbell & Kaufman: Field data 1971-1979

Between 1971 and 1979, Lyle Campbell and Terrence Kaufman undertook extensive research on Xinka in the *municipios* of Guazacapán, Chiquimulilla and Jumaytepeque. Their research constitutes the most comprehensive linguistic documentary work that has been done on Xinka. The corpus of data contains several thousand lexical items (according to Kaufman's notes around 1800 roots and 2500 stems) from every town –Guazacapán, Chiquimulilla and Jumaytepeque– including several coherent Xinka texts from all documented varieties. All data are available as sound recordings.

The focus of their research was laid on description and internal classification. Based on their field data from Guazacapán, Chiquimulilla and Jumaytepeque as well as on the secondary data from Yupiltepeque (drawn from Lehmann 1920), they identified Xinka as a language family and the four documented varieties as individual Xinka languages (Campbell 1972a:187). Campbell and Kaufman were the first researchers who recorded and documented the Xinka of Jumaytepeque, and identified it as a new variety. Their data constitute the only substantial documentation of this variety (cf. § 2.2.2.13).

The linguistic information that was published concerned especially the language history of Xinkan; first and foremost aspects of geographical distribution and language contact (cf. Campbell 1971, 1972, 1978a, 1978b, 1979, 1997, 1998). Campbell had included a study on Maya loanwords in Xinka in his thesis on the historical development of K'iche'an (Campbell 1971) and published his results shortly thereafter in a separate article (Campbell 1972a). "Maya loan words in Xinka" contains besides several identified Mayan loans and their precise etymological derivation the phonemic inventory and eight basic phonological rules. The results of the Xinka documentation project found further consideration in several works of both authors on Mesoamerican languages and linguistics (Campbell & Kaufman 1976, 1980, 1983; Kaufman 1977; Campbell, Kaufman & Smith-Stark 1986; Campbell & Muntzel 1989; Campbell 1997a; 1998).

In the early 1970s, Campbell and Kaufman undertook research on Xinka together. Campbell had started this work and Kaufman returned to the Xinka area in 1978 and 1979 to record more data. It was the plan to publish an extensive handbook containing a comparative grammar and dictionary (see Campbell & Kaufman 1980:856). Kaufman systematised all the documented data on filing cards and generated a comparative Xinka vocabulary filling nearly 500 handwritten pages, which I have been permitted to have as a copy for reference (see below).

To provide data for work on a Xinka alphabet and a basic linguistic study, Kaufman had left a xerox-copy of some of his field notes from Guazacapán and Chiquimulilla with the Guatemalan linguist Narcisco Cojti and the *Proyecto Lingüístico Francisco Marroquín* (PLFM) in Antigua (Kaufman: personal communication, 2001). The PLFM gave permission to the COPXIG to draw another xerox-copy of this material. During my first field stay in Chiquimulilla in Spring 2000, I was shown the two files that were copied at the PLFM. The files contain mostly lexical data that are in part known from other compilations, as well as elicited verb paradigms and further relevant morphological data.

In Spring 2005, Campbell was granted funding from the National Science Foundation to database, analyse and disseminate the Xinka documentation from the

1970s. The project "Xinkan, Pipil and Mocho': Bringing Three Endangered Language Documentation Projects to Completion" also includes a revitalisation project that is carried out in cooperation with PAPXIGUA. In the course of this project, PAPXIGUA concentrates on working with the very language materials from the 1970s as well as on documenting further data with terminal speakers in Guazacapán and Jumaytepeque.

In October 2005, Campbell kindly invited me to visit the Center for American Indian Languages (CAIL) in Salt Lake City and take a look at the copied material. I am drawing on these data only as secondary reference material. Examples and analytic results taken from the field notes are credited and cited. Where my data and analysis do not coincide, I do not make reference to the data, unless the divergence requires discussion.

It needs to be stressed that the linguistic material Campbell and Kaufman documented in the 1970s is in every respect more comprehensive than the language information that the terminal speakers provided in Guazacapán thirty years later. The detailed and precise documentation from the 1970s includes linguistic structures (phonological and grammatical) that have not been documented elsewhere. The original recordings have been made available as online-resources on AILLA (see footnote 7) and can be used to complement and evaluate the findings of the present dissertation. I would like to express my sincere thanks to Lyle Campbell for sharing these notes with me and allowing me to make use of some of the data for the present analysis of colonial Xinka.

2.2.2.12 *Julian de la Cruz (1996)*

Julian de la Cruz was the last known Xinka speaker from Chiquimulilla. He died in 1996, shortly after he started to give language lessons to the members of the newly funded COPXIG. Julian de la Cruz was literate and gave instructions how to write the language according to specific orthographic conventions, which are rather inconsistent but correspond largely to those of Pineda Pivaral. It is possible that Julian de la Cruz either copied Pineda Pivaral's conventions or that both derive their Xinka orthography from the same source. The data indicate that Julian de la Cruz' linguistic competence was that of a semi-speaker; he frequently inserted Spanish forms.

2.2.2.13 *Jumaytepeque notes 1997*

In 1997, Felipe de la Cruz from the COPXIG documented some phrases and lexical items of the Xinka of Jumaytepeque upon a visit to the community. He made notes into a booklet that he allowed me to copy. The precise origin of the language information is unclear. The data comprise information either given or documented by Concepción García and a copy of language material that was collected by the teacher Elvia (no surname is indicated). Elvia's data comprise 140 lexical items/short phrases, while Concepción García's data include only 46 such items. The orthographic conventions of both sources are the same.

2.3 Characteristics and methodological implications of corpus data

In the analysis of Maldonado-Xinka, terminal speakers' data and other secondary sources are used to complement the fragmentary colonial language information. This chapter examines the characteristics of colonial language data in relation to the comparative material, and discusses comparability and complementarity of the different types of data sources.

As the characteristics and constraints of the secondary data correspond largely to the methodological implications resulting from the ALS, colonial and secondary sources will be treated together in the same section (§ 2.3.1). Colonial/secondary data and terminal speakers' data differ with respect to their adequacy as a basis of linguistic description and their representativeness for the Xinka language system. We will discuss the constraints and methodological implications, resulting from the different types of data sources.

2.3.1 Colonial and secondary sources

Following the chosen definition (see footnote 67), the ALS is a secondary language source. Colonial sources share many of the methodological constraints and characteristics of the comparative secondary Xinka sources. Secondary language data have been filtered by the author; and structural inconsistencies cannot be clarified by new elicitation and testing of informants (cf. Smailus 1989b:18; Dürr & Schlobinski 1994:241).

Colonial grammars and vocabularies are intentional and addressed to members of the clergy for missionary purposes (Zimmermann 1997:15). This reflects in the sample sentences as much as in the selection of lexical items in the dictionary of the ALS, which has been designed to provide the necessary vocabulary for sermons and confessions, and excludes a considerable portion of the ethnographically more relevant lexicon (cf. Smailus 1989b:19; Brecht-Kriszat & Holl 1997:187; Zimmermann 1997:15).

The documentary context of the ALS is unknown – Maldonado de Matos might have worked with informants, but he might equally well just have documented his personal language knowledge. The comparative secondary sources give only rarely information about the objective or context of documentation, but most data are accompanied by a translation. If the precise context of elicitation is unknown and cannot be reconstructed anymore, individual forms may be ambiguous or incomprehensible and the source of faulty interpretation remains often unclear. This is especially true in cases in which the author did not understand what he was documenting.⁸⁸

⁸⁸ McQuown's data (1948) exhibit many such imprecise forms. To give an example, McQuown inquired for the Spanish verb form "se mojó" and wrote down the Xinka *utu močo* which may probably be translated "wet wood" with *utu* being identified as the lexeme for "tree, wood" and *močo* as the adjective "wet" (a loan from Spanish); it has to be noted that the form in itself is defective and reflects strong influence from Spanish as in Xinka adjectives are positioned before the noun. It may be hypothetically reconstructed that the context of this elicitation was probably some sort of discourse which involved a tree or a piece of wood, and that the informant took up the theme in his next answer. McQuown's documentation does not provide any indications about this context, just the single form which he did not realise to be incorrect. In those cases in which the correct form may not be reconstructed or concluded

Further constraints are posed by the form of representation of the data, i.e. orthographic transcription, descriptive categories, translation context. Colonial and secondary information reflect the analysis, perception and categorisation of language forms by the author and may therefore be fragmentary and deficient (cf. Dürr & Schlobinski 1994:241).

Especially with respect to orthographic standards, the sources show immense variation. The orthography of the ALS is based on the contemporary Spanish standard. Although prephonemic orthographies may reflect an author's individual strive for precision in documenting the exact pronunciation of a word (see § 4), the failure to document phonetically reduces the reliability of the data, as the entire spectrum of sound patterns such as phonemic contrasts, intonation etc. may not be represented sufficiently, or may remain entirely undocumented (cf. Newman 1967:180; Smailus 1989:18). Besides the orthographic ambiguities, there are also random and arbitrary typographic mistakes made in the process of notation or even printing. Such mistakes may easily be overlooked unless they occur in great quantities, e.g. in Calderón (1908; see § 2.2.2.3).

All forms and elements may at first only be analysed according to their semantic or functional context, i.e. their translation or descriptive category; congruence of form and meaning (or function) can, however, never be assumed (cf. Smailus 1989:21; Zimmermann 1997:13). An author might subjectively have perceived two categories as parallel that according to other criteria do not correspond structurally at all. When dealing with the ALS and the comparative secondary Xinka data, it must be borne in mind that semantic contexts have been filtered or modified to a greater or lesser extent by Maldonado de Matos and the other authors, and that the respectively chosen descriptive standard has an impact on the reliability of the data.⁸⁹

Spanish influence manifests itself in form of loanwords, integrated Spanish lexemes and constructions of complex phrases, as well as in the syntax. It is unclear to what extent instances of Spanish influence in the ALS reflect contemporary language usage, and to what extent they need to be attributed to Maldonado de Matos' linguistic creativity (cf. Smailus 1989b:21). We need to point out here that all colonial language descriptions have been produced in a bilingual context, with either the author or his informant(s) being bilingual, which increases the degree of influence from the reference language. It also needs to be taken into account that Maldonado de Matos claims fluency in several Mayan languages (Mam, K'iche' and Kaqchikel). The representation of Xinka forms may therefore, in addition to Spanish and Latin, be influenced by Mayan forms (cf. Zimmermann 1997:15).

Grammatical information from secondary sources has been pre-analysed and filtered by the author; linguistic entities are usually not represented in their natural context but in form of an analysed descriptive category. Crucial for the degree of modification caused by grammatical categorisation is the chosen descriptive model, which provides the framework for linguistic description.

from external contexts it is possible that incorrect forms are analysed which are not representative for the Xinka language system.

⁸⁹ Haviland described this problem of colonial language sources for the Tzotzil dictionary of Santo Domingo Zinacantan which correlates Spanish infinitives consistently with inflected Tzotzil verbs (see Laughlin 1988:79).

The ALS utilises the colonial-style model of Latin grammar (see § 2.1.4). Calderón's (1908) grammatical sketch still follows this grammatical tradition (see § 2.2.2.3), whereas Schumann (1967) employs structural descriptive categories for his outline of Xinka grammar (see § 2.2.2.9). It may be worthwhile to reflect what makes linguistic description based on the Latin grammatical model different from modern structural descriptions.

Although many colonial and later traditional grammars can be characterised as excellent linguistic descriptions (cf. McQuown 1976:108-09), the Latin model imposes certain constraints that result in the linguistic data of colonial grammars to be of limited representativeness and reliability.⁹⁰ The restrictions regard the descriptive format itself, which requires the comparison of indigenous language structure with the descriptive categories of the Latin standard (cf. Newman 1967:180).

This procedure brings about two basic constraints: First, it permits only the description of those language structures and forms that have corresponding categories in the Latin descriptive paradigm, while all those forms that are idiosyncratic to the language may go unnoticed (cf. Smailus 1989b:18). Second, in colonial grammars the vernacular is often artificially modified to fit the Latin model in the sense that Latin categories without correspondence in the indigenous language (e.g. pluperfect) may be filled with artificially created forms and constructions that are uncommon, if not ungrammatical. Colonial authors have sometimes even assigned identical forms to various grammatical functions, only to fill all categories of the Latin model (cf. Smailus 1989:18; Newman 1967:180).⁹¹

Nevertheless, these constraints do not imply that colonial language information is generally unreliable and cannot represent the language properly. In fact, the representation of the basic morphology of Mesoamerican languages in colonial grammars is often very accurate (cf. Newman 1967:180). Moreover, the fact that Schumann (1967) employs structural categories does not necessarily imply that his description of Xinka grammar is more reliable. The analysis of language structure and the definition of grammatical categories are by no means objective processes. They are always influenced by the chosen standard of description and may be inconsistent.

Thus, each secondary source is a closed synchronic language representation that does not allow clarification of structural inconsistencies by drawing on the interview contexts as a corrective, as it is possible in the case of primary language data (see Smailus 1989:18; Dürr & Schlobinski 1994:241).

The corpus of comparative Xinka sources is quite heterogeneous. The data are of different geographic and temporal origin and therefore show lexical and

⁹⁰ Smailus (1989b:17-23) discusses the problem of using colonial language data as a basis of linguistic description instancing colonial Kaqchikel; his remarks are included in the reflections on the representativeness of the language information from the *Arte de la lengua szinca*.

⁹¹ Artificially created forms are attested in various colonial grammars and text sources written by missionaries (Dedenbach-Salazar Saénz 1997:315-316). Evidence of such modifications can, however, only be provided if the language has been properly documented and described - in past and present. Linguistic analysis also needs to take into account that in the case of dominated language groups, such as Xinka (see ch. 1.5), artificial forms may even have encroached upon the language system and have become part of general language use.

grammatical variation (see Table 2. 4). Certainly, each source pictures only a small section of the language system. Divergence between the data of secondary sources is often caused by differences in the objective orientation of the compilations and studies. They may also be the result of erratic and unreflected elicitation by the author or may reflect idiosyncracies and deficiencies in the informant's linguistic competence.

Table 2. 4: Heterogeneity of secondary sources

		Table 2. 4. Heterogeneity of secondary sources					
↑ diachronic development		Campbell 1972					
			Pineda P. 1969				
		McArthur 1967	McArthur 1967				
		Schumann 1967					
			Schumann 1966				
			McQuown 1948				
			Fernandéz 1938				
			Lehmann 1911			Lehmann 1911	
			Calderón 1908			Calderón 1908	
				Gavarrete 1868		Valdéz 1868	Valdéz 1868
	Maldonado 1773		Morales 1812				
	← regional diversification →	?	GUA	CHI	SIN	YUP	JUT/JAP

2.3.2 Terminal speakers' data

There are several constraints that influence the use of language information from terminal Xinka speakers as a basis for linguistic description. We will specify these constraints by drawing on various investigations concerned with the structural consequences of language shift and decay (cf. e.g. Dorian 1980, 1982 and 1989; Hill 1980; Dressler 1981; Campbell & Muntzel 1989; Thomason 2001).

2.3.2.1 Structural deficiency and its cause

Last speakers' data exhibit a high degree of structural deficiency that results from language shift and manifests itself in the reduction of the lexicon and an increasing morphological and phonological simplification of the language (see Sasse 1992a:15-17; Evans 2001:261). The terminal speakers of Xinka form a light proficiency continuum that is comprised mostly of rememberers and of weak semi-speakers, who – as a result of the interruption of regular and strategic language transmission – mostly produce deficient forms (see § 1.5).

Sasse has characterised the language competence of semi-speakers as pathological, i.e. they remember many lexical items but show a significant degree of deficiency and pidgin-like simplification in morphology and syntax. Semi-speakers have lost important morphological and syntactic categories and often fail to properly correlate form and function of grammatical elements. Decreasing grammatical

competence manifests itself in paradigmatic gaps. Features of phonological distinction are less often recognised, which is why the language of semi-speakers may exhibit significant variation in the pronunciation. Language knowledge is often limited to single words, short phrases and formulas from the daily domains of communication, which semi-speakers apply without understanding the grammatical function. Linguistic creativity is restricted to fuse these "fossile" elements somehow together – with or without underlying syntactic rules. The ability to create new expressions on the basis of principal grammatical patterns has been irretrievably lost or is at least very limited. The prototypical semi-speaker is not able to produce a narrative text or to converse fluently in the language (cf. Sasse 1990:15ff., 1992a:15-17).

Reduction of lexicon and borrowings

Functional gaps and forms that cannot be remembered instantaneously are habitually and arbitrarily substituted with lexemes and constructions from the L_1 , i.e., in the case of the last Xinka speakers, from Spanish. Insertion of Spanish elements into the Xinka language structure as well as regular code-switching between Xinka and Spanish result in typical semi-speaker talk, i.e. a mixed form of both languages. It shows that the switch between Xinka and Spanish is often a very arbitrary choice of the speakers, as they may insert Spanish lexemes even though they are generally aware of the Xinka equivalent, which they had used in other contexts before.⁹²

Technically, the insertion of Spanish lexemes is the result of a typical process of decay that causes the loss of lexical elements in obsolescent languages. Cultural change and the subsequent loss of lexical creativity in new language domains bring about a condition in which the change of a domain implies a switch of language. Although lexical reduction in the L_1 caused by code-switching is a phenomenon that is not exclusively restricted to situations of language death, its massive occurrence in these situations makes it a significant factor (cf. Thomason 2001:226-8). The reduction of domains in the L_1 entails a reduction of language genres and style (cf. Campbell & Muntzel 1989:195).

Lexical loss through code-switching is related to the phenomenon of borrowing from a dominant language. The number of loans increases with more L_1 -speakers becoming bilingual and applying the L_2 to more and more domains (Thomason 2001:226). Massive borrowing of lexical and grammatical elements from the dominant L_2 may be typical and probable for obsolescent languages, the phenomenon of borrowing as such is, however, not inseparably linked to the process of language shift, and the hypothesis that borrowing inevitably increases in situations of language shift remains unproven (Thomason 2001:229). While code-switching is unambiguous and the identification of lexical loans is usually easy, interferences may reduce grammatical structure and typological diversity in the recessive language without this being obvious (cf. Evans 2001:263).

⁹² However, there seem to be restrictions as to which Spanish lexemes may be inserted into Xinka and which ones may not. Sebastián Hernández, for instance, rejected inquiries for specific items explaining that such a word would not exist in the *idioma* (e.g. "mujer virgen"), in other cases, however, he provided without hesitation a Spanish word which he embedded in a Xinka phrase (e.g. "viuda"). It is also possible that the individual decision of the speaker whether a word is established or not, may be entirely random.

Morphosyntactic Simplification

The language of speakers with an interrupted language acquisition phase typically exhibits a reduced and simplified morphology (cf. Campbell & Muntzel 1989:191; Bergsland 1998:33-34). We may observe the loss of grammatical morphemes and a general tendency to substitute synthetic constructions with analytic ones, thus avoiding any complex syntax (Campbell & Muntzel 1989:192, Thomason 2001:229).

A typical phenomenon of language decay is the reduction of allomorphs, i.e. of regular alternations, by analogical generalisation of one variant, such as the simplification of the system of plural markers, the paradigmatic assimilation of irregular verbs, or the use of singular personal pronouns in the plural – in short, the elimination of systematic irregularities in the language (Campbell & Muntzel 1989:191, Thomason 2001:226). Likewise, the fusion of morphosyntactic categories and semantic contrasts (e.g. the loss of the inclusive and exclusive contrast of pronominal forms) may in the wider sense be understood as a simplification due to decay (Thomason 2001:229). The decay of morphology starts with the loss of language productivity, i.e. the functional loss of derivational morphology and other mechanisms of word formation. In this process, the semantic transparency of derivational morphemes is gradually lost, while morphotactic transparency increases. In the reduction of inflectional categories, it is generally verbal morphology that is preserved the longest (Dressler 1981:10).

Semi-speakers operate with a small number of morphologically marked categories in a rather variable way, while fully competent speakers generally mark categorically. Moreover, semi-speakers employ a very limited number of syntactic patterns, which are usually transparent constructions that reflect the underlying semantic and syntactic relations; i.e. varying surface structures are reduced to a single representation (Andersen 1982:99 *apud* Campbell & Muntzel 1989:192-193).

Phonological Decay

The structural consequences of language shift for the phonological system of moribund languages are better studied. The number of phonological distinctions is significantly reduced, although contrasts of high functionality, or contrasts that exist in both languages (L_1 and L_2), tend to be preserved longer than others. Unmarked elements may be overgeneralised, i.e. marked forms may be substituted with unmarked or less marked ones. Elimination of oppositions usually implies the deletion of the marked element including the loss of marked subphonemic and allophonic variants (Andersen 1982 *apud* Campbell & Muntzel 1989:186).

Structural decay may also entail the contrary phenomenon: the overgeneralisation of marked features. Semi-speakers often learn the function of phonological markers that do not exist in the L_2 only with imperfection. The exotic sound of such features leads them to use these elements excessively, including in inappropriate contexts. Campbell attests this phenomenon with Xinka data from Jumaytepeque and Guazacapán that exhibit excessive glottalisation of consonants by speakers who have never learned the complicated rule underlying consonantal glottalisation in Xinka and instead extend glottalised markers to all consonants (Campbell & Muntzel 1989:189-190; cf. § 4.4.6). Thus, formerly obligatory phonological rules may become optional, be entirely dropped or substituted by other

rules. In this context, formerly irregular forms may become regular – a process that is related to the overgeneralisation of "exotic" markers and the tendency to reduce marked forms.

It is unclear whether phonological changes are inherent phenomena in the moribund language structure, or whether they may be attributed to external factors (Campbell & Muntzel 1989:186). While all processes of linguistic change that do not have a direct analogy in the L₂ (e.g. overgeneralisation) may indeed be internally induced and immanent to the system, instances of assimilation to the phonological system of the L₂, especially the elimination of oppositions, suggest external influence (Hill 1980:4; see Campbell & Muntzel 1989:190).

2.3.2.2 *Competence and performance*

Individual language competence determines the degree of structural deficiency, i.e. the quality of the data, and is therefore the main source for variation in the semi-speaker's data. Searching for a measure to determine the degree of last speaker's overall language competence is in fact a search for the degree of individual language performance, i.e. the production and perception of language elements (cf. Dressler 1981:13-14). Terminal language situations – such as the case of Xinka in which the informants have not spoken or heard their language in a long time – demonstrate that competence and performance are two incongruent concepts. Performative skills need to be re-activated and at the start, speakers have extreme problems in re-transferring the mental concept of language from the metalinguistic level to the level of actual speech production (see Dressler 1981:14; see also Dorian 1981:151).

Situations of gradual language death or, more generally, language contact situations with the majority of the population being bilingual, always create bilingual speakers who are not able to actively produce both languages and whose linguistic competence in one of the languages is restricted to perception alone (Dressler 1981:14). The passive competence, or receptive performance, of semi-speakers is generally higher developed than their active or productive competence; however, obsolescent categories and complex syntactic structures are as a general rule not understood anymore (Sasse 1992b:63-64; Dressler 1981:14-15). Passive competence may only be attested in a communicative context. The Xinka semi-speakers notably lacked communicative exercise and most of them had already gone deaf to a considerable degree. In many instances, they did not recognise phrases and forms they had produced just a moment ago.

This inability of semi-speakers to assess or even recognise their own rather spontaneously produced language forms may be attributed to the circumstance that the metalinguistic competence of semi-speakers is less developed than their performative competence; semi-speakers may develop an amazing communicative efficiency that does not reflect their actual linguistic competence: "They are perfectly content to produce what they are able to produce" (Dressler 1981:15 after Dorian 1981; cf. Sasse 1992a:14-15, 1992b:61-63). Furthermore, increasing deafness may result in the productive performance being better developed than the receptive one (cf. Dressler 1981:14). Thus, language competence is not equivalent to communicative competence and the data of those speakers who exhibit a high productive performance are not necessarily more reliable than those of less communicative semi-speakers. With respect to language decay we may raise the

question as to whether performative deficiency may entail deficiency in competence (cf. Dressler 1981:14). Dressler points out that in the case of obsolescent languages, decreasing linguistic competence needs to be understood as a collective phenomenon. The loss of word formation mechanisms in particular shows that the deficiency in creative language production and performative skills may cause changes in the overall language competence of all speakers (id.).

On the other hand, the work with the terminal Xinka speaker confirmed what had been demonstrated in earlier studies: that individual language competence may be improved through strategic and repetitive performance (cf. Evans 2001:61-62). Gradually, speakers may regain fluency in the "buried language" and rediscover ever more forms that help them to increase their level of competence. Competence regained through performance, however, is not permanent and may – depending on temporary factors, such as individual physical and mental conditions – be lost rather quickly (cf. Evans 2001:267-268).

Sebastián Hernández (see § 2.2.1.2), for example, had gradually improved his performance when rather unexpectedly in an interview on All Saints Day 2000 his performative ability dropped to a very low level and he was not able to produce even the most simple forms and phrases anymore. It may be suspected that the context of this particular day, possibly the morning prayer for his deceased relatives, was the decisive factor. Along with the overall improvement of his performative ability, Sebastián Hernández increasingly mixed Spanish and Xinka forms. His desire to communicate increased and went beyond his ability to judge on the linguistic code he was using. Here, the lengthy and frequent interview sessions may have had a counter-productive effect on the quality of data.

Hence, individual language competence, or performance, comes out as a rather dynamic category that is influenced by various factors (interview situation, individual disposition of the informant etc.) and should therefore not be used as an indicator of reliability without due reflection of the data. Dressler argues that in situations of language obsolescence, competence is not entirely independent from social and cultural knowledge (1981:18-20). It should therefore be avoided to assess terminal data isolated from their context of documentation; i.e. from the cognitive patterns (frames, schemata, plans, scripts) in which certain linguistic forms are used (id.). To attest the reliability of linguistic forms, however, natural cognitive contexts need to be differentiated from semantic contexts that are provided by the framework of elicitation.

2.3.2.3 *Interview context*

Structural deficiencies and discrepancy in the terminal data may be the result of the last speaker's individual competence and disposition, as much as of the respective mode and conditions during the process of documentation. Both, the linguist and the informant, shape the context of documentation. The data reflect the method of elicitation and the way the informant is responded to (cf. Mithun 2001:34; Evans 2001:261). Furthermore, the speaker's disposition and conduct in the situational context of the interview and the informant's willingness to cooperate have an impact on the quality of the data. The last Xinka speakers had many reservations about the documentation of their language (see § 1.5), in some cases speakers withheld their knowledge or deliberately manipulated the data. Intentional

manipulation was mostly connected with commercial interests of the informant – the less profitable some of the speakers reckoned the pay, the more they manipulated the information. Also, speakers tried to bridge imperfect competence by means of creativity and invented forms.

Linguistic documentation of Xinka is restricted to direct elicitation alone. As there is no actual communicative context in which Xinka would still be used, natural speech situations cannot be documented anymore (e.g. conversations, story-telling, prayers). Such natural speech situations would provide coherent texts and would allow the analysis of language within its own linguistic and cultural context, whereas the reliability of elicited data is rather limited (Mithun 2001:35, 45). Data recorded by direct elicitation are mainly lexical, mostly nouns that refer to concrete, tangible objects as well as terms that show an equivalent in the contact language, or language of elicitation. The documentation of abstract and culturally specific concepts, of other lexical categories such as verbs, and of morphosyntactic information encoded in phrases and full sentences, proves more difficult (cf. Mithun 2001:37).

The lack of language practice makes it difficult for informants to remember specific forms or to articulate coherent language, which is why the documentation covers only simple and less complex structures. Direct elicitation provokes the speakers to make mistakes or give deviating answers to the same question in different contexts. In addition, direct elicitation may lead speakers into creating forms that are not part of the L₁ language system (i.e. Xinka) by drawing analogies from the L₂ or language of elicitation (i.e. Spanish) (cf. Mithun 2001:52). Quite for the contrary, the terminal speakers were for the most part unable to draw the same sort of paradigmatic analogy within the Xinka language system, which leaves it subject to speculation whether a requested form does not exist or whether informants simply could not remember it.

Direct elicitation of Xinka forms is limited in that it focused especially on the elicitation and documentation of morphosyntax, which may have led to the exclusion of certain features and elements that are part of the terminal speakers' overall linguistic competence.

Informants habitually answered questions for concrete objects and specific lexical items by giving an explanation of an entire phrase or even a full sentence - generally blended with Spanish forms. It proved to be the most effective method to simply record such additional and unrequested utterances without comment or interruption in order to obtain Xinka language data without the interfering influences of elicitation. After a few interviews it was clear that the best results could be obtained when informants were not asked for a specific form or word but rather generally for the description of particular activities, such as "how to work on the *milpa*" or "what to do when visitors arrive at the house" etc. Recalling such cognitive patterns, speakers apparently found it much easier to reactivate linguistic forms.

The coherent utterances resulting from such interviews often contain forms and constructions that could otherwise have been elicited only with great difficulty. The limited linguistic competence of semi-speakers made it generally impossible to attest grammatical reliability by re-eliciting such forms that had been produced in free contexts. Only in very rare cases informants were able to repeat a particular lexical form or grammatical construction. Semantic contexts of such un-elicited and freely

produced forms often remain unclear as speakers are generally unable to give more than an abridged Spanish translation of their utterances – very often their translations do not reflect the actual content of the Xinka phrase. The lack of reliable translation contexts (including misunderstandings regarding the semantic context) is a further source of error in linguistic documentation.

2.3.2.4 A note on heterogeneity

In the proficiency continuum formed by the last Xinka speakers the language production of some speakers is less pathologic than that of others (see § 1.5; cf. Campbell & Muntzel 1989:181). Thus, the primary data exhibit divergences with regard to the lexical and grammatical competence of individual speakers. In particular, morphosyntactic properties may be represented in various ways, for instance, individual preference in the use of discontinuous demonstratives.⁹³ This heterogeneity has to be attributed to the fact that the last Xinka speakers do not form a functional speech community and thus lack a point of reference for language norms. The language is only remembered on the individual level and the information the terminal speakers provide may not be regarded as representative for a uniform and normative language system. The lack of communication led to the emergence of idiosyncrasies that may even have been modified and further developed individually.⁹⁴

The different degrees of individual language competence among the terminal speakers did not permit the elicitation of forms according to a standardised scheme, which contributes to the heterogeneity of the documented primary data. Furthermore, translation contexts may be identical while the Xinka forms and phrases provided by the speakers vary structurally. The following example illustrates such structural variability. For the semantic context "me duele la cabeza" ('I have a headache'), informants provided different Xinka translations. While SH (a) and JS (b) use the uninflected verb form *nama* 'to hurt', JAP (c), RHG (d) and PE (e) form the expression with the transitive verb *šuka* 'bite' or its intransitive form *šukaki*. All informants agree that the noun for 'head' is *hu:ši*, but they differ in the possessor-marking affixes employed.

- (2.1)
- | | | | | | |
|----|--|---------------|-------|-----|-------|
| a. | nama | ʔan-hu:ši | | | |
| | hurt | 1sP-head | | | |
| | 'my head hurts' (G-SH) | | | | |
| b. | nama | ša | hu:ši | | |
| | hurt | PREP | head | | |
| | 'it hurts in(side) (the) head' (G-JS) | | | | |
| c. | ke | šuka-n | hu:ši | na | nin |
| | Sp:that | bite-SUBJ/1sA | head | DET | PN:1s |
| | 'that it bites (the) head of mine' (G-JAP) | | | | |

⁹³ Sebastián Hernández prefers the construction *man=ta X maŋ* (DEM=INT N DEM), whereas Juan Santos forms demonstratives with *ku=ču X maŋ* (MOD=DIM N DEM); Pablo Esquite and Raymundo Hernández both use the construction *ʔəŋ-ču X maŋ* (1sP-DIM N DEM) (see § 8.5).

⁹⁴ It has to be taken into account that isolation of a terminal speaker from a speech community may also have a contrary, positive effect that the language system is at least virtually preserved instead of further deteriorating by communication with other defective speakers (cf. Evans 2001:266).

- d. ke sika-ki hu:ši-n
 Sp:that bite-AP head-1sP
 'that bites my head' (G-RHG)
- e. ke šuka-ki ʔən-ču=hu:ši-n
 Sp:that bite-AP 1sP-DIM=head-1sP
 'that bites my little head (of mine)' (G-PE)

As a result of structural decay caused by gradual language shift and the abandonment of the language as L_1 (cf. § 1.5), the information the terminal speakers provide varies in great detail. The degree of variation illustrates the complexities involved in the use of these primary data as a comparative source for the description of colonial Xinka. In the following chapter we will discuss the methodological implications that result from the constraints of the different sources.

3 Language description as grammatical reconstruction

The present chapter will account for the implications imposed by the heterogeneous corpus of language data and will define the methodological framework for the morphosyntactic description of Maldonado-Xinka. It will be shown how comparative data can be employed to identify the typological properties in the Latin-style colonial grammar, and which factors will need to be considered in the process.

Depending on the type of documented material there are two basic approaches to the description of colonial language data:

- 1) a comparative approach that attempts the analysis of the colonial data in relation to the structural information about the modern variety, or varieties, of the language (e.g. McQuown 1967:203; Newman 1967:181; Dürr 1987:29-32; Laughlin 1988:80); and
- 2) an internal approach that attempts to reconstruct a colonial language system on the basis of a single source. These sources may be either indigenous language texts (e.g. Acalán-Chontal described by Ortwin Smailus [1971] on the basis of the Paxbolón-Maldonado papers; or colonial K'iche' described by Michael Dürr [1987] on the basis of the Popol Vuh), or linguistic materials such as dictionaries and grammars (see John Haviland's linguistic study of the colonial Tzotzil dictionary of Santo Domingo Zinacantán [in Laughlin 1988]; Smailus' description of the colonial *Cakchiquel* Chi-dictionary [1989b]; or Astrid Alexander-Bakkerus' description of Cholón based on a colonial grammar by Pedro de la Mata [Alexander-Bakkerus 2005]).

Here, text sources –especially when accompanied by a Spanish translation– seem to provide a more reliable basis for internal analysis than grammars and vocabularies, which represent language forms detached from their original syntactic context (cf. Smailus 1989b:21). However, it has to be conceded that text sources may be equally problematic, as they may have been produced by non-native speakers, sometimes even as straight one-to-one translations from Spanish. Quite for the contrary, grammars and vocabularies may at times be astoundingly precise with respect to the morphosyntactic information they provide.

Both methodological approaches to colonial language data serve as models for the linguistic analysis of the ALS:

The objective of the aforementioned MA thesis (see preface and introduction) was a strictly formal and manuscript-internal analysis of the ALS; comparative data were only drawn on for confirmation of descriptive results. This approach followed the methodological example of previous studies on colonial language sources (see in particular Smailus 1973; Dürr 1987; Haviland 1988 and Smailus 1989a, 1989b). The internal analysis of the ALS provided only limited information about morphosyntactic processes and typological properties in Xinkan. The objective of the present study is to gain more information about the grammatical structure of

eighteenth-century Xinka by re-analysing - and reconstructing - the ALS-forms in the context of all available comparative data.

In contrasting the results of the internal analysis of ALS-data with primary and secondary data we need to allow for diachronic and regional differentiation of the comparative material. Divergences in the primary and secondary data regard the phonological, morphological, syntactic and lexical level; secondary data vary furthermore with respect to semantic contexts and indicated descriptive categories. Each source covers different aspects of the language system and reflects the idiosyncrasies of the documented variety as well as the individual linguistic competence of the informant and method of documentation.

The question we will have to ask is, how this heterogeneity of comparative data may be responded to methodologically, i.e. under which theoretical conditions may diachronically and/or regionally diverse language data (e.g. modern data from X_G or secondary data from X_{Ch} or X_V) be employed as a basis of morphosyntactic analysis and linguistic description of Colonial Xinka?

The key methodological dilemma in dealing with the heterogeneous corpus data is how to identify what we have referred to as 'deficient' forms and tell them from 'systematically relevant' items. Morphology indicated in the ALS may have been lost or may appear in changed form in the primary data, and it may be difficult to tell whether forms that are without parallel in the modern data were actually part of the system at an earlier language stage, or whether they have artificially been modified by Maldonado de Matos to fit the Latin model.

The semi-speakers data create a quite similar problem: first, it is unclear whether all of the documented elements and features were equally existent in the language; second, the variation among the speakers may reflect dialectal or family traditions; and third, it has to be taken into account that we may simply be dealing with erroneous and pathological forms. As the decline of Xinka has been a gradual process that started in the colonial era (see § 1.5), we have to allow for the fact that secondary data, even the earliest, reflect structural decay as much as the primary documentation. The ALS and the Zeeje-manuscript show evidence for the morphosyntactic incorporation of Spanish forms into the Xinka language structure, proving that the influence of Spanish was quite strong. Therefore, it may have to be assumed that eighteenth-century Xinka exhibits even more Spanish inferences, which are less obvious and result from a situation of long-term bilingualism in the region.

Another methodological difficulty is presented by such elements and patterns that occur in only one attested context but nowhere else in the corpus of data. Semi-speakers, for instance, often lack the ability to reflect or remember the language they produce (see above, § 2.3.2.2; Sasse 1992a:15-17), thus elements from such single contexts could be intuitively remembered parts of the language system as well as they could simply be erratic forms. Single context must therefore not be excluded from the analysis. Divergences in the data resulting either from misunderstandings between linguist and speaker or from the recording situation in general may not be detected, if analysis eliminates all single contexts right from the beginning. Instead, the dynamics of competence and performance and the respective documentary context need to be taken into account (cf. Evans 2001:261). The same issue applies to secondary data, which may equally contain single context forms.

The ALS indicates grammatical information primarily in form of Latin-style paradigms. In the comparative data sources, verbal inflection is generally not attested for all grammatical persons. Such systemic or paradigmatic gaps within individual sources or data sets would need to be substituted or complemented by additional information from other sources.

Although the difficulties inherent to the data cannot be entirely overcome, a methodological solution starts with the insight that all deviations in the corpus data are the result of various processes of linguistic change, which can be either internally or externally motivated and indicate the geographical and temporal separation of the sources. Deficiency may lie in the source itself, i.e. in individual mistakes by the informant or imperfect elicitation and documentation, or may result from the formal representation of the data. Language decay is a form of linguistic change that needs to be differentiated in general patterns of simplification and reduction that concern the entire speech community on the one hand, and irregular changes of the language structure that are the result of individual linguistic creativity of the semi-speaker on the other (see § 2.3.2, § 3.3.5).

Consequently, all the individual sources - including the individual terminal speakers - need to be treated as separate and definable synchronic language representations. Given that divergence of these representations results ultimately from some sort of sound or grammatical change, the identification of phonological, morphological and syntactic processes becomes the essential criterion for mutual reconfirmation of the ALS-Xinka and the comparative data. Identifying instances of linguistic change to gain more information about colonial Xinka grammar is fundamentally a process of reconstruction, with the ALS-data forming the frame of reference.

The term reconstruction is used here in a two-fold sense: (1) to refer to linguistic reconstruction in the sense of identifying former language states, and (2) in the sense of rebuilding a deficient and incomplete system. It needs to be emphasised that what is labelled here as the "reconstructive description of eighteenth-century Xinka" does not refer to the postulation of a hypothetical colonial language system, but to the analytic approach that is chosen to overcome the rigidity and classificatory errors of the Latin grammatical model applied in the ALS (e.g. Latin grammatical categories of *plusquamperfecto* or the case system). The main objective of the study is the reconstruction, or restoration, of the morphosyntactic categories that existed in Maldonado-Xinka by means of comparative analysis.

The first section of this chapter lays the theoretical foundations of the reconstructive approach to Xinka grammar (§ 3.1). Then we will define the conditions and criteria of reconstruction (§ 3.2) and identify patterns of linguistic change in the corpus (§ 3.3). The last section deals with the descriptive format (§ 3.4).

3.1 The diachronic-typological approach to language

The reconstructive approach to describing eighteenth-century Xinka follows in the footsteps of studies that are embedded within the wider theoretical framework of diachronic typology.

'Diachronic typology' (DT) goes back to Joseph Greenberg's modern typological approach to grammar and its consequent extension to diachrony (Croft 1990:1, 1996:349; Croft *et al.* 1990:xiv; Fox 1995:249).⁹⁵ Greenberg demonstrated that languages do not "vary in infinitely many ways" but that there are natural limits to cross-linguistic variation and that languages may be categorised into different types according to the structural patterns and features they have in common and which differentiate them from other languages (cf. Croft *et al.* 1990:x; Fox 1995:247-248). General grammatical parameters (e.g. grammatical number) exhibit a significant degree of structural variation across languages; genitive constructions, for instance, may be represented by structural features such as fusion, affixation, compounding, case, adposition etc. The various structural representations are referred to as 'linguistic types'. By definition, a linguistic type is a structural type that is represented by a particular construction in a particular language (Croft 1990:27-33).

The morphosyntactic features, or linguistic types, of a language are mutually dependent. This interdependence of grammatical features may be expressed by means of so-called implicational universals, that is, 'the presence of feature X in a given language, always implies the presence of feature Y' (Croft 1996:345), e.g. "if a language has demonstratives that follow the head noun, then it has relative clauses that also follow the head noun..." (Hawkins 1983:84, Universal XI; cf. Croft 1990:47, 1996:345). Such implicational universals provide predictability of certain features and are thus of considerable importance for typological reconstruction (cf. Fox 1995:249). But the constraints to typological variation of languages reach beyond implicational universals, which are only apt to describe the relationship between two parameters. Languages belong to certain dominant orders or harmony patterns according to the combination of parameters or implicational universals they exhibit (Croft 1990:55, 1996:345).⁹⁶

Whereas synchronic typological research concentrates on identifying which linguistic types are present in certain languages in order to establish universals, the diachronic extension of typology links the search for universal structural types with a historical objective (Croft 1996:349). In the diachronic-typological approach linguistic types are not viewed as static features of a language but are subject to change, which allows for the reality that proto-languages often do not exhibit the same linguistic types as their daughter languages (e.g. word order in Latin SOV > French SVO). Linguistic types are instead dynamically interpreted as possible stages through which languages may pass in their evolution; synchronic states are thus stages in a diachronic process of continuous linguistic change (cf. Croft 1990:203-206; Croft *et al.* 1990: xii-xiv).

The combination of specific linguistic types at a certain point in the evolution of a given language may be defined as a synchronic language state. Such language states evolve to conform with two basic properties: (1) stability, i.e. the likelihood of persistence of a specific language state, and (2) frequency, i.e. the likelihood of the linguistic type itself (Fox 1995:250). It is therefore assumed that all languages are

⁹⁵ For a detailed account of the principles of modern *Linguistic Typology* and the development of the term 'typology' within the discipline see Croft (1990, 1996).

⁹⁶ The two dominant orders are the OV-pattern and the VO-pattern: (1) 'VO type': VO, VS [i.e. VSO], Prep, NG, NA, NNum, NDem, NRel, etc., and (2) 'OV type': OV, SV [i.e. SOV], Postp, GN, AN, NumN, DemN, RelN, etc. (Croft 1996:345).

subject to the same universal constraints and that they always develop towards consistency in the universal dominant order or harmonic pattern. This explains why language states are mostly consistent and typological universals hold even true for reconstructed proto-languages. Unlike the structuralist approach that defines language change as a sequence of synchronic language states, which are linked by historic transitions, the basic assumption of DT is that synchronic universals and typological factors present relevant constraints for language change "inasmuch as they impose limitations on the states out of or into which the transition may lead." (Fox 1995:250).

Thus, a language state is always determined by its antecedent state and again determines the consequent stage of evolution in a particular language since a change in one parameter of the system results in the change of other parameters so that the system in itself will not violate the universal typological constraints (id.).

In the view of this dynamic interpretation of language states, 'synchronic regularities are merely the consequence of [diachronic] forces.' (cf. Greenberg 1966:186 *apud* Croft 1990:xii, 1996:349). Morphosyntactic change follows a restricted number of diachronic pathways and the spectrum for typological variation within which a grammatical function may be synchronically encoded is rather limited (cf. Givón 2000:110). Identifying "the allowable paths of language change" and finding attested transitions between language states is the main objective of diachronic typological research (Croft 1996:349).

DT implies therefore the rejection of the structural dichotomy of synchrony and diachrony (Croft 1996:344). Language is understood as constantly changing and synchronic states are mere results of diachronic processes. Morphosyntactic processes of language change are typologically constrained and thus predictable, or reconstructable.

The theoretical principle of DT has found resonance in studies that aim at the reconstruction of grammatical patterns. Linguistic reconstruction in general aims at defining abstract proto-forms of phonological and grammatical properties at a historically unattested stage of a certain language (Fox 1995:1-3). It proceeds from alternations in synchronic data and postulates earlier forms on the basis of our knowledge of possible types of linguistic change. There are two methodological approaches, depending on whether synchronic alternations within a language or between genetically related languages are analysed: internal reconstruction and external, or comparative, reconstruction.

Comparative Reconstruction (CR) depends on the comparison of at least two related languages or synchronic language systems. The method is based on the assumption that daughter languages develop from proto-languages by means of attestable linguistic change. CR is applied to define genetic relationships between languages by identifying the characteristic features and properties of an earlier state of a language system as well as the processes responsible for linguistic change by means of systematic comparison of cognate forms (cf. Kaufman & Norman 1984:77; Fox 1995:37ff.; Trask 1996:202-215; Campbell 1998:108-109). CR starts with the identification of sound changes and phonemic inventories and proceeds from there to the reconstruction of grammatical patterns of proto-languages (cf. Campbell 1998:109, 112-132). However, with regard to the reconstruction of grammar, CR does not suffice as a sole method, as Gildea points out:

In the absence of regular laws of grammatical change – comparable to regular laws of sound change – it is difficult for a traditional comparativist to identify cognates: for example, can an instrumental nominalizer and an infinitive really be considered semantically similar enough to be potential cognates? (Gildea 2000a:vii)

Instead, the reconstruction of grammatical forms relies on the second method of linguistic reconstruction that is based on the theoretical principle of Diachronic Typology.

Internal Reconstruction (IR) derives earlier language states from internal evidence within a single language (Fox 1995:145-147; Campbell 1998:201). The method is based on the assumption that linguistic change leaves traces in the language structure which occur as systematic irregularities (e.g. irregular verbal inflection, morphophonemic variation), and that these alternations provide evidence for the earlier form. The premise of IR is that every formal irregularity in a synchronic state is preceded by a coherent, regular state, i.e. morphophonemic alternations or linguistic types with more than one grammatical representation always result from former regularities. Thus, irregularities have to be viewed as intermediary states of linguistic change which result from interdependent grammatical features changing simultaneously. The same grammatical function may then be represented by two (or even more) coexisting constructions that reflect the older and the newer stage (cf. Fox 1995:148-149; Croft 1996:349; Campbell 1998:202; Givón 2000:114).

IR always starts with these structural irregularities and derives the earlier state by postulating a probable underlying linguistic change by means of plausibility and analogy (Gildea 2000a:viii). Patterns of linguistic change are postulated on the basis of universal pathways of grammatical evolution that have been identified within the field of grammaticalisation theory⁹⁷ which widely relies on diachronic comparison of historically attested data (cf. Givón 1979; Heine & Reh 1984; Hopper & Traugott 1993; see also Gildea 2000a:vii). Together with a specific understanding of the mechanisms of morphosyntactic change (reanalysis, extension, borrowing) these identified diachronic pathways basically function as "regular laws of grammatical change" (Gildea 2000a:vii-viii).

Attested universals of linguistic change and their typological manifestations have two essential applications in linguistic reconstruction. They provide a means to confirm hypothetical reconstructions, since reconstructions of linguistic states, proto-forms or transitional processes have to be in accord with general typological constraints (Fox 1995:251). On the other hand, universals may provide a tool for reconstruction in that they permit the reconstruction of linguistic states that are not attested by comparative or internal evidence, and thus serve to predict processes of linguistic change (Fox 1995:252).

Still, mainly based on hypotheses and analogy, the principle of IR is heavily theory-dependent and reconstructed forms are only valid with respect to the applied typological universal. For that reason, IR as a method has been a subject of great

⁹⁷ The term grammaticalisation originally refers to a process by which a formerly independent lexical item takes on a grammatical function. Today, the term subsumes a great number of theories and research studies about the emergence and development of grammar in general.

controversy and grammatical reconstruction on the whole is often considered to be not feasible (cf. Givón 2000; Gildea 2000a:ix-x).

Several studies have extended the method of IR to comparative data or synchronic sister languages in order to reconstruct the grammatical evolution – and thus the areal and genetic development – of languages with no attested historical data (cf. Young & Givón 1990; Gildea 1998, 2000; Aikhenvald 2000). Fundamentally a response to the controversy, this approach basically combines the methodological principles of IR and CR. The theoretical cleavages have been overemphasised in the literature and practice shows that both methods do complement each other. Internally reconstructed processes of linguistic change and postulated proto-forms can in many cases be confirmed by comparative data (cf. Campbell 1998:218; Gildea 2000a:vii-viii). Seemingly unconditioned sound change often turns out to be the result of grammatical change rather than its cause, and the reconstruction of phonological change thus becomes the consequence of grammatical reconstruction. On the other hand, in dealing with comparative data, grammatical reconstruction requires prior phonological reconstruction.

Within the general framework of DT, we may define the term 'Grammatical Reconstruction' (GR) to refer to the plausible postulation of the evolutionary stages of a particular grammatical item. The methodological approach depends entirely upon a universal theory of linguistic change (Givón 2000:108).

3.2 Reconstructive description of the *Arte de la lengua szinca*

The methodological approach to grammatical reconstruction, which is based on the theoretical principles of diachronic typology and its reconstructive postulates, is adopted in the morphosyntactic analysis of colonial Xinka to bridge the aforementioned paradigmatic gaps in the corpus data. The theoretical assumption that typological properties, or language types, are processes rather than definite, unchangeable language states, gives us 'methodological permission' to draw on diachronically and regionally diverse comparative data to analyse and reconstruct the typological properties of the colonial language. Formal, functional and semantic divergences in the ALS and the comparative corpus are treated as 'systematic irregularities' (or alternations) resulting from linguistic change. In applying reconstructive principles to the Xinka corpus, the search for cognates and correspondence sets is extended across 'source boundaries'.

To reconstruct the typological properties of eighteenth-century Xinka, we need to identify cognates and processes of linguistic change on the phonological, morphosyntactic and etymological level within the corpus of comparative data on Xinka.⁹⁸ Cognates are genetically related linguistic forms (sounds, morphemes, lexemes) that have been subject to some sort of formal, functional or semantic change.

In this section criteria and constraints for reconstructing the typological properties of Maldonado-Xinka will be specified. The actual processes of linguistic

⁹⁸ The definition of cognates and innovations follows the methodological framework laid out by Gildea (1998, 2000) for the reconstruction of the grammatical evolution of the verbal system of the Carib languages.

change that can be identified in the Xinka corpus will be the subject-matter of the following section (§ 3.3).

3.2.1 *Criteria*

Regarding the general criteria of GR (IR) it has been defined that in order to be considered plausible, (1) reconstructed grammatical forms have to show sufficient semantic similarity, (2) phonological divergence should be explained by regular, natural sound change, and (3) postulated morphosyntactic change should correspond to general typological assumptions about diachronic change and follow the basic principles of unilinearity (or principles of enclitisation) as well as relative chronology (cf. Givón 2000:120ff.; Gildea 2000a:viii).⁹⁹

Cognate forms and irregularities are identified by systematic comparison of the corpus data. Sufficient formal and semantic similarity constitutes the main criterion of identification. Some cognates are, however, formally and functionally dissimilar and may easily stay unnoticed.

The basic criterion for the reconstruction of a grammatical element that is also attested within the corpus as a free form is 'typological plausibility', i.e. the postulated process of change has to be securely attested in other languages or by universals of typological change (Gildea 2000a:viii; Givón 2000:120). Typological plausibility is of particular importance when dealing with deficient data – attested processes of change that are implausible according to typological universals may provide an indication for instances of language decay or the deficiency of the data.

A further criterion of grammatical reconstruction is the principle of unilinearity or clitisation. It is based on the assumption that all morphemes evolve from lexical forms and that when combining with word stems and becoming functionally relevant they maintain the syntactic position of the former free form. Once grammaticalised, a morpheme preserves its morphotactic position (Givón 2000:121).

Additional information about the comparative sources and their relative chronological placement provides further evidence in the sense that the temporally and regionally heterogeneous corpus of Xinka data functions as a frame of reference. Reconstructed stages need to be compatible with this chronological outline as much as with the universal sequential processes of change (cf. Campbell 1998:207; Givón 2000:121). There are some general criteria for establishing the relative age of a grammatical form. The smaller and more generic, i.e. the more semantically opaque and the closer to the lexical stem, a morpheme is, the older it is. Morphophonemic and syntactic irregularities provide further indications for the relative age of grammatical forms (Givón 2000:121).

The majority of the Xinka forms in the ALS and in the other secondary sources are lexical. However, the lexicon of a language may encode morphosyntactic information in great detail and provide indications about the typological

⁹⁹ None of the mentioned criteria is absolute, but taken together these criteria form a prototype (cf. Givón 2000:121-122). As there may be several criteria applying in the course of an argumentation and as individual reconstructions and processes may condition each other, deviations and argumentative conflict between the criteria are at times inevitable. However, a too high number of divergences contradicts any reconstruction (cf. Givón 2000:120).

development of a language system (cf. Lehmann 1990; Gildea 1998:44). The systematics of the lexicon reflect the specific grammatical structure of a language since lexical classes and morphosyntactic operations are interdependent, inasmuch as lexical classes determine morphological markers and grammatical change, again, affects lexical categories (cf. Lehmann 1990:163, 181). The lexicon is the part of a language system that is least subject to manipulation; the semantics of lexical items may, however, be very short-lived (Lehmann 1990:165). Morphosyntactic categories that may be identified on the basis of lexical data are primarily derivational and inflectional processes, as well as lexical classes and deictica (directionals, relational nouns etc.).

The mutual interdependence of lexical categories and operational strategies is relevant to the reconstruction of colonial Xinka morphosyntax by comparison of ALS-forms with the terminal Xinka data. Language decay implies the gradual replacement of L_1 -lexicon by lexical items from the L_2 . Distinguishing this process from regular (or "healthy") instances of lexical borrowing may be difficult (see § 3.3.4). The morphosyntactic or typological reconstruction of Maldonado-Xinka has to take into account that in the comparative data, the deletion of lexical elements from the L_1 and the adoption of new lexemes from the L_2 may be motivated by the loss of grammatical structure (morphemes and syntactic patterns) in the L_1 . The presence of Spanish lexemes in the comparative data, especially in the terminal data from X_G , may be a sign of former morphology that has been lost.

3.2.2 *Constraints*

The reconstruction of individual processes of linguistic change and grammatical evolution is constrained by the quantity and quality of the linguistic data on Xinka in the corpus.

Linguistic reconstruction in general has to account for the fact that only regular change is reconstructable (see Fox 1995; Campbell 1998:17 for the basics of sound reconstruction). The premise of GR (IR) is that irregular or inconsistent states are preceded by earlier coherent states. Thus, only coherent states can be reconstructed, irrespective of whether the analysed pattern is coherent or incoherent. It is generally impossible to reconstruct irregular or incoherent states, e.g. earlier contrasts that have merged and earlier alternations that have been eliminated by means of analogy are lost if there is no diachronic or comparative record of the forms (cf. Fox 1995:148-150; Campbell 1996:341-342).

The comparative corpus of Xinka data provides such a diachronic record, which should ideally allow us to identify incoherent states and unconditioned processes of linguistic change. However, the reality is more complicated as the record is fragmentary and we can only identify patterns that have actually been documented. Thus, in cases in which ALS-forms have not been preserved or do not appear to relate coherently to later states, identification of the earlier morphosyntactic category by definition of the linguistic process becomes impossible. Any sort of formal, functional or etymological divergence within the corpus may be the result of regular language change, decay or deficient documentation practice. Therefore, the differentiation of regular and irregular change can be difficult as apparent incoherence may be misleading.

The greatest obstacle is the lack of comparability which results from the heterogeneity of the corpus (see § 2.3). Identifying processes of linguistic change requires first of all the identification of morphosyntactic categories and functions in the individual sources. Morphosyntactic function is generally defined on the basis of the distribution of individual elements, including the semantic context of the form (cf. Croft 1990:11-12). With respect to the deficient data in the corpus, the semantic criterion constitutes a problem, as semantic contexts of individual forms can be quite variable, or in some cases even undefined.

In the ALS as well as in the secondary sources, most Xinka forms are provided with a direct translation context. Depending on the source, the translations deviate significantly. In the majority of cases, individual Xinka elements are associated with their Spanish, English or even Latin translation contexts. In other cases entire phrases, sentences or text units are correlated (see e.g. Morales 1812; Schumann 1967 etc.). In the ALS and other sources with pre-analysed grammatical data (Calderón 1908; Schumann 1967 etc.) individual elements and forms are correlated with two levels of semantic context, i.e. with the meta-level of the descriptive category in addition to the concrete, direct translation contexts. The analysis of the semantics of the Latin descriptive categories in the ALS thus has to consider the prior definition of these categories by Nebrija (1492). We also need to take into account that semantic contexts may be simple mis-categorisations of forms and that idiosyncratic semantic concepts in Xinka with no correspondence in the reference language may be easily overlooked if a category is unmarked (see Croft 1996:346).

The primary data, on the other hand, often lack proper translation contexts as a result of the individual interview situation. In many instances speakers only provided very fragmentary translations of their utterances, if any at all (see § 2.3.2). In most cases the meaning of an element can be reconstructed by comparison of translation contexts. Nevertheless, we need to consider that the semantic context of an element may change and that attested and unattested contexts do not necessarily correspond.

Heterogenic semantic contexts, formal idiosyncrasies and deficient documentation practice are the factors which constrain the usefulness of the diachronic corpus for the reconstruction of Xinka morphosyntactic categories. For a number of features in the ALS, no cognates can be properly identified in the comparative data. The morphosyntactic categorisation of these forms is thus exclusively based on the semantic context given in the ALS. The comparative data attest the presence of patterns and features for which no cognate forms are recorded in the ALS. In these cases we may postulate a hypothetical form, as the occurrences of the feature in the comparative sources suggest that the feature, or an earlier state of the feature, must have existed in eighteenth-century Xinka. More complicated is the case of features that are attested in only one variety (e.g. in X_Y). In these cases it is difficult to ascertain whether the element was already present in an earlier stage of the language and came to be preserved only in one variety, in which case it could be reconstructed for X_M , or whether that feature has to be regarded as an innovation.

The comparative data – especially the primary data from X_G – certainly provide more detailed information about Xinka morphosyntax than the ALS. However, we cannot assume that the more recent and less eclectic comparative data automatically feature the innovative forms from which the earlier morphosyntactic categories of eighteenth-century Xinka can be reconstructed. It needs to be kept in mind that –

despite being the earliest source– the ALS may encode innovations that have not occurred in other regional varieties.

Even if cognates have been identified in the corpus, the direction of change cannot in all cases be plausibly reconstructed. But since this study does not aim at reconstructing a complete and coherent system of colonial Xinka language states, instances of incoherence and of impossible reconstruction do not present a fundamental methodological problem. The aforementioned diachronic-typological studies, which serve here as a methodological role model, aim primarily at reconstructing grammatical features of not historically attested stages of a language under consideration by postulating hypothetical and abstract proto-forms of actually occurring synchronic linguistic states. In the present study, the principles of diachronic typology and linguistic reconstruction are not the objective of study itself, but rather the prerequisite to linguistic description and thus primarily a tool (cf. Hopper & Traugott 1993:30 *apud* Gildea 1998:31). The grammatical evolution of morphosyntactic categories and processes needs to be reconstructed in order to identify and describe the typological properties of colonial Xinka as documented in the ALS.

The reconstructive description includes relevant aspects of the typological development of a grammatical form and employs the reconstructed colonial types as descriptive categories. Given the methodological constraints described above, this reconstructive description of typological properties does not claim to be anything but an approximation at best.

3.3 Identifying patterns of linguistic change

This section deals with the various patterns of linguistic change that need to be identified in the corpus in order to reconstruct the morphosyntactic categories of Maldonado-Xinka. Identifying these processes of linguistic change yields additional information about (1) the internal classification of Xinka as a language family, (2) the various external influences the Xinka varieties were exposed to through time, as well as (3) the regularity of processes of structural decay which occur in the course of Xinka language death.

We will first address patterns and morphosyntactic consequences of sound change (§ 3.3.1) and etymological change (§ 3.3.2), before focussing properly on the types of change in grammatical constructions (§ 3.3.3). The question of how to identify patterns of contact-induced change and borrowing is addressed in the following section § 3.3.4. In § 3.3.5 we will discuss processes of structural language decay and how they can be differentiated from regular patterns of change.

3.3.1 Sound change

The definition of morphosyntactic categories in Maldonado-Xinka depends on the identification of patterns of sound change within the corpus.

The analysis of sound changes and reconstruction of the phoneme inventory of Maldonado-Xinka follows general criteria of comparative and internal reconstruction, taking general typological properties of the language's sound system into account (see e.g. Fox 1995; Campbell 1998:112-132). Sound changes can be

identified on the basis of relative semantic stability of cognate forms. Universal patterns of regular sound change and the diachronically differentiated corpus provide evidence for the direction of sound change.

The identification of changed sound values is linked to the analysis of orthographic representations in the ALS and the comparative sources (see § 4.3 and § 4.1.3). Actual sound changes need to be distinguished from orthographic inaccuracies. Difficulties arise in those cases where the phonetic realisation of an element is variable (e.g. Fernández' use of the graphemes <sl> and <jl> to indicate *ʃ*, which again is attested to alternate with *š* and *h*; see § 4.1.3.5, § 4.3.1.5.2). Graphemic interpretation relies heavily on the comparative data. Herein, structural decay and a high degree of variation in the individual pronunciation of terminal speakers of *X_G* make the identification of the sound values that are represented graphemically in the ALS ambiguous.

Phonological reconstruction constitutes a pre-requisite to grammatical reconstruction. The comparative data in the Xinka-corpus exhibit a significant number of divergent sound patterns that need to be analysed in order to define lexical and morphological cognates.

The systematic sound changes that can be identified within the ALS and across the regional Xinka-varieties need to be distinguished as to whether they are phonemic or non-phonemic. Phonemic change increases or decreases the number of sounds in the phonemic inventory of a language, whereas non-phonemic (or allophonic) change (also called 'phonetic shift') does not change the number of phonemes (Campbell 1998:19). The identification of phonemic/non-phonemic sound change has implications for the reconstruction of morphosyntactic categories of colonial Xinka, as we have to take into account that the phonemic inventories of the different Xinka variants and data sources in the corpus may not correspond. This means that sounds which are phonemic in the comparative data could be allophonic in the ALS, and vice versa.

Two general kinds of phonemic change need to be distinguished: mergers and splits, which can be conditioned as well as unconditioned (see Campbell 1998:22-24, 26). Mergers are sound changes that reduce the number of phonemes of a language by merging distinct sounds into one ($A, B > C$) (see Campbell 1998:22). Unless documented by diachronic data, mergers cannot be reconstructed. There are no examples of phonemic sound-merging attested in the Xinka corpus.

Splits, in contrast, increase the number of contrastive sounds in a language, usually by deleting the conditioning phonetic environment of allophonic sound variants, which turns them into separate phonemes ($A > B, C$) (Campbell 1998:23-24). For example, in *X_M* *s* and *š* occur word-initially before all vowels, but intervocally in complementary distribution as allophonic variants of one phoneme /s/. Although there are no minimal pairs that would establish contrastive sounds, it can be shown that *s* in word-initial position derives either from loanwords or by a phonetic process of deaffrication from initial *ç*'. Initial *š*, in contrast, derives from earlier forms of /s/. For example, in the Mayan loan, *X_M* *ç'ama* > *X_M* *sama* 'good', and the Xinka term **sama* (as preserved in *X_V*) > *X_M* *šama* 'inside, in'. Thus, *s* and *š* end up as contrastive phonemes in *X_M* (see § 4.3.1.4.1) (cf. explanation of split into contrasting phonemes /š/ and /s/ in Nahuatl, Campbell 1998:23-24).

The majority of patterns of sound divergence result from non-phonemic (allophonic/phonetic) changes that are specific to particular Xinka varieties.

Unconditioned non-phonemic changes do not affect the number of distinctive sounds and occur without restrictions from the phonetic context (Campbell 1998:19). For example, the sound shift $\check{s} > h$, which is attested as an ongoing process in the ALS as well as in the more recent data sources from Guazacapán and Chiquimulilla, cannot be shown to be conditioned by a specific phonetic environment but seems to be general; i.e. with all vowel sets, word-initially and intervocalically (3.1). It does not result in contrastive variants (see also § 4.3.1.4.2).

(3.1)	a.	X_M	ʔašin	:	X_G, X_{Ch}	hin	'no'
	b.	X_M	ʔaši	:	X_M	ʔahi	'this (demonstrative)'
	c.	X_M, X_G	šurúti	:	X_G	huruʔ	'squirrel'
	d.	X_M	šete	:	X_{Ch}	hete	'firefly'
	e.	X_M, X_G	šama	:	X_{Ch}	hama	'in (preposition)'

Conditioned non-phonemic changes occur only in certain defined phonetic contexts (Campbell 1998:20). There are several cases of conditioned non-phonemic changes that are in different ways relevant to the orthographic analysis and reconstruction of Maldonado-Xinka (see § 4, § 4.5.1). To mention just a few:

X_{Ch} changes $\check{s} > r / \_ i, \acute{i}, u, a$ in word-initial position as well as between vowels (rhotacism) (3.2). This change is dependent on the presence of high and low vowels; before mid vowels e and o , the sibilant $\check{s}$ is preserved (see § 4.3.1.4.1).

(3.2)	a.	X_M	<szina>	:	X_G	šina	:	X_{Ch}	rina	'urine, to urinate'
	b.	X_M	<huszi>	:	X_G	hu:ši, X_{Ch} hu:ši	:	X_{Ch}	hu:ri	'head'

For the central Xinka varieties, X_M , X_G and X_{Ch} , we can identify a process of deaffrication of $\check{c}' > s, \check{s} / \_ i, \acute{i}, u, a$ (3.3). In X_Y the original sound $\check{c}'$ is preserved (see § 4.3.1.4.1)

(3.3)	X_Y	č'arara	:	X_{Ch}	č'arara, sarara	:	X_M	<sarara>, X_G sarara?	'cold (adjective)'

Another change that distinguishes the Xinka varieties of Jutiapa from the central varieties is the shift $l, \acute{\ell} > t / CV? \_ V$ (3.4); i.e. laterals and lateral-fricatives that follow a glottal stop in non-initial position have changed into t in X_Y (see § 4.3.1.5.2).

(3.4)	X_M	<tila>	:	X_G	tiʔla, X_{Ch} tiʔla	:	X_Y	tita	'salt'

In X_G there is a process of change that affects nasals in final position: $n \rightarrow \eta / \_ \#$ (3.5). In X_{Ch} the process can even lead to the replacement of the final nasal by $-ʔ$ (see § 4.4.7).

(3.5)	X_M	<nangún>	:	X_G	nanguŋ	:	X_{Ch}	<nangú> (Ch-F)	'afternoon'

These patterns of non-phonemic change need to be distinguished from sporadic or irregular change, which affects only a few words and is generally not predictable (Campbell 1998:27). The distinction of sporadic changes and deficiencies in the Xinka data is not always clear.

Sound change is not only conditioned by the phonetic environment, but can also be caused by the morphological context and processes of grammatical change. Within the ALS-corpus, we find patterns of sound shift that occur in a specific morphological environment, or are conditioned by morphosyntactic operations and are therefore morphophonemic (see § 4.4). For example, three-syllabic verb roots lose V_2 upon suffix-inflection with person- or TAM-markers (3.6a-c) (see § 4.4.3.1)

or stops and affricates are glottalised in initial and medial position upon suffix-inflection of the root (d) (see § 4.4.6; Campbell 1997a:166).

(3.6)	a.	ʔiwaɕ'a VT:spin 'to spin' OT: "hilar" (2391.)	→	ʔuy_ša-n VT:spin-1sA 'I spun' OT: "pret. hilar" (2392.)
	b.	ʔeɬama VT:borrow 'to borrow' OT: "prestar" (2251.)	→	ʔeɬ_ma-ɬa VT:borrow-AGT '(the one) who borrows' OT: "el que presta" (3806.)
	c.	wašata VI:enter 'to enter' OT: "entrar" (1965.)	→	ʔan-waš_tə-ʔ 1sS-VI:enter-STAT 'I entered' OT: "yo entré" (1974.)
	d.	ʔuka VT:have, put 'to have, put' OT: "haber" (1804.)	→	ʔuk'a-ka VT:have, put-2sA 'you (would) have' OT: "hayáis" (2035.)

Besides being affected by the morphological environment, sound change can cause morphophonemic alternation and thus can condition formal morphological change. For example, there are two allomorphs of the plural marker, *-ʔi* and *-ʔe*, which result from processes of phonetic assimilation; *-ʔe* only occurs with stems that have mid vowels, i.e. with vowel set 2 (see § 4.4.2) (3.7). Here, the vowel of the plural marker is subject to assimilation of the stem/root vowel, thus rendering two allomorphic variants of the operator.

(3.7)	hurak- ʔi man-PL 'men' OT: "hombres" (3974.)	:	kosek- ʔe big, large-PL 'big ones' OT: "grandes" (11.)

With respect to the reconstruction of morphosyntactic categories in Maldonado-Xinka, it is crucial to note that phonological shift and phonological reduction can occur as a result of grammatical change, especially in processes of grammaticalisation (see § 3.3.3).

(3.8)	X _M *ʔaku ʔaya-n go be-1sS _{DEP} 'I am going to be' OT: "voy a estar" (1961.)	:	X _G _ku=_ya-n go=PROG-1sS _{DEP} 'I am going' (G-SH)

The precise role of phonological shift/reduction in morphosyntactic change will be dealt with in more detail in the relevant section (see § 3.3.3 below).

3.3.2 Etymological change

The corpus of Xinka data provides many examples for semantic, or etymological change; i.e. the change of the semantic referent of a morpheme/lexeme or construction. Etymological change may be indicative of regional differentiation, as much as it can highlight processes of semantic reinterpretation within a Xinka

There are cases where one Xinka form is correlated with multiple semantic/translation contexts. Here, the identification of semantic change is based on stability of linguistic form. Such examples may be cases of true polysemy/homonymy (3.9a) or they may indicate the extension of a Xinka term to new concepts (b). In some cases multiple semantic contexts can also derive from faulty correlation based on different forms of conceptualisation in Xinka and the Spanish reference language.

- In different regional varieties, the same lexical form may have undergone semantic/etymological change. The term *wona* is translated in most sources as 'hill' ('cerro'), with the exception of X_Y where it refers to 'cave' ('cueva, hoyo') (3.10a). Although we cannot establish the etymology, both meanings seem to be connected through the concept of a volcano and its crater, of which several dominate the Xinka landscape (e.g. volcano Tecuamburro). In the second example, the root that refers to 'fish' ('pescado') in X_Y and X_{Ch} is attested in X_M with the meaning 'shrimp' ('camarón') (as opposed to the term for 'fish' in X_M , X_G , which is *sema*). It is not entirely clear whether the final *-k* in the ALS-example is an instrumental marker, which may have influenced the meaning of the term itself.

- In contrast, multiple Xinka lexemes can also occur correlated with the same semantic referent. These cases are identified based on the stability of the semantic/translation context. Whereas some of these examples might again be simply indicative of the different forms of conceptualisation in Xinka and Spanish – as well as they may indicate faulty correlation of semantic contexts – other cases are clearly the result of semantic extension.

- Some of these may even be borrowed concepts such as the extension of the lexeme *ʔayala* 'woman' as a reference to the moon (3.12), which is a well-known concept in many Mesoamerican languages; e.g. K'iche' *ʔatiʔ* 'grandmother, moon'.

- Within grammaticalisation theory, semantic/etymological shift of lexemes and morphemes is seen as the first stage of grammatical change, which precedes morphosyntactic and phonological shift (see below; Heine, Claudi & Hünemeyer 1991:213; Gildea 1998:41). Thus, in order to define morphosyntactic categories in the ALS, semantic/etymological change within the ALS or the comparative data needs to be identified.

3.3.3 Grammatical change

Besides patterns of sound change and semantic shift, we need to identify grammatical cognates in the Xinka corpus in order to reconstruct the morphosyntactic categories of Maldonado-Xinka.

Studies in diachronic typology have defined universal stages of grammatical evolution (cf. Fox 1995:202-203; Givón 2000), which allow us to identify pathways of grammatical change in the Xinka corpus. Most of these insights have been gained in the field of grammaticalisation theory. The term 'grammaticalisation' refers to the evolution of grammar and is – in its narrower sense – applied to a chain of processes in the course of which an independent lexeme or syntactic construction assumes grammatical function in particular contexts and evolves from these into an auxiliary, and subsequently into a bound grammatical morpheme which may extend its grammatical function even further (cf. Heine, Claudi & Hünnemeyer 1991:4; Hopper & Traugott 1993:xv; Campbell 1998:238). Typical examples of grammaticalisation are the evolution of TAM-markers from positional verbs or periphrastic constructions, the evolution of third person pronoun markers from demonstratives, or the derivation of auxiliaries from main verbs etc. (cf. Campbell 1998:239).

Within the study of grammaticalisation the main focus of interest rests on two basic processes: (a) on the change from the lexical item to the grammatical morpheme, and (b) on how discourse structure evolves into morphosyntactic marking (Traugott & Heine 1991:2 *apud* Campbell 1998:238) – both processes have to be taken into account in grammatical reconstruction.

Grammaticalisation is not a mechanism of linguistic change itself (see Harris & Campbell 1995:20), but actually a correlation of several, more or less simultaneously occurring processes that involve the loss of semantic and syntactic independence as well as phonetic substance of the lexical item (cf. Heine & Reh 1984:159; Campbell 1998:238). Croft (1996:349) defines various interacting processes:

Phonological grammaticalization processes involve the gradual reduction of the phonological size of the former lexical item, and its attachment and phonological adaptation to an associated root. Morphosyntactic processes involve the former lexical item's becoming obligatory, fixed in word order, syntactically bound to an associated root, and fitting into a small paradigm of other grammatical elements. Functional processes involve an as yet ill-understood shift in semantic/pragmatic content of the former lexical item to a more 'grammatical meaning', and also an expansion of the semantic or functional range of the item (Croft 1996:349)

There are three basic mechanisms which bring about morphosyntactic change: reanalysis, extension/analogy and borrowing (Harris & Campbell 1995:50).¹⁰⁰ We will for the moment focus on the mechanisms of reanalysis and extension and their particular role in processes of grammaticalisation and will treat the mechanism of borrowing more extensively in the following section (§ 3.3.4).

¹⁰⁰ Other forms of morphosyntactic change (e.g. "rule addition and loss, lexical diffusion, changes in phrase structure rules, grammaticalization, contamination, etc.") are seen as specific forms or consequences of the three main mechanisms (cf. Harris & Campbell 1995:50ff.).

REANALYSIS is the main source of grammaticalisation and functional change (cf. Harris & Campbell 1995:50; Campbell 1998:240; Gildea 1998:36):

Reanalysis is a mechanism which changes the underlying structure of a syntactic pattern and which does not involve any modification of its surface manifestation (Harris and Campbell 1995:50-51)

That is, surface manifestations (such as morphological marking or word order) stay unchanged, while the underlying structure (such as constituency or grammatical relations) is reinterpreted, or reanalysed (see Harris & Campbell 1995:50-51). Reanalysis thus leads to constructions that have multiple interpretations (cf. *ibid.*; Campbell 1998:227; Gildea 1998:36). A typical form of reanalysis is fusion or merging of two forms across morphological boundaries (e.g. in compounding or lexicalisation of nominal endings from demonstrative enclitics) (Hopper & Traugott 1993:40). Processes of reanalysis can only be attested on the basis of diachronic data that provide evidence for the individual development of a reanalysed element (Gildea 1998:37). Illustrative examples for reanalysis are the change of the English copula "is" to an auxiliary function in "he *is* on building of a house" (copula) > "he *is* building a house" (auxiliary) (see Harris & Campbell 1995:51), or the locatives becoming markers for progressive in many African languages (see Heine, Claudi & Hünemeyer 1991).

EXTENSION/ANALOGY is the mechanism which brings about formal grammatical change (see Harris & Campbell 1995:51; Gildea 1998:37-38):

Extension is a mechanism which results in changes in the surface manifestation of a pattern and which does not involve immediate or intrinsic modification of underlying structure... (Harris and Campbell 1995:51)

In the process of extension/analogy an existing morphosyntactic pattern is borrowed and applied to a new semantic context. This process mostly regards morphology, but can also manifest in syntax. Examples for extension/analogy would be the weakening of strong verbs in English (Metzler 1993:601) or the extension of a whole set of person-marking affixes from one syntactic category to another (Gildea 1998:37, 40). Processes of extension/analogy simplify the language by reducing morphosyntactic variation. Campbell points out that extension and analogy need to be distinguished as two separate processes. In contrast to analogy, which can principally be understood as a process in which speakers "borrow" patterns from their own language to apply them in other contexts (Campbell 1998:89-90), extension refers to any form of change in surface structure.

Both mechanisms are distinct in that extension/analogy causes the change of a given morpheme/construction in a specific context, whereas reanalysis "changes all the morphology that occurs in a given construction" (cf. Gildea 1998:40). However, as diachronic operations reanalysis and extension/analogy interact in processes of grammatical change. Extension can be attested formally; it can occur independently of reanalysis (Gildea 1998:40). Reanalysis, in contrast, is not manifested formally at its initial stage and can only be identified on the basis of semantic and functional evidence (Gildea 1998:39). That reanalysis has happened only becomes apparent at a later stage in form of subsequent sound change and phonological loss or extension. Reanalysis and extension are sequential mechanisms, inasmuch as extension can be defined as "the means by which new reanalysis becomes explicit. Each change that

takes place in the grammar of a reanalyzed construction is arguably based on analogy to some similar category" (Gildea 1998:38).

Grammatical change by reanalysis and extension manifests itself in multiple meanings/functions, or polysemy, because the original forms and the reanalysed or extended constructions continue to coexist in the language for a while (Gildea 1998:39). In the Xinka corpus we find several cases of polysemous markers that occur in different morphosyntactic functions of which one represents the earlier, the other the later stage (e.g. antipassive and inchoative intransitives developing from reflexives).

The main challenge in this process of identifying multiple meaning is the distinction of related, polysemic and unrelated, homonymic forms (cf. Hopper & Traugott 1993:71). Besides polysemous roots and markers, grammatical change can lead to suppletive allomorphs (cf. Fox 1995:186), or multiple non-cognate forms expressing the same function (in distinct morphosyntactic environment), such as different plural particles, different markers for cross-referencing the third person, or various markers for causatives in Xinka (see § 11.2.2). Polysemous roots and suppletive allomorphs are traces that grammatical change leaves in the language:

Since with the development of a new stage, previous stages do not disappear from the language, the result is a series of overlapping grammaticalization stages that co-exist in the synchronic structure of the language in the form of grammaticalization chains (Heine 1993:120 *apud* Gildea 1998:39)

The term 'grammaticalisation chain' refers to a unidirectional "sequence of at least two distinct but overlapping uses" of a given linguistic form of which the source form is the earlier, less grammaticalised stage and the target form the later, more grammaticalised stage of development (Heine 1993:53). An example for such a grammaticalisation chain is the 'verb-to-TAM-chain', which defines the pathway for the grammaticalisation of auxiliaries through the stages of the independent word > clitic > bound morpheme > fusional inflection (see Heine 1993:53-66). At the final stage of such a grammaticalisation chain we find the lexicalisation of the form (see Givón 2000:142).

Although the identification of grammaticalisation chains in Xinka is somewhat facilitated by the fact that the corpus data are diachronically diverse, the deficiency of the documented language material outweighs the advantages. We are provided with a less than complete record of the stages of each particular development, which makes the hypothetical reconstruction of grammaticalisation chains necessary. The reconstruction of grammaticalisation chains has to draw on evidence from the entire corpus of data; i.e. across source boundaries. At the onset of the grammaticalisation lies some sort of semantic shift of lexemes and morphemes which precedes morphosyntactic and phonological shift (Heine, Claudi & Hünemeyer 1991:213; Gildea 1998:41). Part of the process is the loss of semantic independence of the grammaticalised form as well as the loss of phonological substance (see above), which needs to be plausibly explained within the chronological framework of the reconstructed evolutionary scheme.

For example, the evolution of the progressive marker *-ya* in X_G constitutes a case in which a reconstructed grammaticalisation chain provides the evidence for the definition of the morphosyntactic category in Maldonado-Xinka (see (3.13)). In X_G we find progressives marked on transitive and intransitive verbs with the suffix *-ya*,

which is followed by a cross-referencing pronominal suffix in the first or second person; in the third person, the verb is followed by the enclitic *hi?* or *he?* (see step 3). The ALS indicates a periphrastic construction that expresses the progressive of intransitive verbs. The construction consists of an unmarked main verb and an existential verb *ʔaya-* in auxiliary function that carries the inflectional information. The construction is only attested for the third person with the irregular form of the auxiliary verb *ʔahi* 'he/she/it is' (step 1a). However, since Maldonado de Matos gives us a full conjugation of the existential verb *ʔaya-* itself, we may conclude that the same type of periphrastic progressive construction must have existed for a first and second person subject (step 1b). Phonological reduction of the initial vowel *a* lead to the cliticisation, and later grammaticalisation, of the auxiliary verb (step 2).

(3.13)	(1)	Periphrastic construction	a.	$\langle \text{yszàpa agí} \rangle$ $\text{ʔiʂapa} \quad \text{ʔahi}$ leave be+3s _{DEP} 'he is leaving' OT: "está aquel saliendo" (1970.)
			b.	$*\text{ʔiʂapa} \quad \text{ʔaya-n}$ leave be-1s _{DEP} 'I am leaving'
	(2)	Phonological reduction	a.	$*\text{ʔiʂapa} \quad \_he?$
			b.	$*\text{ʔiʂapa-} \_ya-\eta$
	(3)	Grammaticalised markers	a.	$\text{ʔiʂapa} \quad he?$ leave PROG+3s _{DEP} 'he is leaving' (G-SH)
			b.	$ti:ki=ya-n$ sleep=PROG-1s _{DEP} 'I am sleeping' (G-RHG)

Connected to the evolution of the progressive marker is the reconstruction of the future marking auxiliary verb *kuya-* and the third person future auxiliary *kuy*. In the ALS a periphrastic construction consisting of the intransitive verb *ʔaku* 'go' and the marked auxiliary *ʔaya-* 'be (in a place)' is used to indicate a future context (step 1). This context is not attested for the third person as it is reconstructed in step 1b. Semantic contexts suggest that the periphrastic construction *ʔaku ʔaya-n* 'I go to be' ("voy a estar") has been reanalysed and syntactically extended to precede verbs instead of locative nouns. This stage of reanalysis is unattested (step 2). In a process of phonological reduction, the construction becomes grammaticalised to an auxiliary verb that takes cross-referencing suffixes (step 3): in examples from X_{Ch} only the initial vowel of the auxiliary is affected, whereas in X_G the initial vowel of the main verb is likewise dropped, resulting in the grammaticalised auxiliary verb root **kuya-* 'go to' (see step 3b). In the third person, the hypothetical and reconstructed construction $*\text{ʔaku} + \text{ʔahi} > *ku-hi > ku-y$ (see step 3c). This grammaticalised future

marker in third person *ku-y* is frequently attested in the more recent data from X_G as a future proclitic (step 4).¹⁰¹

- (3.14) (1) Periphrastic construction
- a. <acù ayaan Guatemala>
 ʔakuʔ ʔaya-n Guatemala
 go be-1s_{DEP} TOPN/LOC
 'I go to be in Guatemala'
 OT: "me voy a estar en G." (1961.)
- b. *ʔakuʔ ʔahi
 go be+3s_{DEP}
 'he goes to be = he is going'
- (2) Reanalysis
- a. *ʔakuʔ ʔaya-n + Verb
 go PROG-1s_{DEP}
 'I am going to + V'
- b. *ʔakuʔ ʔahi + Verb
 go PROG+3s_{DEP}
 'he is going to + V'
- (3) Phonological reduction
- a. ʔaku=ya-n ʔiʂpa-k(i)
 go=PROG-1s_{DEP} leave-REFL? = go for a walk
 'I am going to go for a walk'
 OT: "voy a pasear" (Ch-P)
- b. ku=ya-n ʂawaɕ'a
 go=PROG-1s_{DEP} sow
 'I am going to sow' (G-RHG)
- c. *ku-hi + Verb
 ku=y ʂawaɕ'a
 go=PROG+3s_{DEP} sow
 'he is going to sow' (G-RHG)
- (4) Morphosyntactic reduction
- a. kuy ruru-n
 AUX.FUT+3s pick fruit-1s_{A_{DEP}}
 'it is going to that I pick fruit'
 = 'I will pick fruit' (G-RHG)
- b. kuy ʔipala nin
 AUX.FUT+3s bath PN:1s
 'I am going to bath' (G-SH)

Both cases of reconstruction illustrate that the identification of processes of grammaticalisation is a prerequisite to the definition of morphosyntactic categories in Maldonado-Xinka.

3.3.4 Externally motivated change

It is taken here as a premise that Xinka has been subjected to external influences from Spanish and Mesoamerican contact languages throughout time (cf. § 1.5) and that language contact is therefore reflected in the corpus of data. Accordingly, the morphosyntactic reconstruction will have to account for lexical data and

¹⁰¹ A few steps have been deliberately omitted from the sample reconstruction (cf. § 12.4.1).

morphosyntactic categories in the ALS showing traces of borrowing and language contact. With respect to the comparative data, we furthermore need to consider that varying degrees of exposure to contact languages may result in varying degrees of phonological, lexical and morphosyntactic divergence from the ALS-data.

The following paragraphs will outline some of the basic criteria for identifying instances and processes of linguistic change induced by contact (see e.g. Campbell & Kaufman 1976:82-84; Campbell 1998:57-78; Aikhenvald & Dixon 2006b). We need to distinguish between instances of the actual borrowing of linguistic items from another language, i.e. 'direct diffusion' (as labelled by Aikhenvald) and instances of the borrowing of meaning and usage that are reflected in processes of reanalysis and extension/analogy, i.e. 'indirect diffusion' (see Harris & Campbell 1995:51; Aikhenvald 2002:4). Of these, the identification of direct diffusion is the more straightforward.

To identify loans in Xinka we need to draw on external data from potential contact languages. The primary contact language reflected in Xinka is Spanish. Further Mesoamerican languages from which Xinka may have borrowed lexical and grammatical items have been identified in previous studies and include Mayan and Nahuatl languages as well as Proto-Mixe-Zoque and Lenka (Campbell 1971; 1972a; 1977; Campbell & Kaufman 1976; Kaufman 1977; Schumann 1973).

Lexemes that are not consistent with the phonological or morpho-typological patterns of Xinka may be identified as loans. All forms that show some form of similarity to lexical items in the identified contact languages have probably been borrowed into Xinka. A loan from Spanish is therefore easily identifiable, even though it exhibits phonological adaptation. The donor is likely the language that is phonologically more differentiated. For example, if a proposed loan has *k* in Xinka and *q* in K'iche'an, then K'iche'an can be identified as the source because it contrasts *k* and *q* and would have borrowed the item without changing the sound (see Campbell 1977:102-103). Similarly, the lender is always that language in which a specific form may be morphologically analysed (Campbell & Kaufman 1976:83; Campbell 1977:103). Furthermore, a language is a donor language if cognates of the presumed loan are attested in the entire language family (ibid.).

In some cases it is difficult to identify regular patterns of phonological assimilation and probable contact languages for a presumed loan. Mesoamerican languages may have secondary loans, i.e. lexical forms that the donor language borrowed from another source (cf. Suárez 1983:156). In the case of Xinka, extralinguistic information about geographical, historical and cultural conditions, which is usually drawn on for the identification of contact languages (Campbell & Kaufman 1976:83), is rather scarce and therefore the identification of loans has to rely mainly on linguistic criteria.

One central question is how similarities that result from borrowing can be distinguished from similarities attributed to genetic inheritance. With respect to Xinka, insufficient identification of loans and linguistic diffusion has generated several misinterpretations about the genetic affiliation of the language, such as the groupings with Lenka and with Mixe (see § 1.3). Similarities were generally overemphasised and loanwords were wrongly identified as reflexes of a common proto-language (see § 1.3). In fact, the polarisation of 'genetic relationship' vs. 'borrowing' holds true only as long as we base the identification of genetic relationships on lexical evidence alone, keeping up the assumption that languages

split and further develop without ever being in contact again. Following Dixon (2000), diversification is the result of cultural separation, diffusion is the result of cultural contact.¹⁰² Both phenomena are interrelated and mutually interdependent in the process of language evolution. Depending on the cultural situation in a given area, diffusion may converge languages "on a common prototype" that diversifies again once there is cultural separation (Dixon 2000:4).

Various linguistic features typical for the Mesoamerican linguistic area are attested in Xinka (Campbell, Kaufman & Smith-Stark 1986) and it can be assumed that most morphosyntactic patterns (e.g. basic word order) have been adopted from other Mesoamerican languages, primarily from Mayan languages. In the process of reconstructing morphosyntactic categories in X_M , we have to keep in mind that linguistic change of one element entails the change of another (see § 3.1), and that past language contact may persist in linguistic processes of synchronic language states. Shared structural features and typological similarity can be indicative of genetic relationship as much as they may be the result of an identical structural development in unrelated languages that may have been motivated by the borrowing of one feature (Mithun 1991:47; Campbell & Goddard 1991:20). Certainly, instances of (earlier) externally motivated morphosyntactic change can only be identified by comparison with probable contact languages, or areal features.

Some recent typological studies have focussed on the factors which condition the borrowing of a specific grammatical category and how these factors correlate with genetically inherited patterns and with patterns that have diffused through contact (cf. Aikhenvald 2000, Aikhenvald & Dixon 2006b).

Two scenarios of grammatical borrowing are possible: (1) the borrowing of grammatical markers which are integrated into an existing type of syntactic construction; e.g. the borrowing of directionals from Mayan motion verbs (§ 14.1); and (2) the borrowing of new types of construction which accommodate existing morphology, such as word order patterns (see e.g. Campbell 1978b:599).

Lexemes and grammatical patterns that have been regularly borrowed from Spanish and persist in processes of linguistic change are not easily distinguished from phenomena of linguistic decay in all cases. Borrowing and contact-induced changes are concomitant symptoms of structural decay, since the gradual abandonment of lexical domains and morphological reduction are predictable results of intensive and oppressive contact with a dominant language (see below). Both phenomena show a significant overlap, the boundary of which is fuzzy.

3.3.5 *Language decay*

Xinka has been a dominated language family throughout colonial times. Traces of external pressure and language shift are reflected in the ALS as much as in the comparative data in form of sound, semantic and morphosyntactic divergence. When employing semi-speaker data in order to reconstruct morphosyntactic categories from the ALS, processes of structural decay need to be given special attention.

¹⁰² Dixon has labelled his model the Punctuated-Equilibrium-Model, defining cultural separation and linguistic split as periods of punctuation that are followed by periods of cultural equilibrium in which linguistic features diffuse (Dixon 2000). It has to be noted that periods of equilibrium always imply cultural domination.

In general, we can say that it is not possible to distinguish decay structurally from instances of general contact-induced change, as most forms of structural change associated with decay also appear in normal situations of language contact, which do not lead to the death of one of the languages involved (cf. Campbell & Muntzel 1989:187, 195; Thomason 2001: 226; 229).¹⁰³ However, decay is the only form of linguistic change that exclusively occurs in situations of language shift (Thomason 2001:229).¹⁰⁴ Thus, language decay implies the presence of semi-speakers and requires an interruption of regular language transmission; the less complete the language acquisition process of an individual speaker was, the higher the probability that structural changes are the result of decay (cf. Sasse 1992a:15-16, 1992b:61; Brenzinger 1998:98; Thomason 2001:230).

Furthermore, decay always involves degenerating or regressive change, which manifests itself in the simplification, reduction and loss of speech domains and structures that are not substituted otherwise (e.g. by borrowing) (cf. Campbell & Muntzel 1989:191-195; Dorian 1981 *apud* Sasse 1992b:60; Thomason 2001:226-228). Simplification and reduction are the main criteria for identifying decay.¹⁰⁵ While both phenomena imply the loss of linguistic elements, 'reduction' results in functional deficiency of the language (cf. Sasse 1992a:15-16). Obsolescent languages deviate from the formerly intact language system by complete loss of categorial systems without functional substitution. The result are paradigmatic gaps that cannot be explained by language contact alone, as these categories are present in the dominant language and could –theoretically– have been borrowed from there. Decay may therefore be understood as pathological loss of functional categories without compensation.¹⁰⁶

Characteristic for situations of language death are innovations introduced into the language system as a result of the semi-speaker's misperception of grammatical or phonological rules. Such innovations are internally motivated processes of change that are caused by the conditions of language shift, i.e. by the contact situation. In contrast to decay, innovations do not necessarily simplify the language system; they

¹⁰³ Campbell & Muntzel give an example of the change of the former relational noun *-wan*, which still required personal inflection, to an inflected preposition *wan* that is attested in various Nahua languages irrespective of their "state of health" (1989:95).

¹⁰⁴ It has to be noted that the reverse does not apply, that is, language death does not necessarily imply the gradual reduction of the linguistic corpus (cf. Brenzinger 1998:98-99).

¹⁰⁵ The terms *simplification* and *reduction* have been borrowed from the research on Creole Studies and pidginisation. The term *simplification* refers to the loss of overall complexity, while *reduction* denotes the loss of essential elements leading to defectivity in the language system. However, this distinction is not operational since the definition of "essential elements" as the only *differentia* is quite imprecise and arbitrary (cf. Sasse 1992:15).

¹⁰⁶ It has been suggested that the reduced inflectional and derivational morphology of moribund languages may be explained by the same processes and mechanisms that are involved in the phenomenon of pidginisation because in both instances functional and structural reduction occur simultaneously (cf. Mühlhäuser 1979 *apud* Dressler 1981:13). The psycho- and sociolinguistic conditions involved are, however, quite different in both cases and there is no correspondence with respect to the role of language acquisition and its social function which is why parallels between both phenomena are of rather superficial nature (Dressler 1981:13).

may also add complexity to it (cf. Campbell & Muntzel 1989:187-189; Thomason 2001:229-30).¹⁰⁷

Together, these processes cause a significant disintegration of the language, which may be defined as the final result of the interruption of strategic language transmission (see § 2.3.2.1). The symptoms of language death are thus a defective morphology, the loss of central morphological categories, pidgin-like simplification of syntax as well as faulty correlation of form and function; furthermore, pronunciation is variable and phonemic contrast are gradually lost (Sasse 1992a:15).

We may distinguish structural changes caused by language shift from contact-induced changes: structural simplification and the adoption of L₂ elements in a non-obsolescent contact situation do not bring about functional loss in the L₁-system and may be seen as mere attempts of L₂-imitation, whereas structural decay causes reduction and irreversible loss of linguistic elements (cf. Sasse 1992b:60). Negative borrowing, i.e. the loss of morphosyntactic categories that are non-existent in the dominant L₂, does not limit the functionality of the language system as lost forms are generally substituted with functionally equivalent means from the contact language (cf. Sasse 1992a:15-16; Thomason 2001:230). Thus, functionality constitutes the main criterion for distinguishing decay from regular change. For example, in the terminal speakers' data from X_G all cross-referencing affixes for marking first, second and third person plural have been lost; whenever speech acts involve plural persons, the informants resorted to full Spanish constructions.

Within the theoretical framework of DT language change is understood mainly as an individual phenomenon which results from the interaction of language knowledge acquired from the language community and typological constraints that are part of the speaker's linguistic competence (Croft 1996:350). It is subject to discussion to what extent the loss of individual linguistic competence entails the loss of awareness for the adaptive constraints of language change and, thus, allows the production of unstable and disharmonic states that may be defined as linguistic decay; or whether linguistic decay still operates within universal constraints.

3.4 Descriptive format

As outlined above, the methodological approach to reconstructive description combines: (1) the identification of all cognates as well as cases of formal or functional, or formal *and* functional, divergence within the corpus data, and (2) the instrumentalisation of universal processes of linguistic change and the criteria of typological (and phonological) plausibility, unilinearity and chronology in order to determine the morphosyntactic categories in the ALS. In practice, the identification of cognates and patterns of linguistic change are certainly not separate steps but interdependent processes.

In this section the framework and formal organisation of the grammatical description will be defined. § 3.4.1 will focus on how the reconstructed morphosyntactic categories of Maldonado-Xinka can be transferred into a coherent descriptive format, while § 3.4.2 addresses some aspects of data processing.

¹⁰⁷ Aikhenvald, for instance, showed that processes of grammaticalisation in Tariana may indeed be influenced by, or even be the result of, language obsolescence (2000:1).

3.4.1 *Morphosyntactic description*

The previous sections of this chapter have in some way put the cart before the horse by outlining a diachronic-typological approach to the data, which implies a functional perspective on grammar, before defining a functional-typological descriptive framework for this study.

There are two basic descriptive techniques based on the two main theoretical orientations within the field of linguistics: the formal and the functional-typological approach to grammar. While formal descriptions disregard semantic and pragmatic aspects of language and focus exclusively on the formal interrelations between linguistic elements, the functional approach includes the relevance of meaning in the analysis of grammatical form (cf. Newmeyer 1998:7).

The formal or structural approach corresponds to the practice of linguistic descriptivism; i.e. the internal analysis of distribution patterns and contexts of linguistic elements, excluding semantic or pragmatic aspects by deriving meaning from the formal context alone. This practice of a strictly "form-driven grammatical description" is aimed at preventing linguists from imposing categories to the language they describe as it allows the analysis of a language system in its own terms (Payne 2007:139). The formal approach is also referred to as hierarchical description, since it understands the hierarchy of phonology, morphology and syntax as a main ordering device.

Functional(-typological) descriptions, in contrast, understand linguistic forms primarily as communicative strategies (Croft 1990:246-247; Næss 2007:3; Payne 2007:141). Consequently, they include the semantic and pragmatic level of language, deriving the grammatical function of a linguistic element from its semantic context. This is at the same time the main point of criticism to the functional approach, since the decision about which lexical and semantic features are selected for defining grammatical or morphosyntactic function is largely a matter of intuition and thus subjective (cf. Newmeyer 1998:337-338). However, this criticism is balanced by the typological component of the approach, which bases the criteria for defining grammatical function upon cross-linguistic analysis of many languages (Croft 1990:246-247).

Payne (2007:137-138) explains why the functional-typological approach to grammatical description is more adequate than formal-hierarchical description of elements in a language alone. On the one hand, the "boundary between morphology and syntax is in fact quite arbitrary", which makes it problematic to use this formal boundary as a descriptive device. On the other hand – and this is the main problem of formal-hierarchical description – the coherence of "interlocking subsystems" which include formally distinct elements/operators is lost. In English, for instance, the subsystem "tense" can be expressed morphologically (e.g. past tense marked with *-ed*) or periphrastically (e.g. future tense marked with e.g. the auxiliary *will*). Grammatical descriptions that employ functions rather than forms as descriptive categories can depict the organisation and interrelation of such functional subsystems (e.g. tense/aspect/mode, deixis, valency etc.), which is relevant for cross-linguistic comparison.

With respect to the heterogeneous corpus of Xinka language data, the varying information on morphology, syntax and semantic contexts constitutes a problem for formal language description, whereas functional-typological description has the

categorial means to account for such divergence. Formal-hierarchical description of the concrete form would not allow the description of processes of formal linguistic change within the same categorial framework. Employing functional categories instead, elements of diverse origin that undergo formal-categorial change in their grammatical development may be subsumed under the same descriptive category. However, an exclusively functional approach would equally not do justice to description by ignoring the existing formal and distributive properties of the language (cf. Payne 2007:139).

The format chosen for the description of Maldonado-Xinka follows Payne's "balanced formal/functional approach" (1997:7ff.; 2007:139). That is, "controlled, systematic and rule-dominated" areas of grammar, such as lexical categories, pronouns, derivational and inflectional inventories etc., are described based on form, whereas all those areas of language that "cross-cut structural levels" are categorised according to function (Payne 2007:140). The combination of "form-first" and "function-first" description (terms see Payne 2007) certainly reflects in the analytic process, as the reconstruction of morphosyntactic categories of Maldonado-Xinka has to start with a formal-structural analysis of the ALS and the comparative sources. Morphosyntactic function is always defined on the basis of the formal/structural distribution plus the semantic context of a given form (cf. Croft 1990:11-12, Brown & Miller 1999:xiv). The term 'morphosyntax' refers to the interface of morphology and syntax. A morphosyntactic description employs the morphological processes, or operations, through which morphological elements exert syntactic function, as descriptive categories (cf. Shopen 1985; Payne 1997:7-8).

The internal order of the grammatical description of Xinka morphosyntactic categories is influenced by Payne's *Describing Morphosyntax* (1997) and Aikhenvald's *Grammar of Tariana* (2003), which both served as templates in terms of general organisation and descriptive order. The terminology follows general functional-typological standards (see among others Comrie 1981; Shopen 1985; Payne 1997 etc.). The precise use of terms and categories is explained and defined in the relevant chapters and sections (e.g. terms such as lexical categories, semantic roles and alignment system, valency changing operation, deictic categories etc.)

The actual morphosyntactic categories that can be reconstructed for Maldonado-Xinka form the frame of reference for the description. Patterns from the comparative data that are relevant to the reconstruction of the ALS category are indicated, and the process of change is explained where necessary.

In accordance with Payne's "form-first" functional approach, the general outline of the grammatical description of Xinka follows from the simpler to the more complex forms; i.e. from root to operator (see Payne 1997:7-8). For example, functional categories relating to nouns are subsumed under the category of noun phrase operations. Markers with different operational functions are listed and described in these various contexts, which is coherent with the choice of a functional-typological descriptive model that rates function over form. Their etymological connection and relative position in the grammaticalisation chain is addressed and discussed under the categories that present the later or derivative states. This descriptive procedure accounts for the possibility that the diachronic processes which gave rise to the various functions may have occurred at very different stages in the chronological development of the Xinkan languages.

Where functional reconstruction is not possible, or where the etymology and evolution of divergent forms remains unclear, the definition of descriptive categories is ambiguous. In these cases, individual forms are described with respect to the functional context that can be derived from the ALS, and a discussion of the problem of reconstruction is included. Some of these forms may indicate suppletive functional change or even functional loss.

The artificiality of functional opposition of inflection and derivation has been pointed out as a general problem within typological-functional linguistics, as morphosyntactic operators may oscillate between the two functions or often simply develop from each other (see e.g. Anderson 1985:6; Payne 1997:26). This is also the case in Xinka. However, for the descriptive purpose we will keep the distinction of the formal categories of inflection and derivation.

Despite the fact that this is not common usage and may even be considered "an instance of bad grammar writing to obscure the linguistic description with too many examples" (Mithun 2007:56), I have chosen to make the analysis more transparent, by providing in each case several examples from the ALS and the comparative data to illustrate categories and morphosyntactic processes.

3.4.2 *Organisation of corpus data*

On a practical note, for the purpose of analysis the data from the ALS and the comparative sources were integrated into a concordance format which correlates individual forms with their contexts – provided such contexts were given. With respect to the sequence of data processing it has to be noted that the database was originally designed to provide an analytic basis for the reconstructive description of modern Xinka. Thus, the properties of the terminal data recorded in Guazacapán defined the layout of the concordance. The concordance contains additional contextual information about the speaker and the interview date.

Transcribed interviews¹⁰⁸ were prepared for analysis by extracting all coherent Xinka-utterances and correlating them with their associated semantic contexts. As the interview context is sometimes not very specific and does not permit to correlate Xinka forms and utterances with a concrete translation, it was sometimes chosen to correlate Xinka forms with the wider semantic context. Translations of Xinka forms produced by semi-speakers often need to be reconstructed from the context. These isolated Xinka contexts were then divided into recognisable lexical and morphosyntactic units and transferred into a systematic concordance (.doc-format) that correlates every unit or lexical item with its complete context of utterance and its Spanish semantic context.

The language data from the ALS and the secondary comparative sources were then integrated into the created concordance format. Coherent sentences and phrases were divided into units using the translation context as an indication for identifying single items and constituents. Accordingly, the concordance contains information about the origin or source of each individual item.

¹⁰⁸ In order to have the complete interview contexts and to provide the COPXIG with proper data, the interviews were transcribed in their entirety, including the lengthy Spanish discourse.

The concordance constitutes the basis for phonological and morphosyntactic analysis. The integration of all primary and secondary language data into one single database permitted comparative analysis of the various sources and synchronic representations of Xinka.

4 Phonology

The ALS is a prephonemic source that uses letters from the Spanish alphabet and a few special characters to represent the sounds of the vernacular. Key to the phonological interpretation of the orthographic symbols is the comparison to the phonological properties of Xinkan languages that can be derived from previous linguistic studies (see § 4.1.1), the primary sound recordings (see § 4.1.2) and secondary sources with prephonemic orthographies (see § 4.1.3).

Several studies have shown that comparing colonial orthographies with the phonemic inventories of the closest modern language variety can yield valuable insights about the phonology of a colonial language (see e.g. Dürr 1987:34).¹⁰⁹ Certain constraints, however, need to be kept in mind. The sound values underlying the language representation in the ALS do not necessarily correspond with the phonemic conditions in the semi-speaker data. The last speakers of Guazacapán show differences in their sound realisations that can be attributed to decay and the loss of regular communication in the language. Moreover, the sound inventories presented in previous studies on Xinka phonology do not coincide either, but show differences with respect to the interpretation of phonemic values and the nature of existing sounds. Such divergence may be the result of diachronic change, as the data stem from different times and regions and variant sounds might indicate language boundaries.

The analysis of orthographic conventions in the ALS has to account for distinct geographical origin and possible linguistic change. The earlier data may encode sounds or phonemic distinctions that have been lost in the meantime – or, quite for the contrary, they may underrepresent distinctions that have developed more recently. Thus, there is no single standard Xinka phonemic system to compare the colonial orthography to: the sound system of proto-Xinka still awaits reconstruction (see Campbell 1997a:166), and as the affiliation of Maldonado-Xinka is not specified in the ALS (see § 2.1.3), the comparative basis for an analysis of the colonial sound system is ambiguous.

Some previous studies of colonial language sources have shown that much information about sound values and patterns can be derived from a systematic internal analysis of the orthography used in the source data (see e.g. Dürr 1987; Smailus 1989b; Alexander-Bakkerus 2005).

The phonetic and phonemic interpretation of the graphemes will proceed from the orthographic rules of Spanish that are often applied faithfully in colonial grammars (see Newman 1967:180; Smailus 1989b:29). In the first chapter of the

¹⁰⁹ Dürr (1987), for instance, used the phonemic inventory of the K'iche' dialect of Nahualá as a standard inventory to explain orthographic conventions in the Popol Vuh, as Nahualá-K'iche' is considered to be the dialectal variety that corresponds most closely to colonial K'iche' (Dürr 1987:36) – however, in this particular case it needs to be taken into account that the Dept. Nahualá is not the region where the text originates from. Thus, the situation resembles slightly the Xinka case, inasmuch as the origin of the phonemic inventories used to explain the colonial orthography are not necessarily congruent with the origin of the colonial source itself.

manuscript text, Maldonado de Matos explains his orthographic conventions, justifying the introduction of new symbols to represent idiosyncratic Xinka sound values, and thus, providing us with further details about the nature of sounds in the colonial variety he describes.

Treating the ALS as a closed synchronic representation of a historic language state, more information about the Xinka sound system can be derived from an analysis of internal systematics of graphemic conventions. Provided that orthography is indeed consistent, the phonemic status of certain sounds may be derived from the distribution of orthographic symbols in their graphemic as well as semantic contexts. We may, for instance, postulate different phonemes on the basis of attested minimal pairs of graphemes. Complementary distribution of graphemes may be similarly indicative of allophonic variation. Still, phonemic contrasts that are not represented orthographically cannot be identified. Furthermore, it has to be taken into account that not all graphemic contrasts indicate phonemically distinct sounds. They can also be identified as orthographic overdifferentiations of sound features, such as the Spanish spelling convention which represents the phoneme *k* as <qu> before the front vowels *i* and *e*, and as <c> before all other vowels.

The orthographic analysis allows us furthermore to establish phonological rules and derive Xinka phonotactics. Consistent graphemic distribution can provide tentative clues about morphophonemics and syllable structure. On the other hand, inconsistent orthography may make the definition of morphophonemic processes and phonological rules difficult. The consistency and inconsistency of graphemic distribution can therefore function as a measure and corrective for the reliability of the language information in the ALS.

In § 4.1 we will analyse the phonological information that can be derived from the comparative data, including previous studies, sound recordings and prephonemic sources. The grapheme inventory of the ALS is the subject of § 4.2. In § 4.3 we will combine the information of both sections in order to reconstruct the sound values of the individual graphemes employed by Maldonado de Matos, and suggest an approximate sound inventory for the colonial Xinka variety. The phonemic analysis of the graphemic conventions is based upon the etymological reconstruction of the Xinka lexicon and is only valid for the given corpus of data. It cannot be entirely ruled out that forms which are exclusively represented prephonemically may not have been correlated correctly as the original sound value might have been lost in the other varieties. Deficiencies attributed to an erroneous orthographic rendering of individual forms by the author cannot be excluded.

Phonological rules and morphophonemic processes that can be reconstructed for Maldonado-Xinka are treated in § 4.4. The reconstruction of phonemes and rules will take the phonological development of the language family into account, including identified cases of regular and contact-induced sound change as well as linguistic variation caused by decay (see § 4.5).

To bridge the deficiencies and inconsistencies of the orthography and provide the reader with a coherent form of representation, all prephonemic forms are rendered into phonemic orthography for the remainder of the study.¹¹⁰ The criteria of

¹¹⁰ Although this opens up a potential for rendering forms into incorrect phonemic representations, I decided in favour of the transformation as it increases the explanatory potential of the linguistic form and, besides, has become a common standard: cf. Dürr (1987:34-5) who does not modernise the forms from

orthographic rendering are discussed in this chapter. To maintain transparency and account for possible errors in the phonemicisation process of primary and prephonemic data, the original orthography of each form is preserved in each example.

4.1 Comparative data on the phonemic system of Xinkan languages

4.1.1 *Previous phonological studies*

Some studies on Mesoamerican linguistics include phonemic inventories for Xinka that are based on the investigations carried out by Campbell and Kaufman in the 1970s (see Kaufman 1977; Campbell 1979; Suárez 1983; Campbell, Kaufman & Smith-Stark 1986). In the majority of these cases, the phoneme list is indicated for comparative reasons and is not accompanied by abundant lexical data. Additional details about Xinka phonology are provided by studies that were exclusively concerned with the language (see Calderón 1908; Lehmann 1920; McQuown 1948; McArthur 1966; Schumann 1966, 1967; Campbell 1971, 1972, 1977). With the exception of Lehmann (1920), all phonological descriptions are based on primary linguistic data documented by the authors themselves – Campbell and Kaufman who have documented data from three varieties base their analysis on comparative data.¹¹¹

The various proposed phonemic inventories for Xinka are as heterogeneous as the corpus of data itself. Most authors stress the potential inaccuracy of their preliminary propositions and point out that not all phonological aspects have been clarified thus far (see McArthur 1966:309; Campbell 1972a:187; Kaufman 1977:72). While there is no vast disagreement about the inventory of sounds as such, phonological oppositions are not clearly defined (see Table 4. 1).¹¹² McArthur (1966:309) and Campbell (1971:328, 1972:187) accept a common set of phonemes for the Xinka of Guazacapán and Chiquimulilla, whereas Schumann proposes different phonemic inventories for both varieties (1966:449; 1967:19). McQuown (1948) and Kaufman (1977:72) only provide data from Chiquimulilla. Suárez (1983:36) does not indicate the source of the phonological information he provides, but the inventory basically corresponds with the proposals of Campbell and Kaufman. The deviations between the proposals can be attributed to differences in the methodological approach and varying degrees of phonological abstraction by the authors as much as to variation within the descriptive data.

the Popol Vuh, while Christenson (2004) does; see also Laughlin (1988) who modernised the orthography of the colonial Tzotzil dictionary, or Alexander-Bakkerus (2005) who chose this procedure for the description of Cholón.

¹¹¹ Lyle Campbell kindly permitted me to copy some of his and Kaufman's field notes. The phonological information provided therein is extensive and precise. However, since the data are still unpublished I decided to include here only the phoneme inventories that have actually been published by both scholars. The field notes are nevertheless considered and cited in the discussion of phonemes in section 4.3

¹¹² It has to be noted that not all of these inventories are clearly defined as "phonemic inventories".

Table 4. 1: Comparative inventories of consonants

	stops				affr.		ejectives				fricatives				nasals				liquids		glides			
Calderón (1908) ¹¹³	p	t	k	ʔ	b	d	č		k'	ç'	f	s	š	h	m	n	ŋ	l	r	w	y			
McQuown (1948)	p	t	k	ʔ			č	pʔ	tʔ	kʔ	çʔ	čʔ	s	š	h	m	n		l	r	w	y		
McArthur (1966)	p	t	k	ʔ	b	d	g	č	pʰ	tʰ	k'	ç'		s	š	h	m	n	ŋ	l	r	w	y	
Schumann (1966)	p	t	k	ʔ	b		g	č					f	s	š	ʃ	h	m	n		l	ɹ	w	y
Schumann (1967)	p	t	k	ʔ			č						s	š	ʃ	h	m	n		l	ɹ	w	y	
Campbell (1972)	p	t	k	ʔ			č	p'	t'	k'	ç'		s		h	m	n		l	ɹ	w	y		
Kaufman (1977)	p	t	k	ʔ			č	p'		k'	ç'	č'	s	š	h	m	n		l	r	w	y		
Suarez (1983) ¹¹⁴	p	t	k	ʔ			č	p'	t'	k'	ç'	č'	-	-	-	-	-	-	l	ɹ	-	-	-	
Campbell (1997)	p	t	k	ʔ				p'	t'	k'	ç'		s	š	h	m	n		l	r	w	y		
																m̃	ñ		l'	ɹ'	w̃	ý		

Xinka phonology is typologically very similar to Mayan (Campbell 1972a:187; Suárez 1983:36). The basic phonological and phonotactic rules have been defined by Campbell and Kaufman (cf. Campbell 1972a:187; Kaufman 1977:72; Campbell, Kaufman & Smith-Stark 1986:537-544).

Most secondary sources agree on an inventory of six vowel sounds *i*, *ɨ*, *u*, *e*, *o* and *a*. Vowel length and accent are phonemic (see Kaufman 1977:72). With respect to the inventories of consonantal phonemes the sources differ. The definition of the voiced stops *b*, *d* and *g* by Calderón (1908), McArthur (1966) and Schumann (1966) can be identified as an overdifferentiation, since these sounds are allophonic variants of the voiceless stops *p*, *t* and *k* (Schumann 1967:19.20; Campbell 1972a:187).

The inventories differ also with regard to the definition of glottalised stops: while Schumann rejects their existence altogether, the other authors agree at least on the existence of a glottalised velar stop *k'*. McQuown (1948) and Kaufman (1977) assume furthermore the glottalisation of the affricates *č'* and *ç'*; while McArthur (1966) only indicates a phonemic contrast for *č* and *ç'*. Campbell attributes phonemic status only to the glottalised form of the alveolar affricate *ç'*, while *č* occurs just in an unglottalised form (1972:187).

¹¹³ Calderón's data are strictly speaking prephonemic in that Calderón uses characters of the Spanish alphabet to represent the sounds. However, his language description contains a chapter on phonology in which he gives a detailed description of the sounds indicating place and mode of articulation according to contemporary linguistic standard. Therefore, I include his phoneme set with IPA conventions in this table. Calderón's inventory of graphemes will also be included in the analysis of orthographic conventions of the prephonemic sources (see § 4.1.3).

¹¹⁴ Suárez does not comment on the fricatives, vibrants and glides, and simply states overt similarity with the Mayan phonemic system (1983:36).

Further disagreement regards the definition of fricative phonemes. Except for Campbell, all other authors make a phonemic distinction of the voiceless alveolar fricative *s* and the postalveolar fricative *ʃ*. Schumann distinguishes a third fricative phoneme, the voiceless retroflex *ʂ*. In his earlier work, Campbell defines the sounds [s] and [ʃ] as allophonic variants of the phoneme *ʃ* with [ʃ] only occurring between high vowels *i* and *u* (1972:187). However, he distinguishes *s* and *ʃ* as phonemic in his proposal of a preliminary proto-phoneme inventory (1997:166).

With respect to the differentiation of laterals it is unclear whether the lateral *l* and the lateral fricative *ɬ* are allophonic variants or different phonemes. Campbell and Schumann distinguish /l/ and /ɬ/, while Kaufman differentiates an intervocalic allophone [l] and a sound variant [ɬ] that occurs in final position (Kaufman 1977:72).

Campbell and Kaufman (field notes) indicate the existence of glottalised resonants *m̥*, *n̥*, *l̥*, *w̥*, *y̥* and glottalised *ɾ̥*, which seem to be the result of morphophonemic processes. Campbell has included the glottalised resonants in the latest published version of the Xinka phoneme inventory, suggesting that these sounds may have been present in proto-Xinka (Campbell 1997a:166).

4.1.2 Sound inventories of terminal speakers (Guazacapán)

The following Table 4.2 illustrates the sound system attested in the semi-speaker data from Guazacapán. Not all of the sounds in this inventory are used by all speakers. Schumann noticed socio-stratigraphically conditioned variance in the pronunciation of younger and elder Xinka speakers that appeared to result from the higher proficiency of the younger generation in Spanish (1967:22-23). Given that these divergences were notable in the 1960s, we may preclude phonological consistency in the language use of the last surviving Xinka speakers and have to allow for an even wider variance in phonetic realisations.

Table 4. 2: Sound inventory of the Xinka of Guazacapán (2000-03)

	Bilabial	Labio-Dental	Alveolar	Postalveolar	Retroflex	Velar	Glottal
Stop	p		t			k	ʔ
[+ voiced]	[b]		[d]			[g]	
[+ glottalisation]	pʰ		tʰ			kʰ	
Affricate				ɟ			
[+ glottalisation]			ɟʰ				
Nasal	m		n			[ŋ]	
Fricative		[f]	s	ʃ	[ʂ]		h
Lateral-Fricative			ɬ				
Lateral			l				
Vibrant			r				
Glide	w					y	

	Front	Central	Back
High	i	ɨ	u
Mediate	e	[ə]	o
Low		a	

Furthermore, the language information the speakers provided was rather fragmentary and interspersed with a lot of Spanish forms. The inventory therefore excludes all sounds that are only attested in Spanish forms. Nevertheless, it needs to be taken into account that there is Spanish influence on Xinka phonology, and vice versa, the pronunciation of Spanish forms may have been influenced by Xinka.

The sound inventories of the last speakers from Guazacapán reflect idiosyncrasies and personal preferences of pronunciation that distinguish one speaker from the other. Speakers also vary in their individual sound realisations – apparently at random – which might be the result of phonological decay (see § 2.3.2.1).

4.1.2.1 Stops

The inventory contains the stops *p*, *t*, *k* and their glottalised forms *p'*, *t'*, *k'* as well as *ʔ*. Aspiration of stops occurs, but is not contrastive. The unglottalised stops are attested in word- and syllable-initial position as well as in syllable-final position with all six vowels *i*, *ɨ*, *u*, *e*, *o* and *a*. Bilabial and alveolar stops occur regularly only in word-initial (4. 1) and in intervocalic position (4. 2). Velar stops and the glottal stop *ʔ* are also attested in word-final position (4. 3).

(4. 1) Distribution of stops in initial position		
p_	pula	'make' (SH, RHG, JAP, JS) ¹¹⁵
t_	tura	'take, bring' (SH, RHG)
k_	kotoro	'flying ant' (RHG, JAP)
p'	p'up'uʔ	'mat' (SH, RHG, JAP, JS)
t'	t'at'aʔ	'father, sir' (SH)
k'	k'aʔi	'smoke' (SH, RHG)
ʔ	ʔaku	'walk' (SH, RHG, JS)
(4. 2) Distribution of stops in intervocalic position		
VpV	ʔišapa	'leave, emerge' (SH, RHG, JS)
VtV	hutu	'tree' (SH, RHG, JAP, JS)
VkV	maku	'house' (SH, JS)
Vp'V	p'up'uʔ	'mat' (SH, RHG, JS)
Vt'V	t'aʔaʔ	'father, sir' (SH)
Vk'V	čirik'ʔ	'small' (SH, JAP)
(4. 3) Distribution of stops in final position		
_k	šinak	'beans' (PE, SH, RHG, JAP, JS)
_k'	tayuk'	'hat' (SH, RHG)
_ʔ	ʔukaʔ	'did, done' (SH)
_t	ʔaʔtepet	'town' (PE, SH, JAP, JS) [L-N]

Unglottalised stops are voiced after nasals and voiceless in all other contexts (see Schumann 1967:19-20; Campbell 1972a:187). Velar stops are furthermore voiced in initial position before *r* (4. 4).

¹¹⁵ Terminal speakers are cited alphabetically by last name, i.e. Pablo Esquite (PE), Sebastián Hernández (SH), Raymundo Hernández Godínez (RHG), José Antonio Pérez (JAP), Juan Santos (JS).

(4. 4)	a.	/ʔampuki/	[ʔambuki]	'snake' (SH)
	b.	/ʃantiwina/	[ʃandi ^h wina]	'above' (SH, JS)
	c.	/nankun/	[nangun]	'afternoon' (SH, RHG, JAP)
	d.	/k(a)rawa/	[gra ^h wa]	'woods, wilderness' (RHG, JAP, JS)

There is a lot of inconsistency and variance in the use of glottalised stops. On the basis of the primary data alone, it is occasionally unclear whether a certain form occurs regularly with a glottalised stop, or whether we are dealing with an instance of "over-glottalisation". Alternating glottalisation is attested with bilabial (4. 5) and alveolar stops (4. 6), but occurs most often with velar stops (4. 7).

(4. 5)	a.	pupuʔ (SH)	:	p'up'uʔ (SH)	'mat'
	b.	ʔipaʔa (SH, JS)	:	ʔip'aʔa (SH)	'to bath'
	c.	mapu (SH, RHG)	:	map'u (SH)	'tortilla'
(4. 6)	a.	tuʔu (SH)	:	t'uʔu (SH)	'flower'
	b.	hutu (SH)	:	hut'u (SH)	'tree'
	c.	tata (SH)	:	t'at'aʔ (SH)	'father, sir'
(4. 7)	a.	ka-ni ^h wa (SH, JAP)	:	k'a-ni ^h wa (SH)	'you want/ask for'
	b.	suku (RHG)	:	suk'u (RHG)	'to tie (sth.)'
	c.	ʔikaʔ (SH)	:	ʔik'aʔ, ʔik'ah, k'aʔ (SH, JAP)	'one'
	d.	horo-k'aʔ (SH)	:	horo-ka (SH)	'you got = you have'

Glottalisation also occurs on Spanish forms (4. 8), including lexical items that are randomly borrowed (4. 8) as well as regular Spanish loanwords (4. 9).

(4. 8)	a.	pork'e	'because' (SH)	Sp: <i>porque</i>	[pɔr'ke]
	b.	k'alor	'heat' (SH)	Sp: <i>calor</i>	[ka'lɔr]
	c.	ʔaŋk'unyado	'brother-in-law' (SH)	Sp: <i>cuñado</i>	[ku'na ^h o]
	d.	sentramerik'a	'Central America' (SH)	Sp: <i>Centro América</i>	['sentro ʔa'merika]
	e.	p'ito	'pipe' (SH)	Sp: <i>pito</i>	['pito]
(4. 9)	a.	^h wak'aʃ	'cow' (SH, JAP)	Sp: <i>vaca</i>	['baka]
	b.	k'afē	'coffee' (JS)	Sp: <i>café</i>	[ka'fē]

Campbell has shown that this variance is connected to the process of language attrition which reflects a tendency of terminal speakers to overgeneralise stops (Campbell & Muntzel 1989:189-190). Indeed, it can be noticed that the existence of one glottalised stop in a phrase may lead the semi-speakers into glottalising the other stops (see Campbell & Kaufman: field notes). There are several examples in the corpus where speakers either glottalise every velar stop within a phrase or none at all (4. 10). In the majority of examples, however, random glottalisation only affects singular stops.

(4. 10)	a.	[šinak' k'uy k'agon]	b.	[pulaŋ k'aʔ ^h waruk']
		/šinak kuy kawu-n/		/pula-n (ʔi)kaʔ waruk/
		beans AUX.FUT buy-1sA		make-1sA INDEF net
		'I am going to buy beans' (SH)		'I made a net' (SH)

Campbell interprets the inconsistent use of glottalised stops as a result of terminal speakers having lost control over a complex phonological rule of glottalisation. He notes that stops and affricates are regularly glottalised when followed by *-Vn*, *-Vɣ* or *-Vʔ* (Campbell 1972a:187; 1997:166; see § 4.4.6). There are indeed several examples which suggest that suffixation or cliticisation of grammatical markers in general may cause glottalisation of stops in intermediate (or

syllable-initial) as well as word-initial position. The process is attested with cross-referencing suffixes of first, second and third person, marking either the subject on verbs (4. 11) or the possessor on nouns. Whereas Campbell only indicates the suffixes *-n* (first person), *-y* (third person) and *-ʔ* (stative marker), we find glottalisation also in roots marked with *-ka* (second person possessor) and *-h* (third person possessor).

(4. 11)	a. k' uya-ŋ be going-1sS 'I am going' (SH)	b. ʃuk' a-ŋ eat-1sA 'I ate' (SH, JAP)
	c. gwe ʃk' e-y throw-3sA 'he threw' (RHG)	d. t' ure-y take-3sA 'he took' (SH)
(4. 12)	a. mak' u-ŋ house-1sP 'my house' (JAP)	b. mak' u-ka house-2sP 'your house' (JAP)
	c. mak' u-h house-3sP 'his house' (SH, JAP, RHG)	

Glottalisation of medial consonants of verb roots/stems can also occur as a result of inflectional marking. Attested forms in this context are the stative-resultative marker *-ʔ* (4. 13a), the anterior marker *-wa* (b) and the intransitive imperative marker *-ya* (c). The fact that medial velar consonant in the last example (d) is glottalised may be seen as evidence that following intransitive progressive auxiliary in the third person singular *hiʔ* is not a free form, but cliticised to the root.

(4. 13)	a. ʔur k' u-ʔ drink-STAT 'he drank' (JAP)	b. hap'a- ^g wa niŋ pass by-ANT PN:1s 'I passed by' (SH)
	c. ^g wa ʃt' a-ya enter-IMP 'enter!' (SH)	d. ti: k' i hiʔ sleep PROG+3sS _{DEP} 'he is sleeping' (SH)

The process of glottalisation of stops in roots/stems is also attested with the agentive derivation *-ʔa* (4. 14a) and plural marker *-ʔi* (b).

(4. 14)	a. muk'a- ʔa work-AGT 'worker' (JS)	b. hut'u- ʔi tree-PL 'trees' (SH)

In some instances, glottalisation may also result from the deletion of *V₂* in three-syllabic forms (see § 4.4.3).

(4. 15)	a. ʔi ʃp' a-ʔ ← ʔiʃapa leave/emerge-STAT 'he left/emerged' "salió" (SH)	b. ʔak' wa-ŋ ← lak'uwa son-in-law-1sP 'my son-in-law' "mi yerno" (RHG)

It is not entirely clear whether the glottalisation of root consonants is a regular morphophonemic process. There are examples of the same type of glottalisation occurring with forms where the final consonants *-n* and *-ʔ* cannot be identified as grammatical markers and the glottalised velar stop is not part of the root but the initial consonant of a suffixed morpheme (4. 16).

- (4. 16) a. ʔahmuk'aŋ (SH), ʔahmukan (SH), ʔahmuk'aʔ (SH, JAP) 'yesterday'
 b. pik'aŋ (SH) 'the day before yesterday'

Furthermore, Campbell and Kaufman (field notes) indicate a process of glottalisation of medial stops in loanwords from Nahuatl, Spanish and Mayan. Their examples include forms that end in grammatical suffixes and forms with non-functional final consonants.

- (4. 17) a. mist'un 'cat' < L-N *mistli* 'cat'
 b. čuk'ul'ah 'chocolate' < L-N *čokolatl* 'chocolate'
 c. ʔaʔk'aʔʔi'i 'mayor' < L-S *alcalde* 'mayor'
 d. hurak'aŋ 'wind, hurricane' < L-M *xuraqan* 'Juraqan (K'iche' deity)'

We may therefore have to consider the process to be phonetic rather than morphophonemic. The small number of attested cases, however, does not allow us to draw any definite conclusions. The rule is attested only by some data; in the majority of contexts, the semi-speakers use unglottalised stops.

There are also cases in which stops in a verbal root become glottalised upon inflection with cross-referencing prefixes (4. 18). These forms are rare and the vast majority of prefix-marked verbs do not exhibit glottalisation. Therefore, it is not entirely clear whether glottalisation in these cases is a relic of a lost morphophonemic process, or whether we are dealing with an instance of overgeneralisation by semi-speakers.

- (4. 18) a. ʔam-p'iri 'I see' (SH)
 1sA-see
 b. muh-k'u 'let's go' (SH)
 1pS-go
 c. ka-ʔišak'a 'you drink' (SH)
 2sS-drink
 d. mu-t'unati 'he plays an instrument' (SH)
 3sA-play an instrument

The semi-speakers show a tendency towards glottalising velar stops in word-final position. In the majority of attested cases, however, final velar stops are unglottalised.

- (4. 19) a. ʔanik' /anik/ 'today' (SH)
 b. šu^hwik' /šuwik/ 'broom' (SH)
 c. maʔik' /maʔik/ 'firewood' (SH)
 d. ʔo:tek' /ʔo:tek/ 'bed' (SH)
 e. pe^hwek' /pewek/ 'gourd' (SH)
 f. tayuk' /tayuk/ 'hat' (RHG)
 g. hurak' /hurak/ 'man' (SH)
 h. šinak' /šinak/ 'bean' (SH, PE)
 i. gunak' /winak/ 'witchmaster, brujo' (PE)

Occasionally, the velar stop *-k* may be replaced by the glottal stop *-ʔ* in word-final position. In some cases this loss of final *-k* can be interpreted morphologically as the deletion of the instrumental marker *-k* (see § 11.1.3.1). However, the change from *k* to *ʔ* also occurs in contexts where the instrumental marker is not attested, which suggests that this is an entirely phonetic process (cf. also § 4.4.7).

- (4. 20) a. ʔanik (SH) → ʔaniʔ (SH) ~ ʔaneʔ (SH) 'today'
 b. maʔik (SH, RHG, JAP, JS) → maʔiʔ (SH) ~ maʔeʔ (JS) 'firewood'
 c. šuʔnik (RHG, JAP, JS) → suniʔ (SH, JAP) 'pot'
 d. waruk (SH, RHG) → waruʔ (SH, JAP, JS) 'net'
 e. tayuk (PE, SH, RHG, JS) → tayuh (JS) ~ tayuʔ (JS) 'hat'

There are cases in the semi-speaker data where *k'* becomes *t* in word-initial position (4. 21). This change is also attested in the corpus of prephonemic data (see § 4.1.3).

- (4. 21) [k'ayɪʔ] (SH) → [tayɪʔ] (SH) 'sell'

4.1.2.2 Affricates

The sound inventory contains alveo-palatal affricate *č* and the glottalised alveo-dental affricate *č'*.

The affricate *č* occurs in initial and intervocalic position with high vowels *i*, *ɨ*, *u*, with mid vowel *e* and low vowel *a* (see § 4.4.2 for patterns of vowel harmony and vowel sets). In the semi-speaker data *č* never occurs before *o*, other than in Spanish loans. The affricate *č* is not attested in final position.

- (4. 22) Phonotactic distribution of *č*
- | | | | | |
|----|-----------|------------------------|----------------------|----------------|
| či | čiči | 'excrement' (RHG) | ʔiwiči | 'hear' (RHG) |
| či | čirikiʔ | 'small' (RHG, JAP) | | |
| ču | čušumuti | 'elderly man' (RHG) | čuču | 'dog' (SH, JS) |
| če | čeyk'uk'ə | 'to crush, pound' (SH) | | |
| čo | - | | | |
| ča | čuh-čaya | 'elderly woman' (RHG) | ša ^ə wača | 'sow' (RHG) |

The phonemic status of *č* is restricted to rather recent loanwords (Campbell 1972a:187) (4. 23). The sound was borrowed along with the lexical items and has been preserved. In some cases borrowed *č* has changed into *š*.

- (4. 23)
- | | | | | |
|----|---------|---------------------|---|---|
| a. | čik'wit | 'basket' (SH) | < | L-N: čikiwitl 'basket' [K-92] |
| b. | miči | 'cat' (SH, RHG) | < | L-N: mistli 'cat'; Spanish: micho/-a, mizo/-a 'cat' |
| c. | čuču | 'dog' (JS) | < | [diffused] |
| d. | čehe | 'cheje (bird)' (SH) | < | L-M: pM *č'exe 'woodpecker' [K-03] |

The sound *č* is also attested in non-borrowed forms. In most of these cases, speakers change *č'* into *č* (4. 24) and *š* into *č* (4. 25). These sound changes also occur in borrowed forms that include *č'* or *š*.

- (4. 24)
- | | | | | |
|----|----------------------------|---|----------------------------|--|
| a. | č'iririʔ (SH, JS) | → | čiririʔ (PE) | 'red' |
| b. | č'uma (JS) | → | čuma (RHG, JS) | 'kiss, suck' < L-M: Kp čumax 'spit, kiss' [K-03] |
| c. | sa ^ə wač'a (SH) | → | ša ^ə wača (RHG) | 'sow' |
- (4. 25)
- | | | | | |
|----|----------------------------|---|--------------|--------|
| a. | ša ^ə wača (RHG) | → | čawača (RHG) | 'sow' |
| b. | ʔiwiši (RHG) | → | ʔiwiči (RHG) | 'hear' |

The glottalised alveo-dental affricate *č'* is phonemic (see Campbell 1972a:187; Kaufman 1977). In intervocalic position, some speakers (SH, RHG) may occasionally change *č'* into *č*, but the unglottalised variant *č* does not indicate lexical contrast (cf. McArthur 1966). In initial position, *č'* occurs regularly with high and low vowels (4. 26). The following examples illustrate the distribution of *č'* with high and low vowels (i.e. vowel set 1/3).

- (4. 26)
- | | | |
|----|---|------------------|
| a. | č'ahpah (JS) | 'sea turtle' |
| b. | sa ^ə wač'aʔ (JAP), ša ^ə wač'a, ča ^ə wača (RHG) | 'sow' |
| c. | č'iririʔ (JS) | 'small' |
| d. | kič'i (RHG, SH) | 'fry' |
| e. | č'iwɨ (JS) | 'bend corn' well |
| f. | ʔirič'ɨʔ (JAP) | 'tasty' |

There are only two cases in the semi-speakers' data where ϕ' precedes mid vowels (vowel set 2); both lexemes seem to be diffused forms.

- (4. 27) a. $\text{ʃan}\phi'\text{ehe}$ 'Chiquimulilla (toponym)' (JAP, RHG, SH, JS)
 b. $\phi'\text{oko}$ 'zanate (bird)' (SH, RHG, JS) < POQ $\phi'\text{ok}$ 'blackbird' [C-71]

More occurrences of the syllables $\phi'e$ and $\phi'o$ are attested in the data Campbell and Kaufman provide in their field notes; some of these can likewise be identified as loans or alternate sound realisations.

- (4. 28) a. X_{Jum} $\phi'\text{en}\phi'\text{erek}$ 'type of bird' (C&K-FN)
 b. $X_{\text{Ch}}, X_{\text{Jum}}$ $\phi'\text{oop'oy}$ 'passion fruit' (C&K-FN) < pMZ $\phi'\text{ap}\phi'$ 'green' [C&K-76]
 c. $X_{\text{G}}, X_{\text{Ch}}$ $\phi'\text{orna}$ 'to drip, trickle' (C&K-FN) : $X_{\text{G}}, X_{\text{Ch}}$ sorna 'rock with waterspring' (C&K-FN)
 d. $X_{\text{G}}, X_{\text{Ch}}, X_{\text{Jum}}$ $\phi'\text{ot'o}$ 'tire out' (C&K-FN) : X_{Y} soto 'tire out' (Y-C)

There is a phonetic process of affrication which changes s into ϕ' in initial position. The process is also attested in the secondary data. Campbell suggested that the change of s (allophonic variants [s] and [ʃ]) to ϕ' is connected to a phonological process in which initial stops become glottalised upon insertion of a glottal stop after the following vowel (i.e. CVCV ~ C'V7CV) or when followed by $-Vn/y/?$ (see Campbell 1972a:187; 1997:166). The following examples may be indicative of this morphophonemic process, although glottalisation in the verb root is not generally attested.

- (4. 29) a. simi (SH, JS) → $\phi'\text{i}7\text{mi}$ (SH) 'extinguish'
 b. suk'u (SH, JS, RHG) → $\phi'\text{uku}$ (RHG) 'tie'
 c. sika (SH, RHG) → $\phi'\text{ika}$ (SH) 'be quite, shut up'

Another case of purely phonetic change is the deaffrication of ϕ' to s or ʃ which again can change into ʃ (see above). Deaffrication may occur in word-initial (4. 30) and intervocalic position (4. 31). In all cases ϕ' can be identified as the original form. Indicative for the direction of change are loanwords that preserve ϕ' in the process of borrowing (see Campbell 1972a:188).

- (4. 30) a. $\phi'\text{oko}$ (SH, RHG) → soko (SH) 'zanate' < POQ $\phi'\text{ok}$ 'blackbird' [C-71]
 b. $\phi'\text{ama}$ (RHG) → sama (SH, JS), san (SH) 'good' < pMZ $\phi'\text{am}$ 'fully grown' [K-03]
 c. $\phi'\text{uma}$ (RHG) → suma (RHG) 'water crops'
 d. $\phi'\text{w}\text{w}\text{t}$ (SH, JS) → suwe (JS), ʃiwi (RH, JS) 'bend corn'
- (4. 31) a. $\text{kwe}\phi'\text{a}$ (SH, JS) → kwesa (JS) 'quail'
 b. $\text{ki}\phi'\text{i}$, $\text{ki}\phi'\text{e}$ (SH, RHG) → kisi (SH) 'to fry'
 c. $\text{wi}\phi'\text{u}$ (SH) → $\text{wi}\text{ʃu}$ (SH, JS, PE) 'to flog'

4.1.2.3 Nasals

The sound system of X_{G} includes bilabial and alveo-dental nasals. Although in the secondary data m is attested before all six vowels, the primary data lack an example of m before e . The alveo-dental nasal n occurs regularly with mid and low vowels i , ɨ , u and a . There are only a few forms (i.e. independent pronouns in first person singular and plural) in which n is attested with mid vowel e ; n is unattested with o .

- (4. 32) Distribution of *m*
- | | | |
|----|--------------|------------------------------|
| mi | miya | 'chicken' (SH, RHG, JAP, JS) |
| mì | mimi | 'sing' (SH) |
| mu | muka | 'work' (SH, JS) |
| me | - | - |
| mo | moro? | 'it is wet' (JS) |
| ma | maku | 'house' (SH, JS, JAP, RHG) |
- (4. 33) Distribution of *n*
- | | | |
|----|-------------------------|----------------------------|
| ni | ni^ɛwa | 'want, ask' (SH, RHG) |
| nì | nima | 'eat' (SH, RHG, JAP) |
| nu | nuka | 'give' (SH, JAP) |
| ne | ne:ʔeke | 'I; personal pronoun' (SH) |
| no | - | - |
| na | naru | 'earth' (SH, RHG) |

Stops are voiced after nasals (see § 4.1.2.1). In the same context, i.e. when preceding a stop, nasals may become assimilated to the stop that follows. Bilabial stops are exclusively attested after bilabial nasals *m*, but never after *n*. Likewise, dental stops occur only after alveo-dental nasals *n*. There are a few instances of a change from *n* to *m* before voiceless bilabial stops (4. 34).

- (4. 34) a. [ʔam-pula] /ʔan-pula/ 'I make' (SH)
 b. [ʔam-piri] /ʔan-piri/ 'I see' (SH)

In final position *n* becomes *ŋ* (see § 4.4.7) (4. 35 a).

- (4. 35) [nuka-ŋ] /nuka-n/ 'I gave' (SH, RHG)

In final position alveo-dental nasals may furthermore either change into a bilabial nasal, i.e. *-n* changes into *-m* (4. 36), or be replaced by a glottal stop *-ʔ* (4. 37).

- (4. 36) a. [mak'ʊŋ] (SH) → [mak'ʊm] (SH) /mak'u-n/ (house-1sP) 'my house'
 b. [ʔuɕʊŋ] (SH) → [ʔuɕʊm] (SH) /ʔuɕʊn/ 'papaya'
 c. [hiŋ] (SH) → [him] (SH) /hin/ 'no'
- (4. 37) a. [maŋ] (SH) → [maʔ] (SH) /man/ *demonstrative*
 b. [ʔahmukaŋ] (SH) → [ʔahmukaʔ] (SH) /ʔahmukan/ 'yesterday'

The change from *n* to *ŋ* also occurs in environments where two alveo-dental nasals follow each other; i.e. *n_n* → *ŋ_n* (4. 38).

- (4. 38) [ʔaŋ-nela] /ʔan-neʔa/ 'mine' (SH)

4.1.2.4 Fricatives

The labio-dental fricative *f* is not phonemically contrastive. It is attested only twice in the semi-speaker data from X_G. Comparison with the secondary language data and etymological reconstruction confirms that *f* is always the result of regressive assimilation. In sound clusters in which the voiced approximant *w*, or the vowel *u*, precede the voiceless lateral-fricative *ʃ*, *w* is devoiced changing the cluster into *fʃ*.

- (4. 39) a. ʔaʃlak (RHG, JS), ʔoʃlak (SH, JAP) ← ʔawʔak (SH), <awʔák> (G-S) 'tortilla griddle'
 b. ʃʃuriyo (JAP) ← <hulúri> (G-S) 'rabbit'

The informants PE, SH and RHG distinguish a voiceless alveolar fricative *s* and a voiceless postalveolar fricative *ʃ*; JAP and JS also use a voiceless retroflex fricative *ʂ* (cf. Schumann 1966, 1967). The simple sibilant *s* (4. 40) and the postalveolar fricative *ʃ* (4. 41) occur regularly in word- and syllable-initial position before high and low vowels *i*, *ɨ*, *u* and *a*. With mid vowels, only *s* is attested in word-initial position; *ʃ* is not attested with *e*, and only in a few cases before *o*.

(4. 40) Distribution of <i>s</i>					
si	siruka	'hurry' (RHG, JAP)	musi	'hair' (JS)	
si	siʔma	'night' (RHG, JS)	kisima	'give as present' (JAP)	
su	suʔmaya	'crab' (RHG, JAP)	ʔusu	'fly' (JS)	
se	sema	'fish' (RHG, JAP, JS)	koseʔ	'big' (JS)	
so	puso	'partridge' (JAP)	-		
sa	samu	'catch, take' (RHG, JS)	kasa	'mosquito' (JS)	
sk	tiskiwan	'waist' (PE)			
st	mistuŋ	'cat' (JS) [L-N]			
(4. 41) Distribution of <i>ʃ</i>					
ši	šinak	'bean' (PE, RHG, JAP, JS)	hiši	'stone' (PE, SH, RHG, JS)	
ši	šima	'mouse' (JAP, JS)	pišik	'tortilla griddle' (RHG)	
šu	šurumu	'boy, young man' (RHG)	hašu	'pig' (PE, SH, JAP)	
še	-	-			
šo	šoʔotok	'piece' (JAP)	pošo	'partridge' (JS) [L-M]	
ša	šaguya	'sit down!' (PE, JAP)	ʔišapa	'leave, emerge' (SH, JS)	
šp	mušpuʔ	'finger' (JS)			
št	ʷwaštaya	'enter!' (JAP)			
šk	ʔiška	'drink!' (PE, RHG)			
sm	kišma	'give as present' (JAP)			
šn	ʔišnak	'sneeze' (JS)			
š	ʷwakaš	'cow' (JAP, JS) [L-S]			

In his earlier published studies on Xinka, Campbell identified complementary distribution for *s* and *ʃ* and defined both sounds as allophonic variants of a single fricative phoneme *ʃ*, with *ʃ* only occurring between high vowels *i* and *u* (1972a:187). In the secondary data we find frequent variance of *s* and *ʃ* within the same etymon (4. 42). The individual semi-speakers from X_G show preferences towards using *s* or *ʃ* within certain contexts, although they exhibit a general tendency towards using the marked form *ʃ* over the unmarked sibilant.

(4. 42)			
a.	šima (JAP, JS)	: šima (SH), suma (SH, RHG, JAP, JS)	'rat'
b.	šaʷwača (RHG)	: saʷwač'a (SH)	'sow'

JAP and JS show a tendency to change initial *ʃ* into *ʂ*, and in some words subsequently into *r*. The change only occurs with high and low vowels; roots with mid vowels preserve the alveolar and postalveolar sibilants; e.g. *sema*, *šolko*.

(4. 43) Distribution of retroflex <i>ʂ</i> before high and low vowels					
ši	š'ínák	'bean' (JAP, JS)	huš'i-ka	'your head' (JAP)	
ši	šima	'night' (JS)	pišik	'gourd' (JAP)	
šu	šuka	'eat' (JAP, JS)			
	> ruka	'eat' (SH, JS, JAP)			
ša	šá	'in, preposition' (JAP, JS)			

The sound change is clearly phonetic as there is no attested case of lexical contrast. The shift from *š* to *s* in X_G parallels the conditioned sound change of *š* > *r* before high and low vowels that is attested in the more recent data from X_{Ch} (see § 4.1.3.5, § 4.3.1.4). This is confirmed by cases of variant use of *s* and *r* in intervocalic position in the semi-speakers' data (4. 44).

- (4. 44) ʔiʃiʃi (RHG) → ʔiriʃi (SH, JAP) 'tasty'

The semi-speakers of X_G occasionally merge the postalveolar fricative *š* and the lateral-fricative *ʃ*, i.e. *š* may change into *ʃ* (4. 45), and *ʃ* may change into *š* in intervocalic as well as final position (4. 46).

- (4. 45) a. waʃata (SH, RHG) → waʃata (RHG) 'enter'
 b. wakaʃ (SH, JAP, JS) → wakaʃ (JS) 'cow' [~ *wakay* (SH)]
- (4. 46) ʔikaʃ (SH, JS) → ʔikaʃ (SH, JS) 'one'

The same form of variation is attested for *š* and the glottal fricative *h*. In the majority of cases, *š* can be identified to be the earlier form.

- (4. 47) a. ʃiŋ (PE, RHG, JAP) → hiŋ (PE, SH, RHG, JAP, JS) 'no'
 b. ʃuruʃi (RHG) → huruʃ (SH) 'squirrel'
 c. ʃapun (RHG, JS) → hapun (SH) 'soap'
- [Sp. *jabón* > Xinka *š* > *r* > *h*]

The glottal fricative *h* occurs in initial position with all vowels. Comparison with the secondary data shows that the syllable *hʃ* is realised by most speakers as *hu*. The phoneme is regularly attested in word- and syllable-final position.

- (4. 48) Distribution of *h*
- | | | |
|----|----------------|-------------------------------------|
| hi | hiši | 'stone' (SH, RHG, PE, JS) |
| hi | hiŋəkəŋ | 'I am knowing' (JAP) |
| hu | hutu | 'tree, pole' (SH, JAP, RHG, JS) |
| he | heʔ | '(he/it) is' (SH) |
| ho | horon | 'I got = I have' (SH, RHG, JAP, JS) |
| ha | hašu | 'pig' (SH, JAP, RHG, PE, JS) |
| _h | pulah | 'he made' (SH) |

Between vowels *i* and *a*, *h* can be realised as *š* or *y* (4. 49). This change is attested only in a few cases. It seems non-distinctive and we may note that individual speakers either prefer *h* or *y*.

- (4. 49) hahi (RHG, JS, PE) : haši (SH) : hayi (SH, JAP) 'avocado'

Between vowels and in (syllable-)final position the lateral-fricative *ʃ* can change into *h* (4. 50). This change from *ʃ* to *h* also reflects in the early premodern data.

- (4. 50) a. tiʃa (SH, JS) → tuha (JS) 'yucca'
 b. ʔaʃmukaŋ (JS) → ʔahmukan (SH) 'yesterday'
 c. wapaʃ (SH, JAP, JS, PE) → wapah (SH, JS, P) 'seat, bench'

4.1.2.5 Laterals and vibrants

The sound inventory contains a voiced alveolar lateral *l* and a voiceless alveolar lateral-fricative *ɬ*, which are here both treated together with the vibrant *r* and the approximant [ɹ].

In word-initial position both lateral sounds are regularly attested only with vowels *i* and *a* and in intervocalic position with all vowels, except for that *l* does not occur with *i*, while *ɬ* is unattested with vowel *o*. In final position only *ɬ* occurs. The majority of laterals that occur are lateral-fricatives *ɬ*.

(4. 51) Distribution of <i>l</i>			
li	-	šilik	'corn cob' (SH)
li	liki	-	
lu	-	ʔalu	'macaw' (JS)
le	-	ø'ehele	'Chiquimultecos' (JS)
lo	-	ʔololoʔ	'white' (RHG, JAP, JS)
la	la ^ə waru	pula	'make' (SH, RHG, JAP, JS)
-l	ʔiškanal		'corn flour' (PE)
(4. 52) Distribution of <i>ɬ</i>			
ɬi	-	k'aɬi	'smoke' (RHG)
ɬi	ɬika	ʔiɬi ^ə wi	'raw sugar' (JAP, RHG, PE, JS)
ɬu	-	ʔuɬu	'fall' (SH, JS)
ɬe	-	əŋʔepeɬe	'I got frightened' (RHG)
ɬo	-	-	
ɬa	ɬapan	ʔayaɬa	'woman' (JAP, RHG, PE)
-ɬ	ʔuruɬ		'egg' (JAP, RHG, PE)

There are several examples of both laterals occurring in non-contrastive alternation, which suggests that the sounds are non-phonemic. There are no secure contexts where *l* and *ɬ* would indicate semantic contrast. The sound inventories of Campbell (1972) and Schumann (1967) distinguish *l* and *ɬ* as phonemes, whereas Kaufman defines an intervocalic allophone [l] and a sound variant [ɬ] that occurs in final position (Kaufman 1977:72). The lateral-fricative *ɬ* can merge with *h* and *ʃ*; see examples (4. 45), (4. 46), (4. 47) and (4. 50).

(4. 53)			
a.	ʔipala (RHG)	: ʔipaɬa (RHG)	'to bath'
b.	ʔayala (JS)	: ʔayaɬa (JS)	'woman'
c.	ʔala peʔ (PE)	: ʔaɬa peʔ (PE, SH, RHG, JAP)	'tomorrow'
d.	la ^ə waro (PE, RHG)	: ɬa ^ə waru (RHG)	'dance'

The vibrant *r* is attested only in intervocalic position between all vowels as well as in consonantal clusters. In the recent data from X_{Ch}, *r* is attested in initial position before high and low vowels *i*, *ɨ*, *u* and *a*, where it can be identified as the result of a change from *ʃ* to *r* (see § 4.1.3.5, § 4.3.1.4.1). This change is related to the change of *ʃ* to *ʂ* that was observed in the pronunciation of JAP and JS (see above § 4.1.2.4). In the semi-speaker data from X_G, *r* is attested in initial position only once, i.e. *ruka* 'comer'.

(4. 54)	Distribution of <i>r</i>			
ri	^h wiriki			'speak' (SH, JAP)
ri	čirik'i?			'small' (SH, JAP)
ru	ʔuruʔ			'egg' (SH, JAP)
re	^h wereke			'get angry' (SH, JAP)
ro	horon			'I got = I have' (SH, RHG, JAP)
ra	harana			'sick, ill' (JAP, JS)
kr	gra ^h wa	/karawa/		'woods, wilderness' (JAP)
rk	^h wirkin	/wirki-n/		'I spoke' (SH, JAP)
rt	ʔurtuy	/ʔurtu-y/		'he drank' (JS)
r_	ruka			'eat' (SH, JAP, JS)

Campbell (1972:188) notes that *l* becomes *r* between high vowels (4. 55). This rule is confirmed by the data as *l* is nearly unattested between *i*_ *i* and *u*_ *u* whereas *r* occurs frequently in this context. However, there are also cases where semi-speakers change *l* into *ʃ* instead (4. 55a).

(4. 55)	a.	[wiriki] (SH, RHG) ~ [weriki] (SH)	→	wiʃiki (RHG)	'speak, word'
	b.	[huru] (SH, RHG, JAP)	→	*/hulu/	'turkey'

There are, however, also cases where *l* is preserved between high vowels (4. 56)

(4. 56)	a.	/wili/	[^h wili]	'undress' (SH)
	b.	/wapili-n/	[^h wapilin]	'my feet' (SH, JS)

Some speakers tend to use the trill [r] between vowels *o* and *a* and the approximant [ɹ] between high vowels *i* and *u* (4. 57). This seems to confirm Campbell's rule as [ɹ] and [l] are phonetically close.

(4. 57)	a.	/horo-kaʔ/	[horokaʔ]	'you got/received = you have' (SH)
	b.	/piri/	[pɹi]	'see' (SH)
	c.	/kuri/	[kuɹiʔ]	'run' (RHG)

4.1.2.6 Glides

The sound inventory includes bilabial and velar glides. The phoneme *w* is realised as a voiced velar stop [g] before the round back vowels *u* and *o*. Preceding all other vowels, *w* can optionally be realised as [w] or [^hw] (see Campbell 1972a:187).

(4. 58)	Distribution of <i>w</i> in initial position			
	wi	/wiriki/	[^h wiriki] (SH, RHG) [wiriki] (RHG, JAP)	'speak'
	wi	-		
	wu	/wunak/	[gunak] (PE, SH, JAP)	'witch'
	we	/wereke/	[^h wereke] (PE, SH)	'get angry'
	wo	/wona/	[gonə] ~ [wona] (PE)	'hill'
	wa	/waruk/	[^h waruk] (JAP, RHG)	'hammock'
	_w	/taw/	[taʍ] (RHG)	'wind'

(4. 59) Distribution of <i>w</i> in medial position				
Vwi	/k'awi/	[k'awi] (SH, JS)		'cry'
		[k'a ^ɛ wi] (SH)		
Vwi	/ʔitiwi/	[ʔiti ^ɛ wi] (SH, RHG, JAP)		'sweets'
Vwu	/šawuya/	[šaguya] (SH, JAP, JS)		'sit down!'
	/kawu/	[kawu] (RHG)		'cook'
		[kagu] (SH, JAP)		
Vwe	/pewek/	[pe ^ɛ wek] (SH, RHG, JAP)		'gourd'
Vwo	-			
Vwa	/ʔawa/	[ʔawa] (RHG)		'moon'
		[ʔa ^ɛ wa] (RHG, JAP)		
	/tupawa/	[tupawa] ~ [tupa ^ɛ wa] (PE)		'he let'

The glide *w* occurs with all vowels, with the exceptions of *wɪ* not occurring word-initially and *wo* [go] being restricted to the initial position of the word. The secondary data show a wider distribution pattern of *w* being attested with all vowels in all positions. There are only a few cases where *w* occurs in final position, mostly as a result of irregular deletion of the final vowel. In final position *w* becomes *ɱ* (see Campbell, Kaufman & Smith-Stark 1986:537).

The palatal semi-vowel *y* occurs regularly only before high and low vowels and is basically unattested with mid vowels. All occurrences with *e* are variant phonetic realisations of other vowels. The only case where *y* is attested before *o* can be identified as a Mayan loan. In initial position, *y* occurs regularly only before vowels *i* and *a* (vowel set 3, see § 4.4.2). Furthermore, *y* occurs frequently in word-final position, mostly as a morphological marker.

(4. 60) Distribution of <i>y</i>				
yi	-		hayi	'avocado' (JAP)
yɪ	yipi	'vomit' (SH)	hiyi	'pocket gopher' (SH)
yu	-		tayuk	'hat' (SH)
ye	-		šu ^ɛ waye	'caiman' (SH)
yo	yololo?	'smooth' (SH) [L-M]	-	
ya	ya ^ɛ wi	'make firewood' (JS)	ʔantuya?	'I scolded' (SH)
_y	ʔukay	'he made' (SH, JS)		

4.1.2.7 Vowels

The Xinka vowel system consists of six basic values: two front vowels *i* and *e*, two rounded back vowels *o* and *u*, the low vowel *a*, and an unrounded high central vowel *ɨ* that can also be realised as a mid central vowel [ə]. There are also many instances where *ɨ* changes into [i] or [u].

In initial position, vowels are always preceded by a glottal stop. This preceding glottal stop is not lost upon prefixation, there are no specific prevocalic markers and vowel fusion is not regularly attested (see § 4.4.3.2). Thus, strictly speaking, vowels never occur in initial position; however, we will refer to the syllable ʔV in initial position as an initial vowel.

(4.61) Distribution of vowels

i	ʔiʃapa	'leave'	hiʃi	'stone'	ti:ki	'sleep'
i	ʔiʔiwi	'raw sugar'	hiʔi	'pocket gopher'	hiyʔ	'pocket gopher'
u	ʔuʔu	'fall'	hutu	'tree, pole'	maku	'house'
e	ʔeʔeke	'to frighten'	teroʔ	'he died'	wereke	'get angry'
o	ʔololoʔ	'white'	horon	'I got = I have'	te:ro	'I want'
a	ʔaku	'walk'	ʔayuk	'hat'	pula	'make'

Vowel length in Xinka has been defined as phonemic (Campbell 1972a:187). There are, however, also cases of non-contrastive variation of vowel-length in the terminal data of X_G (4. 62). In all of the following examples the basic form is indicated first.

- (4. 62) a. ʔo:tek (SH) : ʔotek (SH) 'bed'
 b. mu:tiʔ (SH) : mutiʔ (JS) 'hair'
 c. gwapat (SH) : gwa:pat (JS) 'bench'

Stress has equally been defined as contrastive (Campbell 1972a:187; Kaufman 1977:72). In the primary data, most attested instances of stress shift result from suffixation of a glottal stop in final position (4. 63). In these cases, stress shift is the result of suffixation rather than a contrastive feature.

- (4. 63) a. 'ʔuʔu 'fall' (SH, PE) → ʔu'ʔu-ʔ (RHG, PE) 'he/it fell'
 b. 'tero 'kill, die' (SH, JAP) → te'ro-ʔ (SH, JS) 'he/it died'

Vowel shift¹¹⁶ that can result in disharmonic vowel patterns is frequent among the terminal speakers. In some instances the original vowel can only be identified by comparison with secondary data. Mid vowels (vowel set 2) may change into high vowels (vowel set 1), i.e. *o* becomes *u* and *e* becomes *i*. Vowel *i* may change into *e* in initial (4. 64a), medial (b) and final position (c); there are only a few cases where *i* in final position changes into *a* or *u* (d-e). Loss of *i* in final position is widely attested (f).

- (4. 64) a. ʔiʃka (SH) → ʔeʔka (SH) 'drink'
 b. hin (PE, SH, RHG, JAP, JS) → hen (SH, JAP, JS) 'no'
 c. ʔakani (SH, RHG, JAP, JS) → ʔakane (SH) 'so, like'
 d. ʔiwiči ~ ʔiwiʃiki (RHG) → ʔowiʃa (SH) 'hear'
 e. kuri (PE, RHG, JAP, JS) → kuru (RHG, JS) 'run'
 f. ʔaraki (JAP) → ʔarak_ (JAP) 'watch, observe'

Some speakers change *u* into *o* (4. 65a-c) or *ɨ*(d). The replacement of *u* with *i* in final position is rare (e).

- (4. 65) a. ʔurku (JAP) ~ ʔurtu (JS) → ʔorto- (JAP) 'drink' [< ʔuy-ʔuku "atol"]
 b. muk'aʔa (JS) → mok'ah (JS) 'worker'
 c. mura (SH, RHG, JAP, JS) → mōra (JAP) 'ear of corn (*elote*)'
 d. ʔuʔu (RHG, JS) → ʔiʔi (RHG) 'fall'
 e. haraku (PE) → haraki (SH) 'chipilin (spinach)'

The terminal speakers show the tendency to pronounce the high central vowel phoneme *ɨ* as [i] or [u] (4. 66a-d). This shift is attested in initial, medial and final position. Changes to *u* may be replaced subsequently by *o* (e; see above).

¹¹⁶ The term 'shift' is used here to refer to an unconditioned, non-phonemic sound change (see Campbell 1998:19).

- (4. 66)
- | | | | | |
|----|---|---|---------------------------|----------|
| a. | č ~~h~~ iki (SH, RHG, JAP) | → | čiriki (SH, PE) | 'small' |
| b. | ʔisi ~ ʔi ~~h~~ i (SH, RHG, JAP) | → | ʔusuču ~ ʔučuču (RHG) | 'tasty' |
| c. | nɪʔma (SH) | → | nuʔma (SH, JS) | 'eat' |
| d. | yɪwa-n (RHG) | → | yu ^h waŋ (RHG) | 'I lost' |
| e. | tɪta (JS) | → | tuha (SH, JS) → toha (JS) | 'yucca' |

Vowel *o* may change into *u* in initial and medial position. There are no alternations of *o* in final position. In two attested cases, *o* may vary with *e* in medial position.

- (4. 67) poča (SH) : poča (SH) → puha (JS) 'to wash'

Low vowel *a* may be realised as a mid central vowel *ə* in initial position (4. 68a). It can also change into the mid vowels *e* (b-f) or *o* (g-h); speakers change *a* into *e* in particular before *y*. In some cases *a* is replaced by *i* in medial and final position (i-j). In final position, *a* may be deleted (k).

- (4. 68)
- | | | | | | | |
|----|-------------------------------|---|--------------------------|---|----------------|-----------------|
| a. | ʔan- (SH, RHG) | → | ʔən- (SH) | → | ʔen- (PE, RHG) | '1s, pronoun' |
| b. | ʔayma (PE, SH, RHG, JAP) | → | ʔeyma (SH) | | | 'ear of corn' |
| c. | ʔandamah (RHG, JAP, JS) | → | ʔendamah (RHG, JAP) | | | 'let's go' |
| d. | ^h waseke (SH) | → | ^h weseke (SH) | | | 'throw' |
| e. | ʔiškay (SH) | → | ʔiškey (SH) | | | 'he drank' |
| f. | ʔukay (SH) | → | ʔukey (SH) | | | 'he did' |
| g. | ʔaku (SH, JS) | → | ʔoku (JS) | | | 'go, walk' |
| h. | haraʔna (JAP, JS) | → | hōrana (JS) | | | 'ill' |
| i. | ʔuškaiyaŋ (RHG) | → | ʔuškiyaŋ (RHG) | | | 'I am smoking' |
| j. | ʔišapa (SH, RHG, JS) | → | ʔišapi-n (SH) | | | 'leave, emerge' |
| k. | ʔayaʔa (PE, SH, RHG, JAP, JS) | → | ʔayaʔ_ (SH) | | | 'woman' |

4.1.3 Prephonemic orthographies

Further information about Xinka phonology can be derived from the premodern secondary sources, i.e. word lists and vocabularies that are prephonemic and employ Spanish or Latin symbolic conventions (Berendt 1878; Calderón 1908, 1939; Lehmann [Sapper] 1911; Fernández 1938). Although most orthographies show internal inconsistencies, authors generally attempted to reflect pronunciation thoroughly and thus these sources provide useful information about the sounds and their contrasts.

Phonemic identification of graphemes proves unambiguous in most cases. However, with respect to phonemic contrasts that are unresolved in the proposed sound/phonemic inventories (see § 4.1.1) or in the primary data (see previous § 4.1.2), the analysis remains difficult. The failure to represent a certain sound orthographically does not necessarily imply that the sound did not exist. The Zeeje-manuscript, for instance, does not represent the sounds *ɟ*, *ɕ*' and *ʃ* by specific graphemes, even though it can be assumed that these sounds must have existed in the eighteenth-century Xinka of Chiquimulilla, since they are attested in the earlier ALS as well as in the later data from Chiquimulilla. It also needs to be kept in mind that earlier data (e.g. Morales 1812; Calderón 1908) may encode sounds or phonemic distinctions that have been lost in the meantime. The prephonemic language data of the less well documented varieties (X_S, X_Y and X_{Jut}) may furthermore represent sounds that are not attested in the varieties of Guazacapán and Chiquimulilla.

A frequent feature of orthographic inventories is overdifferentiation, e.g. Calderón distinguishes the graphemes <gu>, <hu> and <g> which represent (in non-complementary distribution) the phoneme *w*. Most of these double-correlations can be explained by Spanish orthographic conventions, such as the representation of the phoneme *k* by <qu> before the front vowels *i* and *e*, and <c> before all other vowels, or representation of *h* by <g> preceding front vowels (see Quilis 1980:56).

The correlation of graphemes and sounds is a reconstructive process that is based on the comparative etymological analysis of lexical data. Table 4. 3 lists the orthographic conventions of the premodern sources. It needs to be pointed out that the given correlation is between graphemes and likely sounds, not phonemes. The premodern orthographies show inconsistencies, which is why the correlation of graphemes is only tentative and unclarified issues about the phonemic value of glottalised stops, fricatives etc. are not solved. In some of these cases, it cannot be established whether these inconsistencies have to be attributed to the respective author, or whether they reflect processes of sound change.

Corresponding forms in different sources indicate the reliability of the data, whereas divergences may be the result of borrowing, language decay or imperfect orthographic representation. The latter is for example illustrated by the high number of inconsistencies and typographic errors in the vocabularies of Calderón (1908). These data show in particular frequent confusion of the graphemes <n> and <u>. This is most likely to be explained as a misinterpretation of Calderón's presumably indistinctive handwriting by the typist or typesetter. The orthographic inconsistencies leave the actual degree of divergence and distinctiveness of the variety from Yupiltepeque somewhat unclear, as the majority of the data which we have from Yupiltepeque are from Calderón.

Table 4. 3: Orthographic conventions of prephonemic Xinka sources

Sound	Ch-Z	Jut-V	Y-V	S-Gav	Ch/Y-C	Ch/Y-L	Ch-F	Ch-P	Ch-JC	Jum
[p] ~ [p']	<p>	<p>	<p>	<p>	<p>	<p>	<p>	<p>	<p> <ph>	<p>
[b]										
[t] ~ [t']	<t>	<t>	<t>	<t>	<t>	<t>	<t>	<t>	<t> <th>	<t>
[d]		<d>			<d>	<d>	<d>	<d>	<d>	<d>
[k] ~ [k']	<c>, <qu>*, <k> <g>	<c>, <qu>*	<c> <k>	<c> <k>	<c> <qu>*, <k>	<c> <qu>*, <k>	<c> <k> <g>	<c> <qu>*, <k> <cc> <ck> <g>	<c> <qu>*, <k> <ck> <g>	<c> <qu>*, <q> <k> <g>
[g]	<g>					<g>				
[ʔ]	<h>-	<h>				<h> <'>		<h> <e>	<h>	<h>
[ɛ] ~ [ɛ']	<z>				<tz>	<tz>	<tz>	<ts> <tx> <tz> <tsh>		
[č] ~ [č']	<ch>		<ch>	<ch>	<ch>	<ch>	<ch>	<ch>	<ch>	<ch>
[f]	<f>				<x> <f>?		<tch> <f>		<f>	<f>

Sound	Ch-Z	Jut-V	Y-V	S-Gav	Ch/Y-C	Ch/Y-L	Ch-F	Ch-P	Ch-JC	Jum
[s]	<s> <z>	<s>	<s>	<s> <z>	<s>	<s> <z>	<s> <ss> <z>	<s> <z>	<s> <c>	<s> <c>
[š]		<sch> (lx)	<x>	<x>	<x>	<x>	<x> <ch>	<sh> <x>	<sh>	<x> <sh>
[h]	<j> <g> <h>-	<j> <g>	<j>	<j>	<j>	<j> <h>	<j>	<j> <g>	<j> <h> <rh> <hr> <g>	<j> <h> <x>
[m]	<m>	<m>	<m>	<m>	<m>	<m>	<m> <mm>	<m>	<m>	<m>
[n]	<n>	<n>	<n>	<n>	<n>	<n>	<n> <nn>	<n> <nn>	<n>	<n> <nn>
[l]	<l>	<l>	<l>	<l>	<l>	<l>	<l>	<l>	<l>	<l>
[ʎ]	<lg>	<gl>	<jl> <lj>	<jl>	<jl> <lj>	<jl> <lj>	<sl> <jl> <xl>	<rl> <jl> <fl> <sl>	<hl> <lh> <jl> <jlh> <shl> <lr> <rl> <lhs> <fl> <jfl>	
[r]	<r>	<r> <rr>	<r> <rr>	<r>	<r> <rr>	<r> <rr>	<r> <rr>	<r> <rr>	<r> <rh> <rrh> <rr>	<r> <rr>
[w]	<gu> <v>	<u> <gu> <gü>	<gu> <u> <hu> <gü>	<u> <gu>	<hu> <gu> <v> <vu> <u> <g> <cvu>	<u> <v> <vu> <hu> <g>	<gu> <gü> <u> 	<gu> <g> <gü> <u>	<gu> <g> <hu> <gü> <u>	<gu> <gü>
[y]	<ll> <y> <i>	<y> <ll>	<y>	<y>	<i> <y>	<y> <i>	<y> <i> <gi>	<y> <i> <ll>	<y> <i> <ll>	<y> <i>
[i] ~ [i:]	<i>	<i> <y>	<i>	<i> <y>	<i> <y>	<i>	<i>	<i> <y>	<i> <y>	<i>
[i] ~ [i:]	-	-	-	-	<ö>	<ö>	<ö>	<ü>	<ou>	-
[ə]					<ü> <üö>	<ü> <u>	<ü> <eu>	<ue> <ou>	<ue>	
[u]	~ <u>	<u>	<u>	<u>	<u>	<u>	<u>	<u>	<u>	<u>
[u:]			<uu> <v>	<uu> <v>		<uu> <ü>	<uu> <ü>		<hu>	
[e] ~ [e:]	<e>	<e>	<e>	<e> <ee>	<e>	<e> <ee>	<e> <ee>	<e> <ee>	<e>	<e>
[o]	~ <o>	<o>	<o>	<o>	<o>	<o>	<o>	<o>	<o>	<o>
[o:]				<oo>						
[a] ~ [a:]	<u>	<a>	<a> <aa>	<a> <aa>	<a>	<a> <aa>	<a> <aa>	<a>	<a> <aa>	<a>

* = {e, i}

The interpretation of the prephonemic inventories also needs to account for sound change, as inconsistencies are not necessarily an indication of errors. If in a source a given grapheme seems to represent a sound that is not attested in the comparative data, this may be an instance of a spelling mistake. However, if that same grapheme is attested in the source more than once, in a similar context or phonetic environment that is reconfirmed by the comparative data, then the use of the grapheme by the author may indicate a sound difference.

The subtleties of sound change that Campbell and Kaufman were able to identify in the language data from Guazacapán, Chiquimulilla and Jumaytepeque in the 1970s cannot be fully re-identified in the premodern data. However, their findings will be taken into consideration in deriving phonological information from the corpus of secondary sources.

From the distributional and etymological analysis of the graphemes in the premodern sources, we may derive some information about the phonological properties of the Xinkan languages.

4.1.3.1 Stops

According to Spanish orthographic conventions, graphemes <p>, , <t>, <d>, <c> and <qu> are identified in all inventories as voiceless and voiced representations of labial, alveolar and velar stops. Graphemes , <d> and <g> are attested in all inventories in medial position following <m> or <n> (4. 69), which allows us to confirm the rule about voicing of stops after nasals (see § 4.1.2.3).

(4. 69)	a.	<n'bojóro na tz'úyu>	/n-pohoro na tʰuɣu/	'I open the abscess' (Ch-C)
	b.	<rambare>	/ran pari/	'(in) the day' (Ch-F)
	c.	<tondón>	/tonton/	'turtle' (Ch-F)
	d.	<manga>	/manka/	'ears' (Ch-Z)

In X_{Ch} these graphemes also occur in word-initial position. A comparison of the prephonemic and phonemic data, i.e. McQuown (1948), Campbell & Kaufman (field notes), reveals a general tendency in X_{Ch} towards using voiced stops in initial position, which may suggest a sound change from p to b in these contexts. Grapheme <g> occurs in word-initial position either as an allophone of w before u and o , or it can represent the voicing of a velar stop k before r (see § 4.1.2.6, § 4.1.3.6).

(4. 70)	a.	<bojóro>, <bojoro>	'to open' (Ch-C), (Ch-F)	:	X_G	[poko]
	b.	<huca-ca bal experimentar>	'you have experienced' (Ch-Z)	:	X_G	[paʔ]
	c.	<guaca bar>	'he already went' (Ch-F)	:	X_G	[paʔ]
	d.	<dólo>	'yellow' (Ch-C)	:	X_G	[tolo]
	e.	<graua>	'woods, wilderness' (Ch-F)	:	X_G	[graʔwa] /krawa/

The grapheme inventories do not differentiate glottalised and unglottalised bilabial and alveolar stops. However, all authors employ at least two different graphemes to represent velar stops. This could be interpreted as an attempt to distinguish the unglottalised and glottalised velar stops orthographically, although given examples do not always correlate systematically with the comparative data; see e.g. the use of graphemes in Calderón's data from X_{Ch} .

(4. 71)	a.	<caraguá>	[karaʔwa]	'woods, wilderness' (Ch-C)	<c> = k
	b.	<cájlí>	[k'aʔi]	'smoke' (Ch-C)	<c> = k'
	c.	<kunú>	[kunu]	'cloud' (Ch-C)	<k> = k
	d.	<körú>	[k'ʔri]	'younger brother' (Ch-C)	<k> = k'

With the exception of Valdéz' data from X_{Jut}, all inventories distinguish <c> and <k>; some of them also include <qu> which occurs in complementary distribution with <c> only before vowels *i* and *e*, mirroring the Spanish convention (4. 72). The following examples illustrate the graphemic representations of velar stops *k* and *k'* in the Zeeje-ms.

(4. 72)	a.	<naca>	[naka]	'you, <i>pronoun</i> ' (Ch-Z)
	b.	<cunuqui>	[kunuki]	'content' (Ch-Z)
	c.	<cassa>	[k'aša]	'mosquito' (Ch-Z)
	d.	<cueta>	[k'weɣ'a]	'quail' (Ch-Z)

Pivara and JC also use the combinations <cc> and <ck>. In Fernández (1938), <k> occurs before all vowels; <c> is not used before *i* and *e* (as an analogy to the Spanish orthographic pattern), but occurs before all others. Occasionally, in the Fernández-data, the grapheme <k> seems to indicate glottalisation of velar stops in contexts which correspond with Campbell's phonological rules and the glottalisation patterns in the modern data.

(4. 73)	a.	<catupaguakan>	[katupawak'an]	'where you left it' (Ch-F)
	b.	<jolomaku>	[holomak'uʔ]	'behind' (Ch-F)
	c.	<kegüexa>	[k'eweg'a]	'anona' (Ch-F)
	d.	<guapik>	[wapik]	'sandal' (Ch-F)

On the whole, however, the use of <c> and <k> does not reflect any clear phonemic pattern and both graphemes can occur in identical contexts (4. 74). Here, <k> may stand with forms that are not attested in the secondary data as including the sound *k'*. We may have to take into account that the irregular distribution of <c/qu> and <k> in the prephonemic data may not only have to be attributed to inconsistent handling of orthographic standards by the author, but may also indicate early instances of overgeneralisation as they can be observed in the language forms produced by the terminal speakers (see § 2.3.2.1).

(4. 74)	a.	<cagui>	: <kagui>	'cry, scream, protest' (Ch-Z)
			: <kaui>	'cry, scream' (Ch-F)
	b.	<ca-uca>	: <ka-uca>	'you (pl.) have' (Ch-Z)
	c.	<calig>	: <kalig>	'some, others' (Ch-Z)
	d.	<ajslaguac>	: <ajlaguak>	'tomorrow, until tomorrow' (Ch-F)
	e.	<camac>	: <kamay>	'embrace, carry' (Ch-F)
	f.	<cunúu>	: <kunu>	'rain cloud' (Ch-F)
	g.	<cuy talán>	: <kuy talán>	'in order to burn' (Ch-F)

This is especially relevant when dealing with the Zeeje-ms. Here, in forms and phrases that contain more than one velar stop the first velar sound is often represented as <k>, while the second is given as <c>. Likewise, the prefix indicating the second person plural is always represented as <ka->.

(4. 75)	a.	<húpu kakan manga hay>	'closing your (pl.) ears' (Ch-Z)
		/ʔupu-ka-ka-n manka ʔay/	
	b.	<ka amigo hay>	'your (pl.) friends' (Ch-Z)
		/ka ʔamigo ʔay/	

This orthographic pattern might reflect actual pronunciation, although this cannot be fully determined. Another unresolved feature of the orthographic conventions in the Zeeje-manuscript is whether <g> in final position represents a glottal stop ʔ, a glottal fricative *h* or a voiceless velar stop *k*.

- (4. 76)
- | | | | | | | |
|---------------|--------------|---|-------------|---|--------------|--------------|
| a. <naucalig> | [naw-ka-lik] | : | [huray-lih] | : | [naw-ka-liʔ] | 'sons' |
| b. <jurailig> | [huray-lik] | : | [huray-lih] | : | [huray-liʔ] | 'their eyes' |
| c. <mugpula> | [muk-pula] | : | [muh-pula] | : | [muʔ-pula] | 'he makes' |

In the prephonemic data from X_Y and X_{Jut} the grapheme <t> is attested in several contexts where cognate forms in X_G and X_{Ch} have *l* or *ʔ* (4. 77). Campbell and Kaufman (field notes) identified a sound change of *l*' > *t*' in the data from X_{Jum} (4. 78). The regularity of the sound pattern and the identification of the sound change in X_{Jum} imply that in these contexts, <t> is not a spelling mistake in the premodern sources but the proper graphemic representation of the sound.

- (4. 77)
- | | | | |
|---|---|-----------------------------|----------|
| a. X_Y <toto> | : | X_G, X_{Ch} tolo | 'yellow' |
| b. X_{Jum}, X_Y <tita> | : | X_G, X_{Ch}, X_{Jut} tila | 'salt' |
| c. X_S <moti>, X_Y mowati | : | X_G muʔ, X_{Ch} muʔa | 'white' |
| d. X_{Jut} <tarti>, X_S, X_Y <tata> | : | X_G, X_{Ch} taʔi | 'neck' |
- (4. 78)
- | | | | | |
|---------------------|---|----------------------|-----------------------|------------|
| a. X_{Jum} tit'a | : | X_G, X_{Ch} til'a | ~ tiʔla (SH), (Ch-MQ) | 'salt' |
| b. X_{Jum} moot'o | : | X_{Ch} mool'a | ~ moʔla (Ch-MQ; Ch-S) | 'moon' |
| c. X_{Jum} muut'a | : | X_G, X_{Ch} muul'a | ~ muʔla (G-S) | 'palmtree' |

Several inventories use <h> to represent the glottal stop, which reflects the function of the grapheme <h> in Spanish orthography.

- (4. 79)
- | | | |
|-----------|-----------|----------------|
| <hucacan> | [ʔukakaŋ] | 'doing' (Ch-Z) |
|-----------|-----------|----------------|

Some authors use an apostrophe <'> (4. 80) or an accent sign <'> (4. 81) to represent ʔ.

- (4. 80)
- | | | |
|----------------|--------------|---------------------------|
| a. <n'ixi gar> | [n-ʔiʃi gar] | 'I am still alive' (Ch-F) |
| b. <tz'arará> | [tʃ'araraʔ] | 'cold' (Y-C) |
- (4. 81)
- | | | |
|--------------|-----------|---------------------|
| a. <chirirí> | [čiririʔ] | 'slim, thin' (Ch-F) |
| b. <huacá> | [waka-ʔ] | 'he went' (Ch-C) |

In the majority of cases, however, the glottal stop is not represented at all.

- (4. 82)
- | | | |
|----------------|------------------|------------------------|
| <_ana_ulalicá> | [ʔana ʔula lika] | 'you (pl.) want' (Y-C) |
|----------------|------------------|------------------------|

In some instances, data from X_Y or X_{Jut} indicate the grapheme <k> or <g> in a context where the comparative data from X_G and X_{Ch} have a glottal stop (4. 83). It is unclear whether this is simply an orthographic convention or whether the varieties from the department of Jutiapa indeed feature the sound *k* in these positions.

- (4. 83)
- | | | |
|---------------|------------|-----------------|
| a. <siena> | [siʔna(k)] | 'bean' (Y-V) |
| b. <schugmac> | [suʔma] | 'night' (Jut-V) |
| c. <su'cma> | [suʔma] | 'night' (Ch-JC) |

4.1.3.2 Affricates

All premodern inventories use the grapheme <ch> quite unambiguously to represent the alveo-palatal affricate č. Only Fernández contrasts <ch> with <tch>, which either reflects the glottalised form *č' or even the alveo-dental affricate č' (see § 4.1.2.2). In the comparative data the grapheme correlates with both sounds (4. 84).

two graphemes <s> and <z> to represent sibilants – both can be correlated with *s* and *š* in comparative data from X_{Ch} and X_G; i.e. <z> with *s* and *š* (4. 88), <s> with *š* (4. 89) and <s> and <z> in identical contexts can correlate with *s* and *š* (4. 90).

- (4. 88)
- | | | | | | |
|----|-------------|------------------------|---|-----------------|----------------|
| a. | <zamaliqui> | 'dark ones' (Ch-Z) | : | X _{Ch} | sama (Ch-C&K) |
| b. | <zicaliqui> | 'eagles, hawks' (Ch-Z) | : | X _{Ch} | šik'a (Ch-C&K) |
| c. | <hizapiy> | 'remove' (Ch-Z) | : | X _G | ʔišapi (G-SH) |
- (4. 89)
- | | | | | | |
|----|--------------|----------------------|---|----------------------------------|---------------------------|
| a. | <sagulla> | 'to put, set' (Ch-Z) | : | X _{Ch} , X _G | /šawuýa/ (Ch-C&K), (G-SH) |
| b. | <siri> | 'hidden' (Ch-Z) | : | X _{Ch} | širi (Ch-C&K) |
| c. | <surumu-lig> | 'youngsters' (Ch-Z) | : | X _{Ch} | šurumu (Ch-C&K) |
| d. | <guasata> | 'come' (Ch-Z) | : | X _G | ʔwašata (G-SH) |
- (4. 90)
- | | | | | | |
|----|--------------|---|----------------|------------------------------|----------------------|
| a. | <zaja> | : | <sa-g> | 'voice' ~ 'his name' (Ch-Z): | šaha (Ch-C&K) |
| b. | <jenzan> | : | <jensan> | 'there is nothing' (Ch-Z) | hin šan (G-SH) |
| c. | <zuculiqui> | : | <sucuquiliqui> | 'tied, fastened' (Ch-Z) | suk'u (Ch-C&K) |
| d. | <zapucallin> | : | <sapu> | 'possessed' (Ch-Z) | sapu 'grab' (Ch-C&K) |

In some cases <s> and <z> are used interchangeably (4. 90); in others, they seem to indicate sound contrast (4. 91).

- (4. 91)
- | | | | | | |
|----|---------------|---|----------------------------------|-----------------------|-------------------|
| a. | <sama> (Ch-Z) | : | X _{Ch} | ʔ'ama (Ch-C&K) | 'good' |
| b. | <zama> (Ch-Z) | : | X _{Ch} , X _G | šama (Ch-C&K), (G-SH) | 'in, preposition' |

The Zeeje-grapheme <z> also denotes *ç*' (4. 92), which is otherwise represented quite consistently as <s> (4. 91a). In all other instances, <z> represents *s* or *š*.

- (4. 92)
- | | | | | | |
|----|-------------|-------------|---|--|----------------|
| a. | <juzuqui> | 'half' | : | <jutzú> (Ch-F) | 'middle, half' |
| b. | <zumuliqui> | 'irrigated' | : | X _{Ch} ʔ'əma (Ch-C&K),
X _G <ʔʔiʔmi> (G-S), ʔ'uʔma (RHG) | 'to irrigate' |

Both, Fernández and Pineda Pivaral, differentiate <s> and <z>; Fernández furthermore uses the grapheme <ss> (4. 93). Comparing the distribution of these graphemes with other secondary and the primary data, no phonemic distinctions can be identified, <s> and <ss> are both attested as *s* and as *š*; <z> is only used in very few cases, and in these it seems to correspond to *s*.

- (4. 93)
- | | | | | | | | | |
|----|---------------|---|----------|---|--------|----------------------|---|---------------------------------|
| a. | <suka> | : | <ssucán> | : | <xuka> | 'eat, bite' (Ch-F) | : | X _G šuka, šuka, ruka |
| b. | <ssaguac> | | | | | 'iron, metal' (Ch-F) | : | X _G saʔwak' |
| c. | <ssandigüina> | | | | | 'upwards' (Ch-F) | : | X _G šan tiwina |
| d. | <ssarar-a> | | | | | 'very cold' (Ch-F) | : | X _G sararaʔ |
| e. | <ssema> | | | | | 'fish' (Ch-F) | : | X _G se:ma, sema |
| f. | <zünjaya> | | | | | 'black crab' (Ch-F) | : | X _G simhaya |

Although several inventories make graphemic distinctions of sibilant sounds, these graphemes can be correlated with *s* and *š* alike.

The glottal fricative *h* is represented in most premodern orthographies as <j>, sometimes also as <g>. The use of <g> preceding front vowels *i* and *e* follows the Spanish convention.

- (4. 94)
- | | | | |
|----|---------------|--------|---------------------------|
| a. | <jen> ~ <gen> | [hen] | 'not, without' (Ch-Z) |
| b. | <jaxú> | [hašu] | 'domesticated pig' (Ch-F) |

4.1.3.4 Nasals

The analysis of the graphemic representation of nasals *m* and *n* is straightforward. However, the use of the double graphemes <mm> by Fernández and <nn> by Pineda Pivaral requires some comment. Fernández apparently tries to represent the glottalisation preceding the medial nasal in some words, while the use of <nn> by Pineda Pivaral is not entirely clear. The graphemic convention may relate to the existence of glottalised resonants in intervocalic context as indicated by Campbell and Kaufman (field notes) (see also § 4.1.1).

- (4. 95) a. <tero nemma ya ca?>, <tero-namma> [niʔma] 'are you hungry?','want to eat' (Ch-F)
 b. <onne> [ʔone] 'tender, infant' (Ch-P)

4.1.3.5 Laterals and vibrants

Except for the fragmentary data from X_{Jum}, all prephonemic inventories seem to distinguish *l* and *ʎ* orthographically. The lateral-fricative *ʎ* is mostly represented as a combination of the letter <l> with an additional grapheme representing a fricative or related sound in the respective inventory, i.e. <gl>, <jl> or <hl>. Further graphemic combinations <sl> (Ch-F, Ch-P), <xl> (Ch-F), <rl> (Ch-P, Ch-JC), <fl> (Ch-P, Ch-JC) as well as <lr, ls, lsh etc.> (Ch-JC) might indicate the phonetic change of *ʎ* to *ʃ* (or *r*) that is attested in the semi-speaker data from Guazacapán (see § 4.1.2.4).

Fernández uses <l> in initial position and <l, jl, sl, xl> in medial and final position, which may indicate complementary distribution of different lateral allophones. A similar pattern is found in the data of Calderón who distinguishes <l> and <lj, jl> with <l> occurring in initial and medial position with *u*, *i*, *o* and *a*, but never before *e*, and <lj, jl> occurring only in medial position and never before *o*.

- (4. 96) a. <elgtepet> (Ch-Z) [ʔeʎtepet] 'town'
 b. <icalg> (Ch-Z) [ʎikaʎ] : <ical> (Ch-Z) [ʎikal] 'one, a'
 c. <ipajla> (Ch-C) [ʎipaʎa] : <ipala> (Ch-F) [ʎipala] 'bath'
 d. <lhana> (Ch-JC) [ʎana] : <lan> (Ch-C, Ch-F) [lan] 'no'
 e. <najli> (Ch-C, Ch-F) [naʎi] 'they'
 f. <pakisl> (Ch-F) [pakiʎ] : <pakil> (Ch-C) [pakil] 'ten'
 g. <tajsllic> (Ch-F) [taʎlik] 'neck'
 h. <taxla> (Ch-F) [taʎa] 'burn'

With regard to vibrants, most graphemic inventories distinguish a single <r> and a double <rr> (4. 97). JC also used the combination <rh>, possibly trying to indicate the mentioned change of *ʎ* > *r* (see § 4.1.2.5). The contexts and sound values of <r> and <rr> can be assumed to parallel the use of both graphemes in Spanish orthography. Thus, <rr> occurs intervocalically, and predominantly in roots that include at least one high vowel, but it is also attested between lower vowels.

- (4. 97) a. <püörri> [pira] : [piša] 'root' (Y-C)
 b. <püörri> [piri] : [piši] 'gourd' (Ch-C)
 c. <ruca jush jurri> [ruka huš huri] : [šuka huši] 'headache' (Ch-P)
 d. <urru> [ʎuru] : [ʎušu] 'fly' (Ch-C)

Fernández (1938) uses <r> in word-initial position before vowels *i*, *u* and *a*, whereas <rr> occurs between vowels in forms that are attested in the primary data with *ʃ* or the retroflex *ʂ* (4. 98).

- (4. 98)
- | | | | | | |
|----|---------|---------|------------------------|---|----------------------|
| a. | <rinak> | [rinak] | 'bean' (Ch-F) | : | X _G šinak |
| b. | <rūma> | [řima] | 'rat' (Ch-F) | : | X _G šima |
| c. | <ruyá> | [ruya] | 'older brother' (Ch-F) | : | X _G šuya |
| d. | <reké> | [reke] | 'rib' (Ch-F) | : | X _G šeke |
| e. | <rajá> | [raha] | 'mouth' (Ch-F) | : | X _G šaha |

Fernandéz' vocabulary includes one example of a minimal pair of graphemes <r> and <rr>. However, the latter form can be identified as a Mayan loanword which originally featured the sound ϕ' .

- (4. 99)
- | | | |
|---------|-------------------------|--|
| <pari> | 'sun, day, heat' (Ch-F) | |
| <parri> | 'to grind' (Ch-F) | : X _G pač'i 'to grind' (G-RHG) <L-M: GTz *pač 'tamal' |

In other sources, e.g. the data from X_Y, we find <rr> attested in contexts that are given with <r> in Fernandéz (1938). If the use of <rr> is anything but accidental, we may assume it to represent a trill as contrasted with an approximant <r>, or even a retroflex fricative.

Comparison of the sources shows that in X_{Ch} *r* has replaced *s* and *š* in many initial and intervocalic contexts. We find evidence for *r* in word-initial position where it does not regularly occur in X_G or in the earlier prephonemic data from X_Y, X_{Jut} or X_S. Grapheme <r> in initial position is attested before high vowels *i*, *í* and *u* and low vowel *a*; there are only three examples of <r> before mid vowel *e* in the entire corpus. These correspond with the few attested cases of *š* preceding *e* in the other varieties.

4.1.3.6 Glides

In most prephonemic inventories, the phoneme *w* is represented by graphemes <gu> and <gü>. The phoneme is realised by the semi-speakers as [ʷ] before high and low vowels (see § 4.1.2.6). Otherwise the letters <v> and <u> as well as the combination <hu> are used to denote *w* (4. 100). In intervocalic contexts, some authors also employ (4. 101).

- (4. 100)
- | | | | |
|----|----------|---------|----------------|
| a. | <guazl> | /waʃ/ | 'three' (Ch-F) |
| b. | <huenin> | /wenin/ | 'who?' (Y-C) |
| c. | <huanin> | /wanin/ | 'who?' (Ch-C) |
- (4. 101)
- | | | | |
|----|-------------|------------|-----------------------------|
| a. | <chabuy> | /šawuy(a)/ | 'sit down' (Ch-F) |
| b. | <larbur> | /lawaro/ | 'dancer' (Ch-F) |
| c. | <guastaban> | /waštawan/ | 'he already entered' (Ch-F) |

The premodern inventories confirm the allophone [g] before back vowels *u* and *o*. In several cases these back vowels are also preceded by the regular grapheme <gu>, which suggests that in these contexts the pronunciation as [w] or [ʷ] was also common and [g] occurred just as a free alternation.

- (4. 102)
- | | | | |
|----|-----------|----------------|---------------------------------------|
| a. | <xangona> | [šangona] | 'northwards, towards the hill' (Ch-F) |
| b. | <guona> | [ʷwona ~ wona] | 'mountain, hill, volcano' (Ch-F) |

The semi-vowel *y* is represented mostly by graphemes <y> (4. 103) and <i> (4. 104), and –following Spanish orthographic conventions– also by <ll> (4. 105). Comparison with primary and other phonemic data provides evidence for the graphemic correlation. In most contexts, the identification proves unambiguous.

- (4. 103) a. <yajyic> 'tumpline, *mecapal*' (Ch-C) : [ya^əwiʔ] 'make firewood' (G-JS),
 (= instr. for carrying firewood) <yáwi> 'trunk' (G-S)
 b. <muy> 'fruit of chical' (Ch-F) : *[muy]
- (4. 104) a. <aima> 'ear of corn' (S-Gav, Y-V) : [ʔayma] (G-RHG)
 b. <ui> 'water' (S-Gav) : [ʔuy] (G-SH)
- (4. 105) a. <llugua> 'to lose, misplace' (Ch-Z) : [yu^əwaŋ] 'I lost' (G-RHG)
 b. <allapa> 'year' (Ch-Z) : <ayapa> *[ʔayapa] 'year' (Ch-C)

4.1.3.7 Vowels

All prephonemic inventories specify at least five different vowel qualities: *i*, *u*, *e*, *o* and *a*. In the early inventories (Morales, Valdéz, Gavarette), the high central vowel *ɨ* is not distinguished but represented as <u> or <i>. The twentieth-century data from X_{Ch} denote *ɨ* as <ö>, <ü>, <ue>, <ou>, <eu> or <öü>. As the vowel is described and represented in the even earlier data of the ALS (see § 4.2), we can rule out the possibility that the sound might be the result of a recent change. It seems more likely that the authors did not recognise the sound contrast.

- (4. 106) Selected examples of representations of vowel phonemes
- | | | | | | | |
|---|---------|-----------|---------------------|----------|---------|---------------|
| i | <piri> | [piri] | 'to see' (Ch-Z) | <itul> | [ʔituʔ] | 'flea' (Y-C) |
| ɨ | <üilu> | [ʔili] | 'back' (Ch-F) | <üörá> | [ʔiraʔ] | 'big' (Y-C) |
| u | <uti> | [ʔuti] | 'corn flour' (Ch-F) | <ruruc> | [ruruk] | 'cane' (Ch-C) |
| e | <elajá> | [ʔelaha] | 'tongue' (Ch-C) | <huerén> | [weren] | 'frog' (Ch-C) |
| o | <ololó> | [ʔololoʔ] | 'white' (Ch-JC) | <moola> | [moʔla] | 'moon' (Ch-F) |
| a | <ayma> | [ʔayma] | 'corn' (Y-C) | <pari> | [pari] | 'day' (Ch-Z) |

Gavarrete, Valdéz and Fernandéz make occasional distinctions between single vowels <V> and double vowels <VV>, which could be interpreted as an indication of vowel length. However, there are no examples that would attest short and long vowels in minimal pairs; and the only case, which is found in the Fernandéz vocabulary, involves a loanword (4. 107a).

- (4. 107) a. <riinak> [ri:nak] 'bladder' (Ch-F) : <rinak> [rinak] 'bean' (Ch-F)
 b. <paatchi> [pa:či] 'corn dough' (Ch-F)
 c. <jaapá> [ha:pa-ʔ] 'come (pl.) here!' (Ch-F)
 d. <toolo> [to:lo] 'coral tree' (Ch-F)
 e. <teeró> [te:roʔ] 'killed' (Ch-F)
 f. <najuun> [nahu:n] 'son, daughter' (S-Gav)
 g. <seema> [se:ma] 'fish' (S-Gav)

In most premodern inventories the accent sign indicates stress (4. 108). Yet, the prosodic feature remains unrepresented in the majority of cases. Presence of the accent sign on a final vowel often denotes a final glottal stop. It needs to be pointed out that suffixed forms are sometimes represented with an accent sign on the last vowel preceding the last consonant, which corresponds with the findings in the semi-speakers data where the stress rule is accurately followed (see § 4.1.2.7, § 4.4.8).

- (4. 108) a. <mujl úru> [muʔ 'ʔuru] 'fly' (Ch-C)
 b. <alán> [ʔa'la-ŋ] 'over, above me' (Ch-F)
 c. <chengóc> [čén'ko-k] 'it is twisted' (Ch-C)
 d. <cayayá> [kaya'yaʔ] 'shining' (Ch-C)
 e. <amucá> [ʔamu'kaʔ] 'to work' (Ch-F)

4.2 Grapheme inventory of the *Arte de la lengua szinca*

As most colonial grammars from Guatemala (Campbell 1977:120; Newman 1967:180; see also Zimmermann 1997:11), the inventory of graphemic symbols in the ALS includes letters of the contemporary Spanish alphabet as well as a few additional diacritic characters that represent the idiosyncratic sounds of Xinka which do not exist in Spanish.

The following graphemes in the Maldonado grammar are taken from the Spanish alphabet:

graphemes representing consonants	< b, c, ch, d, g, h, j, l, m, n, p, qu, r, s, t, v, gu, y, z >
graphemes representing vowels	< a, e, i, o, u >

The phonemic equivalents of these graphemes can be assumed to be in accord with Nebrija's correlation and standardisation of Spanish orthography.¹¹⁷ The inventory of signs includes the graphemes <gu> and <y>, which would correspond to the symbols <hu> and <i>, or <ll> in the Nebrija grammar, and <g> instead of <j> preceding the vowels *i* and *e* (cf. Quilis 1980:56). As we can infer from the orthography of the Spanish text in the ALS, the application of these graphemes reflects contemporary usage.

In the introductory chapter, Maldonado de Matos explains that he employs special symbols to represent those sounds which are not part of the Spanish sound inventory:

Las letras que se usarán en este arte de szinca seran, a más de las de nuestro alphabeto castellano, las siguientes: tz, tx, ε, ck, sz, Ł, Ůe; de todas ellas, las cinco primeras son generales a todas las lenguas szinca, kichel, kakchiquel y zutugil, pero las dos ultimas solo son peculiares de la szinca ... (fol. 11v).

Besides the mentioned graphemes <ε>, <ck>, <tz>, <tx>, <sz>, <Ł> and <Ůe>, the symbols <ek> and <eh> also appear in the grammar. With the exception of <ε>, <Ł> and <Ůe>¹¹⁸, all these signs are combinations of letters from the Spanish alphabet. With the definition of these signs Maldonado de Matos explicitly disapproves of the special symbols inventory <tz>, <ε>, <4>, <4;>, <h> used by Flores in the *Arte de la lengua metropolitana del reyno Cakchiquel* (1753) (fol. 1v), and rejects the use of the graphemes <x> and <v> according to old Spanish or Latin convention (fol. 5r-11r) (cf. § 2.1.4).

Flores' conventions follow the orthography that was introduced by Francisco de la Parra's now lost *Vocabulario Trilingüe Guatemalteco* in the mid-sixteenth century (see Flores 1753:7). The La Parra-orthography became the conventional standard for the description of Mayan languages in Guatemala during the colonial era (Campbell 1977:120; Dürr 1987:44). Defined for the orthographic representation of K'iche'an

¹¹⁷ By transferring Latin graphemes into Spanish, Nebrija tried to create an orthographic system in which one grapheme correlates with one phoneme (Quilis 1980:53-56). However, a few inconsistencies remained, such as the allographic use of <c>/_u, o, a and <qu>/_i, e which later caused ambiguity in colonial descriptions of indigenous languages (cf. Smailus 1989b:30).

¹¹⁸ The chosen representation of two signs <Ů> and <e> is an awkwardness that is explained by the limited possibilities to represent the handwritten form of the grapheme in typographic symbols.

languages, the La Parra-standard uses special signs derived from the Arabic numeral symbols to represent glottalised consonantal phonemes: the *tresillo* <ε> and *cuatrillos* <4>, <4;> and <4h> (Campbell 1977:121; Dürr 1987:44-45). Beginning in the seventeenth century, missionary linguists started to discard the otherwise established La Parra-orthography and increasingly used conventions that were entirely based on the Spanish orthography, which lead to a loss of phonemic distinctions in the representation of late colonial languages sources (Smailus 1989b:30).

The combined letters used by Maldonado de Matos are rather unusual. However, the almost exclusive use and recombination of Spanish letters, together with the explicit rejection of the La Parra-orthography, suggests that the author attempted to create a more intelligible and hispanised orthography.

... y como este arte, no lo escribo para otros que para los castellanos y latinos, es preciso acomodarme, en quanto sea posible, al alphabeto castellano y latino, usando de sus letras, en unas dicciones viruladas y en otras geminadas ... (fol. 3r).

Table 4. 4 illustrates the special signs used by Flores and correlates them with the symbols employed by Maldonado de Matos'. The phonemic interpretation of the La Parra-graphemes follows Campbell (1977:120-121) and Dürr (1987:45). We will have to examine whether the graphemes in the ALS represent the same phonemes as the La Parra-symbols. Maldonado de Matos seems to assume that this is the case and that there is an identical sound system for Xinka and K'iche'an languages (see. fol. 1v), as he correlates every La Parra-symbol with a hispanised graphemic convention that he uses in his Xinka description. The last column of the table indicates the reference in the ALS where Maldonado de Matos gives the explanation for his respective graphemic correlation.

Table 4. 4: Correlation of ALS-graphemes with La Parra-orthography

Flores/de la Parra	Phoneme		Maldonado de Matos
<ε>	'tresillo'	/ q' /	≠ <ε> (fol. 2v)
<4>	'cuatrillo'	/ k' /	= <ck> (fol. 4r-4v)
<4,>	'cuatrillo con coma'	/ ɕ' /	= <tx> (fol. 4v-5r)
<ɸ>		/ x /	= <g> (fol. 3v-4r)
<v>		/ w /	= <gu> (fol. 5r-7v)
<x>		/ š /	= <sz> (fol. 8v-11v)

Maldonado de Matos copies two signs from the inventory of Flores/La Parra, the graphemes <ε> and <tz>, and explains as follows:

... porque en el curso de este arte solo me servirè de la Tz y del tresillo al reves ε, por ser estas letras, aunque geminadas, conformes a las de nuestro alphabeto; porque el ε no es otra cosa que dos CC ligadas, la una sobre la otra; y la Tz, una T con una Z arrimada. (fol. 2v)

It can be discounted that the phonemic value of the grapheme <ε> in the ALS corresponds to the phonemic value of the sign in the La Parra-inventory. Neither the semi-speaker data nor any of the secondary sources indicate the existence of the uvular stop q' in Xinka (see § 4.1). Maldonado de Matos' description of the sound values of <ε> as "dos CC ligadas" and of <tz> as "T con una Z" is only moderately illuminative. The grapheme <tz> that seems to represent an affricate is attested in

the ALS with three lexical entries which are loanwords. The graphemes <Ł> and <ue> are representations of Xinka-specific phonemes that are not distinguished orthographically in Mayan languages are therefore not copied from any other source. The comparative data suggest that these are representations of an alveolar lateral fricative sound *ʎ* and high central vowel *ɨ*. Maldonado de Matos explains the sound values as follows:

La Ł virulada es casi lo mismo que nuestra Ł castellana, con la diferencia solamente de que la pronunciacion de la Ł castellana es limpia y la de la virulada es sucia ó basta [...] La ue diptongo es una media vocal, que media su voz entre nuestras vocales E y U ... (fol. 11v-12r).

4.2.1 Orthographic conventions

Table 4. 5 lists the orthographic conventions of the ALS. The phonetic interpretation relies on the etymological and systematic comparison with the primary and secondary data, including the author's own explanations and contemporary orthographic conventions. The correlation of individual graphemes with their given sound values will be further explained and discussed in the following section that deals with the reconstruction of the phoneme system of Maldonado-Xinka.

Table 4. 5: Orthographic conventions in the ALS

Sounds	Graphemes
[p] ~ [p']	< p >
[b]	< b >
[t] ~ [t']	< t >
[d]	< d >
[k]	< c >; < qu > preceding {i; e}; < ε >; < ek >
[g]	< g > preceding {o; a}; < ε >
[k']	< ck >; < ε >
[ʔ]	< h >; accent; word boundary
[ç] ~ [ç']	< tx >; < tz >; < sz >
[č] ~ [č']	< ch >; < tx >
[s]	< s >; < z >; < sz >
[š] ~ [š]	< sz >; < tx >
[h]	< g >; < j > preceding {i; e}; < Ł >
[m]	< m >
[n]	< n >
[l] ~ [ɬ]	< Ł >; < l >
[r]	< r >; < rr >
[w]	< gu >; < g >; < u >; < ug >
[y]	< y >; < i >
[i] ~ [i:]	< i >; < ii >; < ý >; < j >; + <i>accent</i>
[ɨ] ~ [i:]	< ue >; < ueue >; + <i>accent</i>
[u] ~ [u:]	< u >; < uu >; + <i>accent</i>
[e] ~ [e:]	< e >; < ee >; + <i>accent</i>
[o] ~ [o:]	< o >; < oo >; + <i>accent</i>
[a] ~ [a:]	< a >; < aa >; + <i>accent</i>

The correlation is unproblematic for those graphemes/sounds that are attested in all the comparative sources, but less obvious for those sounds for which we find

deviating information in the corpus of data. To bridge these inaccuracies, the graphemes in the ALS are analysed with regard to their distribution in graphemic and semantic contexts. Some graphemes form minimal pairs or occur in complementary distribution, which allows them to be identified as allophones, or at least allographs. However, it needs to be taken into account that not all graphemic deviations indicate phonemic contrast.

The correlation of graphemes and phonemes is based primarily on the representation of a given form in the comparative lexical data. Table 4. 5 shows a number of double correlations that result from general Spanish orthographic conventions and are also attested in the Spanish text of the ALS. These are the representations of the phoneme *k* as <c> preceding vowels *u*, *o*, *a* and <qu> before *i* and *e*, of *h* as <j> preceding *u*, *o*, *a*, and <g> before *i* and *e* (Quilis 1980:56) as well as the exchangeable use of <i> and <y> to represent the vowel *i* and the semivowel *y*. Grapheme <g> is correlated with different sounds. Following the Spanish convention, <g> represents a voiced velar stop [g] before *o* and *a*, a glottal fricative [h]¹¹⁹ before vowels *i* and *e*, and in combination with *u* it represents the glide *w*.

4.3 Reconstructed phoneme inventory of the *Arte de la lengua szinca*

In this section, we will establish the conventions for the phonemic transcription of ALS-data that will be used in the remainder of the text.

The phonemic inventory that can be defined for Maldonado-Xinka mostly coincides with the phonological information provided by Campbell (1971, 1972) and Kaufman (1977). The reconstruction is based on the systematic analysis of the grapheme inventory of the ALS as well as phonological and etymological evidence from the comparative data. The argumentation includes phonotactics (which are also separately treated in § 4.4.1), systematic alternations, distributional aspects and grammatical contexts of the respective graphemes/sounds. Processes of sound change that are indicative of local varieties or structural disintegration are taken into account.

All phonemes are discussed separately; the presentation of arguments in the individual sections may therefore partially overlap.

4.3.1 Consonantal phonemes

Table 4. 6 figures the consonantal phonemes of Maldonado-Xinka. Phonemes that can be reconstructed with certainty are given in bold letters. Non-phonemic sounds are excluded from the chart. Borrowed sounds are only included in the inventory if they are contrastive in Xinka (i.e. *č*).

¹¹⁹ It needs to be noted that in Spanish orthography <g> represents a velar fricative [x] before *i* and *e*.

Table 4. 6: Inventory of consonants in Maldonado-Xinka

	Bilabial	Alveolar	Postalveolar	Velar	Glottal
Stop	p	t		k	ʔ
[+ glottalisation]	p'	t'		k'	
Affricate			ɕ		
[+ glottalisation]		ɕ'			
Fricative		s	ʃ		h
Nasal	m	n			
Lateral		l			
Lateral-Fricative		ɬ			
Vibrant		r			
Glide	w			y	

4.3.1.1 Stops

The sound inventory of Maldonado-Xinka contains unglottalised and glottalised bilabial stops *p* and *p'*, alveolar stops *t* and *t'* and velar stops *k* and *k'* as well as the glottal stop ʔ.

The ALS-data confirm the rule that voiced stops are allophones of voiceless stop phonemes (Campbell 1972a:187; see § 4.1.2.1, § 4.4.4); as is attested in the comparative data (see e.g. Calderón 1908; McArthur 1966; Schumann 1966). Graphemes , <d> and <g> occur after nasals <m> and <n> (see § 4.4.4), while <p> and <t> occur in all other contexts.¹²⁰

The reconstruction of glottalised stops *p'* and *t'* remains vague. With respect to velar stops, we can only define by etymological comparison which of the ALS-forms represent glottalisation in the right spot, and in which cases indicated glottalisation may be an overgeneralisation.

4.3.1.1.1 Bilabial Stops

There are two graphemes in the ALS that denote bilabial stops: <p> and . Grapheme is attested in medial position preceding vowel graphemes <u>, <ue>, <e> or following the nasal <m>. The distribution suggests that the orthographic representation reflects the rule about the voicing of stops after nasals that is attested in the comparative data (see § 4.1.2.1, § 4.1.3.1, § 4.4.4).

Table 4. 7: Distribution of graphemes <p> and ¹²¹

	<i>	<ue>	<u>	<e>	<o>	<a>
<p>	+	+	+	+	+	+
	-	s	s	s	-	-

¹²⁰ Note that this rule also applies to Spanish loanwords: *confesion* > *conpišun > <cumbiszun>.

¹²¹ Symbol "+" indicates the occurrence of the sound in word-initial position, whereas the "s" denotes occurrence in syllable-initial position. The hyphen "-" indicates that the syllable or sound combination is unattested in the ALS-data.

	<p>	
<sz> _	+	-
<m> _	+	+
<Ł> _	+	-
<y> _	+	-

Grapheme <p> occurs in initial position with all vowels and is attested in medial clusters with the consonantal graphemes <sz>, <m>, <Ł> and <y>.

The few examples where <p> is preceded by a nasal can be identified either as loans (4. 109a) or as patterns of assimilation (b). Other clusters (such as fricatives preceding bilabial stops) are the result of a morphophonemic process that deletes the intermediary vowel (c) (see § 4.4.3.1).

- (4. 109) a. <punpun> /punpun/ 'bladder' (4336.)
 b. <suemp suemp> /sim sim/ 'tense, tight (thing)' (4405.)
 c. <iszpaan> [ʔiʃp(')an] 'leave, emerge (preterite)' (2426.)
 [cf. <yszàpa> 'leave' (1967.)]

Maldonado de Matos does not distinguish glottalised and unglottalised bilabial stops by different graphemes. Aspiration is likewise not represented. The distributional pattern in the ALS does not suggest the occurrence of voiced bilabial stops in word-initial position, as it is attested for X_{Ch} (4. 110). All occurrences of *b* in initial position in the data from X_{Ch} are given with the grapheme <p>, thus *p*, in the ALS.

- (4. 110) X_M <paŁ> [paʔ] (4231.) : X_{Ch} <bar> [bar] (Ch-C) 'already'

There are no orthographic indications for the existence of a contrast of *p* and *p'*. The contexts where glottalisation of bilabial stops occurs in the terminal data (see § 4.1.2) cannot be identified in the ALS. As there are no clear minimal pairs attested in the semi-speaker data, and as other premodern grapheme inventories do not distinguish glottalised and unglottalised bilabial stops either, we can only assume that *p'* existed in Maldonado-Xinka.

When phonemicising the colonial orthography, ALS-graphemes <p> and will be interpreted as phoneme *p*. Despite the cross-data proof of the phonemic status of glottalised stops (see Campbell & Kaufman: field data), the distinction of *p* and *p'* is unclear for the majority of entries, and therefore the unglottalised version has been chosen in all cases.

4.3.1.1.2 Alveolar Stops

Alveolar stops are represented by two graphemes in the ALS: <t> and <d>. Grapheme <t> is attested in initial and medial position with all vowels; <d> follows <n> only before vowels <u>, <o>, <a> in medial position. This suggests that in Maldonado-Xinka [d] also functioned as an allophone of phoneme *t*.

Table 4. 8: Distribution of graphemes <t> and <d>

	<i>	<ue>	<u>	<e>	<o>	<a>
<t>	+	+	+	+	+	+
<d>	-	-	s	-	s	s

	<t>	<d>
<c>	+	
<sz>	+	
<g>	+	
<n>	+	+
<Ł>	+	

As with bilabial stops, glottalised or aspirated alveolar stops are not represented by distinct graphemes (4. 111) and *t'* is therefore not attested in Maldonado-Xinka. The distribution of graphemes does not suggest the existence of voiced alveolar stops in initial position as it is attested in the language data from X_{Ch} (§ 4.1.3.1).

- (4. 111) a. <tiéi> 'to sleep' (3291.) : X_G [ti:ki] ~ [t'i:ki] (G-SH)
 b. <jutu> 'tree, pole' (3989.) : X_G [hutu] ~ [hut'u] (G-SH)

Denoting a voiced alveolar stop, the grapheme <d> only occurs after nasals.

- (4. 112) a. <tondón> [tondon] /tonton/ 'turtle' (4596.)
 b. <cun dâ> [kunda] /kun ta/ 'go with god!' (1821.)
 c. <szandaa> [šanda:] /šanta/ '*how?' (4434.)

Grapheme <t> is attested in consonantal clusters that are either the result of vowel deletion (4. 113 a, b), compounding (c), or occur in loanwords (d, e).

- (4. 113) a. <tisztaŁa> /tištaŁa/ '(the one) who breaks wind/farts' (4588.)
 b. <tuŁtuc> /tuŁtu-k/ 'instrument for piercing, lance' (4603.)
 c. <eŁactuma> /ʔeŁak tuma/ 'tongue of deer = type of herb' (3802.)
 d. <toctoc> /toktok/ 'mockingbird' (4590.) [L-M]
 e. <szuŁtérú> /šuŁteru/ 'single, unmarried man' (4502.) [L-S]

The ALS-graphemes <t> and <d> will be rendered as *t* in the phonemic transcription. Where the existence of a glottalised stop is unambiguously attested in the comparative data, the glottal will be added in brackets.

4.3.1.1.3 Velar Stops

The graphemes <c>, <k>, <ck>, <ε>, <εk> and <g> denote velar stops. Following Spanish orthographic conventions (see § 4.2.1), <g> is distributed after <n> and before back vowels. In both contexts, it represents the voiced velar stop [g], thus, reconfirming the voicing of stops after nasals (see above).

Table 4. 9: Distribution of graphemes representing velar stops

	<i>	<ue>	<u>	<e>	<o>	<a>
<c>	-	+	+	-	+	+
<qu>	+	-	-	s	-	-
<ε>	+	+	+	+	+	+
<ck>	+	+	s	+	+	+
<εk>	s	-	-	-	-	-
<g>	-	-	s	-	-	s

	<c>	<qu>	<ε>	<ck>	<g>
<ɬ>	+				
<s>	+	+	+	+	
<sz>	+		+	+	
<g>	+	+			
<n>					+
<l>	+	+			
<gu>		+			

According to La Parra's colonial orthographic convention, grapheme <ε> represents the K'iche'an sound *q'* (Campbell 1977:121). In the ALS, the grapheme must be correlated with a different sound value, as the existence of uvular stops is not attested by comparative Xinka data (see § 4.2). The comparative sound inventories include only the unglottalised and glottalised voiceless velar stops *k* and *k'* as well as the voiced velar stop *g*. This means that in the ALS three possible sound values are represented graphemically by six different symbols.

Following Spanish orthographic convention, <c> and <qu> are attested in complementary distribution as allographs of phoneme *k* (see § 4.2.1). The remaining graphemes <ε> and <ck> neither occur in complementary distribution with each other, nor with <c/qu>, which excludes them as allophones or allographs. The use of <ε> and <ck> is quite inconsistent. Both graphemes appear in identical lexical contexts and there are no clear minimal pairs (4. 114a).

- (4. 114) a. <ckòmo> 'knee' (3935.) : <εómo> 'knee' (330.)
 b. <ckuenuεi> 'happiness, content' (3784.) : <εuenuεqui> 'to be happy' (2207.)

The distribution of graphemes <c/qu> and <ε> is likewise inconsistent (4. 115), but they are also attested in minimal pairs (4. 116), where they seem to represent different phonemes. In the last of the following examples, the two terms may be etymologically related.

- (4. 115) <ckuenuεi> 'happiness, content' (3784.) : <εuenuεqui> 'to be happy' (2207.)
 (4. 116) a. <éúnu> 'shadows' (3764.) - <cúnu> 'to buy' (2178.)
 b. <εagui> 'to catch with lasso' (2135.) - <cagui> 'to cry' (2117.)
 c. <széεε> 'small firewood' (4466.) - <szeeque> 'rib' (4447.)

The phonemic interpretation is supported by minimal pairs and in the field notes of Campbell and Kaufman.

- (4. 117) a. <εagui> 'catch with lasso' (2135.) : X_G, X_{Ch} [k'a'wi] 'catch with lasso' (C&K-FN)
 b. <cagui> 'to cry' (2117.) : X_G, X_{Ch}, X_{Jum} [kawi] 'scream, cry' (C&K-FN)

No minimal pairs are attested for <c/qu> and <ck>. We may nevertheless assume that these graphemes represent different phonemes, since they never replace each other in the same lexical contexts.

Correlating the graphemes with likely sound values, we may assume that the glottalised velar stop *k'* is denoted as <ck> and <ε> (4. 118), while <c/qu> and <ε> represent the unglottalised velar *k* (4. 119). The comparative data partly confirm this identification, but there are also numerous cases of lexical entries in the ALS that are not given with graphemes <ck> or <ε>, despite the fact that the comparative data suggest the presence of a glottalised velar stop.

- (4. 118) a. <ckeguesza> 'anona, fruit' (3732.) : X_G <k'eʔwesa> (G-Cam)
 b. <jaraɛu> 'spinach, *chipilin*' (3929.) : X_G [haraku] ~ [harak'u] (G-SH)
 c. <iszaca> 'to drink' (2420.) : X_{Ch} <iʃáɛ'aj> (Ch-MA)
 d. <ɛomo>, <ckómo> 'knee' (330.), (3935.) : X_{Ch} <kʔo'mo> (Ch-MQ)
- (4. 119) a. <coséc> 'big' (3739.) : X_G [kosek] (G-S)
 b. <txoco> 'grackle' (4649.) : X_G [ɛ'o'ko] (G-SH), (G-Cam)
 c. <ɛaragua>, <caragua> 'woods' (3713.), (3714.) : X_G [gra^ɛwa] (G-RHG), (G-JS)
 d. <meenáqui>, <naɛi> 'chilli' (4077.), (4139.) : X_G [naki] (X_G)
 e. <caLi> 'smoke' (3702.) : X_{Ch} <cajlij> (Ch-MA)
 : X_G [k'aʔi] (G-SH)
 f. <cagui> 'to cry' (2117.) : X_{Ch} [kawiʔay] (Ch-MQ)
 : X_G [k'awi] (G-SH)

The inconsistent distribution of <ɛ> poses questions as to whether the sign represents a different phonetic pattern such as aspiration, or whether the grapheme may hold the key for understanding the inconsistent usage of *k'* by the terminal speakers. As pointed out above (§ 4.1.2), glottalisation seems to be rather random in the semi-speaker data. Some speakers glottalise frequently (e.g. SH), others hardly ever (e.g. JS). The patterns of glottalisation that are clearly attested in the field notes of Campbell and Kaufman cannot be identified in terminal speakers' data. The overgeneralisation of sounds and the loss of phonemic distinctions are characteristic for situations of language decay (see § 2.3.2.1). The fact that <ɛ> denotes *k* as well as *k'* and the orthographic inconsistencies attested in the comparative data might be seen as indications for a beginning loss of phonemicity of glottalised velar stops in colonial times.

Some examples in the ALS seem to confirm the existence of a regular morphophonemic process that causes glottalisation of velar stops in word-initial position on those roots which also exhibit glottalisation of the root vowel, i.e. CVCV ~ C'V'CV (see Campbell 1972a; § 4.1.2.2).

- (4. 120) <ckómo> 'knee' (3935.) : X_{Ch} [k'oʔmo] 'knee' (Ch-MQ)

Furthermore, <c> is replaced by <ɛ> - suggesting glottalisation of velar stops in medial position – upon suffixation of the root by grammatical markers -*ɲ*, -*y* and -*ʔ*, i.e. CVCV ~ C'VVCV-*ɲ*/*y*/*ʔ*.

- (4. 121) <szuca> [ʃuka] 'pain' (4490.) → <szuɛaan> [ʃuk'a-ɲ] 'I bit' (3170.)

In a few cases, we might interpret glottalisation of the velar stop in medial position to be the result of vowel disharmony between root and suffix; i.e. CVCV ~ CV₁C'V₁-CV₂(C).

- (4. 122) <sacáya> [sakaya] 'raise' (3025.) : <szacari> [ʃak'ari] 'scare away' (3092.)

Etymological comparison shows that ALS-forms ending in <c> are frequently attested in the comparative data with a final glottal stop -*ʔ* (4. 123a-e) or – more rarely – with -*h* (f) or -*t* (g). In particular the semi-speakers from X_G tend to replace final -*k* with -*ʔ*, -*h* and -*t*. This substitution pattern is not attested within the ALS-data. Therefore, the loss of velar stops in final position seems to be a rather recent diachronic process that could be interpreted morphologically (e.g. as deletion of the instrumental marker) but is more likely a purely phonetic process (see § 4.1.2.1, § 4.4.7).

- (4. 123) a. <Lamuc> 'shrimp' (4006.) : X_Y <lamu_>, <samu_> 'fish' (Y-C), (Y-V)
 b. <maŁuee> 'firewood' (4056.) : X_G [maʔiʔ] ~ [maʔeʔ] 'firewood' (G-JS)
 c. <púpuc> 'mat' (4338.) : X_G [pupuʔ] 'mat' (G-RHG)
 d. <szúnic> 'pot' (4507.) : X_G [suniʔ] 'pot' (G-SH), (G-JAP)
 e. <guarúe> 'net' (3844.) : X_G [waruʔ] 'net' (G-SH), (G-JS)
 f. <muc> 'we, 1p' (4089.) : X_G, X_{Ch} [muh] 'we, 1p' (G-SH)
 g. <auŁác> [ʔawʔak] (3653.) : X_Y <aljuat> [ʔaʔ-wat] 'tortilla griddle' (Y-V)

The opposite process is also attested: some cognates that end in *-V* or *-Vʔ* in the ALS are given in prephonemic data from X_{Ch} and X_{Jum} with final velar stops, *-k* or *-k'* (4. 124). Since the first two examples are identified as Mayan loans that do not end in a velar stop in their source languages, the final *-k* in the X_{Ch}-forms could either be a morphological marker or the result of hypercorrection or misinterpretation.

- (4. 124) a. <szúni> [ʃuni_] 'star' (4504.) : X_{Ch} <xunik> [ʃunik] (Ch-F)
 b. <alu> [ʔaluʔ] 'macaw' (3608.) : X_{Ch} <caluck> [k-ʔaluk'] (Ch-P)

We have noted that the semi-speakers show a tendency towards excessive glottalising of velar stops (§ 4.1.2.1). In this context, glottalisation of one stop in a root/stem was identified to cause other stops in the same root/stem to be glottalised as well. There are a few entries in the ALS that seem to reflect this form of "glottal harmony" (4. 125). In the examples below, the antipassive marker *-ki* (§ 11.3.1) and instrumental marker *-k* (§ 11.1.3.1) appear to be glottalised – since the velars in the verbal root are as well.

- (4. 125) a. <sueuckie> suk'u-k'i-k'
 tie-AP-INSTR
 'instrument to tie sth. up' (4391.)
 b. <ɛaguieilLa> k'awi-k'i-ʔa
 catch with lasso-AP-AGT
 'catcher with lasso' (3684.)

Semi-speakers often glottalise velar stops in final position, which seems to be a purely phonetic process (§ 4.1.2.1). The occurrence of <ɛ> and <ck> in final position may be an indication that the same process is attested in the ALS. Comparative data confirm some of these cognate forms to end in glottalised consonants.

- (4. 126) a. <tiŁtick> [tiʔtik'] 'black' (4578.) < Pipil *tiltik* 'black' [C-85]
 b. <pueŁtaɛ> [piʔtak'] 'arrow' (4350.) : X_{Ch} <pwirʔtak'> 'bow and arrow' (Ch-MQ)
 c. <guieie> [wik'ik'] (4332.) : X_{Ch} <jishi-guick> 'grinding stone' (Ch-P)
 [hiʃi wik']

In some cases the fricative *h* in the ALS can be correlated with *k* in cognate forms from the comparative data (4. 127). Campbell and Kaufman indicate that *h* is the earlier sound, i.e. *h* > *k'* (see field notes). The data do not suggest that the target sound is glottalised.

- (4. 127) <jæhue> [haçi] 'scratch' (2440.) : X_{Ch} <cachic> [kaçi-k] 'scratch, scrape' (Ch-F)

There are a few cases where the velar stop *k* from the ALS is represented as <g> (denoting either [g] or [h]) in cognate forms in the Zeeje-manuscript (4. 128). The comparative data mainly attest *k*, which suggests that this may be the earlier sound.

- (4. 128) <muc pula> [mukpula] 'we make' (466.) : X_{Ch} <mugpula> [muh-pula] 'we make' (Ch-Z)

Graphemes <c/qu> and <ε> may be phonemicised as *k*, graphemes <ε> and <ck> as *k'*. The decision whether glottalisation is present is made on the basis of comparison with the other Xinka language data. In cases where graphemic information and comparative data seem to deviate (i.e. ALS <c/qu> is rendered as *k'* in several comparative sources), glottalisation is indicated in brackets.

4.3.1.1.4 Glottal Stop

Maldonado de Matos denotes the glottal stop with the letter <h>, non-graphemically as a gap between the letters, or –in the majority of cases– as an accent on the preceding vowel.

Vowel fusion is not a phonological process in Xinkan (see § 4.4.1). Therefore, two vowels that form a grapheme cluster can be assumed to represent vowel sounds that are separated by a glottal stop.

(4. 129) <charrauen> [čaraʔin] 'dangling' (3689.)

The number of entries that indicate the glottal stop by <h> is very small. In all of these cases, <h> occurs in initial position of the second element of lexical compounds preceding the vowel graphemes <i> and <u> (see Table 4. 10 and example (4. 130)).

Table 4. 10: Distribution of grapheme <h> representing ʔ

	<i>	<ue>	<u>	<e>	<o>	<a>
<h>	s	-	s	-	-	-

- (4. 130) a. <Lóme **hui**> [tome ʔuy] 'tepid water' (4029.)
 b. <saraL **huy**> [saraʔ ʔuy] 'cold water' (4373.)
 c. <tata **hipi**> [tata ʔipi] 'young man, lad' (4549.)

A gap between two vowel graphemes often represents a glottal stop phoneme; it occurs mostly at identifiable morpheme boundaries (4. 131).

(4. 131) <pulacà ay> [pulaka ʔay] 'you (pl.) have made' (409.)

Maldonado de Matos describes this phenomenon as such:

Pero se haze preciso el advertir que en la pronunciación se ha de dividir la particula ay de todo el vocablo en la misma forma que se escribe con una no entera division, sino media. (fol. 32v)

In the orthography of colonial language sources the glottal stop is often represented by accents on the vowel preceding the glottal stop (Campbell 1977:121). This convention can be reconfirmed for the ALS. In the majority of cases, accent signs in the ALS indicate a following glottal stop. This is confirmed by the fact that in serial vowel graphemes an accent often marks the first grapheme.

- (4. 132) a. <pè> [peʔ] 'verbal particle' (4268.) [future TAM]
 b. <jonóa> [honoʔa] 'to guard' (2501.)
 c. <tajna-L.â> [tahna-taʔ] 'be born (preterite)' (3207.)

The accent occurs especially on final vowels of morphologically complex verb forms. As stress always lies on the vowel preceding the last consonant (Schumann

1967:32; Campbell 1972a:187; see. § 4.4.8), we may conclude that the accent sign on final vowels implies the existence of a glottal stop in final position.

However, the accent may also indicate vowel length. In the ALS, two different accent signs are utilised: *accent aigu* [´] and *accent grave* [`]. Both signs are used inconsistently and arbitrarily in marking the glottal stop, vowel length or stress (see § 4.3.2, § 4.4.8). In several comparative examples it cannot be decided whether the accent marks the stop phoneme or vowel length.

In the phonemicisation of ALS-entries the presence of glottal stops will be indicated on the basis of cross-data comparison, the above mentioned orthographic criteria and grammatical analysis of the forms. Many occurrences of the glottal stop can be identified as instances of grammatical marking.

4.3.1.2 Affricates

Maldonado-Xinka includes alveo-palatal and alveo-dental affricates that are represented mainly with the graphemes <ch> for *č* and <tx> for *č'*. Several forms indicated with affricate sounds in the comparative data are attested in the ALS with the grapheme <sz>, which may give us an idea about patterns of sound change including deaffrication and affrication. Distribution of graphemes in the ALS does not provide clear information about the status of glottalisation in affricate phonemes.

4.3.1.2.1 Alveolar affricate

Four graphemes occur in positions where comparative data attest an alveo-palatal affricate *č*: <ch>, <eh>, <sz> and <tx>. The representation of *č* by <ch> follows Spanish orthographic conventions. Whether <sz> and <tx> actually denote *č*, or are indications of sound change, needs to be established.

Distribution shows <ch> in initial and intervocalic position before all vowels, but never in final position. There is only one attested case where the grapheme occurs in consonantal clusters, and here we find it most likely to be an unconditioned change of the original sound *š* (4. 136).

Table 4. 11: Distribution of grapheme <ch> representing *č*

	<i>	<ue>	<u>	<e>	<o>	<a>
<ch>	+	+	s	+	+	+

Campbell (1972:187) observed that the alveo-palatal affricate *č* is restricted to recent loanwords.

(4. 133)	a.	<chuey>	[č̥y]	'little, few' (3701.)	<	pM *tyin 'small', CHR <i>č'ix</i> , KCH <i>čutin</i> [K-03]
	b.	<chueueue>	[č̥irik'i]	"chico, pequeño" (3697.)	<	LEN <i>č'iris</i> 'small' [C-78]; PIP <i>čupi</i> 'little' [C-85]
	c.	<chegche>	[č̥ehče]	"boca rota" (3690.)	<	pM *čexe 'woodpecker' [K-03]
	d.	<chagui>	[ča ^h wi]	"duro" (3688.)	<	WM <i>čaw</i> 'hard, stiff' [C-71]
	e.	<poch poch>	[poč poč]	"los bofes" (4314.)	<	pK <i>pospo žy</i> , ZOQ <i>pukpuk</i> [C-77]
	f.	<jachue>	[hači]	"recoger" (2445.)	<	EM *xa žč 'to harvest' [K-03]
	g.	<choo>	[čo]	"batir chocolate" (2200.)	<	PIP <i>čukulat</i> 'chocolate' [C-85]
	i.	<acha>	[ʔača]	"hacha" (3580.)	<	Sp: <i>hacha</i> 'ax'

The distribution of graphemes in the ALS indicates a few cases of variation in the use of <ch> and <sz>. We may interpret this as evidence that the ALS-data illustrate a change of *č* to *š* that occurred in some loans.

- (4. 134) <chagui> [čawi] 'hard thing' (3688.) : <szagui> [šawi] 'hard thing' (4421.)

Several roots given in the ALS with grapheme <sz> are attested in the comparative data with *č*. Given the attested variation of *č* and *š* in the ALS-data, *č* is likely to be the earlier sound in these cases.

- (4. 135) a. <szeé> [še(?)]) 'opossum' (4465.) : X_{Ch}, X_Y <ché> [če(?)] (Y-C), (Ch-F)
 b. <szaczi> [šak-si] 'to bleach' (3097.) : X_Y <cháchi> [čači] (Y-C)
 c. <usztii> [ʔušti] 'mother-in-law' (4715.) : X_G <učí> [ʔučí] (G-S)

Etymological comparison shows that *č* in Maldonado-Xinka –if attested in a non-borrowed form– can sometimes be correlated with *č'* in X_Y (4. 136). The reverse is also attested: cognate forms that occur in the ALS with *č'* are attested in the comparative data with *č* or *s* (4. 137). Campbell and Kaufman (see field notes) identify a regular sound change *č' > č'* before front vowels *i* and *e* in X_Y, which explains the divergence.

- (4. 136) X_M <múchu> : X_Y <canmutz'urru>
 [muču] [kan muč'uru]
 'lame, crippled' (4091.) 'let's bow down!' (Y-C)
- (4. 137) a. <txáma> [č'ama] 'good, well' (4637.) : X_Y <san> [san] (Y-C)
 b. <txinána> [č'inaʔna] 'scorpion' (4647.) : X_G <čináʔna> [činaʔna] (G-S)
 : X_Y <chinaney> [činaney] (Y-C)

The grapheme <eh> occurs only in the context of one word (4. 138). This term seems to form a minimal pair with another entry from the ALS, which employs the grapheme <ch>, suggesting that <eh> may indicate glottalisation. However, the etymologies of the two entries appear to be related and might be referring to the activity of scraping sth. off the ground. The Eastern Mayan root from which the term was most likely borrowed does not exhibit glottalisation of the final affricate.

- (4. 138) <jæhue> 'scratch' (2440.) <EM *xaʔč' 'harvest'; pCM *xoč' 'scratch' [K-03]
 <jachue> 'pick up, collect' (2445.)

A glottalised alveo-palatal affricate *č'* is attested in the phonetic data (i.e. primary recordings; Campbell & Kaufman: field notes), but does not seem to be contrastive (Kaufman 1977).

In the phonemicisation of ALS-orthography, <ch> will be consistently represented as *č*, including the single case in which <eh> occurs. In some cases <sz> will be interpreted and rendered as *č*.

4.3.1.2.2 Alveo-dental affricate

The alveo-dental affricates *č* and *č'* are represented by graphemes <tx> and <tz>. Grapheme <tz> is attested in the ALS in only three cases, which can be identified as loanwords (see § 4.5.2; see appendix 5). Neither of the graphemes forms consonantal clusters.

In the semi-speaker data the alveo-dental affricate occurs mostly in glottalised form. Campbell identified ϕ' to be contrastive in Xinkan (see Campbell 1972a:187; Kaufman 1977). In the ALS, glottalisation is not graphemically marked, although we may assume all occurrences of <tx> to represent ϕ' rather than ϕ , as it is suggested by the comparative material.

Table 4. 12: Distribution of grapheme <tx> representing ϕ'

	<i>	<ue>	<u>	<e>	<o>	<a>
<tx>	+	+	+	(+)	(+)	+

Grapheme <tx> occurs regularly with all high vowels and *a* (4. 139a-d) and is attested with mid vowels in only two cases (e-f). In the comparative data all occurrences of ϕ' in initial position with vowels *e* and *o* can be identified either as diffused forms or as cognates of forms that are attested with *s* or $\check{c}$ instead of ϕ' in the comparative data (see § 4.1.2.2, § 4.1.3.2).¹²²

- (4. 139)
- | | | | |
|----|------------|-------------------|--|
| a. | <txagui> | [ϕ' awi] | 'to pinch, scratch' (3396.) |
| b. | <txueguue> | [ϕ' iwi] | 'tender corn, <i>camagua</i> ' (4656.) |
| c. | <txinána> | [ϕ' ina?na] | 'scorpion' (4647.) |
| d. | <txúma> | [ϕ' uma] | 'to kiss' (3401.) |
| e. | <txege> | [ϕ' ehe] | 'Chiquimulilla, <i>toponym</i> ' (4643.) |
| f. | <txoco> | [ϕ' oko] | 'grackle' (4649.) |

There are several cases in the ALS, where <tx> and <sz> occur in identical lexical contexts (4. 140). The correlation of these ALS-entries with the comparative data shows that lexical forms given by Maldonado de Matos with both graphemes <tx> and <sz> are generally attested in the comparative corpus with the sound ϕ' ; i.e. the ALS-grapheme <tx> cannot be correlated with the sound $\check{s}$ in the comparative data. It is possible that this variation of <tx> and <sz> in the ALS may be the result of a morphophonemic process of deaffrication that may involve a lengthening of *V*₁. Such processes of affrication and deaffrication are attested in the semi-speaker data (see § 4.1.2.2).

- (4. 140)
- | | | | | | | | |
|----|----------|----------------|--------------------|---|----------|---------|--------------------------|
| a. | <patxi> | [pa ϕ' i] | 'to grind' (2843.) | : | <paaszi> | [pa:ši] | 'to grind' (2837.) |
| b. | <potxa> | [po ϕ' a] | 'to wash' (2933.) | : | <posza> | [poša] | 'to wash' (2927.) |
| c. | <matxi> | [ma ϕ' i] | 'to fry' (2656.) | : | <maszi> | [maši] | 'to fry' (2662.) |
| d. | <guitxu> | [wi ϕ' u] | 'to flog' (2370.) | : | <guiszu> | [wišu] | 'to flog' (2375.) |
| e. | <txueri> | [ϕ' iri] | 'to cut' (3412.) | : | <szuéru> | [ši:ri] | 'to strike, hit' (3186.) |

Campbell and Kaufman (see field notes) identify a regular process of deaffrication of $\phi' > s$ in the varieties of *X_G*, *X_{Ch}*, *X_{Jum}*; in *X_Y* ϕ' is preserved and changes into $\check{c}'$ before front vowels *i* and *e*. In the ALS, several entries that vary ϕ' and *s* / $\check{s}$ can be shown to be derived from forms which originally feature the sound ϕ' . Cognate forms in *X_Y* give ϕ' in most of these cases. Indicative for the direction of sound change are Maya loanwords that feature ϕ' (Campbell 1972a: 188).

¹²² The Calderón-data from Yupiltepeque exhibit complementary distribution of the graphemes <tz> and <ch>; with <tz> occurring in word-initial position with all vowels but *e*, whereas <ch> occurs in word-initial position only with *e*, *i*, *u* and in syllable-initial position also with *a*.

- (4. 141) a. GTz *paɣ 'tamal' > X_M <patxi> 'to grind' (2843.)
 X_M <paaszi> 'to grind' (2837.)
 b. pM *ty'uy 'bend corn' > X_M <txueguue> 'bend corn' (4656.)
 X_G [ɣiwi] : X_G [suwe] 'to bend corn' (G-JS)
 X_{Ch} <xigüi> 'to bend milpa' (Ch-F)
 c. KCH ɣ'ero 'to twist' > X_M <seLè> 'to twist' (3049.)

Several lexical roots which are attested with both sounds in the ALS may also suggest that deaffrication results from morphological marking (4. 142), although not all examples seem to fit that pattern neatly (see d).

- (4. 142) a. <iguitxi> → <úiszin>
 [ʔiwiɣ'i] [wiši-n]
 'hear' (2399.) 'I heard' (2400.)
 b. <szaguatxa> → <sauszán>
 [šawaɣ'a] [šawša-n]
 'to sow' (3140.) 'he sowed' (3141.)
 c. <txunic> → <szunuum pati>
 [ɣ'unik] [šunu-m pati]
 'bag' (4653.) 'long blanket' (4511.)

There are a few cases where the deaffrication of the medial consonant ɣ' > š seems to coincide with the glottalisation, or at least aspiration, of other velar stops in the stem. It is not clear whether this is a morphophonemic process.

- (4. 143) a. <quixi> → <giszi>
 [kiɣ'i] [k'iši]
 'roast, fry' (3013.) 'roast, fry' (3014.)
 b. <iguitxi> → <uýszieɣi>
 [ʔiwiɣ'i] [ʔuyšik'i]
 'to hear' (2399.) 'to hear' (3487.)

We can identify the process of deaffrication by cross-data comparison. Grapheme <tx> occurs in the ALS with roots that are also attested with *s* or *š* in the more recent data from X_G and X_{Ch}.

- (4. 144) a. <txoco> 'grackle' (4649.) : X_G, X_{Ch}, X_Y [ɣ'oko]
 : X_G, X_{Ch} [soko]
 b. <txáma> 'good' (4637.) : X_G, X_{Ch} [ɣ'ama]
 : X_G, X_{Ch}, X_{Jum} [sama]
 : X_Y [san]
 c. <txuemue> 'to irrigate' (3406.) : X_G [ɣ'imi]
 : X_G [suma]
 : X_{Ch} [sumu]
 d. <txúma> 'to kiss, suck' (3401.) : X_G, X_Y [ɣ'uma]
 : X_{Ch} [suma]

In several other instances, roots that occur with *s* and *š* before high and low vowels in the ALS are attested with ɣ' in X_Y (as well as X_{Ch} and X_G).

- (4. 145) a. X_Y, X_G ɣ'uku : X_M <suckù> (3077.) : X_G, X_{Ch} [suk'u] 'to tie, bind'
 b. X_Y ʔiɣ'api : X_M <iszapi> (2430.) : X_G, X_{Ch} [ʔišapi] 'to leave'
 c. X_Y, X_{Ch} ɣ'arara : X_M <sararà> (4374.) : X_G, X_{Ch}, X_{Jum} [sararaʔ] 'cold'
 d. X_Y, X_{Ch}, X_S ɣ'ama : X_M <sáma> (4372.) : X_G [sama] 'darkness'
 e. X_Y, X_{Ch} ɣ'ima : X_M <suema> (4400.) : X_G, X_{Ch} [sima] 'night'
 : X_S, X_Y [siʔma]

- e. X_G, X_{Ch} č'imi : X_Y, X_{Ch} čimi
 : X_M <śimi> (3055.) : X_G [simi] 'extinguish'

There is one case in the ALS, where <tx> and <s> occur in an identical context; the original form seems to be *č'*.

- (4. 146) <txuguinaqui> : <suguinaqui>
 [ɕ'uwí naki] [suwí naki]
 'chili. chiltepe'(4650.) 'chili. chiltepe' (4396.)

As pointed out above, Campbell and Kaufman have identified a change of $\phi' > \check{c}$ before i and e in X_Y . The ALS does not include any clear examples for ϕ' preceding e . However, examples from the ALS that feature $\langle tx \rangle$ or $\langle s \rangle$ before i can be correlated with cognates in X_Y that have changed the sound to $\check{c}$.

- [illegible]

There are several examples where $\check{s}$ resulting from deaffrication has changed into $\check{c}$ or h in X_Y and X_G , or into r in X_{Ch} .

- (4. 148)
- | | | | |
|----|---|---|---|
| a. | X_M <patxi> (2843.), X_G , X_{Ch} pač'i | : | X_M <paaszi> (2837.) |
| | | : | X_{Ch} <parri> 'millstone' (Ch-F) |
| | | : | X_Y <pachi> 'to grind' (Y-C) |
| b. | X_M <potxa> (2933.), X_G , X_{Ch} poč'a | : | X_M <posza> (2927.) |
| | | : | X_G [poča] 'wash laundry' (G-SH) |
| | | : | X_{Ch} <po'rak> 'wash-place' (Ch-MQb) |
| | | : | X_Y <puja> 'to wash' (Y-C) |
| | | : | X_G [puha] (G-JS) |
| c. | X_M <quitxi> (3013.), X_G kič'e (SH) | : | X_M <eiszi> (3014.) |
| | | : | X_Y <kichi> 'roast, fry' (Y-C) |

Deaffrication can also result in a change of $\phi' > t$. In some cases this change may be triggered by the insertion of a syllable (4. 149a).

- (4. 149) a. X_{Ch} <tzumiki> : X_M <tujámi>
 [ɕʰumi-ki] [tu-ha-mi]
 'spit' (Ch-F) 'spit' (3307.)
- b. X_Y, X_{Ch} <tz'arará> : X_{Ch} <tarara> : X_M, X_G <sarará>
 [ɕʰarara] [tarara?] [sarara?]
 'it is cold' 'it is cold' (Ch-MQ) 'cold' (4374.), (G-SH)

The variation of $t \sim \tilde{s}$ attested in the corpus in a few cases seems to be related to this process of deaffrication of $\mathfrak{c}'$ (4. 150).

- (4. 150) a. X_M <itúL> [ʔitúʔ] 'flea' (3905.) : X_{Ch} <ʔi'sul> [ʔi'suʔ] 'flea' (Ch-MQa)
 b. X_M <túyu> [tuyu] 'to begin' (3368.) : X_M <soyo> [soyo] 'to begin' (3072.)

Campbell identified the affrication of $\check{s} > \phi'$ to be connected to a phonological process in which initial stops become glottalised (1) after insertion of a glottal stop after the following vowel (i.e. CVCV $\sim$ C'VʔCV), or (2) when followed by $-V(n/y/\text{ʔ})$ (see Campbell 1972a:187; 1997:166; see also § 4.4.6 for examples). Thus, ϕ' functions as the glottalised equivalent of the sibilants s and $\check{s}$. This process is attested in the ALS in only a few selected cases and occurs more widely in the

semi-speaker data (see § 4.1.2.2). Example (4. 141) illustrates the opposite case for the ALS, i.e. we find examples where inflection causes a change $\phi' > \dot{s}$.

In accordance with glottalisation rules (see § 4.4.6), s becomes ϕ' in Mayan loans that exhibit glottalisation of a root consonant (see Campbell 1972a:188).

- (4. 151) pM *si:naʔŋ > X_M <txinána> [ɕ'inaʔna] 'scorpion' (4647.)

In Mayan loans, $\dot{s}$ may change into ϕ' (4. 152); $\dot{s}$ is not originally contrastive in Xinkan (Campbell 1972a; see above).

- (4. 152) a. EM *čam 'sour' > X_M <txamʉe> [ɕ'ami] 'sour, acidic thing' (4640.)
 b. CHR *poxč'* 'to wash' > X_M <potxa> [poɕ'a] 'to wash' (2933.)
 c. pCh *č'il 'to toast, fry' > X_M <quitxi> [kiɕ'i] 'to roast, fry' (3013.)

There are two examples in X_{Ch} where t may be replaced with ϕ' . In both cases the ALS gives the cognate with t .

- (4. 153) a. <ckotóro> [k'otóro] 'flying ant' (3749.) : X_{Ch} <cotóro> (Ch-C), <cotzoy> (Ch-P)
 b. <utuymag> [ʔutuɣ-mah] 'tail' (4711.) : X_{Ch} <tumay> (Ch-C), <tzumay> (Ch-F)

Graphemes <tx> and <tz> will be phonemicised as ϕ' . Regular glottalisation of the affricate is assumed in all cases.

4.3.1.3 Nasals

Two nasal phonemes m and n can be identified in Maldonado-Xinka. The author employs the letters <m> and <n> of the Spanish alphabet. Both graphemes can be correlated with nasal allophones in the comparative data.

4.3.1.3.1 Bilabial nasal

Grapheme <m> denotes a bilabial nasal sound that occurs before all six vowels (4. 154), but is attested before mid vowels e and o only in a few entries. The majority of these can be identified as loanwords. The grapheme occurs in consonantal clusters after <c>, <sz>, <g>, <j>, <r>, <L> and <gu>.

Table 4. 13: Distribution of grapheme <m> in the ALS

	<i>	<ue>	<u>	<e>	<o>	<a>
<m>	+	+	+	+	+	+

	m
c_	+
sz_	+
g_	+
j_	+
r_	+
L_	+
gu_	+

(4. 154)	Distributional aspects of <i>m</i> in the ALS			
mi	<miya>	[miya]	'hen' (4080.)	
mi	<mveya>	[miya]	'to help' (2719.)	
mu	<múra>	[mura]	'fresh ear of corn' (4106.)	
me	<meme>	[meme]	'mad, crazy' (4076.) [<i>< KCH me:m "mudo"</i>]	
mo	<móla>	[mola]	'moon' (4085.) [<i>< XNK mu# 'white'?</i>]	
ma	<mácu>	[maku]	'house' (4042.)	

The distribution of *m* in the ALS confirms the assimilation pattern identified in the comparative data: before alveolar stops, *m* may be assimilated to *n*, while *n* preceding bilabial stops may change into *m* (see § 4.1.2.3, § 4.4.4).

(4. 155)	<szampiya>	[šampiya]	/šan piya/	'underneath the leaf = Ixhuatán, Top.' (4441.)

In compounds in which the first element ends in *m*, the bilabial nasal may change into *n*.

(4. 156)	<sven au>	[sin ʔaʔu]	←	[siʔma] + [ʔaʔu]	'black corn' (4403.)

In their field notes, Campbell and Kaufman indicate the glottalised resonant *m'* in intervocalic contexts in X_G. This sound pattern is not represented orthographically in the ALS.

The phonemic interpretation of <m> is straightforward. In contexts where *m* is attested as a phonetic assimilation of *n* the grapheme will be rendered as *n*.

4.3.1.3.2 Alveo-dental nasal

The letter <n> occurs before all vowels, although cases where it is attested with mid vowels are few. In word-initial position *n* is never attested before *o*. There are only a few entries in the ALS and the comparative corpus, where *n* is attested before, and these may be the result of processes of assimilation (4. 157a-b).

Grapheme <n> occurs in word-final and syllable-final position as well as in consonantal clusters following <c>, <s>, <g>, <j>, <r> and <Ł>.

Table 4. 14: Distribution of grapheme <n>

	<i>	<ve>	<u>	<e>	<o>	<a>
<n>	+	+	+	+	s	+

	n
c_	+
s_	+
g_	+
j_	+
r_	+
Ł_	+

(4. 157)	Occurrences of the syllable <ne> in the ALS			
a.	<neŁec>	[neʔek]	'we, 1p' (65.)	< *na-ʔik
b.	<nen>	[nen]	'I, 1s' (56.)	< *na-nin
c.	<netaca>	[netaka]	'to push' (2741.)	
d.	<eneya>	[k'eneya]	'banana, plantain' (3733.)	[< Sp. <i>guineo</i>]
e.	<onè>	[ʔone]	'tender thing' (4193.)	[L-M]

Comparative data indicate that in word-final position *n* becomes *ŋ* (see § 4.4.7). In this process *n* may also be replaced by *m* or by a glottal stop *ʔ*. In the ALS this process is nearly unattested as there is only one occurrence of <m> in final position.

- (4. 158) a. <nen> [nen] (56.) : <nem> [nem] 'ls, pronoun' (62.)
 /nanin/ [naninj] (G-SH)
 b. <uchún> [ʔučun] (4668.) : X_G [uçuŋ] 'papaya' (G-SH)
 X_{Ch} <uuchum> [ʔuçum] (Ch-F)

Another process of assimilation indicated by the comparative data is the change of *n* to *m* before bilabial stops. Although this change is attested in the ALS-data (see above), there are very few examples. In most cases the consonantal cluster <mp> can be shown to be the result of processes of assimilation that cause the insertion of *p* (4. 159). If *m* is followed by *c'* it becomes *n*, and *c'* can be realised as *s* or *š*.

- (4. 159) a. <tampɬxi> [tampɬ'i] /təŋɬ'iki/ ~ /təŋšiki/ 'to twist' (3215.)
 b. <simpóro> [simporo] /sin ʔoro/ 'black-L-S:gold = black corn' (4385.)

Assimilation patterns that were identified in the semi-speaker data do not apply to all attested contexts in the ALS; e.g. Maldonado de Matos gives alveo-dental nasals before the bilabial stop *p*.

- (4. 160) a. <an pùla> [ʔanpula] 'I make' (393.) : /ʔan-pula/ [ʔampula] 'I make' (G-SH)
 b. <an piri> [ʔanpiri] 'I see' (737.) : /ʔan-piri/ [ʔampiri] 'I see' (G-SH)

Campbell and Kaufman indicate the existence of a glottalised alveo-dental nasal *n̥* in intervocalic position. This sound is not graphemically represented in the ALS-data.

In the majority of cases, <n> is rendered as *n*. Instances of phonetic assimilation are taken into account.

4.3.1.4 Fricatives

The sound inventory of the ALS includes alveolar and post-alveolar sibilants and a glottal fricative. The retroflex fricative that is attested in X_{Ch} and with some of the semi-speakers is a rather recent phonetic change. Likewise, the glottal fricative in the recent data is frequently attested as ʕ in cognate forms from the ALS.

4.3.1.4.1 Sibilants

Sibilant sounds are denoted with graphemes <s>, <sz> and <z>. Following Spanish orthographic convention, letters <s> and <z> represent *s*. Maldonado de Matos employs <sz> instead of the La Parra-symbol <x>, which represents the postalveolar fricative *ʃ*. Grapheme <z> is exclusively attested with (mostly Spanish) loanwords that define the sound value of the grapheme as *s*.

Table 4. 15: Distribution of sibilant graphemes

(a) Graphemes in word-initial position:						
	<ɪ>	<ʊe>	<u>	<e>	<o>	<a>
<s>	+	+	+	+	+	+
<z>	+	-	-	+	s	s
<sz>	+	+	+	+	+	+

(b) Graphemes in intervocalic position:

	<i>	<ue>	<u>	<e>	<o>	<a>
<s>	-	+	-	+	(+)	+
<sz>	+	+	+	-	(+)	+

(c) Graphemes in consonantal clusters:

	s	z	sz
c_	+	+	+
ε_	+		
g_			+
n_	+		+
r_			+

The sound inventory of the terminal speakers and the phonological information from the other comparative data coincide in that Xinka contains a voiceless alveolar fricative *s* and a voiceless post-alveolar fricative *ʃ*. Campbell identified complementary distribution for both sounds and defined them as allophonic variants of a single fricative phoneme *s*, with *ʃ* only occurring between high vowels *i* and *u* (Campbell 1972a:187).

Graphemes <s> and <sz> are attested in word-initial position before all vowels.

(4. 161) Distribution of *s* in initial position in the ALS

si	<sími>	[simi]	'extinguish' (3055.)
si	<süema>	[siʔma]	'night' (4400.)
su	<suckù>	[suk'u]	'to tie, fasten' (3077.)
se	<seema>	[se:ma]	'fish' (4380)
so	<soyo>	[soyo]	'to begin' (3072.)
sa	<samu>	[samu]	'to catch, take' (1069.)

(4. 162) Distribution of *ʃ* in initial position in the ALS

ši	<szinác>	[šinak]	'bean' (4472.)
ši	<szüema>	[šima]	'mouse' (4527.)
šu	<szúεa>	[šuka]	'to eat' (3169.)
še	<szeque>	[šeke]	'rib' (326.)
šo	<szoto>	[šoto]	'sherds' (4487.)
ša	<számaliy>	[šamali]	'forehead' (4431.)

The ALS confirms complementary distribution of sibilants in intervocalic position: <s> does not occur between the high vowels *i* and *u* of vowel set 1, while <sz> is not regularly attested before the mid vowels *e* and *o* of vowel set 2 (4. 163).

(4. 163) Intervocalic distribution of *s* in the ALS

isi	-		
isi	<uesueεue>	[ʔisik'i]	'make loose' (3497.)
usu	-		
ese	<gueseque>	[weseke]	'throw away' (2340.)
oso	-		
asa	<maazaa>	[ma:sa:]	'sticky' (4065.)

(4. 164)	Intervocalic distribution of š in the ALS		
iši	<giszi>	[hiši]	'stone' (3828.)
iši	<mʉesza>	[miša]	'to bury' (2707.)
ušu	<nuszucu>	[nušuku]	'smoke sth.' (2761.)
eše	-		
ošo	<pószo>	[pošo]	'partridge' (4326.)
aša	<masza>	[maša]	'mud' (4068.)

Both graphemes occur with the high central vowel *i* which may be seen as an additional argument for the existence of third vowel set (see § 4.4.2). This pattern is confirmed by the data from X_Y and X_{Jut} where *š* does not seem to occur in word-initial position (see Valdez-data, with the exception of example (4. 165a)), or where it is at least not attested word-initially before mid vowels (see Calderón-data).

(4. 165)	a.	<sajac>	(Jut-V)	:	<xajác>	(Y-V)	'tooth'
	b.	<sijmatig>	(Jut-V)	:	<simatij>	(Y-V)	'black'
	c.	<soroni>	(Jut-V)	:	<sorone>	(Y-V)	'boy, youngster'
	d.	<gicshē>	(Jut-V)	:	<ixe>	(Y-V)	'stone'
	e.	<gesalia>	(Jut-V)	:	<usajle>	(Y-V)	'head'

In the semi-speaker data, *s* between high vowels can be identified mostly as an alternation of *š* or *ç'* or as a phonetic feature in loanwords.

(4. 166)	a.	[musi]	'hair' (JS)	:	[mušiʔ]	'hair, bead' (G-JS)	[L-MZ]
	b.	[ʔusu]	'fly' (JS)	:	[ʔušu]	'fly' (G-SH)	[L-MZ]

Although <s> and <sz> are attested in graphemic minimal pairs, comparative data expose these pairs to be invalid sets that do not originally include both sound *s* and *š* (4. 167) or differ in more than one sound (4. 168). There are no cases of undisputed minimal pairs in the comparative data.

(4. 167)	<sáma>	[sama / ç'ama]	'darkness' (4372.)
	<száma>	[šama]	'inside, preposition' (4429.)
(4. 168)	<suema>	[siʔma]	'night, black thing' (4400.)
	<szuema>	[šima]	'mouse' (4527.)

Complementary distribution in medial position and the vague minimal pairs in initial position may suggest that *s* and *š* have to be reconstructed as allophones of a single phoneme /s/ for Maldonado-Xinka. Although there is unrestricted occurrence of both sibilants in initial and intervocalic position before all vowels in the ALS, the vast majority of forms with a sibilant in initial position attest grapheme <sz>, while <s> occurs in comparably few cases in initial position. The predominance of *š* in initial position is confirmed by the comparative data. There is some variation of *s* and *š* in certain contexts, but the semi-speakers show a clear tendency to use the post-alveolar fricative. Of these, some forms can be shown to be derived from roots that are attested with grapheme <sz> in the ALS.

(4. 169)	a.	<sacáya>	'to raise, lift' (3025.)	:	<szacari>	'to scare away' (3092.)
	b.	<saLáca>	'to raise, lift' (3030.)	:	<szal>	'good' (4428.)
	c.	<sipani>	'hell' (4386.)	:	<szipi>	'to hurt by cutting' (3158.)
					cf. L-N: <i>šipewa</i> 'flay, peel, strip' [K-92]	

Grapheme <s> occurs in initial position of loanwords from Mayan (4. 170a-c, f?), Nahuatl (d-f) or Spanish (g-h).

- (4. 170)
- | | | | | |
|----|-------------|------------|---------------------------|--|
| a. | <sicar> | [sikaɾ] | 'tobacco' (4381.) | < L-M: pM *si:k' 'tobacco' [C-72] |
| b. | <suemp> | [sɪmp] | 'tense, tight' (4405.) | < L-M: KAQ šim 'tie up' |
| c. | <surúru> | [sururuʔ] | 'southwind' (4398.) | < L-M: KAQ šururem 'southwind' |
| d. | <siguapati> | [siwapati] | 'cihuapatli' (4383.) | < L-N: siwapahitli 'medicinal plant' [K-92] |
| e. | <sompe> | [sompe] | 'pine nut' (4389.) | < L-N: čompamitl 'coral tree' [K-92] |
| f. | <seLè> | [seʔe] | 'put aside' (3049.) | < L-N: šeloa 'split, cut' [K-92]
< L-M: KCH čero 'tear (cloth)' [CH-99] |
| g. | <salvia> | | 'medicinal plant' (4371.) | < L-S: salvia |
| h. | <selica> | [selika] | 'take communion' (3051.) | < L-S: célico |

A number of lexical entries in the ALS that have <s> in initial position can be correlated with cognate forms in the comparative data that attest either *s* or *č'* in the same context. In most cases *č'* can be identified to result from a process of affrication that turns *s* into *č'* in X_Y and X_{Ch} .

- (4. 171)
- | | | | | |
|----|-----------|-----------|--------------------------|---|
| a. | <siquí> | [sik'i] | 'to start' (3061.) | |
| b. | <siraja> | [siraha] | 'scoff, mock' (3065.) | |
| c. | <sirú> | [siru] | 'to hurry' (3070.) | : X_G [siru] (G-JAP),
X_{Ch} *siru (Ch-F) |
| d. | <suema> | [siʔma] | 'night' (4400.) | : X_{Ch} <tzeuma> (Ch-F),
X_Y <tʔ'üōma> (Y-C) |
| e. | <suckù> | [suk'u] | 'tie, fasten' (3077.) | : X_G [č'uku] (G-RHG),
X_Y <tʔ'ucu> (Y-C) |
| f. | <surumay> | [surumay] | 'type of flower' (4397.) | : X_G [surumay],
X_{Jum} [č'ur'umayʔ] (C&K-FN) |
| g. | <suy> | [suy] | 'turkey' (4399.) | |
| h. | <sema> | [sema] | 'fish' (4380.) | : X_G , X_{Ch} , X_S sema |
| i. | <soyo> | [soyo] | 'to begin' (3072.) | |
| j. | <ságuac> | [sa:wak] | 'iron' (4367.) | : X_G , X_{Ch} , X_Y sawak
< WM *čaw 'hard' [C-71] |
| k. | <samu> | [samu] | 'to catch' (1069.) | : X_G [č'a'muʔ] 'he bit' (G-SH) |
| l. | <sáma> | [sama] | 'dark' (4372.) | : X_{Ch} <tzamá> (Ch-F),
X_Y <tʔ'amá> (Y-C) |
| m. | <sararà> | [sararaʔ] | 'cold' (4374.) | : X_{Ch} <tzarará> (Ch-F),
X_Y <tʔ'arará> (Y-C) |

The variation of *s* and *š* in the ALS and throughout the comparative corpus suggests that both sounds may not be contrastive.¹²³ However, the fact that some lexical roots are exclusively attested with *s* seems to indicate that the sounds are not mutually exchangeable in all roots.

There is some variation of *š* and *s* in some Mayan loanwords that have been borrowed into Xinka changing *č* into *š*. In these cases *s* is clearly derived from an earlier *š* that is attested in most entries in the ALS. There are several loanwords from Mayan and Nahuatl where the original sound of the donor language *š* changed into *s*.

- (4. 172)
- | | | | | | |
|----|---------------------|---|------------------|-----------------|--------------------------|
| a. | POQ *čenaq "frijol" | > | <szinác> [šinak] | 'beans' (4472.) | : [šinak] "bean" (G-Cam) |
| b. | pCh *č'ax "amargo" | > | <szayá> [šaya] | 'sour' (4463.) | |

¹²³ Much of the variation of *s* and *š* in cross-data comparison also has to be accounted for by the fact that the prephonemic data may not be reflecting the phonetic form precisely. Non-distinction of *s* and *š* in the Zeeje-ms. may be interpreted as an under-representation as much as it may indicate that both sounds were not present, or not contrasting in early nineteenth century X_{Ch} .

In X_G and X_{Ch} there is some non-contrastive variation of $\check{s}$ and s in cognate forms that are attested with $\check{s}$ in the ALS (4. 173). Given that the ALS is earlier, we may assume that $\check{s}$ changed into s . However, the Zeeje-manuscript does not distinguish s and $\check{s}$ graphemically. This could be interpreted as an under-representation of sound differences, or may indicate that s and $\check{s}$ were indeed not contrastive in early nineteenth-century X_{Ch} (cf. § 4.1.3.3). This would imply that s is the original sound and that in Maldonado-Xinka s has already changed into $\check{s}$.

- (4. 173) a. <szuyá> 'older brother' (4523.) : X_{Ch} šuya (Ch-F) ~ suya (Ch-S)
 b. <szuema> 'night' (4527.) : X_G šima (G-JAP) ~ suma (G-SH); X_{Ch} suma (Ch-S)
 c. <muszi> 'hair, beard' (4112.) : X_G muši (JS) ~ musi (JS)

Evidence for the direction of change is provided by a regular pattern in which $\check{s}$ before high and low vowels in the ALS is correlated with s in X_Y .

- (4. 174) a. <szal> 'good' (4428.) : X_Y <sal> (Y-C)
 b. <szagú> 'village' (3103.) : X_Y <sagú> (Y-C)
 c. <szápu> 'cotton' (4453.) : X_Y <sápu> (Y-C)
 d. <szuema> 'night' (4527.) : X_Y <suma> (Y-C)
 e. <szúunú> 'deep' (4508.) : X_Y <sunu> (Y-C)
 f. <szuyá> 'older brother' (4523.) : X_Y <suya> (Y-C)
 g. <szurúmu> 'boy, youngster' (4517.) : X_Y <sorone> (Y-C)
 h. <juuszi> 'head' (3994.) : X_Y <husal> (Y-C)
 i. <muszi> 'hair, beard' (4112.) : X_Y <mosal> (Y-V), <musal> (Y-C)

This pattern may be connected to the process of deaffrication $\phi' > s$ that occurs before high and low vowels in the ALS, X_G and X_{Ch} (see § 4.3.1.2.2) and could indicate that there are two dependent processes of sound shift: (1) $\phi' > s$, (2) $s > \check{s}$.

The change from s to $\check{s}$ was identified by Campbell and Kaufman (field notes) to have occurred in X_G , X_{Jum} before all vowels and in X_Y before front vowels i and e . It is not entirely clear whether the following examples that show $\check{s}$ and s in the same contexts before e and o (vowel set 2) may provide support for this analysis (4. 175). In the first case we may not be dealing with cognate forms at all, and in the second example, the referent sound of grapheme <ss>, i.e. $\check{s}$ or s , is not definite.

- (4. 175) a. <guaszaeo> [wašako] 'throw stones' (2313.) : X_M <gueseke> [weseke] 'throw' (2340.)
 b. <szurumo> [šurumu] 'boy, youngster' (2.) : X_{Ch} <ssorone> [sorone] 'young' (Ch-F)

The non-contrastive retroflex sound $\check{r}$ that is attested in the recent data from X_G is not represented in the ALS. The premodern data from X_{Ch} reflect a conditioned change of $\check{s} > r$ in initial and intervocalic position before high and low vowels.

- (4. 176) a. <szína> [šína] 'urine, urinate' (3152.) : X_{Ch} [rina] (Ch-C, Ch-F, Ch-MQ)
 b. <szinác> [šinak] 'beans' (4472.) : X_{Ch} [rinak] (Ch-C, Ch-F, Ch-MQ)
 c. <szuckimał> [šuk'imát] 'charcoal' (4492.) : X_{Ch} [rukimał] (Ch-C, Ch-F, Ch-MQ)
 d. <szeque> [šeke] 'chest' (326.) : X_{Ch} [reke] (Ch-F)
 e. <szeé> [še] 'opossum' (4465.) : X_{Ch} [re] (Ch-P)
 f. <szacatxa> [šakač'a] 'to steal' (3088.) : X_{Ch} [rak'ač'a] (Ch-F, Ch-P)
 g. <szagú> /šawu/ 'sitting, seated' (3103.) : X_{Ch} [rawu] (Ch-C, Ch-F, Ch-P)
 h. <szaczi> [šak-si] 'to bleach' (3097.) : X_{Ch} [rari] (Ch-C)

There are only few cases where this change occurs with mid vowels, and these are mostly loans or forms that originally occur with initial consonant ϕ' . Otherwise entries with mid vowels preserve an alveolar or post-alveolar fricative (4. 177).

- (4. 177) a. <sema> [sema] 'fish' (4380.) : X_{Ch} [sema] (Ch-C, Ch-F)
 b. <szoto> [ʃoto] 'sherd' (4487.) : X_{Ch} [ʃutu] (Ch-F)

The change can also affect consonants in medial (4. 178) or syllable-final position (4.179).

- (4. 178) a. <juuszí> [hu:ʃi] 'head' (3994.) : X_{Ch} [huri] (Ch-C, ChF, Ch-P)
 b. <puveszuec> [pi:ʃik] 'jug' (4363.) : X_{Ch} [pɪri] (Ch-C, Ch-MQ)
 c. <uszúmu> [ʔuʃumu] 'to smell' (3480.) : X_{Ch} [ʔurumu] (Ch-C)
 d. <másza> [maʃa] 'mud' (4068.) : X_{Ch} [mara] (Ch-C, Ch-MQ)
 e. <szuszumí> [ʃuʃumi] 'coati' (4522.) : X_{Ch} [rurumi] (Ch-C, Ch-P)
- (4.179) a. <coszco> [koʃko] 'buzzard' (3750.) : X_{Ch} [kurkur] (Ch-MQ)
 b. <tuwezue> [tiʃki] 'far' (3657.) : X_{Ch} [tɪrka] (Ch-MQ), [turku] (Ch-Z)

The shift $\check{s} > r$ does not occur in forms that show no variation with $\check{s}$ and appear exclusively with s . The initial r is nearly unattested in Schumann's data from X_{Ch}¹²⁴ who indicates all these forms with a retroflex sound. Although the denotation of r in the prephonemic data might be explained as a misinterpretation of the sound $\check{s}$ by the respective authors, it needs to be taken into account that the semi-speakers of X_G also change initial $\check{s}$ into r in some words (see § 4.1.2.4). All occurrences of initial r in X_{Ch} or $\check{s}$ in the terminal data are represented by grapheme <sz> in the ALS (and by <s> in the Zeeje-ms.). This confirms that the change of the postalveolar fricative to a retroflex is rather recent.¹²⁵

Cross-data comparison shows that $\check{s}$ and $\check{r}$ alternate in word-initial and medial position (4. 180). There seems to be no clear pattern of change that would account for the variation of the two sounds. In the first example, the form *ʃamu* or *ʃamuk* refers in X_Y to "fish" and contrasts with the lexeme *sema* in the central Xinka varieties. It is not entirely clear whether *samu* may be the original form and thus a cognate of *sema*. In (4. 180 b-c) $\check{s}$ can be identified as the original sound that occurs in most cognates and has changed into $\check{r}$ in the given examples.

- (4. 180) a. X_Y <samu> [samu] 'fish' (Y-V) : X_M <Lamuc> [ʃamu-k] 'shrimp' (4006.)
 b. X_G [ʃuʃi] 'beard' (G-RHG) : X_M <juLi> [huʃi] 'to shave' (2515.)
 c. X_M <puveszuec> [pi:ʃik] 'jug' (4363.): X_G [pɪʃik] 'gourd' (G-JS)

In X_G and X_{Ch}, there is an unconditioned change from $\check{r}$ to $\check{s}$ in word- and syllable-final position. In all examples given below, $\check{r}$ can be identified as the earlier form.

- (4. 181) a. <yeeʔ> [ʔikaʃ] 'one' (4747.) : X_G ʔikaʃ (G-SH)
 b. <guapáʔ> [wapaʃ] 'seat' (3839.) : X_{Ch} wapaʃ (Ch-JC)
 c. <pagtaan> [pahta:n] 'to pay' (2811.) : X_{Ch} paʃta (Ch-F), (Ch-JC)
 d. <pueʔta> [piʃta] 'arrow' (2988.) : X_{Ch} poʃtak (Ch-F), puʃkak (Ch-F)

The opposite case is also attested. In some forms from X_G, X_{Ch} and X_Y $\check{s}$ changes into $\check{r}$ in syllable-final position as the result of vowel deletion.

¹²⁴ The only form with initial r indicated by Schumann is the article *ra*.

¹²⁵ The occurrence of $\check{s}$ in recent Xinka data may be explained as an influence from Guatemalan Spanish. However, in local Spanish the voiceless retroflex fricative is the result of an unconditioned change from a trill $r > \check{s}$ (see Campbell 1998:19-20), while in Xinka we find a conditioned change $\check{s} > \check{s} > r$.

- (4. 182) a. <iszaca> [ʔiʃaka] 'to drink' (2420.) : X_G ʔeʃka (G-SH), (Y-C)
 b. <guaszaLi> [waʃaʔi] 'to dress' (2319.) : X_{Ch} waʔti- (Ch-MQb)

Distributional analysis and the identified patterns of sound change suggest that in Maldonado-Xinka *s* and *ʃ* are two separate phonemes that are derived from other sounds. The sound changes *ʃ*' > *s* and *s* > *ʃ* before high vowels and *a*, which occurred in the central Xinka varieties but not in X_Y, account for the complementary distribution as well as for sound changes in the corpus. When rendering the graphemes into phonemic spelling, the distinction will be preserved and thus <*s*> will be phonemicised as *s*, and <*sz*> as *ʃ*.

4.3.1.4.2 Glottal fricatives

Comparison of the corpus data shows that the glottal fricative *h* is represented in the ALS with the letters <*j*> and <*g*>. Grapheme <*j*> occurs before dark vowels and <*ue*>; before *i*, the glottal fricative is represented by <*g*>. It needs to be pointed out that <*g*> is also attested before vowels *u*, *o* and *a*, where it denotes [g], which can either be an allophone of *k* or *w*. Neither <*j*> nor <*g*> occur regularly before *e* as confirmed by comparative data. Although there are forms with *h* before *e* attested in the semi-speaker data, in most cases these examples can be shown to be phonetic alternations of root vowel *i*. There are no regular consonant clusters with <*j*>. In the only attested case <*j*> follows <*n*>, i.e. <tenjúsic> [ten hu:ʃik] 'vulture' "quebrantahueso" (4563.).

In the comparative data *h* occurs regularly in word- and syllable-final position where it may alternate with *ʔ* and *ʃ* (see § 4.1.2.4). In the ALS, *h* in final position is represented by <*g*>.

Table 4. 16: Distribution of graphemes representing glottal fricatives

	< <i>i</i> >	< <i>ue</i> >	< <i>u</i> >	< <i>e</i> >	< <i>o</i> >	< <i>a</i> >
< <i>g</i> >	+	-	-	-	-	-
< <i>j</i> >	-	+	+	-	+	+

According to Spanish conventions grapheme <*j*> represents a velar fricative. However, there is no velar fricative in modern Xinkan languages, and cross-data comparison also suggests that the graphemes in the ALS represent glottal, and not velar, fricatives.

- (4. 183) a. <jururú> [hururuʔ] 'hot (climate)' (3987.)
 b. <eLaja> [ʔeʃaha] 'tongue' (356.)
 c. <gini> [hini] 'stomach, belly' (3819.)
 d. <uelveg> [ʔilih] ~ [ʔilig] '*his back' (3937.)

A few lexical entries that have <*j*> in initial position can be shown to have lost the initial glottal fricative *h* in the comparative data (4. 184). In other cases ALS-entries that begin with *ʔV* are attested in other premodern sources with letter <*h*> (4. 185). However, since in some premodern Xinka-orthographies <*h*> denotes a glottal stop, it is not entirely clear in which of these cases an initial *h* actually occurred.

- (4. 184) a. <jugúa> [huwa] 'banana' (3964.) : X_{Ch} <uhua> [ʔuwa] (Ch-C)
 b. <jururú> [hururuʔ] 'heat' (3987.) : X_Y <ururuj> [ʔururuh] (Y-C)
 c. <jászu> [haʃu] 'pig' (3945.) : X_G <áʃu> [ʔaʃu] (G-S)
 : X_{Ch} <na ʔaʃʔu> (Ch-MQb)

- (4. 190) a. X_M <jági> [hahi] 'avocado' (3917.) : X_G, X_{Ch}, X_Y [hayi] (G-JAP), (Ch-MQ), (Y-C)
 X_G, X_{Ch}, X_Y [hahi]
 b. X_M <pági> [pahi] 'to break' (4222.) : X_{Ch} [payi] (Ch-MQb)
 X_{Ch}, X_Y [pahi]
- (4. 191) X_M <ayaŁa> [ʔayaʔa] 'woman' (3661.) : X_{Ch} [ʔahaʔ] (Ch-JC)
 $X_G, X_{Ch}, X_Y, X_{Jum}$ [ʔayaʔ(a)]

In certain contexts, the glottal fricative may change into k' (4. 192). In their field notes, Campbell and Kaufman propose that in X_{Jum} $h' > k'$, whereas in X_G, X_{Ch}, X_Y $h' > h$. The example below may indicate that this process affects X_{Ch} as well.

- (4. 192) <jachue> [hač'i] 'scratch' (2440.) : <cachic> [kači-k] 'scratch, scrape' (Ch-F)

Inconsistencies in the distribution of the graphemes constitute some ambiguity regarding the phonemic interpretation of <h> and <Ł> in the ALS. In all cases the graphemes have been taken as original forms and direct representations of the phonemes h and $ʔ$.

4.3.1.5 Liquids

The sound inventory of Maldonado-Xinka includes laterals and vibrants which are affected by certain processes of change. Xinka distinguishes a voiced lateral and a voiceless lateral-fricative.

4.3.1.5.1 Vibrants

The grapheme <r> occurs in the ALS only in intervocalic position. There are no attested consonant clusters. Based on the comparative data, the sound value of the grapheme is an alveolar trill.

Table 4. 17: Distribution of grapheme <r>

	<i>	<ue>	<u>	<e>	<o>	<a>
<r>	s	s	s	s	s	s

In recent X_{Ch} , r is also regularly attested in word-initial position as a result of a non-phonemic change from $\check{s} > \mathfrak{s} > r$ that occurs only before vowels of sets 1/3, i.e. $i, \acute{i}, u$ and a (4. 193, see also § 4.1.3.5, § 4.3.1.4.1).

- (4. 193) a. X_M <szaŁ> [šaʔ] 'good' (4428.) : X_{Ch} [raʔ]
 b. X_M <sziúc> [šiyuk] 'rattlesnake' (4482.) : X_{Ch} [riyuk]
 c. X_M <szurúc> [šuruk] 'cane, stick' (4514.) : X_{Ch} [ruruk]

In the same data, r also occurs in word-final position, where we can identify it as the result of a change from final $-ʔ$ and $-š$ (4. 194)

- (4. 194) a. X_M <guapaŁ> [wapaʔ] 'bench' (3839.) : X_{Ch} <guapar> [wapar] (Ch-JC)
 b. X_M <cheŁna> [čeʔna] 'disorder' (2194.) : X_{Ch} <chern> [černa] 'loosen' (Ch-F)

There are a few examples of $\check{s}$ and r occurring as cognate sounds in intervocalic position (4. 195). The direction of change is not entirely clear. The data generally suggest a common change from $\check{s}$ to r (see § 4.3.1.4.1), which is also supported by the etymological connection of the verb *hiri* "amolar" being derived from the noun

hiši 'stone (= sharpening tool)'. The example from the ALS may indicate that the shift $\check{s} > r$, which is attested in recent X_{Ch} , may already have been in progress in Maldonado-Xinka.

- (4. 195) a. X_M <giri> [hiri] 'grind' (2288.) : X_M <giszi> [hiši] 'stone' (3828.)
 b. X_Y <irin> [ʔirin] 'grind, sharpen' (Y-C): X_{Ch} <ixic> [ʔišik] 'grind' (Ch-F)
 c. X_{Ch} <urruti> [ʔuruti] 'eyes' (Ch-C) : X_{Ch} <uxuti> [ʔušuti] 'eye' (Ch-C)

Comparison of the ALS with other corpus data and the significant number of cases that attest <r> between high vowel sets i_i and u_u as opposed to <l> (4. 196) suggest the validity of Campbell's rule, i.e. l becomes r between high vowels (1972:188; see § 4.3.1.5.2).

- (4. 196) X_Y <tojłoni> [toʔoni] 'children' (Y-C) : X_M <turi> [turi] 'child' (4620.)

The phonemic representation of <r> is straightforward; the grapheme is rendered as r in all instances. Campbell and Kaufman indicate the occurrence of sound [ɾ] in intervocalic contexts. It is not entirely clear, to what extent the use of <rr> in the prephonemic comparative data sources may represent this sound realisation.

4.3.1.5.2 Laterals

The comparative corpus attests a lateral l and a lateral-fricative $\check{ɬ}$. In the ALS, these sounds are represented by graphemes <l> and <ɭ>. Distribution patterns of <l> and <ɭ> show both graphemes in inconsistent usage (4. 204) as well as in complementary distribution.

Table 4. 18: Distribution of ALS-graphemes representing laterals

	<i>	<ɤe>	<u>	<e>	<o>	<a>
<l>	s	s	+	s	s	s
<ɭ>	+	+	s	+	+	+

	<l>	<ɭ>
<p>_	+	
<c>_		+
<ɛ>_		+
<g>_		+
<j>_		+
<r>_		+
<gu>_		+

Grapheme <l> occurs in several contexts in intervocalic position (4. 200). Most forms with <l> in initial position can be identified as loans.

In contrast, <ɭ> is attested in word-initial position with all vowels but <u> (4. 197). It frequently occurs in word-final position (4. 198). In both contexts, <ɭ> most likely represents the lateral-fricative $\check{ɬ}$ as described by Maldonado de Matos (fol 11v; Sachse 2004:25; see § 4.2).

Lateral graphemes are attested in consonantal clusters: the lateral-fricative <ɭ> may follow <c>, <ɛ>, <g>, <j>, <r> and <gu>; after bilabial stops we find <l>.

- (4. 197) a. <Lica> [ʔik'a] 'to descend' (2595.)
 b. <Luecve> [ʔiki] 'to find' (2621.)
 c. <Luri> [ʔuri] 'rabbit' (4031.)
 d. <Lenga> [ʔenka] 'pataxte cacao' (4023.)
 e. <Locama> [ʔokama] 'to boil water' (2605.)
 f. <Laɛugua> [ʔak'uwa] 'son-in-law' (4005.)
- (4. 198) a. <guapáL> [wapaʔ] 'bench' (3839.)
 b. <uguáL> [ʔuwaʔ] 'ant' (4678.)
 c. <piriiL> [piriʔ] '(the one) who sees, seer' (821.)
- (4. 199) a. <uLú> [ʔuʔu] 'to fall' (3433.)
 b. <maLuec> [maʔik] 'firewood' (4056.)
 c. <peLana> [peʔana] 'to slip' (2849.)

The grapheme <ɭ> is attested between vowels of all vowel sets.

- (4. 200) ala: <ipala> [ʔipala] 'to bath' (2411.)
 ili: <guilica> [wiʔlika] ~ [ʔwiʔli] (SH) 'to strip' (2346.)
 ila: <tila> [tiʔla] (G-SH, RHG) 'salty' (4576.)
 ali: <aliya> [ʔaliya] 'to manifest, show' (2059.)
 uli: <puli> [puli] 'to clean' (2950.)
 ulu: <yúlu> [yulu] 'to smoothen' (3538.)
 ule: <szule> [ʃule] 'little fish' (4500.)
 ula: <pùla> [pula] (G-SH, RHG, JS) 'to make' (391.)
 ila: <juela> [hila] 'to pour from jug' (2548.)
 elo: <peeló> [pe:loʔ] 'to dog' (4273.)
 ele: <péle> [pele] 'young lad' (4272.)
 olo: <tolo> [tolo] ~ [toʔlo] 'yellow' (4591.)
 ola: <móla> [mola] ~ [moʔla] 'moon' (4085.)

In Mayan, Nahuatl and Spanish loanwords *l* is preserved (4. 201); however, in Spanish loans, *l* becomes *ʃ* in final position (see § 4.5.2.3). Occurrences of <ɭ> in initial position can be identified as loanwords – there is one single exception where <ɭ> precedes *u* in a Xinka form in initial position (4. 202).

- (4. 201) a. <tili> /tili/ 'heat, to burn' (4258.) [L-M]
 b. <yúlu> /yulu/ 'to smoothen' (3538.) [L-M]
 c. <alú> [ʔalu] 'macaw' (3608.) [L-M]
 d. <tolo> [tolo] ~ [toʔlo] 'yellow' (4591.) [L-N]
 e. <laúsz> [lawuʃ] 'nail' (4022.) [L-S]
 f. <lagui> [lawi] 'key' (4019.) [L-S]
- (4. 202) <lungú> /lunku/ 'one-handed' (4030.)

Where <ɭ> occurs in intervocalic contexts in the ALS, cognate forms in the comparative data often exhibit the consonantal cluster *ʔl* (4. 203). If not attested by phonetic data, we cannot identify which instances of <ɭ> in medial position represent the consonantal cluster [ʔl] and which represent [l] in a true intervocalic context.

- (4. 203) a. <guilica> 'naked' (2346.) : X_G [ʔwiʔli] (SH)
 b. <tila> 'salty' (4576.) : X_G [tiʔla] (SH, RHG)
 c. <mula> 'palm tree' (4096.) : X_G <múʔla> [muʔla] (G-S)
 d. <tolo> 'yellow' (4591.) : X_G <tóʔlo> [toʔlo] (G-S)
 e. <móla> 'moon' (4085.) : X_{Ch} <moʔla> [moʔla] (Ch-MQb)

Complementary distribution in initial position and no attested cases of minimal pairs suggest that both graphemes represent allophones. This seems to be supported by the fact that we find the graphemes <ɭ> and <ɮ> in medial position in non-contrastive alternation (4. 204a-b).

- (4. 204)
- | | | | |
|----|---------------------|---|--------------------------|
| a. | <uɭú> | : | <uɮú-ya> |
| | [ʔuɭu] | | [ʔuɮuya] |
| | 'to fall' (3433.) | | 'pull down' (3437.) |
| b. | <pueɭtaɭa> | : | <puɭtala> |
| | [piɭta-ɭa] | | [piɭtala] |
| | 'bowman' (4351.) | | 'bowman' (4352.) |
| c. | <acuquiɭa> | : | <acuquilaɭi> |
| | [ʔakuki-ɭa] | | [ʔakuki-la-ɭi] |
| | 'vagabond' (3589.) | | 'vagabonds' (3590.) |
| d. | <acuɭa> | : | <aculaɭi> |
| | [ʔaku-ɭa] | | [ʔaku-la-ɭi] |
| | 'who flees' (3587.) | | 'those who flee' (3588.) |

Several roots that occur with *ɬ* in the ALS are attested with *l* in the comparative material; this regards also forms featuring *ɬ* in initial position (4. 205).

- (4. 205)
- | | | | | | | |
|----|-----------|--------------|------------------|---|---|----------|
| a. | <ɭaarà> | [ɭa:ra] | 'ascend' (2585.) | : | [ɭara] ~ [lara] (G-SH) | 'ascend' |
| b. | <ɭaurúɭa> | [ɭaw(a)ru-a] | 'dancer' (4020.) | : | [la ^h waro] ~ [lawaru] (G-RHG) | 'dance' |

After bilabial stops *ɬ* becomes *l* (4. 206).

- (4. 206)
- | | | | |
|----|----------------------------|---|-------------------|
| a. | <apɭa> | : | <apàla> |
| | [ʔapɭa] | | [ʔapàla] |
| | 'open, imperative' (2071.) | | 'to open' (2067.) |
| b. | <iɭaɭán> | : | <iɭapala> |
| | [ʔiɭaɭan] | | [ʔiɭapala] |
| | 'bath, preterite' (2414.) | | 'to bath' (2411.) |
| c. | <eɭle> | : | <epeɭe> |
| | [ʔeɭle] | | [ʔepeɭe] |
| | 'fear, imperative' (2266.) | | 'to fear' (2236.) |

The occurrence of the *ɬ* in final position is consistent with the phonological process of devoicing final consonants attested in Xinka (Campbell 1979:955; Campbell, Kaufman & Smith-Stark 1986:537). In recent X_G and X_{Ch} , final *-ɬ* can change into *-š* (4. 180). In most of these cases, the ALS has <ɭ>, however, there are exceptions (4. 180c).

The fact that <ɭ> and <ɭ> both occur in the ALS intervocalically between the same vowels may suggest that both laterals are contrastive.

According to Campbell's phonological rule, *l* becomes *r* between high vowels (1972:188). The occurrence of <ɭ> between high vowels of vowel set 1 in the ALS can in some cases be explained by correlation with the sound cluster [ʔl] in the comparative data. There are nonetheless roots where *l* follows high vowels without changing into *r* (4. 197e), but the attested cases of <ɭ> and <ɭ> in the context *i i* or *u u* can be identified as morphological boundaries, representations of [ʔl], loanwords or cases where [ɭ] and [l] alternate.

In the majority of cases, grapheme <ɭ> is attested between high vowels of vowel set 1 (4. 207); laterals surrounded by high central vowels *ɬ* are not affected by this

Etymons that occur in the ALS with the lateral-fricative grapheme <L> in medial or syllable-final position are often attested in the comparative data with the glottal fricative *h*. In the majority of these cases, *ʎ* is the morphologically transparent sound. The change of *ʎ* > *h* is unconditioned and non-contrastive. In the secondary comparative data, the occurrence may also be the result of erroneous differentiation of *h* and *ʎ* by the respective authors.

- (4. 210) a. <aŁmucán> [ʔaʔmukan] 'yesterday' (3611.) : X_G [ʔahmukan] (G-RHG)
 b. <ŭeŁŭec> [ʔiʔik] 'jar, jug' (4732.) : X_Y <jüc> [hik] (Y-C)
 c. <eŁama> [ʔeʔama] 'to lend sb.' (2251.) : X_{Ch} <ha'maʔ> 'he lent' (Ch-MQ)

4.3.1.6 Glides

4.3.1.6.1 Bilabial glides

Bilabial glides are represented by graphemes <gu>, <g>, <ug>, and <u>. According to Maldonado de Matos, the letter combination <gu> is used as an equivalent to the grapheme <v> of the La Parra-standard (fol. 5r-7v) (see §4.2).

Table 4. 19: Distribution of graphemes representing /w/

	<i>	<ŭe>	<u>	<e>	<o>	<a>
<gu>	+	+	s	+	+	+
<g>	+	+	-	-	-	+

	<gu>
<e>	+
<n>	+
<r>	+
<Ł>	+
<gu>	+

Before front and central vowels, <gu> is used to represent *w*.

- (4. 211) a. <guiriei> /wiriki/ 'speak' (2353.)
 b. <guŭenac> /winak/ 'witch' (3888.) : X_G [gunak] (G-SH)
 c. <gŭeŭerŭe> /wiri/ 'to wrap' (2380.)
 d. <guesza> /weša/ 'iguana' (3861.)
 e. <guacász> /wakaš/ 'cow' (3834.)
 f. <guaya> /waya/ 'to weed' (2334.)
 g. <cagui> /kawi/ 'to scream' (2117.) : X_G [k'aʔwi] (G-SH)
 h. <agua> /ʔawa/ 'moon' (3600.) : X_G [ʔaʔwa] (G-JS, G-RHG)

In some examples, *w* is also represented as <g> (e.g. *gona* 'cerros'). Preceding the round back vowels *u* and *o*, the glide *w* is realised as [g]; preceding all other vowels it can optionally be realised as [w] or [ʔw] (Campbell 1972a:187). This distribution applies to the word- and syllable-initial position.

- (4. 212) a. <gona> /wona/ 'hill' (3830.)
 b. <szagú> /šawu/ 'to sit' (3103.) : X_G [šaguya] (G-SH, G-RHG, G-JAP)

In final position *w* is also represented by the graphemes <u> or <ug>, which can be seen as a Spanish spelling convention that does not allow the letters <gu> in final position of the syllable. The few examples of *-w* in final position are mainly the result of irregular deletion of the final vowel, which occurs generally more in the recent data. The graphemic variants may indicate the existence of the voiceless allophone [w̥] that is attested in modern Xinka (Campbell, Kaufman & Smith-Stark 1986:537).

- (4. 213) a. <táu> [taM] 'wind' (4551.)
 b. <szaug> [šaM] 'fingernails' (4459.)
 c. <ckáu> [k'aM] 'to cook' (2129.) : X_G [kagu] (G-SH, G-JAP)

Campbell and Kaufman identify the glottalised glide [w̥] in intervocalic position. The sound is not orthographically distinguished in the ALS. The graphemes that represent bilabial glides are given in the phonemic rendering as *w*; the phonetic differentiation into [w], [w̥] and [g] (before *u*, *o*) will not be indicated.

4.3.1.6.2 Palatal semivowels

The velar semivowel *y* is represented in the ALS by graphemes <y> and <i> with <i> only occurring in word-final position. Phonotactically, *y* occurs in initial, medial and final word position. There is only one consonantal cluster in the source; here <y> follows <gu>.

Table 4. 20: Distribution of grapheme <y> representing *y*

	<i>	<ue>	<u>	<e>	<o>	<a>
<y>	s	+	(+)	+	+	+

Grapheme <y> is attested with all vowels. In intervocalic distribution, the grapheme occurs preceding vowels of vowel set 1/3.

- (4. 214) a. <cayi> [kayi] 'to sell' (2141.)
 b. <sueyue> [siyi] 'to return' (3192.)
 c. <ayú> [ʔayu] 'optative particle' (3671.)
 d. <ayáŁa> [ʔayaŁa] 'woman' (3661.)

In initial position, however, <y> occurs regularly only with vowels *i* and *a* (vowel set 3) (4. 215). All cases where <y> is followed by *u* or mid vowels *e* and *o* can be identified as loans (4. 216).

- (4. 215) a. <yuegua> [yiwa] 'to lose' (3549.)
 b. <yuepue> [yipí] 'to vomit' (3569.)
 c. <yána> [yana] 'to be embarrassed' (3509.)
 d. <yászi> [yaši] 'to extend, spread' (3519.)
- (4. 216) a. <yú> [yu] 'man!, vocative' (4761.) [diffused]
 b. <yúlu> [yulu] 'to smooth (down)' (3538.) [L-M]
 c. <yeeгуášz> [yewaš] 'mare' (4759.) [L-S]
 d. <yoŁana> [yoŁana] 'to fall over precipice' (3529.) [L-M]
 e. <yóŁe> [yoŁe] 'to spill, scatter' (3534.) [L-M]

There are no cases of <y> preceding vowel *i* in word-initial position. The syllable *yi* occurs only in four roots that are all confirmed as Maya loans (4. 217). In only two examples, <y> precedes *u* in initial position – both roots are Mayan loans. The syllable *yu*, however, occurs in second position of Xinka roots.

- (4. 217) a. <cayi> [kayi] 'to sell' (2141.) [L-M]
 b. <muyi> [muyi] 'chicle tree' (4115.) [L-M]
 c. <payi> [payiʔ] 'daughter-in-law' (4267.) [L-M]
 d. <taayi> [ta:yiʔ] 'come, preterite' (3199.) [L-M]

Thus, we can confirm that in word-initial position the palatal semivowel *y* occurs regularly only with vowels of vowel set 3.

In word-final position *y* can be represented by <y> or <i> in the ALS.

- (4. 218) a. <pulài> [pula-y] 'he made' (407.)
 b. <sàmui> [samuy] 'he caught' (1084.)

The phonemic interpretation of <y> as *y* is unambiguous in the majority of contexts. The existence of a glottalised glide [y'] –as indicated by Campbell and Kaufman– cannot be reconfirmed on the basis of the colonial orthography.

4.3.2 Vowel phonemes

The vowel system of Maldonado-Xinka is consistent with the vowels that have been identified in the comparative data. With two front vowels *i* and *e*, two rounded back vowels *o* and *u*, the low vowel *a*, and an unrounded high central vowel *ɨ*, Xinka corresponds to the six vowel system that can be found in many Amerindian languages, e.g. in Mixe-Zoquean (cf. Suárez 1983:33; Adelaar 2004). In the ALS, the high central vowel *ɨ* is clearly contrastive.

Table 4. 21: Vowel phonemes in Maldonado-Xinka

	Front	Central	Back
High	i	ɨ	u
Mediate	e		o
Low		a	

Vowel graphemes occur in initial (4. 219), medial (4. 220) and final position (4. 221) of a word. The comparative data clearly show that in Xinka, vowels in initial position are always preceded by a glottal stop, which is phonemic, as diphthongisation is not a regularly attested feature of Xinka phonology. The ALS-data confirm this analysis.

- (4. 219) Distribution of vowel graphemes in initial position
- | | | | |
|------|----------|----------|------------------------|
| # ʔi | <iszapa> | [ʔiʂapa] | 'to leave' (2425.) |
| # ʔi | <ʊecʌec> | [ʔiʰik] | 'jar, jug' (4732.) |
| # ʔu | <uʌú> | [ʔuʰu] | 'to fall' (3433.) |
| # ʔe | <epeʌe> | [ʔepeʰe] | 'to fear' (2263.) |
| # ʔo | <òne> | [ʔone] | 'tender thing' (4193.) |
| # ʔa | <ayma> | [ʔayma] | 'ear of corn' (3670.) |
- (4. 220) Vowel graphemes in medial position
- | | | | |
|-----|---------|----------|--------------------|
| CiC | <tiɨi> | [ti:k'i] | 'to sleep' (3291.) |
| CiC | <mʊeya> | [mʰya] | 'to help' (2719.) |
| CuC | <pula> | [pula] | 'to make' (391.) |
| CeC | <epeʌe> | [ʔepeʰe] | 'to fear' (2263.) |
| CoC | <tolo> | [tolo] | 'yellow' (4591.) |
| CaC | <mácu> | [maku] | 'house' (4042.) |
- (4. 221) Vowel graphemes in final position
- | | | | |
|------|-----------|----------|-----------------------|
| Ci # | <tiɨi> | [ti:k'i] | 'to sleep' (3291.) |
| Ci # | <ʊelʊeʊe> | [ʔiʰ] | 'back' (4734.) |
| Cu # | <mácu> | [maku] | 'house' (4042.) |
| Ce # | <epeʌe> | [ʔepeʰe] | 'to fear' (2263.) |
| Co # | <tolo> | [tolo] | 'yellow' (4591.) |
| Ca # | <ayma> | [ʔayma] | 'ear of corn' (3670.) |

Vowel length, stress and the insertion of a glottal stop can be represented by double graphemes and accent signs, although Maldonado de Matos does not show consistency in the usage of these graphemic devices.

- (4. 222) a. <piriicà mà> [piri:-ka ma] 'you would have seen' (795.)
 b. <pirií pataguaag> [piri: patawa:h] 'to have been seen' (896.)
 c. <pirij> [piri:] 'look!' (778.)

We do not find many cases of vowel change in the ALS. The comparison with the primary and secondary data, however, reveals numerous deviations of vowel values within the same etymon. In the semi-speaker data, non-contrastive changes of vowels are frequent. Vowel change can be conditioned. In some cases change results in disharmonic vowel patterns (cf. § 4.4.2). Mid vowels (vowel set 2) predominantly change into high vowels (vowel set 1), i.e. *o* becomes *u* and *e* becomes *i*. The opposite change, i.e. from high to mid vowels, is less frequent. The patterns of change show that vowel set 1 is more central than the other harmonic sets.

Table 4. 22: Patterns of vowel change in the ALS

ALS	initial position	medial position	final position
i >	e	e	i, e, a
i >	i, u	u	i, a
u >	i, o	i, i, e, (o)	o
e ~	i	i	-
o >	u	u, (e)	-
a >	e, i, (o)	i, i, e, o, u	i, u

Vowel *i* may change into *e* in initial, medial and final position; i.e. $X_M i$ corresponds with $X_G, X_{Ch}, X_Y e$.

- (4. 223) a. <iszaca> [ʔiʂak^(h)a] 'to drink' (2420.) : X_G, X_Y [ʔeʰka] (G-SH), (Y-C)
 b. <imá> [ʔima] 'say, tell' (2406.) : X_G [ʔema] (G-JS)
 c. <aLi> [ʔaʔi] 'by, through' (3606.) : X_G [ʔaʔe] (G-SH, G-JAP)
 d. <acuqui> [ʔakuki] 'go, pass by' (2055.) : X_G, X_{Ch} [ʔakuke] (G-SH), (Ch-S)
 e. <eiriguapatxi> [k(ʰ)iriwa] 'corn gruel' (3737.) : X_{Ch} [herewe] (Ch-JC)

In a few cases, *i* in final position may change into *ɨ* or *a* in other sources; i.e. $X_M i$ corresponds with $X_G \text{ɨ}$ or $X_G, X_{Ch} a$.

- (4. 224) a. <tiszi> [tiʂi] 'lazy person' (4586.) : X_G [tiʂɨ] (G-S)
 b. <iguitxi> [ʔiwiɕ'i] 'to hear' (2399.) : X_G [ʔowiʂa] (G-SH)
 c. <eigui> [k(ʰ)iwi] '(court)yard' (3734.) : X_{Ch} <kigua> [kiwa] (Ch-P)

Loss of *i* in final position is widely attested.

- (4. 225) a. <ambuqui> /ʔampuki/ 'snake' (3630.) : X_{Ch} [ʔampuk_] (Ch-F), (Ch-MQa)
 b. <maLi> [maʔi] 'ash' (4054.) : X_G, X_Y [maʔ_] (G-MA), (Y-C)

Vowel *u* may change into *i* in initial position (4. 226a) and into *i* or *ɨ* in medial position; i.e. $X_M u$ corresponds with $X_M, X_{Ch} i$ or $X_G, X_Y \text{ɨ}$ (4. 226b-d).

- (4. 226) a. <uguál> [ʔuwaʔ] 'ant' (4678.) : X_{Ch} [ʔiwaʔ]
 b. <putxu> [puɕ'u] 'to milk' (2978.) : X_M <pitxu> [piɕ'u] 'squeeze' (2884.)
 c. <juuszi> [hu:ʂi] 'head' (3994.) : X_Y [hiʂal] (Y-C)
 d. <tumu> [tumu] 'finish' (3319.) : X_G [tiʂka] (G-S)

There is only one attested case where *u* can alternate with *o* in medial position – and this is a Maya loan where the same variation is attested (i.e. pM **yul* ~ **yol* 'smooth' [K-03]; see Appendix 5.A).

- (4. 227) X_M <yúlu> [yulu] 'to smooth (down)' (3538.) : X_G [yololo?] 'smooth' (G-SH)

The high vowel *u* can change into *o* in initial and final position. However, these changes do not occur often. The change of *u* to *i* or *e* in final position is likewise rare.

- (4. 228) a. X_M <urɛu> [ʔurk'u] 'to drink' (3460.) : X_G [ʔorto-] (G-JAP)
 b. X_M <jászu> [haʃu] 'pig' (3945.) : X_{Ch}, X_S [haʃo] (Ch-P), (S-Gav)
 c. X_M <szaru> [ʃaru] 'sea, ocean' (4446.) : X_G, X_{Ch} [ʃaro] (G-S), (Ch-Z)

The high central vowel *ɨ* is rather unstable and frequently changes into *i* in initial and final position (4. 229), into *u* in initial and medial position (4. 230) or into *o* in all three positions (4. 231).

- (4. 229) a. <uesza> [ʔʃa] 'illness' (4743.) : X_G, X_{Ch} [ʔiʃa?] 'hurt'
 b. <uesueue> [ʔʃik'i] 'make loose' (3497.) : X_{Ch}, X_Y [ʔiʃk'i] 'raise'
 c. <chuerueue> [čirik'i] 'small' (3697.) : X_{Ch} [ʔiʃti] 'make loose'
 d. <aszue> [ʔah'i] 'this one' (3659.) : X_G, X_{Ch} [čiriki] 'small'
 e. <aszue> [ʔah'i] 'this one' (3659.) : X_M <agi> [ʔahi] (1893.)
- (4. 230) a. <uemuemi> [ʔimim'i] 'to smell' (4736.) : X_G, X_{Ch} [ʔumumu]
 b. <uelueue> [ʔim'i] 'behind' (4734.) : X_{Ch} [ʔuluk]
 c. <juenue> [hin'i] 'to know' (2558.) : X_Y [ʔutuy]
 d. <uegua> [kwa] 'to lend, loan' (2225.) : X_{Ch}, X_Y [hunu]
 e. <chuerueue> [čirik'i] 'small' (3697.) : X_G, X_{Ch}, X_Y [kuwa]
 f. <mueya> [miya] 'to help' (2719.) : X_{Ch} [čuruku]
 g. <nuema> [nima] 'to eat' (2767.) : X_G, X_{Ch}, X_Y [muya]
 h. <nuema> [nima] 'to eat' (2767.) : X_G, X_{Ch}, X_Y [numa]
- (4. 231) a. <ueptxué> [ʔpʃi] 'grown, ripe' (4740.) : X_{Ch} [ʔopɕi] 'ripe' (Ch-S)
 b. <juecka> [hik'a] 'to weave' (2542.) : X_{Ch} [hoka] 'to weave' (Ch-F)
 c. <ckuenueei> [k'ini-k'i] 'happiness' (3784.) : X_{Ch} [kono-ki] 'be happy' (Ch-F)
 d. <puemie> [pimi] 'mute' (4357.) : X_{Ch} [pumo] 'the mute one' (Ch-JC)
- (4. 232) X_M <tuemue> [tim'i] 'to dye, colour' (3378.) → X_M <tueuemaL> [tima-t] '(*dye =) louse' (4632.)

Vowel *e* can be correlated with cognate sound *i* in the comparative sources. The earlier forms in the ALS and the Zeeje-ms. often feature *e* where comparative data from X_Y indicate *i*; the direction of this change is not in all cases clear.

- (4. 233) a. <szeque> [ʃeke] 'chest' (326.) : X_S [sikim] 'chest' (S-Gav)
 b. <nen> [nen] 'I, 1s' (56.) : X_G [nin] (G-SH)
 c. <eLa> [ʔeʔa] 'new, fresh' (3801.) : X_Y [ʔiʔa] 'fresh' (Y-C)

Vowel *o* may change into *u* in initial and medial position (4. 234). This change occurs mostly in X_Y but is also attested in other varieties. In final position, *o* usually does not change; however, there are exceptions (a).

- (4. 234) a. <orómo> [ʔoromo] 'collect' (2778.) : X_Y [ʔurumu] (Y-C)
 b. <ootéc> [ʔo:tek] 'bed' (4204.) : X_Y, X_{Jut} [ʔaʔ-ʔutu] (Y-C), (Y-V)
 c. <potxa> [poɕ'a] 'wash' (2933.) : X_G, X_Y [puha] (G-JS), (Y-C)

The opposite case is also attested: the root vowel *u* in Maldonado-Xinka can be correlated with cognate vowel *o* in X_Y (4. 235). In the given example the change in the vowel conditions a change of C_2 , as *ʃ* becomes *r* between high vowels.

- (4. 235) a. X_M <turi> [turi] 'child' (4620.) : X_Y <tójlóni> [toʃóni] 'child' (Y-C)
 b. X_M <apuj> [ʔapuh] 'eight' (Y-V) : X_{Jut} <apocar> [ʔapokar] 'eight' (Jut-V)

There are very few cases where *o* changes into *e* in medial position; the majority of these examples are attested in X_{Ch} .

- (4. 236) a. X_M <chooēc> [čok'ek] 'chocolate beater' (3694.) : X_G [čeyk'uki] 'to pound' (G-SH)
 b. X_{Ch} <choro> [čoro] 'wrinkel, crease' (Ch-F) : X_{Ch} [čerwo] 'wrinkle' (Ch-F)

In medial position, vowel *a* can change into any other vowel (4. 239). Whereas the other changes are attested in all regional varieties, the shift from *a* to *u* seems to occur mostly in X_Y (4. 238). It is noteworthy that the definite determiner *nu* is only attested in the Zeeje-ms. and not in the more recent data from X_{Ch} .

- (4. 237) a. <guaszaeo> [wašaku] 'throw' (2313.) : X_M <gueseque> [wešeke] 'discard' (2340.)
 b. <szandaa> /šanta/ 'why?' (4434.) : X_Y <xinti> [šinti] 'why?' (Y-C)
 c. <jarána> [haraʔna] 'ill' (3931.) : X_G [horana] 'sick, ill' (G-JS)
 d. <pági> [pahi] 'ravine' (4222.) : X_{Ch} [pohoro] 'to open' (Ch-F)
- (4. 238) a. <acaní> [ʔakani] 'so, like' (3582.) : X_{Ch} <acuní> [ʔakuni] (Ch-Z)
 b. <aratac> [ʔaratak] 'maguey' (3648.) : X_Y <üruta> [ʔiruta] (Y-C)
 c. <mán> [man] 'that, dem.' (4058.): X_Y <mun> [mun] (Y-C)
 d. <ná> [na] 'the, det.' (4133.) : X_Y , X_{Ch} <nu> [nu] (Ch-Z), (Y-C)

In initial position, *a* can become *ə*, *e* or *o* (4. 239). There are no cases where initial *a* changes into *i* or *u*. The only exception is the cross-referencing prefix of the first person singular that is attested with vowel *i* in X_G , X_{Ch} and X_Y and with *u* in X_{Ch} and X_Y (4. 240).

- (4. 239) a. <ayma> [ʔayma] 'ear of corn' (3670.) : X_G , X_{Ch} , X_Y [ʔeyma] (G-SH), (Ch-C), (Y-C)
 b. <aratac> [ʔarata] 'maguey' (3648.) : X_Y <üruta> [ʔiruta] (Y-C)
 c. <acú> [ʔaku] 'go, walk' (2050.) : X_G , X_{Ch} [ʔoku] (G-JS), (Ch-F)
- (4. 240) X_M <an> [ʔan-] 'I, 1s' : X_G ʔan-, ʔən-, ʔin-, n-
 : X_{Ch} ʔan-, ʔen-, ʔin-, ʔun-, ʔən-, n-
 : X_Y 'n-, ʔan-, ʔin-, ʔun-

In final position, *a* can change into *i*, *ɨ*, *e* and *o* (4. 241). It is not entirely clear whether the sound change in the first example is morphological rather than phonetic, since there is no other comparable process for the derivation of nouns from verbs other than the process of conversion (§ 11.1.2.4), which would not affect the phonetic realisation of the word.

- (4. 241) a. <packa> [pak'a] 'to nail' (2801.) : X_M <packi> [pak'i] 'wall' (4217.)
 b. <ɛiriguapatxi> [k'(i)iriwa] 'corn gruel' (3737.) : X_{Ch} [herewe] (Ch-JC)
 c. <ɛʊesza> [k'iša] 'bat' (3796.) : X_G , X_{Ch} [k'išɨ] (G-S), (Ch-F)
 d. <ɟʊeckə> [hik'a] 'to weave' (2542.) : X_{Ch} <jocöc> [hoko-k] 'mend' (Ch-F)

There are also cases where *a* in final position is lost (4. 242). This change can occur in the comparative data, with *a* still being attested in the ALS (a); likewise the ALS includes forms which have lost final *a* (b).

(4. 242)	a.	X _M	<ayaŁa> [ʔayaʔa] 'woman' (3661.)	:	X _{Ch} , X _Y , X _{Jum}	<ayal> [ʔayaʔ_] 'woman' (Ch-F) (Y-C), (Jum-E)
	b.	X _M	<muŁ> [muʔ_] 'white' (4094.)	:	X _{Ch}	<mula> [muʔa] 'white' (Ch-C)

4.4 Phonological and morphophonological processes

Phonological processes can be distinguished into processes that occur independently of morphological marking and morphophonemic processes, i.e. the phonetic realisation of a specific morpheme in different phonetic environments (see Brown & Miller 1996:409).

In this section we will reconstruct the phonological and phonotactic rules of Maldonado-Xinka, considering the patterns and rules that were defined by Campbell and Kaufman (Campbell 1972a:187; Kaufman 1977:72; Campbell, Kaufman & Smith-Stark 1986:537-544; as well as Campbell & Kaufman: field notes). In the preceding analysis of orthographic conventions we have used some of the here identified phonological rules as evidence for the reconstruction of the phonemic inventory. However, inconsistent orthography in the ALS and comparative data still provides an obstacle for the derivation of morphophonemic processes (cf. Dürr 1987:48).

4.4.1 Syllable structure and phonotactics

The basic syllable structure in Xinka is CV(C); initial vowels are always preceded by a glottal stop. The syllable structure CVC occurs regularly only as the result of morphological marking or vowel deletion. Words do not usually consist of more than four syllables; there are, however, a few exceptions. All four syllable patterns are attested in the ALS with lexical and grammatical morphemes. Table 4.23 illustrates the basic combinations; patterns of morphologically more complex forms and compounds are not listed.

Vowels do not appear in syllable-initial position. Diphthongisation or vowel assimilation are unattested and vowel clusters only occur in Spanish forms; e.g. <merio> "medio real" (4078.). There are only a few cases of vowel grapheme-clusters in Xinka forms – all of these cases can be identified in the comparative data as instances where vowels are separated by a glottal stop; e.g. <jonó.a> "cuidar" (2501.). All other cases of apparent vocalic assimilation can be identified as regular processes of vowel deletion resulting from grammatical change (see § 4.4.3.1).

Table 4. 23 Phonotactic patterns in the ALS

SYLLABLE PATTERN	EXAMPLE		GLOSS
CV	cà	[ka-]	2. person singular
CV	a	[ʔa]	3. person singular
CV.CV	pa.ri	[paɾi]	'day, sun, heat'
CV.CV	a.cú	[ʔaku]	'go'
CV.CV	a.ù	[ʔaʔu]	'corn, maize'
CV.CV.CV	εa.ta.Łá	[k'ataʔa]	'lie down (preterite)'
CV.CV.CV	a.cù.ya	[ʔakuya]	'go! (imperative)'
CV.CV.CV.CV	ja.ma.guá.Ła	[hamawaʔa]	'sinner'
CV.CV.CV.CV.CV	aŁ.pa.ra.qui.guà	[aʔparakiwa]	'by, because'
CV.CV.CVC	a.li.yan	[ʔaliyan]	'manifest (preterite)'
CV.CVC	szuu.núc	[ʃu:nuk]	'navel'
CV.CVC	tá.uc	[taʔuk]	'tortoise'
CV.CVC	a.ràn	[ʔaran]	'send (preterite)'
CV.CVC.CV	ni.guaan.szaa	[niwanʃa]	'want (preterite)'
CV.CVC.CV	i.εal.qui	[ʔikalki]	'one alone'
CV.CVC.CVC	mÙe.taŁ.ckin	[mitaʔk'in]	'dream (preterite)'
CVC	ckáu	[kaw]	'cook food'
CVC.CV	nag.qui	[nahki]	'he is'
CVC.CV	ckir.gui	[k'irwi]	'choose'
CVC.CV	ap.la	[ʔapla]	'open! (imperative)'
CVC.CV.CV	ap.lá.qui	[ʔaplaki]	'open (<i>supino</i>)'
CVC.CV.CV.CV	εUer.sza.εi.Ła	[k'irʃakiʔa]	'the one who combs hair'
CVC.CVC	ckir.guín	[k'irwin]	'chose (preterite)'
CVC.CVC	et.cán	[ʔetkan]	'harvest (preterite)'
CVC.CVC.CV	tiy.εiε.Ła	[ti:k'ik'ʔa]	'the one who sleeps (a lot)'

4.4.1.1 Initial consonants

Consonants primarily occupy word and syllable-initial positions. Table 4. 24 lists the reconstructed distribution of consonants that are attested in initial position – consonants that never occur in word-initial position are marked as "s", while "+" denotes all those that occur without restriction in word and syllable-initial position. If there are less than three occurrences of a syllable in the corpus, the distribution is indicated in brackets. The chart shows the distribution of syllable patterns only with regard to vowel quality, vowel length is not considered because of there is a lot of inconsistency in the ALS in this respect. The chart indicates sounds, not phonemes.

The consonant graphemes <p>, <t>, <ε>, <s>, <sz>, <m> are attested with all vowels in word-initial position, while the occurrence of <ck>, <ch>, <n>, <Ł>, <gu>, <y> is restricted. Graphemes , <d>, <c>, <qu>, <h>, <tx>, <z>, <g>, <j> precede only specific vowel phonemes and <l>, <r> only occur in medial position. Graphemes <c>/<qu> and <g>/<j> are attested in complementary distribution as allographs according to Spanish orthographic convention. Graphemes <tx> and <h> do not occur with vowels of vowel set 2 (see § 4.4.2). Grapheme <z> only occurs with loanwords, and graphemes and <d> are attested as allographs of the phonemes *p* and *t* with occurring only in syllable-initial position before vowel graphemes <Ue>, <u> and <e>, and <d> before back and low vowels <u>, <o>, <a>, but never with front vowels <i>, <Ue> and <e>.

Table 4. 24: Initial consonants in the ALS

	[i]	[i̥]	[u]	[e]	[o]	[a]
[p]	+	+	+	+	+	+
[b]	-	s	s	s	-	-
[t]	+	+	+	+	+	+
[d]	-	-	s	-	s	s
[k]	+	+	+	+	+	+
[g]	-	-	+	-	+	s
[kʰ]	+	+	+	+	+	+
[ʔ]	+	+	+	+	+	+
[çʰ]	+	+	+	(+)	(+)	+
[č]	+	+	(+)	+	+	+
[s]	+	+	+	+	+	+
[š]	+	+	+	(+)	+	+
[h]	+	+	+	-	+	+
[m]	+	+	+	(+)	(+)	+
[n]	+	+	+	(+)	s	+
[l]	s	s	s	s	s	s
[ɭ]	+	+	(+)	(+)	(+)	+
[r]	s	s	s	s	s	s
[w]	+	+	s	+	+	+
[y]	s	+	+	(+)	(+)	+

From the graphemic distribution and the comparative data we may derive phonotactic laws for Maldonado-Xinka. The consonants *p*, *t*, *k*, *k'*, *ʔ*, *č*, *s*, and *š* occur without any restriction before all six vowels in word-initial and medial position. Lateral *l* and vibrant *r* occur with all vowels, but only in medial position. The voiced stops *b*, *d* and *g* are only attested in medial position and with specific vowels. When attested in initial position, [g] is an allophone of *w* preceding *u* and *o*. The sounds *ç'*, *m*, *n*, *ɬ* and *y* precede vowels of set 2, *e* and *o*, only in a few cases; *h* and *y* occur with all vowels but not regularly with *e*. The velar glide *y* occurs furthermore with *o* only in two cases and these seem to be loans from Mayan – an additional example is provided by Campbell and Kaufman (see field notes). The alveo-dental nasal *n* never precedes vowel *o* in word-initial position. The occurrence with following *e* is limited to a few cases; however, these are rather prominent pronouns or relational nouns, i.e. *nen* "ego (1s)" (56.), *neɬek* "nos (1p)" (65.); *neɬa* "de; particula nominal (relative noun, possessive)" (4169.).

4.4.1.2 Final consonants

The graphemes <p>, <t>, <c>, <ɛ>, <s>, <sz>, <g>, <j>, <m>, <n>, <r>, <ɭ>, <gu> and <y> occur in word- and syllable-final position. Only <p>, <t>, <s>, <sz> and <r> are attested in syllable-final position as the result of vowel deletion on past/perfective verb forms (see following section). Graphemes <ck>, <tz>, <j>, <m> and <l> occupy the final position only in singular cases.

Table 4. 25: Final consonants in the ALS

<c>, <ε>	<g>	<n>	<l>	<gu>, <ug>	<y>
/-k/	/-h/	/-n/	/-t/ > [-h]	/-w/	/-y/

The graphemes that occur regularly in word-final position are <l>, <y>, <n>, <c>, <ε>, <g> and <gu> or <ug>. For modern Xinka, Campbell (1972a:187) identified the phonemes *-t*, *-y*, *-n*, *-k* and *-ʔ* as regular final consonants; most of these are bound morphemes.

The consonants *y* and *k* occur in final position as part of the root or in the function of morphemes: *-y* e.g. as the cross-referencing suffix of the third person (4. 243) and *-k* as the instrumental marker (4. 244).

- (4. 243) a. <pulāi> [pula-y] 'he made' (407.)
 b. <pè ayacà ay> [pe ʔaya-kaʔ ʔay] 'you (pl.) will be (in a place)' (1910.)
- (4. 244) a. <peeguec> [pe:ʔwek] 'gourd' (4271.)
 b. <szúnic> [ʃunik] 'pot' (4507.)

The graphemes <gu> and <ug> represent the phoneme *w* in final position (4. 245). While <gu> may still be interpreted phonetically as [gu], the inversed grapheme <ug> indicates the presence of a final devoiced glide [ɰ] that is corroborated by the comparative data.

- (4. 245) a. <táu> [taɰ] 'wind' (4551.)
 b. <szaug> [ʃaɰ] 'fingernail' (4459.)

In the more recent data from *X_G* *-h* is attested in word-final position. Many occurrences of final *-h* in *X_G* are cognate forms of final <l> in the ALS (4. 246). The change from *t* to *h* is attested throughout the corpus (see § 4.3.1.5.2). For Maldonado-Xinka, we may therefore prefer to reconstruct *-t* to occur regularly in final position.

- (4. 246) a. <guapaL> [wapaʔ] ~ [wapah] 'seat' (3839.)
 b. <yguaL> [ʔiwaʔ] 'how much/many?, interrogative' (4749.)

On the other hand, there are a few cases in the ALS that show grapheme <g> in final position (4. 247). Comparative data confirm that the represented sound is the glottal fricative *-h*, which can be identified in the contexts given below as a cross-referencing suffix marking the third person.

- (4. 247) a. <muti-ig> [muti:-h] 'his hair' (367.)
 b. <nag eiguag> [na-h kiwa-h] 'he himself' (174.)

In the ALS, the glottal stop in final position is represented either with an accent on the final vowel or remains graphemically unmarked. Its presence is verified by comparison with other corpus data.

- (4. 248) a. <Oerrá> [ʔiraʔ] 'big thing' (4272.)
 b. <pulā> [pula-ʔ] 'make!; imperative' (475.)

Final consonants in Xinka have been described as devoiced or aspirated (see Campbell 1979:955; Campbell, Kaufman & Smith-Stark 1986:537, 544). In this process *n* becomes [ɲ] in the semi-speaker data (see § 4.1.2.3, § 4.4.7); the change is not represented in the ALS. In composite forms the preceding adjectives may delete

Medial clusters which are not the result of vowel deletion in past verbs or which include a consonant that is not regularly attested in Xinka are likely to be loanwords (4. 255). Such loans are often assimilated to the pattern CVCV.

- (4. 255)
- | | | | |
|----|---------------|-------------|---|
| a. | <cachatché> | [kačatčé] | '?, some expression' (3690.) |
| b. | <cosme> | [k'osme] | 'water hyacinth' (3748.) |
| c. | <murchaguiya> | [murčawiya] | 'yellow cotton' (4107.) |
| d. | <mistún> | [mistun] | 'cat' (4083.) <L-N: <i>mistontli</i> 'feline (dim.)' [K-92] |

Some consonant clusters are the result assimilation, such as the rule that stops are voiced after nasals (4. 256). In this context, *n* preceding bilabial stops is assimilated to [m], and *m* preceding dental stops is assimilated to [n]. There are two examples of phonetic assimilation in the ALS where <p> is inserted between <m> and <tx> or <s>.

- (4. 256)
- | | | | |
|----|---------------|-------------|--------------------------------|
| a. | <ambuqui> | [ʔambuki] | 'snake' (3630.) |
| b. | <tondón> | [tondon] | 'sea turtle' (4596.) |
| c. | <tamptxi> | [tampɕ'i] | 'to twist' (3215.) |
| d. | <sũemp sũemp> | /sĩmp sĩmp/ | 'tense, tight (thing)' (4405.) |

The following consonants are attested in syllable-final position after vowel deletion in regular verb forms and loans as well as compounds: *-p*, *-t*, *-k*, *-k'*, *-s*, *-š*, *-h*, *-m*, *-n*, *-r*, *-ʈ*, *-w*, and *-v*.

Table 4. 26 includes only actually occurring combinations of consonantal clusters.

Table 4. 26: Consonant clusters resulting from vowel deletion in the ALS

[illegible]

4.4.2 Vowel harmony

Within the root or morpheme, vowels occur only in certain sets.¹²⁸ Campbell (cf. 1972:187, 1997:166) defined two vowel sets: a set of high vowels *i*, *ɨ* and *u*, and a set of mid vowel *e* and *o*. Vowel *a* is neutral and can occur in either of these sets. In his earlier study from 1972, Campbell had distinguished the set of high vowel into two groups and defined roots occurring with vowel *ɨ* to belong to a separate vowel set 3 (1972:187).

Table 4. 27: Patterns of vowel harmony in the ALS

	Vowels	Graphemes
Set 1	<i>i</i> – <i>u</i> – <i>a</i>	< <i>i</i> >/< <i>y</i> > – < <i>u</i> > – < <i>a</i> >
Set 2	<i>e</i> – <i>o</i> – <i>a</i>	< <i>e</i> > – < <i>o</i> > – < <i>a</i> >
Set 3	<i>ɨ</i> – <i>a</i>	< <i>ue</i> > – < <i>a</i> >

In the ALS, vowel graphemes occur mostly in the three sets that have been defined by Campbell in his earlier studies (1971, 1972), i.e. vowel set 1 *i*, *u* and *a* (4. 257), set 2 *e*, *o* and *a* (4. 258) and set 3 *ɨ* and *a* (4. 259).

- (4. 257) a. <mácu> [maku] 'house' (4042.)
 b. <pari> [pari] 'day' (4255.)
 c. <guitxu> [wiç'u] 'beat, hit' (2370.)
 d. <tiçí> [ti:k'i] 'sleep' (3291.)
 e. <túmu> [tumu] 'to end, finish' (3319.)
- (4. 258) a. <teerô> [te:roʔ] 'to die' (3283.)
 b. <tolo> [tolo] 'white' (4591.)
 c. <ootéc> [ʔo:tek] 'bed' (4204.)
 d. <eLaja> [ʔeʔaha] 'tongue' (356.)
- (4. 259) a. <szuema> [ʃima] 'mouse' (4527.)
 b. <Lueguue> [ʔiwɨ] 'squash' (4036.)

Although there are examples of regular co-occurrence of all high vowels within one root in the ALS-data, most cases where the high central vowel *ɨ* occurs in the same root with vowels of set 1 can be identified on the basis of comparative data as unconditioned changes of *ɨ* to *i*, *u* or *a*.

- (4. 260) a. <uemuemi> [ʔimimi] 'smelly' (4736.) : X_G <imimi> [ʔimimi] 'smell' (G-S)
 b. <Luecu> [ʔiku] 'when?' (4034.) : X_G <likk> [ʔikk] 'when' (G-S)

While cross-data comparison shows co-occurrence of high vowels to be frequent, in the ALS vowel *ɨ* mostly occurs with *a*. Thus, we may postulate three vowel sets for Maldonado-Xinka. However, it needs to be taken into account that there are frequent vowel disharmonies in the semi-speaker data and that the majority of

¹²⁸ Vowel harmony is a phonological trait that has also been identified in Lenkan. Campbell, Kaufman & Smith-Stark understand vowel harmony in Xinka to be a result of areal diffusion rather than genetic inheritance (1986:543). The pattern was first described by Campbell (1971, 1972) and has recently been further analysed by Chris Rogers in a paper on the theoretical significance of Xinkan, presented at the 'Endangered Languages Information and Infrastructure Workshop' at the University of Utah on 12 November 2009. Rogers indicates that besides vowel height, Xinka vowel harmony is based on a distinction of peripheral and non-peripheral vowels.

premodern comparative sources do not represent *ʃ* at all, and if, then rather inconsistently.

Most morphophonemic processes that are conditioned by vowel harmony only distinguish between high and mid vowels. For example, the change from *ʃ* to *r* in X_{Ch} , or from *ʃ* to *ʒ* in the semi-speaker data from X_G , occurs only before high vowels. There is just one attested case where *ʃ* becomes *r* before *e*; i.e. *ʃeke* → *reke* 'ribs'.

Complementary distribution of *s* and *ʃ* in intervocalic position provides an argument for the existence of three vowel sets: as *s* does not occur between the high vowels *i* and *u* and *ʃ* does not occur with vowels *e* and *o*, both sounds are attested with *ʃ*.

Most forms belong to vowel set 1, which is therefore the more central harmonic pattern. Loanwords generally assimilate to set 1, never to set 2.

Vowel harmony mainly regards roots. There is a process of progressive vowel harmonisation after affixation, which leads to the formation of allomorphs; e.g. plural suffix *-ʃi* → *-ʃe*, or the reflexive/antipassive marker *-ki* → *-ke*, when following roots of vowel set 2.

(4. 261)	a.	<turiLi>	[turi-ʃi]	'children' (4621.)
	b.	<oneLe>	[ʔone-ʃe]	'tender things' (4194.)
	c.	<acuqui>	[ʔaku-ki]	'to walk' (2055.)
	d.	<erLeque>	[ʔerLe-ke]	'to get frightened' (2273.)

Vowel harmony does not concern nominal or verbal compounding (4. 262). Lack of vowel harmony is an indicator for borrowing in that only loanwords deviate from the rule; generally these are Spanish loans (e.g. "merio", "cuchilo"). Furthermore, it may indicate deficiency of the data or a lack of precision in the documentation process. "Disharmonic" vowel patterns may therefore point to orthographic inconsistency or phonological disintegration.

(4. 262)	a.	<meenáqui>	[meʔ + naki]	'green chilli' (4077.)
	b.	<coséc uy>	[kosek + ʔuy]	'big river' (3741.)

4.4.3 Sound deletion

There are several processes of sound deletion in Maldonado-Xinka that include morphophonemic processes as much as processes following purely phonetic constraints. Most of the processes that can be identified in the comparative data are also attested in the ALS.

4.4.3.1 Vowel reduction

There are different forms of regular vowel deletion in Maldonado-Xinka. Vowel deletion generally affects three-syllabic roots and four-syllabic forms. In most attested cases, medial consonant clusters are the result of a process of vowel deletion in three-syllabic forms.

The only consonants that appear in final position of the preceding syllable after the deletion of the following vowel are: *-w*, *-ʃ/-h*, *-n*, *-r*, *-p*, *-t*, *-y*, *-ʃ*, *-k*.

4.4.3.1.1 Deletion of V_1

Campbell (1972:187) described a process of deletion of the first syllable in three-syllabic forms preceded by a consonant (i.e. $V \rightarrow \emptyset / C\_CVCV$). There are no examples in the ALS that confirm this process, but in the Zeeje-manuscript we find forms where V_1 has been deleted. Initial consonant clusters are rather rare and seem to be attested regularly only if the velar stop k precedes w or r in the position of C_2 .

(4. 263)	a.	<caragua>, <caragua>	'woods, wild' (3713.), (3714.)	:	X_Y, X_{ut}	[karawa]
					X_G, X_{ch}, X_S	[k rawa]
	b.	<ckeguesza>	'anona' (3732.)	:	X_G, X_{ch}	[k'eweša]
					X_G, X_{ch}	[k_wé'ça]

4.4.3.1.2 Deletion of V_2

In three-syllabic verbs, V_2 is deleted if the verb receives further suffixation: $V \rightarrow \emptyset / CVC\_CV-C(VC)$. The processes of suffixation that are attested include cross-referencing person markers (4. 264a-b), the stative-resultative marker $-ʔ$ (c), unmarked imperative forms of transitive verbs (d-e) and derivational operators such as the agentive marker $-ʔa$ (f-g), the instrumentaliser $-k$ (h) or the inchoative suffix $-ki$ (i).

(4. 264)	a.	X_M <eLama> [ʔeʔama] 'lend' (2251.)	→	X_M <eLmán> [ʔeʔ_ma-n] 'he lent' (2252.)
	b.	X_M <orómo> [ʔoromo] 'collect' (905.)	→	X_M <ormoi> [ʔor_mo-y] 'he collected' (920.)
	c.	X_M <guaszata> [wašata] 'to enter' (1965.)	→	X_M <an guasztà> [ʔan-wašta-ʔ] 'I entered' (1974.)
	d.	X_M <jayápu> [hayapu] 'to receive' (2491.)	→	X_M <jaypu> [hay_pu] 'may he receive' (2495.)
	e.	X_M <guirizi> [wiriki] 'to speak' (2353.)	→	X_M <guirqui> [wir_ki] 'may he speak' (Ch-Z)
	f.	X_M <pajata> [pahata] 'to pay' (2810.)	→	X_M <pagtáʔa> [pah_ta-ʔa] 'who pays' (4224.)
	g.	X_G /ʔawaro/ [ʔaʷaro] 'to dance' (G-SH)	:	X_M <Laurúʔa> [law_ru-ʔa] 'dancer' (4020.)
	h.	X_G /wišata/ [ʷwišata] 'to whistle' (G-SH)	:	X_M <guisztác> [wiš_ta-k] 'flute' (3879.)
	i.	X_M <eréʔa> [ereʔa] 'to scare' (2268.)	→	X_M <erʔeque> [ʔer_ʔe-ke] 'to become scared' (2274.)

This process of vowel deletion is not attested in forms where $\check{c}$, ϕ , or m occur in C_2 -position, or $\check{c}$ in C_3 -position; the glottal stop $ʔ$, the simple sibilant s , and the voiced lateral l do not occur in either of the positions.

V_2 can furthermore be deleted from two-syllabic nouns that take verbalisation suffixes (4. 265).

- (4. 265) X_M <szaru> [ʃaru] 'jug' (4456.) → X_M <szárszi> [ʃarʃi] 'to irrigate' (3129.)

In nominal compounds that would result in four-syllabic forms, V_2 is also lost (4. 266) (see § 4.4.1).

- (4. 266) X_M <Łuesεuegua> [ʔis_kiwa] 'waist' (4039.) = *ʔisi 'thin, slim' + kiwa 'leg'

Vowel deletion does not seem to have been an obligatory process in Maldonado-Xinka, since there are several examples in the ALS where the vowel is preserved (4. 267).

- (4. 267) a. <szapriguaan> [ʃapri-wa-n] [degrain-ANT-1sA] 'degrain, *preterite*' (3124.)
b. <szapariгуán> [ʃapari-wa-n] [degrain-ANT-1sA] 'degrain, *preterite*' (3123.)

4.4.3.2 Vowel fusion

It is not entirely clear whether Maldonado-Xinka had vowel coalescence at morphemic boundaries. The ALS indicates the formation of double or long vowels on suffix marking (4. 268). The semi-speaker data only show a stress shift to the vowel preceding the last consonant.

- (4. 268) a. <ayaan> [*ʔaya:n] 'I am, I was' (3663.)
b. <mère pè patàn> [*pata:n] 'I will be broken' (680.)
c. <sàmu pè pataan> [*pata:n] 'I will be caught' (1177.)
d. <joróon> [*horo:n] 'get/guard, *pret.*' (2511.) : X_G [horón] 'I got' (G-SH)

There are very few cases in the recent data from X_G where prefixation can result in the loss of the initial syllable $ʔV$ of the marked form, provided the final vowel of the prefix and the initial vowel of the lexeme are identical (4. 269). It needs to be pointed out that these cases are rather rare.

- (4. 269) a. X_G [mukay] 'he makes' (G-SH) : X_G [mu-ʔuka-y] 'he makes' (G-SH)
b. X_G [ʃaʔtepet] 'to the village' (G-JAP) : X_G [ʃa-ʔaʔtepet] 'to the village' (G-PE)

Generally, vowels are preceded by a consonant. Diphthongisation is not a regular phenomenon in Xinka and occurs only in very rare cases after vowel deletion.

- (4. 270) X_M <iguitxi> → *iwiʃi-ki → X_M <uýsziei>
[ʔiwiʃi'i] [ʔuýʃiki]
'to hear sth.' (2399.) 'to hear (VI)' (3487.)

4.4.3.3 Reduction of initial syllable or consonant

In the comparative corpus we find cases of change in the course of which the initial consonant C_- (4. 271), initial vowel $ʔV-$ (4. 272) or the entire initial syllable CV_- (4. 273) have been deleted. In all these cases, the ALS indicates the complete forms. The process of deletion seems to be unconditioned and is not the result of the morphological environment.

- (4. 271) a. <náru> [naru] 'earth' (4160.) : X_Y [ʔaru] 'earth' (Y-C)
 b. <ɛiguán> [kiwan] 'I myself' (143.) : X_{Ch} [ʔiwan] 'alone' (Ch-C)
 c. <piri> [piri] 'see' (736.) : X_{Ch}, X_Y [ʔiri] 'see' (Ch-F), (Y-C)
 d. <guéna> [wena] 'who' (3856.) : X_{Ch} [ʔena] 'who' (Ch-Z)
- (4. 272) a. <eLama> [ʔeʔama] 'lend' (2251.) : X_{Ch} [_ha'maʔ] 'he lent' (Ch-MQ)
 b. <epeLe> [ʔepeʔe] 'fear' (2263.) : X_{Ch} [_peʔe ʔayʔ] 'he is afraid' (Ch-MQ)
 c. <ieál> [ʔikaʔ] 'one' (3891.) : X_G, X_{Ch} [_kaʔ] 'one' (G-SH, Ch-C)
 d. <iszapa> [ʔišapa] 'leave' (2425.) : X_G, X_Y [_šapa] 'leave' (G-SH, Y-C)
 e. <aszin> [ʔašin] 'no' (3654.) : X_G [_šin] 'no' (G-JAP, G-RHG)
- (4. 273) a. <quitxu> [kiʕu] 'change' (3020.) : X_G, X_Y [_ʕ'u-y] 'change' (G-S, Y-C)
 b. <uegua> [kiwa] 'to lend' (2225.) : X_Y [_wa-noy] 'lend' (Y-C)

4.4.3.4 Deletion of medial syllable

In very rare cases, medial syllables are deleted from three-syllabic roots. It is not entirely clear whether this process is related to semantic change or simply the result of compounding.

- (4. 274) a. X_M <jarari> : X_{Ch} <jari cúhua> : X_S <jari>
 [harari] [ha_ri kiwi] [ha_ri šaha]
 'bone' (3934.) 'shinbone' (Ch-C) 'tooth' (S-Gav)
- b. X_M <tajana> : X_M <taana>
 [tahana] [ta_na]
 'be born' (3205.) 'to be' (3220.)
- c. X_M <rakatzá> : X_{Ch} <ratzá>
 [rak'aʕ'a] [ra_ʕ'a]
 'to steal' (Ch-F) 'he stole it' (Ch-F)

4.4.3.5 Vowel loss in the process of grammaticalisation

Grammaticalisation processes involve phonological loss (see § 3.3). In the comparative data there are several attested cases of vowel loss on lexical boundaries resulting in clitisation of the following form.

- (4. 275) a. *hin + ʔuka → [hiŋk'a] 'there is nothing' (G-SH, G-JS)
 b. *ti:ki + ʔaya-n → [ti:kiyan] 'I am sleeping' (G-RHG)

These processes of vowel reduction are not attested in the ALS-data, which generally seems to include non-grammaticalised forms (4. 276). We may therefore see these cases of vowel loss on lexical boundaries as a recent development in Xinkan.

- (4. 276) a. X_M <ayà> [ʔaya(ʔ)] 'be' (1879.) : X_G [-ya] "progressive marker VI" (G-S)
 b. X_M <ucà> [ʔuka(ʔ)] 'have' (1881.) : X_G [-ka] "progressive marker VT" (G-SH)

4.4.4 Assimilation

In the ALS, the most regular case of assimilation that can be identified is the voicing of stops after nasals (4. 277).

- (4. 277) a. <ambuqui> [ʔambuki] /ʔampuki/ 'snake' (3630.)
 b. <tondón> [tondon] /tonton/ 'sea turtle' (4596.)

Another process of assimilation that is attested in the ALS is the change of the two syllables *ʔi-wi* to *ʔuy-* in initial position.

- (4. 278) a. <iguitxi> → *iw_ši-ki → <uýsziei>
 [ʔiwiɕ'i] [ʔuyšiki] 'to hear sth.' (2399.) 'to hear' (3487.)
 b. <iguatxa> → *iw_ɕ'a → <úiszaan>
 [ʔiwaɕ'a] [ʔuyšan] 'to spin' (2391.) 'to spin, pret.' (2392.)
 → *iw_ɕ'a-k → <uyszác>
 [ʔuyšák] 'spindle' (4727.)

There are many cases of assimilation in the comparative data. In the data from X_{Ch} and the semi-speaker data from X_G , we find a process of regressive assimilation in which the glide *w* may change into *f* before the liquids *ʃ* and *r* (4. 279). Although Schumann defined *f* as a regular phoneme for X_{Ch} , *f* is not a contrastive sound.

The process is unattested in the ALS, but there are regular forms with *f* in the Zeeje-manuscript, which suggests that we may be dealing with an early process. As the ALS provides us in all cases with the original forms and does not include the sound *f*, we might take this as an indication that the language documented by Maldonado de Matos may not reflect contemporary X_{Ch} .

- (4. 279) a. <auLác> 'tortilla griddle' (3653.) → *ʔawʔak : X_{Ch} [ʔoflak]
 b. <Luri> 'rabbit' (4031.) → *(ʔa)wʔuri : X_{Ch} [fluri]
 c. <paraguíriqui> 'to quarrel' (2826.) → *para-wriki : X_{Ch} [para-frik']
 d. <jurác> 'man' (3973.) → *wrak : X_{Ch} [frak]

Further processes of assimilation in the semi-speaker data from X_G , include e.g. the change of the first person pronoun *ʔan-* becomes *ʔa-* preceding lexical roots that begin with initial consonants *p* (4. 280a) or *n* (b-c).

- (4. 280) a. ʔan-pata 'I can' (G-SH) → ʔa-pata 'I can' (G-SH, G-RHG)
 b. ʔaŋ-niwa 'I want' (G-SH) → ʔa-niwa 'I want' (G-SH)
 c. ʔaŋ-neʔa 'mine' (G-SH) → ʔa-neʔa 'mine' (G-SH)

There are attested cases where *ʔ* between *u* and *i*, or *u* preceding vowels may become *w*.

- (4. 281) a. *mu-ʔišaka [3sA-drink] → X_G [mu-ʔwišaka] 'he drank' (G-SH)
 b. *ku ʔoteʔ [MOD bed] → X_G [kwoteʔ] 'the *little bed' (G-JS)
 c. *naʔu-ʔaʔi [son-PL] → X_{Ch} [nakwaʔiʔ] 'sons' (Ch-MQ)

Another process of assimilation is attested in the Zeeje-ms. (X_{Ch}), where the first person plural prefix *muk-* becomes *muh-* before roots that begin with the velark. This might suggest that in consonant clusters of *k_k* the initial *k* > *h*, although there are no further examples that would corroborate this rule.

4.4.5 Metathesis

In the comparative data we can identify a few cases of metathesis (4. 282). In the examples below (a-e), the ALS records the earlier form; the process is mostly

attested in X_Y and X_{Ch} . In a few cases, the comparative data preserve both forms (g). The occurrences are too random to define a rule. However, it may be noted that most roots where metathesis is attested include a lateral or lateral-fricative sound.

(4. 282)	a.	X_M	<apála> [ʔapála] 'to open' (2067.)	:	X_Y	<n-alpa> [ʔn-ʔalpa] 'I open'
	b.	X_M	<aułác> [ʔawłak] 'tortilla griddle' (3653.)	:	X_Y	<aljuat> [ʔałwat] 'plate'
	c.	X_M	<jayápu> [haypuh] 'to receive' (2491.)	:	X_Y	<yajpuj> [yahpuh] 'to receive'
	d.	X_M	<tunati> [tunati] 'to play instr.' (3325.)	:	X_{Ch}, X_Y	<tinatu> [tinatu] 'to play an instrument'
	e.	X_M	<uyszác> [ʔuyšak] 'spindle' (4727.)	:	X_{Ch}	<iuxak> [yušak] 'spindle' (Ch-F)
	f.	X_Y	<lahuár> [lawar] 'dance' (Y-C)	:	X_{Ch}	<laragú> [laraw] 'dance' (Ch-F)
	g.	X_{Ch}	<ajlahuac> [ʔaławak] 'tomorrow' (Ch-C)	:	X_{Ch}	<ahujlacan> [ʔawłakan] 'yesterday' (Ch-C)

There is one example in the ALS which suggests that metathesis can occur as a process of semantic change. Here, inversion of C_2 and C_3 expresses the antonym of the other term, i.e. 'to heat' and 'to cool down'. We need to take into account here that *ʔokama* is most likely a Mayan loan; i.e. pCh **lok* 'boiling, froth' (see Appendix 5.A).

(4. 283)	X_M	<Łocama> [ʔokama] 'to boil' (2605.)	→	X_M	<Łomeeca> [ʔomeka] 'make tepid' (2611.)

4.4.6 Glottalisation

Rules of glottalisation identified in the comparative data can only be verified with difficulty in the ALS as the colonial orthography represents glottalisation insufficiently. Glottalisation of bilabial and alveolar stops is not represented at all, whereas velar stops are graphemically distinguished. However, we had to note that not all of the graphemes <ɛ> and <ck> can be correlated with glottalised forms in the comparative material (see § 4.3.1.1.3).

Campbell defined two morphophonemic processes that cause glottalisation of initial and medial consonants:

- 1) Stops and affricates are glottalised in initial position upon insertion of a glottal stop after the root vowel: CVCV ~ C'V?CV. In this process *s* and *š* become *ɕ'* (Campbell 1972a:187)¹²⁹
- 2) Stops and affricates are glottalised in initial and medial position on roots that end in *-n*, *-y*, or *-ʔ* (Campbell 1997a:166)

These processes can be identified in the ALS only by correlation of graphemic indications with the comparative data, i.e. initial graphemes <ɕ>, <ck> or <tx> and representations of a glottal stop by <h>, <g> or accent may indicate the process. However, there are several cases of forms that seem to follow this rule in *X_Y* being attested in the ALS with initial <s> or <c/qu>.

(4. 284)	a. <ckeguesza>	'anona' (3732.)	:	<i>X_G</i> , <i>X_{Ch}</i>	[k'eʔweʂa]	< pM *k'eweš
	b. <txinána>	'scorpion' (4647.)	:	<i>X_{Ch}</i>	[ɕ'inaʔna]	
			:	<i>X_G</i>	[ɕ'inaʔn]	< pM si:naʔŋ
	c. <txuəmʊe>	'irrigate' (3406.)	:	<i>X_G</i>	[ɕʔiʔmi] (G-S)	
			:	<i>X_G</i>	[suʔmak'ay] (G-RHG) [= VT-PROG]	
	d. <suema>	'night' (4400.)	:	<i>X_G</i>	[sima] (SH)	
			:	<i>X_G</i>	[siʔma] (G-SH, G-JS, G-RHG)	
			:	<i>X_Y</i>	<tz'üöma> (Y-C)	

Glottalisation within a word can also be caused by suffixation of grammatical markers. In this case, glottalisation may be the result of stress shift to *V₂*. There are very few examples for this morphophonemic process in the ALS (4. 285). However, most of these occur either inconsistently or glottalisation is also indicated for the basic root, although the comparative data suggest that the basic roots is unglottalised:

(4. 285)	a. <szuəaan>	[šuk'a-ŋ]	[eat-1sA]	'eat/bite, <i>preterite</i> ' (3170.)
	b. <Łuəəʊeʊen>	[ʔik'i-n]	[reach-1sA]	'reach, <i>preterite</i> ' (2617.)
	c. <uəaca>	[ʔuk'a-ka]	[have-2sA]	'you had, would have' (2035.)
	d. <mʊeəaguaan>	[mik'a-wa-n]	[work-ANT-1sA]	'work/serve, <i>preterite</i> ' (2692.)

In example (4. 125) it was pointed out that the ALS provides some indications for a tendency towards excessive, unphonemic glottalisation in colonial Xinka. This process is, however, only attested for velar stops. As shown in example (4. 126), there are few attested cases of glottalisation of final velar stops in the ALS. Velar stops in final position are mostly indicated as [k] and represented with grapheme <c>.

The nature of the phonological process that causes glottalisation, i.e. CVCV ~ C'V?CV, is unclear. ALS-roots with initial grapheme <tx> can be correlated in the comparative data with lexemes that exhibit a glottal stop following the first root vowel, i.e. *V₁ʔ* (4. 284a).¹³⁰ Yet, there are several exceptions to this pattern, some of which indicate a process of deaffrication, i.e. the deglottalisation, *ɕ'* > *s* before vowel set 1/3 in *X_G* and *X_{Ch}* (see § 4.3.1.4.1). We can also identify a few forms in

¹²⁹ Campbell (1972:187) described the process as *s* > *ɕ'* as he defined one phoneme *s* and two allophones [s] and [š] in his earlier study. As argued in § 4.3.1.4.1, both sibilants have phonemic status.

¹³⁰ Schumann suggests that infixation marks a hypothetical possessive for the first person singular, e.g. *maʔku* "mi casa (hipotética)" (1967:49). The existence of such an infix cannot be reconfirmed on the basis of the semantic contexts found in the semi-speaker or the comparative secondary data. Glottalisation is however widely attested.

the ALS, where suffixation with the instrumental markers seems to cause deglottalisation in the root.

- (4. 286)
- | | | | |
|----|----------------------------|---|-------------------|
| a. | X_M <εagui> | : | X_M <caguic> |
| | [k'awi] | | [kawi-k] |
| | 'catch with lasso' (2135.) | | 'lasso' (3683.) |
| b. | X_M <íguatxa> | : | X_M <uyszác> |
| | [ʔiwaɕ'a] | | [ʔuyʃak] |
| | 'to spin' (2391.) | | 'spindle' (4727.) |
| c. | X_M <patxi> | : | X_M <paaszíc> |
| | [paɕ'i] | | [pa:ʃik] |
| | 'to grind' (2843.) | | 'kitchen' (4263.) |

Campbell and Kaufman identified patterns of glottalisation and deglottalisation, resulting from morphophonemic processes (see above) that caused sound change in the different Xinka varieties. This includes the definition of glottalised resonants predominately in intervocalic position (see also Campbell 1997a:166). These patterns of glottalisation do not reflect in the ALS, which is why they shall not concern us here any further.

4.4.7 Devoicing

Xinka has been described as bearing the characteristic of devoicing final consonants, which is a typical trait of most Mesoamerican languages (Campbell 1979:955; Campbell, Kaufman & Smith-Stark 1986:537, 544). Devoicing in Xinka is a purely phonetic process. The ALS reflects this rule inasmuch as the majority of graphemes attested as final consonants have been identified to represent voiceless sounds; i.e. $-k$, $-h$, $-ʃ$ and $-m$ (4. 287). In particular, the occurrence of the grapheme <ɭ> in final position suggests that such a rule existed.

- (4. 287)
- | | | | |
|----|----------|---------|-----------------------|
| a. | <guapáɭ> | [wapaɭ] | 'bench, seat' (3839.) |
| b. | <ckáu> | [k'aɪ] | 'to cook' (2129.) |
| c. | <guarúɭ> | [waruk] | 'net' (3844.) |

The replacement of final consonants by $-ʔ$ (4. 288) that are frequently attested in the comparative data (see § 4.3.2) may be the result of the general tendency towards final devoicing (cf. Campbell 1998:41).

- (4. 288)
- | | | | | | | |
|----|----------|---------|---------------|---|---------------|---------------|
| a. | <szúníc> | [ʃuník] | 'pot' (4507.) | : | X_G [suniʔ] | (G-SH, G-JAP) |
| b. | <urúɭ> | [ʔuruɭ] | 'egg' (4693.) | : | X_G [ʔuruʔ] | (G-JAP) |
| c. | <guarúɭ> | [waruk] | 'mat' (3844.) | : | X_G [waruʔ] | (G-SH) |

It is likely that the general process of final devoicing also affects final nasals (cf. Campbell 1998:41). The change of $[-n]$ to $[-ŋ]$ that is attested in the comparative data (see § 4.1.2.3; § 4.1.3.4) is not graphemically represented in the ALS; see (4. 249), (4. 289). Yet, several examples in the ALS where $n > m$ in final position suggest that such a process was present, since the semi-speaker data illustrate the same change of $n / ŋ$ to m (§ 4.1.2.3).

- (4. 289)
- | | | | | | |
|----|-----------|-----------------|---|---------------|--------|
| a. | <szueaan> | 'I ate' (3170.) | : | X_G [ʃukan] | (G-SH) |
| b. | <na nem> | 'I, 1s' (62.) | : | X_G [naniŋ] | (G-SH) |

4.4.8 Stress rule

In Xinka stress is phonologically conditioned and lies on the vowel preceding the last consonant in the word (i.e. $V \rightarrow \tilde{V} / \_C(V) \#$) (Campbell 1972a:187; 1997:166; see also Schumann 1967:32). Thus, Xinka reflects the common stress rule in Mayan languages (cf. Suárez 1983:35). The ALS confirms this rule inasmuch as accent signs are in most cases placed on the respective stress-bearing syllable.

- (4. 290) a. <jayápu> [ha'yapu] 'to receive' (2491.)
 b. <penéc> [pe'nek] 'annoying' (4277.)

The following examples from the semi-speaker data show that stress shifts to the vowel before the last consonant once the root takes grammatical suffixes.

- (4. 291) a. [púla] [make] 'to make'
 b. [pulá-ka] [make-2sA] 'you made' (G-S), (G-SH)
 c. [pula-ka-kán] [make=PROG-2sA_{DEP}] 'you were making' (G-SH), (G-JAP)
 d. [téro] 'I want' (G-SH), (G-PE) [L-S: quiero]
 e. [teró-?] [die-STAT] 'he died' (G-SH), (G-JS)
 f. [ʔan-teró-?] [1sS-die-STAT]] 'I died' (G-SH)

Stress shift is morphophonemic. Some examples from the ALS show that the position of the accent sign may change the meaning of a form – what is, however, unclear is whether the accent sign represents stress, vowel length or a glottal stop (4. 292). With respect to the first two examples, we need to take into consideration that they are actually homonyms which may have been presented with variant spellings.

According to the stress rule an accent sign on a final vowel implies the presence of a glottal stop in final position. In some cases it is difficult to decide whether the stress is phonemic and the glottal follows the stress shift, or whether the stress shift follows the suffixation of a glottal stop with morphological function. For instance, it is not entirely clear whether product nominalisations require the marking of the verbal root with -ʔ, or whether the derivation simply involves a stress shift; cf. § 11.1.2.4 and see (4. 292 c).

- (4. 292) a. <agua> [ʔawa] 'moon' (3600.) - <aguà> [ʔa'waʔ] 'grandmother' (362.)
 b. <puri> [puri] 'to respond' (4339.) - <purí> [pu'riʔ] 'to find, meet' (2963.)
 c. <szúya> [ʃuya] 'first, before' (4524.) - <szuyá> [ʃu'yaʔ] 'older brother' (4523.)

Composite forms retain the position of stress in both elements of the compound; i.e. compounding is not a morphophonemic process.

- (4. 293) a. <óneszinác> [ʔone-ši'nak] 'tender-bean = *ejote* bean' (4196.)
 b. <japáginíy> [ha'pa-ʔ'hini] 'passed-stomach = diarrhea' (3926.)

4.5 Sound change

This section summarises the patterns of sound change attested in the ALS and the comparative data. We will only deal with those patterns that are relevant for the reconstruction of the phonological system of Maldonado-Xinka and define the relative position of the ALS-data within the Xinkan language family. The outline of the phonological development does not mean to be comprehensive and only touches upon selected sound changes.

The analysis will focus on two aspects: patterns of regular sound change that define the different Xinka varieties (§ 4.5.1) and patterns of phonetic assimilation of loanwords (§ 4.5.2). All relevant changes have already been mentioned in the reconstruction of the phonemic system (§ 4.3).

4.5.1 Regional patterns of change

The number of phonemic and non-phonemic changes that are indicative for regional variation is fairly limited. Sound shifts are attested within as well as between the Xinka varieties of Jutiapa and Santa Rosa.

Some significant shifts occur in fricative and affricate sounds. Several examples provide evidence for a process of deaffrication $\phi' > s / \_ i, \acute{i}, u, a$ in the varieties of X_M, X_G, X_{Ch} and X_{Jum} (see (4. 294). There are forms that have subsequently changed s into $\acute{s}$ (e-f) (see below). Some forms in the ALS that preserve ϕ' have cognates in X_G and X_{Ch} where the sound has changed into s (g-h).

(4. 294)	a.	X_Y, X_{Ch}	[ϕ' arara]	:	$X_M, X_G, X_{Ch}, X_{Jum}$	[sarara?]	'cold, wind'
	b.	X_Y, X_{Ch}, X_S	[ϕ' ama]	:	X_M, X_G, X_{Ch}	[sama]	'darkness'
	c.	X_Y	[ϕ' i?ma]	:	X_M, X_G, X_{Ch}, X_S	[si?ma]	'night'
	d.	X_Y	[ϕ' uku]	:	X_M, X_G, X_{Ch}	[suku]	'tie up'
	e.	X_Y	[?i ϕ' api]	:	X_M, X_G, X_{Ch}	[?išapi]	'leave, emerge'
	f.	X_Y	[ϕ' i(7)ma]	:	X_M, X_G	[šima]	'rat, mouse'
	g.	X_M, X_G, X_{Ch}	[ϕ' ama]	:	X_G, X_{Ch}, X_{Jum}	[sama]	'good'
	h.	X_M, X_G, X_{Ch}	[ϕ' imi]	:	X_G, X_{Ch}	[sumu]	'water crops'

In the varieties of X_Y, X_{Jut} and –possibly X_S – the original sound ϕ' is preserved before all vowels with the exception of the front vowels i and e where it changes into $\acute{c}$; i.e. $\phi' > \acute{c} / \_ i, e$ in X_Y, X_{Jut}, X_S (4. 295) (see also Campbell & Kaufman: field notes).

(4. 295)	a.	X_M, X_G, X_{Ch}	[ϕ' ina?na]	:	X_G	[čina?na], X_Y [činaney]	'scorpion'
	b.	X_M, X_G, X_{Ch}	[pa ϕ' i] ~ [paši]	:	X_Y	[pači]	'grind (corn)'
	c.	pX	* $\phi'e?$	:	X_Y	[če?]	'opossum'
				:	X_M	[še?]	

Simultaneously, $s > \acute{s} / \_ i, \acute{i}, u, a$ in $X_M, X_G, X_{Ch}, X_{Jum}$, whereas X_Y preserves s before central and back vowels (4. 296) (cf. Campbell & Kaufman: field notes). Before vowels e and o the two fricatives vary. It is not entirely clear to what extent we are dealing with a chain shift, i.e. (1) $\phi' > s$ and (2) $s > \acute{s}$. In any case, these changes can be seen as innovations in the varieties of X_M, X_G, X_{Ch} and X_{Jum} .

(4. 296)	a.	X_Y	[sapu]	:	X_M, X_G	[šapu]	'cotton'
	b.	X_Y	[hus-al]	:	X_M, X_G, X_{Ch}	[hu:ši]	'head'
	c.	X_Y, X_{Ch}	[suya]	:	X_M, X_{Ch}	[šuya]	'elder brother/sibling'

Another change that may be taken as indicative of regional diversification of the Xinka language family is the intervocalic change of ʃ or $l > t / CV? \_ V$ in the varieties of X_Y, X_{Jut}, X_{Jum} and X_S (see Campbell & Kaufman: field notes). According to Campbell and Kaufman it occurs in intervocalic laterals that are glottalised. The direction of change is indicated by Mayan and Nahuatl loanwords that feature a lateral consonant (e.g. 'to flay, strip': X_M, X_G *k'olo*, X_Y *k'oto* < pM **qol* 'to peel, moul't' [K-03]).

- (4. 297) a. X_M, X_G, X_{Ch} [tila] ~ [tiʔla] : X_G til'a* : $X_Y, X_{Jut}, X_{Jum}, X_S$ [tita] 'salt'
 b. X_M, X_G, X_{Ch} [taʔi] ~ [taʔa] : X_G taʔi* : X_Y, X_S [tata-], X_{Jut} [tarti] 'neck'
 c. X_M, X_G, X_{Ch} [tolo] ~ [toʔlo] : X_{Ch} tol'o* : X_{Ch}, X_Y [toto] 'yellow'
 d. X_M, X_{Ch} [moʔla] : X_{Ch} mool'a* : X_{Jum} moot'o 'moon'
 e. X_M, X_G [muʔla] : X_G, X_{Ch} muul'a* : X_{Jum} muut'a 'palm tree'
 f. X_M, X_G [k'olo] : X_Y k'oto 'flay, strip'

*from Campbell & Kaufman (field notes)

Although there is a lot of random change of vowels throughout the corpus (see § 4.3.2), some of these sound shifts only occur in specific Xinka varieties. Vowel *a* in X_M, X_G can be shown to correspond in several cases to cognate vowels *i* (4. 298) and *u* (4. 299) in X_Y and X_{Ch} ; in all cases *i* and *u* seem to be the innovative sounds.

- (4. 298) a. X_M /šanta/ : X_Y [šinti] 'why?'
 b. X_M [ʔula] : X_Y [ʔuli] 'want, wish'
- (4. 299) a. X_M [ʔaratak] : X_Y [ʔiruta] 'henequen'
 b. X_M, X_G [man] : X_Y [mun] *demonstrative*
 c. X_M, X_G [na] : X_Y, X_{Ch} [nu] *determiner*
 d. X_M, X_G [ʔakani] : X_{Ch} [ʔakuni] 'so, like'

In the following example (4. 300), it is not entirely clear whether the change of the final vowel is morphological, indicating the functional difference of verb and noun, or whether we are dealing with an instance of sound change. It needs to be pointed out that the term is a Mayan loanword that receives a final vowel upon borrowing into Xinka.

- (4. 300) GLL *pak' > X_M [pak'a] 'to nail' : X_M [pak'i] 'wall'

In the Xinka varieties of Santa Rosa we can identify shifts of alveo-palatal, lateral and glottal fricative sounds. The lateral-fricative ʃ in X_M, X_G, X_{Ch} may correspond with š in X_G and X_{Ch} (4. 301) – and vice versa, š attested in loanwords in X_M, X_G, X_{Ch} may change into ʃ in terminal X_G (4. 302). In both cases morphological transparency and the original phonetic form of the attested loanwords indicate the direction of the unconditioned change.

- (4. 301) a. X_M [huʔi] 'to shave' : X_G [šuši] 'beard'
 b. X_M, X_G [wapaʔ] 'bench' : X_{Ch} [wapaš] 'seat'
 c. X_M [piʔta] : X_{Ch} [poštak] ~ [puškak] 'arrow'
 [cf. L-M: Toj pulte 'bow']

- (4. 302) a. X_M, X_G [pišik] : X_G [piʔik] 'jug, gourd'
 b. X_M, X_G, X_{Ch} [wakaš] : X_G [wakaʔ] 'cow'

The fricative shift $h > š$ (4. 303), (4. 304) occurs mostly in X_{Ch} , but is also attested in X_G, X_{Jum} and even X_M . Morphological transparency defines the direction of change; e.g. *hutu-k* [tree-INSTR] 'soot, burned log'. In most attested cases, cognate forms in X_M and X_Y feature *h*, although the presence of both forms, *hutuk* and *šutuk*, in the ALS suggests that the shift was an active process in Maldonado-Xinka.

- (4. 303) a. X_M, X_{Ch} [hu:tuk] 'soot' : X_M [šu:tu-k] 'soot'
 b. X_M, X_Y [hiya] 'to cut' : X_G, X_{Ch} [šiya] 'to wound'

In some cases *h* becomes *y* between vowels. All of these shifts are attested in the more recent data of X_G and X_{Ch} , whereas X_M and X_Y and the older data from X_{Ch}

preserve *h*. Yet, the changed form *hayi* 'avocado' is also attested in X_Y . In some cases *h* can also change into *ʔ* or *ʃ*.

- (4. 304) a. X_M, X_Y, X_{Ch}, X_G [hahi] : X_G, X_{Ch} [haʃi] : X_G, X_{Ch}, X_Y [hayi] 'avocado'
 b. X_M, X_Y, X_{Ch} [pahi] : X_{Ch} [paʔi] : X_{Ch} [payi] 'hole, ravine'

The opposite process of a fricative shift is also known: in several other cases, roots that are attested in the ALS with *ʃ* occur with *h* in X_G and X_{Ch} (4. 305). The presence of both sounds in the ALS (4. 305a-d) shows this is an active process in Maldonado-Xinka. In most cases, however, the sound shift *ʃ* > *h* is indicative of diachronic differentiation between X_M and the central Xinka varieties.

- (4. 305) a. X_M [ɕ'amɪ] : X_M [hami] 'sour, bitter'
 b. X_M [ʃuʃi] 'beard' : X_M [huʔi] 'to shave'
 c. X_M [ʔaʃi] : X_M [ʔahi] 'this'
 d. X_M [saʔk'a] 'to raise' : X_M [hahʔa] 'hoe'
 e. X_M [ʔaʃin] : X_G, X_{Ch} [hin] 'no'
 f. X_M, X_G, X_{Ch} [ʃan] : X_{Ch} [han] 'in'
 g. X_M [ʃanda] : X_G [handa] 'why?'
 h. X_M [ʃete] 'worm' : X_{Ch} [heta] 'firefly'

We can identify some specific types of sound innovations that only occur in X_{Ch} : There is a regular sound change of *ʃ* > *ʃ* > *r* (rhotacism) before vowels of sets 1/3 that occurs exclusively in recent data from X_{Ch} as well as in some of the terminal data from X_G (4. 306a).

- (4. 306) a. X_M, X_G [ʃina] : X_{Ch} [rina] 'urine'
 b. X_M, X_G, X_{Ch} /ʃawu/ : X_{Ch} [rawu] 'seated, sit down'
 c. X_M, X_G, X_{Ch} [hu:ʃi] : X_{Ch} [huri] 'head'
 d. X_M, X_{Ch} [ʃuʃumi] : X_{Ch} [rurumi] 'coati'
 e. X_M, X_G, X_{Ch} [paɕ'i] ~ [paʃi] : X_{Ch} [pari] 'grind corn'

Quite for the contrary, the voicing of voiceless stops in initial position (4. 307) is an innovation that is already attested in the Zeeje-ms, which suggests that the Maldonado-Xinka does not originate from Chiquimulilla.

- (4. 307) a. X_M, X_G [paʔ] : X_{Ch} [bar] 'already'
 b. X_M, X_G [tolo] : X_{Ch} [dolo] 'yellow'
 c. X_M, X_G [ʔik'aʔ] : X_G [k'aʔ] : X_{Ch} [gar] "one, # 1"

Velar stops that are indicated in final position in the ALS can be deleted or changed into *-ʔ* (or *-h*) in the other varieties (X_Y, X_G, X_{Ch}) (4. 308). In most cases final *-k* is morphologically identified as an instrumental marker. The change is not indicative of regional differentiation of the Xinkan languages, but defines Maldonado-Xinka as a more conservative variety.

- (4. 308) a. X_M, X_{Ch} [ʔamuk] 'shrimp' : X_Y [lamu_], [samu_] 'fish'
 b. X_M, X_G [maʔik] 'firewood' : X_G [maʔiʔ] ~ [maʔeʔ] 'firewood'
 c. X_M, X_G [pupuk] 'mat' : X_G, X_{Ch}, X_Y [pupuʔ] 'mat'
 d. X_M [muk-] "we (1p)" : X_G, X_{Ch} [muh] "we, 1p"

Loanwords provide evidence for the direction of change from *h* > *k* attested in the comparative data. In all such cases, the ALS preserves *h*.

- (4. 309) EM *xa ʒɛ > X_M [haçi] : X_{Ch} [kaçi-k] 'scratch'

To summarise the described patterns of regional sound change: based on the analysis of sound innovation, we may tentatively sort the varieties of the Xinka language family into two regional groups. Whereas the innovations of $\phi' > s$ and $s > \dot{s}$ occur in the varieties X_M , X_G , X_{Ch} , X_{Jum} (with X_Y , X_{Jut} and X_S) preserving the original sound, the change of $l, \not{t} > t$ affects X_Y , X_{Jut} , X_{Jum} and X_S (with X_M , X_G and X_{Ch} leaving the lateral unchanged). The innovations define two groups:

$$\begin{array}{ll} X_1 = & X_Y, X_{Jut}, X_S, (X_{Jum}) \quad [\text{preserves } \phi' \text{ and } s; \text{ innovates } t] \\ X_2 = & X_M, X_G, X_{Ch}, (X_{Jum}) \quad [\text{innovates } s \text{ and } \dot{s}; \text{ preserves } l, \not{t}] \end{array}$$

It is striking that the variety of X_S which was spoken in close vicinity of X_G and X_{Ch} shares these innovations/preservations with the varieties of X_Y and X_{Jut} . The X_{Jum} shares one change with each of the groups. The X_M shares innovations/preservations with the central varieties X_G and X_{Ch} . The other described sound changes support this classification and allow further subgrouping. Vowel shift indicates possible innovations in X_Y and X_{Ch} as opposed to X_M and X_G (4. 298), and innovations in X_{Ch} show that $X_M \neq X_{Ch}$ (4. 306). As suggested by Kaufman (personal communication, 1997 and 2001), X_M is thus phonologically closest to X_G , which also defines its relative position in the Xinka language family. Shifts in fricative sounds, however, show that X_M also shares sound features with X_Y as opposed to the changes in X_G and X_{Ch} , which can be identified as rather recent and are therefore not relevant for the present reconstruction.

Recent data of X_G provide evidence for several of the described diversifying changes to be still active in the terminal state of the language. Terminal speakers deviate in their phonetic traits. This is most obvious regarding the use of the retroflex $\mathfrak{s}$ that is only attested with JS and JAP. JS furthermore tends to assimilate $ku + \text{?V}$ to $k\omega$ (see § 4.4.4). Both of these phonetic traits are characteristic for X_{Ch} rather than X_G , although grammatically both speakers use X_G .

4.5.2 *Patterns of assimilation in loanwords*

Forms that were borrowed into Xinka from other languages exhibit regular patterns of assimilation, which provide additional information about the phonological properties of Xinkan (see § 4.3). This section lists only the identified processes of assimilation in loanwords in Xinka; borrowed forms that do not exhibit any patterns of assimilation will not be dealt with.

Loanwords attested in the ALS can be identified to have been borrowed from Mayan, Nahuatl, and Spanish. Loans from other languages/language families are attested in Xinkan, however, most of these are widely diffused forms for which the precise direction of change cannot be definitely determined.

4.5.2.1 *Mayan Loans*

The majority of sound changes that Mayan loans underwent upon borrowing into Xinka have been described by Campbell (1972) in his study on Mayan loanwords in Xinkan. Xinka is phonologically quite similar to Mayan, which may be the result of intense contact between both language groups.

The basic root pattern in Maya is CVC, whereas Xinka has polysyllabic CVCV (see § 4.4.1). To assimilate to the basic root pattern in Xinka, Mayan loans aggregate a final vowel (4. 310). In most cases the added final vowel is harmonic to the root vowel (Campbell 1972a:188-189).

(4. 310)	a.	<mapi>	[mapi]	'coyol palm' (4059.)	<	pM * <i>map</i> 'coyol palm' [C-72]
	b.	<uszu>	[ʔuʂu]	'fly' (4718.)	<	pM * <i>ʔus</i> 'fly' < pMZ * <i>ʔusu</i> [C-72]
	c.	<meme>	[meme]	'crazy' (4076.)	<	pM * <i>me:m</i> 'mute, dumb' [C-72]
	d.	<szíca>	[šik'a]	'hawk' (4468.)	<	pM * <i>šihk</i> 'hawk' [C-72]
	e.	<naei>	[nak'i]	'chilli' (4139.)	<	pK * <i>naq</i> 'seed, pit' [C-71]
	f.	<muyi>	[muyi]	'chicle tree' (4115.)	<	pM * <i>muy</i> 'chicle tree' [C-72]
	g.	<pati>	[pati]	'cloth' (4060.)	<	pK * <i>poʔ</i> 'cloth' [C-72]

There are several processes where marked Mayan sounds are simplified upon borrowing into Xinkan (4. 311), (4. 315) etc. For example, glottalisation in Maya stops can be lost in Xinka.

(4. 311)	a.	<cayi>	[kayi]	'to sell' (2141.)	<	pM * <i>k'ay</i> 'to sell' [C-72]
	b.	<sicar>	[sikaɾ]	'tobacco' (4381.)	<	pM * <i>si:k</i> 'tobacco' [C-72]

As a matter of fact, this pattern is relevant to the issue of phonemic or allophonic contrast of [k] and [k'] (see § 4.3.1.1.3). There are instances loans from Mayan preserve *k'* (4. 312); however, given that Maya *k'* is frequently changed into *k* upon borrowing may suggest that the glottalised velar stop might not have been a regular feature of the Xinka phonemic system before intense contact with Mayan.

(4. 312)	a.	<packi>	[pak'i]	'cypress nut' (4218.)	<	WM * <i>paɣk'</i> 'pineapple' [K-03]
	b.	<packa>	[pak'a]	'to nail' (2801.)	<	GLL * <i>pahk'</i> ~ * <i>pak</i> 'wall' [K-03]

As the Xinka phonemic system does not include uvular stops, the sounds *q* and *q'* in Eastern Mayan loans are rendered into velar stop *k* in Xinka (4. 313).

(4. 313)	a.	<guŋenac>	[winak]	'witch' (3888.)	<	pM * <i>winaq</i> 'man, person' [C-72]
	b.	<naei>	[nak'i]	'chilli' (4139.)	<	pK * <i>naq</i> 'seed, pit' [C-71]
	c.	<szaaalaguisz>	[šak'alawiš]	'white' (4411.)	<	KCH <i>saqal</i> 'whiteness' [E-65]
	d.	<éolo>	[k'olo]	'to flay' (2166.)	<	pM * <i>qol</i> 'to peel' [K-03]

In many Mayan loans, the affricate *č'* has changed into *s* (see § 4.3.1.2.2).

(4. 314)	a.	<szuszumí>	[šušumi]	'coati' (4522.)	<	WM * <i>č'uč'um</i> 'coati' [C-72]
	b.	<suesin>	[suk'sin]	'jug' (4395.)	<	pM * <i>čuhh</i> ; POQ <i>suh</i> 'gourd' [C-71]

This process of deaffrication may also reflect in Mayan loans that change *č'* to *t*.

(4. 315)	<cotó>	[kotoʔ]	'molar' (Ch-C)	<	pM * <i>q'oʔe'</i> 'cheek' [K-03]

Another form of deaffrication regards the Mayan sound *č* that may change into *s* (4. 316) or *k* (4. 317).

(4. 316)	a.	<szinác>	[šinak]	'bean' (4472.)	<	WM * <i>čenaq</i> 'bean' [C-71]
	b.	<szúni>	[šuni]	'star' (4504.)	<	EM * <i>č'umi:l</i> 'star' [K-03]
	c.	<coszco>	[koško]	'buzzard' (3750.)	<	pM * <i>k'ut</i> 'buzzard'; pK * <i>k'uč</i> [K-03]
	d.	<szayá>	[šayaʔ]	'sour' (4463.)	<	pCh * <i>č'ah</i> 'bitter' [K-03]

(4. 317)	<jóeóguàł>	[hok'o-wa-ʔ]	'corn husk' (3954.)	<	GLL * <i>xoč</i> 'break, harvest' [K-03]

Campbell pointed out that *č* is preserved in many cases (4. 318), but that these are rather recent loans (1972:189).

- (4. 318) <chagui> [čawi] 'hard thing' (3688.) < pM *kaw; WM čawi 'hard, stiff' [C-72]

The reverse process, affrication, is also attested. Since the Xinka phonemic system does not include an unglottalised alveo-dental affricate, Mayan ϕ becomes ϕ' when borrowed into Xinkan (4. 319) (cf. Campbell 1972a:189).

- (4. 319) a. <txáma> [ɣ'ama] 'good' (4637.) < CHL ϕam 'good' [C-72]
 b. <tzimaja> [ɣ'imaʔa] 'potter' (4645.) < pM * $\phi ima(\gamma)$ 'gourd, jug' [K-03]
 c. <quitxu> [kiɣ'u] 'to exchange' (3020.) < pM * $k'e\acute{s}$ 'change' [K-03]

Likewise, s may change into ϕ' if the root vowel is followed by a glottal stop (Campbell 1972a:188; see also § 4.4.6) (4. 320).

- (4. 320) a. <txinána> [ɣ'inaʔna] 'scorpion' (4647.) < pM * $si:na \gamma$ 'scorpion' [C-72]
 b. <txuemuε> [ɣ'imi] 'rope' (4661.) < pY * sum 'lasso, rope' [K-03]

Another process of affrication involves the change from s to $\acute{s}$ (4. 321).

- (4. 321) a. <poch poch> [poč poč] 'lungs' (4314.) < KCH, KAQ $pospo \gamma$ 'lungs' [C-77]
 b. <puchu> [puču] 'hunchback' (Ch-F) < GLL * $p'u:s$ 'hunchback' [K-03]

As Xinka does not have initial r -, Maya r in initial position is rendered as y in loans (4. 322). Mayan loans that exhibit r - in initial position are only attested in X_{Ch} where they occur as the result of the recent sound change described in § 4.3.1.4.1.

- (4. 322) <yuema> [yima] 'hog plum' (4767.) < WM * yum 'jocote' [C-77]; CM * rum [K-03]

There are several changes involving fricative sounds. The Mayan velar x changes into h or $\acute{s}$ in Xinkan (4. 323), (4. 324).

- (4. 323) a. <jója> [hoha] 'heron' (Ch-C) < pM * $xo:x$ 'crow' [C-72]
 b. <nau jarro> [haro] 'breadnut tree' (Ch-P) < pM * $\gamma ax\acute{s} \sim \gamma ox\acute{s}$ 'breadnut' [K-03]
- (4. 324) a. <puesza> [piša] 'smelly' (4360.) < pM * $pahar$ 'skunk'; POQ $pahar$ [C-72]
 b. <szueja> [šiha] 'sand' (4526.) < GTz * $hi \gamma$ 'sand' [K-03]
 c. <muesza> [miša] 'to bury' (2707.) < pM * muq 'to bury'; IXL $muxa$ [K-03]

We also find the opposite process of Maya $\acute{s}$ being rendered as h or y (4. 325) (see § 4.3.1.4.2).

- (4. 325) <pági> [pahi] 'ravine' (4222.) < pK * $pa\acute{s}$ - 'to split, break' [K-03]

The vowels of Mayan roots borrowed into Xinka have in some cases been subsequently changed. All these changes involve the vowel o : Maya o is changed into a (4. 326), u (4. 327) or i (4.328); in some cases Maya u (4. 329) and a (4. 330) are rendered into o in Xinka.

- (4. 326) a. <pati> [pati] 'cloth' (4060.) < pK * $po \gamma$ 'cloth' [C-72]
 b. <caataa> [k'ata] 'lie down' (2089.) < GK * $ko\phi$ 'lie down' [K-03]
- (4. 327) a. <púpuc> [pupuk] 'mat' (4338.) < pM * $pohp$ 'mat' [C-72]
 b. <cúnu> [kunu] 'buy' (2178.) < WM * koy 'to buy' [C-71]
 c. <púmu> [pumu] 'incense' (4335.) < pM * $po:m$; pMZ * $po:mV$ 'incense' [C-72]
- (4.328) a. <txuεεuε> [ɣ'ik'i] 'half' (4654.) < pCh * $\phi'ok$ 'to break' [K-03]
 b. [tiririʔ] 'round' (X_G) < EM * $toli$ 'round'; IXL $t'oro \gamma$ [K-03]
- (4. 329) <toctoc> [toktok] 'mockingbird' (4590.) < PQM $tuqtuq$ 'mockingbird' [S-73]
 < KCH $tuktuk$ 'woodpecker' [E-65]

- (4. 330) a. <poεo> [poko] 'break' (2905.) < pM **pak* 'to break, split' [K-03]
 b. <yoŁe> [yoŁe] 'spill, scatter' (3534.) < LL **yal* 'scatter, throw' [K-03]

4.5.2.2 Nahuan Loans

There are few loans from Nahuan languages in Xinka. The majority of Nahuan loans come from Pipil, which is historically identified as a contact language. Some loans, however, are from Classical Nahuatl and are also attested as loans in Mayan highland languages. We may assume that these loans have entered the language in the colonial era – either through Mayan or even directly from Nahuatl that served as the regional *lingua franca* (see Suárez 1983:164-165).

The limited number of Nahuan loans does not permit the definition of regular rules of phonological assimilation. The final consonant *-t* and syllable *-ti* may be indicative for loans from Pipil where *-t* / *-ti* marks the absolutive in nouns (Campbell 1985:39-40), while Classic Nahuatl has *-tl* / *-tli* (4. 331). It is, however, unclear whether *-t* and *-ti* may also be interpreted as phonological assimilations of *-tl* and *-tli*. Mayan languages have borrowed terms from Nahuatl assimilating *-tli* > *-ti* (e.g. NAH *mačahili* > KCH *masati* 'pineapple'). Moreover, in verbal stems, the suffix *-ti* occurs in Xinka also in a different morphosyntactic function, as an alternation of the inchoative suffix *-ki*.

- (4. 331) a. <siɣuapati> < NAH: *siwapahtli* 'medicinal plant' [K-92]
 [siwapati]
 'ciguapate' (4383.)
 b. <szuti> < PIP: *šuti* 'freshwater snail' [C-85]
 [šuti]
 'freshwater snail' (4519.)

Lexemes ending in *-t* and *-š* are characteristic for loans from Nahuan (see Schumann 1967:25) (4. 332). However, not all such forms can be securely identified as etymologically Nahuan (e.g. <epét> "icaco").

- (4. 332) a. <chuculat> [čukulat] 'chocolate' (4261.) < NAH *čokolatl* 'chocolate' [K-92]
 b. <aŁtèpét> [ʔat̪t̪epet] 'village, town' (3617.) < NAH *altepetl* 'village, town' [K-92]
 c. <tenész> [teneš] 'lime' (4561.) < PIP *tenes* 'lime' [C-85]

Furthermore, we can identify those lexemes as Nahuan which end in the syllable *-me* that derives from Nahuatl *-mitl* (4. 333).

- (4. 333) X_S <chiname> [činame] 'town' (S-Gav) < NAH *činamitl* 'enclosure' [K-92]

The phonotactic pattern of some Nahuan loans suggests that they were borrowed into Xinka via K'iche'an languages (4. 334).

- (4. 334) a. <tunáti> < KCH *tuna:x* 'play instr.' < PIP *tuntun* 'shell' [C-85]
 [tunati]
 'play instr.' (3325.)
 b. <maza> < KCH *masati* 'pineapple' < NAH *mačahili* 'pineapple' [K-92]
 [masa]
 'pineapple' (4064.)

Most forms borrowed into Xinka from Nahuatl languages preserve their phonotactic patterns (4. 335) as well as the affricate sounds *č* and *č̣* (4. 336).

(4. 335)	a.	<tiłtick>	[tiłtik']	'black' (4578.)	<	PIP <i>tiltik</i> 'black'; <i>ti:l</i> 'charcoal' [C-85]
	b.	<mistún>	[mistun] [miči]	'cat' (4083.) 'cat'	<	PIP <i>mistun</i> 'cat' [C-85] NAH <i>mistli</i> 'cat' [K-92]
	c.	<szipi>	[šipi]	'hurt by cutting' (3158.)	<	NAH <i>šipewa</i> 'to flay' [K-92]
(4. 336)	a.	<chuculat>	[čukulat]	'chocolate' (4261.)	<	PIP <i>čukulat</i> 'chocolate' [C-85]
	b.	<choo>	[čo]	'beat chocolate' (2200.)	<	NAH <i>čocolatl</i> 'chocolate' [K-92]
	c.	<tutzupari>	[č'uč'u pari]	'measles' (4665.)	<	PIP <i>tsu:tsu</i> 'wound' [C-85]

Phonetic adaptations include the voicing of voiceless stops after nasals (4. 337) and the simplification of consonantal clusters that do not regularly occur in Xinka (4. 338). Some loans reflect the process of deaffrication *č' > s* described in § 4.3.1.2.2.

(4. 337)	X _M	<tondón> /tonton/ 'sea turtle' (4596.)	<	PIP <i>tu:ntu:n</i> 'sea shell = turtle shell' [C-85]
(4. 338)	X _M	<tiszi> [tiši] 'lazy person' (4586.)	<	PIP <i>tiškwit</i> = <i>tiš</i> 'corn dough'; <i>kwit</i> 'to grab' [C-85]
(4. 339)	X _M	<sompe> [sompe] 'pine nut' (4389.)	<	NAH <i>čompamilt</i> 'coral tree' [K-92:316]

4.5.2.3 Spanish loans

Proper Spanish loans underwent processes of regular assimilation to the Xinka phonemic system. Spanish forms that did not undergo these processes are likely to be the result of irregular insertion and code-switching related to language shift rather than lexical items that have been borrowed regularly into Xinka language structure when the language was still intact.

Indicative of Spanish loans are vowel clusters (e.g. *io*) and consonant clusters (e.g. *pl*, *gr*) in either initial or middle position where they are not the result of vowel deletion (see § 4.4.3.1).¹³¹

In Spanish loans, mid vowels *e* and *o* (vowel set 2) are not preserved but generally change into high vowels *i* and *u* (vowel set 1) (4. 340).

(4. 340)	a.	<capiltu>	[kapiltu]	'council' (3710.)	<	Sp. <i>cabildo</i>
	b.	<caguayo>	[kawayu]	'horse' (3681.)	<	Sp. <i>caballo</i>
	c.	<cusztarica>	[kuštarika]	'*rich coast = type of cacao' (3779.)	<	Sp. <i>costa rica</i>
	d.	<paluumász>	[palu:maš]	'dove' (4237.)	<	Sp. <i>paloma</i>
	e.	<szinúla>	[šinula]	'lady' (4476.)	<	Sp. <i>señora</i>
	f.	<pułpu>	[pułpu]	'dust' (4334.)	<	Sp. <i>polvo</i>
	g.	<lagui>	[lawi]	'key' (4019.)	<	Sp. <i>llave</i>
	h.	<máchiti>	[mačiti]	'machete' (4051.)	<	Sp. <i>machete</i>

¹³¹ Suárez identifies the phonemes *b*, *d*, *g*, *f*, *x*, *ñ*, *l*, *f* and *r* in Mesoamerican Indian languages generally as the result of Spanish influence (1983:41).

Consonant clusters are usually simplified in Xinka (4. 341).

(4. 341)	a.	<laúsz>	[lawš]	'nail' (4022.)	< Sp. <i>clavo</i>
	b.	<paalé>	[pale]	'father' (4235.)	< Sp. <i>padre</i>

There is a general pattern of desonorisation with Spanish voiced stops (4. 342) and laterals (4. 343).

(4. 342)	a.	<capiltu>	[kapiltu]	'council' (3710.)	< Sp. <i>cabildo</i>
	b.	<intiuli>	[ʔintyuʔi]	'Indians' (Ch-Z)	< Sp. <i>indios</i>
	c.	<acurra>	[ʔakura]	'needle' (Ch-C)	< Sp. <i>aguja</i>
(4. 343)		<puŁpu>	[puʔpu]	"polvo" (4334.)	< Sp. <i>polvo</i> [polbo]

The alveolar sibilant *s* is palatalised and changes into *š* (4. 344) or *ʃ* (4. 345).

(4. 344)	a.	<szinula>	[šinula]	'lady' (4476.)	< Sp. <i>señora</i>
	b.	<cusztarica>	[kuštarka]	'*rich coast = type of cacao' (3779.)	< Sp. <i>costa rica</i>
(4. 345)	a.	<andamaŁtà>	[ʔandamaʔ ta]	'let's go' (2066.)	< Sp. <i>andamos</i>
	b.	<arhta>	[ʔaʔta]	'far, distant' (Y-C)	< Sp. <i>hasta</i>

In the majority of examples, the Spanish velar fricative [x] is correlated in Xinka with the postalveolar sibilant [š] (4. 346). This suggests that these loans entered the language in the early colonial times, because they preserve the sibilant sound which had already changed into a velar in the Spanish of the seventeenth century (see Penny 1991:86-90).

(4. 346)	a.	<casza>	[kaša]	'chest, box' (3722.)	< Sp. <i>caja</i> [kaxa]
	b.	<szapún>	[šapun]	'soap' (4455.)	< Sp. <i>jabón</i> [xabon]

In a few examples, Spanish [x] becomes *r* in Xinka (4. 347). It is not entirely clear whether this is a change that occurred upon borrowing, or whether these forms are early examples of the rhotacism attested in X_{Ch} at a later stage (see § 4.3.1.4.1, § 4.5.1).

(4. 347)	a.	<móro>	[moro]	'to soak, make wet' (2674.)	< Sp. <i>mojar</i>
	b.	<acurra>	[ʔakura]	'needle' (Ch-C)	< Sp. <i>aguja</i>

The process according to which *l* becomes *r* between high vowels in Xinka is attested in reverse way in that Spanish loans change *r* into *l* between vowels of set 2.

(4. 348)		<peeló>	[pe:loʔ]	'dog' (4273.)	< Sp. <i>perro</i>

Further processes of assimilation regard simplification of marked sounds specific to Spanish. The Spanish lateral [ʎ] (<ll>) becomes a voiced simple lateral *l* in Xinka (4. 349), while Spanish [ɲ] > [n] (4. 350).

(4. 349)		<lagui>	[lawi]	'key' (4019.)	< Sp. <i>llave</i>
(4. 350)		<szinula>	[šinula]	'lady' (4476.)	< Sp. <i>señora</i>

Since [b] is not a phoneme in Xinka, voiced bilabial stops change into bilabial glides [b] > [w]:

(4. 351)		<caguayo>	[kawayu]	'horse' (3681.)	< Sp. <i>caballo</i>

There is one single case where a velar stop *k* in initial position becomes *h* upon being borrowed into Xinka.

- (4. 352) <joroso> [horoso] 'type of chilli' (3962.) < Sp. *coroso*

Changes in final position include the addition of final vowels described for Mayan loans.

- (4. 353) <pelo> [pelo] 'to peel' (2855.) < Sp. *pelar*

Quite striking are Spanish loans that do not end in a vowel but in the postalveolar fricative -š (4. 354) and thus deviate from the phonotactic pattern. It seems that these forms preserve the Spanish plural -s.

- (4. 354) a. <laamunisz> [la:muniš] 'lemon' (4007.) < Sp. *limón*
 b. <paluumász> [palu:maš] 'dove' (4237.) < Sp. *paloma*

This process of borrowing is attested for K'iche'an and other Mayan languages, which likewise adapt Spanish forms phonotactically to the Mayan basic root pattern CVC by borrowing the inflectional suffix -s > -š (see e.g. Campbell 1978a; Wichmann & Hull, in press). As this pattern does not correlate with Xinkan phonotactics, we may tentatively take it as an indication that the respective Spanish forms have not been borrowed directly but through a Mayan language.

Finally, in some Spanish loans we can identify cases of stress shift that cannot be explained as adaptations of the Spanish form to Xinka stress rule (4. 355).

- (4. 355) <peeló> [pe:'loʔ] 'dog' (4273.) < Sp. *perro* ['pero]

5 Lexical classes

The morphological units in Xinka are lexical roots, affixes, clitics and free particles. Most affixes, clitics and particles are monosyllabic. Attested morphological processes are prefixation, suffixation and in rare cases reduplication. Xinka is predominantly suffixing with derivational morphology employing suffixes only. Xinka is head-marking, i.e. the element that determines the syntactic function of a phrase is always the marked element (cf. Payne 1997:31).

Xinka lexical classes (or categories)¹³² can be distinguished into open word classes, i.e. verbs, nouns, adjectives/modifiers, and closed word classes, i.e. pronouns, determiners, question words, auxiliaries, adverbials (including TAM-adverbials), pragmatic markers, prepositions, numerals and quantifiers. The distinction between open and closed word class can be difficult to determine for free morphemes that have been grammaticalised from a lexical word

5.1 Open word classes

On the basis of morphosyntactic function and formal criteria (such as word class-changing morphological derivations and specific inflectional morphology) three open word classes can be distinguished in Xinka: verbs, nouns and adjectives.

The lexical category is not easily determined for all forms and multiple membership is attested. For example, the distinction between nouns and adjectives on the one hand, or verbs and nouns on the other, is sometimes not straightforward as some forms can be interpreted to function in either way.

There are subclasses of nouns and verbs which assume grammatical function in defined contexts and in these functions form closed word classes (see § 5.2). For example, auxiliary verbs share the morphosyntactic properties of verbs and can occur in the function of primary verbs; in their function as auxiliaries, however, they form a closed class. Similarly, non-spatial prepositions share the morphosyntactic properties of nouns, but since they occur in specific contexts in which other nouns cannot occur, they also form a closed word class.

VERBS form the universal lexical category that includes all those lexemes that express actions and processes, or less 'time-stable concepts' (Givón 2001:52; *apud* Payne 1997:47). In Xinka verbs can be cross-referenced for person, take (mostly temporal) inflectional and derivational suffixes and can host TAM-adverbials. Derivational morphology increases or reduces valency of the verb stem. Verbs also function as a derivational basis for the formation of nouns.

Furthermore, verbs can form complex predicates that express grammatical function, such as auxiliary verb constructions (AVC) or compound verbs (including light verb constructions (LVC) and phrasal verbs).

¹³² The term 'grammatical category' is used in the present study only to refer to grammatical functions and not to word classes (cf. Payne 1997:32). What has been traditionally labelled as "parts-of-speech" will be referred to here simply as 'lexical/word class' or 'lexical category'.

Based on the morphological properties, we may define the following verb classes:

- intransitive verbs
- transitive verbs
- auxiliary and copula verbs

The morphosyntactic properties of transitive and intransitive verbs in Maldonado-Xinka are determined by means of identifying the categories attested in the ALS with verbs expressing concepts that could be regarded as inherently transitive (e.g. 'kill', 'beat') or intransitive (e.g. 'go', 'sleep'). Spanish translation contexts in the colonial grammar do not necessarily match the morphosyntactic properties of a given verb, and valency of a specific verbal form can often only be derived from the categories indicated on the verb. Some verbs may be ambitransitive, but these are exceptions and the majority of verbs are either intransitive or transitive as it seems to be generally the case in Mesoamerican languages (Suárez 1983:80). Verb roots can be two- or three-syllabic. It is possible that some three-syllabic roots show traces of ancient stem formation with the productiveness of the relevant suffix being lost at the documented stage of the language.

Intransitive verbs take cross-referencing prefixes in main clauses and cross-referencing suffixes when occurring in subordinate function to mark person agreement with the subject. Root intransitives, derived intransitives and detransitivised verbs (passive) share the same morphological properties. Derived intransitive stems include antipassive/inchoative verbs with *-ki*, positional verbs in *-na* and motion verbs in *-ku* or *-ta* (see § 11.3). Although intransitive verbs do not seem to fall into different subclasses based on their morphological properties, it needs to be noted that motion verbs do not employ the stative-resultative suffix following the past marker *-ʔa* (§ 12.2.2), which seems to be determined by the semantics of the verb root.

Transitive verbs in main clauses mark the agent with cross-referencing prefixes in the nonpast/imperfective and suffixes in the past/perfective, while transitive verbs in dependent/ subordinate contexts take cross-referencing suffixes. Ditransitive verbs are not morphosyntactically distinguished from transitive verbs; they only mark the agent on the verb. Root transitives, derived transitives (transitive positional verbs) and transitivised stems (= causative verbs) exhibit the same morphological properties.

NOUNS are lexical categories that represent so-called time-stable concepts (cf. Givón 2001:51 *apud* Payne 1997:33). In Xinka, inflectional properties of nouns are limited to the morphosyntactic functions of number and person (possession). Nouns can function as a derivational basis for other nominal categories and verbs. Nominal compounding is frequent; here, nouns can also combine with modifying elements of other word classes, i.e. mainly adjectives. Marked with cross-referencing affixes, nouns can function as predicates.

The nominal types in the open word class are object and abstract names as well as toponyms. There are no attested Xinka personal names.

Nouns divide into the two subclasses of alienably and inalienably possessed nouns (see § 8.2). Alienable possession is marked with cross-referencing prefixes, whereas inalienably possessed nouns employ suffixes to mark the possessor.

Inalienably possessed nouns include kinship nouns, body parts and objects inherently connected with the human body or person. Some nouns can take both, possessor-marking prefixes and suffixes, depending on whether they function as inalienably or alienably possessed nouns within the respective context.

Number is only marked on human and a few other animate referents (see § 8.4). The category of singular is generally unmarked, whereas plural markers fall into three groups: (1) inanimate nouns and animal terms mark plural by means of quantifiers; the quantifier employed in the ALS is *te:nan*; (2) kinship nouns mark plural with the suffix *-ka #i*, and (3) all other human/animate nouns employ the suffix *-#i* or *-#e* depending on vowel harmony. Based on plural marking, we may therefore define the following subclasses of nouns:

- inanimate and non-human animate nouns
- human-animate nouns (including place names)
- kinship nouns

The distinctions of these subclasses were noted by Maldonado de Matos and are thus reflected in the ALS. Toponyms that are not derived by means of locative markers but consist of an ethnonym, i.e. a term which describes a population, can occur with plural marker *-#i* and, thus, fall into the human-animate subclass.

ADJECTIVES are lexical morphemes that are used in a noun phrase to specify or modify the head noun (Payne 1997:63). In Xinka the number of adjective roots is small. Modifiers that function as descriptive adjectives are often participle forms that are derived from verbs or are otherwise attested in purely nominal function.

Adjectives share many morphosyntactic properties of the noun. They take nominal cross-referencing and number marking and can function as the head of a noun phrase. Underived adjectives can be distinguished from nouns only on the basis of semantic (i.e. by an inherent adjectival meaning indicating colour, dimension, physical states etc.) and syntactic criteria (e.g. in Xinka modifiers always precede the modified noun). Universally inherent grammatical categories of adjectives are comparison and equation. In Xinka comparison is marked by means of specific modifiers and reduplication of the adjective root. Xinka adjectival roots fall into the following semantic domains which exhibit the same morphosyntactic properties: human characteristics, dimension/distance, quantity/degree, age, value, colour and other physical properties such as weight, consistence, temperature etc.

Participles occur in the syntactic function of adjectives/modifiers. Other attested processes of adjectivisation are non-productive.

5.2 Closed word classes

Closed word classes often derive originally from verbs, nouns and adjectives that have become grammaticalised, and therefore they can share the morphosyntactic properties of the open classes. Some closed classes simply consist of semantically confined groups of nouns or verbs to which no further members can be added (e.g. numerals, adpositions, TAM-adverbials), or which occur in restricted functional contexts. Other closed classes consist of function words, particles or clitics.

Closed word classes with nominal properties include: pronouns (§ 7), determiners (§ 8.5), question words (§ 13.2), numerals (§ 8.6), quantifiers (§ 8.4)

and prepositions (§ 9). Closed word classes with verbal properties include: auxiliary/copula verbs (§ 10.1.3), TAM-adverbials (§ 12.5), deictic roots (§ 14), pragmatic markers (§ 13.3-13.5) and conjunctions (§ 17.2). Adverbs exhibit both nominal and verbal properties; they do not form a separate class as such.

PRONOUNS: Free pronominal forms in Xinka include personal pronouns, intensifier-reflexive pronouns and indefinite pronouns.

Personal pronouns are combined from demonstratives and cross-referencing suffixes that mark the possessor on inalienably possessed nouns. Pronouns do not take further grammatical markers. In the ALS personal pronouns distinguish first, second and third person in singular and plural. The comparative data from X_{Ch} and X_{Jum} indicate the existence of a reverential second person, which combines a determiner and a cross-referencing suffix for the third person (singular or plural).

Third person pronouns are also attested in contexts where they have a demonstrative meaning ('this', 'that'), and vice versa, demonstratives can occur in pronominal function and substitute for third person pronouns. The comparative data indicate the combination of demonstratives and third person pronouns to form different degrees of personal deixis.

Xinka personal pronouns function as core-arguments (i.e. S/A and O) and oblique arguments of verbal predicates. They also mark the subject on nominal predicates and can complement possessor-marking on nouns. In all these functions pronouns show agreement with the person that is cross-referenced on the verb or the noun. Personal pronouns can also occur with unmarked verbs and nouns, functioning as the only reference to subjects and possessors. In the second person, pronouns can be used as vocative pronouns. Imperative predicates can be accompanied by a personal pronoun in the second person.

Intensifier-reflexive pronouns consist of the intensifier-reflexive root *ki-*, the unidentified morpheme *-wa* that can be omitted in the third person, and possessor-marking suffixes. Intensifier-reflexive pronouns are coreferential with the person of the nominal form or verb they accompany.

Indefinite pronouns ('somebody, someone') are based on the question words for human/person and combine with the intensifier *ki*. According to Maldonado de Matos the negative indefinite pronoun 'nobody' is not represented by a single morpheme but combines the affirmative indefinite pronoun with the marker *ni-* that is not further attested in the corpus and the conditional adverbial *ma* (see § 12.5.4).

DETERMINERS: Xinka does not distinguish definite determiners, or specifier articles, and demonstratives by different roots. Instead the demonstrative *na* also occurs in the function of a definite determiner that precedes noun phrases. Definite determiners and demonstratives can combine with each other to form semantic nuances of indexicality. Xinka distinguishes immedial, proximal and distal demonstrative roots. Demonstratives can occur in adnominal (§ 8.5.2.1) and pronominal (§ 8.5.2.2) function. In pronominal function, demonstratives can inflect for number. There are also examples of third person pronouns expressing demonstrative concepts ('this', 'that') (§ 8.5.2.3).

QUESTION WORDS form a closed class of morphologically diverse lexical items. A certain number of question words are based on the interrogative marker *ʔn*; others seem to combine an interrogative root and demonstratives (e.g. *we-na* 'who?').

Question words can occur in direct and indirect interrogative contexts. They are also employed as relativisers and subordinators.

NUMERALS constitute a closed word class to which no new member can be added. The Xinka numeral system is vigesimal (Campbell, Kaufman & Smith-Stark 1976:556). Morphologically, numerals fall into derived and underived forms. The body part term *pu* 'hand' refers to the number 'five'. From 'ten' onwards all numerals are compounds. A morphological distinction of cardinal and ordinal is not attested in the corpus. Syntactically, numerals precede the noun phrase like other modifiers. Numerals can combine with temporal adverbs to indicate distance in time. There is no category of numeral classifiers, although Xinka numerals do take a small number of suffix-markers including the intensifier/distributive *ki*.

QUANTIFIERS constitute a closed class on semantic, morphological and functional grounds. The quantifiers *te:na-* 'much, all' (§ 8.4.1.1), *taha-* 'many, all' (§ 8.4.1.2), *tumu-* 'all, every' (§ 8.4.1.3) are employed to mark plural on non-human nouns. They generally precede the modified noun phrase. Morphologically, quantifiers combine with the distributive marker *ki* and the suffixes *-ʔ* and *-n*, the function of which is not entirely clear, although they might indicate mode (see § 8.4.1, § 13.3). The quantifiers are not related to the Xinka question words for content questions of quantity, i.e. 'how many?' or 'how much?'.

PREPOSITIONS: On semantic and morphological grounds, prepositions can be distinguished into 'spatial prepositions' (§ 9.1) and 'non-spatial prepositions' (§ 9.2), which can both function as heads of adpositional noun phrases.

- 'spatial prepositions' consist of prepositional roots that can occur as bound or free forms, the latter of which usually combine with demonstratives. In some cases spatial prepositional roots are also attested with possessor-marking suffixes. Spatial prepositions precede the noun phrase.
- 'non-spatial prepositions' mark oblique arguments. They can either precede a noun phrase or constitute a prepositional phrase on their own, taking possessor-marking suffixes. In Mesoamerican linguistics, obligatorily possessed prepositional categories that encode non-core arguments are often referred to as 'relational nouns' (see Campbell, Kaufman & Smith-Stark 1986:545ff.). This term is not used here, since Xinka non-spatial prepositions are unmarked when preceding a noun phrase and take possessor-marking suffixes only when functioning as a prepositional phrase.

AUXILIARY VERBS share the morphosyntactic properties of verbs but exert only grammatical function, while the conceptual meaning of the clause is carried by the lexical verb they accompany. Xinka employs auxiliary verbs and auxiliaries derived from verbs that do not take inflectional markers. Most auxiliary verbs and auxiliaries in Xinka are attested as primary verbs in the corpus of data, including existential verbs (e.g. *ʔaya* 'to be in a place', *ʔuka* 'have' etc.), motion verbs (e.g. *ʔaku* 'go'), and complement-taking verbs (e.g. *ʔuʔa* 'want').

There are two patterns of auxiliary verb constructions in Xinka: those where auxiliary verbs/auxiliaries follow the lexical main verb in subordinate syntactic function, and those where the auxiliary verb precedes a nonfinite lexical main verb. Most auxiliary verb constructions in Xinka that indicate grammatical functions such as TAM-categories have the auxiliary following the lexical main verb in a syntactically subordinate function.

ADVERBS: There is no separate open word class of adverbs. Adverbs function as semantic and syntactic modifiers of the predicate. Most lexical items that occur in adverbial function are particles or clitics or combinations of nouns/verbs and particles/clitics. Adverbs do not exhibit any specific morphological properties. They are morphologically nominal, i.e. complex adverbial forms are inherently nominal. Adverbial forms in Xinka cannot take plural markers or be possessed.

The definition of adverbs is arbitrary and based on the semantic contexts. Xinka has modal, temporal and locative adverbs.

- 'modal adverbs' describe the manner of the predicate action. They are derived from adjectives, or could be identified as adjectives in adverbial function. Examples are *šaʔ* 'good, well', *ʔakani* 'like, so', *ʔakʔ* 'a bit' etc.
- 'temporal adverbs' include deictic elements, prepositions and numerals. Examples are *nankun* 'afternoon', *ʔaʔa* 'tomorrow', *ʔaʔmu-kan* [today-ago] 'yesterday', *pi-kan* [two-ago] 'the day before yesterday' etc. Temporal adverbs can combine with TAM-adverbials
- 'locative adverbs' occur as single modifiers of predicates and combine with deictic markers to specify direction of movement.

TAM-ADVERBIALS accompany the predicate and indicate temporal, aspectual and modal categories (§ 12.5). Morphologically and functionally they form a separate class of their own. TAM-adverbials derive from directionals and are therefore of verbal origin. They take the suffixes -ʔ and -ʔ, which are in other contexts identified as participle markers. TAM-adverbials mostly follow the predicate they refer to, however, auxiliary verbs are always preceded by adverbials.

DIRECTIONALS are used to indicate categories of spatial and temporal deixis. Spatial and temporal reference is realised by the same directionals, which are of verbal origin and can in some cases be shown to have diffused from Mayan languages (i.e. **peʔ* 'come', **taʔ* 'come'). Directionals can combine with adverbs specifying the position in space/time (§ 14.2 and § 14.3).

PRAGMATIC MARKERS include negative and affirmative adverbs and clitics. There are different negative markers for different syntactic functions. Negative markers seem to be morphologically complex; they can combine with elements from other closed word classes.

CONJUNCTIONS do not form a separate word class in Xinka. They are derived from demonstratives, verbs, adverbials etc.

6 Personal reference

Person can be expressed in Xinka by two grammatical categories: cross-referencing affixes and personal pronouns (§ 7). Cross-referencing affixes signal anaphoric participant reference of S/A on verbal and nominal predicates and mark the possessor on nouns. Two basic patterns of cross-referencing are attested: prefixation and suffixation. Cross-referencing prefixes and suffixes are mutually exclusive and do not occur on the same root or stem; there are a few possible exceptions to this rule that will be discussed in § 10.1.1.

The usage of prefixes and suffixes depends on various morphosyntactic and semantic parameters: word class and alienable/inalienable possession for nouns; transitivity, tense/aspect and syntactic hierarchy (main clause/subordinate clause) for verbs. The distribution of cross-referencing affixes shows that the same forms that mark the subject on transitive verbs (A) also mark the possessor on nouns (POSS).

CROSS-REFERENCING PREFIXES generally mark the subject (S) on intransitive and A on nonpast/imperfective transitive verbs in declarative main clauses (§ 10.1). On nouns, prefixes either mark the possessor of alienably possessed nouns (see § 8.2.2) or the subject of a predicative noun phrase (see § 10.2.2.1).

CROSS-REFERENCING SUFFIXES mark A on past/perfective transitive verbs in main clauses (see § 10.1.1.1) and S/A on subordinate predicates. The possessor on inalienably possessed nouns is marked with cross-referencing suffixes (see § 8.2.3); the same set of suffixes can mark the argument on prepositions (§ 9.2). Independent pronouns are formed with determiners and possessor-marking suffixes (see § 7.1.1).

Table 6. 1: Composite statement of cross-referencing affixes in the ALS¹³³

	Prefixes			Suffixes		
	ANPAST, PALIEN	S	SPAST	PINALIEN	APAST, SDEP	ADEP
1s	ʔan-	ʔan-	ʔan-	-n, -an	-n	-n
2s	ka-	ka-	ka-	-ka	-kaʔ	-kan
3s	mu-	ʔa-	Ø-	-h, -i (C_)	-y	-y
1p	muk-	muk-	muk-	-k	-k	-k
2p	ka- ... ʔay	ka- ... ʔay	ka- ... ʔay	-ka ʔay	-ka ʔay	*-kan ʔay
3p	mu-... (ki=)ʔik	ʔa-... (ki=)ʔik	Ø-... (ki=)ʔik	-h (ki=)ʔik	-y (ki=)ʔik	-y (ki=)ʔik
	Set A ₁	Set A ₂	Set A ₃	Set B ₁	Set B ₂	Set B ₃

¹³³ Following a practice in Mesoamerican linguistics, Campbell & Kaufman in their field notes label the different sets of cross-referencing affixes as A (prefixes) and B (suffixes). For the description of the system of personal reference in the present chapter I will adopt the nomenclature of A- and B-sets, however, deviating in the numbering from the Campbell & Kaufman-notes. In the remainder of this study the system of reference to A/B-sets is not used, instead sets will be labelled according to their semantic role and function. This is not unproblematic, since some sets have multiple functions and it would be practical to refer to them with one common nomenclature. However, in order to avoid confusion of when A refers to the grammatical role of the transitive subject and when it refers to a set of cross-referencing affixes, I decided to gloss the sets according to their syntactic function as S or A arguments.

Maldonado-Xinka distinguishes three persons in singular and plural. The first, second and third person singular and the first person plural are represented by different affixes. The second and third person plural are formed with the affixes of the singular forms and a plural clitic, or particle. In the second person the plural clitic used is *ʔay*; it always follows the verb. In the third person plural, the plural clitic *#k* and the complex form *ki=#k* are used. They also follow the verb, although *#k* is attested in the position preceding auxiliary verbs (cf. § 6.3).

Cross-referencing prefixes and suffixes do not significantly deviate from each other in form (see Table 6. 1). The markers of the first and second person are almost identical. In the first person singular the vowel *a* is lost in suffix position, unless the cross-referenced lexeme either ends in final vowel *a* or in a consonant. In all other cases, the final vowel of the marked stem is lengthened.

In the third person singular and plural, there are three prefix- and two suffix-markers, which do not occur in exchangeable contexts and can be used as a basis for defining different sets of cross-referencing affixes.

Set A₁: The first set of cross-referencing prefixes (third person: *mu-*) marks A on nonpast/imperfective transitive verbs in main clauses as well as the possessor on all those nouns that do not fall into the category of inalienably possessed.

Set A₂: On intransitive verbs in main clauses in nonpast/imperfective S in the third person is marked with *ʔa-*.

Set A₃: On intransitive verbs in main clauses in the past/perfective the third person is unmarked.

Set B₁: The possessor of inalienably possessed nouns is marked with cross-referencing suffixes; the suffix of the third person is *-h*, which is also used with *pata-wa-*, i.e. with the anterior/perfect form of the auxiliary verb *pata-* (see § 10.1.3.6).

Set B₂: In the past/perfective, the agent (A) of transitive verbs in a main clause is marked with cross-referencing suffixes. The same set of suffixes marks S on intransitive verbs in dependent/subordinate clauses.

Set B₃: The person-marking suffixes of this set seem to morphologically combine the suffixes of Set B₂ and the subjunctive marker *-n* (see § 13.3); the full morphology only reflects in the second person. These suffixes mark A on transitive verbs in subordinate syntactic context.

The use of the different sets of cross-referencing affixes is determined by several semantic parameters (see above):

ALIENABILITY: Possessor-marking on nouns is determined by the parameter of alienability, i.e. the use of possessor-marking prefixes and suffixes depends on whether the noun is alienably (6. 1) or inalienably possessed (6. 2).

(6. 1)	a. <ca jaszu> ka-hašu 2sP-pig 'your pig' OT: "tu marrano" (351.)	b. <mu guayà> mu-wayay 3sP-milpa 'his milpa (corn field)' OT: "sus milpas" (275.)
(6. 2)	a. <szaja an> šaha:-n mouth-1sP 'my mouth' OT: "mi boca" (325.)	b. <utàc> ʔuta-k mother-1pP 'our mother' OT: "nuestra madre" (361.)

Cross-referencing of S/A on verbs is conditioned by transitivity, tense/aspect and syntactic hierarchy.

TRANSITIVITY: The subject of the nonpast/imperfective intransitive verb (S) is marked differently in the third person than the subject of the nonpast/imperfective transitive verb (A). In the first and second person the prefixes on intransitive and transitive verbs are identical.

- (6. 3) a. <an màrà>
ʔan-ma:ra
 1sS-rest
 'I rest'
 OT: "yo descanso" (1471.)
- b. <a màrà>
ʔa-ma:ra
 3sS-rest
 'he rests'
 OT: "aquel descansa" (1473.)
- (6. 4) a. <an pùla>
ʔan-pula
 1sA-make
 'I make'
 OT: "yo hago" (393.)
- b. <mu piri qui Lic>
mu-piri ki=ʔik
 3sA-see INTENS=PL
 'they (themselves) see (it)'
 OT: "aquellos ven" (742.)

TENSE/ASPECT: Participant reference is dependent on the tense/aspect of the predicate. Intransitive verbs generally mark the subject with cross-referencing prefixes. Past/perfective is marked by means of the stative-resultative suffix -ʔ (see § 12.2.1.2).

- (6. 5) a. <an màrà>
ʔan-ma:ra
 1sS-rest
 'I rest'
 OT: "yo descanso" (1471.)
- b. <an màrà>
ʔan-ma:ra-ʔ
 1sS-rest-STAT
 'I rested'
 OT: "yo descansé" (1483.)
- (6. 6) a. <a màrà>
ʔa-ma:ra
 3sS-rest
 'he rests'
 OT: "aquel descansa" (1473.)
- b. <màrà>
Ø-ma:ra-ʔ
 3sS-rest-STAT
 'he rested'
 OT: "aquel descansó" (1487.)
- (6. 7) b. <an pùla>
ʔan-pula
 1sA-make
 'I make'
 OT: "yo hago" (393.)
- b. <pulàn>
pula:-n
 make-1sA
 'I made (it)'
 OT: "yo hice" (405.)

SYNTACTIC HIERARCHY: Xinka distinguishes verbal predicates in certain subordinate clauses and contexts by a different set of cross-referencing affixes. Dependent cross-referencing suffixes are mostly used with subordinate predicates that are coreferential in subject with the main predicate. In auxiliary verb constructions that have the auxiliary following the lexical main verb, S/A is marked on the auxiliary with dependent-marking cross-referencing suffixes.

Table 6. 2: Third person cross-referencing affixes in main and subordinate clauses (ALS)

Function	Main Clause	Subordinate Clause
S	prefix ʔa-	-y
S _{PAST}	prefix Ø-	-y
A	prefix mu-	-y
A _{PAST}	suffix -y	-y

The functional contexts of the different sets for personal reference will be described in more detail in the following sections of this chapter. Comparing the forms and patterns from the ALS with person-marking in the other Xinka varieties, we will see that the system of cross-referencing affixes can differ substantially with respect to the number of grammatical persons, formal properties of the morphemes and the contexts where the markers are used. The cross-referencing system in the ALS shows most correspondences with the person-marking patterns in the Xinka of Guazacapán (X_G).

6.1 Cross-referencing prefixes

In this section the sets of cross-referencing prefixes in the ALS will be compared with the prefixes that are attested in the other Xinka varieties (§ 6.1.1). This comparison is mainly descriptive and does not aim at reconstructing the development of the person-marking system in Xinka. In § 6.1.2 the functional contexts of cross-referencing prefixes attested in the ALS will be described, drawing on comparative examples.

6.1.1 Morphology of cross-referencing prefixes

In the ALS, cross-referencing prefixes mark A on nonpast/imperfective transitive verbs, S on intransitive verbs and nominal predicates as well as the possessor on alienably possessed nouns. Only the markers for the third person (singular and plural) differ in the various functional contexts. Depending on the functional context, the third person is marked with different affixes, while first and second person are always marked with the same affixes in all functional contexts. The second person is always indicated by Maldonado de Matos with an accent sign on the vowel <à>; it is not clear whether this should indicate that the vowel is lengthened or followed by a glottal stop, none of which is suggested by the comparative data (see below). The plural clitics that combine with second and third person prefixes to form the second and third person plural always follow the verb. Maldonado de Matos often (but not generally) leaves a gap between the person marker and the following verb stem, which may suggest that the forms are proclitics rather than prefixes.

Table 6. 3: Composite statement of cross-referencing prefixes in the ALS

		ANPAST, PALIEN	S	SPAST
1s	<an>	ʔan-	ʔan-	ʔan-
2s	<cà>	ka-	ka-	ka-
3s	<mu>, <a>	mu-	ʔa-	Ø-
1p	<muc>	muk-	muk-	muk-
2p	<cà ... ay>	ka- ... ʔay	ka- ... ʔay	ka- ... ʔay
3p	<mu / a ... (qui) Lic>	mu-... (ki=)tik	ʔa-... (ki=)tik	Ø-... (ki=)tik
		A ₁	A ₂	A ₃

GUAZACAPÁN (X_G): Cross-referencing prefixes in X_G distinguish three persons in singular and plural and largely correspond with the forms in the ALS. In the primary data, only the first, second and third person singular as well as the first person plural are attested. The comparative chart below shows that the markers for the second and

third person singular correspond in all data sources. Varying forms are given for the first person singular and plural. Terminal speakers vary $\lambda an-$, $\lambda \partial n-$, and $\lambda n-$, which is reflected in the Schumann data (1967). Among the semi-speakers, PE and RHG use almost exclusively the form with the neutral vowel $\lambda \partial n-$. Campbell and Kaufman give $n-$ as the basic form of the first person in their field notes. Assimilations of $\lambda an > \lambda am$ and $\lambda n > \lambda m$ before p have been omitted from the comparative table (see § 4.4.4). For the first person plural, Campbell and Kaufman indicate $muk-$, whereas Schumann and the semi-speakers give the prefix as $muh-$. The second and third person plural are only attested in the data documented Campbell and Kaufman.

The third person pronouns $mu-$, $\lambda a-$, and $\emptyset-$ are basically attested in the same functional contexts as in the ALS. Schumann does not indicate $\lambda a-$ or the zero-marker, which are, however, attested in the semi-speaker data where $\lambda a-$ is exclusively used as an impersonal marker (on intransitive as well as transitive verbs). The third person singular prefix $mu-$ is used by some of the semi-speakers – but only very rarely – to mark the third person plural. The plural clitics that accompany the cross-referencing affixes in the ALS are not attested in the semi-speaker data.

Table 6. 4: Cross-referencing prefixes in X_G

	G-S	G-SH	G-JAP	G-RHG	G-JS	G-PE	G-C&K
1s	<an-> <in->	$\lambda an-$, $\lambda \partial n-$ $\lambda in-$	$\lambda an-$	$\lambda an-$, $\lambda \partial n-$	$\lambda an-$	$\lambda \partial n-$	<n->
2s	<ka->	ka-	ka-	ka-	ka-	ka-	<ka->
3s A_{NPAST} / P_{ALIEN}	<mu->	mu-	mu-	mu-	mu-	-	<mu->
3s S	-	$\lambda a-$	$\lambda a-$	$\lambda a-$	$\lambda a-$	-	< $\lambda a-$ >
3s S_{PAST}	-	$\emptyset-$	$\emptyset-$	$\emptyset-$	$\emptyset-$	$\emptyset-$	$\emptyset-$
1p	<muh->	muh- $\lambda \partial n-$	-	-	-	-	<muk->
2p	-	-	-	-	-	-	<ka->
3p A_{NPAST} / P_{ALIEN}	< $\ddot{t}ik$ >	mu-	-	-	-	-	<mu->

CHIQUMULLA (X_{Ch}): The cross-referencing prefixes attested in the various data sources from X_{Ch} show significant variation, which may be attributed to the fact that we can identify two different structural types of person-marking prefixes: basic prefixes (Type 1) and complex prefixes or proclitics (Type 2). Prefixes/proclitics of the structural type 2 seem to combine the unidentified root $*m\ddot{t}$ (or $m\ddot{a}$) and a person-marking suffix of Set B₁. In the plural persons the plural suffix $-i$ seems to be inserted in between. The cross-referencing prefixes/proclitics given by Campbell and Kaufman in their field notes are morphologically complex. Structurally, these forms mirror the morphology of personal pronouns (§ 7.1.1). Prefixes/proclitics of both types are used in the same functional contexts, i.e. to mark possessor on alienably possessed nouns and S/A on verbal and nominal predicates.

Most sources indicate forms for the first, second and third person singular as well as the first person plural. The second and third person plural are attested in the Zeeje-ms. (2p), Calderón (1908), Fernández (1938) and in the data of Campbell and Kaufman (2p, 3p). Campbell and Kaufman also identified a formal person that is marked with prefixes of type 2.

The first person singular prefix shows variation across the sources, but in most cases the non-phonemic orthography seems to attest a form with a neutral (i.e. $\lambda \partial n-$)

or high middle vowel (i.e. *ʔm-*); Calderón mostly omits the initial vowel altogether. Because of the nature of the text, the Zeeje-ms. does not include an example for the first person singular. There are very few cases where Fernandéz and McQuown indicate **m-* in the function of a first person singular possessor-marking prefix. Although this form could fall into the structural type 2 (combining **m-* and the suffix *-ʔ* that can indicate the first person singular possessor in X_{Ck}), it is possible that in this case, the form has been borrowed from the Spanish possessive pronoun of the first person singular *mi* 'my'.

For the second person singular, two types of prefixes are attested: The Zeeje-ms., McQuown and Pineda Pivaral exclusively have the basic form *ka-*, the earlier data from Calderón and Fernández indicate the prefix of the structural type 2 **mɨk-* or *mak-*, which Campbell & Kaufman and Julian de la Cruz give as the only cross-referencing prefix for the second person.

Table 6. 5: Cross-referencing prefixes in X_{Ch}

[illegible]

The basic prefix that marks A and possessor in the third person is *mu-*. Campbell and Kaufman indicate the type 2-prefix *məh-*. The Zeeje-ms. has <mug->, which varies with <muc->. It is not clear whether <g> indicates *h* as indicated by Campbell and Kaufman, or whether it represents the velar stop *k* as attested in Calderón and Fernández, who give **m#k-* as an alternative prefix for the third person singular. In the remainder of this study, <mug> from the Zeeje-ms. is phonemicised as *muh-*.

In the Zeeje-ms. the first person plural is likewise indicated as <muc->, which corresponds with the first person plural prefix in the ALS, but is attested in X_{Ch} only once more in similar form, i.e. as *mak-* or **m#k-* in the Fernández vocabulary. Before stops the prefix can be realised in the Zeeje-ms. as <mug->, which may suggest that *muk-* became *muh-*; the examples are generally phonemicised here as *muk-*. Calderón, Fernández and Campbell & Kaufman indicate the first person plural as **m#ki-* or **m#ki-*, which corresponds to the structural type 2.

The Zeeje-ms. and the other data sources from X_{Ch} also deviate with respect to the form of the second person plural. While the colonial text uses the basic prefix combining the second person cross-referencing prefix *ka-* and the plural clitic *ʔay* that is also attested in the ALS, all other sources indicate a form of the structural type 2, i.e. **m#tik* (in one case Calderón uses <mak>, which probably also represents a prefix with a high middle vowel, i.e. *m#k-*). Campbell & Kaufman (field notes) indicate a formal or deferential second person plural; the prefix of the structural type 2 includes the second person formal cross-referencing suffix -y of Set B₂.

In the third person plural the Zeeje-ms. again corresponds with the ALS, indicating the discontinuous combination of the third person singular cross-referencing prefix *muk-* and the plural clitic *liki*. Campbell and Kaufman indicate the complex prefix <məʔih->, which is confirmed in the Calderón-data.

JUMAYTEPEQUE: The set cross-referencing prefixes in X_{Jum} that is indicated in the Campbell & Kaufman-data are structurally very similar to the person-marking prefixes/proclitics of the structural type 2 attested in X_{Ch} . All prefixes consist of the neutral vowel *ə* and a cross-referencing suffix, including the plural suffix -*ʔi* on all plural persons. The language data from X_{Jum} that were documented by Felipe de la Cruz include the first person singular *ʔan-* and the first person plural *muk-*, and show therefore more correspondence with person-marking in X_G . Campbell and Kaufman indicate the existence of a formal second person.

Table 6. 6: Cross-referencing prefixes in X_{Jum}

	Jum-C/K	Jum-E	Jum-G
1s	<ən->	<an-> <in->	
2s	<ək->		
2sf	<əy->		
3sA	<əh->		
3sS	<a->		<a-> <ha->
3sS _{PAST}	Ø-		
1p	<əlki->	<muk->	<muc->
2p	<əlɪk>		
2pf	<əlɪy>		
3p	<əlɪh>		

YUPILTEPEQUE: The cross-referencing prefixes attested in the data from X_Y correspond largely with the markers in Maldonado-Xinka and X_G . There is some variation in the first person singular and plural. Although the variations in the first person singular may result from Calderón's inconsistent orthography (§ 2.2.2.3), it may also indicate that the prefix reconstructs as $*\mathcal{Z}n-$. In the plural persons variant forms of the structural type 2 are attested that include the plural suffix $-i$ and show similarity with the prefixes/proclitics in X_{Ch} and X_{Jum} . In the third person plural the cross-referencing prefix $*m\acute{h}-$ combines with the plural clitic $\mathcal{Z}aya$ following the verb; this form appears to be related to the clitic $\mathcal{Z}ay$ attested in the ALS with the second person plural.

Table 6. 7: Cross-referencing prefixes in X_Y

	Y-C	Y-L	
1s	<n'->, <an->, <in->, <u'n-> (_V)	<un->	= * in-
1sP	<nu->, <mi->*		
2s	<ca->		= *ka-
2sf	<mi->, <mij->, <miy-> (vi, imp) <muy-> (vi, imp)	<mu->	= *miy-
3sA	<mu->, <mi->		= *mi-
3sS	<a->		= *a-
1p	<muc->, <mu-> _[k] <lijiu=>		= *muk- = *li-?
2p	<ka-> <lica=>		= *ka- = *li-ka=
3pA	<miy ... aya>		= *mi- ... $\mathcal{Z}aya$

COMPARATIVE ANALYSIS: Comparing the sets of prefixed person markers in the ALS and the other Xinka varieties, we can identify two structural types: (1) basic prefixes and (2) complex forms that combine person-marking suffixes with a nominal root and insert the nominal plural marker i between root and person marker in all plural persons. In X_{Ch} and X_{Jum} this second structural type is used as the main set of person-marking prefixes/proclitics.

The fact that the various data sources from X_{Ch} , X_{Jum} and X_Y seem to indicate the co-occurrence of both structural types (see Calderón 1908) may suggest that the two types of person-marking prefixes can either be attributed different functions or derive from different functional contexts. In X_{Ch} the functional contexts where the forms of Type 2 are attested correspond with the functional contexts of the basic prefixes in the other varieties. With regard to this it needs to be taken into account that there are reports about the use of two different Xinka varieties in the different *barrios* of Chiquimulilla (see § 1.2).

TYPE 1: The set of cross-referencing prefixes in the ALS shows correspondence with the basic prefixes of personal reference attested in X_G , in the earliest data source from X_{Ch} , the Zeeje-ms., and for the most part with the set of markers used in X_Y . Markers of this set are also attested in some of the other data sources from X_{Ch} and X_{Jum} . The forms of this set are fairly regular in the different varieties.

The first person singular is realised as $\mathcal{Z}an-$, $\mathcal{Z}n$ or $\mathcal{Z}n-$ in the different varieties, with $\mathcal{Z}n$ (or $\mathcal{Z}n-$) structurally corresponding to the pattern of Type 2-prefixes. The ALS prefix $\mathcal{Z}an-$ corresponds with the form $\mathcal{Z}an-$ attested in X_G (Schumann 1967 and semi-speaker data).

Table 6. 8: Comparative statement of cross-referencing prefixes

	X _M	X _G	X _{Ch}	X _{Jum}		X _Y		
			Type 1	Type 2 ¹³⁴	Type 1	Type 2	Type 1	Type 2
1s	ʔan-	ʔan, ʔən-	*ʔn-, ʔan-	ʔən-	ʔan-	ʔən-	ʔən-	
2s	ka-	ka-	ka-				ka-	
				mə-k-		ʔən-k-		
2sf				mə-y-		ʔən-y-	-	
3sA,P	mu-	mu-	mu(k)-	mə-h-		ʔən-h-	mu-	
				mə-k-				
3sS	ʔa-	ʔa-	ʔa-		ʔa-		ʔa-	
3sS _{PAST}	Ø-	Ø-	Ø-		Ø-		-	
1p	muk-	muk-	muk-		muk-		muk-	
		muh-	muh-	mə-ti-ki-		ʔən-ti-ki-	muh-	ti-?
				ki-				
2p	ka- ... ʔay	ka-	ka-				ka-	
				mə-ti-k-		ʔən-ti-k-		ti-ka-
2pf	-	-		mə-ti-y-		ʔən-ti-y-		
3p	mu- ... (ki=)tik	mu- / tik	mu(k)-...liki	mə-ti-h-		ʔən-ti-h-	*mi...ʔaya	

While Maldonado de Matos uses *muk-* to mark the first person plural, there is some variation between *muk-* and *muh-* in X_G, X_{Ch} and X_Y. As the direction of change *k* > *h* in syllable-final position is also attested in other contexts (e.g. *tayuk* > *tayuh*), *muk-* might be the earlier form. The orthographic convention <mug> in the Zeeje-ms. may represent that change, as it is not entirely clear whether <g> needs to be rendered as *h* or *k* (see above).¹³⁵ Even more likely, *muh-* may simply be an abbreviation of the complex prefix form *məʔiki*.

The Type 1-prefixes for the second person are regular and always attested as *ka-*. In the ALS and the Zeeje-ms., the second person plural is additionally marked with the plural clitic *ʔay* (§ 6.3).

In the third person most sources attest the distinction of different prefixes used in different functional contexts. The prefix *mu-* is attested in transitive contexts in most varieties. While in the ALS the prefix *ʔa-* marks third person on nonpast intransitive verbs, it is attested as an impersonal marker in X_G and X_{Ch} where it also occurs with transitive verbs. The third person plural is accompanied in the ALS by the clitic *ʔik* or *ki=ʔik* following the marked verb. In X_G *ʔik* is attested but mostly occurs without additional prefix-marking on the verb. In X_Y the prefix-marked verb is accompanied by the plural clitic *ʔaya*.

TYPE 2: As pointed out above, the complex forms of prefixed anaphoric person-markers that are used in the Xinka varieties of X_{Ch}, X_{Jum} and X_Y, have been grammaticalised from an unidentified nominal root and person-marking suffixes; in the plural forms the nominal plural marker *-ʔi* is inserted between root and personal suffix (see Table 6. 9). Campbell and Kaufman have identified a formal/deferential person that falls morphologically into the structural type 2 and is attested in X_{Ch}, X_{Jum} and X_Y, but not in the ALS or in X_G where only basic prefixes are employed.

¹³⁴ In this table, prefixes of the structural type 2 are given in the same form as there were annotated by Campbell and Kaufman, i.e. with the vowel *ə*.

¹³⁵ In the remainder of this study, the third person singular prefix <mug> from the Zeeje-ms. will be phonemicised as *muh-*; however, it needs to be kept in mind that this rendering might be imprecise.

Table 6. 9: Morphology of Type 2 prefixes in X_{Ch} , X_{Jum} and X_Y

	X_{Ch}	X_{Jum}	X_Y	
1s	ʔə-n-	ʔə-n-		[DEM?-1s]
2s	mə-k-	ʔə-k-		[DEM?-2s]
2sf	mə-y-	ʔə-y-	mi-y-	[DEM?-2/3s]
3s	mə-h-	ʔə-h-		[DEM?-3s]
1p	mə-ʔi-ki	ʔə-ʔi-ki	ʔi-ʔ	[DEM?-PL-1p]
2p	mə-ʔi-k	ʔə-ʔi-k	ʔi-ka	[DEM?-PL-2s/p]
2pf	mə-ʔi-y	ʔə-ʔi-y		[DEM?-PL-2/3s/p]
3p	mə-ʔi-h	ʔə-ʔi-h		[DEM?-PL-3s/p]

As the two structural types of prefixes do not differ functionally, both marking the possessor on nouns and subject on verbs, they will not be distinguished by different glosses; i.e. in the examples given in this study, e.g., the person-marking prefixes *ka-* and *mʔi-* in examples from X_{Ch} will both be glossed identically as '2s'.

With respect to the origin of these two structural types of person-marking prefixes/proclitics, we may speculate that cross-referencing suffixes (see § 6.2) are actually the older inflectional category. Hypothetically, prefixes/proclitics may have developed from independent deictic forms that preceded the verb/noun and have grammaticalised/cliticised in this position. In such a scenario the complex structural type 2 attested in X_{Ch} , X_{Jum} and X_Y would be the earlier form the non-complex prefixes/proclitics developed from. The (supposedly) deictic form **mʔi* that has been eliminated in the first and second person singular of Type 1-prefixes/proclitics may have been preserved in the third person singular and first person plural, i.e. **mʔi-h* > **mu-* and **mʔi-ki* > **muk-* / *muh-*.

Table 6. 10: Hypothetical development of personal prefixes/proclitics in Xinkan

	Type 2	Type 1
1s	*ʔi-n-	> *ʔan- / ʔən-
2s	*mi-k-	> *ka-
2sf	*mi-y-	-
3s	*mi-h-	> *mu-
1p	*mi-ʔi-ki	> *muk-, *muh-
	> ʔi-	
2p	*mi-ʔi-k	> ʔi-ka- > *ka-
2pf	*mi-ʔi-y	-
3p	*mi-ʔi-h	> *mu- / ʔik

6.1.2 Functional contexts

The functional contexts in which cross-referencing prefixes occur in the ALS include alienable possessor-marking and subject-marking on verbal and nominal predicates.

6.1.2.1 Possessor-marking (alienable)

Cross-referencing prefixes (Set A_1) mark alienable possession on all nouns that are not generic body part or kinship terms and do not express an inherently possessive relation to the human body/self. They also mark possession on derived and compound nouns as well as Spanish loans.

- (6. 8) a. <ca jaszu>
ka-hašu
 2sP-pig
 'your pig'
 OT: "tu marrano" (351.)
- b. <mutua Lic>
mu-tuwa **ɬik**
 3pP-cacao tree PL
 'their cacao tree(s)'
 OT: "sus cacaguatales" (272.)
- c. <an anima>
ʔan-ʔanima
 1sP-heart
 'my heart/soul'
 OT: "mi corazón" (302.)
- d. <mu ucszaya Li quiLic>
mu-ʔuk-šaya-ɬi **ki=ɬik**
 3sP-married-female-PL INTENS=3P
 'their (own) wives'
 OT: "sus mujeres" (309.)

The comparative data confirm this pattern for possessor-marking on nouns.

- (6. 9) a. ʔan-ʔayma
 1sP-corn
 'my corn' (G-SH)
- b. ka-šinak
 2sP-beans
 'your beans' (G-JAP)
- c. mu-maɬik
 3sP-firewood
 'his firewood' (G-SH)
- d. <na' mu'c, otec>
 na muk-ʔo:tek
 DET 2sP-bed
 '(the) your bed'
 OT: "tu cama" (Ch-JC)
- e. <inuc raia>
 ʔən-uk-ɾaya
 1sP-CL:old/married-female
 'my wife'
 OT: "mi mujer" (Ch-C)
- f. <alig ka amigo hay>
 ʔalih ka-ʔamigo ʔay
 PREP.CAUS 2pP-Sp:friend 2PL
 'by/because of your (pl.) friends'
 OT: "por vuestros amigos" (Ch-Z)

Some non-spatial prepositions take possessor-marking cross-referencing prefixes. The only preposition attested with prefix-marking in the ALS is the benefactive *neɬa* (8. 9). In X_G the prefix-marked benefactive *neɬa* only occurs when preceding noun phrases (see § 9.2.1); in the ALS this pattern is confirmed in a possessive phrase (6. 10b). In X_{Ch} the benefactive preposition takes person-markers of the structural type 2.

- (6. 10) a. <an neLa>
ʔan-neɬa
 1sP-BEN
 'for me, mine'
 OT: "mío, de mí" (144.), (243.)
- b. <na gracia muneLa dios>
na gracia mu-neɬa dios
 DET Sp:grace 3sP-BEN Sp:god
 'the grace of god = god's grace'
 OT: "la gracia de dios" (1963.)
- (6. 11) a. ʔan-neɬa
 1sP-BEN
 'mine' (G-SH, G-RHG), (G-S)
- b. mu-neɬa
 3sP-BEN
 'his/her' (G-RHG)
- c. <naj na macu na macnejla>
 nah na maku na *mik-neɬa
 PN:3s DET house DEM 2sP-BEN
 'this house is yours'
 OT: "esta casa es tuya" (Ch-C)
- d. <majlicuejla>
 maɬik-*neɬa
 2pP-BEN
 'yours (pl.)'
 OT: "vuestros" (Ch-C)

6.1.2.2 S/A-marking

Cross-referencing prefixes mark S on intransitive (in general) and A on transitive predicates (in the nonpast/imperfective). These functional categories employ

different markers in the third person, while the prefixes in the first and second person are the same in all contexts. Prefixes of the second person are also attested in contexts where they mark person on imperative predicates.

S-MARKING OF NONPAST/IMPERFECTIVE PREDICATES: Maldonado de Matos marks the subject of intransitive predicates in the nonpast/imperfective with cross-referencing prefixes of Set A₂, i.e. the third person is marked with the prefix *ʔa-*.

- (6. 12)
- | | |
|---|--|
| <p>a. <an màrà>
 ʔan-ma:ra
 1sS-rest
 'I rest'
 OT: "yo descanso" (1471.)</p> | <p>b. <cà acù>
 ka-ʔakuʔ
 2sS-go
 'you go'
 OT: "tú vas" (1643.)</p> |
| <p>c. <a màrà>
 ʔa-ma:ra
 3sS-rest
 'he/she rests'
 OT: "aquel descansa" (1473.)</p> | <p>d. <muc tá>
 muk-taʔ
 1pS-come
 'we come'
 OT: "nosotros venimos" (1401.)</p> |
| <p>e. <cà tá ay>
 ka-taʔ ʔay
 2pS-come 2PL
 'you (pl.) come'
 OT: "vosotros venís" (1402.)</p> | <p>f. <a acù qui Lic>
 ʔa-ʔakuʔ ki=ʔik
 3pS-go INTENS=3PL
 'they (themselves) go'
 OT: "aquellos van" (1647.)</p> |

The pattern is confirmed in the comparative data; in X_{Ch} and X_Y prefixes of the structural type 2 are found in the same functional context.

- (6. 13)
- | | |
|--|--|
| <p>a. na nin ʔan-ti:ki
 DET PN:1s 1sS-sleep
 'I sleep' (G-SH)
 'he/she cries'
 OT: "llora" (Ch-Z)</p> | <p>b. <a kagui>
 ʔa-k'awi
 3sS-cry</p> |
| <p>c. <taj camajlic tiki>
 tah ka maʔik ti:ki
 IMP:go/EXH do PN:1p sleep
 'let's go and sleep!'
 OT: "vamos a dormir" (Ch-C)</p> | <p>d. <nkichi ical taju mun úvui>
 n-k'íci ʔikal tahu mun ʔuwi
 1sA-fry INDEF piece DEM meat
 'I will fry a piece of that meat'
 OT: "voy a asar un pedazo de carne" (Y-C)</p> |
| <p>e. <nay mícó>
 nay mi-ko
 PN:2s 2sS-go
 'you go'
 OT: "tú vas" (Y-C)</p> | <p>f. <nalica lica tiki ajla>
 nalika lika=ti:ki ʔaʔa
 PN:2p 2pS=sleep tomorrow
 'tomorrow you (pl.) sleep'
 OT: "mañana dormiréis" (Y-C)</p> |

S-MARKING OF PAST/PERFECTIVE PREDICATES: In the past/perfective the same cross-referencing prefixes are employed, with the exception of the third person, which is unmarked. The verb is in addition marked for tense/aspect with the resultative-stative suffix *-ʔ*.

- (6. 14)
- | | |
|--|---|
| <p>a. <an màrà>
 ʔan-ma:ra-ʔ
 1sS-rest-STAT
 'I rested'
 OT: "yo descansé, he descansado" (1483.)</p> | <p>b. <ca guacà>
 ka-waka-ʔ
 2sS-go away-STAT
 'you went away'
 OT: "tú te fuistes, has ido" (1740.)</p> |
|--|---|

- c. <guasztà>
Ø-wašta-ʔ
 3sS-enter-STAT
 'he entered'
 OT: "aquel entró" (1976.)
- d. <tá ý>
Ø-ta:-yi-ʔ
 3sS-come-LIG-STAT
 'he came'
 OT: "aquel vino, ha venido" (1412.)

This pattern is confirmed in the data from X_G , X_{Ch} and X_Y .

- (6. 15) a. ʔan-ʔuʔu-ʔ
 1sS-fall-STAT
 'I fell' (G-RHG)
- b. na naka ka-ʔaku-ʔ
 DET PN:2s 2sS-go-STAT
 'you went' (G-SH)
- c. Ø-yiwa-ʔ
 3sS-get lost-STAT
 'it got lost' (G-RHG)
- d. <tu'pʌʔ>
Ø-tupa-ʔ
 3sS-stay-STAT
 'it/he stayed'
 OT: "se quedó" (Ch-MQ)
- e. <un xayé ra maku>
 ʔən-šaye-ʔ ra maku
 1sS-return-STAT PREP house
 'I returned home'
 OT: "y regresé a casa" (Ch-F)
- f. <n'patá>
n-pata-ʔ
 1sS-bath-STAT
 'I bathed'
 OT: "ya se bañó" [sic] (Y-C)

A-MARKING OF NONPAST/IMPERFECTIVE PREDICATES: The set of prefixes employed to mark A on transitive predicates in the nonpast/imperfective is identical with the prefixes that mark the possessor on alienably possessed nouns.

- (6. 16) a. <an nariŁa>
ʔan-nariŁa
 1sA-teach
 'I teach'
 OT: "yo enseño" (1977.)
- b. <cà mere>
ka-mere
 2sA-break
 'you break it'
 OT: "tú rompes" (575.)
- c. <mu piri>
mu-piri
 3sA-see
 'he/she sees it'
 OT: "aquel ve" (739.)
- d. <muc orómo>
muk-ʔoromo
 1pA-pick up
 'we pick it up'
 OT: "nosotros recogemos" (909.)
- e. <cà sàmu ay>
ka-samu ʔay
 2pA-catch 2PL
 'you (pl.) caught it'
 OT: "vosotros cogéis" (1074.)
- f. <mù pùla quiŁic>
mu-pula ki=Łik
 3pA-make INTENS=3PL
 'they (themselves) make'
 OT: "aquellos hacen" (398.)

The comparative data from X_G , X_{Ch} and X_Y confirm this pattern.

- (6. 17) a. ʔan-Łiki naka
 1sA-find PN:2s
 'I find you' (G-SH)
- b. mu-kunu mapu
 3sA-buy tortilla
 'he buys tortillas' (G-SH)
- c. <n'di mac nihuá>
 nti *mik-niwa
 INT:what? 2sA-want
 'what do you want?'
 OT: "¿qué quieres?" (Ch-C)
- d. <xuxo murruca naljki>
 šušo mu-ruka naŁki
 dog 3sA-bite PN:1p
 'the dog bites us'
 OT: "el perro nos muerde" (Ch-C)

- e. <mu suka nay pelu>
 mu-suka nay pe:lu(?)
 3sA-bite PN:2s Sp:dog
 'the dog bites you'
 OT: "el perro te muerde" (Y-C)
- f. <mucúru tinátu>
 mu(k)-kuru tinatu
 1pA-run flute
 'we run the flute = we play flute'
 OT: "vamos a tocar flauta" (Y-C)

The third person prefix *ʔa-* that is used by Maldonado de Matos to mark the third person on intransitive verbs, is attested in the comparative data also with transitive predicates where it seems to mark an impersonal subject in most cases.

- (6. 18) a. <na šuunik apuʔaʔ hinaʔ wati>
 na šu:nik ʔa-puʔa-ʔ hinaʔ wati
 DET pot 3sS-make-STAT PREP clay
 'one makes the pot with clay'
 OT: "las ollas se hacen de barro" (G-C&K)
- b. <inaj man aulí>
 ʔi-nah man ʔa-ʔuli:
 ʔ-PN:3s DEM 3sS-want
 'he/one wants'
 OT: "el quiere" (Y-C)

IMPERATIVE PREDICATES: In the ALS and the comparative data, prefixes of the second and third person can mark person on imperative predicates. In Maldonado-Xinka this form is mainly attested with intransitive and "defective" verbs.

- (6. 19) a. <cà tà>
ka-taʔ
 2sS-come
 'come!'
 OT: "ven tú" (1434.)
- b. <a tà>
ʔa-taʔ
 3sS-come
 '(may) he come!'
 OT: "venga aquel" (1436.)
- (6. 20) a. ka-tura naka ka-wapik
 2sA-take PN:2s 2sP-sandals
 'take/bring your sandals!' (G-JAP)
- b. ka-ti:ki naka
 2sS-sleep PN:2s
 'sleep!' (G-SH)
- c. <muy huastaya>
 muy-wasta-ya
 2sS-enter-IMP.VI
 'enter!'
 OT: "entra!" (Ch-C)

6.1.2.3 Nominal predicates

In the comparative data cross-referencing prefixes are attested as inflectional copulas of the subject of nominal predicates (see § 10.2.2.1). Both, predicate nouns (6. 21) and predicate adjectives (6. 22) are attested. Predicate nouns that are marked with inflectional copulas do not formally differ from possessive nouns.

- (6. 21) a. ʔən-čuh-čumuti paʔaʔ
 1sS-DIM-old PFV
 'I am already very old' (G-RHG)
- b. <anwéna>
 ʔan-wena
 1sS-INT:who
 'I am who...'
 OT: "estoy, tengo" (G-S)
- c. <n'frac kilac ni>
 n-frak k'i *kal ni
 1sS-man ADV INDEF PN:1s
 'I am a man as well'
 OT: "soy también un hombre..." (Ch-C)

- (6. 22) a. na nin ʔan-pobre
 DET PN:1s 1sS-Sp:poor
 '(it is me), I am poor' (G-SH)
- b. <antiški>
 ʔan-tiški
 1sS-far
 'I am far'
 OT:"estoy lejos" (G-S)
- c. <naljki muljki urajkilma>
 naʔki muʔki-ʔurah *kiwa(?)
 PN:1p 1pS-big INTENS?
 'we ourselves are big'
 OT:"nosotros somos grandes" (Ch-C)

There is only one example in the corpus of data that – based on the semantic context – seems to indicate a predicate adjective with a cross-referencing suffix. Although *tška* seems to be identified as a positional adjective (see § 8.7.2.2), it cannot be entirely ruled out that it may occur here in nominal function.

- (6. 23) <tškaka>
 tška-ka
 far-2s
 'you are far'
 OT:"estás lejos" (G-S)

6.2 Cross-referencing suffixes

This section includes a comparison of the person-marking suffixes attested in the ALS and the other Xinka varieties (§ 6.2.1). Cross-referencing suffixes show more formal variation and fall into more different functional sets than prefixes (§ 6.2.2).

6.2.1 Morphology of cross-referencing suffixes

There are three different sets of cross-referencing suffixes in the ALS, which are used in different functional contexts. Set B₁ marks the possessor on inalienably possessed nouns, including non-spatial prepositions, and occurs as a morphological element in personal pronouns and intensifier-reflexives. There are a few nouns that regularly end in a consonant and insert the vowel *a* between the stem and the suffix. Set B₂ marks A on transitive verbs in the past/perfective as well as S on intransitive predicates in dependent clauses; it differs from Set B₁ in second and third person.

Table 6. 11: Composite statement of cross-referencing suffixes in the ALS

		P _{INALIEN}	A _{PAST} / S _{DEP}	A _{DEP}
1s	<Vn>	-n, -an	-n	-n
2s	<ca>, <cà>, <can>	-ka	-kaʔ	-kan
3s	<Vg>, <y>	-h	-y	-y
1p	<Vc>	-k	-k	-k
2p	<cà ay>, <can ay>	-ka ʔay	-ka ʔay	*-kan ʔay
3p	<Vg / y (qui) Lic>	-h (ki=)ʔik	-y (ki=)ʔik	-y (ki=)ʔik
		Set B ₁	Set B ₂	Set B ₃

The second person suffix on verbal predicates is in most cases indicated with an accent, which suggests the presence of a final glottal stop -ʔ that is not necessarily part of the suffix, but could be identical with the stative-resultative marker otherwise attested with intransitive verbs in the past/perfective (§ 12.2.1.2). Subordinate

transitive predicates are marked with suffixes of Set B₃ that differs from Set B₂ only with respect to the second person. The dependent-marking second person suffix *-kan* seems to combine the regular cross-referencing suffix *-ka* and the subjunctive marker *-n* (§ 13.3). The dependent-marking suffix is attested on auxiliary verbs in dependent clauses.

GUAZACAPÁN (X_G): Cross-referencing suffixes in X_G distinguish three persons in singular and plural. Plural forms are only attested in Schumann (1967) and in the Campbell & Kaufman-data; the semi-speakers have lost all plural person markers and simply use singular persons to mark a predicate in a plural context. As in the ALS, person-marking suffixes fall into three different functional sets that are distinguished by differences in the markers representing the second and third person. The possessor of inalienably possessed nouns is marked in the third person with the suffix *-h*. Campbell and Kaufman indicate that nouns ending in a consonant mark the possessor of the third person with *-i*; there are no examples in the semi-speaker data that attest this. The subject of transitive verbs in the past/perfective is marked in the third person with *-y* and in the second person with *-kaʔ*. As pointed out above, *-ʔ* may not be part of the suffix but may be marking past/perfective. On subordinate predicates in dependent clauses the second person is marked with *-kan* (see above). Two semi-speakers employ the suffix *-y* on a verbal predicate to express formal address, i.e. Spanish "usted". It is not clear whether these few examples indicate the existence of a formal person in X_G, which is not attested elsewhere, or whether they have to be attributed to Spanish influence, i.e. using the third person for formal reference.

Table 6. 12: Cross-referencing suffixes in X_G

	G-S	G-MA	G-SH	G-JAP	G-RHG	G-JS	G-PE	G-C/K
1s	<-n>	<-ŋ>	-n	-n	-n	-n	-n	<-nʔ> / <-an>*
2sP	<-ka>	<-ca> <-c>	-ka	-ka	-ka		-ka	<-ka>
2sA _{PAST/SD}			-kaʔ	-kaʔ	-kaʔ		-kaʔ	<-kaʔ>
2sA _{DEP}			-kan	-kan	-kan			
2sf			(-y)			(-y)		
3sP	<-h>		-h			-h		<-h> / <-i>*
3sA _{PAST}	<-y>		-y	-y	-y	-y		<-yʔ>
3sS _{DEP}			-ʔ	-ʔ	-ʔ			<ʔ>
1p	<-k>							<-k> / <-ak>*
2p	<-ka>		-ka	ʔ	ʔ			<-ka ʔay>
3p	<ʔik>							<-h ʔik>

*nouns ending in C

CHIQUMULILLA (X_{Ch}): The cross-referencing suffixes attested in the different data sources from X_{Ch} show some variation as the prefixes, but separate structural types are less easily defined. Possessor-marking (Set B₁) and subject-marking suffixes (Sets B₂/B₃) exhibit more formal differences than in X_G. In the singular persons the forms in the different sources largely correspond, but there are differences in the morphology of suffixes in the plural persons. While the suffixes attested in the earliest source, the Zeeje-ms., correspond with the basic suffixes found in the ALS, Calderón, Fernández and Campbell & Kaufman indicate complex

suffixes that seem to combine the nominal plural suffix *-ʔ(i)* and a basic cross-referencing suffix, i.e. *-ki* (1p), *-k(a)* (2p), *-y* (2pf) and *-ʔ* or *-h* (3p). The plural cross-referencing suffixes correspond with those forms that combine in X_{Ch} with the root **mʔ* to form person-marking prefixes (see § 6.1.1). The data sources that employ these complex plural suffixes also distinguish a formal second person.

The different sources largely correspond with respect to the suffixes employed for possessor-marking on inalienably possessed nouns; the only main exception being the Zeeje-ms. that employs the same markers attested in the ALS. The first person singular possessor (not attested in the Zeeje-ms.) can be marked with *-ʔ* and *-n*. Campbell and Kaufman indicate both suffixes. Calderón and Fernández mostly use accent signs on the final vowel, or a completely unmarked form, to express a first person possessor; however, the suffix *-n* is also attested, e.g. with body part noun *wap-an* [foot-1sP] 'my foot'.

Most sources indicate *-k* as the suffix that marks the second person singular possessor; only in the Zeeje-ms. and in the Fernández-data *-kaʔ* is used. The second person plural also just employs *-k* following the plural morpheme *-ʔi*. The formal second person possessor is marked with the suffix *-y* that is identical in form with the suffix that marks formal second person on verbs. The third person possessor is attested as *-h* (with variations of *-ʔ* and *-ʔ* that could be attributed to the documentary context). In the Zeeje-ms. the suffix combines with the plural clitic *ʔiki* to mark the third person plural; Calderón and Campbell & Kaufman indicate the plural as *-ʔi-ʔ*, respectively *-ʔi-h*.

Table 6. 13: Possessor-marking cross-referencing suffixes in X_{Ch}

	Ch-Z	Ch-C	Ch-L	Ch-F	Ch-MQ	Ch-S	Ch-P	Ch-JC	Ch-C&K
1s		<-V> <-n>	<-V> <-n>	<-V> <-n>	<-ʔ>	<-ʔ>	<-ʔ>	<-n>	<-(i)ʔ> <-n>
2s	<-ca>	<-c>	<-c>	<-cá>	<-kʔ>	<-k>		<-c>	<-(i)k>
2sf		<-y>							<-(i)y>
3s	<-g>				<-ʔ>	<-h>	<-g>		<-(i)h>
1p	<-g>	<-jki> <-ljki> <-jliki>		<-ljki>					<-(i)lki>
2p	<-ca hay>	<-jlic>							<-(i)lik>
2pf		<-jliy>							<-(i)ylik>
3p	<-g liqui>	<-jli>		<-ki>?	<-h>				<-(i)hi(h)>

The person-marking suffixes that mark the subject on verbal predicates differ from the possessor-markers. Although the suffix *-ʔ* is attested as a marker for the first person, in the clear majority of cases, *-n* is used with verbal predicates. In the second person most sources indicate the form *-kaʔ*, the accent on the vowel indicating the presence of a final glottal stop. The second person suffix *-k* or *-kʔ* seems to be only attested with imperative verb forms. The second person plural is also attested with two forms *-ʔkaʔ* and *-ʔi-k*, both combining the plural morpheme *ʔi* and the second person suffix. Calderón and the speaker Julian de la Cruz seem to distinguish a formal second person that is indicated by Campbell & Kaufman.

The suffix *-y* marks a third person subject. In the Zeeje-ms. the third person suffix combines with the plural clitic *ʔiki* to mark the third person plural; Calderón and

Campbell & Kaufman indicate the suffix *-ʔ* instead. There are two different forms attested for the first person plural. The Zeeje-ms. and Pivaral indicate the basic suffix *-k* that corresponds with Maldonado-Xinka, while Calderón and Campbell & Kaufman give *-ʔkiʔ*, which combines the plural morpheme *ʔ(i)* and the person-marker *-ki*, suggesting that the first person plural suffix *-k* may originally have been *-ki*.

Table 6. 14: S/A-marking cross-referencing suffixes in X_{Ch}

	Ch-Z	Ch-C	Ch-L	Ch-F	Ch-MQ	Ch-S	Ch-P	Ch-JC	Ch-C&K
1s		<-n>	<-n>	<-n>	<-n>		<-n>	<-n>	<-n(ʔ)>
2s	<-ca>	<-cá> <-c>		<-cá> <-c> _{imp}	<-kʔ>			<-cá> <-c>	-kaʔ
2sA _{DEP}	<-can>		<-can>	<-kan>			<-cán>		-kan
2sf		<-y>						<-y>	-y
3s	<-y>	<-y> <-i>		<-y>	<-y>	<-y>	<-y>		-y(i)ʔ
3sA _{DEP}	<-llin>								<-yin>
1p	<-g>						<-c> <-ck>		
		<-jki>							-lkiʔ
1pA _{DEP}		<-jkin>							<-ʔkin>
2p		<-ljca> <-jlí>							-lkaʔ
2pA									<-ʔkan>
2pf		<-jliy>							-liy
2pfA _{DEP}									<-ʔkay>
3p	<-y liqui>	<-jlí>		<-li>					-hriʔ ~ -liʔ
3pA _{DEP}									<-hrin>, <-ʔin>

It needs to be pointed out that in the Campbell & Kaufman-notes, most cross-referencing suffixes that are used to mark the subject of past/perfective transitive verbs in main clauses (A_{PAST}) and of intransitive verbs in dependent clauses (S_{DEP}) are indicated with a final *-ʔ* (Set B_2). Transitive verbs in dependent clauses use suffixes that are formally identical with those of Set B_2 , but add the marker *-n*. The markers that functionally distinguish the sets seem to be identified as the TAM-categories of the stative-resultative marker (*-ʔ*) and the subjunctive marker (*-n*) (see below) that have become grammaticalised in the context of person-marking.

JUMAYTEPEQUE (X_{Jum}): The sets of cross-referencing suffixes attested for X_{Jum} have been retrieved from a table in the field notes of Campbell and Kaufman. From these data one can see that the system of person-marking suffixes in X_{Jum} is similar to the forms attested in X_{Ch} . They distinguish a separate postconsonantal set of possessor-marking suffixes that inserts the vowel *a* as a ligature. The set of suffixes Campbell & Kaufman indicate as markers of A on past/perfective transitive verbs differs from the possessor-marking suffixes in that most forms are followed by *-ʔ*, which as in the ALS and X_G may indicate past/perfective. In the third person a different suffix is employed to mark A. The suffix sets that mark A in past/perfective (B_2) and A in subordinate contexts (B_3) differ in the final consonant. All person-markers, with the exception of the first and the formal person, end in *-ʔ*.

when referencing past/perfective A in main clauses, or in *-n* when occurring in subordinate context.

Table 6. 15: Cross-referencing suffixes in X_{Jum} (from Jum-C&K)

	Poss. V	C	A _{PAST}	A _{DEP}
1s	<-nʔ>	<-ʼan>	<-n>	<-n>
2s	<-k>	<-ka>	<-kaʔ>	<-kan>
2s	<-y>	<-ʼay>	<-y>	<-y>
3s	<-h>	<-i>	<-yiʔ>	<-yin>
1p	<-lki>	<-ʼalki>	<-lkiʔ>	<-lkin>
2p	<-lik>	<-ʼalik>	<-lkaʔ>	<-lkan>
2p	<-liy>	<-ʼaliy>	<-liy>	<-liy>
3p	<-lih>	<-ʼalih>	<-hriʔ>	<-hrin>
	Set B ₁		Set B ₂	Set B ₃

YUPILTEPEQUE (X_Y): The person-marking suffixes attested in Calderón (1908) are, as the prefixes, a mixture of the markers attested in Maldonado-Xinka and X_G, and forms that are more similar to the Type 2-forms in X_{Ch} and X_{Jum}. There is one example that suggests the distinction of formal second person singular; no plural form is attested. The marker used for the formal second person and the third person might be identical, depending on how to interpret the original orthography. Suffixes that mark verbal predicates are marked with an accent suggesting the presence of the final glottal stop attested in the other varieties. In the third person a possessor-marking (*-h*) and a subject-marking form (*-y(i)*) are distinguished. The third person plural combines with the plural clitic (*man*) *ʔaya* (see § 6.3).

Table 6. 16: Cross-referencing suffixes in X_Y

	Y-C	Y-L	
1s	<-n>	<-n>	= *-n
2s	<-cá>		= *-kaʔ
2sf	<-y>		= *-y
3s	<-i>, <-yi>		= *-y / -yiʔ
	<-jli>, <-l>		= *-ʔ(i)
3Sp	<-j>		= *-h
1p	<-c>		= *-k
2p	<-lica>, <-licá>		= *-likaʔ
	<-ka>		= *-ka
3pP	<-y ... man aya>		= *-y + plural
	<-j ... man aya>		= *-h + plural

COMPARATIVE ANALYSIS: Comparing the sets of suffixes in the ALS and the other Xinka varieties, we can again assert Maldonado-Xinka to show most correspondences to the system of suffix-marking in X_G and the Zeeje-ms; X_Y only deviates with respect to the third person plural that employs a different plural clitic. In X_{Ch} and X_{Jum} we can identify a second structural type of suffixes that mark plural persons and have apparently grammaticalised from the nominal plural morpheme *-ʔi* and a basic cross-referencing suffix. While for X_{Ch} both structural types are indicated in the data sources, in X_{Jum} only the complex plural suffixes are attested. The following Table 6. 17 does not include dependent-marking suffixes, which will be discussed in more detail in § 6.2.2.3.

Table 6. 17: Comparative statement of cross-referencing suffixes

	X _M	X _G	X _{Ch}		X _{Jum}	X _Y
			Type 1	Type 2		
1s	-n	-(a)n	-n, -ʔ		-n(?) / -an	-n
2s	-kaʔ	-kaʔ	-kaʔ		-kaʔ	-kaʔ
2sPoss	-ka	-ka	-(i)k		-k / -ka	
2sf		(-y)	-y		-y / -ay	-y
3sA _{PAST}	-y	-yʔ	-y(i), -(i)y		-yiʔ	-y/-ʔ(i)
3sPoss	-h	-h	-k, -ʔ		-h	-h
3sP/C ₋		-i	-(i)h		-i	
1p	-k	-k	-k	-(a)hki -(i)ʔki -h	-ʔkiʔ -lki / -alki	-k
2p	-ka ʔay	-ka ʔay	-ka ʔay	-h ka	-lkaʔ, -lka -(a)lik	-ka
2pf				-ʔiy, -(i)yʔik	-liy, -(a)liy	
3p	-y (ki=)ʔik		-y liki	-hri, ʔi	-hriʔ	-y ... ʔaya
3pPoss	-h (ki=)ʔik	-h ʔik	-h liki	-ʔi(h), -ki,	-(a)lih	-h ... ʔaya

Whether the suffixes of the structural type 2 originally had a different function, cannot be determined. In the attested examples they occur in the same functional contexts as the other suffixes. As pointed out above, suffixes that mark the subject on predicates tend to be indicated with a final glottal stop. Since verbal predicates that are marked with suffixes either indicate a past/perfective event or are syntactically subordinate, and hence deranked (see § 17), -ʔ can possibly be identified as the stative-resultative marker (§ 12.2.1.2) that may have become grammaticalised as part of the suffix.

X_{Ch} and X_{Jum} distinguish an informal and a formal second person singular and plural marked with the suffixes -ka and -y. Campbell & Kaufman identify -ka as the formal person and there are examples in Calderon's X_{Ch}-data that correlate the suffix with the Spanish translation context "usted", i.e. you (formal). However, the fact that some semi-speakers employ the marker of the third person singular to create a corresponding category for the Spanish formal address of "usted", suggests that, following the "Spanish" pattern, the form marked with -y may be the one indicating deferential address. I will in the remainder of the study define the second person address that is formally identical or similar with the third person as the formal person.

There are two different suffixes that mark the third person singular depending on functional context: In the tables listed above, the suffix -y has been identified as the marker that cross-references the subject on verbal predicates. In the semi-speaker data the suffix -y following the vowel *a* is frequently changed into -ey, which appears to be a process that is independent of syntactic hierarchy or function, e.g. *ʔimay* → *ʔimey*; *ʔukay* → *ʔukey* etc. Campbell & Kaufman indicate that on nouns ending in a consonant the possessor can be marked with -i, which explains some confusion in the data. In all other cases the possessor of inalienably possessed nouns is marked with -h. The same suffix is used as a person-marker on non-spatial prepositions and in pronominal forms (personal pronouns, intensifier reflexives). The cross-referencing suffix -h occurs furthermore on verb forms in the ALS and the comparative data, suggesting that it may have another verbal function. However, in most of these contexts the form can be identified to function as a nominal marker,

including on verb forms that are marked with the anterior/perfect suffix *-wa*; e.g. *pata-wa-h* [*accomplish-ANT-3sP] 'his having accomplished'; *ʔuʔu-wa-h* [fall-ANT-3sP] 'his having fallen'. In the semi-speaker data *-h* also regularly occurs with the existential verb *ʔuka* 'have' indicating a past concept, i.e. *ʔuka-h* [have-3sP] 'had, there was' = "había"; as this form occurs with predicate nominals a nominal function of the suffix can be assumed.

6.2.2 Functional contexts

The functional contexts in which cross-referencing suffixes occur in the ALS include possessor-marking on inalienably possessed nouns, A-marking on transitive verbs in the past/perfective, as well as marking of S/A and intransitive and transitive predicates in dependent/subordinate contexts.

6.2.2.1 Possessor-marking (inalienable)

Cross-referencing suffixes mark the possessor on inalienably possessed nouns, including non-spatial prepositions. They furthermore combine with determiners to form personal pronouns.

POSSESSOR-MARKING: Inalienable possession is attested with body parts terms, kinship nouns and nouns that indicate a non-terminable possessive human relation. The suffixes that mark possession on these nouns form Set B₁, i.e. the third person is marked with *-h*.

(6. 24)	a. <szaja an> ʃaha:-n mouth-1sP 'my mouth' OT: "mi boca" (325.) c. <utàc> ʔuta-k mother-1pP 'our mother' OT: "nuestra madre" (361.) e. <Pedro pùlai macùg aLmucàn> Pedro pula-y maku-h ʔaʔmukan Pedro make-3sA house-3sP yesterday 'Pedro made his house yesterday' OT: "Pedro hizo su casa ayer" (2017.)	b. <mutiig quiLic> muti:-h ki=ʔik hair-3pP INTENS=PL 'their (own) hair' OT: "sus cabellos" (367.) d. <na jamàca> na hama-ka DET sin-2sP 'your sin' OT: "tus pecados" (2034.)

The same categories are attested in the comparative data.

(6. 25)	a. huraʔi-n eyes-1sP 'my eyes' (G-PE) b. <nanu utaca hay> nanu ʔuta-ka ʔay DET mother-2pP 2PL '(this is) your (pl.) mother' OT: "vuestra madre" (Ch-Z)	c. <macuc nec> maku-k nek house-1pP PN:1p 'our house (of ours)' OT: "nuestra casa" (Y-C)

In X_{Ch} and X_G , the possessor in the first person singular can also be marked with $-ʔ$ (see Schumann 1967:49; Campbell & Kaufman: field notes).

- (6. 26) a. mak'u-ʔ na
 house-3sP PN:3s
 'his house' (G-SH)
- b. <nama'kuʔ>
 na maku-ʔ
 DET house-1sP
 'my house'
 OT: "es mi casa" (Ch-MQb)

Some nouns that end in the high vowel *i* drop the final vowel when marked with a first person singular or plural possessor-marking suffix, and instead employ the forms *-an* (first person singular) or *-ak* (first person plural). Campbell & Kaufman treat these types of roots as consonant final. The pattern is attested in the ALS and the comparative data.

- (6. 27) a. <talan>
 tal(i)-an
 throat-1sP
 'my throat'
 OT: "mi garganta" (340.)
- b. <guapan>
 wap(i)-an
 foot-1sP
 'my foot'
 OT: "mi pie" (339.)
- (6. 28) a. wap-ak
 foot-1pP
 'our foot' (G-RHG)
- b. <ta'tam>
 tat-an
 throat-1sP
 'my throat'
 OT: "cuello" (S-Gav)
- c. <chirí ti guapan>
 čiri-ʔ ti(:ʔ) wap-an
 twist-STAT IO foot-1sP
 'my foot is twisted'
 OT: "el pie está torcido" (Y-C)

NON-SPATIAL PREPOSITIONS: Possessor-marking cross-referencing suffixes also mark the referent on the non-spatial prepositions *neʔa* (benefactive/possessive), *ti-* (indirect object) and *ʔaʔi-* (causal). The pattern is attested in the comparative data.

- (6. 29) a. <tiýn>
 ti:ʔ-n
 IO-1sP
 'to me'
 OT: "a mí, para mí" (61.)
- b. <neʔa ag>
 neʔa:-h
 BEN-3sP
 'for him'
 OT: "él (genitivo)" (262.)
- c. <aʔi cà>
 ʔaʔi-kaʔ
 PREP.CAUS-2sP
 'by/because of you'
 OT: "tú (ablativo)" (256.)
- (6. 30) a. neʔa-n šawaç'aʔ waya-n
 BEN-1sP sow, plant milpa-1sP
 'for me to plant my milpa' (G-SH)
- b. <mug sullu jurailig tihica hay>
 muh-suyu hura-li(-h) ti:ʔ-ka ʔay
 3sA-turn eye-PL-(3sP?) IO-2p 2PL
 'he turns his eyes to you (pl.)'
 OT: "convierte sus ojos hacia vosotros" (Ch-Z)

- (6. 36) <ša ʔuy ʔuʔuwah Hwan>
 ša ʔuy ʔuʔu-wa-h Hwan
 PREP water fall-ANT-3sP Juan
 'into the river fell Juan = *into the river (is) his having fallen of Juan'
 OT: "Juan se cayó en el río/agua" (G-C&K)

6.2.2.2 *A-marking (past/perfective)*

Cross-referencing suffixes of Set B₂ mark the subject on transitive predicates in the past/perfective. The third person is marked with the suffix -y. These verb forms are attested in the ALS only in the context of paradigmatic examples (6. 37), but the comparative data indicate that they occur as predicates of independent or main clauses (6. 38).

- (6. 37) a. <piriyn>
piri:-n
 see-1sA
 'I saw (it)'
 OT: "yo vi, he visto" (749.)
- b. <mere câ>
mere-kaʔ
 break-2sA
 'you broke (it)'
 OT: "tú rompistes" (587.)
- c. <ormo i>
ʔor(o)mo-y
 pick up-3sA
 'he picked it up'
 OT: "aquel recogió..." (920.)
- d. <sâmuuc>
samu:-k
 catch-1pA
 'we caught it'
 OT: "nosotros cogimos" (1086.)
- e. <εUetUecâ ay>
k'iti-kaʔ **ʔay**
 measure-2pA 2PL
 'you (pl.) measured it'
 OT: "vosotros medisteis" (1250.)
- f. <pulâi quiLic>
pula-y **ki=ʔik**
 make-3pA INTENS=3PL
 'they (themselves) made (it)'
 OT: "aquellos hicieron..." (410.)
- (6. 38) a. kiri-n nin_A tiʔa_O
 pull-1sA PN:1s yucca
 'I harvested yucca' (G-SH)
- b. tero-y kah miya_O
 kill-3sA INDEF chicken
 'he/she killed a chicken' (G-SH)
- c. <pulakâ>
 pula-kaʔ
 make-2sA
 'you made it'
 OT: "tú hiciste o Uds. hicieron" (G-S)
- d. <pirin nak>
 piri-n nak_O
 see-1sA PN:2s
 'I saw you'
 OT: "desde que te vi" (Ch-F)
- e. <inay avuájla culay>
 ʔinay_A ʔawaʔa kula-y
 PN:2s yesterday want-2sf
 'you wanted (it) yesterday'
 OT: "ayer quisiste tú" (Y-C)

6.2.2.3 *Dependent-marking*

Predicates in dependent clauses that are not introduced by a syntactic subordinator mark person with cross-referencing suffixes. Following Campbell and Kaufman (see field notes), suffixes in this functional context will be labelled 'dependent-marking' suffixes. This term is preferable over 'subordinate' marking since the sets of cross-referencing markers also occur in other contexts where their

function is not primarily determined by syntax, such as person-marking on auxiliary/existential verbs. It needs to be stressed here that, although the ALS and the semi-speaker data do attest examples of dependent-marking, the pattern as such and the morphology of this suffix would be difficult to describe and reconstruct without the thorough analysis and systematic documentation of the sets of markers by Campbell and Kaufman from X_G , X_{Ch} and X_{Jum} .

Intransitive predicates are marked with Set B₂; i.e. with the same set of suffixes that marks A on transitive verbs in past/perfective. In their field notes, Campbell and Kaufman indicate that nearly all intransitive dependent-marking suffixes end in *-ʔ*. It has been suggested above that this marker may be identical with the stative-resultative suffix *-ʔ*, which may either have become grammaticalised as part of the suffix, or even follows the suffix as a marker with separate function.

Table 6. 18: Composite statement of intransitive dependent-marking suffixes (B₂)

	X_M	X_G	G-C/K	Ch-C/K	Jum-C/K
1s	-n	-n	nʔ	-ʔ ~ -n	-n
2s	-kaʔ	-kaʔ	-kaʔ	-kaʔ	-kaʔ
2sf				-y	-y
3s	-y	-y, -ʔ	-ʔ	-y(i)ʔ	-yiʔ
1p	-k		-k	-ʔkiʔ	-lkiʔ
2p	-ka ʔay		-ka ʔay	-ʔkaʔ	-lkaʔ
2pf				-ʔiy	-liy
3p	-y (ki=)ʔik		-h ʔik	-hriʔ ~ -ʔiʔ	-hriʔ

Transitive predicates employ a separate set of cross-referencing suffixes, which seem to morphologically combine the basic person-marking suffix and the subjunctive marker *-n* (see § 13.3). While in the ALS and in X_G the suffix *-n* is only preserved in the second person, the Campbell & Kaufman-data from X_{Ch} and X_{Jum} are morphologically transparent and confirm the marking with *-n* to be a regular pattern; the only form deviating from this pattern is the formal second person in singular and plural. In the first person singular the subordinate marker *-n* is assimilated to the cross-referencing suffix. In the ALS and X_G , the third person suffix *-y* is also not marked with *-n*.

Table 6. 19: Composite statement of transitive dependent-marking suffixes (B₃)

	X_M	X_G	G-C/K	Ch-C/K	Jum-C/K
1s	-n	-n	-n(?)	-n(?)	-n
2s	-kan	-kan	-kan	-kan	-kan
2sf				-y	-y
3s	-y	-y	-yʔ	-yin	-yin
1p			-k	-ʔkin	-lkin
2p				-ʔkan	-lkan
2pf				-ʔkay	-liy
3p				-hrin, -ʔin	-hrin

Dependent-marking suffixes are attested in the following contexts:

- with subordinate predicates in some complement and adverbial clauses
- with auxiliary verbs in AVCs where the auxiliary follows the lexical verb (e.g. progressive constructions)
- future constructions with grammaticalised auxiliary *kuya-*
- interrogative clauses

SUBORDINATE PREDICATES: Predicates in complement and adverbial clauses can take dependent-marking suffixes to mark person agreement.

There is only one example in the ALS that illustrates a complement clause which functions as the subject of a nominal predicate. In this example, the intransitive existential/copula verb *ʔaya* that takes dependent-marking suffixes follows its subordinate nominal predicate (6. 39). In X_G and X_{Ch} , there are more examples of transitive and intransitive predicates with dependent-marking suffixes in complement clauses with O function (6. 40).

- (6. 39) <szàŁ cangui szàma gracia ayaàc>
šaŁ ka-n wi šama gracia ʔaya:-k
 good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP}
 'it is good (that) we are in grace'
 OT: "bueno es que estemos en gracia" (1953.)
- (6. 40) a. hin hini-kan naka
 NEG know-2sA_{DEP} PN:2s
 '...that you do/did not know' (G-JAP)
- b. ʔaku-n paʔa?
 go-1sS_{DEP} PFV
 '...that I am already going' (G-SH)
- c. <hucay despreciado pulacan burla ti libertad>
ʔuka-y despreciado pula-kan burla ti(:?) libertad
 do-3sA Sp:depreciated make-2sA_{DEP} Sp:joke PREP Sp:liberty
 'he has depreciated/despised that you make a joke of liberty'
 OT: "haber despreciado el burlarte de la libertad" (Ch-Z)

Dependent-marking suffixes are attested in the ALS also with subordinate predicates of adverbial clauses. In the following example, the light verb *ʔuka* takes a second person singular transitive dependent-marking suffix (6. 41). The pattern is confirmed in the comparative data, e.g. in X_{Ch} (6. 42).

- (6. 41) <ca tà pè aŁa uea can confesar>
ka-ta? pe? ʔaŁa ʔuka-kan confesar
 2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)
- (6. 42) <que si junuca pá hay hucacan aprovechar>
qué sí hunu-ka pa? ʔay ʔuka-kan aprovechar
 Sp:that Sp:if know-2pA PFV 2PL do-2pA_{DEP} Sp: take advantage
 'that if you (pl.) know to take advantage (of them), ...'
 OT: "que si sabéis aprovecharlos" (Ch-Z)

AUXILIARY VERB CONSTRUCTIONS: Dependent-marking suffixes are used with auxiliary verbs that follow the lexical verb. The existential verb *ʔaya* is never attested with any other set of person-marking affixes but with intransitive dependent-marking suffixes.

- (6. 43) <tà ayacà>
ta? ʔaya-ka?
 come PROG-2sS_{DEP}
 'you are coming'
 OT: "estás viniendo" (1969.)

- (6. 44) <yguitzi nàŁ u ɛa can naca na misza>
ʔiwiɕ'i naʔʔ ʔuka-kan naka na miša
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa, ..." (1989.)

In the comparative data the same pattern occurs; here, auxiliaries in postposition cliticise to the main verb.

- (6. 45) ti:ki=ya-n
 sleep=PROG-1sS_{DEP}
 'I am sleeping' (G-RHG)
- (6. 46) a. niwa=ka-kan hina nin
 ask=PROG-2sA_{DEP} PREP:with PN:1s
 'because you are asking/begging me (for)' (G-SH)
- b. <ne iriyan liki>
 ne ʔiri=ya-n liki
 PN:1s see=PROG-1sS_{DEP} PN:3p
 'I am seeing them'
 OT: "yo los veo" (Ch-C)

FUTURE PERIPHRAISIS: In future constructions with the grammaticalised future auxiliary *kuya-* dependent-marking suffixes are attested on the auxiliary as well as on the lexical verb (§ 12.4.1). In X_G there are examples of constructions with coreferential dependent-marking on auxiliary and lexical verb.

- (6. 47) a. <kuyáka yiwáka>
 ku=ya-ka yiwa-ka
 go=PROG-2sS_{DEP} descend/enter-2sS_{DEP}
 'you are going to enter'
 OT: "entrarás" (G-S)
- b. <kuyán kayakán tiʔla ša šankúko>
 ku=ya-n kaya=ka-n tiʔla ša šan-kuko
 go=PROG-1sS_{DEP} sell=PROG-1sA_{DEP} salt PREP PREP-TOPN
 'I am going to sell salt in Taxisco'
 OT: "venderé sal en Taxisco" (G-S)

In another type of future construction, the third person singular form of the grammaticalised future auxiliary precedes the lexical verb that carries dependent-marking suffixes. This pattern in which the lexical verb is subordinate to the auxiliary occurs mostly with transitive verbs (6. 48), although intransitives are also attested (6. 49).

- (6. 48) a. ku=y šuka-kan naka sema
 go=PROG+3sS_{DEP} eat-2sA_{DEP} PN:2s fish
 'you are going to eat fish' (G-JAP)
- b. <n'di cuay pulajkin>
 nti kw=ay pula-hkin
 INT go=PROG+3sS_{DEP} make-1pA_{DEP}
 'what are we going to make?'
 OT: "¿qué debemos hacer?" (Ch-C)
- (6. 49) a. ku=y ʔaku-n paʔaʔ
 go=PROG+3sS_{DEP} go-1sS_{DEP} PFV
 'I am already going to go' (G-SH)

- b. <na'c cuay tero ca>
 nak kw=ay tero-ka
 PN:2s go=PROG+3sS_{DEP} die/kill-2sS_{DEP}
 'you are going to die'
 OT: "te vas a morir" (Ch-JC)

INTERROGATIVE CLAUSES: Dependent-marking suffixes are attested on intransitive and transitive predicates in interrogative clauses. In the ALS (6. 50) as well as in the comparative data (6. 51b), dependent-marking suffixes are attested with predicates in interrogative clauses that indicate past with the anterior-marker *-wa*. In X_G the suffixes are also attested with transitive progressive predicates in interrogative clauses.

- (6. 50) <¿naca in szàc szà guacàn na tumin?>
naka ?in šakša-wa-kan na tumin
 PN: 2s INT steal-ANT-2sA_{DEP} DET money
 'did you steal the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)
- (6. 51) a. <capi ixpacá> b. <ca tupagua kan?>
 ka pi ?iš(a)pa-ka? ka tupa-wa-kan
 INT:where? CENT emerge-2sS_{DEP} INT:where? leave-ANT-2sA_{DEP}
 'where did you leave from?' 'where did you leave it?'
 OT: "¿de dónde vienes?" (Ch-C) OT: "¿dónde lo dejaste?" (Ch-F)
- c. hanta ta?ma tura=ka-kan naka
 INT road take=PROG-2sA_{DEP} PN:2s
 'which road are you taking?' (G-JAP)

6.3 Plural clitics

In this section we will look at the morphology and functional distribution of the plural clitics that combine with singular affixes or pronouns to mark the second and third person plural. Plural clitics are only attested in combination with anaphoric and free pronominal categories, including cross-referencing prefixes (§ 6.1) and suffixes (§ 6.2) as well as personal (§ 7.1) and intensifier-reflexive pronouns (§ 7.2).

The pronominal plural markers employed in the ALS include the clitic for the second person plural *?ay* and the clitic *ʔik* or the combination *ki=ʔik* for the third person plural. The two variant forms for the third person plural are attested in the same functional contexts.

Table 6. 20: Plural clitics in the ALS

	FORM		ORIGINAL GLOSS
second person plural	<ay>	?ay	e.g. (294.)
third person plural	<Lic>	ʔik	"plural" (269.)
	<qui Lic>	ki=ʔik	e.g. (207.)
	<quigLic>	ki-h=ʔik	"plural" (270.)

The following chart gives an overview of plural clitics in the other Xinka varieties. None of these forms is found in the semi-speaker data; pronominal plural markers are only attested in Schumann (1967) and the Campbell & Kaufman-data

from X_G . In X_{Ch} the second person plural clitic ηay occurs only in the Zeeje-ms., while the third person marker is also found on nouns in the vocabularies of Calderón (1908) and Fernández (1938). Plural clitics co-occur with basic person-marking affixes. The cross-referencing prefixes and suffixes of the structural type 2 attested in X_{Ch} and X_{Jum} seem to have been grammaticalised from a pattern in which the plural marker $\#i$ was preceding a pronominal suffix. These patterns are reflected in the morphology of pronouns; i.e. plural clitics are only attested as a functional category in those varieties/data sources where pronouns are formed with basic pronominal suffixes.

Table 6. 21: Plural clitics in the comparative data

	X_G	X_{Ch}	X_{Jum}	X_Y
second person plural	ηay	ηay (Ch-Z)		
third person plural	$\#ik$	$\#i$ $\#ik$ liki liki ki	hri?, $\#i$?	ηaya lik $\#iki$

Etymologically, pronominal plural markers in Xinka can be reconstructed to three basic morphemes which occur in different combinations: $\#i$, ki and $\eta ay(a)$.

The plural morpheme $\#i$ is otherwise attested in the function of a suffix that marks plural on animate/human nouns (see § 8.4.2) and occurs with Type-2 forms of cross-referencing prefixes and suffixes in X_{Ch} and X_Y . The forms attested in X_{Ch} and X_Y seem to indicate that the plural clitic $\#ik$ is an abbreviated form of the morphologically complex form $\#i-ki$, which combines the nominal plural suffix and the morpheme ki .

The etymology of the morpheme ki is not straightforward. In some of the data sources, $-ki$ is given as a cross-referencing suffix for the third person plural. However, this function seems to be derived from the plural morpheme rather than vice versa. Although semantically plausible, the adverb ki 'much' seems to be a diffused term from Maya and is not likely to be related to the plural clitic. Instead ki might be identified as the same root that indicates the intensifier-reflexive. Schumann analyses the root in the function of an object pronoun, which we can revise in § 7.2.2.3. An etymological relation with the intensifier-reflexive seems to be suggested, since the same marker appears to have a distributive function when occurring with quantifiers and numerals (§ 8.6.3.3).

The plural clitic ηay accompanies the second person plural in the ALS, the Zeeje-ms. and in X_G . In X_Y the clitic ηaya combines with the demonstrative man 'that one' to form the pronoun of the third person plural. The plural form also combines with verbs that are marked with third person cross-referencing affixes. Campbell and Kaufman identify ηay in their field notes as an inclusive plural marker, which may contrast with the aforementioned distributive marker ki .

In the ALS, second and third person plural markers are attested in the same functional contexts (see above).

SECOND PERSON PLURAL: The second person plural clitic *ʔay* always follows the verbal or nominal form carrying the person-marking reference; it never occurs in initial position. The form is attested with intransitive and transitive verbs.

- (6. 52) a. <cà màrà ay>
ka-ma:ra-ʔ ʔay
 2pS-rest-STAT 2PL
 'you (pl.) rested'
 OT: "vosotros descansasteis" (1491.)
- b. <cà pùla ay>
ka-pula ʔay
 2pA-make 2PL
 'you (pl.) make (it)'
 OT: "vosotros hacéis" (397.)
- c. <merecà ay>
mere-kaʔ ʔay
 break-2sA 2PL
 'you (pl.) broke (it)'
 OT: "vosotros rompisteis" (590.)

Auxiliaries and TAM-adverbials usually occur between the inflected verb and the plural clitic that follows in final position.

- (6. 53) a. <cà pùla Lan ay>
ka-pula ʔan ʔay
 2pA-make OPT 2PL
 'you may make (it)'
 OT: "vosotros hagáis" (437.)
- b. <cà màrà mà ay>
ka-ma:ra-ʔ maʔ ʔay
 2sS-rest-STAT COND 2PL
 'you (pl.) would have rested'
 OT: "vosotros hayáis descansado" (1533.)

In imperative contexts, *ʔay* can occur without being accompanied by a cross-referencing affix of the second person.

- (6. 54) a. <curànbè ay>
kura-n peʔ ʔay
 run-SUBJ DIR 2PL
 '(that) you (pl.) run here!'
 OT: "veníad vosotros" (1840.)
- b. <tonèya ay>
tone-ya ʔay
 be silent-IMP.VI 2PL
 'you (pl.) shut up!'
 OT: "calláos vosotros" (1858.)

The second person plural clitic occurs with alienably and inalienably possessed nouns (6. 55) and other nominal categories including personal pronouns and intensifier-reflexives (6. 56).

- (6. 55) a. <ca ucszaya Li ay>
ka-ʔukšaya-ti ʔay
 2pP-wife-PL 2PL
 'your (pl.) wives'
 OT: "vuestras mujeres" (308.)
- b. <aguacaay>
ʔawa-ka ʔay
 grandmother-2pP 2PL
 'your (pl.) grandmother'
 OT: "vuestra abuela" (363.)
- (6. 56) a. <nána náca ay>
nana naka ʔay
 FOC PN:2s/p 2PL
 'you (pl.)'
 OT: "vosotros" (86.)
- b. <náca eiguáca ay>
naka ki-wa-ka ʔay
 PN:2s/p INTENS/REFL-?-2pP 2PL
 'you yourself (pl.)'
 OT: "tú mismo (plural)" (165.)

Furthermore, the clitic marks the second person plural on person-marked non-spatial prepositions.

- (6. 57) a. <neŁa ca ay>
neŁa-ka ʔay
 BEN-2sP 2PL
 'yours (pl.)'
 OT: "vuestro" (292.)
- b. <ca neŁa ay>
ka-neŁa ʔay
 2pP-BEN 2PL
 'yours (pl.)'
 OT: "de vosotros" (88.)

- c. <tiýca ay>
ti:ʔ-ka ʔay
 IO-2pP 2PL
 'to you (pl.)'
 OT: "a, para vosotros" (89.)

THIRD PERSON PLURAL: The markers for the third person plural occur in the same contexts as those of the second person. The plural clitic *#k* or the complex form *ki=#k* usually follow the verb that is marked with third person cross-referencing affixes. Both forms are attested with transitive and intransitive predicates. Maldonado de Matos does not specify any functional difference, but prefers to use the complex form *ki=#k*, when the verb is not accompanied by TAM-adverbials or auxiliaries (6. 58a-c). This complex form seems to combine the intensifier root *ki* and the plural clitic *#k*, i.e. *ki=#k* [INTENS=3PL] '(they) themselves'. It is not cross-linguistically uncommon to find intensifier-reflexives in pronominal function.

- (6. 58) a. <a acù qui Lic>
ʔa-ʔakuʔ ki=#k
 3s/pS-go INTENS=3PL
 'they themselves go'
 OT: "aquellos van" (1647.)
- b. <mu piri qui Lic>
mu-pi:ri ki=#k
 3pA-see INTENS=3PL
 'they themselves see'
 OT: "aquellos ven" (742.)
- c. <pulái qui Lic>
pula-y ki=#k
 make-3pA INTENS=3PL
 'they themselves made'
 OT: "aquellos hicieron, han hecho" (410.)
- d. <a acù Lic>
ʔa-ʔakuʔ #k
 3pS-go 3PL
 'they go'
 OT: "vayan aquellos" (1681.)

In most attested cases the intensifier *ki* and the plural *#k* cliticise to each other, but there are also contexts that show both markers in a discontinuous pattern.

- (6. 59) <mà ayu qui agi Lic>
ma ʔayu ki ʔahi #k
 COND AUX INTENS be+3sS_{DEP} 3PL
 'they themselves would have had been'
 OT: "aquellos hubieran, habrían, y hubiesen estado" (1946.)

The marking pattern can be confirmed in the comparative data. Schumann employs the clitic *#k* as a sole reference marker for the third person plural (6. 60a). In the Zeeje-ms. the plural marker *liki* accompanies cross-referencing prefixes and suffixes (b-c).

- (6. 60) a. <pula#k>
 pula-#k
 make-3PL
 'they make'
 OT: "ellos hacen" (G-S)
- b. <mug apala liqui>
 muh-ʔapala liki
 3pA-open 3PL
 'they open (it)'
 OT: "abren" (Ch-Z)
- c. <jama tupaguay liqui>
 hama tupa-wa-y liki
 PREP put-ANT-3pA 3PL
 'where/in that they have put (it)'
 OT: "en que le han puesto" (Ch-Z)

TAM-adverbials and auxiliaries can either follow (6. 61) or precede (6. 62) the third person plural clitic. Although both third person plural clitics are attested with TAM-adverbials, only *ʔik* seems to be attested between the verb and the adverbial.

- (6. 61) a. <màrà Lic mà>
Ø-ma:ra-ʔ ʔik maʔ
 3pS-rest-STAT 3PL COND
 'they would have rested'
 OT: "aquellos hayan descansado" (1534.)
- b. <sàmui Lic pà ayù>
samu-y ʔik paʔ ʔayuʔ
 catch-3pA 3PL PFV AUX
 'they will have caught (it)'
 OT: "aquellos habrán cogido" (1105.)
- (6. 62) a. <a acù pà pè Lic>
ʔa-ʔakuʔ paʔ peʔ ʔik
 3pS-go PFV FUT 3PL
 'they would have gone'
 OT: "aquellos fueren, hubieren ido" (1711.)
- b. <meri mà qui Lic>
mere-y maʔ ki=ʔik
 break-3s COND INTENS=3PL
 'they themselves would have broken it'
 OT: "aquellos hayan rompido" (631.)

When occurring with phrasal verbs, *ʔik* can likewise precede or follow the preposition.

- (6. 63) a. <mu pata nàL Lic szàma>
mu-pata naʔʔ ʔik šama
 3sA-*accomplish IMPFV 3PL PREP
 'they remembered'
 OT: "aquellos se acordaban" (1570.)
- b. <mu pata Łan szàma Lic>
mu-pata ʔan šama ʔik
 3sA-*accomplish OPT PREP 3PL
 'they would remember'
 OT: "aquellos se acuerden" (1604.)

As pointed out above, the intensifier *ki* and the plural clitic *ʔik* can occur in a discontinuous pattern. There are, however, also a few examples, where *ki* is attested in final position. In constructions that are indicated by Maldonado de Matos as pluperfect forms *ʔik* follows the predicate, while *ki* follows the TAM-adverbials *paʔ* and *naʔʔ*. The artificiality of the Latin tense category does not allow further conclusions about the position and usage of clitics and intensifiers in the third person plural.

- (6. 64) a. <capa pulây Lic paL nàL qui>
ka=pa pula-y ʔik paʔ naʔʔ ki
 EXO=PFV make-3sA 3PL PFV IMPFV INTENS
 'they had made themselves'
 OT: "aquellos habían hecho" (416.)
- b. <capa paL nàL qui agi Lic>
ka=pa paʔ naʔʔ ki ʔahi ʔik
 EXO=PFV PFV IMPFV INTENS be+3sS_{DEP} 3PL
 'they themselves had been'
 OT: "aquellos habían estado" (1905.)

The plural clitic *ʔik* can follow or precede inflected existential verbs that are accompanied by TAM-auxiliaries.

- (6. 65) a. <nàL agi Lic>
naʔʔ ʔahi ʔik
 IMPFV be+3pS_{DEP} 3PL
 'they were (durative)'
 OT: "aquellos estaban" (1899.)
- b. <Łan Lic agi>
ʔan ʔik ʔahi
 OPT 3PL be+3pS_{DEP}
 'they would be'
 OT: "aquellos estén" (1928.)

In auxiliary verb constructions the plural clitic *#k* occurs in most cases between the lexical verb and the following auxiliary verb (6. 66a-b). However, there are also cases where the plural clitic follows the auxiliary verb it refers to (c). The following examples show a type of auxiliary construction that is used by Maldonado de Matos to fill the slot of passive voice in the Latin model of grammar. In the comparative data these auxiliary verb construction have an abilitative meaning (see § 10.1.3.6).

- (6. 66) a. <nana turiŁi nariŁa Łic patai>
nana turi-Łi nariŁa Łik pata-y
 FOC child-PL teach 3PL *accomplish-3pA
 'the children are taught'
 OT: "los muchachos son enseñados" (1980.)
- b. <samù mà Łic pataguaag>
samu-? ma? Łik pata-wa-h
 catch-STAT COND 3PL *accomplish-ANT-3pP
 'they would have accomplished (being) caught = the would have been caught'
 OT: "aquellos hayan sido cogidos" (1210.)
- c. <pùla naŁ patai Łic>
pula na(7)Ł pata-y Łik
 make IMPFV *accomplish-3pA 3PL
 'they accomplished making = they were made'
 OT: "aquellos eran hechos" (493.)

Third person plural clitics that accompany possessor-marking affixes on nominal categories also follow the inflected form in most cases. Both forms, *#k* and *ki=#k*, are attested in these contexts. They occur with alienably and inalienably possessed nouns.

- (6. 67) a. <mutùa Łic>
mu-tuwa Łik
 3pP-cacao 3PL
 'their cacao trees'
 OT: "sus cacaguatales" (272.)
- b. <Łapaag Łic>
Łapa:-h Łik
 grandson-3pP 3PL
 'their grandsons'
 OT: "sus nietos" (369.)
- c. <mutiig quiŁic>
muti:-h ki=Łik
 hair-3pP INTENS=3PL
 'their (own) hair'
 OT: "sus cabellos" (367.)

With non-spatial prepositions *#k* can accompany a third person cross-referencing affix or occur on its own as the sole plural reference. The pattern is also attested in the comparative data; in X_{Ch} the plural clitic also occurs with spatial prepositions (6. 69c).

- (6. 68) a. <mu neŁa Łic>
mu-neŁa Łik
 3pP-BEN 3PL
 'theirs, of them'
 OT: "de aquellos" (112.)
- b. <tiyg Łic>
ti:7-h Łik
 IO-3pP 3PL
 'to them'
 OT: "a, para aquellos" (113.)
- c. <neŁa Łic>
neŁa Łik
 BEN PL
 'theirs, of them'
 OT: "de aquellos" (111.)

- (6. 69) a. <tiʔiʔik>
ti:ʔ=ʔik
IO=3PL
'to them'
OT: "a, para ellos" (G-S)
- b. <nelag liqui>
nela-h liki
BEN-3pP 3PL
'theirs'
OT: "de los" (Ch-Z)
- c. <salig>
sa lih
PREP 3PL
'in them'
OT: "en ellos" (Ch-Z)

The clitic *ʔik* marks plural on definite and indefinite pronouns, demonstratives and quantifiers. In most of these cases the plural morpheme follows the pronoun. However, if the pronoun is preceded by a non-spatial preposition, the clitic occurs in the position between the preposition and the pronoun (d-e).

- (6. 70) a. <nana nagLic>
nana nah ʔik
FOC PN:3s PL
'they'
OT: "aquellos" (110.)
- b. <namán Lic>
na man ʔik
DET DEM 3PL
'to them'
OT: "a éstos" (140.)
- c. <nana axué Lic>
nana ʔahʔ ʔik
FOC DEM PL
'these'
OT: "éstos" (123.)
- d. <neLa Lic na mán>
neʔa ʔik na man
BEN 3PL DET DEM
'of/for those'
OT: "de éstos" (137.)
- e. <aLi Lic guèna qui>
ʔaʔi ʔik wena=ki
PREP.CAUS 3PL INT:who=INTENS
'by whom (pl.)?'
OT: "el que (plural, ablativo)" (212.)
- (6. 71) a. ʔahe-ʔe
DEM-PL
'these' (G-SH)
- b. <nanu juliqui>
nanu hu-lik
DET DEM-PL
'these (ones)'
OT: "éstas" (Ch-Z)
- c. <maliqui>
ma-ʔiki
DEM-PL
'these'
OT: "aquellos" (Ch-Z)

In X_Y the third person plural clitic attested with pronouns is *ʔaya*; however, with quantifiers, the form *liki* is employed.

- (6. 72) a. <manaya>
man =ʔaya
DEM =PL
'those'
OT: "ésos, ésas, ésos" (Y-C)
- b. <tajiliki>
tahi =liki
QUANT=3PL
'all'
OT: "todos" (Y-C)

In X_{Ch} there are examples of the third person plural clitic in pronominal function, indicating the O argument of the transitive predicate.

- (6. 73) a. <alig hucay deber liqui>
ʔalih ʔuka-y *deber* liki_O
because do-3pA Sp:owe PN:3p/3PL
'because they owe them'
OT: "por deberlos" (Ch-Z)
- b. <ne iriyan liki>
ne ʔiri=ya-n liki_O
PN:1s see=PROG-1s_{DEP} PN:3p/3PL
'I am seeing them'
OT: "yo los veo" (Ch-C)

7 Pronouns

Free pronominal forms in Xinka include personal pronouns (§ 7.1), intensifier-reflexive pronouns (§ 7.2) and indefinite pronouns (§ 7.3). Morphologically, personal and reflexive pronouns consist of a demonstrative or adpositional root and a bound person-marking suffix. Indefinite pronouns combine question words and intensifiers.

In Xinka most content question words (e.g. for human/person, quantity) exhibit pronominal plural marking and would therefore fall into the category of pronouns; they are, however, treated together with other interrogative markers in the chapter on modality (see § 13.2).

7.1 Personal pronouns

7.1.1 Morphology of personal pronouns

In Maldonado-Xinka independent pronouns distinguish the numbers singular and plural and the first, second and third person. Morphologically, they are combinations of the demonstrative *na* (§ 8.5) and the set of cross-referencing suffixes that marks possession on inalienably possessed nouns (§ 8.2.3, § 6.2).

Table 7. 1: Personal pronouns in the ALS

	FORM			ORIGINAL GLOSS
1s	<nen>	ne-n	*[DEM-1s]	"ego" (56.), "yo" (4172.)
	<nem>	ne-m	/_p	(62.)
2s	<náca>	na-ka	*[DEM-2s]	"tú" (75.)
3s	<nag>	na-h	*[DEM-3s]	"ille, illa, illud" (101.), (102.)
	<nagqui>	na-h ki	*[DEM-3s + INTENS]	"él, aquel" (4143.)
1p	<néLéc>	ne:-ʔe-k (neʔ-ʔe-k)	*[DEM-PL-1p]	"nosotros, nos" (4170.)
2p	<naca ay>	na-ka ʔay	*[DEM-ka + 2PL]	"vosotros, vos" (4136.)
3p	<nagquiLic>	na-h ki ʔik	*[DEM-3s + INTENS + 3PL]	"ellos, aquellos son" (4144.)

In the first person the morphological pattern seems to be irregular, as V_1 is *e* not *a*. This may indicate that the first person singular affix may originally have been **ən* as attested in the Campbell & Kaufman-data from X_G , X_{Ch} and X_{Jum} . The variation of *-n* and *-m* in final position is phonetic (see § 4.4.4). The first person plural seems to combine either the demonstrative *na* or the first person singular pronoun **ne-*, the plural morpheme *ʔi* and the person-marking suffix - V_2 became assimilated following vowel harmony rules (see § 4.4.2); i.e. **na-ʔi-k* [DEM-PL-1p] > *ne:ʔek*. V_1 in <néLéc> carries an accent, which does not coincide with the stress pattern, i.e. stress lies on V_2 . This may indicate that V_1 is either long or followed by a glottal stop.

In the first and second person singular, cross-referencing prefixes and suffixes are formally identical (i.e. *ʔan-/-(a)n* and *ka-/ka*). Only the third person pronoun, which is expressed in the majority of attested cases by *na* and the suffix *-h*, indicates that personal pronouns are combinations of demonstratives and person-marking suffixes.

The second and third person plural correspond with the singular forms but are followed by the plural clitics *ʔay* (second person) and *#ik* (third person). The third person plural may also include the intensifier *ki* (§ 7.2.2.1.3).

The morphology of independent pronouns in the ALS is confirmed by the analysis of pronominal forms in the other Xinka varieties:

GUAZACAPÁN: The independent pronouns attested in X_G show formal correspondences with the data from the ALS. Primary and secondary data sources are largely consistent.

Table 7. 2: Comparative chart of personal pronouns in X_G

	Primary Data	G-S ¹³⁶	G-MA	G-C&K
1s	nin, niŋ, niʔ, nini nen, neʔ nan	<nin>	<niŋ>	<nenʔ ~ ninʔ>
2s	naka, nak'	<náka>	<náca>	<naka>
2sf	nay			
3s	nah, naʔ naʔ			<nah>
DEM	nah maʔ	<naman>, <man>		
DEM	nahi, naʔi	<hiʔ> "él" ('he')		
	nahi "ésto" ('this')	<nahi> "élla" ('she')		
1p	ne:ʔeke, ne:ʔek'	<neʔék>, <neʔeʔék>		<neeʔek> (excl.) <neeʔek ʔay> (incl.)
2p	-			<naka ʔay>
3p	-	<naʔik>		<naaʔik>

The pronoun in the first person singular is *nin* or *nen*. The final consonant *-n* may be replaced by *-ʔ* or *-k*. According Campbell and Kaufman, the final nasal is glottalised (see field notes). In selected cases we find *nan*.

The second person pronoun is consistently given as *naka*. Occasionally, the semi-speakers shorten the form to *nak'*, glottalising the velar in final position (see § 4.3.1.1.3). Depending on the functional context, the pronoun may be preceded by the determiner *na*. In the semi-speaker data we find a few selected occurrences of the form *nay*. The semantic contexts seem to suggest that in X_G *nay* is used as a formal or deferential pronoun, corresponding to the formal pronoun *na-y* [DET-3s] that is attested in X_{Ch} , X_{Jum} and X_Y (see below).

The pronoun of the third person singular *nah* consists of the determiner *na* and the third person cross-referencing suffix *-h*. The semi-speakers also often use the demonstrative *naʔ* instead of the third person pronoun. Both forms can combine with the demonstrative *man*. Schumann (1967) interprets these demonstratives as third person singular pronouns, since they are attested in the same functional context as *nah*. He furthermore identifies the forms *hiʔ* 'he' ("él") and *nahʔ* 'she' ("élla") as referential pronouns. This gender differentiation cannot be reconfirmed elsewhere in the comparative corpus.

¹³⁶ Schumann (1967) identifies this set of personal pronouns as "sujetos" or subject-marking.

The first person plural pronoun corresponds with the form *ne:tek* or *neʔek* attested in the ALS. Campbell & Kaufman note that V_1 is long, Schumann indicates a glottal stop following the vowel. Furthermore, Campbell & Kaufman distinguish an inclusive and exclusive form; the inclusive form being followed by the marker *ʔay*, which occurs in the ALS with the second person plural (see ALS, see X_{Ch} /Zeeje, see X_Y 3p). This exclusive form is not attested in the semi-speaker data.

The free pronoun of the second person plural is again only attested in the Campbell & Kaufman-data. They indicate the same form *naka ʔay* that occurs in the ALS (see above) and in the Zeeje-ms. (see below). The plural clitic *ʔay* seems to be related to the clitic that follows exclusive first person plural as indicated by Campbell and Kaufman.

The pronoun of the third person plural combines the determiner *na* and the plural marker *ʔi* or *ʔik*. It deviates from the form given in the ALS *na-h (ki) ʔik* in that the cross-referencing suffix *-h* is not present. According to Campbell and Kaufman the first vowel *a* is long.

CHIQUMULILLA: In the X_{Ch} -data, pronouns show greater variance than in X_G . This could be the result of language change or may point to the existence of different dialectal varieties in Chiquimulilla (see § 2.2.2.3). The pronominal forms attested in the Zeeje-manuscript seem to correspond with the paradigm in X_G . The pronouns attested in the other sources show by and large more similarity with the set of personal pronouns attested in X_{Jum} .

For the first person singular the forms *nini*, *nin*, *nen* and *nan* are attested. The least frequent form *nan* suggest that the original morphology of the form combined the determiner *na* and the first person marker *ʔan*. However, in the recent data, the form that occurs most widely is *niʔ*, of which *nik* and *nit* are phonetic variations. Schumann's lexical data from X_{Ch} suggest that there is a functional difference between *niʔ* 'I' (S/A-function) and *nin* 'me' (Sp. "a mí") (O function) which cannot be confirmed elsewhere in the X_{Ch} -data. The first person singular pronoun is unattested in the Zeeje-ms.

There are two different pronouns that mark the second person singular. The first and basic form *naka* corresponds with the markers attested in the ALS and in X_G . In the recent data, the final vowel is lost and *nak* is the form that occurs in most contexts. Fernandez indicates *nakay* 'you' (Sp. "te") suggesting a separate marker for the second person singular direct object (O) (see Schumann for the first person singular). However, this form is not attested in any syntactic context. Informant Julian de la Cruz used the form *nak ki*, which seems to combine the second person singular pronoun and the intensifier *ki* (i.e. 'you alone').

In all sources, the second person singular is also given as *nay*, consisting of the determiner *na* and the person-marking suffix *-y*. It is variously translated as 'you' (Sp. "tú, Ud.") (Ch-C, Ch-F, Ch-JC) or 'he' (Sp. "él, élla") (Ch-S). In X_{Ch} *-y* marks the second person singular, while in Maldonado-Xinka or X_G it refers to the third person. With respect to this functional difference of *-y* in X_{Ch} and X_G , we need to take into account that Spanish speakers in the Guatemalan *oriente* do not use the second person singular "tú". Instead the formal "usted" is applied in all contexts; only small children and clear subordinates are occasionally addressed with the ancient form "vos" (cf. Penny 1991:124-125). Campbell and Kaufman (field notes)

distinguish the forms *nak* and *nay* as formal and informal second person, which may support the idea that *nay* was originally a pronoun that referred to the third person.

The third person singular pronoun *nah* corresponds with the pronouns attested in the ALS and X_G. The pronoun can combine with the intensifier *ki* and with the demonstrative *ma(n)* to form *nah ki* (Ch-Z, Ch-P) and *na ma* (Ch-C).

The sources give quite variant forms for the first person plural. The pronoun *ne* only occurs in the Calderón/Fernández-data where it follows the non-spatial preposition *neʔa* (§ 9.2.1); e.g. *neʔa ne* 'ours' ("nuestros"). It is not entirely clear whether *ne* may be the first person singular that functions here in a plural context, or whether we are dealing with an abbreviation of the form *ne:ʔek* that is attested in the ALS and in X_G. In all other contexts, the pronoun consists of the determiner *na* and the suffix *-ʔki* that can be identified as a cross-referencing suffix for the first person plural. Schumann also gives the form *naʔik*. It is unclear whether the forms *maʔki* and *waʔki* in the Calderón-data are systematic variations or typographic errors.

Table 7. 3: Comparative chart of personal pronouns in X_{Ch}

	Ch-Z	Ch-C	Ch-L	Ch-F	Ch-MQ	Ch-S	Ch-MA	Ch-P	Ch-JC	Ch-C&K
1s	-	<na> <ne> <ni> <nini> <ran>	<ni>	<nan> <nen> <ni> <nin(i)> <ran>		<niʔ> <nin>	<niʔ> <ni> <nick> <nit>		<nan> <nin> <ni'c>	<niʔ>
2s	<naca>	<naca> <nac>	<nac>	<naka> <nak> <nakay>	<nakʌ> <nakʰ>	<nak>	<na·c>	<nack>	<naca> <nac> <n'ac> <nac qui>	<nak>
2sf		<nay>		<nay>		<nay>			<nay>	<nay>
3s	<nag> <nagqui>	<naj> <naj na ma>	<na- namá>	<naj>	<naʔ>		<nāj>	<naj> <najqui>		<nah>
1p		<-ne> <najki> <maljki> <hualjki>		<-ne> <nalki> <najlki>		<naʔi> <naʔik>		<naj-hiqui na> <ni narla>		<naʔki>
			<ni- lama>							
2p	<naca hay>	<najlica> <najlic> <majlic> <huajlic>	<na-lic>	<najlic> <majlic>						<naʔik> <naʔiy>
2sf										<nay ʔih> <nay ʔik>
3p	<nag- quiliqui> <ma- liqui>	<najli>, <najlij> <najliki> <najna> <najna majliki> <liki>	<nana ma-lic>	<najli> <najna najliki> <liki>				<najli>	<najliqui>	<naʔi(h)>

For the second person plural there are two different forms of pronouns. In the Zeeje-ms. we find the form *naka ʔay*, which corresponds with the pronoun from the ALS. In both sources the pronoun is attested in a continuous and discontinuous pattern. In all other sources the second person plural pronoun consists of the determiner *na*, the plural marker *ʔi* and second person singular cross-referencing suffix *-ka*. The full form *naʔika* is only attested in Calderón, in all other contexts the final vowel is deleted, *naʔik* (cf. *naka* > *nak*). Calderón includes the additional forms *maʔik* and *waʔik*. Campbell & Kaufman make a functional distinction of formal and informal address. The forms *nay ʔih* and *nay ʔik* correspond with the singular form *nay*.

In the Zeeje-ms. the pronoun for the third person plural is *nah ki liki* which basically corresponds with the form *nah ki ʔik* in the ALS. In the more recent contexts, the pronominal form is given without *ki*, i.e. **na-h-ʔi(ki)*. In the variant forms *naʔiki* and *naʔi* the cross-referencing suffix *-h* seems to have been dropped, or assimilated to the following lateral-fricative *ʃ*. Demonstrative forms that can substitute for the third person plural in X_{Ch} are structurally identical, i.e. *ma-ʔiki* [DEM-PL]. Campbell & Kaufman give the pronoun as *na-ʔi-h* [DET-PL-3p]. Calderón and Fernández also indicate a pronominal form for the third person plural that does not include the plural marker *ʔi*; i.e. *na-h na* [DET-3s DET].

JUMAYTEPEQUE: The independent pronouns in X_{Jum} correspond largely with the pronominal forms from X_{Ch} . Campbell & Kaufman give the first person singular pronoun as *ninʔ*. They distinguish an informal and a formal second person. In the second person singular, the informal *nak* and the formal pronoun *nay* are attested. Additional data indicate that the full form *naka* is also used. The formation of the third person singular pronoun *nah* is regular. In the X_{Jum} -data that were collected by Felipe de la Cruz, the third person also occurs as *nan*. The plural pronouns correspond with the forms in X_{Ch} .

Table 7. 4: Comparative chart of personal pronouns in X_{Jum}

	Jum-C&K	Jum-E
1s	<ninʔ>	
2s	<nak>	<naka>
2sf	<nay>	
3s	<nah>	<nan>
1p	<nalki>	
2p	<naalik>	
2pf	<naaliy>	
3p	<naalih>	

YUPILTEPEQUE: The paradigm of pronouns in X_Y shows some correspondences with Maldonado-Xinka, as well as some deviations. Nearly all forms consist of the determiner *na* and a cross-referencing suffix. With the exception of the first person singular, Calderón gives all pronouns with the initial vowel *ʔi*-, i.e. *ʔi-man*, *ʔi-nay*, *ʔi-nek*. The function of this marker is unclear, but it could be tentatively related to the deictic marker *ʔi*- 'there' ('allí') (§ 14).

The first person singular pronoun is attested as *nen*, *ne* and *nin*. The entry <nau> is likely to be identified as a typographic error (see § 2.2.2.3) and should render as *nan*. The form *nan* is also attested in X_G and X_{Ch} and seems to confirm that the pronoun combines the determiner *na* and the personal suffix *-an*. It is not clear

whether the variant forms of the first person singular in X_Y encode functional difference.

In the second person singular there are two pronominal forms, *naka* and *nay*, of which *nay* is the more frequent one. From the translation contexts it cannot be determined whether the two forms reflect the semantic distinction of formal and informal person that is indicated by Campbell & Kaufman for X_{Ch} and X_{Jum} .

Table 7. 5: Personal pronouns in X_Y

	Y-C	Y-L	
1s	<nau>, <na> <nen>, <ne>, <na nen> <nin>	<nen>, <ne> <nin>	*na(n) *ne(n) *nin
2s	<naca> <nay>, <inay>, <anay>, <nanay>	<nac> <anay>	*naka *nay
3s	<naj>, <inaj> <iman> <(i)naj man>, <naj mau>	<man>	*nah *man *nah man
1p	<nec>, <inec>, <na nek>, <naj nec> <nelek> <lelec>		*nek *nelek *lelek ?
2p	<nalica>, <inalika> <lika(n)> <naj ne inay>		*nalika *lika *nah na nay
3p	<(i)naj man aya> <naya>, <naj naj aya>		*man aya *nah aya

The basic form of the third person is *nah* or *ʔnah*. Demonstratives are used in the same context and may combine with *nah*; e.g. *nah man*.

The first person plural pronoun is *nek* or *ʔnek*. This basic form can be preceded by determiner *na* or third person singular pronoun *nah*. The form *nelek* is also attested but less frequent. The existence of two different markers for the first person plural may suggest an inclusive/exclusive contrast as identified by Campbell & Kaufman for X_G . Calderón also gives *lelek*, which may be another typographic error.

The second person plural pronoun corresponds with the pattern identified in X_{Ch} , i.e. *na-ʔi-ka* (DET-PL-2p). There is a short form that simply lacks the determiner, i.e. *ʔi-ka* (PL-2p).

The morphology of the third person plural is straightforward. The third person singular pronoun *nah* or *nah man* is marked with the plural morpheme *ʔaya*.

The personal pronouns in the Xinkan languages show some structural correspondences. In all varieties, pronominal forms consist of the demonstrative *na* and the cross-referencing suffixes that mark possession. Table 7. 6 illustrates that the pronouns in Maldonado-Xinka show most correspondences with X_G and the Zeeje-ms., i.e. the early data from X_{Ch} .

The first person singular and plural both share the vowel *e*. The earlier sources give *nen* for the first person singular. In X_G , X_{Ch} and X_Y all three forms, *nin*, *nen* and *nan* are attested, with *nin* being the most frequently attested form. It is not possible to identify any functional difference of these forms. In the first person plural, X_{Ch} and X_{Jum} have *naʔik*, while all other varieties –including the ALS and the data from X_Y – give *ne:ʔek* or *nek*.

The comparative data from X_{Ch} , X_{Jum} and X_Y seem to confirm the contrast of formal and informal second person that was described in the previous chapter for the cross-referencing system. In X_G evidence for *nay* functioning as a formal pronoun can only be found in the semi-speaker data.

- (7. 1) a. hin ʔan-ʔuʃiki nay
 NEG 1sA-hear PN:2sf
 'I do not hear you (2sf)' (G-SH)
- b. ʔurtu-y nay kah trago maʔ
 drink-3sA PN:2sf INDEF Sp:drink DEM
 'you (2sf) drank that drink' (G-JS)

The contrast of formal and informal second person is not reflected in the ALS or the Zeeje-ms. It may be the result of local Spanish where "usted" has substituted for "tú" and is only occasionally replaced by "vos" (see above). However, since the contrast also reflects in the cross-referencing system, we may also understand the fact that it is missing in the ALS as an inadequacy of Maldonado de Matos' description.

Table 7. 6: Comparative chart of personal pronouns in Xinkan

	X_M	X_G	X_{Ch}	X_{Jum}	X_Y
1s	nen, nem	nen nin, nini, niʔ, nik nan	nen, ne nin, nini, niʔ, nik nan	ninʔ	nen, ne nin nan
2s	naka	naka nak'	naka nak	naka nak	naka
2sf	-	nay	nay	nay	na-nay nayar
3s	nah	na nah	na nah	nah	na nah
1p	ne:ʔek	ne:ʔek(e)	-ne naʔi(ki), naʔki ni naʔa maʔki, waʔki	nalki	nek, na-nek ne-ʔek, le-lek
1p (incl.)		ne:ʔek ʔay			
2p	naka ʔay naka ... ʔay		naka ʔay* naka ... ʔay* nakay ni nakah		nakay (poss)
2pf		naʔik** (ʔikan)?***	naʔik, naʔika (1x) maʔik, waʔik hi ʔik	na:lik na:liy	naʔika ʔika, -ʔikan
3p	nah (ki)ʔik	na:ʔik	nah kiʔiki naʔiki naʔi, naʔih nahki ʔik kiʔik manʔik	na:lih	nahaya naya
DEM	manʔik		maʔiki		man aya

* Ch-Z, ** G-S, *** G-SH

The comparative data confirm the function of the clitic *ʔay* as a plural marker for the second person plural. Campbell & Kaufman also indicate the existence of a first person plural inclusive form marked with *ʔay* in X_G . In X_Y the plural clitic *ʔaya* combines with the third person pronoun *nah* and the demonstrative *man* to form the third person plural pronoun. All these plural markers seem to be etymologically related. There are not sufficient contexts to suggest an etymology of the marker.

In Maldonado-Xinka the third person plural is formed with the plural clitic *#k* that follows the pronoun *nah*, but can also occur alone. In the comparative data the third person plural pronoun always combines with the same pronominal plural clitics that are also used with person-marking affixes (see § 6.3). All forms are combinations of the plural morpheme *-#i* (§ 8.4.2) and the intensifier/distributive marker *ki*.

Third person pronouns are attested in the function of demonstratives (7. 2) (see § 8.5.2.3). In the same way, the demonstratives *ʔahʔ* and *man* may occur in pronominal function and substitute for the third person independent pronoun *nah* (7. 3).

- (7. 2) <najli fracli>
 na-ʔi frak-li
 DET-PL man-PL
 'these men'
 OT: "estos hombres" (Ch-C)
- (7. 3) a. <¿cà pè taguà na aszue?>
 ka peʔ ta-waʔ na ʔaʃi
 INT DIR come-ANT DET DEM
 'where did this one (= he) come from?'
 OT: "¿de dónde vino ésto?" (2010.)
- b. hanta wena tupa-wa-n na hiʔ
 INT:what? INT:who leave-ANT-SUBJ DET DEM
 'who left this?' (G-RHG)

The use of pronouns and demonstratives may be discourse-dependent. Schumann, for example, writes that in interrogative constructions the third person pronoun is always expressed as *man* (see 1967:43-44). This restriction cannot be reconfirmed on the basis of the other corpus data.

7.1.2 Functional contexts of personal pronouns

Personal pronouns in Xinka function as core-arguments (i.e. S/A and O) and extended arguments of verbal predicates. They also mark the subject on nominal predicates and can complement possessor-marking on nouns. In S function pronouns show agreement with the person cross-referenced on the verb; as possessive complements they show agreement with the person of the possessor marked on the noun. Pronouns can, however, also function as the only reference to subjects and possessors. In the second person, pronouns can be used as vocative pronouns.

7.1.2.1 Subject marking

Personal pronouns are used to represent the argument of the subject or agent of the verbal predicate. In this S/A-function, the pronoun always shows agreement with cross-referencing affixes on the verb. The examples from the ALS show that pronouns in S/A-function precede the predicate, while O arguments always follow.

- (7. 4) a. <nən an ima naL na misza>
nən_A **ʔan-ʔima** **na(ʔ)ʔ** **[na** **miša]**_O
 PN:1s 1sA-speak IMPFV DET Sp:mass
 'I spoke (= read) the mass'
 OT: "yo decía misa" (1982.)
- b. <naca ayù pà guiszucà na Juan>
naka_A **ʔayu** **paʔ** **wišu-kaʔ** **[na** **Juan]**_O
 PN:2s AUX PFV beat-2sA DET Juan
 'you will have beaten Juan'
 OT: "tú habrás azotado a Juan" (2022.)

This pattern, which seems to reproduce Spanish syntax, is also attested in the comparative data. The position of the personal pronoun is not dependent on the verb form.

- (7. 5) a. **naka**_A **ʔima-kaʔ** **nin**_O
 PN:2s tell-2sA PN:1s
 'you told me' (G-SH)
- b. <najli pulay>
naʔi_{S/A} **pula-y**
 PN:3s make-3sA
 'they made (it)'
 OT: "ellos hacen" (Ch-C)
- c. <nalica lica curúki>
nalika_S **lika-kuruki**
 PN:2p 2pS-run
 'you run'
 OT: "vosotros corréis" (Y-C)

However, the pronoun expressing the S/A argument predominantly occurs in the X_G , X_{Ch} and X_Y in the position following the predicate. The O argument mostly follows in final position.

- (7. 6) a. **mu-ǵ'iwi** **nahi**_{S/A}
 3sA-bend corn PN:3s
 'he bent corn' (G-JS)
- b. <n'dala ni pumu>
n-tala **ni**_A **pumu**_O
 1sA-burn PN:1s incense
 'I burn incense'
 OT: "quemo copal" (Ch-C)
- c. <ajla muj tiki nec>
ʔaʔa **muh-ti:ki** **nek**_S
 tomorrow 1pS-sleep PN:1p
 'tomorrow we will sleep'
 OT: "mañana dormiremos" (Y-C)

Maldonado de Matos indicates that in progressive constructions the pronoun in S/A-function can follow (7. 7a) or precede (b) the auxiliary.

- (7. 7) a. <yguitzi nàL u ɛa can naca>
ʔiwiǵ'i **naʔ** **ʔuka-kan** **naka**_A
 hear IMPFV PROG-2sA_{DEP} PN:2s
 'you were hearing ...'
 OT: "tú estabas oyendo misa, ..." (1989.)
- b. <yguitzi nàL naca u ɛa can>
ʔiwiǵ'i **naʔ** **naka**_A **ʔuka-kan**
 hear IMPFV PN:2s PROG-2sA_{DEP}
 'you were hearing ...'
 OT: "tú estabas oyendo misa, ..." (1988.)

Both patterns are confirmed in the comparative data from X_G , X_{Ch} and X_Y ; below only examples from X_G are given.

- (7. 8) a. hono-? ?uka-ka naka_S b. pula nin_A ka-n
 get drunk-STAT PROG-2sA PN:2s make PN:1s PROG-1sA
 'you are drunk' (G-JS) 'I am making (sth./it)' (G-JAP)

Personal pronouns can be preceded by articles and demonstratives to emphasise their deictic function. In the ALS, pronouns in S function are optionally preceded by the focus determiner *nana* that is used by Maldonado de Matos to indicate the Latin cases of nominative (§ 8.5.1.2).

- (7. 9) a. <nàná nen> b. <nana nag>
 nana nen **nana nah**
 FOC PN:1s FOC PN:3s
 'I' 'he, she'
 OT:"yo" (57.) OT:"él, aquel" (103.)

In X_G pronouns can also be preceded by the determiners *nana* or *na* when functioning as S/A arguments. The focus determiner *nana* is only used by RHG and JS with the first person singular pronoun; it occurs mostly in clause-initial position. The majority of first and second person pronouns in initial position are preceded by *na*. Pronouns in the third person are never preceded by a determiner.

- (7. 10) a. nana nin_A ?ima=ka-n naka_O
 FOC PN:1s tell=PROG-1sA_{DEP} PN:2s
 'I am telling you' (G-RHG)
 b. nana nin_A nuk-ey [na naka]_O
 FOC PN:1s give-3sA DET PN:2s
 'I give (it) to you' (G-JS)
 (7. 11) a. [na nin]_A ?an-?ima naka_O
 DET PN:1s 1sA-tell PN:2s
 'I will tell you' (G-SH)
 b. [na naka]_S ka-?aku-?
 DET PN:2s 2sS-go-STAT
 'you went' (G-SH)

In subordinate clauses pronouns in S/A-function that are preceded by the determiner *na* occur in final position, following the subordinate or nominal predicate. In the given examples from X_G subordinate status of the verb form is indicated by the anterior-suffix (a) or the stative marker that derives a participle form (see § 11.1.2.1).

- (7. 12) a. [piri-wa naka_O na nin_A]_{SUB} b. [?u?u-? na nin_S]_{SUB}
 see-ANT PN:2s DET PN:1s fall-STAT DET PN:1s
 '(that) I saw you' (G-JS) 'I have fallen' (G-PE)

There are cleft-constructions (see § 16.2.5.3) in X_G where the pronoun that functions as the nominal predicate is repeated following the relativised verb with which it shows agreement. In the second example, the first person plural pronoun *ne:teke* occurs in initial position functioning as the nominal predicate, while the verb is followed by the first person singular pronoun, which does not show agreement with the complex predicate.

- (7. 13) a. na nin hapa-n nin ša maku-ka
 DET PN:1s pass-1sA PN:1s PREP house-2sP
 'it was me, I passed by your house' (G-JAP)

- b. ne:teke kuy sawaɣ'a nin
 PN:1p AUX.FUT sow PN:1s
 'we are going to sow' (G-SH)

Not attested in the ALS are cleft-constructions where the relativised verb is marked in the third person singular. The personal pronoun usually occurs in initial position (7. 14a, c), although in subordinate clauses, it can also follow the relativised verb (b).

- (7. 14) a. nana nin_A nuk-ey na naka_O
 FOC PN:1s give-3sA DET PN:2s
 'it is me, who gives it to you' (G-JS)
- b. man ʔaʔi mu-pula nin_A
 DEM PREP.CAUS 3sA-make PN:1s
 'because who makes it, is me' (G-JAP)
- c. <neu teroy ical jurra>
 nen tero-y ʔikal hura
 PN:1s kill-3sA INDEF man
 'it (was) me who killed a man'
 OT: "mato un hombre" (Y-C)

7.1.2.1.1 Pronouns as the only reference to S/A

Independent pronouns occur with predicates that are marked with the past suffix *-ta* or the anterior *-wa* and do not carry anaphoric person-marking. The marker *-n* following the active past suffix in the following ALS-example indicates that the verb is subordinate/relativised and that the preceding pronoun and the intensifier clitic *ki* occur in predicative function.

- (7. 15) <...naca qui púla Làn>
naka ki pula-ta-n
 PN:2s INTENS make-PAST.ACT-SUBJ
 '(it is) you yourself (who) made it'
 OT: "... tú lo hiciste" (4771.)

In X_G , X_{Ch} and X_Y the pattern is confirmed (7. 16). The subordination of the verb form is suggested by the lack of anaphoric participant reference, but in particular also indicated by the presence of the anterior/perfect suffix *-wa* that occurs exclusively on subordinate predicates.

- (7. 16) a. naka ti:ki-taʔ
 PN:2s sleep-PAST.ACT
 'you slept' (G-PE)
- b. naka tupa-waʔ
 PN:2s leave-ANT
 'you left it' (G-RHG)
- c. <naljki tikilá ahujlacan>
 naʔki ti:ki-taʔ ʔawʔakan
 PN:1p sleep-PAST.ACT yesterday
 'we slept yesterday'
 OT: "ayer dormimos nosotros" (Ch-C)
- d. <naj nucajlá tijli>
 nah nuka-taʔ ti:-ti
 PN:3s give-PAST.ACT IO-PL
 'he gave it to them'
 OT: "él se los dio a ellos" (Y-C)

The substitution of cross-referencing by analytic pronouns is widely attested in the semi-speaker data from X_G , as well as in X_{Ch} , and could therefore be a result of language obsolescence. The pronoun that references S/A usually precedes the transitive or intransitive verb, which could be seen as a syntactic influence from Spanish (i.e. change from VOA > AVO).

- (7. 17) a. $naka_A$ $wišu$ na nin_O
 PN:2s beat DET PN:1s
 'you beat me' (G-PE)
- b. <nay tili naj man>
 nay_A $tili$ nah man_O
 PN:2s see PN:3s DEM
 'you see it'
 OT: "tú lo ves" (Y-C)
- c. <naca curú>
 $naka_S$ $kuru-?$
 PN:2s run-STAT
 'you run'
 OT: "tú corres" (Ch-C)

Loss of anaphoric reference is also attested in auxiliary constructions in X_G and X_{Ch} . The pronoun always occurs in final position following the predicate.

- (7. 18) a. $harana$ $he?$ nin
 ill be+3sS_{DEP} PN:1s
 'I am (being) ill' (G-SH)
- b. <jarna'c ayquí, nác>
 $harna-k$ $ʔay$ ki nak
 ill-STAT? be+3s ? PN:2s
 'you are (being) ill'
 OT: "estás enfermo" (Ch-JC)
- c. <saacsaji neu>
 $saksa-?$ $hi?$ nen
 steal-STAT? be+3sS_{DEP} PN:1s
 'I was stealing = I stole'
 OT: "yo robé" (Y-C)

7.1.2.1.2 S/A with imperative verbs

In the comparative data pronouns mark the S/A-core role in imperative constructions of intransitive and transitive verbs. The corpus of data from X_G does not include any examples of the second person plural pronoun in imperative contexts. The second person singular pronoun *naka* follows in all attested cases behind the verb. The same syntactic pattern is found in X_{Ch} and X_Y . In X_Y the personal pronoun used is the deferential form *nay*, not *naka*. Because of the limited data on X_Y it is not clear whether both second person pronouns occur in imperative constructions, or whether *nay* is the only form that may be used in this context.

- (7. 19) a. $wašta-ya$ $naka$
 enter-IMP.VI PN:2s
 'you, enter!' (G-JAP)
- b. $tupa-wa-Ø$ $naka$
 leave-ANT-IMP.VT PN:2s
 'you, stay here!' (G-PE)
- c. <toney ná'c>
 $tone-y$ nak
 be silent-IMP.VI PN:2s
 'you, be silent!'
 OT: "cállate" (Ch-JC)
- d. <nen lájta nay akü>
 nen_O $lahta-Ø$ nay_A $ʔaki$
 PN:1s push-IMP.VT PN:2s a bit
 'you, push me a bit!'
 OT: "empújame un poco" (Y-C)

7.1.2.1.3 S-marking on nominal predicates

Besides marking subject on nominal predicates, pronouns can function as nominal predicates themselves (§ 10.2). In the third person, the predicate nominal is given by Maldonado de Matos as *nah ki*, combining the third person pronoun and the intensifier *ki* (see § 7.2.2.1.3). The intensifier may have distributive function in these contexts. The pattern is also attested in the Zeeje-ms.

- (7. 20) a. <nèn>
nen
 PN:1s
 'I am'
 OT: "yo soy" (1873.)
- b. <nagqui>
nah=ki
 PN:3s=INTENS
 'he/she alone is'
 OT: "él es, aquel es" (4143.)

- (7. 21) <nagquiliqui>
 nah=ki liki
 PN:3s=INTENS 3PL
 'they alone are'
 OT: "son" (Ch-Z)

The comparative data indicate that personal pronouns functioning as nominal predicates can host TAM adverbials (§ 12.5).

- (7. 22) <najbar>
 nah bar
 PN:3s PFV
 'he/it is already'
 OT: "acabado" (Ch-F)

The ALS does not provide much contextual information for the use of pronouns as nominal predicates. There is one example of the third person singular pronoun preceding the adverb *šik'i* 'also'; the phrase is given as a lexical entry in the vocabulary.

- (7. 23) <nagsziēi>, <nagszuequí>
nah šik'i
 PN:3s ADV:also
 'he also/as well'
 OT: "también" (2049.), "él es, y también" (4147.)

In the comparative data pronouns in predicative function are followed by the noun phrase functioning as the subject of the nominal predicate.

- (7. 24) a. ne:teke wał
 PN:1p NUM:'3'
 'we are three' (G-SH)
- b. <nałma'estro>
 nah *maestro*
 DEM/3s Sp:teacher
 'he is (the) teacher'
 OT: "es el maestro" (Ch-MQb)
- b. <nag nanu necesidad>
 nah nanu *necesidad*
 PN:3s DET Sp:necessity
 'it is the necessity'
 OT: "es la necesidad" (Ch-Z)
- c. <nay piar>
 nay pi-?ar
 PN:2s NUM:'2'-CL
 'you two'
 OT: "vosotros dos" (Y-C)

In X_G there are frequent examples of pronouns marking the subject of participles and adjectives in predicate function. In contrast to predicate nominals, predicate adjectives are always followed by the pronoun.

- (7. 25) a. muču-? nin
 get tired-STAT PN:1s
 'I am tired' (G-JS)
- b. ?erteke-? nin
 get frightened-STAT PN:1s
 'I am frightened' (G-SH)
- (7. 26) harana naka
 ill PN:2s
 'you are ill' (G-JS)

Pronouns mark subject on question words functioning as nominal predicates. In these cases, the pronoun always follows the question word.

- (7. 27) <¿guena nàca?>
wena naka
 INT:who? PN:2s
 'who are you?'
 OT: "¿quién sois vos?" (1872.)

- (7. 28) a. <huanin nac>
 wanin nak
 INT:who? PN:2s
 'who are you?'
 OT: "¿quién eres tú?" (Ch-C)
- b. <n'dinay>
 nti nay
 INT:what? PN:2s
 'what are you?'
 OT: "¿qué?" (Ch-C)
- c. <huení jan aya>
 weni han ʔaya
 INT:who? INT 3PL
 'who (that) are they?'
 OT: "¿quiénes son ellos?" (Y-C)

7.1.2.1.4 Antecedent control of reflexive pronouns

The intensifier-reflexive pronoun *k'i-(wa)-* (§ 7.2) takes personal suffixes for anaphoric reference of the antecedent, which is controlled by the A argument of a transitive predicate. The personal pronouns functioning as antecedents show agreement with the anaphoric person marker and precede the intensifier-reflexive pronoun.

- (7. 29) a. <naca eica>
naka ki-ka
 PN:2s INTENS/REFL-2sP
 'you yourself'
 OT: "tú mismo" (154.)
- b. <nána nag eiquig qui>
nana nah kiki-h =ki
 FOC PN:3s INTENS/REFL-3sP INTENS
 'he himself'
 OT: "aquel mismo" (176.)

Personal pronouns exerting antecedent control over intensifier-reflexives are also attested in the comparative data. While in X_{Ch} , the reflexive root takes anaphoric person-marking (7. 30a-b), the example from X_Y shows the free pronoun as the only reference to the antecedent (c).

- (7. 30) a. <ni-kiguán>
 ni ki-wa-n
 PN:1s INTENS/REFL-?-1sP
 'I alone, myself'
 OT: "yo solo" (Ch-F)
- b. <nag quiqui>
 nah kiki
 PN:2s INTENS/REFL+3s
 'he himself'
 OT: "él mismo" (Ch-Z)
- c. <maski nen>
 mas ki nen
 ? INTENS/REFL PN:1s
 'to me myself'
 OT: "a mí mismo" (Y-C)

7.1.2.2 Object marking

Personal pronouns are also used as O arguments of transitive predicates. The examples from the ALS show that pronouns in the function of direct objects follow the verb in main and subordinate clauses. In example (7. 31b) the pronoun in object function occurs in a discontinuous pattern that is not attested elsewhere in the corpus of data. The construction may be an indication that the pronoun has cliticised to the verbal predicate; however, in a comparative example from the Zeeje-ms. (7. 32e) we find the discontinuous pronoun in the position before the verbal predicate.

- (7. 31) a. <¿szàn para cà nem?>
šan para-ka? nem_O
 INT.what? search-2sA PN:1s
 'what have you searched me for?'
 OT: "¿para qué me quieres?" (1870.)
- b. <mu uša pè castigar naca Dios ay>
mu-ʔuka pe? castigar naka_O dios_A ʔay_O
 3sA-do FUT Sp:punish PN:2p Sp:god 2PL
 'god will punish you (pl.)'
 OT: "os ha de castigar dios" (2040.)
- c. <... nucai naca na palè>
na penitencia [nuka-y naka_O [na pale]_A]_{REL}
 DET Sp:penitence give-3sA PN:2s DET Sp:priest
 '...the penitence (that) the priest gave you'
 OT: "la penitencia que te dio el padre" (2036.)

This syntactic pattern is confirmed in the comparative data where the pronoun in object function follows finite (7. 32) and nonfinite (7. 33) verb forms in main and dependent clauses (VO). Example (7. 32e) seems to confirm the existence of the discontinuous pattern attested in the ALS (7. 31b).

- (7. 32) a. hin ʔan-ʔušiki nay_O
 NEG 1sA-hear PN:2sf
 'I do not hear you' (G-SH)
- b. piri-wa naka_O na nin_A
 see-ANT PN:2s DET PN:1s
 'I saw you' (G-JS)
- c. nuk-ey nin_O mapu_E
 give-3sA PN:1s tortilla
 'he gave me a tortilla' (G-JAP)
- d. <mu suca nay pelu>
 mu-suka nay_O pe:lu(ʔ)_A
 3sA-bite PN:2s Sp:dog
 'the dog bites you'
 OT: "el perro te muerde" (Y-C)
- e. <ena qui naca hucay alusinar hay ...>
 ʔena=ki naka_O ʔuka-y alucinar ʔay_O
 INT:who=INTENS PN:2p do-3sA Sp:seduce 2PL
 'those who have seduced you (pl.)'
 OT: "los que os han alucionado" (Ch-Z)
- (7. 33) a. piri-ʔ nin_O naka_A
 see-STAT PN:1s PN:2s
 'you saw/watched me' (G-SH)
- b. <naj irijlá najlí>
 nah_A ʔiri-ʔaʔ natí_O
 PN:3s see-PAST.ACT PN:3p
 'he saw them'
 OT: "él los vió" (Ch-C)

The same pattern is attested for imperative transitive predicates, which are likewise followed by the direct object.

- (7. 34) a. ʔima-Ø na_O
 tell-IMP PN:3s
 'tell him!' (G-SH)
- b. <muyay nen>
 muya-y nen_O
 help-IMP PN:1s
 'help me!'
 OT: "ayúdame!" (Y-C)

In periphrastic constructions, the pronoun in O function may follow the complex verbal predicate (7. 35) or may occur between light verb or auxiliary and main verb (7. 36).

- (7. 35) a. hin mu-ʔuka bisitar nin_O
 NEG 3sA-do Sp:visit PN:1s
 'he does not visit me' (G-SH)
- b. <ne iriyan líki>
 ne ʔiri=ya-n líki_O
 PN:1s see=PROG-1sA PN:3p/3PL
 'I am seeing them'
 OT: "yo los veo" (Ch-C)

- (7. 36) a. mu-ʔuka nin_O desbelar
 3sA-do PN:1s Sp:wake up
 'he wakes me up' (G-SH)
- b. <najlic iri nac ayin>
 naʔik ʔiri nak_O ʔayin
 PN:3p see PN:2s PROG+3sS_{DEP}
 'they are seeing you'
 OT: "ellos te ven" (Ch-C)

Pronouns in the accusative case, i.e. those indicating direct objects, are indicated in the ALS as being preceded by the definite determiner *na* (§ 8.5.1.1). Maldonado de Matos gives only lexical or paradigmatic examples (7. 37); when occurring in syntactic context, most pronouns in object function are not preceded by *na* (7. 31).

- (7. 37) a. <na náca>
na naka
 DET PN:2s
 '(to) you'
 OT: "a ti" (81.)
- b. <na nag>
na nah
 DET PN:3s
 '(to) him, her'
 OT: "a aquel, a él" (108.)
- c. <namán Łic>
na man ʔik
 DET DEM/3s 3PL
 '(to) those'
 OT: "a esos" (140.)

In the comparative data pronouns in object function are attested in initial position. In X_G (all examples are G-SH), the first person singular pronoun is preceded by determiner *na*, i.e. *na nin* [DET-PN:1s]. In X_V the third person plural pronoun is likewise preceded by a determiner (c). All examples of this pattern seem to reflect Spanish syntax.

- (7. 38) a. [na nin]_O ʔika-ka?
 DET PN:1s find-2sA
 'you found me' (G-SH)
- b. <nac ni irijlá>
 nak_A ni_O ʔiri-ʔa?
 PN:2s PN:1s see-PAST.ACT
 'you saw me'
 OT: "tú me ves [sic]" (Ch-C)
- c. <naj man aya suacá pelu>
 nah man=ʔaya_O suka pe:lu?_A
 DET? PN:3s/DEM=PL bite dog
 'the dog bit them'
 OT: "el perro los mordió" (Y-C)

In the ALS the indirect object is expressed by means of the non-spatial preposition *ti: ʔ* (see § 9.2.2). In the comparative data, on the other hand, we find examples of indirect objects being expressed by independent pronouns that follow the direct object and are always preceded by the determiner *na*.

- (7. 39) a. nuk-ey [na ku=ʃunik]_O [na nin]_E
 give-3sA DET MOD=pot DET PN:1s
 '... (that) he gave me the pot' (G-JS)
- b. nuka-ka? mapu_O [na man]_E
 give-2sA tortilla DET DEM
 'you gave him (a) tortilla' (G-RHG)

7.1.2.3 Possessor marking

Independent pronouns are attested in the ALS in contexts where they seem to mark the possessor on Spanish nouns. In the given examples, the pronoun precedes the noun, as it does in Spanish (e.g. *tu confesión* 'your confession').

- (7. 40) a. <szamá naca confesión>
šama naka confesión
 PREP PN:2s Sp:confession
 'in your confession'
 OT: "en tu confesión" (2033.)
- b. <púla naca penitencia>
pula-Ø naka penitencia
 make-IMP.VT PN:2s Sp:penitence
 'make your penitence!'
 OT: "haz tu penitencia" (2027.)

In X_G and X_Y nouns that mark the possessor with cross-referencing affixes can be accompanied by independent pronouns. In the majority of attested cases, the pronoun follows the cross-referenced noun (7. 41). However, in X_G we also find several examples where pronouns precede possessive nouns (7. 42).

- (7. 41) a. naʔu-n nin
son-1sP PN:1s
'my son' (G-SH)
- b. <macuc nec>
maku-k nek
house-1pP PN:1p
'our house'
OT: "nuestra casa" (Y-C)
- (7. 42) a. naka ka-ču-maku-m
PN:2s 2sP-DIM-house-?
'(this is) your little house' (G-PE)
- b. na nin hu:ši-n
DET PN:1s head-1sP
'my head' (G-SH)

But the comparative data also provide examples where the free personal pronoun is the only reference to the possessor and the noun is otherwise unmarked. In X_G and X_Y , possessor-marking free pronouns occur in the position following the possessed noun. The following examples show that this pattern also applies to Spanish nouns in X_G .

- (7. 43) a. korason naka
Sp:heart PN:2s
'your heart' (G-JS)
- b. hin šan familia ni
NEG INT Sp:family PN:1s
'I do not have family' (G-SH)
- (7. 44) a. <pu naj mau chiri ti>
pu nah man čiri(-?) ti(:?)
arm PN:3s DEM twist-(STAT) IO
'the arm of him is twisted (= dislocated)'
OT: "el brazo de él está torcido" (Y-C)
- b. <imacu inay>
ʔi-maku ʔi-nay
?-house ?-PN:2s
'your house'
OT: "tu casa" (Y-C)

In X_{Ch} pronouns functioning as possessive markers mostly precede the possessed noun. No functional difference can be attributed to the variant first person singular pronouns *nan* (7. 45a) and *ni* (b).

- (7. 45) a. <nan lhajpá>
nan ʔapa
POSS/PN:1s grandfather
'my grandfather'
OT: "mi abuelo" (Ch-JC)
- b. <ay ni mayá>
hay ni waya?
Sp:EXIST POSS/PN:1s milpa
'there is my milpa = I have a milpa'
OT: "tengo mi milpa" (Ch-C)
- c. <maj pamac naj lamuc>
mah pama-k nah lamuk
DEM arm-INSTR POSS/PN:3s shrimp
'those arms his shrimp = the claws of the shrimp'
OT: "tenazas del camarón" (Ch-C)

Calderón indicates a separate set of possessive pronouns in X_Y (7. 46). These consist of the determiner *na* or *nah* followed by the personal pronoun. Etymological form and translation context do not seem to be consistent in all cases (b).

- (7. 46) a. <nane>
na ne
DET PN:1s
'*mine'
OT: "tuyos, suyos [sic]" (Y-C)
- b. <nanay>
na nay
DET PN:2s
'yours'
OT: "tuyo, suyo" (Y-C)
- c. <naj nec>
nah nek
DET PN:1p
'*ours'
OT: "mío, míos [sic]" (Y-C)

In X_Y free possessive pronouns are also attested as predicate nominals. The translation context of the second person possessive pronoun is given as a benefactive, 'for you' ("para ti"). It needs to be pointed out that this construction differs from the simple possessive in example (7. 41b), where the noun *maku* is cross-referenced for inalienable possession and followed by an unmarked pronoun that emphasises the possessor.

- (7. 47) a. <nanay ayahui>
 na nay ʔayawi
 DET PN:2s all
 'all is yours'
 OT: "todo es para ti" (Y-C)
- b. <mu macu na nec>
 mu-maku na nek
 1pP?-house DET PN:1p
 'our house'
 OT: "esta casa es nuestra" (Y-C)

The translation contexts of "mío, tuyo, suyo" as well as "para mí, ti" suggest that these forms indicated as independent possessive pronouns by Calderón are structurally and semantically comparable to the accusative pronouns in the ALS (cf. § 7.1.2.2).

7.1.2.4 Pronouns and non-spatial prepositions

Pronouns can substitute for cross-referencing affixes in marking person on non-spatial prepositions (§ 9). Syntactically they function as nominal complements. In all cases that are attested in the ALS, the pronoun follows the nominal root.

- (7. 48) a. <aLi náca>
 ʔaʔi **naka**
 PREP.CAUS PN:2s
 'by/because of you'
 OT: "por ti" (83.)
- b. <neLa nen>
 neʔa **nen**
 BEN PN:1s
 'for me/mine'
 OT: "mío, de mí" (58.)
- c. <tiy neLéc>
 ti:ʔ **ne:ʔek**
 IO PN:1p
 'to us'
 OT: "a, para nosotros" (69.)

This pattern is confirmed in the comparative data, where the independent pronouns usually follow the free preposition.

- (7. 49) a. ʔaʔi naka
 PREP.CAUS PN:2s
 'by you' (G-SH)
- b. hanta ʔima ti:ʔ nin
 INT:what? tell IO PN:1s
 'what (he) tells me' (G-SH)
- c. <nejla ni>
 neʔa ni
 BEN PN:1s
 'mine, for me'
 OT: "mío, míos" (Ch-C), (Ch-F)
- d. <naj man ti lina nec>
 nah man *ta li-na nek
 PN:3s DEM come PREP-DET PN:1p
 'he comes with us'
 OT: "él viene con nosotros" (Y-C)

In X_G and X_{Ch} , the pronoun can also precede the free preposition; this pattern is mostly attested in non-declarative clauses.

- (7. 50) a. man ʔaʔi
 DEM PREP.CAUS
 'because of that/him' (G-JAP)
- b. <nac nejla>
 nak neʔa
 PN:2s BEN
 'for you'
 OT: "para ti" (Ch-C)

In X_G and X_Y , prepositional roots with person-marking affixes can be followed by independent pronouns, which show agreement with the person affix on the root.

- (7. 51) a. neʔa-n sawaʔaʔ nin
BEN-1sP sow PN:1s
'for me to sow (milpa)' (G-SH)
- b. ʔan-neʔa nin
1sP-BEN PN:1s
'for me, mine' (G-SH)
- c. <utuj man aya>
ʔutu-h man=ʔaya
PREP:behind-3pP DEM=PL
'behind them'
OT: "detrás de ellos" (Y-C)

7.1.2.5 Vocative contexts

Vocative is expressed by independent pronouns. All examples are predicative noun phrases. In the examples from the ALS, the pronoun in vocative function follows the adjective (7. 52), whereas in X_G the vocative pronoun always precede the noun. The second person plural is not particularly marked, other than that the noun carries plural inflection (7. 53).

- (7. 52) <a pobre nen>
ʔa pobre nen
EXCL poor PN:1s
'oh, me poor one!'
OT: "o me miserum" (2045.)
- (7. 53) a. naka witiʔaya
PN:2s young lady
'you, young lady!' (G-JAP)
- b. naka šurumu-ʔe
PN:2p young man-PL
'you, young men!' (G-SH)

The noun *yu:* occurs in vocative contexts where it substitutes for pronouns in the second person singular. The form could be diffused from Zoquean **yumi* that is found in Ch'orti' as *yum* 'father' and Salvadorian Lenka as *yu* 'male' (see Campbell 1978b; Kaufman 2003:110).

Table 7. 7: Vocative pronoun

	FORM	ORIGINAL GLOSS
ALS	<yú> yu:	"hombre, nombre anómalo, que sólo tiene el vocativo" (4761.)
X_G	yu:	"vos" (G-SH)
X_{Ch}	<yu>, yu:	"tú, hombre" (Ch-C), (Ch-F)
	<yú>	
	<hyu>	

Maldonado de Matos does not provide any example of the vocative pronoun in syntactic context. However, in X_G and X_{Ch} it is attested in imperative (7. 54) and interrogative clauses (7. 55).

- (7. 54) a. hapa-yaʔ delante yu:
pass-IMP.VI Sp:forward VOC
'step forward, you!' (G-SH)
- b. <mare po yú>
*mara *pe(?) yu:
hurry IMP VOC
'hurry, you!'
OT: "apúrate" (Ch-F)
- (7. 55) <cayac yu>
ka ya-k yu
INT:where? be-2s_{DEP} VOC
'where are you going to be, you!'
OT: "¿adónde vas?" (Ch-C)

7.2 Intensifier-reflexive pronouns

'Reflexives' indicate that a referent acts on him-/herself, or several referents act on themselves (Heine & Miyashita 2008:169). Morphosyntactically, a reflexive is a "non-subject" argument that is coreferential with the subject of a transitive predicate (König & Siemund 2008). The term 'intensifier' refers to emphatic pronouns (e.g. Spanish "mismo", English "self", German "selbst") (ibid.). In Xinka, both functions are encoded by the same form, as it is the case in English, where reflexives and intensifiers are both expressed with the form 'X-self'. The intensifier-reflexive *ki-(wa)-* 'self, alone' is a pronominal form that takes person-marking suffixes of the nominal set (see § 6.2) to co-reference the subject.

7.2.1 Morphology of intensifier-reflexives

Intensifier-reflexives are classified by Maldonado de Matos as *pronombres primitivos*, which he translates into Spanish as "mismo" (see fol. 21r-22r). In all cases the initial consonant is indicated as <ɛ>, suggesting that it may be glottalised. This phonetic value seems to be supported by Calderón's data (1908) as he spells intensifier-reflexives with the grapheme <k>.¹³⁷ However, the glottalised velar stop does not seem to be attested in the primary data nor in the Campbell & Kaufman-data. Moreover, as the reconstructed etymology of the root does not suggest glottalisation either, the initial consonant will be rendered here as *k* (see other cases where <ɛ> represents /k/, § 4.2.1, § 4.3.1.1.3).

In the first person singular and plural the intensifier-reflexive is given as *ki-wa-*. The syllable/suffix *-wa* can be omitted in the second and third person; in the third person, it can be replaced by *-ki*. Neither the function of *-wa* nor the function of *-ki* could be clarified.

Table 7. 8: Intensifier-reflexives (ALS)

	FORM		ORIGINAL GLOSS
1s	<eiguan>	ki-wa-n	[INTENS/REFL-?-1sP] "yo mismo" (142.)
2s	<eiguáca>	ki-wa-ka	[INTENS/REFL-?-2sP] "tú mismo" (162.)
	<eiguac>	ki-wa-k	[INTENS/REFL-?-2sP] (153.)
	<eica>	ki-ka	[INTENS/REFL-2sP] (154.)
3s	<eiguag>	ki-wa-h	[INTENS/REFL-?-3sP] "aquel mismo" (174.)
	<eiquig qui>	ki-ki-h ki	[INTENS/REFL-?-3sP + INTENS] (176.)
1p	<eiguác>	ki-wa-k	[INTENS/REFL-?-1pP] "nosotros mismos" (148.)
2p	<eiguáca ay>	ki-wa-ka ʔay	[INTENS/REFL-?-2pP + 2PL] "tú mismo, pl" (165.)
	<eica ay>	ki-ka ʔay	[INTENS/REFL-2pP + 2PL] (164.)
3p	<qui Lic eiguàg>	ki=ʔik ki-wa-h	[INTENS=PL+ INTENS/REFL-?-3pP] "aquel mismo, pl" (181.)

Campbell and Kaufman provide in their field notes full inflectional paradigms for intensifier-reflexives in X_G , X_{Ch} and X_{Jum} . The following Table 7. 9 does not account for possible functional differences of the forms that are listed in the individual person categories. The structural pattern of the intensifier-reflexives consisting of the elements *ki-* and *-wa* is attested in all Xinka varieties. Campbell and Kaufman indicate for X_{Ch} an additional form *wal'a-*, which is structurally

¹³⁷ Fernández (1938) who copied from Calderón (see § 2.2.2.4) also indicates <k>.

similar to its cognate form in X_{Jum} , where the full form of the intensifier-reflexive combines the morphemes **ki-* and *wat'a*. (see § 4.5.1: $l' > t'$). For X_{Ch} and X_{Jum} , they also give *kyu:ka* for the second person singular, which seems to be an assimilation of **ki-wa-ka* [INTENS/REFL-?-2sP]. In most varieties, intensifier-reflexives in the third person drop *-wa* and give the forms *ki ki-h* or *ki-h ki* instead. The comparative data suggest that the intensifier-reflexives in Maldonado-Xinka are structurally closest to the forms in X_G . Intensifier-reflexives in X_Y can be realised as *kiwa-* and as combinations of *ki* and a personal pronoun.

Table 7. 9: Comparative statement of intensifier-reflexives in Xinka

	X_M	X_G	X_{Ch}	X_{Jum}	X_Y
1s	ki-wa-n	ki-wa-n (C&K)	(k)i-wa-n (C,F, C&K) ki-wa (C&K) wa'a-n (C&K)	k-wat'a-n (C&K)	kiwa-n (Y-L)
		ki-n (C&K), (RHG)			*ki nen (Y-C)
2s	ki-wa-k(a)		ki-wa-k (C&K) kyu:k(a) (C, C&K)	kyuuka (C&K)	*ki?a-ka (Y-L)
	ki-ka	ki-ka (C&K)			
2sf			ki-wa-y (C,F,C&K) wa'a-y (C&K)	k-wat'a-y (C&K)	*ki nay (Y-C) ki-wa-y (Y-C)
3s	ki-wa-h		wa'a-h (C&K)		
		ki? (C&K), (SH)			
	ki-ki-h ki ki-h ki	ki-ki-h (C&K)	kiki (Z, C) kiki (C&K)	kihkih (C&K)	*ki nah man (Y-C)
1p	ki-wa-k	ki-wa-k (C&K)	ki-wa-k (Z) kyu(:)-k (C) ki-wa-ki (C, F) ki-wa-ʔki (C, F, C&K) wa'a-ʔki (C&K)	k-wat'a-lki (C&K)	*ki nek (Y-C)
2p	ki-wa-ka ʔay		wa'a-ʔik (C&K)	k-wat'a-lik (C&K)	*ki nalika (Y-C)
	ki-ka ʔay				
2pf				k-wat'a-liy (C&K)	
3p	ki ʔik ki-wa-h ki-h ʔik		ki-ʔi-k'i (C&K) ki-ʔi-h (C&K) <li kiki> (C)	ki-lih (C&K) k'i-h (C&K)	*ki nah man ʔaya (Y-C)

The functional difference of intensifier-reflexives that combine *ki* and the morpheme **wa(ʔa)* and those that are based on *ki* alone is unclear. Maldonado de Matos gives *kika* and *kiwaka* in precisely the same functional contexts. However, since nearly all examples from the ALS stem from declination tables and are not attested in syntactic context, it cannot be tested whether the distinction between the two intensifier-reflexive forms might be determined by factors such as syntactic position or subordination. The suffix *-wa* has different functions in Maldonado-Xinka. In the function of an inflectional anterior-suffix it marks past-time reference on subordinate and non-declarative predicates and in contexts where basic word order is changed (§ 12.2.3). As derivational operator it marks the perfect passive participle (§ 11.1.2.2) and locative (§ 11.1.3.3). In all of these contexts, *-wa* is a

verbal marker that occurs with verbal stems. If the suffix *-wa* employed in intensifier-reflexives was etymologically related to one of the other functional contexts, this would imply that the root *ki-* must be verbal. There are, however, no indications for a verbal origin of *ki-*.

In the corpus of data intensifier-reflexives occur with the translation contexts "mismo", "solo" and Spanish reflexive constructions. Etymologically, they seem to be related to the clitic *ki* that occurs in the ALS in the function of an adnominal intensifier with grammatical categories indicating person (pronouns, interrogative pronoun or question word) or number (quantifiers, numerals).

Table 7. 10: Contexts of *ki* 'self, alone' (ALS)

CONTEXTS	FORM			ORIGINAL GLOSS
pronominal	<guéna qui>	wena=ki	[INT=INTENS]	"el que"
	<nagqui>	nah=ki	[PN:3s=INTENS]	"él es, aquel es"
	<nag eiqúig qui>	nah kiki-h =ki	[PN:3s + INTENS-3sP =INTENS]	"aquel mismo"
numeral	<ieal qui>	?ika†=ki	[NUM=INTENS]	"sólo uno"
	<tumuqui>	tumu=ki	[QUANT=INTENS/DISTR]	"todos"
	<Lic>	*4i=k(i)	[PL=INTENS/DISTR]	3p plural marker
	<qui Lic>	ki=†ik	[INTENS=3PL]	3p plural marker

It is not entirely clear whether the intensifier is the same form that is categorised by Maldonado de Matos as an affirmative particle, i.e. *ki(?)* <qui> "partícula conclusiva, y afirmativa" (4366.). Campbell & Kaufman indicate *ki?* with the meaning "solamente, exactamente". Both semantic contexts match the grammatical function of intensifiers. Based on the translation contexts in the ALS and comparative data, it can be argued that the basic meaning of *ki* is 'self, alone'. With the numeral and quantifiers, the intensifier is either literally translated as 'alone' or can be shown to have distributive function, which implies the same literal meaning (§ 7.2.2.1.4). With pronominal forms, *ki* seems to indicate the concept of 'self', which derives a demonstrative function (§ 7.2.2.1.2). Lexical forms indicating the concepts 'alone' and 'only' are cross-linguistically a common source for intensifier-reflexives (see Heine & Miyashita 2008:174). This strategy for reflexive-marking is known from other Mesoamerican languages as well (see e.g. Suárez 1983:83).

Some contexts from the ALS and Schumann's X_G -data suggest that the intensifier *ki* marked with person-marking suffixes functions as an object pronoun. Schumann (1967:43-44) defines a full set of pronouns that mark direct and indirect object; in a few contexts he employs the form also to mark reflexive.

Morphologically, these object pronouns combine the root *ki-* and a person-marking suffix. The forms in the first person singular suggest that *ki* may combine here also with personal pronouns. The pattern is known from X_Y , where the intensifier-reflexive marker combines *ki* and a personal pronoun (see above). The morphology of the second person singular form *ki-?aka* is unclear; hypothetically, it might be reconstructed as the intensifier-reflexive **ki-waka* that is attested in the ALS, or as a combination of the *ki* and a personal pronoun, i.e. **ki + naka*.

Schumann employs this set of pronouns in the function of an object pronoun and, in a few selected examples, as a reflexive pronoun. He does not indicate a separate set of intensifier-reflexives, which may suggest that we are dealing with one and the same category. However, there are examples in the ALS that show the third person marker *ki* in the function of a direct object pronoun (§ 7.2.2.3). The third person

plural clitic *ki=ʔk* may fall into the same category, although Maldonado de Matos does not use it as an object pronoun (§ 6.3).

Table 7. 11: Object pronouns in X_G according to Schumann (1967)

	FORM			ORIGINAL GLOSS	GLOSS
1s	<kiʔin> <ʔinin> <kiʔinin>	*ki-ʔ(i-n)in	[OBJ+PN:1s]	"a o para mí" (G-S)	'to/for me'
2s	<kiʔaka> <ʔaka> <kaka>	*k(i)-ʔaka	[OBJ+PN:2s]	"a o para ti" (G-S)	'to/for you'
2f	<iika>	*(k)i-ka	[OBJ-2s]	"a ti, a Uds. (G-S) "para ti, para ustedes" (G-S)	'to/for you (f)'
3s	<ki> ¹³⁸	*ki-y	[OBJ-3s]	"a o para él" (G-S)	'to/for him/her/it'
1p	<key>	*k-ey	[OBJ-ʔ]	"a o para nosotros" (G-S)	'to/for us'
3p	<kiʔik> <kaʔik>	*k(i)-(a)ʔik	[OBJ-3PL]	"a o para ellos" (G-S)	'to/for them'

Syntactically, reflexives and direct objects behave similarly in that they both fill the functional slot of the O argument; object pronouns show agreement with the O argument, while reflexives co-reference the subject. Object pronouns constitute a cross-linguistically attested, although rare, source for reflexives (Schladt 2000:105). Intensifier-reflexives can occur with and without *-wa*, while object pronouns seem to consist only of *ki* and a personal pronoun or suffix. This could suggest that two formerly separate categories may have merged and that object pronouns have become used as intensifier-reflexives as well. However, it may seem more likely that intensifier-reflexives diachronically developed from an adverbial (?) **ki* with the meaning 'alone, self'. A possible diachronic scenario of development would be: *ki* 'alone, self' > intensifier *ki* / intensifier-reflexive *ki-(wa)-* > object pronoun *ki-*. The main argument for this grammaticalisation path is that *ki* occurs only rarely in object function. In the majority of attested cases in the corpus of data, direct and indirect object are marked with personal pronouns (§ 7.1.2.2) or the non-spatial preposition *ti*: ʔ- (§ 9.2.2). It is therefore best explained by an irregular use of the reflexive rather than being an early stage of development that has fallen out of use.

7.2.2 Functional contexts of intensifier-reflexives

Intensifier-reflexive pronouns function as emphatic pronouns (adnominal and adverbial intensifiers) and non-subject arguments of transitive verbs (reflexives). In some contexts they are employed to mark the O argument. The pronominal form of the intensifier-reflexive *ki-(wa)-* that takes person-marking suffixes and the intensifier clitic *ki* can occur in the same functional contexts and are therefore discussed together in the same sections.

¹³⁸ Schumann (1967) includes the form <iʔiʔi> into the paradigm which can be identified as the third person singular of the non-spatial preposition marking the indirect object **ti-h* (see § 9.2.2).

7.2.2.1 Intensifiers

This section gives examples of the functional contexts of the intensifier pronoun *ki(wa)-* and the related intensifier clitic *ki*, which occur in similar contexts.

7.2.2.1.1 Intensifiers in adnominal and adverbial function

In adnominal function intensifiers occur in the position following personal pronouns. From the given contexts no functional difference between the intensifier-reflexives with (7. 56) and without *-wa* (7. 57) can be concluded. Both forms seem to occur in S function as well as O function.

- (7. 56) a. <náca eiguáca>
naka ki-wa-ka
 PN:2s INTENS-?-2sP
 'you yourself'
 OT: "tú mismo" (162.)
- b. <nag eiguag>
nah ki-wa-h
 PN:3s INTENS-?-3sP
 'he himself'
 OT: "aquel mismo" (174.)
- (7. 57) a. <òro naca eica capa jata pè qui>
ʔoro naka ki-ka ka-pahata pe? ki?
 Sp:only PN:2s INTENS-2sP 2sA-pay IMP INTENS/OBJ
 'only you yourself will have to pay it(self)'
 OT: "tú mismo serás quien solo lo has de pagar" (1876.)
- b. <na náca eica>
na naka ki-ka
 DET PN:2s INTENS-2sP
 '(to) you yourself'
 OT: "tú mismo (acusativo)" (161.)
- c. <nána nag eiquig qui>
nana nah ki-ki-h ki
 FOC PN:3s INTENS-?-3sP INTENS
 'he himself'
 OT: "aquel mismo (nominativo)" (176.)

Most examples of intensifiers in the comparative data stem likewise from mainly lexical entries and are not attested in syntactic contexts; with the exception of the Campbell & Kaufman-data. Again, there is no evidence for a functional difference of *ki-* and *kiwa-* in the data.

- (7. 58) a. <nag quiqui>, <nackiki>
 na(h) kiki
 PN:3s INTENS+3s
 'to him himself'
 OT: "él mismo" (Ch-Z); "a él mismo" (Ch-F)
- b. <ni kilman> [sic]
 ni *ki-wa-n
 PN:1s INTENS-?-1sP
 'to myself'
 OT: "a mí mismo" (Ch-C, Ch-F)
- c. <naki ki uc>, <na ki kiuc>
 *nak-(k)i kyu:-k
 PN:2s-INTENS INTENS-2sP
 'you-self yourself = to you yourself'
 OT: "a ti mismo" (Ch-C), "a ti" (Ch-F)
- d. <naljki ki uc>
 naʔki kyu:-k
 PN:1p INTENS-1pP
 'to us ourselves'
 OT: "a nosotros mismos" (Ch-F)

In X_G and X_{Ch} , the intensifier is also attested with its basic meaning 'alone'.

- (7. 59) a. <ni-kiguán>
 ni ki-wa-n
 PN:1s INTENS-?-1sP
 'I/me alone'
 OT: "yo solo" (Ch-F)
- b. <naljki kigualjki>, <naljki kihualiki>
 naʔki ki-wa-ʔki
 PN:1p INTENS-?-1pP
 'we ourselves/alone'
 OT: "a nosotros mismos/solos" (Ch-C)

Although most examples give intensifiers in adnominal function, in X_G we also find examples of adverbial intensifiers. There are no examples of adverbially used intensifiers in the ALS.

- (7. 60) mu-kara kiki man=ta mu-komestible
 3sA-carry INTENS+3s DEM=INT 3sP-Sp:food
 'he/she carries him/herself that what is his/her food' (G-SH)

7.2.2.1.2 Intensifiers and non-spatial prepositions

Maldonado de Matos combines the intensifier-reflexive with non-spatial prepositions to form the cases of the Latin model of grammar (i.e. genitive, dative, ablative). In these contexts, the prepositions *neʔa* (benefactive) and *ti:ʔ* (indirect object) are marked for person with cross-referencing affixes, which show agreement with the person-marking on the intensifier-reflexive. In the examples from the ALS the causal prepositions *ʔaʔi* and *ʔaʔparakiwa* are marked with independent pronouns. In all attested cases, the intensifier-reflexive follows the prepositional form.

- (7. 61) a. <anneʔa eiguán> b. <tiýg ʔic eiguàg>
 ʔan-neʔa ki-wa-n **ti:ʔ-h ʔik ki-wa-h**
 1sP-BEN INTENS-ʔ-1sP IO-3pP 3PL INTENS-ʔ-3pP
 'mine myself = for/of myself' 'to themselves'
 OT: "de mí mismo" (144.) OT: "aquel mismo (pl., dativo)" (183.)
- c. <aʔi náca eica ay>
 ʔaʔi naka ki-ka ʔay
 PREP.CAUS PN:2s INTENS-2pP 2PL
 'by yourselves'
 OT: "tú mismo (plural, ablativo)" (172.)

The complex causal preposition *ʔaʔpara-kiwa-* 'by, because of', that is employed only by Maldonado de Matos and not attested elsewhere in the corpus, seems to be a (possibly artificial) combination of the intensifier-reflexive *kiwa-* and the preceding prepositions *ʔaʔ-* and *para-* (§ 9.2.3). In most contexts the complex preposition constitutes the prepositional phrase and does not precede another noun phrase. Example (7. 62b) in contrast shows the preposition preceding a noun phrase consisting of a first person pronoun and its co-referential intensifier.

- (7. 62) a. <aʔparaquiguá>
 ʔaʔ-para kiwa-ʔ
 PREP.CAUS-ʔ INTENS/REFL-ʔ
 'by-ʔ X-self = by/because of X'
 OT: "por" (3615.)
- b. <aʔparaquiguá nen eiguán>
 ʔaʔ-para kiwa-ʔ nen kiwa-n
 PREP.CAUS-ʔ INTENS/REFL-ʔ PN:1s INTENS-1sP
 'because of me myself'
 OT: "por mí mismo" (147.)

Although Maldonado de Matos employs the combination of non-spatial preposition and intensifier to form the cases of the Latin grammar, the pattern is attested in the comparative data, which suggests that it is not an artificial construction. Moreover, the pattern confirms that the reflexive marker *kiwa-* must be nominal as non-spatial prepositions precede noun phrases.

- (7. 63) <majkinejla kiauaki>, <majkinejla kiguaki>
 mahki-neʔa ki-wa-ki
 1pP-BEN INTENS-ʔ-1pP
 'ours ourself = for/of ourselves'
 OT: "nuestro" (Ch-C), (Ch-F)

There is one attested case in the ALS, where a non-spatial preposition occurs with the unmarked intensifier *ki*. The following example show *ki* following the preposition *ti*: ʔ (§ 9.2.2) that is marked with *-h* for third person singular.

- (7. 64) <tiʔ-g qui>
ti:ʔ-h ki
 IO-3sP INTENS
 'to himself'
 OT: "a sí, para sí" (96.)

7.2.2.1.3 Pronominal forms with intensifier *ki*

The intensifier *ki* occurs adnominally with third person pronouns in demonstrative function. In the ALS the basic third person pronoun *nah* can be followed by *ki* in singular and plural (7. 65). The given translation context indicates a demonstrative functioning as a nominal predicate, i.e. 'that (one) is'. The comparative data confirm the demonstrative translation context. In this context, *ki* might have a distributive function (see next section).

- (7. 65) a. <nag qui>
nah=ki
 PN:3s=INTENS
 'he-self = that one is'
 OT: "él es, aquel es" (4143.)
- b. <nagquiLic>
nah=ki =ʔik
 PN:3s/p=INTENS =3PL
 'they-selves = these ones are'
 OT: "ellos o aquellos son" (4144.)
- (7. 66) a. <nagqui>, <najquí>
nah=ki
 PN:3s=INTENS
 'he-self = that one'
 OT: "él, aquel, éste" (Ch-Z); "él" (Ch-P)
- b. <nagqui-liqui>
nah=ki =liki
 PN:3s=INTENS =3PL
 'they-selves = these ones are'
 OT: "son, sean" (Ch-Z)
- c. <nagqui nanu gran Potencia>
nah=ki nanu gran potencia
 PN:3s=INTENS DET Sp:great Sp:power
 'it-self the great power = that is the great power'
 OT: "aquella gran Potencia" (Ch-Z)

In combination with the human/animate interrogative pronoun *wena*, the intensifier *ki* derives the relative pronoun *wena=ki* 'who=self = he/the one who'. Although the form is identified in the comparative data and more likely includes the marker *ki* 'self, alone', it needs to be pointed out that *wena ki* parallels the Spanish relative construction *quién qué* (INT:who? + INT:what?) 'the one who'.

- (7. 67) a. <na guéna qui>
na wena=ki
 DET INT:who=INTENS
 'who-self = (he) who'
 OT: "el que" (204.)
- b. <guéna ayuqui>
wena ʔayu =ki
 INT:who AUX INTENS
 'if who-self = if someone'
 OT: "si alguno" (214.)
- c. <ni guéna maquí>
ni wena ma =ki
 NEG INT:who SUBJ INTENS
 'not who-self = nobody'
 OT: "ninguno" (228.)
- (7. 68) <ena qui naca hucay alusinar hay>
ʔena=ki naka ʔuka-y alucinar ʔay
 INT:who=INTENS PN:2s do-3s Sp:hypnotize, seduce 2PL
 '(the one) who has seduced you (pl.)'
 OT: "los que os han alucionado" (Ch-Z)

7.2.2.1.4 Numerals and quantifiers with intensifiers

The intensifier *ki* occurs adnominally with numerals and quantifiers. In the ALS (7. 69) and the comparative data (7. 70) *ki* follows the numeral *ʔikaʔ* 'one' to indicate 'only one / one alone'. It is not clear whether *ki* in its function as an adnominal intensifier is a free form or cliticises to the numeral.

- (7. 69) <ieal qui>
ʔikaʔ=ki
 NUM:1=INTENS
 'one alone / only one'
 OT: "solo uno" (3892.)
- (7. 70) a. <ikáhki>
 ʔik'ah=ki
 NUM:'1'=INTENS
 'one alone'
 OT: "uno" (G-S)
- b. <calki nay>
 kal=ki nay
 NUM:1=INTENS PN:2sf
 'you are one alone / only one'
 OT: "tú estás solo" (Y-C)

There are examples in X_G and X_{Ch} , where *ki* following the numerals 'one' and 'two' is translated as Spanish "vez", indicating the number of 'times' that an action is taking place. This may suggest that the intensifier functions here as a distributive marker.

- (7. 71) a. <pa ikáhki>
 pa(?) ʔikah=ki
 PFV NUM:'1s'=INTENS/DISTR
 'already one-time = once ago'
 OT: "una vez" (G-S)
- b. <piki (vez) huirkihui>
 pi=ki vez wirki-wi?
 NUM:'2'=INTENS/DISTR Sp:times speak-?
 'he spoke two-times = he spoke twice'
 OT: "sólo dos veces habló" (Ch-C)

The distributive function might also reflect in the use of the intensifier *ki* with the quantifiers *tumu-* and *taha-* (only in X_{Ch}). The examples given by Maldonado de Matos show that *ki* can either follow the quantifier (7. 72a) or the nominal head of the phrase (b).

- (7. 72) a. <tumuqui pari>
tumu=ki **pari**
 QUANT=INTENS/DISTR day
 'all-itself days = every day'
 OT: "todos los días" (2031.)
- b. <tumun pariqui>
tumu-n **pari=ki**
 QUANT-? day=INTENS/DISTR
 'all days = every (of the) days'
 OT: "todos los días" (2032.)
- (7. 73) a. <tumuki hualjki>
 tumu=ki watki
 QUANT=INTENS/DISTR PN:1p
 'us all'
 OT: "todos nosotros" (Ch-C)
- b. <tajaki>
 taha=ki
 QUANT=INTENS/DISTR
 'much, many, all'
 OT: "mucho, todo" (Ch-C), (Ch-F)

In X_{Ch} we find the intensifier-reflexive in the same functional context following the quantifier *tumu-*, which confirms that *ki* and *kiwa-* can both express a distributive meaning.

- (7. 74) a. <tumuquiguac>
 tumu ki-wa-k
 QUANT INTENS-?-1pP
 'all ourselves'
 OT: "somos todos" (Ch-Z)

- b. <miki-gualá tumuki gua-ki>
 *muka-wa-la? tumu ki-wa-ki
 work-go-PAST.ACT QUANT INTENS-?-3p/PL
 'all themselves went to work'
 OT: "todos fueron al trabajo" (Ch-F)
- c. <lig tumuqui na quiquí>
 †ih tumu=ki na kiki?
 PREP QUANT=INTENS/DISTR DET INTENS+3s
 'with all of itself'
 OT: "todos sus ramos" (Ch-Z)

The third person plural clitic *†ik* may have grammaticalised from a similar pattern that had *ki* in the function of a distributive marker following the animate plural marker *†i* (§ 8.4.2). This might suggest that Xinka may originally have distinguished distributive and collective plural.

7.2.2.2 Reflexives

In reflexive constructions the intensifier-reflexive pronoun follows the verbal predicate. There is only one example of a reflexive construction in the ALS, which consists of an intransitive imperative predicate followed by the reflexive pronoun *ki-* that takes the person-marking suffix of the second person singular.

- (7. 75) <zèLèya eica>
se†e-ya ki-ka
 twist-IMP.VI INTENS/REFL-2sP
 'twist yourself'
 OT: "tuérsete tú" (1861.)

Examples in the comparative data show that in Xinka reflexive constructions person-marking on the verb and on the intensifier-reflexive is coreferential. Both types of pronominal forms are attested, i.e. without (7. 76a-c) and with the suffix *-wa* (d-e). Schumann gives the reflexive with the form *ki ʔin* (a) that he otherwise employs as an object pronoun (see § 7.2.1).

- (7. 76) a. <nanín imawán kiʔin>
 na nin ʔima-wa-n ki-ʔin
 DET PN:1s say-ANT-1sA_{DEP} REFL-1sP
 'I told myself'
 OT: "yo me dije (pensé dentro de mí)" (G-S)
- b. <weskey kikiH Hwan ša ʔuy>
 weske-y kiki-h Hwan ša ʔuy
 throw-3sA REFL-3sP Juan PREP river
 'Juan threw himself into the river'
 OT: "Juan se aventó, al río tiró" (G-C&K)
- c. <hucay consolidar quiquí na jú>
 ʔuka-y consolidar kiki na hu?
 do-3sA Sp:consolidate REFL+3s DET DEM
 'this (one) has consolidated himself'
 OT: "se ha consolidado éste" (Ch-Z)
- d. <ju tz'an kíhuan>, <jutzán kiguán>
 huɕ'a-n ki-wa-n
 shake-1sA REFL-?-1sP
 'I shook myself'
 OT: "sacudir" (Ch-C), (Ch-F)

- e. <coy kihua>
 ko-y ki-wa-y
 ?-IMP.VI REFL-?-2sfP
 '*go/watch yourself = be careful'
 OT: "cuidate" (Ch-C), (Y-C)

It is not clear whether Xinka distinguishes reflexive and reciprocal as grammatical categories. The following example from the Zeeje-ms. may be ambiguous only in the Spanish translation context.

- (7. 77) <mug huca amar quiqui>
 muh-?uka amar kiki
 3sp-do Sp:love INTENS/REFL+3p
 'they love themselves/each other'
 OT: "se aman" (Ch-Z)

Examples from X_{Ch} show that in subordinate clauses, the verb takes dependent-marking, but the intensifier-reflexive form does not change.

- (7. 78) a. <unuyinkiki>
 ?unu=yin kiki
 stretch=PROG+3sS_{DEP} INTENS/REFL+3s
 'he is stretching himself'
 OT: "estirarse" (Ch-F)
- b. <que teno allin quiqui>
 ke teno=?ayin kiki
 Sp:that introduce=PROG+3sS_{DEP} INTENS/REFL+3s
 'that he is introducing himself'
 OT: "que introduciendose" (Ch-Z)

In X_G and X_{Ch} , there are examples of reflexive constructions that combine a stative participle and the reflexive *ki-wa-* carrying the S-reference; e.g. 'it has stung me (= myself)' = 'I have stung myself'.

- (7. 79) <tz'ajmá kihuan ti ricayijli>
 g'ahma-? ki-wa-n ti(:?) rikayi-ti
 sting-STAT INTENS/REFL-?-1sP PREP/IO thorn-PL
 'I stung myself with thorns'
 OT: "me piqué con una espina" (Ch-C)

The reflexive *ki* is also attested in X_G and X_{Ch} in a similar construction with the verb *šuka* 'bite'. In the following examples, which all stem from the same speaker (RHG), the reflexive pronoun can precede marked and unmarked verbs.¹³⁹

- (7. 80) a. suka ki-n ?an-ču-hura?i-n
 bite INTENS/REFL-1sP 1sP-DIM-eyes-?
 'my eyes hurt' (G-RHG)
- b. suka ki hu:ši-n
 bite INTENS/REFL head-1sP
 'my head hurts' (G-RHG)

¹³⁹ The patterns in which the object pronoun *ki-* occurs confirm that the form is not to be confused with the antipassive suffix *-ki* (§ 11.3.1). Intransitivised verbs would not take suffixes to mark person (7. 80a), nor would the derivational suffix *-ki* follow in the slot after the person-marking suffix on the verb (7. 81a).

- c. <suka ke reké>
 suka ke reke
 bite INTENS/REFL chest
 'to have chest pain'
 "tener dolor de pecho" (Ch-F)

In other examples from X_G and X_{Ch} , we can find a pattern where unmarked *ki* can follow marked verbs. The translation contexts suggest that the function is reflexive.

- (7. 81) a. šuka-y ki? ša hini-n
 bite-3sA INTENS/REFL PREP stomach-1sP
 'my stomach hurts' (G-RHG)
- b. <junuca balqui hay>
 hunu-ka bal ki ʔay
 know-2sA PFV INTENS/REFL 2PL
 'you (pl.) already know yourself'
 OT: "ya sabéis" (Ch-Z)
- c. <guasti-qui na mú-camisa>
 wasti-Ø ki na mu-camisa
 put on-IMP.VT INTENS/REFL DET 2sP-Sp:shirt
 'put on itself, your shirt!'
 OT: "ponéte tu camisa" (Ch-JC)

It is cross-linguistically attested that reflexive markers can change verbs into "depatientive" forms, i.e. verb forms which do not encode the patient of the verbal action and typically express general situations (cf. Kemmer 1988; Dixon 1994:147; Lichtenberk 2000:42; Shibatani 2004:1158; König & Gast 2008). This may suggest that in Xinka the valency-decreasing marker for antipassive/inchoative verbs *-ki* (§ 11.3.1) may ultimately derive from a reflexive suffix. Some examples from X_Y and the Zeeje-ms. seem to confirm the existence of a reflexive suffix *-ki* in Xinka.

- (7. 82) a. <n'cuteki> b. <ayun ganúki>
 n-kute-ki ʔayu-n kanu-ki
 ?-scratch-REFL *be-1s_{DEF} stretch?-REFL
 'scratch yourself' 'I am stretching myself'
 OT: "rascanse" (Y-C) OT: "yo me estiro" (Y-C)
- c. <nanu asaguyqui>
 nanu ʔa-sawu-y-ki
 DET 3pS-sit/settle-?-REFL
 'those who have established themselves'
 OT: "y las que se establecían" (Ch-Z)

In X_G and X_{Ch} , the intensifier *kiwa-* can follow the verb *pata-* (§ 10.1.3.6). The pattern is attested in the Calderón-data from X_{Ch} and in the Campbell & Kaufman-data from X_G and X_{Ch} (7. 83). The verb and the intensifier show agreement in person-marking. The construction combines a finite verb and the reflexive pronoun in position of the object. The translation context that is given as "solo, solito", i.e. 'alone, only', derives from the descriptive meaning of the phrase. Examples given by Campbell and Kaufman show that C_2 *t* becomes *t'* upon suffixation. In this function, the intensifier occurs with and without the morpheme *-wa*, which is omitted in X_G in the second (a) and third person, and in X_{Ch} in the third person (d). In the second person, X_{Ch} generally preserves *-wa-* (c).

- (7. 83)
- a. <pat'aka gika>
 pata-ka ki-ka
 *accomplish-2sA INTENS-2sP
 'you have accomplished yourself = you alone'
 OT: "solito tú" (G-C&K)
 - b. <patan iguán>, <patan ihuan>
 pata-n ?i-wa-n
 *accomplish-1sA INTENS-?-1sP
 'I have accomplished myself = I alone'
 OT: "yo solo" (Ch-C), (Ch-F); "estoy solo" (Ch-C)
 - c. <pat'ak kiwak>
 pata-k ki-wa-k
 *accomplish-2sA INTENS-?-2sP
 'you have accomplished yourself = you alone'
 OT: 'you (f.) alone' (Ch-C&K)
 - d. <patay kiki>, <pataykiki>
 pata-y kiki
 *accomplish-3sA INTENS+3s
 'he has accomplished himself = he alone'
 OT: "él solo" (Ch-C), (Ch-F)

7.2.2.3 Object reference

In the ALS and X_G , there are a few contexts that seem to indicate the intensifier *ki* in the function of an object pronoun. There are several contexts where Maldonado de Matos gives the third person singular in the function of direct object as *ki*. This object pronoun occurs only with transitive predicates and seems to be translated into Spanish as "lo" ('it'). It can precede the verb (7. 84a), but follows in most attested cases in last position behind the TAM-adverbials (b-d). When occurring in final position Maldonado de Matos indicates the form with an accent, suggesting that it renders either *ki* or *ki*:

- (7. 84)
- a. <naca qui púla Łàn>
naka ki pula-Ła-n
 PN:2s INTENS make-PAST.ACT-SUBJ
 '(that) you made it(self)'
 OT: "tú lo hiciste" (4771.)
 - b. <... ca- pajata pè qui>
ka-pahata pe? ki?
 2sA-pay IMP INTENS
 'you have to pay it(self)'
 OT: "lo has de pagar" (1876.)
 - c. <pulác naŁ qui>
pula-k na(?)Ł ki?
 make-1pA IMPFV INTENS
 'we would have done it(self)'
 OT: "nosotros hubieramos hecho" (458.)
 - d. <uisziy ayù pa qui na misza>
?uyši-y ?ayu? pa? ki na miša
 hear-3sA AUX PFV INTENS DET mass
 'if he already heard (himself/it) the mass'
 OT: "si habrá oído misa" (2024.)

The pattern from the ALS is not attested as such in the comparative data, where most occurrences of *ki(?)* following verbs can be identified as reflexives. However, *ki* is attested in X_G and X_{Ch} with ditransitive verbs in the function of an object pronoun that references the recipient of the action (7. 85); this function also reflects in the Schumann's literal translation of the pronoun (see Table 7. 11). In X_{Ch} we find an example where the object is expressed by a personal pronoun that is preceded by *ki* (c).

- (7. 85) a. <nanin imán kiʔáka>
 na nin ʔima-n ki-ʔaka
 DET PN:1s say-1sA INTENS/OBJ-2s
 'I told you(rself)
 OT: "yo te digo" (G-S)
- b. ku=ya-n tupa kiʔ
 go=PROG-1s_{DEP} leave INTENS/OBJ
 'I am going to leave him(self)' (G-SH)
- c. <imagua ay qui na'c>
 ʔima-wa ʔay ki nak
 tell-ANT PROG+3s INTENS/OBJ PN:2s
 'I was telling you(rself)
 OT: "te estoy diciendo vos" (Ch-JC)

The transliterations of the examples in the ALS and the comparative data show that intensifier-reflexives are used in object function, but can retain their semantic value 'x-self'. In X_Y we find the pattern *mas ki + personal pronoun* that is translated by Calderón as 'to X x-self' and seems to occur in the function of a direct object. In contrast to the examples above, the examples from X_Y retain the intensifier-reflexive meaning of the form.

- (7. 86) a. <maski nen>
 mas ki nen
 ? INTENS/REFL PN:1s
 'to myself'
 OT: "a mí mismo" (Y-C)
- b. <maski naj man>
 mas ki nah man
 ? INTENS/REFL PN:3s DEM
 'to himself'
 OT: "a él mismo" (Y-C)

7.3 Indefinite pronouns

In Xinka indefinite pronouns are based on interrogatives (cf. Haspelmath 2008). They combine the human/person question word *wena* (§ 13.2.3.2) and the intensifier *ki* (§ 7.2.1), i.e. *wena=ki* 'who-self = he/the one who'. It is possible that the intensifier might have distributive function in these contexts (see § 7.2.2.1.3), i.e. **wena=ki* [who=*DISTR] 'who of those'. As the intensifier *ki* also occurs with other pronominal forms the similarity of the pattern with the Spanish relative construction *quién qué* (INT:who? + INT:what?) 'the one who', may be accidental. However, in the ALS the form is given with a translation context that suggests it to function like a relative pronoun (7. 87). In combination with the auxiliary *ʔayu* (§ 10.1.3.3), however, it is indicated as an indefinite pronoun (7. 88).

- (7. 87) a. <guena qui agi>
 wena=ki **ʔahi**
 INT:who=INTENS be+3s_{DEP}
 'who-self is/was = (the one) who is/was'
 OT: "el que está o estaba" (1962.)
- b. <nána guéna qui Lic>
 nana **wena=ki** **ʔik**
 FOC INT:who=INTENS 3PL
 'who-selves = (they) who'
 OT: "el que (plural)" (207.)

- (7. 88) a. <guéna ayuqui>
wena **?ayu** **=ki**
 INT:who AUX INTENS
 'who-self would = if someone'
 OT: "si alguno" (214.)
- b. <ayuguenauqui>
?ayu **wena=ki**
 AUX INT:who=INTENS
 'who-self would = if someone'
 OT: "si alguno" (3674.)

The indefinite pronoun is also attested in the Zeeje-manuscript, where it likewise functions as a relative pronoun (7. 89a) and is attested with the indefinite-distributive meaning 'some' (b).

- (7. 89) a. <pero enaqui joroy honor>
pero *?ena=ki* *horo-y* *honor*
 Sp:but INT:who=INTENS get-3sA Sp:honor
 'but (the one) who has got honour...'
 OT: "pero el que tenga honor" (Ch-Z)
- b. <nelag enaqui eltepet>
nela-h *?ena=ki* *?eltepet*
 BEN-3s INT:who=INTENS town
 'of/for some towns'
 OT: "de algunos pueblos" (Ch-Z)

In combination with the negative markers human/person interrogatives also form the basis of the negative quantifier 'nobody' (see § 13.2.3.2; §13.4.6). In the ALS (7. 90) and in X_{Ch} (7. 91), these negative quantifiers are attested in pronominal function.

- (7. 90) a. <niguena>
ni= **wena**
 NEG= INT:who
 'nobody'
 OT: "ninguno" (4176.)
- b. <ni guéna maquí>
ni= **wena** **ma** **=ki**
 NEG= INT:who SUBJ INTENS
 'not who-self = nobody'
 OT: "ninguno" (228.)
- (7. 91) a. <?awanín>
?a= **wanin**
 NEG= INT:who?
 'nobody'
 OT: "nadie, no está" (Ch-S)
- b. <landí huanin>
lan=ti **wanin**
 NEG=INT INT:who?
 'nobody that'
 OT: "ninguno" (Ch-C)

8 Nouns and noun phrase

This chapter deals with the grammatical properties of the noun phrase. Nouns fall into different classes based on distinct morphological markers and semantic domains (§ 8.1). The morphological categories of nouns in Maldonado-Xinka include: possession (§ 8.2), number (§ 8.4), deixis/focus (determiners) (§ 8.5), as well as modification by means of adjectives (§ 8.7) and numerals (§ 8.6). Spatial and syntactic relations (§ 9) and derivational operations (§ 11) that involve noun phrases are treated in separate chapters.

The following types of noun phrases can be distinguished in the ALS:

- simple noun phrases that consist of a nominal root or stem
- complex noun phrases that consist of nominal compounds
- complex noun phrases that consist of a noun and a modifier preceding the core
- complex noun phrases consisting of a nominal core that is extended with determiners or demonstratives
- possessor constructions

The core of any noun phrase is a head noun, which may be a nominal root (8. 1a), a pronoun (b) or a nominal stem, i.e. a derived noun (c).

(8. 1)	a. <jútu> hutu N:tree/trunk 'tree' OT:"el palo" (24.)	b. <nen> nen PN:1s 'I' OT:"ego" (56.)
	c. <jamaguãLa> hama-wa-ta VI:sin-ANT-AGT 'sinner' OT:"el pecador" (3923.)	

Noun phrases can be complex. The simplest form of the complex noun phrases are nominal compounds. Nominal compounds in Xinka fall into different classes depending on the position and lexical category of the head noun.

(8. 2)	a. <tuma ambuqui> tuma ʔampuki deer snake 'deer snake = boa constrictor' OT:"la masacúa; culebra" (4609.)	b. <szantiguina> šan tiwina PREP sky 'in the sky = above' OT:"arriba, en el cielo" (4442.)
	c. <macu uguaL> maku ʔuwaʔ house ant 'ant house = ant hill' OT:"el hormiguero" (4050.)	

Complex noun phrases that consist of a head noun and a preceding modifier are not easily distinguished from structurally identical nominal compounds (8. 3a). The difference is a semantic one, with nominal compounds involving modifiers

expressing a common term or concept. Modifiers are in the majority of cases identified as adjectives, but also involve quantifiers and degree markers.

- (8. 3) a. <Lómehui>
ʔome ʔuy
 tepid water
 'tepid water'
 OT: "agua tibia" (4029.)
- b. <tenan jutu>
te(:)na-n hutu
 QUANT-IRR? tree
 'trees'
 OT: "palo (plural)" (3991.)

Simple and complex noun phrases can be optionally extended by determiners and demonstratives, which may precede or follow the head noun (8. 4). Determiners and demonstratives can occur in combination and form discontinuous marking patterns (c).

- (8. 4) a. <uiszica nà miszà>
ʔuyši-ka na miša
 hear-2sA DET mass
 'you heard the mass'
 OT: "(oiste) misa" (1958.)
- b. <nana turi-Łi>
nana turi-Łi
 FOC child-PL
 'the children'
 OT: "los muchachos" (1979.)
- c. <nana jautuma axue>
nana haw-tuma ʔahı
 FOC skin/leather-deer DEM
 'this deerskin = this whip'
 OT: "este azote" (1.)

The inflectional categories attested with noun phrases are possessor marking (§ 8.2) and number (§ 8.4). There are different noun classes that exhibit distinct patterns of possessor marking (§ 8.1). Alienably possessed nouns mark the possessor with cross-referencing prefixes (8. 5a), while inalienably possessed nouns mark the possessor with suffixes (8. 5b). Possessive noun phrases can be extended with determiners (8. 5c) or form part of nominal compounds (see § 8.3.2).

- (8. 5) a. <ca jaszu>
ka-hašu
 2sP-pig
 'your pig'
 OT: "tu marrano" (351.)
- b. <naün>
naʔu-n
 son-1sP
 'my son'
 OT: "mi hijo" (345.)
- c. <tumuqui na jama-ca ay>
tumu-ki na hama-ka ʔay
 QUANT-DIST DET sin-2pP 2PL
 'all your (pl.) sins'
 OT: "todos vuestros pecados" (2033.)

There are different strategies for marking number depending on the category of the noun (§ 8.4). Nouns with human/animate referents mark plural morphologically on the nominal stem (8. 6), while all others employ quantifiers.

- (8. 6) a. <szurumuŁi>
šurumu-Łi
 boy, youngster-PL
 'boys, youngsters'
 OT: "el muchacho (plural)" (4518.)
- b. <mũecaŁaŁi>
mĩk'a-Ła-Łi
 work-AGT-PL
 'workers'
 OT: "el sirviente (plural)" (4119.)
- c. <papacáŁi>
papa-ka-Łi
 uncle-CL-PL
 'uncles'
 OT: "el tío (plural)" (4243.)

All types of noun phrases can function as core arguments (S, O) or adjuncts of the predicate (see § 15). Nouns phrases can also function as predicates (§ 10.2). In this function, they may host TAM-adverbials (§ 12.5). Table 8. 1 indicates the sequence of optional elements in the noun phrase:

Table 8. 1: Noun phrase structure

	ELEMENT/OPERATOR
determiner	na, nana
quantifier / plural (non-human)	te:na-, taha-, tumu-
possessor proclitic (alienable)	
(modifier 1) / classifiers	e.g. ču-
(modifier 2)	adjective
ROOT	
derivation	
- participle	-ʔ, -wa
- agentive	-ʔa
- instrumental	-k
plural (human/animare)	
possessor suffix (inalienable)	
demonstrative	naʔ, man, ʔaʃiʔ
TAM	
- mode	ma, ʔayu
- past	paʔ, paʔ
- mode	ʔayu
- deictic	peʔ

8.1 Noun classes

Nouns fall into different classes, based on plural and possessor marking as well as grammatical function in compounding. A grammatical distinction is made between derived and non-derived nouns. We may distinguish the following classes of nouns:

- Human/Animate
- Non-human animate nouns
- Inanimate and abstract nouns
- Body Part Nouns
- Kinship Nouns
- Spanish loans
- Derived nouns
- Compound Nouns
- Classifiers

HUMAN/ANIMATE NOUNS: The category comprises all non-kinship nouns that denote humans, their characteristics, states and professions. It includes ethnonyms which are descriptive nouns of activity, e.g. *č'imaha* 'potter' = 'people from Guazacapán'. Human-animate nouns mark plural with the suffix *-ʔi*. As they are non-kinship terms, they are alienably possessed and mark the possessor with cross-referencing prefixes. The noun class comprises the generic roots *humu* 'male', *haya* 'female', *turi* 'child' and the stems *hurak* 'man', *ʔaya ʔa* 'woman' as well as the Mayan loan *wʔnak* 'witch'. The second group of nouns in the class are descriptive nouns that

denote human characteristics such as states (e.g. *tiʔik* 'black (person)', *pele* 'youngster' ('patojo')), disablements (e.g. *pohmo* 'blind', *nunu* 'dumb') or attitudes (e.g. *ʔara* 'barbarian', *tiši* 'lazy man, layabout'). Derived agentives (e.g. *ʔeʔma-ʔa* [borrow-AGT] '(the one) who borrows'; *hʔk'a-ʔa* [weave-AGT] 'weaver') and classifier compounds with gender nouns (e.g. *ʔuk-šaya* [old-female] 'elderly woman'; *witi-ʔaya* [ʔ-female] 'young woman' ('doncella')) fall into this category.

NON-HUMAN/ANIMATE NOUNS: The members in this category are defined as animate because they are either attested with the plural-marker *-ʔi*, which only occurs with human/animate nouns, and/or they occur with optional alienable or inalienable possessor marking, which indicates a human, and thus, animate relation. The nouns in this category include names of (domesticated?) animals (*hašu* 'pig'), environmental terms (*hiši* 'stone', *naru* 'earth') and terms that describe things made by humans (e.g. *maku* 'house', *k'iwi* 'yard', *wayaʔ* 'maize field', *milpaʔ*, *hʔk'a* 'cloth (woven thing)', *šawa* 'blanket, cover').

INANIMATE AND ABSTRACT NOUNS: Alienable possession and plural marking by means of quantifiers define the members in this category as inanimate and non-human. They comprise nouns denoting objects, animals, plants, food terms, environmental terms, diseases and place names. The fact that animals, plants and food items, which are culturally perceived as animate, are comprised in this category, suggests that the distinction of human vs. non-human is the significant parameter in the distinction of noun classes.

'Object': Most terms for objects are nominal stems that are derived by means of the instrumental marker *-k* (see § 11.1.3.1). Some of these forms are semantically transparent, whereas others are not. Examples for derived object nouns are: *ʔa ʔu-k* [maize-INSTR] 'calcium carbonate (used as fertilizer)', *ʔaw-ʔa-k* [maize-CAUS-INSTR] 'tortilla griddle, *comal*', *ʔata-k* [ʔ-INSTR] 'blouse, *huipil*', *k'awi-k* [knot-INSTR] 'lasso', *kuru-k* [flee-INSTR] 'type of basket' ('yagual de mecates'), *tayu-k* [put sth. on the head-INSTR] 'hat', *ʔote-k* [ʔ-INSTR] 'bed', *pewe-k* [ʔ-INSTR] 'gourd, bowl', *šoto-k* [pot-INSTR] 'cooking stones', *šu:tu-k* [wood-INSTR] 'soot, charcoal', *sawa-k* [hard?-INSTR] 'metal', *šuwu-k* [sweep-INSTR] 'broom', *šuni-k* [ʔ-INSTR] 'pot', *maʔi-k* [ash-INSTR] 'firewood', *wapi-k* [foot-INSTR] 'sandal, *caite*'.

'Compounds': Derived stems with the instrumental marker *-k* can also form compounds, e.g. *k'ata-k wik'i-k* [put-INSTR + grinding stone-INSTR] 'grinding stone' ('tapesco de moler'), *ku:ru-k šma* [flee-INSTR + ʔ] 'roof-ridge, ridgepole'.

Other object nouns are derived product/result nominalisations with verb roots: *ʔiwaʔ'a* 'thread' (*ʔiwaʔ'a* 'to spin'), *poʔ'a* 'laundry that is to be washed' (*poʔ'a* 'to wash'), *hʔk'a* 'weaving, cloth' (*hʔk'a* 'weave'), *čiči* 'excrement' (*čiči* 'to defecate') etc.

There are also non-derived objects, such as *kuʔku* 'pot, bowl' ('*cajete*'), *k'uʔami* 'bromeliad (*aechmea magdalenae*)' ('pitaflaja'), *suk'sin* 'water jug', *pati* 'cloth, napkin', *oto* 'rockbed, volcanic tuff' ('talpetate'), *šoto* 'pot', *maʔi* 'ash', *waru* 'hammock' etc.

'Animal designations' comprise:

- domesticated animals: *miya* 'chicken', *huru* 'turkey', *hašu* 'pig', *mistun* 'cat', *suy* 'turkey'
- wild animals: *tuma* 'deer', *pokoko* 'raccoon', *šma* 'mouse', *hiru* 'kinkajou', *kaškaš* 'agouti, tepescuintle', *ʔuri* 'rabbit', *payamu* 'coyote', *howa* 'puma', *šušumi* 'coati', *wilay* 'tiger', *še* 'possum', *weren* 'frog', *šuruʔ* 'squirrel', *k'ʔa* 'tapir', *k'ʔa* 'bat'

- reptiles: *ʔampuki* 'snake', *weša* 'iguana', *tonton* 'sea turtle', *šuway* 'crocodile', *šiyuk* 'rattlesnake', *pese* 'lizard', *ta ʔuk* 'turtle', *pa ʔama* 'sea turtle'
- aquatic animals: *sema* 'fish', *s#maya* 'crab', *šuni* 'sea shells, mussels', *ʔamuk* 'shrimp', *šuti*, *šuni* 'river snails, jutes'
- birds: *koško* 'vulture', *h#i* 'parakeet', *šok'oy* 'owl', *waka* 'chachalaca', *kukuwaʔ* 'pigeon', *kuruwi* 'turtle-dove', *čehče* 'woodpecker', *waksi* 'vulture-like bird that sings at sunrise and sunset', *teško* 'type of bird', *šik'a* 'hawk', *č'oko* 'grackle', *toktok* 'mocking bird', *ʔalu* 'parrot', *pošo* 'partridge'
- arachnids: *ʔamu* 'spider', *č'ina ʔa* 'scorpion'
- insects and parasites: *ʔara* 'fly, worm', *kaša* 'mosquito', *ʔituʔ* 'flea', *k'otoro* 'flying ant', *zompope*, *ʔušu* 'small fly, jején', *harun* 'tick', *šete* 'worm', *ʔuwaʔ* 'ant', *t#maʔ* 'lice'

'Plant terms' comprise:

- generic terms: *hutu* 'tree, wood, pole', *mašira* 'root', *piya* 'leaf', *šuway* 'every kind of bunch', *tu ʔu* 'flower, blossom'
- terms for trees: *ʔimik* 'pine tree', *mapi* 'coyol palm', *mula* 'palm tree', *muyi* 'chicozapote, sapodilla', *pahayu* 'Brazilian cherry tree' ("guapinol"), *pawak* 'pine', *parwa* 'cacao tree', *pima* 'amate tree', *pisina* 'black cherry tree', *šaru mapi* 'guiscoyol palm', *sompe* 'pinyon tree', *šupimaʔ* 'thorn tree (*acacia hindisii*)' ("izcanal"), *šuwān* 'laural ree', *tolo* 'coral tree', *yašik* 'joshua tree', *y#wiʔ* 'coachipilín tree'
- grass and reeds: *karawa* 'grass', *nuwi* 'straw', *šinu* 'wild reed', *č'ita* 'reed flower', *wiyan* 'sugar cane'
- maguey/henequen: *ʔaratak* 'henequen', *maguey*, *tamač'i* 'twisted hemp fibre/cord'
- building materials: *šiya-ku* 'rope', *ʔohote* 'rope of tree bark fibre', *koyo* 'rod for beds', *k'osme* 'reed rod for beds'
- herbs, flowers, wild plants: *ʔamuʔ* 'nettle', *chichicastle*, *harak'u* 'chipilín (*crotalaria longirostrata*)', *k'osme* 'waterlily', *pipi* 'vanilla?' ("bejuquillo"), *šiw-uwiʔ* 'soap-weed'
- fruit: *horoso* '1. fruit of the corozo palm; 2. type of chilli', *masa* 'pineapple', *pak'a* 'guanábano, anona', *pak'i* 'penguin (*bromelia pinguin*)', *peyu* 'sanzapote (*chrysobalanaceae*)', *tapa* 'nance'
- cash crops, food and good for consumption: *ʔayma* 'corn (on the cob)', *ʔa ʔu* 'corn (degrained)', *ʔepet* 'icaco (fruit from the coast)', *hahi* 'avocado', *huhuʔ* 'honeycomb', *ʔiti* 'tomate', *k'aw* 'white tamal', *k'eneya* 'plantain', *k'iri-wa pač'i* 'atol', *chilate*, *kuruya* 'thick tortilla', *pixton*, *lenka* 'pataxte (wild cacao)', *ʔw#i* 'pumpkin', *mapi* 'tortilla', *mura* 'ear of corn', *elote*, *nak'i* 'chilli', *pač'i* 'corn dough', *pumu* 'incense', *copal*, *šapu* 'cotton', *sikar* 'tobacco', *šinak* 'beans', *tila* 'salt', *tuwa* 'cacao', *č'w#i* 'fresh corn', *camagua*, *ʔuk'u* 'fresh corn tortilla', *ʔuruʔ* 'egg', *ʔuč'i* 'hominy', *nixtamal*, *ʔuti* 'corn flour', *pinol*, *ʔiyuku* 'corn gruel, atol'

'Environmental terms' include:

- landscape: *k'arawa* 'woods', *pahi* 'ravine', *tahti* 'plain, valley', *wona* 'hill, mountain'

- natural elements: *ɲɪy* 'water', *k'unu* 'shadow', *taw* 'wind', *maša* 'mud', *šha* 'sand', *wati* 'clay', *pípk* 'well', *mumuc* 'pool', *ka fi* 'the smoke'
- celestial bodies: *ɲawa* 'moon', *pari* 'sun', *šuni* 'star'
- time periods, occurrences: *ɲayapa* 'year', *pari* 'day', *sma* 'night', *pari-k'i* 'summer', *ɲuwik'i* 'winter', *wina* 'festival, celebration', *šanu* 'festival'

Terms for 'diseases' listed in the ALS; generic terms: *harana* 'illness', *nama* 'pain'; specific diseases: *čohmo* 'rotting face = pustules', *koso* 'small-pox', *kutumi* 'cramp', *ɲša* 'scabies', *ɲštu* 'scar' ~ *ɲštuʔ* 'rash', *nuru* 'pus' ~ *nuruʔ* 'yaws (*treponema pertenue*)', *ɲšto* 'ulcer, wound' ~ *ɲšto* 'ulcerous, purulent', *ɲštu* 'diarrhea'

Non-derived 'abstract terms' in this noun class include: *ɲi* 'old thing', *ɲštu* 'the reverse/flipside', *k'ša* 'half' etc.

BODY PART NOUNS: The members of this noun class are generally inalienably possessed, unless the noun is derived. There are only few cases where body part nouns are marked for plural with *-fi*, which defines them as human/animate. The nouns in this group can be classified as follows:

- extremities: *ɲɛfaha* 'tongue', *huray* 'eyes, face', *hu:ši* 'head', *k'omo* 'knee', *k'wɪ* 'shin', *mani* 'ear(s)', *nari* 'nose', *pa:ma(:ʔ)* 'arm, wing', *pu* 'hand', *šama-li* 'forehead', *šawu* 'fingernail, claw', *ta fi* 'throat', *tita* 'leg', *ɲutuyma-h* 'tail', *wapi* 'foot'; and compounds: *na ɲu-wapi* 'toes', *na ɲu-pu* 'fingers', *šan-šeke* 'chest', *huray wapi* 'a bone in the foot', *para-wapi* 'foot sole', *para-ta fi* 'neck', *para-pama-h* 'armpits'
- body and bones: *ɲuwi-h* 'meat', *harari* 'bone', *ɲšk'wa* 'waist, backbone'; and compounds: *ɲuwi tita-h* 'muscles', *ɲuwi k'omo* 'flesh of lower leg, calf', *harari k'wɪ* 'shin bone', *harari ɲɛ-h* 'backbone', *harari k'omo* 'bone of the knee', *hutu ta fi* 'bone of the neck'
- organs: *hini* 'stomach', *mašira* 'blood vessels, nerves', *ɲšo* 'intestines',
- sexual organs: *teʔ* 'female parts', *tahnawa humu* 'male sexual organs', *tahnawa haya* 'female sexual organs'
- bodily fluids: *kama* 'blood, semen', *šina* 'urine', *čiči* 'excrement', *ɲma* 'excrement'; and compounds: *ɲɪy huray* 'tears', *ɲɪy nari* 'snot', *ɲɪy šaha* 'spit, saliva'
- orifices: *huri* 'anus', *šaha* 'mouth'; and compounds: *para-šaha* 'cheeks', *šan-saha* 'teeth', *haw-šaha* 'lips'
- cover/skin: *hawi* 'skin, bark', *muti* 'hair', *muš-huray* 'eye-lashes'
- abstract nouns with relation to human body: *ša* 'name', *šanšana* 'dress, clothing', *mka* 'work, tribute', *mu/purimu* 'food', *šuya* 'first, earlier', *hama* 'sin'; and objects made by humans: *ɲšak'a* 'drink, *chilate*', *ɲwa* 'corn dough'
- characteristics of (human) body: *muču* 'lame', *šaha* 'sharp, hunger' (other human characteristics are not marked with cross-referencing suffixes; see above)
- derived body part terms that are not inalienably possessed: *šunu-k* [ʔ-INSTR] 'navel', *tani:-k* [ʔ-INSTR] 'brain', *tutu-k* [suck-INSTR] 'female breast', *huta-k* [ʔ-INSTR] 'anus'; as well as the reduplicated forms: *poč-poč* 'lungs', *pun-pun* 'bladder'

- alienable possessed: *pipi* 'genitals of babies/animals', *pʰkʰi* 'liver', *mušta* 'belly', *muš(i)* 'hair, feather, beard', *šuši* 'beard'

KINSHIP NOUNS denote human kinship relations, are inalienably possessed and form the plural with the plural marker *-ʰi* that is preceded by a classifier *-ka*. Kinship nouns can be roots or compounds. They comprise the following kinship categories:

- parents: *tata* 'father', *ʔuta* 'mother'
- grandparents: *ʔamuʔ* 'grandfather', *ʔawaʔ* 'grandmother'
- uncle/aunt: *papaʔ* 'uncle', *ʔanuʔ* 'aunt'
- brothers/sisters: *šuyaʔ* 'older brother/sibling', *kʰiʰiʔ* 'younger brother/sibling', *wʰiʰiʔ* 'younger sister'
- offspring: *na ʔu* 'offspring, son/daughter', *humu na ʔu* 'son', *haya na ʔu* 'daughter'
- in-laws: *ʔušti*: 'mother-in-law', *pantu*: 'brother-in-law, sister-in-law', *ʔaya-pantu*: '[?]-POSS brother-in-law' 'father-in-law of son/daughter', *consuegro*', *ʔaya- ʔuči*: '[?]-POSS mother-in-law' 'mother-in-law of son/daughter', *consuegra*', *ʔak'uwa* 'son-in-law', *payi*: 'daughter-in-law'
- fictive/defined kinship: *titi-ka ʔuta*: '[?]-CL mother' 'godmother', *titi-ka tata* '[?]-CL father' 'godfather', *titi-ka na ʔu* '[?]-CL offspring' 'godson, godchild', *ʔkʰi-n na ʔu* '[find-1sA offspring]' 'stepchild'

SPANISH LOANS are distinguished from Mayan and Nahua loans in that they are more recent and less grammatically integrated. They comprise terms from different semantic categories:

- animals: *kaštilan* [Sp:castillana] 'laying hen', *kawayo* [Sp:caballo] 'horse', *wakaš* [Sp:vaca] 'cow, beef', *pe:loʔ* [Sp:perro] 'dog', *yewaš* [Sp:yegua] 'mare', *palumaš* [Sp:paloma] 'Castilian turtledove'
- plants: *kašik* [Sp:caña de castilla] 'giant reed', *ʔaranšaš* [Sp:naranja] 'orange', *lamuniš* [Sp:limón] 'lemon', *kuštarika* [Sp:costa rica] 'type of cacao'
- food: *kaštila mapʰi* (= Castilian tortilla) 'bread'
- church/religion: *kumbišyun* [Sp:confesión] 'confession', *ʔayuna* [Sp:ayuno] 'fasting, lent', *krišma* [Sp:cristianar] 'baptism, christening', *kapun* [Sp:capon] 'capon', *kantore ʔe* [Sp:cantor-PL] 'singers', *ʔanima* [Sp:anima] 'soul, heart', *prima* [Sp/Lat:prima] 'break of dawn', *korere* 'idol, fetish', *pale* [Sp:padre] 'priest, father', *miša* [Sp:misa] 'mass', *ma-tyuš* [house-Sp:dios] 'church'
- society: *ʔa ʔkalti* [Sp:alcalde] 'mayor', *kaštiyanu* [Sp:castellano] 'Spanish', *kapiltu* [Sp:cabildo] 'council, chapter', *šu ʔtera* [Sp:soltera] 'unmarried woman', *šinula* [Sp:señora] 'lady, mistress'
- objects: *kučilo* [Sp:cuchillo] 'knife', *kaša* [Sp:caja] 'chest, box', *kurni kapuš* [Sp:cabo de candela] 'candle stub', *ʔača* [Sp:hacha] 'axe', *lawi* [Sp:llave] 'key', *lawš* [Sp:clavo] 'nail', *mačiti* 'machete', *šapun* [Sp:jabón] 'soap', *šaru* [Sp:jarro] 'jug', *papuk* [Sp:papel] 'paper', *meša* [Sp:mesa] 'table', *šila* [Sp:silla] 'chair, seat', *nawaku* [Sp:naguas] 'petticoat', *tašelaš* [Sp:tijeras] 'scissors'
- money: *merio* [Sp:medio real], *tuštun* [Sp:tostón] 'silver coin', *tumin* [Sp:tomín] 'money'
- other: *pu ʔpu* [Sp:polvo] 'dust', *salvia* [Sp:salvia] 'sage, medicinal herb', *ʔora* [Sp:hora] 'twelve o'clock'

DERIVED NOUNS mark plural according to their semantic class, i.e. agentives use *-ʃi*, but are generally alienably possessed, such as e.g. *ʃiwa-ʃa* [make tortillas-AGT] 'tortilla baker' (= "torteadora"), *kunu-k'i-ʃa* [buy-AP-AGT] 'who buys, customer', *wišu-ki-ʃa* [beat-AP-AGT] 'who beats, flogger' ("azotador"). Instrumentals generally refer to inanimate objects/instruments; e.g. *k'ʃa-k* [comb-INSTR] 'comb', *mara-k* [rest-INSTR] 'resting place', *wišu-k* [beat-INSTR] 'whip'. Abstract/ product nominalisations (e.g. *puri-k'i-Ø* [respond-AP-NOM] 'wedding', *poša-wa-ʃ* [wash-ANT-PART.ACT] 'soap rest'), participles (e.g. *pula-wa* [make-PART.PF] 'made thing'), *pok'o-wa* [break-PART.PF] 'broken thing', *poša-wa* [wash-PART.PF] 'washed laundry') and locatives (e.g. *mša-wa* [bury-LOC/PART.PF] 'burial') generally do not mark plural on the noun.

COMPOUND NOUNS fall into four different categories: (1) modifier-modified compounds, which again can be distinguished into attributive noun compounds (e.g. *karawa hašu* [woods-pig] 'wild boar'), adjective/classifier compounds (e.g. *me-naki* [green-chilli] 'green chilli'; *ʃuk-šaya* [old-female] 'elderly woman') and prepositional compounds (e.g. *ʃa-ʃ-pama-h* [PREP-arm-3sP] 'shoulder'), (2) verb-object and subject-predicate compounds (e.g. *wašta-karawa* [entered-woods] 'viper'), (3) possessive compounds (e.g. *na ʃu wapi* [offspring-foot] 'toe') and (4) coordinate compounds (e.g. *šuway-ʃamuk* [lizard-prawn] 'sea devil').

TOPONYMS are actually not a class in its own right, but include roots (e.g. *k'ša* [bat] "Nancinta"; *kuku* [?] "Taxisco"), prepositional compounds (e.g. *šam-piya* [PREP-leaf] "Ixhuatán"), derived nouns (e.g. *tuhku-wa* [?-LOC] "Tecoaco"; *ʃuru-ʃ* [=?-NOM] "Tacuilula"), ethnonyms (e.g. *ʃ'imaha* [L-M:potter] "Guazacapán") and loanwords (e.g. *ʃa ʃepet* 'town').

8.2 Possession

There are several strategies in Xinka to express ownership. The concept of inalienable/alienable possession constitutes the main parameter for possessor marking. Nouns fall into the two subclasses of alienably and inalienably possessed nouns. The division is based on semantic category (e.g. kinship terms) as well as grammatical category (non-derived/derived nouns). The person of possessor is indicated by means of cross-referencing affixes on the noun. Inalienably possessed nouns are marked with possessive suffixes, whereas possession of alienably possessed nouns is marked with prefixes. Some nouns can express both concepts and can therefore take both, prefixes and suffixes, depending on whether the possessor relation they express is alienable or inalienable.

A few nouns including abstract nouns as well as terms describing the environment and locations usually do not occur with any sort of possessor marking; they do, however, not form a category of obligatorily non-possessed nouns.

Another morphosyntactic strategy of expressing ownership is the marking of the possessor by an independent pronoun (§ 7.1.2.3). Although attested in the ALS, these forms are more frequent in the primary data from X_G and are indicative of the structural simplification of the language by terminal speakers.

The non-spatial preposition *ne ʃa* offers another alternative way of expressing possession (see § 9.2.1). The root, which either takes cross-referencing affixes or occurs unmarked, indicates a 'possessive' or 'benefactive' relation of two syntactic

constituents. The use of cross-referencing prefixes and suffixes depends on whether *neʔa* refers to a noun phrase or whether it precedes a verbal predicate. Structurally an adpositional form, the independent possessive is not treated in the present chapter but in § 9.

Possessive constructions can be head-marking or dependent-marking. In head-marking possessive constructions, possession is marked by means of cross-referencing affixes or pronouns on the possessum preceding an unmarked possessum. In dependent-marking possessive constructions the possessum in initial position is unmarked and followed by the possessor-constituent, which is introduced –and, thus, marked– by the non-spatial preposition *neʔa* (some of the semi-speakers from X_G mark the possessor with the diminutive marker *čū*).

8.2.1 Possessor-marking affixes

Maldonado-Xinka distinguishes cross-referencing prefixes and suffixes in the first, second and third person in singular and plural. The morphology of the stem is not changed by affixation. The possessor on nouns is marked with the same sets of cross-referencing affixes that mark the subject of the transitive verb (A), with the exception of the third person being marked by the suffix *-h* instead of *-y*. Parameters for the use of suffix- and prefix-marking are alienable/inalienable, non-compound/compound, non-Spanish/Spanish loan. The set of A-prefixes is used to mark the possessor on alienably possessed nouns, whereas the set of A-suffixes is employed with inalienably possessed nouns. The occurrence of some nouns with both, prefixes and suffixes, indicates that these nouns may be inalienably as well as alienably possessed, depending on the semantic context. The semantic relationship that may be encoded in the identical marking of possessor and agent, or transitive subject, is discussed in § 15.2.

Table 8. 2: Cross-referencing affixes marking possessor (ALS)

	Alienable possessor	Inalienable possessor
1s	ʔan-	-n
2s	ka-	-ka
3s	mu-	-h, -i (postconsonantal)
1p	muk-	-k
2p	ka-... ʔay	-ka ʔay
3p	mu-... (ki) ʔik	-h (ki) ʔik

In his colonial description, Maldonado de Matos distinguishes three categories of nouns (fol. 25v-26r): The first category, which marks the possessor with prefixes, includes all those nouns that end in a consonant and do not belong to any of the other two classes. The second category, which marks the possessor with suffixes, includes all nouns describing human body parts, kinship terms and all objects that have a natural relation to the human body (e.g. 'clothing'). The third category includes a limited number of nouns that occur with both affixes (e.g. 'house', '(back-)yard' and 'blood'). Analysis of the distribution of affixes with respect to the defined noun class shows that derived and composite nouns as well as Spanish loans always mark the possessor with prefixes, even if they denote body parts, kinship terms or a human relation. In the extensive ALS vocabulary, all nouns are marked for their category with either number 1, 2 or 3.

Maldonado de Matos' description and the semantic and distributional properties of possessor marking in the ALS and the comparative data imply that Xinkan nouns distinguish alienable and inalienable possession, i.e. possession that can be terminated (alienable) and possessor relations that cannot be terminated (inalienable) (cf. Payne 1997:104). It is a common pattern in Mesoamerican languages that body part and kinship nouns form a class of obligatorily possessed nouns, whereas possessor marking on other nominal forms is optional (see Suárez 1983:84; Campbell, Kaufman & Smith-Stark 1986:549; Silver & Miller 1997:21).

The obligatoriness of marking on the second noun class defined by Maldonado de Matos cannot be concluded from the corpus data. Most of the nouns in the ALS that take cross-referencing suffixes are also attested in contexts where they are unmarked. This suggests that possessor-marking is also optional for those nouns that employ cross-referencing suffixes. Comparative data from X_G and X_{Ch} support the idea that body part and kinship nouns in Xinkan are inalienably but not inherently possessed, and that they can function without cross-referencing suffixes. Prefix- and suffix-marking may also be semantically determined, with cross-referencing suffixes specifying that the noun is "part" of the possessor, while nouns marked with prefixes denote the "property" of the possessor (see Campbell & Kaufman: field notes).

8.2.1.1 Possessor marking on prepositions

Spatial and non-spatial prepositions employ possessor-marking to cross-reference the participant, or oblique argument, whose relation to the predicate is specified by them (see § 9). In the ALS, the non-spatial prepositions *neʔa* (benefactive/possessive), *ti:ʔ* (indirect object) and *ʔaʔi-* (cause/reason) are attested with possessor-marking suffixes (8. 7). The forms are given in the colonial grammar mostly without syntactic contexts.

(8. 7)	a. <tiʔn> ti:ʔ-n IO-1sP 'to me' OT: "a mí o para mí" (61.)	b. <neʔa Vg> neʔa-h BEN-3sP 'for him' OT: "él (genitivo)" (262.)
	c. <aʔi cà> ʔaʔi-kaʔ PREP.CAUS-2sP 'by/because of you' OT: "tú (ablativo)" (256.)	d. <eiguan> k'i-wa-n INTENS/REFL-?-1sP 'myself' OT: "yo mismo" (142.)

The comparative data confirm the morphological pattern. In X_G the benefactive root *neʔa* occurs with cross-referencing suffixes only preceding unmarked verbs, which may suggest that the person marker has grammaticalised from a cross-referencing prefix that originally marked the verb. In X_{Ch} cross-referencing suffixes mark the participant on the basic adpositional roots *ʔaʔi-* 'at, on top of', *para-* 'at, under' and *ʔi-* 'with'.

(8. 8)	a. <i>neʔa-n</i> <i>ʃawaʔ'aʔ</i> <i>waya-n</i> BEN-1sP sow, plant milpa-1sP 'for me to plant my milpa' (G-SH)
	b. <mug sullu jurailig tihica hay> <i>muh-suyu</i> <i>hura-li(-h)</i> <i>ti:ʔ-ka</i> <i>ʔay</i> 3sA-turn eye-PL(-3sP) IO-2pP 2PL 'he turns his eyes to you (pl.)' OT: "convierte sus ojos hacia vosotros" (Ch-Z)

c. <ajlajlic> ʔaʔa-ʔik PREP:on top of-2p/PL 'on top of you (pl.)' OT:"sobre de vosotros" (Ch-C)	d. <para-y> para-y PREP:under-2s 'under(neath) you' OT:"debajo de ti" (Ch-C)

In all of these cases, the prepositional roots take the same cross-referencing suffixes that mark inalienable possession on nouns. There are, however, some non-spatial prepositions that also occur with alienable possessor-marking, i.e. with cross-referencing prefixes. The only preposition attested with prefix-marking in the ALS is the benefactive *neʔa* (8. 9). In X_G the prefix-marked benefactive *neʔa* only occurs preceding noun phrases (see § 9.2.1). This pattern is confirmed in Maldonado-Xinka in form of a possessive phrase (8. 9b).

(8. 9) a. <an neʔa> ʔan-neʔa 1sP-BEN 'for me, mine' OT:"mío, de mí" (144.), (243.)	b. <na gracia muneʔa dios> na gracia mu-neʔa dios DET Sp:grace 3sP-BEN god 'the grace of god = god's grace' OT:"la gracia de dios" (1963.)

The comitative *moka* is only attested in the X_G -data documented by Schumann. It is probably etymologically related to the nominal root **mʔk-* 'have' ("tener") attested in X_{Ch} . All given examples employ (alienable) cross-referencing prefixes, suggesting that the form literally translates as 'my company', 'your company' etc.

(8. 10) a. <naka anmoka kayak šan šan-ʕ'ehe> naka ʔan-moka kaya-k šan šan-ʕ'ehe PN:2s 1sP-COMIT sell-1pA PREP PREP-TOPN 'you with me, we sold (things) in Chiquimulilla' OT:"tú y yo (conmigo) vendemos en Chiquimulilla" (G-S)	b. <kamóka> ka-moka 2sP-COMIT 'with you' OT:"contigo, con Uds." (G-S)

8.2.2 *Alienable possession*

Alienable possession is marked with cross-referencing prefixes. The majority of nouns in the ALS fall into this category. The nouns that mark the possessor with prefixes include the following semantic categories:

- human non-kinship nouns
- non-human inanimate and animate nouns denoting animals, plants and environmental terms
- inanimate nouns denoting objects
- abstract nouns
- place names
- nouns denoting disease
- selected and derived body part terms
- Spanish loans

Derived nominals (such as instrumentals, agentives and product nominalisations) and compound nouns are generally marked with cross-referencing prefixes, irrespective of their semantic category.

HUMAN NON-KINSHIP NOUNS: Human designations that do not fall into the category of kinship nouns include the generic roots *humu* 'male', *haya* 'female', *turi* 'child' as well as derived forms such as *hura-k* [*big/tall-NOM] 'man' and *ʔaya-ʔa* [be-AGT] 'woman' and Mayan loans such as *wɪnak* 'witch'. Maldonado de Matos also subsumed nouns under this category that are identical with descriptive adjectives and indicate human characteristic, e.g. *pohmo* 'blind person', *tiši* 'lazy person', *lunku* 'one-handed person', *wiriš* 'naughty person' etc. The category furthermore includes all agentive nouns derived by means of the nominaliser *-ʔa*, e.g. *hapa-ʔa* [pass-AGT] 'passenger', *ʔwa-ʔa* [make tortillas-AGT] 'tortillera', *šakša-ʔa* [steal-AGT] 'thief', *kayi-k'i-ʔa* [sell-AP-AGT] 'seller, merchant', *hama-wa-ʔa* [sin-ANT-AGT] 'sinner'. There is no attested case of a human non-kinship noun carrying possessor marking in the ALS; the only examples are found in the comparative data.

- (8. 11) *mu-ʔaya-ʔa*
 3sP-female-AGT
 'his woman, wife'
 OT: "su mujer" (G-RHG)

NON-HUMAN/ANIMATE NOUNS DENOTING ANIMAL, PLANT (AND ENVIRONMENTAL) TERMS: The meanings of the nouns in this subcategory imply an alienable possessor relation; they are grammatically treated as inanimate but can – in selected cases – occur with animate plural marking (8. 12b). Alienable possessor marking on nouns denoting animal names is found in the ALS as well as in the comparative data (8. 13).

The category¹⁴⁰ contains all terms for animals including domesticated (e.g. *miya* 'hen', *huru* 'turkey', *hašu* 'pig') and wild animals (e.g. *pokoko* 'raccoon', *šma* 'rat', *hiru* 'kinkajou'), animals of prey (e.g. *tuma* 'deer', *šušumi* 'coati'), reptiles (e.g. *ʔampuki* 'snake', *weša* 'iguana', *tonton* 'marine turtle', *šuway* 'lizard'), maritime animals (e.g. *sema* 'fish', *šinaya* 'crab', *šuni* 'sea shell'), birds (e.g. *koško* 'vulture', *hɪɪ* 'parakeet', *šok'oy* 'owl'), arachnids (*ʔamu* 'spider', *ɕ'ina ʔna* 'scorpion'), insects and parasites (e.g. *ʔara* 'fly, worm', *kaša* 'mosquito', *ʔtuʔ* 'flea').

(8. 12)	a. <ca jaszu> ka-hašu 2sP-pig 'your pig' OT: "tu marrano" (351.)	b. <mujaszúLi> mu-hašu-ʔi 3sP-pig-PL 'his pigs' OT: "sus marranos" (274.)
(8. 13)	a. <an-tuma>, <in-tuma> ʔan-tuma [ʔin-tuma] 1sP-deer 'my deer' OT: "mi venado" (G-S)	b. ʔan-hašu 1sP-pig 'my pig' (G-SH)

Plant and crop names that occur with alienable possessor marking include generic terms (e.g. *hutu* 'tree', *tuʔu* 'flower', *piya* 'leaf', *mašira* 'roots', *karawa* 'grass,

¹⁴⁰ The following sub-categories are not emic.

ku#ku 'pot, bowl', *pai* 'cloth', *waru* 'hammock'). No specific examples for possessor marking on object names are found in the ALS, however, the form is widely attested in the comparative data.

(8. 17)	a. ʔan-pewek 1sP-gourd 'my gourd' (G-RHG)	b. ka-wapaʔ 2sP-bench 'your bench' (G-SH)
	c. mu-maʔik 3sP-firewood 'his firewood' (G-SH)	d. <na' mu'c, otec> na muk-ʔo:tek DET 2sP-bed '(the) your bed' OT: "tu cama" (Ch-JC)

PLACE NAMES: All place names fall into the category of alienably possessed nouns. This includes generic terms (e.g. *ʔa#epet* 'town' [loan]), toponyms formed with the preposition *šam* (e.g. *šam-#p#y* [PREP-?] "Atiquipaque", *šam-piya* [PREP-leaf] "Ixhuatán"), toponyms derived with the locative/ passive past-marker *-wa* (e.g. *tuhku-wa* [?-LOC] "Tecoaco", *mša-wa* [bury-LOC] 'burial'), toponyms that are used as ethnonyms (e.g. *č'ehe* [=?] "Chiquimulilla"; *č'imaha* [= potter] "Guazacapán"), toponyms formed by compounds (e.g. *k'š-tamay* [bat-?] "Sinacantán", *tahti-šam-piya* [savanna-PREP-leaf] "Tepeaco") and general nouns functioning as designations of place (e.g. *kuku* [= ?] "Taxisco", *ʔuru#* [= egg?] "Tacuilula", *k'ša* [= bat] "Nancinta").

- (8. 18) <mug eltepetliqui>
muh-7e#tepet-liki
3pP-town-PL
'their towns'
OT: "sus pueblos" (Ch-Z)

NOUNS DENOTING DISEASE: Maldonado de Matos lists quite a large number of terms denoting common diseases, which he all categorises as belonging into the first noun class of alienably possessed nouns. The categorisation seems sound, given that diseases are non-permanent states and can be terminated (in the worst case by death). His list includes a generic term for disease (*harana* 'illness') as well as specific syndroms (e.g. *koso* 'small-pox', *kutumi* 'cramp', *ʔštu* 'rash', *nuru* 'pus').

SELECTED AND DERIVED BODY PART TERMS: A small number of body part terms are indicated by Maldonado de Matos as being alienably possessed: *p#k'i* 'liver', *mušta* 'belly', *muš(i)* 'feather, hair, beard', *šuši* 'beard' and *pipi* 'genitals of children/animals'. Some of these terms are attested in X_G with cross-referencing prefixes (8. 19). Other body part terms declared to be alienably possessed are derived forms that are nominalised either by means of the instrumental marker *-k* (e.g. *šunu-k* 'navel', *huta-k* 'anus', *tani-k* 'neck, brain', *tutu-k* 'breasts') or, in the case of a few terms that seem to be loanwords, also by reduplication (e.g. *poč-poč* 'lungs' [KCH, KAQ *pospo ʔy*, ZOQ *pukpuk*; see Campbell 1977]), *pun-pun* 'bladder' [L-?]).

(8. 19)	a. <kašuši> ka-šuši 2sP-beard 'your beard' OT: "barba" (G-S)	b. mu-tutu 3sP-breast 'her breast' (G-JS)

SPANISH LOANS: On Spanish loans the possessor is always marked with prefixes (or proclitics). This includes borrowed body parts, kinship terms and abstract nouns, which would be inalienably possessed in Xinka. Examples for Spanish loans are

ʔanima 'soul', *miša* 'mass', *paʔe* 'priest', *ma-tyuś* 'church', *nawaku* 'petticoat', *tumin* 'money', *šapun* 'soap', *tašelaś* 'scissors'.

- (8. 20) a. <an anima>
ʔan-ʔanima
 1sP-Sp:heart
 'my heart/soul'
 OT: "mi corazón" (302.)
- b. <ca cumbision>
ka-kumbisyon
 2sP-Sp:confession
 'your confession'
 OT: "confesarte, tu confesión" (2042.)
- (8. 21) a. ʔan-ʔabwelo ʔan-ʔabwela nin
 1sP-Sp:grandfather 1sP-Sp: grandmother PN:1s
 'my grandfather, my grandmother (of) me = my grandparents' (G-SH)
- b. ʔi-m-ʔuka ku mu-banko
 LOC-LIG-AUX:have MOD 3sP-Sp:bench
 'here there is his bench' (G-RHG)
- c. <alig ka amigo hay>
 ʔalih ka-amigo ʔay
 PREP.CAUS 2pP-Sp:friend 2PL
 'by/because of your (pl.) friends'
 OT: "por vuestros amigos" (Ch-Z)

COMPOUND NOUNS: Nominal compounds generally mark the possessor with cross-referencing prefixes; only a small number of compound nouns are attested with person-marking suffixes. Maldonado de Matos includes all types of nominal compounds into the first noun class:

'Modifier-modified compounds (modifier-head noun)': compounds that consist of a modifier in first and the head noun in second position. The modifier can occur in form of

- an adjective/classifier, e.g. *ʔuk-šumu* [old/married-male] 'husband, old', *šu-rya* [small-female] 'girl', *haya-humu* [female-male] 'effeminate', *muś-karawa* [hair-woods] 'rubbish, trash', *kosek ʔuy* [big-water] 'river', *me-naki* [green-chilli] 'green chilli', *muʔa-šiyuk* [white-serpent] 'rattlesnake', *ten-hu:ši-k* [red-head-INST] 'red-headed vulture', *tolo-ʔa ʔu* [yellow-corn] 'yellow corn', or
- a noun, e.g. *karawa haśu* [woods/forest-pig] 'wild boar', *wona taw* [hill-wind] 'north wind', *tuma ʔampuki* [deer-serpent] 'deer snake = boa constrictor', *tila sema* [salt-fish] 'salty fish', *nukšu-k sema* [smoke-INST-fish] 'smoked fish'.

With human/animate nouns marked for plural, the pronominal plural marker of the second and third person plural follow in final position.

- (8. 22) a. <an ucszáya>
ʔan-ʔuk-šaya
 1sP-CL:old/married-female
 'my wife'
 OT: "mi mujer" (304.)
- b. <muc ucszayáLi>
muk-ʔuk-šaya-ti
 1pP-CL:old/married-female-PL
 'our wives'
 OT: "nuestras mujeres" (307.)
- c. <mu ucszáya Li quiLic>
mu-ʔuk-šaya-ti **ki=ʔik**
 3sP-old/married-female-PL INTENS=PL(POSS)
 'their (own) wives'
 OT: "sus mujeres" (309.)

- (8. 23) a. <ʔan-muk-šumu>
 ʔan-(m)uk-šumu
 1sP-CL:old/married-male
 'my husband'
 OT: "mi esposo" (G-S)
- b. <inuc raia>
 ʔin-uk-ɾaya
 1sP-CL:old/married-female
 'my wife'
 OT: "mi mujer" (Ch-C)
- c. ka-witi-ɬaya
 2sP-CL:ʔ-female
 'your young lady/virgin' (G-JAP)

'Possessive compounds (head noun-modifier)': compounds that consist of a head noun in first position that is followed by a specifying element which is always a noun, e.g. *haw-tuma* [skin-deer] 'whip', *maku hašu* [house-pig] 'hogshed', *piya wayaʔ* [leaf-milpa] 'milpa leaf', *pɰi miya* [tamal-chicken] 'chicken tamal', *tata miya* [father-chicken/hen] 'rooster', *ʔuruʔ tonton* [egg-tortoise] 'tortoise egg', *ʔuy wakaš* [water-cow] 'broth', *horo-ʔ kawayu* [guard/get-AGT-horse] 'horse guard, servant'.

'Verb-noun compounds (verb-head noun)': compounds that combine a participle/past verb in first position and a noun in second position. As explained in § 8.3, these compounds are morphosyntactically verb phrases in which the noun functions as the argument of the verbal predicate, e.g. *hapa-(ʔ) hini* [pass-STAT stomach] 'diarrhoea', *wašta-(ʔ) karawa* [enter-shrub/forest/wild] 'viper', *wita-ʔ huwa* [tender-STAT zapote] 'mashed plantain/banana', *pak'a-ʔ hutu* [nail-STAT tree/pole] 'wall poles/wattle', *hara-ʔa mapí* [toast-STAT tortilla] 'toasted tortilla'.

In the ALS, only the first category of modifier-head noun compounds is attested with cross-referencing prefixes. The X_G-data confirm the same modifiers (*ʔuk*- 'old/married', *ču-/šu*- 'small/young' and *miku*- 'small/little') in non-composite complex noun phrases. Both types of complex noun phrases (compound and non-compound NP) mark the possessor with prefixes. In cases where the classifier/modifier precedes an inalienably possessed noun, possession is marked additionally with cross-referencing suffixes (for detailed discussion see § 8.3.2).

- (8. 24) a. <an-uk-pełóʔ>
 ʔan-ʔuk-pe:loʔ
 1sP-CL:old-Sp:dog
 'my old dog'
 OT: "mi perro viejo" (G-S)
- b. <ahanmikučukmáku>
 ʔah-ʔan-miku-čuk-maku
 EXCL-1sP-DIM-CL:old-house
 'oh, my little old house'
 OT: "mi pequeña casa vieja (enfático)" (G-S)
- b. ʔən-ču-šuruk
 1sP-DIM-cane
 'my little (walking) cane' (G-RHG)

8.2.3 Inalienable possession

Inalienably possessed nouns are marked with the same set of cross-referencing suffixes that are used to mark the subject of the transitive verb in the past/perfective. Nominal roots that mark inalienable possession fall into the following semantic categories:

- body part terms
- kinship nouns
- nouns that indicate a non-terminable possessive human relation

It needs to be stressed that nouns which take inalienable possessor-marking suffixes are not obligatorily possessed and do also occur in unpossessed contexts. The term 'intimate possession' that is used by other authors may in fact be more appropriate (Campbell, Kaufman & Smith-Stark 1986:549).

Inalienably possessed nouns form a closed class, which does not include derived nouns. Body part and kinship nouns form nominal compounds in which they preserve possessor marking with cross-referencing suffixes (see below).

BODY PART TERMS: The majority of terms denoting body parts employ cross-referencing suffixes to mark possession. Most non-derived nouns of this semantic category are indicated by Maldonado de Matos as belonging to the second noun class. A small number of non-derived body part nouns fall into the first noun class of alienably possessed nouns (see § 8.2.2).

(8. 25)	a. <szaja an> šaha:-n mouth-1sP 'my mouth' OT: "mi boca" (325.)	b. <oszôca> ʔošo-ka intestines-2sP 'your intestines' OT: "tu tripa" (349.)
	c. <eĹajaác> ʔetaha:-k tongue-1pP 'our tongue' OT: "nuestra lengua" (357.)	d. <mutiig quiĹic> muti:-h ki=ʔik hair-3pP INTENS=3PL 'their (own) hair' OT: "sus cabellos" (367.)
(8. 26)	a. huraʔi-n eyes-1sP 'my eyes' (G-PE)	b. wapi-li-k'aʔ foot-PL-2sP 'your feet' (G-SH)
	c. <manga hay> man-ka ʔay ear-2pP 2PL 'your (pl.) ears' OT: "vuestros oídos" (Ch-Z)	d. <lescúhuan> leskuwa-n waist-1sP 'my waist' OT: "la cintura" (Y-C)

Maldonado de Matos describes that in the first person singular, some nouns ending in the high vowel *i* do not only mark possession with the suffix *-n*, but also change the vowel from *i* to *a* (8. 27). Yet, the majority of nouns ending in *-i* preserve the vowel. If this is a process of assimilation in which the free pronoun *ʔan* of the first person singular preserves its vowel, it is not constrained by vowel length or stress pattern, which are identical for some nouns that preserve *i* and others that do not, e.g. *húši* 'head' ~ *táʔi* 'throat'. Campbell and Kaufmann distinguish possessor markers for nouns ending in consonant, and nouns ending in vowel (see fieldnotes). In the first person singular the possessor marker for nouns ending in consonant would be *-an*. The Maldonado-data do not provide any examples of inalienably possessed body part terms with final consonants. The three examples of nouns employing *-an* are attested in the ALS and the comparative data to end in *-i* when unpossessed. The nouns *wapi* 'foot' and *mami* 'ear' are indicated by Maldonado de Matos also with cross-referencing prefixes to mark the possessor (see below).

(8. 27)	a. <talán> tal(i)-an throat-1sP 'my throat' OT: "mi garganta" (340.)	b. <guapan> wap(i)-an foot-1sP 'my foot' OT: "mi pie" (339.)

- c. <maman>
mam(i)-an
 ear-1sP
 'my ear'
 OT: "mi oreja" (341.)

The pattern of vowel change is confirmed in the comparative data from X_G , X_{Ch} , X_S and X_Y . Note that in X_S the term for throat is *ta ʔ(i)-* (see § 4.5). In X_G the same change occurs with the cross-referencing suffix of the first person plural *-k* (a).

- (8. 28) a. wapa-k
 foot-1pP
 'our foot' (G-RHG)
- b. <ragu yucurrá huapan>
 rawu yukura wapa-n
 sit down shake foot-1sP
 'sitting (I) shake my foot'
 OT: "sentado está [sic] moviendo las
 piernas" (Ch-C)
- c. <ta'tam>
 tat-an
 throat-1sP
 'my throat'
 OT: "cuello" (S-Gav)
- d. <chiri ti guapan>
 čiri-ʔ ti(:ʔ) wapa-n
 twist/sprain-STAT IO foot-1s
 'my foot/ankle is twisted'
 OT: "el pie está torcido" (Y-C)

A significant number of nouns denoting body parts are compounds that consist of non-derived, non-compound body part terms which combine with a modifying noun or classifier in first or second position. Possessive compounds with the head noun in first position can either consist of two body part terms of which the second may take possessor marking (e.g. *harari k'awi* [bone-shin] 'shin bone', *haw-šaha* [skin-mouth] 'lips', *muš-huray* [hair/feather-eye] 'eye-lashes', *ʔuwi tita-h* [flesh-leg-3s] 'muscle', of a kinship noun in first and a body part noun in second position (e.g. *na ʔu-wapi* [child-foot] 'toes'), of a simple noun in first and a body part term in second position (e.g. *tahna-wa haya* [be born-LOC-female] 'female genitals'), or of a body part term in first and a noun in second position (e.g. *ʔuy huray* [water-eye] 'tears', *ʔuy šaha* [water-mouth] 'saliva'). Modifier-compounds can consist of a body part term as head noun that is preceded by a preposition (e.g. *para-wapi* [PREP-foot] 'sole of the foot'; *šan-šaha* [PREP-mouth] 'teeth'; *para-pama-h* [PREP-arm-3s] 'armpits').

- (8. 29) a. <jarari uelueg>
harari ʔii-h
 bone back-3sP
 'his backbone'
 OT: "el hueso del espinazo" (3937.)
- b. <ałpámag>
ʔał-pama-h
 PREP: on top of-arm-3sP
 'on top of his arm = his shoulder'
 OT: "los hombros" (3614.)
- c. <ugui titag>
ʔuwi tita-h
 meat leg-3sP
 'meat of his leg'
 OT: "los muslos" (4683.)

KINSHIP NOUNS: In Maldonado-Xinka the possessor on kinship nouns (e.g. *ʔamu* 'grandfather', *šuya* 'elder sibling; first, before', *na ʔu* 'son, offspring', *ʔuta* 'mother', *ʔanu* 'aunt', *wʔi* 'younger sister') is generally marked with cross-referencing suffixes.

- (8. 30) a. <naùn>
naʔu-n
 son-1sP
 'my son'
 OT: "mi hijo" (345.)
- b. <utàc>
ʔuta-k
 mother-1pP
 'our mother'
 OT: "nuestra madre" (361.)
- c. <aguacaay>
ʔawa-ka ʔay
 grandmother-2p 2PL
 'your (pl.) grandmother'
 OT: "vuestra abuela" (363.)
- d. <Łapaag Łíc>
ʔapa-h ʔik
 grandchild-3p PL
 'their grandchildren'
 OT: "sus nietos" (369.)

This pattern is largely confirmed by the comparative data, although the same kinship nouns are also attested in X_G and X_{Ch} with possessor-marking prefixes.

- (8. 31) a. tupa-wa ʔən-ču=naʔu-n
 stay-ANT 1sP-DIM=son-1sP
 'my little son stayed' (G-PE)
- b. <nanu utaca hay>
 nanu ʔuta-ka ʔay
 FOC mother-2pP 2PL
 '(this is) your (pl.) mother'
 OT: "vuestra madre" (Ch-Z)

Compound kinship terms always consist of a modifier preceding a kinship noun. Here, the cross-referencing suffix that marks possession is taken by the first, modifying element, not by the kinship noun in second position.

- (8. 32) <ayán uchi>
ʔaya-n ʔuči
 friend-1sP mother-in-law
 'my cross-mother-in-law = mother-in-law of my son/daughter'
 OT: "mi consuegra" (3665.)

NOUNS THAT INDICATE A NON-TERMINABLE POSSESSIVE HUMAN RELATION: Maldonado de Matos includes a few terms into the category of inalienably possessed nouns that do neither denote body parts or kinship terms, but have an immediate relation to the human body/identity, i.e. *ša*: 'name', *šanšana* 'dress, clothing', *mʔa* 'work, tribute', *mu/purimu* 'food'.

Terms denoting items of clothing are not generally inalienably possessed and are, in the comparative data, generally used with cross-referencing prefixes, e.g. X_G (SH) *ka-nagu ʔ* (2sP-petticoat) 'your petticoat'.

Although most nouns describing human/animate characteristics and states are alienably possessed, the terms *muču* 'lame' and *šaha* 'knife's edge' are listed in the ALS as belonging to the second noun class.

Several nouns can occur with both, prefix- and suffix-markers. Maldonado de Matos includes the following nouns into that category: *maku* 'house', *k'iwí* 'yard', *hiši* 'stone', *kama* 'blood, semen', *harari* 'bone', *mašira* 'veins, nerves', *hʔa* 'weaving', *šawa* 'cover, bedspread', *šina* 'urine', *hama* 'sin', *mʔa* 'tribute, work', *ʔošto* 'ulcer, wound', *wič'uk* 'whip', *wapi* 'foot', *mami* 'ear', *taʔi* 'throat'. Nouns that employ both, prefix- and suffix-marking, do not form a semantic category on their own, but fall into the noun classes attested with alienably and inalienably possessed nouns.

The body part nouns identified by Maldonado de Matos as belonging into the third noun class comprise non-derived roots (i.e. *ʔina* 'excrement', *harari* 'bone', *wapi* 'foot', *mani* 'ear', *šina* 'urine', *nari* 'nose') and compounds (*harari k'omo* 'knee

bone', *hutu ta fi* 'neck bone'). With regard to the compounds, group membership of one noun seems to define the membership of the compound noun. There are no attested examples of prefix-marking on body part nouns in the ALS, the only examples are found in the comparative data.

(8. 33)	a.	nama	ʔan-hu:ši	b.	mu-tita
		hurt	1sP-head		3sP-leg
		'my head hurts'	(G-SH)		'his leg' (G-JS)
	c.	<ka 'wapi>		d.	<tan cuay thala na mu'c rhaja'c>
		ka-wapi			*ʔan kway tala na muk-rahak
		2sP-foot			NEG FUT burn DET 2sP-mouth
		'your foot'			'(you) will not burn your mouth'
		OT: "tu pie" (Ch-MQ)			OT: "no te vayas a quemar la boca" (Ch-JC)

Maldonado de Matos includes the kinship nouns *haya na ʔu* 'daughter' and *payi* 'daughter-in-law' among those nouns that can also take cross-referencing prefixes. The parallel terms to these kinship designations, i.e. *humu na ʔu* 'son' and *ʔak'uwa* 'son-in-law' are, however, categorised as part of the second noun class, and thus, as straightforward inalienably possessed nouns that mark the possessor with suffixes. The categorisation of the parallel terms in different noun classes may suggest that Maldonado de Matos (a) either mislabelled category membership on the two items in the vocabulary, or that (b) the nouns that he categorised as belonging to the third class were the ones for which he happened to have attested cases of prefix-marking, while this particular information was missing for the others. The fact that prefix-marked kinship nouns are attested in recent data from X_G and X_{Ch} could be interpreted as a confirmation of the latter, or as an indication for structural decay.

(8. 34)	a.	mu-tataʔ		c.	<ran najli>
		3sP-father			r(a) ʔan-naʔi
		'his father' (G-SH)			DET 1sP-relative
	b.	<na mu'c lhapa>			'(the) my relative'
		na muk-ʔapa			OT: "mi pariente" (Ch-C)
		DET 2sP-grandchild			
		'(the) your grandchild'			
		OT: "tu nieto" (Ch-JC)			

Possessor-marking with prefixes and suffixes is also suggested for a number of non-human animate nouns, which include one denotation of a domestic animal (i.e. *hašu* 'pig'), animate terms of the natural environment (i.e. *hiši* 'stone', *naru* 'earth'), names of spaces that are created by humans into the natural environment (i.e. *wayaʔ* 'milpa', *maku* 'house', *k'iwí* 'yard'), and names of products which are the result of human activity (i.e. *ʔšak'a* 'drink, refreshment', *ʔwa* 'corn dough', *hʔ'a* 'weaving' and *šawa* 'cover, bedspread').

Only one of these terms, *maku* 'house', is attested in syntactic context with possessor marking.

- (8. 35) <Pedro púlai macùg aL.mucàn>
Pedro pula-y maku-h ʔaʔmukan
 Pedro make-3sA house-3sP yesterday
 'Pedro made his house yesterday'
 OT: "Pedro hizo su casa ayer" (2017.)

In the comparative data the root *maku* is widely attested with both, alienable (8. 36) and inalienable possessor-marking (8. 37).

- (8. 36) a. ʔan-makuʔ nin
1sP-house PN:1s
'my house' (G-SH)
- b. <ɾhal ay quí na muc macú>
ral ʔay ki na muk-maku
good be+3sS_{DEP} ? DET 2sP-house
'how good/nice is your house!'
OT:"que buena está tu casa" (Ch-JC)
- c. <mu macu na man>
mu-maku na man
3sP-house DET DEM/3s
'that (one) is his house'
OT:"esta casa es suya" (Y-C)
- (8. 37) a. ču=mak'u-m
DIM=house-1sP
'my little house' (G-PE)
- b. <nama'kuh>
na maku-h
DET house-3sP
'his house'
OT:"es la casa de ellos" (Ch-MQb)
- c. <macuc nec>
maku-k nek
house-1pP PN:1p
'our house'
OT:"nuestra casa" (Y-C)

In X_G the root consonant is glottalised upon marking of the noun with cross-referencing suffixes (see § 4.4.6). Schumann (1967:49) points out that glottalisation of the medial consonant alone can mark possession in the first person singular. In X_{Ch} we find other examples of this form that omits the first person singular possessive marker. According to Schumann the glottalisation of the root consonant indicates a hypothetical state; this semantic interpretation is not confirmed by the other examples.

- (8. 38) a. <mákʔu>
mak'u
house+1sP?
'my house'
OT:"mi casa" (hipotético) (G-S)
- b. mak'u-ʔ na
house-ʔ PN:3s
'his house' (G-SH)
- c. <a-cuy na maku>
ʔaku-y na mak'u
go-3sS_{DEP} DET house
'he goes (to my) house'
OT:"anda a mi casa" (Ch-F)
- d. <nama'kuʔ>
na maku-ʔ
DET house-1sP?
'my house'
OT:"es mi casa" (Ch-MQb)

ABSTRACT NOUNS: Abstract nouns with a relation to the human body/identity are attested with possessor-marking suffixes. Maldonado de Matos gives the term *hama* 'sin' as a noun that may also take prefixes.

- (8. 39) <na jamâca>
na hama-ka
DET sin-2sP
'your sin'
OT:"tus pecados" (2034.)

In the ALS we find a small number of derived stems that are categorised by Maldonado de Matos as belonging to his third noun class and can mark the possessor with either prefixes or suffixes. Nouns that are categorised as such are e.g.

wiriki? 'word' (3866.), *k'in-k'i-ta* [be happy-AP-AGT] '(the one) who is happy' (3785.), *kunu-k'i-wa* [buy-AP-PART.PF] 'bought thing' (3767.) or *ho:ro-t maku* [guard-AGT house] '(the one) who guards the house' (3961.). The use of prefix and suffix-markers with the same noun could be an indication that these nominal forms can function both ways, as alienably and inalienably possessed, depending on the referent or the attitude of the speaker. Hypothetically, **harari-n* [bone-1s] 'my bone' would refer to a bone in my body, whereas **ʔan-harari* [*1sP-bone] could refer to some other bone that I own (such as bones from animals or relatives). Similarly, **payi-n* 'my daughter-in-law' could refer to an attitude that sees the daughter-in-law as kin, whereas **ʔan-payi* with alienable possessor-marking could refer to a situation where the daughter-in-law is not treated as part of the kin group. There are, however, no contrastive examples in the corpus of data that would confirm this idea.

The large number of body part and kinship nouns that are attested with cross-referencing prefixes in the comparative data may provide a counter-argument for this hypothesis, since these semantic contexts clearly indicate the possessum to be the actual, personal body part or kin of the indicated possessor.

There are examples in X_G of inalienably possessed nouns that mark the possessor with cross-referencing suffixes, which are preceded by the diminutive modifier *ču-* 'small' and an additional possessor-marking prefix. The only examples for this are found in the first person singular (8. 40). One semi-speaker (PE) also combined a second person prefix and the first person singular suffix in order to indicate a second person possessor. Although this particular mixing of grammatical persons may be the result of language attrition, it is not entirely impossible that Maldonado de Matos' third noun class is actually referring to these type of constructions that imply double-marking of possessive on a noun phrase. There is one example from X_G where double-marking seems to occur on a single noun (8. 41).

- (8. 40) a. ʔən-ču=naʔu-n
1sP-DIM-son-1sP?
'my little son of mine' (G-RHG)
- b. ke suka-ki-n ʔən-ču=huraʔi-n
Sp:that bite-AP-SUBJ 1sP-DIM=eyes-1sP?
'that my little eyes (of mine) bite' (G-RHG)
- c. naka ka-ču=maku-n
PN:2s 2sP-DIM=house-?
'(it is) your little house of yours' (G-PE)
- (8. 41) nama ʔan-wapi-li-n
hurt 1sP-foot-PL-1sP?
'my feet hurt' (G-SH)

It needs to be mentioned that possessor-marking and plural suffixes do not co-occur on the same root/stem; in such cases, the noun is marked with prefixes, e.g. **ʔan-na ʔu-(ka) ʔi* [1sP-son-PL] 'my sons', but *na ʔu-n* [son-1sP] 'my son').

8.2.4 Personal pronouns indicating possession

The possessor of a noun phrase can also be marked grammatically with an independent pronoun (see § 7.1.2.3). While the syntactic contexts in the ALS indicate that the same independent pronouns which occur as predicate arguments also function as markers of the possessor, the ALS-vocabulary also includes

independent possessive pronouns for the first and second person plural. These pronouns combine a determiner (*na* or *nana*) and a cross-referencing prefix. As they are not attested in syntactic context, it is not entirely clear whether these are free pronominal forms, or whether they are indicated as forms that would be prefixed to a noun phrase. Examples from X_{Ch} , however, seem to suggest that these possessive pronouns occur without a nominal referent in predicative function.

- (8. 42) a. <nana muc>
 nana muk
 FOC 1pP
 'our'
 OT: "nuestro (nominativo)" (277.)
- b. <na cà ay>
 na ka ʔay
 DET 2pP 2PL
 'your (pl.)'
 OT: "vuestro (acusativo)" (294.)
- (8. 43) a. <na muc>
 na muk
 DET 2sP
 'your'
 OT: "es tuyo" (Ch-JC)
- b. <ra (a)n>
 ra ʔan
 DET 1sP
 'my'
 OT: "mi" (Ch-C)

Possessive pronouns attested in X_Y do not differ formally from independent pronouns. In the following examples the possessive function is only indicated by the translation context.

- (8. 44) a. <naj ne>
 nah ne
 DET PN:1s
 'my, mine'
 OT: "mío, míos" (Y-C)
- b. <nanay>
 na nay
 DET PN:2s
 'yours, his'
 OT: "tuyo, suyo" (Y-C)

In the ALS, only independent pronouns are attested in syntactic context as grammatical markers of possession. There are only a couple of contexts in which the independent pronoun marks the possessor on Spanish nouns. In the given examples, the pronoun precedes the noun, which corresponds to the syntactic pattern of possessor-marking in Spanish.

- (8. 45) a. <szamà naca confesión>
 šama naka confesión
 PREP PN:2s Sp:confession
 'in your confession'
 OT: "en tu confesión" (2033.)
- b. <ca ùca condenar naca anima>
 ka-ʔuka condenar naka anima
 2sA-do Sp:condemn PN:2s Sp:soul
 'you (have to) condemn your soul = you are condemned'
 OT: "te has de condenar" (1955.)

This straightforward pattern from the ALS is not attested elsewhere in the comparative data. However, there are numerous examples of independent pronouns that mark the possessor, following the noun phrase. The syntactic order with the pronoun following the noun could be an influence from Spanish and the pronouns in these constructions are possibly best understood as literal translations of the Spanish independent possessive pronoun, e.g. "la cosa mía, tuya, suya..."

- (8. 46) a. **ša mak'u-ʔ nin**
 PREP house-1sP? PN:1s
 'in the house of mine = in my house' (G-SH)

- b. ša ku maku man
PREP MOD house DEM/3s
'in the house (of) that one = in his house' (G-JS)
- c. <pu naj mau chiri ti>
pu nah man čiri(-?) ti(:?)
hand PN:3s DEM twist-STAT IO
'the arm of him is twisted'
OT: "el brazo de él está torcido" (Y-C)
- d. <imacu inay>
ʔi-maku ʔi-nay
?-house ?-PN:2s
'your house'
OT: "tu casa" (Y-C)

There are examples in X_G and X_Y that indicate that the preceding noun can be marked with cross-referencing affixes that show agreement with the independent pronoun.

- (8. 47) a. naʔu-n nin
son-1sP PN:1s
'my son' (G-SH)
- b. ka-kamisa naka
2sP-Sp:shirt PN:2s
'your shirt' (G-SH)
- c. <macuc nec>
maku-k nek
house-1pP PN:1p
'our house'
OT: "nuestra casa" (Y-C)

The independent pronoun that is in agreement with the possessor can also precede the noun phrase. In X_G , X_{Ch} and X_Y this pattern occurs with noun phrases that function as nominal predicates.

- (8. 48) a. na nin hu:ši-n
DET PN:1s head-1sP
'(it is) my head' (G-SH)
- b. na nin ʔan-tayuk
DET PN:1s 1sP-hat
'(it is) my hat' (G-SH)
- c. <ay ni mayá>
hay nin waya?
Sp:EXIST PN:1s milpa
'there is my milpa'
OT: "tengo mi milpa" (Ch-C)
- d. <nanay ayahui>
na nay ʔaya-wi
DET PN:2s be-?
'yours ?'
OT: "todo es para ti" (Y-C)

In X_G and X_Y , independent pronouns are attested in complex possessive phrases with the pattern "3sP-possessum possessor" (see next section). They can take the position/function of the possessor that follows the possessum, which is always cross-referenced in the third person singular, irrespective of the person referenced by the pronoun.

- (8. 49) a. mu-kwerpo nin
3sP-Sp:body PN:1s
'his body of mine = my body' (G-SH)
- b. <mu macu na nen>
mu-maku na nen
3sP-house DET PN:1s
'his house is mine'
OT: "esta casa es mía" (Y-C)

8.3 Nominal compounds

The lexical core of a noun phrase may be a nominal compound that is composed of two or more elements. Nominal compounding is a common strategy in Xinkan and there are several structural types of compounds attested in the ALS:

- compounds that consist of a modifier and a head noun
- nominalised verb phrases
- compounds that consist of a head noun and a modifier or noun-genitives

Terms from other Mesoamerican languages and Spanish that occur regularly in compounds can be identified as proper loanwords and are not the result of structural decay, which goes along with increasing use of non-Xinka terms (§ 2.3.2).

The distinction between compounds and non-composite, complex noun phrases is not always clear. The main criterion for the distinction may be that the individual constituents of compounds do not allow any insertion of other constituents between them (however, this does not entirely hold true for noun-genitives). Nominal compounds in Maldonado-Xinka do not form phonological words, because their stress patterns do not differ from noun phrases in which the individual constituents do not form a compound. Another indication for compounds is the insertion of *h* if the second noun begins with a vowel; e.g. *pari ñuy* <parihúy> [hot-*h*-water] 'hot water' (see § 4.3.1.1.4).

Nominal compounds function morphosyntactically like single nouns. Some morphological patterns are, however, specific to compounds: nominal compounds mark the possessor generally with cross-referencing prefixes, unless the head noun of the compound is inalienably possessed. Compounds with inalienably possessed head nouns mark the possessor with cross-referencing suffixes. Possessor-marking treats the nominal compound as an entity, which becomes only apparent in the case of possessive prefixes that precede the entire compound.

The designations for the different compound types in Maldonado-Xinka have been taken from Andersen (1985:46ff.) and Aikhenvald (2003); the subtypes of modifier-modified compounds are simply descriptive.

8.3.1 Modifier-modified compounds

These compounds consist of two elements: a modifier in first position and a modified element in form of a head noun in second position. The modifier can be a noun, an adjective or a preposition. Modifier-modified compounds with adjectives/classifiers and with prepositions have "phrasal counterparts" (cf. Andersen 1985:47) inasmuch as the structure of the compound reflects the phrase structure of noun phrases that include an adjective or preposition as modifier. The morphosyntactic properties of compounds and noun phrases are also quite similar.

8.3.1.1 Attributive noun compounds

Attributive noun compounds consist of a noun in first position that modifies, or specifies, the basic meaning of the head noun in second position. Thus, the noun in first position acts like a modifier. Syntactically, attributive noun compounds are complex noun phrases. Their definition as compounds is mainly determined by the

semantic concept they derive; although there are some examples that are written by Maldonado de Matos in one word, which suggests that these forms are more than just expressions. The head nouns attested in these compounds fall into the following semantic categories: kinship nouns, animals, food terms, environmental terms.

Kinship nouns form compounds with nominal modifiers that indicate specific types of kin relations (8. 50). In the few attested cases, the cross-referencing suffix that marks possession is taken by the first, modifying element, and not by the kinship noun in second position. It seems unusual that the noun carrying the inflection should occur in attributive function. However, semantically both translation contexts suggest the second noun (i.e. *tata* 'father' or *ʔuči* 'mother-in-law') to be the head noun, which is modified and specified by the elements *step and *friend.

(8. 50)	a. <titica tata> titi-ka tata ʔ-2sP father 'your compaternity father = your godfather' OT: "el padrino" (4580.)	b. <ayán uchi> ʔaya-n ʔuči friend-1sP mother-in-law 'my cross-mother-in-law = mother-in-law of my child' OT: "mi consuegra" (3665.)

Attributive noun compounds are attested with animal, food and environmental terms functioning as head nouns (8. 51). Attributive nouns in initial position specify sex, age, and other characteristic features of the head noun. The distinction between attributive nouns and adjectives is not always clear and simply based on the fact that attributive nouns are otherwise attested in the corpus as independent nouns. The first example *tuma ʔampuki* 'deer snake' is a calque found in other Mesoamerican languages (Campbell, Kaufman & Smith-Stark 1986:553), e.g. K'iche' *ke:x kumaç*; Nahuatl *masa-ko ʔatl* [deer + snake]. The distinction of attributive noun compounds and simple descriptive noun phrases may not in all cases be clear; the criterion is primarily semantic in that attributive noun compounds derive a new concept that is more specific or completely different from the combined meanings of the word (see Payne 1997:93). In many cases, Maldonado de Matos indicates attributive noun compounds as one lexical form (c-d).

(8. 51)	a. <tuma ambuqui> tuma ʔampuki deer snake 'deer-snake = boa constrictor' OT: "la masacúa; culebra" (4609.)	b. <jaya jaszu> haya hašu female pig 'female pig = sow' OT: "la marrana" (3949.)
	c. <purimapue> puri-mapí heat-tortilla 'hot tortilla = meal' OT: "la comida" (4344.)	d. <gonatau> wona-taw hill-wind 'hill-wind = northwind' OT: "el viento, norte" (3831.)

8.3.1.2 Adjective compounds

These compounds consist of an adjective in first position and a head noun in second. The adjective modifies the meaning of the head noun as it is the case in non-compound noun phrases (8. 52). Modifiers attested in adjective compounds indicate physical states such as dimension, consistence, colour and temperature. Numerals are also attested as modifiers.

Adjective-noun compounds seem to be formally distinguished from noun phrases consisting of a head noun and a preceding, modifying adjective. Maldonado de Matos always gives these compounds as word forms that appear to exhibit the stress pattern of one word. In some cases the final vowel of the adjective is omitted, which indicates that both lexical elements form a new lexical entity. Compounds mark the possessor with cross-referencing prefixes, which precede the adjective. There are, however, examples from X_G where the same is the case for non-composite noun phrases. The main criterion for defining an adjective compound is semantic, as the concept the compound refers to differs from the concept referred to by a descriptive adjective-noun phrase; e.g. *tolo šaha* [yellow-mouth] 'fer-de-lance' denotes a specific snake type, or *me:-naki* [green-chilli] 'green chilli' refers to a specific type of chilli, not to the fact that the chilli is green.

(8. 52)	a. <óneszinác> ʔone-šinak tender, young-bean 'tender beans = <i>ejote</i> beans' OT: "el ejote, vayna de frisol tierno" (4196.)	b. <meenáqui> me:-naki green-chilli 'green chilli' OT: "chile verde" (4077.)
	c. <toloszaja> tolo-šaha yellow-mouth 'yellow-mouth = fer-de-lance (snake)' OT: "cantil, culebra con boca amarilla" (4595.)	d. <pijúszic> pi:-hu:ši-k NUM:'2'-head-INSTR 'two-heads = two-headed snake' OT: "culebra de dos cabezas" (4292.)
	e. <süen au> šin-ʔaʔu black-corn 'black corn' OT: "el maíz negro" (4403.)	f. <mułckeguesza> muł-k'eweša white-anona 'white anona' OT: "la anona blanca" (4100.)

Adjective compounds are also used to express temporal concepts. The adjective forms *ɕ'ik'i* and *puy* form compounds with the temporal nouns 'day' and 'night' to indicate the concepts of 'midday' and 'midnight'. It needs to be noted that different adjectives are employed to express the 'middle/centre of the day' and the 'middle/half of the night'. However, in X_G **ɕ'ik'i* is also found with the concept of 'midday'; in the given example, the head noun is omitted (8. 54). The loss of the final vowel on the adjective provides a formal criterion that both lexical elements form a compound.

(8. 53)	a. <txüesüesüema >, <txüesüema> ɕ'ik'(i)-šima middle/centre-night 'midnight' OT: "media noche" (4654.), (4655.)	b. <puy pari> puy-pari middle/half-day 'midday' OT: "medio día, tarde" (4365.)
(8. 54)	a. puy-pari middle/half-day 'midday' (G-JAP)	b. ɕ'aʔkaʔ-Ø middle/centre 'midday' (G-SH)

8.3.1.3 Classifier compounds with gender nouns

There are a few adjective roots occurring as modifiers in nominal compounds that seem to function as classifiers, although this semantic distinction is rather fuzzy. The classifiers attested in the ALS are: *ʔuk-* 'old/married', *ču-/šu-* 'small/unmarried', *witi-* 'soft', *karwa-* (**ika ʔ-wa* = *NUM:one-PART.PF) 'separated'. These classifiers

occur exclusively with the gender nouns **haya* 'female' and **humu* 'male', which can be realised as *-šaya/-šumu*, *-čaya/-čumu*, *-taya/-tumu* or *-raya/-rumu* depending on the preceding classifier.

Comparing compound gender nouns throughout the language family we find the terms to be quite similar in the different Xinkan languages, which points to the antiquity of these compounds.

Table 8. 3: Comparative chart of classifier-gender term compounds

	X _M	X _G	X _{Ch}	X _S	X _{Jum}	X _Y
old man	ʔuk-šumu	čuk-šumu	ʔawk-šumu ʔup-šumu			
old woman	ʔuk-šaya	čuk-šaya čuh-čaya	ʔaw-šaya ʔap-šaya			
husband	ʔuk-šumu	ʔuk-šumu	ʔun-šumo ʔup-šum			
wife	ʔuk-šaya		ʔu-šaya ʔuk-šaya ʔun-šaya *ʔup-šayal šaya-ya			
young man	šu-rumu	šu-rumu	šu-rumu	šu-rum	šo-romo	so-rono
young woman	šu-šaya	šu-šaya	šu-šaya		šu-šaya	su-šaya
young lady	witi-šaya	witi-šaya	miti-šaya [sic]			
widow (female)	karwa haya		kar(a)wa-ya			nut-aya
widow (male)	karwa humu		kar-umu		ka-rumo ka-ʔuno unt-umu	unt-aya

The classifier/adjective *ʔuk-* precedes the basic gender nouns to indicate two concepts: that of 'spouse' and that of 'elder'. It is not uncommon for Mesoamerican languages to distinguish classifiers for married and unmarried people (e.g. K'iche'), which accordingly include the notions of 'old/elder' and 'young'. The etymological origin of the root *ʔuk-* is not transparent.

- (8. 55) a. <ucszumu>
ʔuk-šumu
 old/married-male
 'husband, elderly man'
 OT: "marido" (4676.), "viejo" (4674.)
- b. <ucszaya>
ʔuk-šaya
 old/married-female
 'wife, elderly woman'
 OT: "mujer, consorte" (4672.),
 "vieja" (4670.)

The comparative data confirm this pattern of compounding. The classifier *ʔuk* is attested in X_G and X_{Ch} in the same contexts. It is unclear whether the form *ʔun-šumu* that is repeatedly attested in the X_{Ch}-data of Fernández (c) is the result of misrepresentation by the author, i.e. <un> = *<uc>. The morpheme *un* could also indicate the first person singular, i.e. **ʔan-šumu* [1sP-male] 'my male' = 'my husband'), as well as it could be derived from the Spanish independent pronoun, i.e. "un varón". In the Lehmann-data from X_{Ch} the classifier is indicated as <up> (d).

- (8. 56) a. <anmukšumu>
 ʔan-uk-šumu
 1sP-CL:old/married-male
 'my husband'
 OT: "mi esposo" (G-S)
- b. <ucraia>
 ʔuk-šaya
 CL:old/married-female
 'wife'
 OT: "mujer" (Ch-C)

c.	<un-xumu> ʔun-šumu CL/1sP?-male 'husband' OT: "marido" (Ch-F)	d.	<muupxum> mu-ʔup-šum 3sP-CL:old/married-male 'her husband' OT: "marido" (Ch-L)

In X_G the classifier *ʔuk-* is preceded by the diminutive/affectionate adjective *ču* 'small' when referring to the concept of 'old, elderly' (8. 57). The translation contexts of the rendered modifier *ču-* as given by Schumann do not reflect the diminutive meaning of the marker *ču*. Some of the semi-speakers delete the classifier *ʔuk* altogether just using the diminutive to indicate the same semantic concept (c). Schumann points out that the adjective *ču-* functions as a bound morpheme that can be preceded by cross-referencing prefixes (1967:47, 49).

(8. 57)	a.	<čukšumu> ču-(u)k-šumu DIM-CL:old/married-male 'elderly man' OT: "anciano" (G-S)	b.	<čukšaya> ču-(u)k-šaya DIM-CL:old/married-female 'elderly woman' OT: "anciana" (G-S)
	c.	ʔən-ču-čaya 1sP-DIM-female 'my little old lady' (G-RHG)	d.	<ʔan-čuk-pelo?> ʔan-ču-(u)k-pe:lo? 1sP-DIM-CL:old-Sp:dog 'my little old dog' OT: "mi perro viejo" (G-S)

In X_{Ch} the same semantic context is marked with the morpheme *ʔa-* preceding the classifier *ʔuk-*, rendering the modifier *ʔawk-*. The exact function of *ʔa* is unclear; it may parallel the diminutive adjective *ču* in X_G , but could also derive from a determiner, i.e. *na* or *ra*.

(8. 58)	a.	<awksumu> ʔa-uk-sumu ʔ-CL:old/married-male 'elderly man' OT: "anciano" (Ch-S)	b.	<ʔawšaya> ʔaw-šaya ʔ-CL:old/married-female 'elderly woman' OT: "anciana" (Ch-MQb)

The diminutive modifier *ču* 'small' also functions as a classifier on gender nouns indicating 'young' and 'unmarried' persons. In all Xinka varieties the initial consonant *č* becomes *š* (cf. § 4.3.1.2.1, § 4.5.1); i.e. *šurumu* 'young man, boy' and *šuraya* 'young woman, girl'. The terms are attested with nearly no variation in the comparative data (see Table 8. 3); in X_{Jum} and X_Y , there is a change of vowel *u* to *o* in the term *šurumu*.

(8. 59)	a.	<szuraya> šu-<i>raya</i> DIM/not married-female 'girl' OT: "la muchacha" (4513.)	b.	<szurumu> šu-<i>rumu</i> DIM/not married-male 'boy' OT: "el muchacho" (4517.)

The classifier/adjective *witi* only occurs with the female gender noun *haya*, referencing a 'young female', which can be variously interpreted as 'girl' (possibly of marriageable age) or even 'virgin'; there is no parallel male term attested. The exact meaning of the classifier cannot be determined, although it may be etymologically related to the root **wita* 'to soften'; *wita-wa* [to soften-PART.PF] 'softened thing'. The comparative forms from X_G and X_{Ch} seem to confirm the semantic and morphological analysis of the term; Pivara gives the form with an initial *m*, which is likely a misspelling.

- (8. 60) a. <guitiŁaya>
witi-Łaya
 soft-female
 'young lady / virgin'
 OT: "la doncella" (3874.)
- b. witi-Łaya
 soft-female
 'young lady / virgin' (G-JAP), (G-RHG)
- c. <mitirlaya>
 *witi-Łaya
 soft-female
 'young lady'
 OT: "india joven o indita" (Ch-P)

The term *karwa-* combines with the basic gender terms to indicate the age-class concept of a 'widow/widower'. Maldonado de Matos gives the translation as "cosa separada", i.e. 'separated thing' for the classifier/adjective. The etymology of the term is not evident.

- (8. 61) a. <carguajumu>
karwa-humu
 single/separated-male
 'widower'
 OT: "viudo" (3717.)
- b. <carguajaya>
karwa-haya
 single/separated-female
 'widow'
 OT: "viuda" (3718.)

The compound is attested in the comparative data. For X_{Ch} , McQuown indicates it as referring to the concept of 'virgin'. Both terms have in common that they designate an unmarried/single woman, which suggests that the modifying element *karwa* might refer to the state of 'unmarriedness' in general rather than to the state of being 'widowed' in particular.

- (8. 62) a. <kar'wayΛ>
 karw-aya
 single/separated-female
 'virgin'
 OT: "mujer virgen" (Ch-MQb)
- b. <carguáye>
 karw-aye
 single/separated-female
 'widow'
 OT: "viuda" (Ch-C)

In X_{Ch} and X_{Jum} , the modifying element in the term for 'widow(er)' is given as *ka-* or *kar-* (8. 63). In X_{Jum} and X_Y we find the marker *Λun-*, which may be derived from the Spanish indefinite article "un" (the *t* that follows *Λun* is the result of assimilation) (8. 64). This may suggest that the modifier *kar* can be identified as the numeral *Λkaʔ* 'one'; the precise etymology of the full modifier form *karwa-* 'single/separate' that is used in the ALS and in X_{Ch} is, however, unclear.

- (8. 63) a. <carúmu>, <carumo>
 ka-rumu
 NUM: '1'-male
 'one-male = widower'
 OT: "viudo" (Ch-C), (Jum-E)
- (8. 64) a. <unt-umu>
 Λun-t-umu
 NUM: '1'(L-S)-LIG-male
 'one male = widower'
 OT: "viudo" (Ch-F)
- b. <nutaya>, <táya>
 *Λun-t-aya
 NUM: '1'(L-S)-LIG-female
 'one female = widow'
 OT: "viuda" (Y-C)

The gender nouns *haya* and *humu* also occur with other attributive modifiers. In the following examples the modifiers are identified as Mayan loans that are likely from K'iche'an **saq* 'white' (Kaufman 2003:221) and preserve the nominal

abstractive suffix *-i:l*. In K'iche'an the abstractive noun *saqi:l* is attested with the literal meaning 'bright', 'noble', 'gentle', 'divine' (see Edmonson 1965:159) and is interpreted to refer to the concept of 'excellence' and 'human civilisation' (Breton 2007:35). The concept may have been borrowed from K'iche' where the terms *saqi:l* *ʔal* [light/excellent daughter] and *saqi:l* *k'axo:l* [light/excellent son] are known as emic terms that were used to refer to human descendants, civilisation and life in general (see Christenson 2003:66; Breton 2007:35).

(8. 65)	a. <sza eiLumu> šak'it-humu L-M:whiteness/excellent-male 'excellent-male = good man' OT:"buen mozo, visarro" (4416.)	b. <sza eiLaya> šak'it-haya L-M:whiteness/excellent-female 'excellent-female = good woman' OT:"buena moza, hermosa, linda" (4415.)

8.3.1.4 Prepositional compounds

In prepositional nominal compounds the element modifying the head noun is a prepositional root. Prepositional compounds fall into the semantic domains of toponyms, complex directionals, temporal adverbs and body part terms. The preposition *šan* is the basic preposition that is employed in compounds of all domains, whereas the prepositional roots *ʔaʔ*- and *para*- only occur with body part terms.

8.3.1.4.1 Toponyms

Campbell identified several Xinka-toponyms in southeastern Guatemala which are prepositional compounds that consist of a preposition, *šan* or *ʔaʔ*, and a head noun (Campbell 1978a:36-37). Some place names mentioned by Campbell involve the locative marker *ʔay*- (e.g. *ʔay*-(*ʔampuk* [LOC-snake] 'place of snake'), the etymology of which is not entirely clear, although it seems to derive from the preposition *ʔaʔ*'on, on top of' (see § 9.1.2).

Toponymic compounds attested in the ALS and the comparative data consist of a head noun that is preceded by the preposition *šan* (*šam* before *p*). There are no compound place names in the corpus of data that include the preposition *ʔaʔ*.

(8. 66)	a. <szampiya> šan-piya PREP-leaf 'in/on/at the leaf' OT:"Ixhuatán; pueblo" (4441.)	b. <tagti szamipiya> tahti šami-piya plain PREP-leaf 'plain in/on/at the leaf' OT:"Tepeaco; pueblo" (4536.)
	c. <szamʉepʉey> šam-ʔipiy PREP-? 'in/on/at ?' OT:"Atiquipaque; pueblo" (4432.)	d. <szan szogue> šan šowe PREP leaf for measuring salt? 'in/on/at ?' OT:"Pasaco; pueblo" (4448.)

The ALS lists several toponyms that are given as simple nominal roots or compounds that are not preceded by a preposition (8. 67). The same toponyms (referring to Chiquimulilla, Sinacantán, Taxisco and Nancinta) are attested in X_G and X_{Ch} with the preposition *šan* (8. 68). This seems to suggest that the prepositional modifier may be optional.

- (8. 67) a. <txege>
ǵ'ehe
 TOPN
 'Chiquimulilla'
 OT: "Chiquimula [sic]; pueblo" (4643.)
- b. <εDesztamay>
k'ış-tamay
 bat-? = TOPN
 'bat-*place? = Sinacantán'
 OT: "Sinacantán; pueblo" (3795.)
- c. <cúcu>
kuku
 TOPN
 'Taxisco'
 OT: "Taxisco; pueblo" (3757.)
- d. <εDesza>
k'ışa
 bat = TOPN
 'bat = Nancinta'
 OT: "Nancinta; pueblo" (3797.)
- (8. 68) a. <šanǵʔéhe>
 šan ǵ'ehe
 PREP TOPN
 'in/on/at Chiquimulilla'
 OT: "Chiquimulilla (población)" (G-S)
- b. <šankıştamáy>
 šan kiř-tamay
 PREP bat-?
 'in/on/at bat-*place? = Sinacantán'
 OT: "Sinacantán (población)" (G-S)
- c. <san gúko>, <xan cücü>
 šan kuku
 PREP ?
 'in/on/at Taxisco'
 OT: "Taxisco" (Ch-S), (Ch-F)
- d. <san k'isi>
 san kiři
 REP bat
 'in/on/at the bat = Nancinta'
 OT: "Nancinta" (Ch-S)

In combination with motion verbs, the preposition *šan* indicates direction towards a location. In the semi-speaker data from X_G, we find contexts where toponyms preceded by *šan* express the direction 'towards' ("hacia") when following a motion verb.

- (8. 69) a. na nin ku=ya-n šan ǵ'ehe
 DET PN: 1s go=PROG-1s_{DEP} PREP TOPN
 'I am going to(wards) Chiquimulilla' (G-JAP)
- b. ku=ya-n šan kuku
 go=PROG-1s_{DEP} PREP TOPN
 'I am going to(wards) Taxisco' (G-RHG)

The Nahuatl translations of the Xinka place names suggest that the function of the preposition *šan* may parallel the Nahuatl locative marker *-tlan*; e.g. (a) Ixhuatán: *iřwa-tlan* [to sprout-LOC] 'place of sprouting plants' = *šan-piya* [PREP/LOC-leaf] 'place of leaves'; or (b) Sinacantán: *činakan-tlan* [bat-LOC] 'place of bats' = (*šan*)-*k'řa* [PREP/LOC-bat] 'place of bats'.

8.3.1.4.2 Directionals and complex prepositions

The preposition *šan* is used to form (a) prepositional compounds that indicate absolute directionals and (b) complex prepositions that define spatial deixis relative to the human body.

Directionals combine the preposition *šan* and a locative noun. Only two of these compounds are found in the ALS, indicating the directionals 'up(wards)' and 'down(wards)'. The attested locative nouns are *tiwina* 'sky' and *řaru* 'sea, ocean', the latter of which, taking the environmental conditions of the Xinka area into account, lies southwards and downhill from the Xinka area (cf. §1.2).

- (8. 70) a. <szantiguina>
šan-tiwina
 PREP-sky
 'in the sky = above'
 OT: "arriba, en el cielo" (4442.)
- b. <szanszaru>
šan-řaru
 PREP-sea
 'in the sea = below the sea'
 OT: "abajo el mar, las lagunas" (4446.)

In X_G and X_{Ch} the directions of 'up' and 'down' are expressed by the same terms. Although these directionals are best translated with the English prepositions 'below' and 'above', it needs to be pointed out that the Xinka forms do not give the direction/location with relation to the speaker but indicate an absolute direction that refers to speaker and addressee alike. The head nouns in these compounds are references to spaces in the natural environment ('sea', 'sky', 'hill'), or to spaces created by humans ('yard'). A conceptual distinction is made between the terms *šan-tiwina* [PREP-sky] 'up in the sky' and *šan-wona* [PREP-hill] 'uphill' – both forms are translated into Spanish as "arriba".

- (8. 71)
- | | |
|---|---|
| <p>a. piri-n Ø-hapa-ʔ šan-tiwina
see-1sA 3sS-pass-STAT PREP-sky
'I saw it passed in the sky = above' (G-SH)</p> <p>b. <xantigüina>, <ssandigüina>, <ranti'win>
*šan-tiwina
PREP-sky
'in/to the sky = above, upwards'
OT: "hacia arriba" (Ch-F), "arriba" (Ch-MQb)</p> | <p>c. <jansharo>
han-šaro
PREP-sea
'in/to the sea = below, downwards'
OT: "abajo" (Ch-P)</p> <p>d. <xangüiu>
šan-kiw
PREP-yard
'in/to the yard = outside'
OT: "fuera, sitio, delante" (Ch-F)</p> <p>e. <san gona>
san-wona
PREP-hill
'to the hill = above, upwards' (G-RHG)</p> <p>f. <jangona>
han-wona
PREP-hill
'to the hill = above, upwards'
OT: "arriba" (Ch-P)</p> |
|---|---|

In X_G and X_{Ch} the same prepositional compounds that indicate the directionals 'up' and 'down' are used to refer to the cardinal directions of north and south. The locative noun *šaru* 'ocean' indicates 'south' while *wona* 'hill, volcano' indicates north, referring to the volcano Tecuamburro. These terms are only attested in the central Xinka varieties X_G and X_{Ch} where the topographic landmarks coincide with the descriptive terms. The other cardinal directions 'east' and 'west' are denoted in all Xinka varieties by verb noun compounds indicating the rising and descending of the sun (8. 102).

- (8. 72)
- | | |
|---|---|
| <p>a. <u>south</u>
<šanšáro>, <šamšáro>
<xanxaru>, <ssanrraru>
šan-šaru
PREP-sea
'towards the sea = south(wards)'</p> <p>b. <u>north</u>
<šawóna>
<sa góna>
<xangona>, <ssangu-o-na>
ša(n)-wona
PREP-hill/volcano
'towards the hill/volcano = north(wards)'</p> | <p>OT: "sobre el mar, sur" (G-S)
OT: "hacia el mar, hacia el Sur" (Ch-F)
(G-RHG)</p> <p>OT: "norte, hacia el cerro" (G-S)
OT: "Tecuamburro (volcán), 2. norte" (Ch-S)
OT: "hacia el Norte, hacia el cerro" (Ch-F)</p> |
|---|---|

The preposition *šan* expresses 'movement towards' the landmark, literally translating as 'towards to hill/sea'. This is suggested by cases of prepositional compounds occurring with motion verbs. It needs to be noted that in most contexts where motion verbs precede the directional, the preposition *ša-* is prefixed to the locative noun, deleting the marker *-n*.

- (8. 73) a. ku=ya-n ša-šaru
 go=PROG-1s_{DEP} PREP-sea
 'I am going to(wards) the sea = southwards' (G-RHG)
- b. <acugüi rhagona>
 ʔaku wi ra-wona
 go DIR? PREP-hill
 'let's go to(wards) the hill = northwards'
 OT: "vamos a tierra fría" (Ch-JC)

In some examples the concept of 'movement towards' is expressed by another preposition that precedes the prepositional compound.

- (8. 74) a. <šašawóna> b. <xanguarantigüina>
 ša ša-wona šan wa ran-tiwina
 PREP PREP-hill PREP DIR PREP-sky
 'towards north / northwards' 'go towards the sky = upwards'
 OT: "hacia el norte" (G-S) OT: "allá arriba" (Ch-F)

Prepositional compounds indicating directionals behave morphosyntactically as single nouns. In X_{Ch} the compound indicating the cardinal direction 'north' is attested as the modifying element (attributive noun) in the nominal compound denoting the rainy season. The conceptual equation of 'north' with rain storms and cold temperatures is common in all of Mesoamerica.¹⁴¹

- (8. 75) <sagóna wári>
 sa-wona wari
 PREP-hill rain
 'northern-rain = rainy season'
 OT: "temporal" (Ch-S)

Complex prepositions are only attested in the comparative data (§ 9). We may assume that they existed in Maldonado-Xinka, even though they have not been documented by the colonial author. Complex prepositions combine the preposition *šan* and a body part term indicating the position of an entity in relation to the human body. They form an intrinsic system of spatial reference denoting the spatial relations of 'before' (8. 76a), 'behind' (b-c) and 'below' (d-e). For the complex preposition 'below, downwards', the etymology of the head root is ambivalent and could be derived either from the body part term *paha* 'arm', as suggested by the example from X_Y , or from the prepositional root *pa-*; i.e. *šan* + *pa* [towards + under/below] 'below, downwards'.

- (8. 76) a. <ra urrutiy> b. <n'dupani ran uluc>
 ra ʔuruti-y n-tupa ni ran ʔulu-k
 PREP eyes-2sP 1sS-stay PN:1s PREP back-2sP
 'at your eyes = before you' 'I stayed at your back = behind you'
 OT: "delante de ti" (Ch-C) OT: "me quedo detrás de ti" (Ch-C)

¹⁴¹ With respect to this, it needs to be noted that in the Xinka area bad storms and rains usually come from the Pacific, i.e. from the south.

- c. <sutaj utün>
 su-tah ʔiti-n
 PREP-? back-1sP
 'at my back = behind me'
 OT: "detrás de mi" (Y-C)
- d. <san pajan>
 šan paha-n
 PREP arm-1sP
 'at my arm = below me'
 OT: "abajo de sobaco" (Y-C)
- e. <ram'pay>
 ram pa-y
 PREP arm-3sP
 'at his arm = below him'
 OT: "abajo" (Ch-MQb)

8.3.1.4.3 Temporal adverbs

The preposition *šan*, or *šama*, preceding a temporal head noun can form a compound that is used as a temporal adverb (cf. § 14.3.3). The temporal compound can function as a nominal predicate and host the perfective/relational adverbial *paʔ* (or *paʔa*) (see § 12.5.2). In the ALS, the form is attested with the temporal head nouns *pari* 'day' and *šʔma* 'night'.

- (8. 77) a. <szam pari paʔ>
 šam pari paʔ
 PREP sun, day PFV
 '(it is) already in (the) day'
 OT: "ya es de día, ya es tarde" (4440.)
- b. <szamacsuema>
 šama-k šʔ(ʔ)ma
 PREP-? night
 '(it is) in the night = (early) morning'
 OT: "de mañana" (4430.)

The comparative data from X_G and X_{Ch} show that the prepositional compound *šan pari* makes reference to the beginning of the day and is variously translated as 'early' ("temprano"), 'morning' ("mañana"), or 'dawn' ("aurora"). When combined with a perfective adverbial it indicates "ya es tarde" = 'it is already late' (in the morning/beginning of the day)".

- (8. 78) a. šam-pari paʔaʔ
 PREP-sun, day PFV
 '(it is) already in (the) day' (G-RHG)
- b. <xambari>, <šam 'bari>
 šam-pari
 PREP-sun, day
 '(it is) in (the) day = morning'
 OT: "temprano en la mañana" (Ch-F); "aurora" (Ch-MQb)

When referring to the afternoon, the phrase "ya es tarde", is expressed with the temporal noun *nankun* 'afternoon, midday' ("tarde, medio día"). Such contexts including the perfective marker are only attested in the comparative data.

- (8. 79) ša nankun paʔaʔ
 PREP afternoon PFV
 '(it is) already afternoon = it is late' (G-JAP)

The prepositional compound involving the head noun *šʔma* 'night' ("noche") occurs variously with the free prepositions *šama* and *šan* as well as with the bound form *ša-*. The function of the suffix *-k*, which marks the preposition in the ALS, is unclear. The temporal reference of the compound is also a bit ambiguous. While the ALS and some entries in X_{Ch} suggest that it refers to the early morning (possibly the time after midnight) (8. 80a), translation contexts from X_G , X_{Ch} and X_{Jum} indicate a general reference to the night ("de noche") (8. 80b-d), or in combination with the perfective marker even the beginning of the night (8. 80e).

- (8. 80) a. <jansúma>
han-su(?)ma
PREP-night
'in(side) the night = the morning'
OT: "la mañana" (Ch-C)
- b. ša-siʔma
PREP-night
'in the night = at night' (G-RHG)
- c. <ra suma>, <rassuma>, <rasu'cma>
ra-su(?)ma
PREP-night
'in the night = at night'
OT: "de noche" (Ch-F), "ya es noche" (Ch-JC)
- d. <sanzuma>
san-suma
PREP-night
'in the night = at night'
OT: "en la noche, oscuro" (Jum-E)
- e. <rassumabar>
ra-su(?)ma bar
PREP-night PFV
'it is already night = nightfall'
OT: "anohecido" (Ch-F)

The ambiguity either reflects actual usage or has to be explained by semantic change in the different Xinka varieties. The translation of the compound as 'early morning' may also be a remnant of a formerly more complex noun phrase, as it is attested in X_{Ch} where both temporal nouns, *siʔma* and *pari*, occur in a nominal compound that refers to precisely that time of the day. In the given context, *siʔma* functions as an attributive noun modifying the meaning of the head noun *pari*, rendering a literal translation as 'in night(ish) day'. The same structural pattern is attested in X_Y in a prepositional compound referring to the time 'at noon'.

- (8. 81) a. <jansúma pári>
han suʔma pari
PREP night day
'in night-day = early in the morning'
OT: "es temprano de la mañana" (Ch-C)
- b. <santz'icri parri>
san ɛ'ikri pari
PREP mid, half day
'in, at mid-day'
OT: "mediodía" (Y-C)

Also in X_{Ch} , we find evidence that prepositional compounds can function as a derivational basis. In the given example the noun takes the inchoative marker *-ki* (§ 11.3.2). The derived inchoative verb refers to the meaning of the prepositional compound.

- (8. 82) <rassumaki>
ra-su(?)ma-ki
PREP-night-INCH
'become night'
OT: "anohecer" (Ch-F)

8.3.1.4.4 Body part terms

A number of body part nouns are prepositional compounds consisting of a preposition (*šan*, *ʔaʔ* or *para*) that precedes a non-derived body part term as head noun. These compounds are descriptive terms and denote body parts by making spatial reference to specific locations on the human body.

Body part compounds with the preposition *šan* specify a part of the body which is 'in(side)' the body part that is denoted by the head noun; i.e. *šan-šaha* [PREP:in-mouth] "dientes" = 'inside the mouth'. Before nasals, *šan* changes to *ša*; in all other cases, it is the free prepositional form *šan* that occurs with body part compounds.

- (8. 83) a. <szanszaja>
šan-šaha
 PREP-mouth
 'in the mouth = teeth'
 OT: "los dientes" (4444.)
- b. <szanszana>
šan-šana
 PREP-?
 'on the ? = clothing, cover'
 OT: "vestido, ropa de ponerse" (4445.)
- c. <szanszeeque>
šan-šeke
 PREP-ribs
 'on the ribs = chest'
 OT: "pecho, costillas" (4447.)
- d. <szamini>
šam-(h)ini
 PREP-stomach
 'in the stomach = stomach ache'
 OT: "dolor de barriga" (4490.)

Further compounds denoting body parts are attested in the comparative data (8. 84). Here, the preposition likewise indicates a spatial reference to a position 'inside' the body part denoted by the head noun. In the final example (d), the reference is to the prepositional concept 'below'.

- (8. 84) a. <rambamá>
 ram-pama
 PREP-arm
 'in the arm = armpit'
 OT: "sobaco" (Ch-F)
- b. <xampú>
 šam-pu
 PREP-hand
 'in the hand = palm'
 OT: "palma de la mano" (Ch-F)
- c. <ranʔlɛ>
 ran-ʔlɛ
 PREP-back
 'in the back = lungs'
 OT: "pulmón" (Ch-MQb)
- d. <ranguapa>
 ran-wapa
 PREP-foot
 'in the foot = foot-sole'
 OT: "planta del pie" (Ch-F)

In the comparative data we also find a number of compounds that consist of *šan* preceding body part nouns without changing the meaning of the head noun. This pattern seems to be especially common in X_G .

- (8. 85) a. ša-mami
 PREP-ear
 'in the ear = ear' (G-PE)
- b. ša-nari
 PREP-nose
 'in the nose = nose' (G-SH)
- c. <xancomó>
 šan-komo
 PREP-knee
 'in/on the knee = knee'
 OT: "rodilla" (Ch-F)
- d. <ran'rahΛ>
 ran-rah
 PREP-mouth
 'in/on the mouth = mouth'
 OT: "boca" (Ch-MQb)
- e. <sanjuratiy>
 šan-huratiy
 PREP-eyes
 'in/on the eyes = face'
 OT: "cara" (Y-C)

Body part terms combining with the preposition *ʔaʔ* specify a position 'on top of' the body part denoted by the head noun. The majority of these compounds are found in the ALS. There are no cases where the preposition does not change the meaning of the head noun, like it is often attested with body part nouns involving the preposition *šan*.

- (8. 86) a. <aʔguapi>
ʔaʔ-wapi
 PREP:over-foot
 'over the foot = dorsum of the foot'
 OT: "empeine del pie" (3619.)
- b. <aʔpamag>
ʔaʔ-pama-h
 PREP:over-arm-3sP
 'over his arm = shoulder'
 OT: "los hombros" (3614.)

- c. <aŁte>
ʔaŁ-te
 PREP:over-female genitals
 'over female genitals = male genitals'
 OT:"*membrum virile*" (3616.)

In the comparative data only the term for 'shoulder' is attested. The translation context given by Fernández indicates the literal translation of the term as 'on top of the arm'. The compound term is the same in X_G and X_{Ch} .

(8. 87)	a. <aŁpamá> ʔaŁ-pama-ʔ PREP:over/above-arm-ʔ 'over the arm = shoulder' OT:"hombro" (G-S)	b. <alj pamá> ʔaŁ-pama-ʔ PREP:over/above-arm-ʔ 'above the arm' OT:"sobre el brazo" (Ch-F)

The preposition *para* is only attested in compounds that denote body parts (8. 88). The preposition makes spatial reference to a position 'underneath' or 'behind' the body part denoted by the head noun. The majority of these compounds are attested in the ALS.

(8. 88)	a. <paraguapi> para-wapi PREP:below-foot 'below the foot = sole of the foot' OT:"planta del pie" (4246.)	b. <paraszaja> para-šaha PREP:below/behind-mouth 'below the mouth = jaw' OT:"cachetes" (4250.)
	c. <paratáŁi> para-taŁi PREP:below-throat 'below the throat = neck' OT:"pescuezo" (4249.)	d. <parapáamag> para-pama-h PREP:below/behind-arm-3sP 'below his arm = arm pit' OT:"senos, sobacos de los brazos" (4248.)

There is one example in the ALS where the preposition *para* is used to specify a part of the house.

- (8. 89) <parapaēi>
para-pak'i
 PREP:below-pared
 'corner of the house'
 OT:"el rincón de la casa" (4247.)

In the comparative data body part compounds involving the preposition *para* or *pa* are nearly unattested. In the following example the translation contexts suggests that the preposition may not form part of a compound.

- (8. 90) <pokche pa ra tajla>
 pokče para taŁa
 goitre PREP throat
 '(the) goitre is at the neck'
 OT:"el bocio está en el pescuezo" (Ch-C)

8.3.2 Possessive compounds

Hierarchical compounds that consist of a head noun in first position and the modifying or specifying noun in second position are structurally and semantically similar to possessive phrases (see § 16.1.3) and will be labelled here 'possessive

compounds'.¹⁴² The head noun indicates the possessum, the noun following in second position refers to the possessor. However, possessive compounds differ morphosyntactically from possessive phrases in that the possessive relation is not marked with cross-referencing affixes on the head noun, or possessum. Possessive compounds can combine nominal roots or derived nouns.

A large number of possessive compounds are complex body part terms. The majority of these combine two body part terms, of which the first one functions as the head noun that is modified, or specified, by the second one that may also carry possessor marking. In some cases the head noun in initial position may delete its final vowel, indicating that both words qualify formally as a compound.

(8. 91)	a. <jarari uelueg> harari ʔiɪ-h bone back-3sP 'bone of his back = his backbone' OT: "hueso del espinazo" (3937.)	b. <jauszaja> haw-šaha skin-mouth 'skin of the mouth = lips' OT: "los labios" (3943.)
	c. <juray guapi> huray wapi eye foot 'eye of the foot = bone of the foot' OT: "el hueso, que llaman ojo de pie" (3983.)	d. <musz juray> muš-huray hair -eyes 'hair of the eyes = eye lashes' OT: "las pestañas" (4113.)

Complex body part terms can also combine a kinship term as head noun and a body part noun in second position.

(8. 92)	a. <nauguapi> naʔu-wapi child-foot 'child of the foot = toe' OT: "dedos de los pies" (4163.)	b. <naupu> naʔu-pu child-hand 'child of the hand = finger' OT: "los dedos de las manos" (4164.)

Possessive compounds denote a number of other nominal concepts that involve body part terms as head nouns. The modifying noun in second position can be an animal or plant designation, an object, natural element or a reference to space. Some of the head nouns in initial position have lost their final vowel, which indicates that these compounds are single word forms.

(8. 93)	a. <jautuma> jaw-tuma skin-deer 'skin of the deer = deer skin' OT: "piel de ganado" (3944.)	b. <nari uray> nari ʔuray nose fire 'nose of the fire = half-burned log' OT: "el tizón" (4159.)
	c. <muszcaragua> muš-karawa hair -wilderness, woods 'hair of the woods = rubbish, waste' OT: "la basura" (4111.)	d. <ueluemacu> ʔiɪ-maku back-house 'back of the house = behind the house' OT: "lo de detrás de la casa" (4735.)
	e. <uruɩ miya> ʔuruɩ miya egg chicken 'egg of the chicken = chicken egg' OT: "huevo de gallina" (4695.)	f. <piyaguayá> piya-wayá leaf-milpa 'leaf of the milpa' OT: "la hoja de milpa" (4307.)

¹⁴² Greenberg referred to this type of phrase as a 'noun-genitive' (Greenberg 1966:78); Campbell uses the term 'possessor-possessum-construction' (Campbell & Mithun 1979:956-957).

Possessive compounds also denote other descriptive nominal concepts that do not involve or specify body part terms. However, in the majority of these compounds animal terms function as modifying nouns.

- (8. 94)
- | | |
|--|---|
| <p>a. <uy guaacas>
 ʔuy wakaš
 water meat/beef
 'water of meat = broth'
 OT: "caldo" (4720.)</p> <p>c. <macu uguał>
 maku ʔuwał
 house ant
 'house of ant = ant hill'
 OT: "el hormiguero" (4050.)</p> | <p>b. <pøepøe miya>
 pipi miya
 tamal chicken
 'tamal of chicken = chicken tamal'
 OT: "tamal de gallina/pipián" (4356.)</p> <p>d. <ószo ambuqui>
 ʔošto ʔampuki
 wound snake
 'wound of snake = king's evil (illness)'
 OT: "los lamparones, crispéla; enfermedad" (4212.)</p> |
|--|---|

Instrumental nouns, which can be derived from transitive as well as intransitive roots, are attested as head nouns of possessive compounds.

- (8. 95)
- | | |
|--|--|
| <p>a. <guisucnuguí>
 wišu-k nuwi
 beat-INSTR cotton
 'beating-instrument (of/from) cotton
 = cotton whip'
 OT: "sacudidor de algodón" (3883.)</p> <p>c. <jayuc szaja>
 hayu-k šaha
 clean-INSTR mouth
 'cleaning instrument for the mouth = napkin'
 OT: "pañó de cholate, servilleta" (4261.)</p> | <p>b. <ticieguaru>
 ti:k'i-k waru
 sleep-INSTR net
 'sleeping-instrument (of/from) net
 = hammock'
 OT: "la hamáca" (4573.)</p> <p>d. <pueszøecsina>
 pšit-k šina
 ?-INSTR orín
 '?-instrument for urine = pee-pot'
 OT: "la jícara de orines" (4364.)</p> |
|--|--|

8.3.3 Coordinate compounds

Coordinate compounds consist of two nouns of which none functions as a head. Both nouns may be derived stems. There are only a few coordinate compounds attested in the ALS. The meaning referred to is not transparent from the constituents.

Most coordinate compounds found in Maldonado-Xinka are parallel compounds, that is, two different semantic concepts form a new concept. Most of these parallel compounds denote animal and plant terms; some seem to function as *pars-pro-toto* terms.

- (8. 96)
- | | |
|---|--|
| <p>a. <szuguay Łamuc>
 šuway łamuk
 lizard shrimp
 'lizard-shrimp = sea devil'
 OT: "el peje armado" (4496.)</p> <p>c. <cuszcuszipari>
 kuškuš pari
 owl/hawk sun, day
 'owl sun/day = type of tree'
 OT: "cierto árbol, barbona" (3778.)</p> | <p>b. <amuambuqui>
 ʔamu ʔampuki
 spider snake
 'spider-snake = cancer'
 OT: "el herpes, cancro" (3628.)</p> <p>d. <jajŁa cuchilo>
 habŁa cuchillo
 scratch/raise Sp:knife
 'scratch/raise-knife
 = instrument for weeding, hoe'
 OT: "cutachilla, instr. con que deshieran" (3916.)</p> |
|---|--|

The noun root *tili* occurs in second position of several parallel compounds; the lexeme is not attested in a single context with a separate/definable meaning. The term is a loanword from Mayan that is reconstructed for pM as **til* 'burn' (Kaufman 2003:524). The semantic concept of 'burning' is reflected in the usage of the root *tili* in Xinka compound nouns. In the ALS *tili* occurs mostly in synonymic compounds with nouns describing temperatures, i.e. *pari* 'sun, heat', *taʔa* 'heat, fever', *taw* 'cold, wind', and *piʔa* '?'. The semantic contexts seem to suggest that *tili* carries the meaning 'heat/burn/ache'.

(8. 97) a. <paritili> pari tili heat burn/ache 'heat-ache= sunstroke' OT: "la calentura de tabardillo" (4258.)	b. <taʔa tili> taʔa tili burn burn/ache 'burn(ing)-ache= fever' OT: "calentura" (4539.)
c. <piʔatili> piʔa tili ? burn/ache '?-ache = urge' OT: "calamidad, necesidad" (4293.)	d. <tautaʔatili> taw-taʔa tili cold-burn burn/ache 'cold-burn(ing)-ache= shivers' OT: "frios y calenturas" (4553.)

In X_G and X_{Ch} *tili* occurs in the same contexts as in the ALS. In the Zeeje-ms., *tili* is attested in a compound with the lexeme *muka* 'work, tribute', which translates as 'slavery'. Here, the concept of 'temperature/heat' is applied metaphorically to denote 'suffering' and 'hardship'. It is unclear whether the form *-tile* in the last example from X_{Ch} refers to a similar concept.

(8. 98) a. <taʔatitili> taʔa tiʔli burn(ing) burn/ache 'burn(ing)-ache= fever' OT: "calentura" (G-S)	b. <mucatili> muka tili work, tribute burn/ache 'work/tribute-ache = slavery' OT: "esclavitud" (Ch-Z)
c. <ʔuytile> ʔuy-tile water-? 'spit, saliva' OT: "saliva" (Ch-MQb)	

8.3.4 Verb-noun compounds

Some nominal compounds have the structure of a verb phrase. They consist of a nominalised verb or participle which precedes a noun that functions as the S argument of the verb. The majority of verbs attested in this context are intransitive. With a transitive head verb the noun following in second position functions as direct object. Morphosyntactically, the verb phrases behave as nouns, which is why they are classified here as nominal compounds, despite the fact that the head of the construction is a verb. Maldonado de Matos indicates most forms as one word; the stress also seems to suggest that the forms are treated as single word forms.

In most verb-noun compounds, the head verb is unmarked. Morphosyntactically, these compounds are verbal nouns (or infinitives) that are extended by a noun phrase in S function. These verb-noun compounds are descriptive terms that refer to the activity or function of a nominal protagonist, which could be real or abstract, e.g. dusk, nightfall = 'enter-wilderness'; wall poles/wattle = 'nail(ing)-pole'.

- (8. 99) a. <guasztacarágua>
wašta-karawa
 enter-woods/wilderness
 'enter-wilderness = dusk, nightfall'
 OT: "vispera" (3854.)
- b. <txuəguə mapue>
ɕ'iwí-mapí
 bend corn-tortilla
 'bend corn-tortilla = tortilla from fresh corn'
 OT: "tortilla de maíz tierno" (4657.)
- c. <jaraLa mapue>
haraŋa-mapí
 toast-tortilla
 'toast-tortilla'
 OT: "tortilla tostada" (3930.)
- d. <packuszája>
pak'u-šaha
 V: nail-mouth
 '?-mouth = lie'
 OT: "mentira" (4219.)
- e. <paəajutu>
pak'a-hutu
 V: nail-tree/wood
 'nail-wood = wall poles/wattle'
 OT: "palos, parales en el bajareque de la casa" (4215.)

In Xinka we find phrasal verbs (§ 10.1.4.2) that are strictly speaking verb-noun compounds where prepositions occupy the functional slot of the noun. In the following examples, the preposition *šama* specifies "(the) inside" as a location.

- (8. 100) a. <acuszáma>
?aku-šama
 go-PREP/N: inside
 'go inside = sadness'
 OT: "tristeza" (3592.)
- b. <nuema szama>
néma-šama
 eat-PREP/N: inside
 'eat inside = sadness'
 OT: "tristeza, cuidados" (4187.)

Accent marking in the following examples suggests that these compounds are not single word forms. The verb root seems to carry a glottal stop that marks either a third person singular past/perfective or a participle form. The verb-nouns make reference to a nominal entity by indicating a state of action, or immediate result of an activity, which affects the noun in second position; e.g. diarrhea = 'passed-stomach'.

- (8. 101) a. <japáginíy>
hapa-ʔ hini
 pass-STAT stomach
 'passed-stomach = diarrhea'
 OT: "evacuaciones" (3926.)
- b. <guitá jugua>
wita-ʔ huwa
 soft-STAT zapote
 'softened-zapote = mashed banana'
 OT: "plátano pasado" (3871.)

There are verb-noun compounds with intransitive verbs marked with the suffix *-wa* in initial position. The function of the marker in this context is not entirely clear. The marker is attested in nominal contexts, deriving the perfect participle (§ 11.1.2.2) or a locative noun (§ 11.1.3.3), as well as in verbal function as a TAM marker for anterior/perfect (§ 12.2.3). In the given examples *-wa* could plausibly take both functions, that of the anterior/perfect verb marker as well as that of the locative nominaliser.

- (8. 102) a. <guasztaguasüema>
wašta-wa šima
 enter-ANT/LOC night
 '(where) the night entered = nightfall'
 OT: "entrada de la noche" (3851.)
- b. <seLè guapari>
seŋe-wa pari
 set aside-ANT/LOC sol
 '(where) the sun set aside = sunset'
 OT: "la tarde, caída del sol" (4378.)
- c. <tagnaguajaya>
tahna-wa haya
 be born-ANT/LOC female
 'place of being born of female
 = female genitals'
 OT: "partes genitales de la mujer" (4533.)
- d. <teroguasaguac>
tero-wa sawak
 die/kill-ANT/LOC metal/bell
 '(where) died/was killed – bell
 = death bell'
 OT: "dobles de las campanas" (4570.)

In other verb-noun compounds the head verb is nominalised with the agentive marker *-ʔ(a)* (§ 11.1.3.2). Technically, these compounds are therefore noun-noun compounds. In all cases the verb is transitive and the following noun functions as a direct object.

- (8. 103) <jooroʔ. caguayo>
 ho:ro-ʔ **kawayo**
 guard/get-AGT horse
 'who guards horse = horse guard'
 OT:"guarda caballo" (3957.)
- (8. 104) a. <sacsal mijya> b. <ocolá tajma>
 saksa-l miya ʔoko-la tahma
 steal-AGT chicken go-AGT path
 'who steals chicken = chicken thief' 'who walks the path = traveller'
 OT:"ladrón de gallinas" (Y-C) OT:"caminante" (Ch-F)

8.4 Number

Xinka distinguishes singular and plural. While singular is unmarked, plural can be marked in different ways depending on the type of referent of the countable noun. As it is the case in other Mesoamerican languages, Xinka marks plural morphologically only on nouns with an animate or human referent (cf. Campbell 1979:957; Campbell, Kaufman & Smith-Stark 1986:550). Among the human referents, kinship nouns form a special class that exhibits a specific pattern of plural marking. Inanimate/non-human referents mark number by means of modifiers (adjectival/nominal) with the meaning 'all/many', which is also not uncommon in Mesoamerica (cf. Suárez 1983:86). Maldonado de Matos describes this category as the second declination (fol. 19r).

Number is marked only on nouns. In noun phrases that include an adjectival modifier, the modifier is not marked for plural to constitute agreement.

8.4.1 Inanimate/non-human nouns

On inanimate and animate/non-human referents of countable nouns plural is indicated by means of quantifiers. In the ALS, the plural modifiers *te:na-* 'much', *taha-* 'many' and *tumu-* 'all' occur in this function. The quantifier *tumu-* may be related to the transitive verb *tumu* 'to complete sth.', indicating the concept of 'completeness' (= 'all'); the etymology of *te:na-* and *taha-* is unclear.

Table 8. 4: Quantifiers on inanimate/non-human nouns

FORM	ORIGINAL GLOSS	GLOSS
<teenan> te:na-n	"mucho, bastante"	= 'much'
<teená> te:naʔ		
<tajá> tahaʔ	"muchas veces"	= 'many'
<tumuqui> tumu-ki	"todo, todos"	= 'all'
<tumun> tumu-n		

These quantifier roots are always marked with a suffix or clitic. The suffixes/enclitics attested in this context are *-n*, *-ʔ* and *-ki*. The quantifiers *te:na-* and

tumu- occur in the ALS with the suffix *-n* that may be identified as the marker for subjunctive/irrealis, which refers here to an unspecific mass/number, and therefore to something that is 'unreal' (§ 13.3.2). The quantifier *tumu-* occurs in most contexts with *=ki*, which is likely identified as an intensifier with distributive function (see § 7.2.2.1.4). This distributive marker is also attested with the quantifier *taha-*. However, in most contexts *taha-* ends in *-ʔ* that is also attested with the quantifier *te:na-*. The respective function of *-ʔ* in the given contexts is not understood.

8.4.1.1 Quantifier *te:na-*

The quantifier *te:na-* is attested in X_M , X_G and X_{Ch} (Zeeje-ms.) with inanimate and animate/non-human nouns. The difference of the form *te:na-n*, marked with the irrealis *-n*, and *te:na-ʔ*, marked with *-ʔ*, cannot be definitely concluded from the given contexts; other than that *te:na-n* might refer to a more indefinite mass. The form *te:na-ʔ* is used in X_G in adverbial function (see below). In the ALS it is not attested in any syntactic context. All examples in the Maldonado-data and in the Zeeje-ms., where the quantifier indicates plural on noun phrases, employ the form *te:na-n*.

Table 8. 5: Comparative chart of the quantifier *te:na-*

	FORM	ORIGINAL GLOSS
X_M	<teená>	<i>te:na-ʔ</i> "bastante, mucho"
	<teenan>	<i>te:na-n</i> "mucho"
X_G	<tenáʔ>, <teʔená>	<i>tena-ʔ</i> , <i>teʔna</i> "muchos (objetos y personas)" (G-S)
X_{Ch}	<tenan>	<i>tena-n</i> "numerosas, tantos" (Ch-Z)

Morphosyntactically, the quantifier *te:na-* functions like an adjective that precedes the head of the noun phrase (8. 105). In the given contexts, determiners and adpositional forms always precede the quantifier (c-d).

- (8. 105) a. <teñan giru>
te:na-n **hiru**
 QUANT-IRR? monkey
 'much monkey = monkeys'
 OT: "monos, muchos monos" (17.)
- b. <tenan jutu>
te:na-n **hutu**
 QUANT-IRR? tree
 'much tree = trees'
 OT: "palo (plural)" (3991.)
- c. <na teñan jurai ic>
na **te:na-n** **huraʔi-k**
 DET QUANT-IRR? eyes/face-1pP
 'to our faces'
 OT: "a nuestras caras" (384.)
- d. <neʔa teenan mácu>
neʔa **te:na-n** **maku**
 BEN QUANT-IRR? house
 'of much houses'
 OT: "de las casas" (50.)

In the Zeeje-ms. the quantifier precedes primarily Spanish nouns that are sometimes also marked with the Spanish plural suffix.

- (8. 106) a. <jamá tenan desastres>
 hama tena-n *desastre-s*
 PREP QUANT-IRR? disaster-PL(Sp.)
 'in much disaster'
 OT: "en medio de tantos desastres" (Ch-Z)
- b. <nelag tenan mal>
 nelah tena-n *mal*
 BEN QUANT-IRR? Sp:bad
 'of much bad (things)'
 OT: "de tantos males" (Ch-Z)

There is one example in the ALS of *te:na-* marking plural on a noun with a human/animate referent (8. 107). The noun phrase head is an agentive noun that occurs elsewhere with the animate/human plural suffix *-ʔi* (§ 8.4.2).

In X_{Ch} *taha-* 'all, much' ('todo, mucho, bastante') is used to indicate plural on non-human and inanimate nouns. It precedes countable (e.g. 'chicken') and uncountable nouns (e.g. 'mud') alike. The function of the final marker -ʔ that is indicated by the accent signs in the original orthography is not understood.

- (8. 110) a. <tajá migia>
 taha-ʔ miya
 QUANT-ʔ chicken
 'many chicken'
 OT: "muchas gallinas" (Ch-JC)
- b. <tajá murúrri>
 taha-ʔ mururi
 QUANT-ʔ beard
 'many beards'
 OT: "todos son barbados" (Ch-C)
- c. <taja' marra>
 taha-ʔ mara
 QUANT-ʔ mud
 'much mud'
 OT: "mucho lodo" (Ch-JC)

In X_{Ch} and X_Y *taha-* marks quantity on abstract nouns such as environmental conditions and repeated actions (= 'times') (8. 111). While the abstract noun in the second example is countable, the environmental concept of 'heat' is only quantifiable in terms of intensity, but not number.

- (8. 111) a. <tajá jururú>
 taha-ʔ hururuʔ
 QUANT-ʔ heat
 'much heat'
 OT: "mucho calor" (Ch-JC)
- b. <taja suyi>
 taha-ʔ suyi
 QUANT-ʔ times
 'many times'
 OT: "muchas veces" (Y-C)

Nominal compounds are marked with the quantifier *taha-* in the same manner as simple nouns.

- (8. 112) <tajá macúc nugüi>
 tahaʔ maku-k nuwi
 QUANT-ʔ house-INSTR straw
 'many straw-thatched houses'
 OT: "muchas casas de paja" (Ch-JC)

In the language data of Julián Cruz we find examples of *taha-* preceding animate/human nouns that are marked with the animate/human plural suffix -ʔi (or -ʔe) (8. 113). The quantifier may function here simply as an intensifier rather than as a plural. However, it has not been clarified whether the redundant combination of quantifier and bound plural marker may be the result of language decay. This may be suggested, as Julian Cruz also employs *taha-* with singular animate/human nouns (d).

- (8. 113) a. <ulú tajá guayajhlí>
 ʔuʔu-ʔ taha-ʔ waya-ʔi
 fall-STAT QUANT-ʔ milpa-PL
 'it fell (= he fell) many milpas'
 OT: "botó mucha milpa" (Ch-JC)
- b. <tajá onelhe>
 taha-ʔ ʔone-ʔe
 QUANT-ʔ soft/baby-PL
 'many babies'
 OT: "que patojal" (Ch-JC)
- c. <tajá jono huajlo>
 taha-ʔ hono-wa-ʔe
 QUANT-ʔ get drunk-ANT-PL
 'many drunks'
 OT: "muchos bolos" (Ch-JC)
- d. <taja' frack>
 taha-ʔ frak'
 QUANT-ʔ man
 'many men'
 OT: "muchos hombres" (Ch-JC)

In X_Y *taha-* can precede a verb phrase, referencing the noun that functions as an O argument to the verbal predicate.

- (8. 114) <taja joron perepun>
 taha-? horo-n pere-pu-n
 QUANT-? get-1sA small-hand-1sP
 'I got (= have) many fingers'
 OT: "tengo muchos dedos" (Y-C)

In X_{Ch} *taha-* is attested in adverbial function, preceding nominal predicates with zero-copula. In example (8. 115b) the nominal predicate consists in an uninflected verb. Depending on the predicate the marker indicates the quantity or intensity of the action.

- (8. 115) a. <tajá tulma> b. <taja' cagüi na one>
 taha-? tuwa taha-? kawí na ʔone
 QUANT-? cacao/value QUANT-? cry DET baby
 'much (is the) the value' 'much crying (is) the baby'
 OT: "vale mucho" (Ch-C) OT: "mucho llora el nene" (Ch-JC)

In X_G and X_{Ch} , *taha-?* occurs independently in nominal function, representing the O argument of imperative or negated transitive predicates.

- (8. 116) a. <im pe tahá?> b. <jlhan mujnicua tajá>
 ʔim pe(ʔ) taha? ʔan mu-niwa taha?
 say IMP all NEG 3sA-want all/much
 'say (it) all!' 'he does not want all/much'
 OT: "que se diga todo! dígallo todo!" (G-S) OT: "no quiere bastante" (Ch-JC)

In X_{Ch} *taha-?* is attested with the negative marker *ʔan*. It is not clear whether this complex noun phrase occurs in the function of a predicate argument, or whether it functions as a negative quantifier preceding noun phrases.

- (8. 117) <landajá>
 ʔan taha-?
 NEG QUANT-?
 'not much = little'
 OT: "poco" (Ch-F)

The quantifier also marks plural on the human/person interrogative *wanin* 'who?'. Preceded by the question word, *taha-?* occurs in nominal function. The phrase can be literally translated as 'who all?'.
 (8. 118) <wa nintaj la?>
 wanin taʔa-?
 INT:who? QUANT-?
 'who all?'
 OT: "who" (Ch-MA)

8.4.1.3 Quantifier *tumu-*

The quantifier *tumu-* 'all' is attested in the ALS and in X_{Ch} . As pointed out above, it is possible that the form is etymologically related to the transitive verb *tumu* 'finish, complete'; hypothetically *tumu-* could be indicating the concept 'completed' (= 'all').

Table 8. 7: Comparative chart of quantifier *tumu-*

	FORM		ORIGINAL GLOSS
X_M	<tumuqui>	tumu=ki	"todo, todos"
	<tumun>	tumu-n	
X_{Ch}	<tumukí>	tumu=ki	"todo, todos" (Ch-C), (Ch-F)
	<tumuque>	tumu=ke	"todo, todos" (Ch-Z)

In the majority of attested cases the quantifier *tumu-* is marked with the clitic *=ki* that either has intensifier or distributive function (see § 7.2.2.1.4). In X_{Ch} the quantifier *tumu* can combine with the intensifier-reflexive *kiwa-*, which takes cross-referencing suffixes. This construction literally translates as 'all X-selves'.

- (8. 119) a. <tumuquiguac>
 tumu kiwa-k
 QUANT INTENS/REFL-1pP
 'all ourselves'
 OT: "somos todos" (Ch-Z)
- b. <miki-gualá tumuki gua-ki>
 *muka-wa-la? tumu kiwa-ki
 work-ANT-AGT QUANT INTENS/REFL-3p/PL
 'all themselves are workers'
 OT: "todos fueron al trabajo" (Ch-F)

Maldonado de Matos uses the quantifier *tumu* also with the subjunctive/irrealis marker *-n* that is otherwise attested with the quantifier *te:na-*. In the only example of this form, the quantifier *tumu-n* precedes a noun phrase head, which is marked with *=ki* that seems to have distributive function in this context.

- (8. 120) <tumun pariui>
 tumu-n **pari=ki**
 QUANT-IRR? day=INTENS/DISTR
 'all days = every (of the) days'
 OT: "todos los días" (2032.)

In Maldonado-Xinka *tumu=ki* is used to indicate plural with simple and complex noun phrases. The quantifier precedes animate as well as inanimate nouns. Although *tumu=ki* primarily expresses the concept 'all', plural is not separately marked on noun phrases that are preceded by the quantifier.

- (8. 121) a. <tumuqui pari>
 tumu=ki **pari**
 QUANT=DISTR day
 'all of these days = every day'
 OT: "todos los días" (2031.)
- b. <tumuquí mu guayà>
 tumu=ki **mu-wayá?**
 QUANT=DISTR 3sP-milpa
 'all of his milpas'
 OT: "todas sus milpas" (275.)
- c. <tumuqui na jamaguaLa>
 tumu=ki **na** **hama-wa-ʔa**
 QUANT=DISTR DET sin-ANT-AGT
 'all of the sinners'
 OT: "todos los pecadores" (22.)
- d. <tumuqui na jamaca ay>
 tumu=ki **na** **hama-ca ʔay**
 QUANT=DISTR DET sin-2pP 2PL
 'all of your sins'
 OT: "*todos vuestros pecados" (2033.)

In X_{Ch} the quantifier *tumu-* marked with the distributive *=ki* is attested in the position before simple and complex noun phrases, including independent pronouns. Preceding non-plural nouns, it is used to indicate mass ('all, each') rather than plural.

- (8. 122) a. <tumukí huajlic>
 tumu=ki waʔik
 QUANT=DISTR PN:2p
 'all you (pl.)'
 OT: "todos vosotros" (Ch-C)
- b. <tumuque juez>
 tumu=ke juez
 QUANT=DISTR Sp:judge
 'all judges'
 OT: "todo juez" (Ch-Z)
- c. <tumukí na macu>
 tumu=ki na maku
 QUANT=DISTR DET house
 'all the house'
 OT: "toda la casa" (Ch-C)
- d. <tumuqui nanu castianuli>
 tumu=ki nanu kastyanu-li
 QUANT=DISTR FOC Spanish-PL
 'all the Spanish'
 OT: "todos los españoles" (Ch-Z)

In X_{Ch} the nominal form *tumu-ki* occurs as a mass noun expression in the function of a predicate argument that can either take the S-role (8. 123) or the O-role (8. 124). In imperative contexts and in O function, *tumuki* follows the verbal predicate.

- (8. 123) a. <tumuqui atagana unbú>
 tumu=ki ʔa-tahana =ʔən =pəʔ
 QUANT=DISTR 3sS-be =SUBJ =FUT
 'all will be'
 OT: "será todo" (Ch-Z)
- b. <iguisi tumuqui>
 ʔiwiɕ'i-Ø tumu=ki
 hear-IMP.VT QUANT=DISTR
 'hear (you) all'
 OT: "oíd todos" (Ch-Z)
- (8. 124) <ana xuxo urrumnay tumukí>
 na šušo *ʔurumu ʔay tumu=ki
 DET dog smell PROG+3sS_{DEP} QUANT=DISTR
 'the dog is smelling all'
 OT: "el perro anda olfateando todo" (Ch-C)

8.4.2 Animate/human nouns

On animate nouns with a human referent plural is marked morphologically with the suffix *-ʔi*. The operator is etymologically related to the comitative adpositional root *ʔi-* denoting 'company' (§ 9.2.4). Noun markers that express the concept 'and, company' are cross-linguistically attested and often not defined as plurals (see Payne 1997:99). In Xinka the marker has become grammaticalised indicating an unspecific number of people/animate nouns and therefore functioning as a pluraliser.

Its grammaticalisation as a suffix indicates that at an earlier evolutionary stage of Xinka, cross-referenced adpositional forms indicating 'in the company/with' followed the head noun, just as auxiliary verbs (§ 10.1.3) and demonstratives (§ 8.5.2) can be shown to occur in the position following their lexical referent. In contrast, the adpositional form *ʔi-* 'with' that is attested in the ALS and in the comparative data precedes the constituent it refers to.

The animate plural suffix *-ʔi* is attested in all Xinka varieties. Its use and application, however, vary.

Table 8. 8: Plural suffixes attested in Xinka

	FORM		GLOSS
X_M	<ʔi>, <ʔe>, <ʔa>	-ʔi, -ʔe, -ʔa	plural
X_G	<ʔi>	-ʔi, -ʔe	plural (G-S)
X_{Ch}	, <liki>	-ʔi-(ki)	plural
X_Y	<-li>, <-jli>	-liʔ, -ʔiʔ	plural

In the ALS plural on nouns is marked with the suffixes *-ʔi* and *-ʔe*. The suffix *-ʔe* marks plural only on roots with mid vowels (vowel set 2) (8. 125b-c), while *-ʔi* is attested on all other noun stems, including derived stems irrespective of their root vowel (a-b). On the animate/non-human root *maku* 'house' (see below), Maldonado de Matos marks plural with the suffix *-ʔa* (d). There are no other occurrences of this

form of the operator. The allomorphic and irregular variants suggest that suffix *-ʔi* has become fully grammaticalised as a plural marker.

- (8. 125)
- | | |
|---|---|
| <p>a. <turiLi>
 turi-ʔi
 child-PL
 'children'
 OT: "el niño (plural)" (4621.)</p> | <p>b. <joro ʔeLaLi>
 horo-k'e-ʔa-ʔi
 guard/get-AP-AGT-PL
 'guards'
 OT: "el guardián (plural)" (3959.)</p> |
| <p>c. <onéLe>
 ʔone-ʔe
 soft thing/baby-PL
 'babies'
 OT: "cosa tierna (plural)" (4194.)</p> | <p>d. <macuLa>
 maku-ʔa
 house-PL
 'houses'
 OT: "la casa (plural)" (4043.)</p> |

Independent pronouns and cross-referencing affixes are accompanied in the third person plural by the plural clitic *ʔik*, or *ki=ʔik*, which combines the adpositional root *ʔi-* 'with, company of' and the distributive marker *k(i)* (see § 6.3). In the ALS the pronominal pluraliser *ʔik* never occurs with other noun phrases. This is different in X_{Ch} and X_Y .

In X_G the same plural operators are employed as in Maldonado-Xinka. However, in the semi-speaker data we find only a few contexts where the marker is used at all. In these contexts, *-ʔi* and *-ʔe* are varied according to individual preference of the speaker rather than to harmonise with the vowel patterns. The preferred marker even with mid vowels in *-ʔi*. Schumann (1967:52) indicates that nouns ending on final consonant insert the vowel *a* between the nominal stem and the plural suffix; X_G *weren-a-ʔi* [frog-*a*-PL] 'frogs'. There are very few examples in the data that confirm this pattern.

- (8. 126)
- | | |
|--|---|
| <p>a. hura-ʔi
 man-PL
 'men' (G-PE)</p> | <p>b. turi-ʔe
 child-PL
 'children' (G-JAP)</p> |
| <p>c. <na pelóʔʔi>
 na pe:lo(?) -ʔi
 DET Sp:dog-PL
 'the dogs'
 OT: "los perros" (G-S)</p> | |

In X_{Ch} the use of *-ʔi* and *-ʔe* is likewise random. In most attested cases, *-ʔi* combines with the morpheme *ki* (see § 6.3). The plural suffix *-ʔi* and the form *-ʔiki* do not seem to differ functionally, although there is a tendency in the Calderón-data for human denotations and body part terms to be predominantly marked with *-ʔi*, while objects, plant/food and animals terms are more often attested with *-ʔiki*.

- (8. 127)
- | | |
|--|---|
| <p>a. <fragli>, <fragle>
 frak-li
 man-PL
 'men'
 OT: "hombres" (Ch-Z)</p> | <p>b. <nanu turilig>
 nanu turi-ʔih
 FOC child-PL
 'the children'
 OT: "la puerilidad" (Ch-Z)</p> |
| <p>c. <utajli>
 ʔuta-ʔi
 mother-PL
 'mothers'
 OT: "madres" (Ch-C)</p> | <p>d. <xurumujliki>
 ʃurumu-ʔiki
 young man-PL
 'young men'
 OT: "varón, joven (plural)" (Ch-C)</p> |

In X_Y we find plural marker indicated as *-li?* or *-fi*. In the Calderón-data the plural marker is sometimes preceded by the graphemes <c> or <k>; it is not entirely clear whether these graphemes indicate a glottal stop -ʔ (see § 4.1.3.1) or whether they have morphological function. There are no attested cases of the plural suffix *-fi* combining with *ki* as it is the case in X_{Ch} . The X_Y data do not indicate an allomorphic distinction of *-fi* and *-fe*.

(8. 128)	a. <papali> papa-li? uncle-PL 'uncles' OT:"tíos" (Y-C)	b. <sononclí> sononi-k-li? young man-?-PL 'young men' OT:"jóvenes" (Y-C)

All nominal stems marked with the plural suffix share the attribute of animacy. Maldonado de Matos uses the marker primarily with nouns denoting humans. Kinship nouns employ the same suffix, but add the classifier *-ka* (see below § 8.4.2.1).

(8. 129)	a. <juracLi> hurak-ti man-PL 'men' OT:"el hombre (plural)" (3974.)	b. <ayaLaLi> ?aya-ta-ti woman-PL 'women' OT:"la mujer (plural)" (3662.)
	c. <szurumuLi> šurumu-ti young man-PL 'young men' OT:"el muchacho (plural)" (4518.)	d. <tisziLi> tiši-ti lazy (person)-PL 'lazy (people)' OT:"el haragán (plural)" (4587.)

The comparative data confirm that the suffix occurs on human-animate nouns.

(8. 130)	a. šurumu-fe young man-PL 'young men' (G-SH) 'workers' OT:"trabajadores" (Ch-C)	b. <macajli> *mika-ti work-PL
	c. <jaranaijliki> harana-tiki ill-PL 'ill (people)' OT:"enfermos" (Ch-C)	d. <payili> payi-li? nurse-PL 'nurses' OT:"nueras" (Y-C)

The plural suffix only occurs with animate nouns and is therefore attested with derived agentives. In the ALS, agentive nouns always mark the plural with *-fi*, never with *-fe*. In X_{Ch} , however, we find examples of plural marking on agentives with *-fe*.

(8. 131)	a. <maraLaLi> mara-ta-ti rest-AGT-PL 'those who rest' OT:"el que descansa (plural)" (4063.)	b. <pooeLaLi> pok'e-ta-ti illuminate-AGT-PL 'those who illuminate' OT:"el que alumbra (plural)" (4311.)
	c. <caguiquiLaLi> kawi-ki-ta-ti cry-AP-AGT-PL 'those who cries' OT:"el gritón (plural)" (3687.)	

- (8. 132) a. <sagulali>, <sagulale>
 sawu-**4a-4i/4e**
 sit/settle-AGT-PL
 'those who settle = settlers, inhabitants'
 OT: "habitantes" (Ch-Z)
- b. <lopajlájli>
 lopa-**4a-4i**
 blowgun-AGT-PL
 'blowgunners'
 OT: "cerbataneros" (Ch-C)
- c. <n'an puriqui lhajli>
 nan(a) puri-ki-**4a-4i**
 FOC respond-AP-AGT-PL
 'those who respond = who get married'
 OT: "los del casamiento" (Ch-JC)

The animate plural marker occurs with toponyms that are not derived by means of a locative marker, but are ethnonyms which designate a local population, or the inhabitants of a place, and are therefore animate nouns with a human referent this may be pluralised.

- (8. 133) a. <tximajaLi>
ç'imaha-4i
 TOPN:Guazacapan-PL
 'those from Guazacapan'
 = Guazacapanecos'
 OT: "Guazacapan; pueblo (plural)" (4646.)
- b. <txegeLé>
ç'ehe-4e
 TOPN:Chiquimulilla-PL
 'those from Chiquimulilla'
 = Chiquimultecos'
 OT: "Chiquimul[illa]; pueblo (pl:)" (4644.)

The comparative data confirm this pattern; in X_{Ch} the plural marker is also attested with the general noun denoting 'town, village'.

- (8. 134) a. ç'ehe-le
 TOPN-PL
 'those from Chiquimulilla' (G-JS)
- b. <ç'imahá4i>
ç'imaha-4i
 TOPN-PL
 'those from Guazacapan'
 OT: "Guazacapan" (Ch-S)
- c. <elgtepet liqui>
7e4tepet-lik
 town/village-PL
 'town, villages'
 OT: "pueblos" (Ch-Z)

Loanwords from Mayan and Spanish with human referents likewise mark plural with the suffix *-4i*. There are several examples for this in the ALS (8. 135). In the semi-speaker data from X_G, the plural marker occurs only rarely, but can be shown to be used with Spanish human/person indicating nouns that are randomly used by the last speakers (8. 136).

- (8. 135) a. <guuenaçLi>
winak-4i
 L-M:witch-PL
 'witches'
 OT: "el brujo (plural)" (3889.)
- b. <szinuLaLi>
šinu4a-4i
 Sp:woman, lady-PL
 'women, ladies'
 OT: "señora (plural)" (4477.)
- c. <paleLé>
pale-4e
 Sp:priest-PL
 'priests'
 OT: "el sacerdote (plural)" (4236.)
- (8. 136) a. muher-4e
 Sp:woman-PL
 'women' (G-JAP)
- b. <intiuli>
 7intyu-li
 Sp:indio-PL
 'indians, indios'
 OT: "indios" (Ch-Z)

Nouns with inanimate or non-human referents mark plural with quantifiers preceding the pluralised noun phrase (see § 8.4.1). There are, however, several nouns attested in the ALS and the comparative data that employ the animate plural marker *-ʔi*. The largest semantic group among these nouns are terms denoting animals, i.e. non-human but certainly animate referents. The ALS gives only a few examples of nouns with animal referents that use the plural suffix.

- (8. 137)
- | | |
|---|---|
| <p>a. <caguayuLi>
kawayu-ʔi
Sp:horse-PL
'horses'
OT:"caballo (plural)" (3682.)</p> | <p>b. <jaszuLi>
haʃu-ʔi
pig-PL
'pigs'
OT:"marrano (plural)" (3946.)</p> |
| <p>c. <giruLi>
hiru-ʔi
monkey-PL
'monkeys'
OT:"mico, mono (plural)" (3824.)</p> | <p>d. <jujuLi>
huhu-ʔi
honeycomb-PL
'honeycombs'
OT:"panal (plural)" (3966.)</p> |

In X_G we find only a few examples of animal terms that are marked with *-ʔi*, while in X_{Ch} and X_Y animal terms are generally indicated to mark plural with *-ʔi* or *-ʔiki*.

- (8. 138)
- | | |
|--|--|
| <p>a. kawayu-ʔi
Sp:horse-PL
'horses' (G-JS)</p> | <p>c. <zicaliqui>
sika-lik
eagle-PL
'eagles'
OT:"águilas" (Ch-Z)</p> |
| <p>b. <arrújli>
ʔaru-ʔi
pig-PL
'pigs'
OT:"cerdo (plural)" (Ch-C)</p> | <p>e. <tumacli>
tuma-k-li?
deer-?-PL
'deer (pl.)'
OT:"venados" (Y-C)</p> |
| <p>d. <iruli>
ʔiru-ʔi?
monkey-PL
'monkeys'
OT:"monos" (Y-C)</p> | |

Nominal compounds of animal terms from X_{Ch} show the plural suffix always marking the second noun of the compound, irrespectively of whether this functions as head noun or as modifier of the head noun.

- (8. 139)
- | | |
|---|---|
| <p>a. <tatamiyajli>
tata miya-ʔi
father hen/chicken-PL
'father-chicken (pl.) = roosters'
OT:"gallos" (Ch-C)</p> | <p>b. <urulmiyajli>
ʔuruʔ miya-ʔi
egg hen/chicken-PL
'egg of chicken (pl.) = chicken eggs'
OT:"huevos" (Ch-C)</p> |
|---|---|

Besides animal terms, Maldonado de Matos notes that there are other non-human nouns referring to the environment as well as human-made objects which mark plural not by means of quantifiers, but with the suffix *-ʔi*. These nouns can be identified as concepts which are frequently attributed animacy in Amerindian languages (Silver & Miller 1997:24-25), but can also occur in inanimate form, which is why they can employ different sorts of plural marking, depending on their semantics in a given context.

- (8. 140)
- | | |
|---|---|
| <p>a. <jutuLi>
hutu-ʔi
tree/pole-PL
'trees'
OT:"los palos" (32.)</p> | <p>b. <gisziLi>
hiʃi-ʔi
stone-PL
'stones'
OT:"piedra (plural)" (3829.)</p> |
|---|---|

- c. <macuŁa>
maku-Ła
 house-PL
 'houses'
 OT: "casa (plural)" (4043.)

The comparative data confirm morphological plural marking for the same inanimate nouns as those indicated by Maldonado de Matos. In X_{Ch} and X_Y , there are even more nominal terms denoting environmental concepts (8. 141) and man-made objects (8. 142) that mark plural with the suffix *-Łi*.

(8. 141)	a. <tujluji> tuŁu-Łi? flower-PL 'flowers' OT: "flores" (Ch-C)	b. <utujli> Łutu-Łi tree-PL 'trees' OT: "árboles" (Ch-C)
	c. <kerteli> kerte-li? mountain, hill-PL 'mountains' OT: "cerros" (Y-C)	d. <jixili> hiŁi-li? stone-PL 'stones' OT: "las piedras" (Y-C)
(8. 142)	a. <makúŁi> maku-Łi house-PL 'houses' OT: "casas" (G-S)	b. <mug gragua liqui> *muk-krawa-lik 1pP-woods, forest-PL 'our woods/forests = our fields (?)' OT: "nuestros campos" (Ch-Z)
	c. <talimajliki> taŁma-Łiki road, path-PL 'roads, paths' OT: "caminos" (Ch-Z)	d. <guayali> waya-li? milpa-PL 'milpas' OT: "milpas" (Y-C)

In X_{Ch} and X_Y , the bound plural marker is also attested with body part terms (8. 143a-b), nouns describing food terms (c), and other objects (d). Maldonado de Matos indicates that nouns falling into the given domains mark plural by means of quantifiers.

(8. 143)	a. <tajlili> taŁi-Łi neck-PL 'necks' OT: "cuellos" (Ch-C)	b. <jararicli> harari-k-li bone-?-PL 'bones' OT: "huesos" (Y-C)
	c. <mapujliki> mapu-Łiki tortilla-PL 'tortillas' OT: "tortillas" (Ch-C)	d. <pupucli> pupu-k-li mat-?-PL 'mats' OT: "petates" (Y-C)

The data from the Zeeje-ms. show that the plural marker *-liki* not only occurs with animate nouns, but is also employed to pluralise abstract nouns that are borrowed from Spanish.

(8. 144)	a. <nanu mal liqui> nanu mal-lik FOC bad-PL 'the bad ones' OT: "los males" (Ch-Z)	b. <jan mug derechos liqui> han muh-derechos-lik PREP 3pP-Sp:rights-PL 'what (are) their rights' OT: "cuales son sus derechos" (Ch-Z)

Patterns of possessor-marking on plural nouns provide evidence that the plural marker *-ʔi* is suffixed to the nominal stem and not cliticised. On alienably possessed human/animate nouns that are marked with cross-referencing prefixes, the pronominal plural clitics of the second and third person plural follow after the nominal plural suffix *-ʔi*.

- (8. 145) a. <ca ucszaya ʔi ay>
ka-ʔuk-ʂaya-ʔi **ʔay**
 2pP-CL:old/married-female-PL 2PL
 'your (pl.) wives'
 OT: "vuestras mujeres" (308.)
- b. <mu ucszaya ʔi quiLic>
mu-ʔuk-ʂaya-ʔi **ki** **ʔik**
 3sP-CL:old/married-female-PL INTENS 3PL
 'their wives'
 OT: "sus mujeres" (309.)

In X_G and X_{Ch} , mostly with inalienably possessed nouns (body part and kinship terms), the possessor is marked with cross-referencing suffixes that follow the plural suffix *-ʔi*. With respect to the example (8. 146b) below, it needs to be mentioned that the author of the Zeeje-ms. gives the plural suffix generally as <lig> and that the presence of the possessor-marking suffix *-h* can in this case only be concluded from the translation context.

- (8. 146) a. wapi-ʔi-n
 foot-PL-1sP
 'my feet' (G-PE), (G-SH)
- b. <huy jurailig>
ʔuy **huraʔi-ʔi-h**
 water eye-PL-3sP
 'water of his eyes = his tears'
 OT: "sus lágrimas" (Ch-Z)

Although possessor marking indicates that *-ʔi* is suffixed to the nominal stem, there is one example in the ALS where the plural marker seems to precede its reference noun. It is possible that the marker is suffixed to the preceding preposition *ʂama* that modifies the noun.

- (8. 147) <szamà ʔi guína>
ʂama ʔi wina
 PREP PL festival, holiday
 'in the festival days/holidays'
 OT: "en los días festivos" (2044.)

Although Maldonado de Matos explains that adjectives are not marked for plural, we find several modifiers in the ALS that take the bound plural marker *-ʔi*. All of these forms occur in nominal function.

- (8. 148) a. <chuerueeʔeLi>
ʂrik'i-ʔi
 small-PL
 'the small ones'
 OT: "chico o pequeño (plural)" (3698.)
- b. <onéLe>
ʔone-ʔe
 soft-PL
 'the soft ones = babies'
 OT: "cosa tierna (plural)" (4194.)
- c. <cosecLe>
kosek-ʔe
 big-PL
 'the big ones'
 OT: "grandes" (11.)

In the comparative data bound plural markers are attested on adjectives in nominal function. There are a few cases of such forms attested in syntactic contexts, which show them in modifier-function preceding the noun phrase.

- (8. 149)
- a. *kep-ʔe hiʃi*
MOD?-PL stone
'there are a lot of stones' (G-RHG)
 - b. <nanu mas benefica liqui providencias>
nanu más benefica-liki providencias
FOC Sp:more Sp:benefit-PL Sp:providence
'the more beneficial providences'
OT: "las más beneficas providencias" (Ch-Z)
 - c. <perejli-nesjle>
pere-ʔi (ʔo)ne-ʔe
small-PL soft thing/baby-PL
'small babies'
OT: "hijos pequeños" (Ch-F)
 - d. <jamuli>
hami-liʔ
sour-PL
'sour ones'
OT: "agrios" (Y-C)

In the Zeeje-ms., the plural marker *-ʔiki* is attested with verbal roots. It could not be clarified whether these forms actually exist or whether they are artificial constructions by the author.

- (8. 150)
- a. <nanu mumu liqui>
nanu mumu-liki
FOC sing-PL
'the singers'
OT: "cánticos" (Ch-Z)
 - b. <nanu llugualiqui>
nanu yuwa-liki
FOC lose-PL
'the losers'
OT: "los extraviados" (Ch-Z)

8.4.2.1 Kinship nouns

Kinship nouns form a subclass of animate-human nouns inasmuch as they employ a different pattern of plural marking than other nouns of the category. The plural marker attested with kinship nouns in the ALS is *-kaʔi* or *-k'aʔi*. It combines an otherwise unidentified classifier *-ka* that indicates kinship (not attested otherwise) and the plural marker *-ʔi*.

- (8. 151)
- a. <tatacaLi>
tata-ka-ʔi
father-CL-PL
'fathers'
OT: "padres" (4547.), "viejos" (4548.)
 - b. <guʊejʊeɛaLi>
wiʔi-k'a-ʔi
younger brother-CL-PL
'younger brothers'
OT: "los hermanos menores" (3887.)
 - c. <titica naucaLi>
titi-ka naʔu-ka-ʔi
?-CL son-CL-PL
'step children'
OT: "los ahijados" (4583.)
 - d. <ayán panducaLi>
ʔaya-n pantu-ka-ʔi
friend-1s? 'brother-in-law'-CL-PL
'brothers/husbands of one's
brother-/sister-in law'
OT: "los concuños" (3668.)

The same pattern of plural marking on kinship nouns is attested in X_{Ch}. In the Zeeje-ms. plural kinship terms are given with the same third person singular cross-referencing suffix that marks the possessor on inalienably possessed kinship nouns.

- (8. 152) a. <allacalig>
 ʔaya-ka-lih
 friend-CL-PL
 'allies, friends'
 OT: "aliados" (Ch-Z)
- b. <nawkaʔi>
 naw-ka-ʔi
 son-CL-PL
 'sons'
 OT: "ustedes ("hijos")" (Ch-S)
- c. <lacuacájlí>
 lakwa-ka-ʔi
 son-in-law-CL-PL
 'sons-in-law'
 OT: "verno (plural)" (Ch-C)

There are singular cases of kinship nouns in the ALS that mark plural simply with *-ʔi*, omitting the classifier *-ka* (8. 153). In X_Y the classifier *-ka* is not attested at all and all kinship noun are marked for plural with *-ʔi* (8. 154), which may suggest that the classifier is optional.

- (8. 153) <ayán uchiLi>
 ʔaya-n **ʔuči-ʔi**
 friend-1s mother-in-law-PL
 'my cross-mother-in-law = mother-in-law of my son/daughter'
 OT: "mi consuegra (plural)" (3666.)
- (8. 154) a. <papali>
 papa-liʔ
 uncle-PL
 'uncles'
 OT: "tíos" (Y-C)
- b. <lacualí>
 lakwa-liʔ
 'son-in-law'-PL
 'sons-in-law'
 OT: "yernos" (Y-C)

8.5 Determiners

The term 'determiner' is used here as a general designation for operators that provide semantic and pragmatic information about a noun phrase (cf. Payne 1997:102). Determiners contrast and can be grouped into different classes based on their inflectional properties and the semantic/pragmatic concepts of identifiability and referentiality. Determiners in Xinka include definite determiner (§ 8.5.1), demonstratives (§ 8.5.2), indefinite determiners (§ 8.5.3) and cardinal numbers (see next section § 8.6).

Xinka does not distinguish definite determiners and demonstratives by different roots. Basically, there are only demonstratives in Xinka, of which one also occurs in the function of a definite article. The morphosyntactic properties of the definite determiner differ from those of the demonstrative. Demonstratives and definite determiners can co-occur, combining the grammatical functions of both categories.

Xinka has a distance-oriented three-term demonstrative system. The semantic interpretation of Xinka demonstratives is determined by (a) the functional distinctions of the Spanish and Latin forms that are used as reference terms in the ALS and the comparative sources, and (b) the etymology of the demonstrative root, which is also attested in other functional contexts.

Maldonado de Matos indicates Xinka forms for the Spanish demonstratives *este*, *ese* and *aquel*. The Spanish demonstrative system is classified as a distance-oriented three-term system in which the demonstratives indicate relative distance to the speaker, with "este" denoting a referent in close proximity, "ese" denoting a referent that is farther away from the speaker (but possibly closer to the addressee), and "aquel" denoting a referent that is remote from the speaker and the addressee (see Anderson & Keenan 1985:282). It remains unresolved whether the Xinka demonstrative system may express other degrees of relative distance from the deictic centre than the functions inherent in the Spanish reference form; there is no indication that Xinka demonstratives (or combinations of these) encode aspects of visibility or direction.

Table 8. 9: Correlation of Xinka determiners/demonstratives with Spanish referents

DEMONSTRATIVE	ORIGINAL GLOSS	FUNCTION in SPANISH
na	"el, la, lo"	definite/specifier (distance not specified)
ʔaši / ʔahi	"este, esta, esto"	referent in close proximity
	"hic, haec, hoc"	
man	"ese"	referent farther away but not remote (or in proximity of the addressee)
nah	"aquel", "ille, illa, illud"	referent remote from speaker/addressee

The remote demonstrative *nah* indicated by Maldonado de Matos is identical with the third person independent pronoun. In demonstrative function, this third person pronoun only co-occurs with other demonstratives.

The other demonstrative stems seem to derive from deictic roots that are attested in the context of pronominal, spatial and temporal deixis. The three-way distance-oriented distinction in the adnominal and pronominal demonstratives is paralleled by the same distinction in spatial/locative demonstratives; the deixis roots do also occur in other deictic categories with similar semantic values (cf. § 14.2.1, § 14.3.1, § 13.2).

Table 8. 10: Functional contexts of deictic roots (ALS)¹⁴³

	adnominal demonstrative	pronominal demonstrative	locative deixis		temporal deixis		interrogative/relative pronoun	
immedial	(na...) na	na naʔ	naʔ	'here'	naʔ-ʔ	IMPFV	*wena-ta	'who'
proximal	(na...) ʔaši	na ʔaši, ʔahi	*ʔi, ʔiš	'there'	ʔaši-k	'when'	šan-ta ši	'what'
					ʔaši-ša	'now'		
distal	(na...) man	na man	*ma	'there'	ma(ʔ)	COND	*man=ta	'where'

Demonstrative stems in Xinka are attested as adnominal demonstratives that accompany a coreferential noun, and as pronominal demonstratives that substitute for a noun phrase.

¹⁴³ The organisation of this table follows Kaufman (1990:95).

8.5.1 Definite determiners

8.5.1.1 Definite determiner *na*

Definite determiners encode information about the identifiability and specificity of a noun phrase (Payne 1997:102; Dryer 2008). The demonstrative *na* 'here(to)' is attested in all Xinka varieties as the basic deictic marker of definiteness. In the comparative data we find the variant forms *nu*¹⁴⁴ (X_{Ch} and X_Y) and *ra* (X_G and X_{Ch}), which occur in the same functional contexts as *na*; i.e. preceding a noun phrase (see also Schumann 1967:44).

Table 8. 11: Comparison of definite determiners

X_M	X_G	X_{Ch}	X_Y	X_{Jum}	ORIGINAL GLOSS
na	na	na	na	na	"el, la, lo"
		nu (Ch-Z)	nu		
	ra	ra (Ch-F)			

The deictic root *na* occurs as a demonstrative and locative adverb, indicating the locative concept 'here' (§ 14.2.1). It is not uncommon in Mesoamerican languages that demonstratives and locative adverbs are related, e.g. in K'iche' (Kaufman 1990a:95). In the function of a demonstrative *na* may combine with other locative adverbs and deixis markers.

In position preceding the nominal referent, the demonstrative *na* functions as a definite determiner (or article). As the operator occurs in various contexts where the functional distinction of definite article and demonstrative is not straightforward, it will be referred to by the neutral term 'determiner'. There are various contexts where the determiner *na* has become grammaticalised: Personal pronouns are related to demonstratives in that they combine *na* and a pronominal suffix that is otherwise used to mark the possessor on inalienably possessed nouns (see § 7). This shows that the demonstrative *na* is a nominal category. In its pronominal function following predicates, *na* has become grammaticalised as a derivational suffix of intransitive and transitive positional verbs (see § 11.2.3, § 11.3.3).

The definite determiner differs in its morphosyntactic properties from the demonstrative *na?* in that it always precedes the referent noun phrase. Definite determiners and demonstratives can co-occur, with the determiners always preceding in initial position. In the ALS, the definite determiner is only attested before simple noun phrases that refer to objects, animals/humans and abstract nouns. It also references Spanish loans. The definite determiner does not take plural inflection; plural is exclusively marked on the noun (8. 155b). In contrast, demonstratives in pronominal function can take plural markers. The original translations in these examples from the ALS illustrate that Maldonado de Matos uses *na* to mark the accusative case; below and in the following section (§ 8.5.1.2) it will be argued that this categorisation within the Latin model of grammar is incorrect and that *na* primarily functions as a definite determiner.

¹⁴⁴ In X_{Jum} and X_Y , the marker *nu* also occurs in a few contexts in which it may be referring to the first person singular; e.g. <nan, nu xarumo> *nan nu-šurumo* [EXIST 1sP-boy] "hay mi patojo" (Jum-E); <nu macu> *nu-maku* [1sP-casa] "mi casa" (Y-C). It is not clear whether these contexts can be interpreted as inferences from neighbouring Mayan languages (e.g. Poqom), or whether the actual function of *nu* is that of a determiner, which is simply not reflected in the translation contexts.

- (8. 155) a. <na jútu>
 na **hutu**
 DET tree
 'the tree'
 OT: "al palo" (28.)
- c. <na náca>
 na **naka**
 DET PN:2s
 'you'
 OT: "a ti" (81.)
- b. <na turiŁi>
 na **turi-Łi**
 DET child-PL
 'the children'
 OT: "los niños" (1978.)
- d. <na guéna ayuqui>
 na **wena** **ʔayu** **ki**
 DET INT:who AUX INTENS
 'if someone'
 OT: "si alguno (acusativo)" (219.)

The comparative data show the definite determiner *na* (in X_{Ch} also *nu*) before simple and complex noun phrases. The determiner always precedes the entire noun phrase.

- (8. 156) a. *na* *pari*
 DET sun
 'the sun' (G-JAP)
- c. <nu base>
 nu *base*
 DET Sp:basis
 'the basis'
 OT: "la base" (Ch-Z)
- e. <naguona>
 na *wona*
 DET hill
 'the hill'
 OT: "cerro" (S-Gav)
- b. <na peloʔi>
 na *pe:lo(ʔ)-Łi*
 DET Sp:dog-PL
 'the dogs'
 OT: "los perros" (G-S)
- d. <na-gragua-perló>
 na *krawa* *pe:loʔ*
 DET wild Sp:dog
 'the wild dog'
 OT: "coyote" (Ch-P)

When preceding a participle (X_G , X_{Ch}), the function of *na* is ambivalent, as it may either be interpreted as a definite determiner specifying the noun phrase, or as the pronominal S argument of a nominal predicate (cf. Schumann 1967:44).

- (8. 157) a. <na pupuʔ>
 na *pupu-ʔ*
 DET grow-STAT
 'the grown (one)'
 OT: "lo crecido" (G-S)
- b. <na kunúʔ>
 na *kunu-ʔ*
 DET buy-STAT
 'the bought (one)'
 OT: "lo comprado" (Ch-S)

As mentioned above, Maldonado de Matos defines the definite determiner *na* as an accusative case-marker. According to the colonial author *na* precedes the O argument of a clause, while the S/A argument is preceded by the focus determiner *nana* that is accordingly categorised as a nominative case-marker (see § 8.5.1.2). However, neither O nor S/A arguments need to be preceded by the respective determiner, which seems to suggest that the function of markers is a different one.

In accordance with Maldonado de Matos' categorisation, most syntactic examples in the ALS show *na* indeed preceding noun phrases in object function, including abstract nouns, human nouns and personal names in declarative main (8. 158a-b) and dependent clauses (c), as well as in non-declarative clauses (d). In all attested cases the noun phrase marked with *na* follows the predicate.

- (8. 158) a. <nem an nariŁa naturiŁi>
nen ʔan-nariŁa na turi-Łi
 PN:1s 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1978.)
- b. <naca ayù pà guiszucà na Juan...>
naka ʔayuʔ paʔ wišu-kaʔ na Juan
 PN:2s AUX PFV beat-2sA DET Juan
 'you would have beaten (the) Juan'
 OT: "tú habrás azotado a Juan" (2022.)
- c. <... asUèc imaguà na miszà>
ʔasŁk ʔima-waʔ na miša
 when say-ANT DET Sp:mass
 '..., when one spoke (= was spoken?) the mass'
 OT: "...cuando se dijo la misa..." (1959.)
- d. <¿naca in szàc szà guacàn na tumin?>
naka ʔin šakša-wa-kan na tumin
 PN:2s INT steal-ANT-2sA_{DEP} DET money
 'did you steal the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)

The pattern is confirmed in the comparative data, where the determiner marking the O argument also occurs in position following the predicate.

- (8. 159) a. ture-y na waruʔ
 take-3sA DET hammock
 'he took (away) the hammock' (G-JAP)
- b. <ʔišAk'Λ ʔay na ʔaguardiente>
ʔišaka ʔay na aguardiente
 drink PROG+3sS_{DEP} DET Sp:liquor
 'he is drinking the liquor'
 OT: "anda tomando el aguardiente" (Ch-MQb)
- c. <pachi nu eyma>
pači nu ʔeyma
 grind DET corn
 '(to) grind the corn'
 OT: "moler maíz" (Y-C)

However, there are sufficient examples in the comparative data and in the ALS which show that *na* does not exclusively mark O arguments. In the following examples from the ALS *na* precedes noun phrases in S function in dependent clauses and auxiliary verb constructions with *pata-* (see § 10.1.3.6). In all given contexts, the S argument marked with *na* follows the predicate.

- (8. 160) a. <...nucai naca na palè...>
nuka-y naka na pale
 give-3sA PN:2s DET Sp:priest
 'the priest gave (it to) you'
 OT: "..., que te dio el padre" (2036.)
- b. <taí na maestro nari Ła in na turi Łi>
Ø-ta:yi-ʔ na maestro
 3sS-come-LIG-STAT DET Sp:teacher
 'the teacher came'
 OT: "vino el maestro ..." (2043.)

- c. <si yguitz ma naL patai na misza>"
- | | | | | | | |
|-----------|----------------|-----------|---------------|-----------------|-----------|-------------|
| si | ʔiwiɕ'i | ma | na(ʔ)t | pata-y | na | miša |
| CONJ:if | hear | COND | IMPFV | *accomplish-3sA | DET | Sp:mass |
- 'if the mass would have been heard'
- OT: "si la misa fuese oida" (2032.)

This pattern is confirmed in X_G and X_{Ch} where *na* likewise marks the S argument in dependent clauses.

- (8. 161)
- | | | | | | | | | | |
|----|---|----------|-----------|-------|--------------------------------|---------------------------------|----------------|-------|------|
| a. | wa | na | tawu | b. | piri-wa | naka | na | nin | |
| | go | DET | wind/cold | | see-ANT | PN:2s | DET | PN:1s | |
| | 'the wind/cold goes' (G-RHG) | | | | '..., (that) I saw you' (G-JS) | | | | |
| c. | hin | ʔan-piri | na | nin | d. | <lan, gwahtá, na tagú> | | | |
| | NEG | 1sA-see | DET | PN:1s | | lan | Ø-wahta-ʔ | na | tawu |
| | 'I do not see (it) = I do not like it' ¹⁴⁵ⁱ (G-SH) | | | | | NEG | 3sS-enter-STAT | DET | wind |
| | | | | | | 'the wind has not entered' | | | |
| | | | | | | OT: "no entra la brisa" (Ch-JC) | | | |

While there are no examples from the ALS, where S arguments in independent main clauses are preceded by *na*, the comparative data indicate that the use of *na* is not determined by syntactic hierarchy. In X_G pronouns in S function preceded by *na* can occur in initial position of the main clause.

- (8. 162) a. na nin ʔan-7ima naka b. na naka ka-ʔaku-7
 DET PN:1s 1sA-say PN:2s DET PN:2s 2sS-go-STAT
 'I (will) tell you' (G-SH) 'you went' (G-SH)

In the semi-speaker data from X_G, pronouns functioning as indirect objects of a ditransitive clause are preceded by *na*.

- (8. 163)
- a. nuk-ey [na ku=ʃunik]_O [na nin]_E
give-3sA DET MOD=pot DET PN:1s
'... (that) he/you gave me the pot' (G-JS)
- b. nuka-ka? [mapu]_O [na man]_E
give-2sA tortilla DET DEM
'you gave him (= that one) (a) tortilla' (G-RHG)

In the X_{Ch} and X_Y , the determiner is also found in contexts where it marks the subject of nominal predicates with zero-copula encoding.

- (8. 164) a. <miko na máku>
 miko na maku
 small DET house
 'the house is small'
 OT: "la casa es pequeña" (Ch-S)
- b. <one najua>
 ʔone na (ʔa)wa
 tender DET moon
 'the moon is tender (= young)'
 OT: "la luna está tierna" (Y-C)

The definite determiner *na* co-occurs with demonstratives *naʔ*, *ʔaʃ* and *man* and defines the syntactic function of the adnominally or pronominally used demonstrative. Co-occurrence with the determiner does not alter the semantic reference of the demonstrative (8. 165). In the comparative data the demonstrative *naʔ* is also attested in this context (8. 166); in the ALS *nana* only occurs in the function of a determiner (see next section § 8.5.1.2).

¹⁴⁵ The meaning of this phrase is indicated by the original field translation context (see Appendix 6). The concept that the verb 'to see' can express the meaning 'to like' is also known from some Mayan languages (e.g. K'iche').

- (8. 165) a. <na axuè>, <na aszue>
na ʔašĩ
 DET DEM
 '(to) this'
 OT: "a éste" (120.), "ésto" (3659.)
- b. <na mán>
na man
 DET DEM
 'that'
 OT: "a ése" (133.)
- (8. 166) a. na na?
 DET DEM
 'this' (G-SH)
- b. <na jú>, <nu jú>
 na hu?
 DET DEM
 'this'
 OT: "éste" (Ch-Z)
- c. <namán>, <na ... mán>
 na man
 DET DEM
 'that'
 OT: "él, élla" (G-S)

In adnominal function, *na* co-occurs with demonstratives *ʔašĩ* and *man* in a discontinuous pattern, with the determiner preceding and the demonstrative marker following the referenced noun. There are only two examples of this pattern in the ALS. In both cases the discontinuous pattern is attested in a prepositional phrase (8. 167). The discontinuous marking pattern is confirmed in X_G . The translation contexts indicate the demonstrative function of the pattern (8. 168).

- (8. 167) a. <szamá na pari axuè>
šama? na pari ʔašĩ?
 PREP DET day DEM
 'in this day = now'
 OT: "... ahora" (2036.)
- b. <...Linà nà ayàŁa man ... >
ʔi-na? na ʔayaŁa man
 PREP:with-PN:3s/DET DET woman DEM
 'with that woman'
 OT: "... con esa mujer..." (1955.)
- (8. 168) na hurak man
 DET man DEM
 'that man' (G-SH)

In pronominal function, determiners and demonstratives co-occur in a continuous pattern. Here, the demonstrative functions as a head noun. The only example in the ALS gives the demonstrative *ʔašĩ* preceded by the determiner *na* following the predicate in an interrogative clause (8. 169). In X_G the pronominal demonstrative *na man* is attested in final position of negative (8. 170a) or ditransitive clauses (b).

- (8. 169) <¿cà pè taguà na aszue?>
ka? pe? ta-wa? na ʔašĩ
 INT:where? CENT come-ANT DET DEM
 'where did this (one) come from?'
 OT: "¿de donde vino ésto?" (2010.)
- (8. 170) a. <hin hiniy namán>
 hin hini-y na man
 NEG know-3sA DET DEM
 'that (one) does not know'
 OT: "él no sabe" (G-S)

- b. nuka-ka mapu na man
give-2sA tortilla DET DEM
'you gave that (one) (a) tortilla' (G-RHG)

The same determiner-demonstrative combination is attested in X_G , X_{Ch} and X_Y in a discontinuous and a continuous pattern marking the subject of a nominal predicate with zero-copula encoding.

- (8. 171) a. <na čáma mán>
na č'ama man
DET good DEM
'that (one) is good'
OT: "él es bueno" (G-S)
- b. <ra urrutij na ma>
ra ʔuruti na ma
PREP eyes DET DEM
'before that (one)'
OT: "delante de él" (Ch-C)
- c. <mu macu na man>
mu-maku na man
3sP-house DET DEM
'that one's house = this house is his'
OT: "esta casa es suya" (Y-C)

In X_G and X_{Ch} the combination of determiners and demonstratives occurs in clause-initial position in the function of a nominal predicate that can be followed by a noun phrase or, in a cleft-construction, by a relativised verb phrase (8. 172). The translation context in (c) reflects the function of the determiner-demonstrative combination as nominal predicate.

- (8. 172) a. na hu milagro
DET DEM Sp:miracle
'this miracle' (G-JS)
- b. na man huru
DET DEM turkey
'that turkey' (G-JAP)
- c. <namán na kú mu túma>
na man na kumu tuma
DET DEM DET Sp:like deer
'that (one) is like a deer'
OT: "aquel es un venado" (G-S)
- d. <guanin namá japá>
wanin na maʔ hapa-ʔ
INT:who? DET DEM pass-STAT
'who is that who passed by?'
OT: "¿quién fue el que pasó?" (Ch-JC)

Following the third person independent pronoun, demonstratives in X_G and X_{Ch} can co-occur with determiner *na* in continuous and discontinuous contexts (see § 8.5.2.3).

- (8. 173) a. nah na man
PN:3s DET DEM
'he is that = he, this one' (G-SH)
- b. <najna-na>
nah na na
PN:3s DET DEM
'he is this = he, this/that one'
OT: "éste, ése" (Ch-F), (Ch-C)
- c. <naj na frac na>
nah na frak na
DEM/3s DET man DEM
'he is this man'
OT: "este hombre" (Ch-C)

8.5.1.2 Focus determiner *nana*

The definite determiner, or demonstrative *na*, occurs in a reduplicated form as *nana* (in X_{Ch} also as *nanu*), which is used in clause-initial position and marks focus. Morphologically, *nana* likely combines the determiner *na* and the demonstrative/locative adverb *na*, which form a continuous pattern that precedes the noun phrase.

Table 8. 12: Comparison of focus-marking determiner

	X _M	X _G	X _{Ch}	X _Y	GLOSS
*na-na	nana	nana	nana		'el, la, lo'
				nana	'a él, para él'
			nanu		'el, la, lo'

Syntactically, *nana* functions as a determiner: it precedes noun phrases and combines with other demonstratives (8. 174). Noun phrases preceded by *nana* can take plural or possessor marking (b) or consist in an independent (c) or interrogative pronoun (d).

- (8. 174) a. <nana jutu>
nana hutu
 FOC tree
 'the tree'
 OT: "el palo" (25.)
- b. <nána an ucszáya>
nana ʔan-ukšaya
 FOC 1sP-woman
 '(the) my woman/wife'
 OT: "mi mujer" (310.)
- c. <nana nag>
nana nah
 FOC PN:3s
 '(the) he'
 OT: "él o aquel" (103.)
- d. <nána guéna qui>
nana wena=ki
 FOC INT:who=INTENS
 'the one who'
 OT: "el que" (200.)

Maldonado de Matos defines *nana* "el, la, lo" as a nominative case-marker (in the S role), as opposed to *na* "al, la, lo" that – within the Latin case-marking system – functions as an accusative marker (in the O role). However, the syntactic examples from the ALS show that *nana* is only used to mark the S in main clauses, whereas the S argument in dependent clauses is preceded by *na*; see (8. 160) and (8. 161). O arguments and nouns in prepositional phrases are only preceded by *na*; they never occur with *nana*. Furthermore, Maldonado de Matos describes the use of both determiners as optional (fol. 15r), which makes their primary function as case-role markers unlikely.

It can be shown that *na* and *nana* are used in different syntactic contexts: While noun phrases marked with *na* always follow the predicate, *nana* is attested in clause-initial position and following the auxiliary *pata* (§ 10.1.3.6). In the ALS, *nana* precedes noun phrases that function as S arguments in main clauses. The predicate may be a finite verb or an auxiliary construction with *pata*- (§ 10.1.3.6).

- (8. 175) a. <nana Pedro púlai na macùg...>
nana Pedro pula-y na maku-h
 FOC Pedro make-3sA DET house-3sP
 'Pedro made (= build) his house'
 OT: "Pedro hizo su casa ..." (2017.)
- b. <nana maestro mu nariLa pè na doctrina ...>
nana maestro mu-nariLa pe? na doctrina
 FOC Sp.teacher 3sA-teach CENT DET Sp:creed
 'the teacher will teach the creed'
 OT: "el maestro enseñará la doctrina..." (2020.)
- c. <nana macu pulà pataguàg ...>
nana maku pula-? pata-wa-h
 FOC house make-STAT *accomplish-ANT-3sP
 'the house was made (= built)'
 OT: "la casa fue hecha..." (4775.)

In X_G and X_{Ch} , *nana* or *nanu* precedes simple and complex noun phrases in clause-initial position. The translation contexts do not indicate any other function for *nana* than that of a definite determiner.

- (8. 176) a. *nana miku šuraya*
 FOC small young woman
 'the girl' (G-SH)
- b. <nanu sirig>
nanu siri-h
 FOC hide-PART.ACT
 'the hiding = the asylum'
 OT: "el asilo" (Ch-Z)

In most attested cases, *nana* occurs in clause-initial position with noun phrases that precede the predicate. In clauses with auxiliary constructions, Maldonado de Matos employs *nana* also before S arguments that follow the predicate (8. 177). The same pattern is attested in X_{Ch} (8. 178)

- (8. 177) a. <capa uiszicà paL naL na misza nana naca ay>
ka=pa ?uyši-ka? pa† na(?)† na miša nana naka ?ay
 EXO=PFV hear-2sA PFV IMPFV DET Sp:mass FOC PN:2p 2PL
 'you (pl.) had already heard the mass'
 OT: "ya habíais oído misa vosotros" (2018.)
- b. <nariLa patai Lic nana turiLi ...>
nari†a pata-y †ik nana turi-†i
 teach *accomplish-3sA 3PL FOC child-PL
 'the children are taught'
 OT: "los muchachos son enseñados..." (1979.)
- (8. 178) <cuya-cagüique-nana-frack>
ku=ya kawiki nana frak
 go=PROG cry FOC man
 'the man is going to cry' (Ch-P)

The distribution in the ALS and in the comparative data suggests that *nana* functions as a focus-marker. Most translation contexts do not explicitly indicate this focus function. In X_G , however, *nana* occurs predominantly in initial position, functioning as the nominal predicate of cleft-constructions (§ 16.2.5.3). The relative clause that complements the nominal predicate can be realised in form of a deranked verb form (8. 179a) or a predicate marked with the third person singular (b) (see § 17.3).

- (8. 179) a. *nana nini harana=ya-n*
 FOC PN:1s ill=PROG-1sS_{DEP}
 'it is me (who is) being ill' (G-RHG)
- b. *nana na nin nuk-ey na naka*
 FOC DET PN:1s give-3sA DET PN:2s
 'it is me (who) gives (it) to you' (G-JS)

The focus determiner *nana* also co-occurs with demonstratives in clause-initial position. The ALS includes examples of the demonstratives *?ah†* and *man* in this context.

- (8. 180) a. <nána axué>
nana ?ah†
 FOC DEM
 'this (one)'
 OT: "éste" (117.)
- b. <nána mán>
nana man
 FOC DEM
 'that (one)'
 OT: "ése, éso" (130.)

In X_G and X_{Ch} , *nana* and demonstratives co-occur in continuous and discontinuous patterns in adnominal as well as pronominal function.

- (8. 181) a. *nana hi?*
 FOC DEM
 'this (one)' (G-JAP)
- b. *nana senyorita man*
 FOC Sp:miss DEM
 'that miss' (G-SH)
- c. <*nanu jú*>, <*nanu ... jú*>
 nanu hu?
 FOC DEM
 'this (one)'
 OT: "ésta" (Ch-Z)

8.5.2 Demonstratives

Demonstratives in Xinka indicate the relative distance of a referent to the speaker. Based on the referents of parallel locative adverbs, we can distinguish an immedial ('this here'), a proximal ('this there') and a distal ('that over there') demonstrative, which co-occurs with the determiners *na* and *nana* in adnominal as well as pronominal function.

The immedial demonstrative *na(?)* occurs in the ALS only in form of the locative adverb *na:(?)* 'here' ("aquí") (§ 14.2.1), but is attested more widely in the comparative data. In final position, it seems to be regularly followed by a glottal stop.

Table 8. 13: Comparison of immedial demonstrative

	FORM		ORIGINAL GLOSS
X_M	-	-	
X_G	< <i>na</i> >, < <i>ná</i> >	<i>na(?)</i>	"este, aquí"
X_{Ch}	< <i>na</i> >, < <i>na?</i> >	<i>na(?)</i>	"esta"
X_Y	< <i>na</i> >	<i>na</i>	"esta"

Schumann (1967:46) gives the meaning of *nana* as "aquí, acá", which suggests that the form combines the definite determiner *na* and the demonstrative *na(?)* "este/aquí". The form is attested in X_G and X_{Ch} where it occurs in a discontinuous (8. 182a-b) and continuous marking pattern (c).

- (8. 182) a. <*na jixi na*>
 na hiši na
 DET stone DEM
 'this stone'
 OT: "esta piedra" (Ch-C)
- b. <*na rukakáy ná*>
 na ruka=ka-y na?
 DET eat=PROG-3sA DEM/LOC
 'he is eating here'
 OT: "él está comiendo aquí" (G-S)
- c. <*rukukay naná*>
 ruka=ka-y na na?
 eat=PROG-3sA DET DEM/LOC
 'he is eating here'
 OT: "él está comiendo aquí" (G-S)

The proximal demonstrative *ʔaʃi* is represented variously with C₁ *ʃ* or *h*. Maldonado de Matos also indicates the medial consonant with the grapheme <x> of the La Parra-convention, which is otherwise not attested in the ALS; according to this convention the grapheme represents *ʃ* (see § 4.2). In the comparative data the demonstrative is attested exclusively with the glottal fricative *h*, confirming the sound change of *ʃ* > *h* in Central Xinka; e.g. *ʔaʃin* > *hin* (see § 4.5.1).

Table 8. 14: Comparison of proximal demonstrative

	FORM		ORIGINAL GLOSS
X _M	<aszue>	ʔaʃi	"hic, haec, hoc, esta" (116.)
	<axue>		"este" (3659.)
	<agvé>	ʔahi	"este" (3605.)
X _G		hi?	"este, eso" (G-JAP, G-JS)
		hu?	"este, eso"
X _{Ch}	<jú>	hu?	"este, esta" (Ch-Z)
X _Y	<ulú>	?	"aquello" (Y-C) (proximal?)

The translation context is given in Spanish as "este" and in Latin as "*hic, haec, hoc*", from which we can conclude that *ʔaʃi* indicates a proximal demonstrative. In X_G the demonstrative is translated as "ese" or "este, in X_{Ch} as "este, esto". The form *ʔaʃi* may be etymologically related to the locative adverb *ʔi* or *ʔh* "allí" (G-S) attested in X_G and X_Y (see § 14.2).

- (8. 183) a. ʔi pe? ma?
 LOC come DEM/3s
 'there he comes' (G-JAP)
- b. ʔih-uka-?
 LOC-have-STAT
 'there is' (G-JAP)
- c. <iman>
 ʔi-man
 LOC-DEM/3s
 'that (one) there'
 OT: "él" (Y-C)

The proximal demonstrative is attested in the ALS (8. 184) and the comparative data (8. 185) in discontinuous as well as continuous pattern with the definite determiner *na*.

- (8. 184) a. <na pari axué>
na pari ʔahi
 DET day DEM
 'this day = now'
 OT: "ahora" (2036.)
- b. <na axué>, <na aszue>
na ʔaʃi
 DET DEM
 '(to) this (one)'
 OT: "a este" (120.), "esto" (3659.)
- (8. 185) a. mu-ǵ'uwe na hi
 3sA-bend corn DET DEM/3s
 'he bent this (corn)' (G-JS)
- b. <nu verdad jú>
 nu *verdad* hu?
 DET Sp:truth DEM
 'this truth'
 OT: "esta verdad" (Ch-Z)

The distal demonstrative *man* does not occur in the ALS in syntactic context. The morphosyntactic properties of the demonstrative need to be reconstructed mainly from the comparative data. In X_Y *man* is also attested as *mun*.

Table 8. 15: Comparison of 'distal demonstratives'

	FORM		ORIGINAL GLOSS
X _M	<mán>	man	"ese, esa, eso"
X _G	<man>	man	"él, élla" (G-S)
			"este, ese, aquel, él"
X _{Ch}	<man>	man	"él" (Ch-C)
	<ma->	ma-	"eso" (Ch-Z)
X _{Jum}	<mán>	man	"su" (Jum-G)
X _Y	<man>, <mun>	man, mun	"ese, esa, eso", "él" (Y-C)

Schumann gives *na man* as pronominal "él, élla" for X_G, although most contexts in the semi-speaker data reveal a demonstrative function that is sometimes parallel to the Spanish demonstratives "ese" and "aquel". The demonstrative occurs in adnominal and pronominal function; in X_{Ch} and X_Y *man* is only attested pronominally. Adnominally, it is mostly given with the meaning "ese, esa, eso" in the ALS as well as in the comparative data. In pronominal function, *man* is translated as a third person pronoun "él, aquel" in most comparative sources.

Etymologically, the demonstrative consists of the distal deictic root *ma* *"allí, ahí, allá" and the suffix *-n* the function of which is not entirely understood. It may derive from the determiner *na* but there is no evidence for this hypothesis. The morphological status of *-n* is suggested by occurrences of the root *ma* with other suffixes in X_{Ch} and X_Y.

- (8. 186) a. <ma>
ma
LOC:there
'there it is'
OT:"allí está" (Ch-F)
- b. <ma iki na uray>
ma *ʔuka(?) na ʔuray
LOC have DET fire
'there it has the fire = there is the fire'
OT:"allí está el fuego" (Ch-F)
- c. <majcaján>
ma-h ka han
LOC-? have ?
'there it has ?'
OT:"ahí, allí, allá", "ese, esos" (Y-C)

The distal demonstrative *man* co-occurs in the ALS (8. 187) and comparative data (8. 188) with determiners *na* and *nana* in a discontinuous (adnominal) and a continuous (pronominal) pattern.

- (8. 187) a. <nà ayàŁa man>
na ʔayaŁa man
DET woman DEM
'that woman'
OT:"esa mujer" (1955.)
- b. <na mán>
na man
DET DEM
'to that'
OT:"a ese" (133.)
- (8. 188) a. nana senyorida man
FOC Sp:young lady DEM
'that young lady/miss' (G-SH)
- b. na man huru
DET DEM turkey
'that turkey' (G-JAP)

While determiners never occur with plural marking, demonstratives can be inflected for number (8. 189). Maldonado de Matos gives the demonstratives *ʔahí* and *man* with the pronominal plural clitic *#ik* (see § 6.3), just like the regular third person pronoun *nah*. In most cases the plural *#ik* follows the demonstrative, but it can also precede it (c).

- (8. 189) a. <na axu'é Lic>
 na **ʔašĩ** **ʔik**
 DET DEM PL
 'to these'
 OT:"a estos" (126.)
- b. <nana mán Lic>
 nana **man** **ʔik**
 FOC DEM PL
 'those'
 OT:"esos" (136.)
- c. <tiy Lic na man>
 ti:ʔ **ʔik** **na** **man**
 IO 3PL DET DEM
 'to/for those'
 OT:"a, para esos" (139.)

In X_G and X_{Ch} , animate plural markers *-ʔe* (8. 190a) and *-liki* (b-c) occur with demonstratives. In X_Y the demonstrative *man* marks plural with the morpheme *ʔaya*, which is only used pronominally and seems to be etymologically related to the second person plural clitic *ʔay* attested in the ALS (see § 6.3).

- (8. 190) a. ʔahe-ʔe
 DEM-PL
 'these' (G-SH)
- b. <nanu pulaqui juliqui>
 nanu pula-ki hu-liki
 FOC make-VN DEM-PL
 'these deeds'
 OT:"estos hechos" (Ch-Z)
- c. <maliqui>
 ma=ʔiki
 DEM=PL
 'those'
 OT:"aquellos" (Ch-Z)
- d. <manaya>
 man =ʔaya
 DEM =3PL
 'those'
 OT:"esos, esa, esos" (Y-C)

8.5.2.1 Demonstratives in adnominal function

Adnominal demonstratives follow their nominal referent, which is in most attested cases preceded by a determiner. Structurally, these discontinuous demonstrative patterns result from the morphosyntactic strategy to express distance by means of locative adverbs following a nominal referent that is preceded by a definite determiner (see above § 8.5.1.1, cf. Diessel 2008).¹⁴⁶ In Maldonado-Xinka the adverbial demonstratives attested in this position are *man* and *ʔašĩ*; in X_{Ch} the pattern is also confirmed for the demonstrative/locative adverb *na ʔ* "aquí".

Table 8. 16: Structural pattern of adnominal demonstratives

PATTERN	ORIGINAL GLOSS
na NP naʔ	'the NP here'
na NP ʔašĩ	'the NP there'
na NP man	'the NP over there'

Adnominal demonstratives occur with noun phrases functioning as S arguments, O arguments, adjuncts and nominal predicates. Examples from the ALS show that adnominal demonstratives co-occur with the focus-determiner *nana* in clause-initial position (8. 191) and with the simple determiner *na* in prepositional phrases (8. 192).

¹⁴⁶ The origin of the pattern explains why there is never more than one discontinuous pattern in a clause, as pointed out by Schumann (1967:46).

- (8. 191) <nana jautuma axœ neŁa turiŁi>
nana haw-tuma ʔahi neŁa turi-ti
 FOC skin-deer DEM BEN child-PL
 'this deer skin (= whip) is for the children'
 OT: "este azote o cuero es para los muchachos" (1.)
- (8. 192) a. <szamà na pari axvè> b. <Łinà nà ayàŁa man>
šama na pari ʔahi **ti-na? na ʔayaŁa man**
 PREP DET day DEM PREP-DEM DET woman DEM
 'in this day = now' 'with that woman'
 OT: "ahora" (2036.) OT: "con esa mujer" (1955.)

In X_G and X_{Ch} , the discontinuous adnominal demonstrative pattern is attested with simple (8. 193a-c) and complex noun phrases (d). In the Zeeje-ms., the determiner *nanu* also occurs in position following the verbal predicate (b).

- (8. 193) a. <na jixi na> b. <turay nanu lucha jú>
 na hiši na tura-y nanu lucha hu?
 DET stone DEM/LOC bring-3sA FOC fight DEM
 'this stone' 'one/he brought this fight'
 OT: "esta piedra" (Ch-C) OT: "haber llevado esta lucha" (Ch-Z)
- c. na hurak man
 DET man DEM
 'that man' (G-SH)
- d. Ø-ʔulu-ʔ na ku=ču=turi man
 3sS-fall-STAT DET MOD=DIM=child DEM
 'that little child fell' (G-JS)

In the same source we find an example of the nominal referent being preceded by a numeral instead of a determiner.

- (8. 194) <nela pulgua siglo jú>
 nela pulwa siglo hu
 BEN NUM:'7' Sp:century DEM
 'of these seven centuries'
 OT: "de siete siglos" (Ch-Z)

In X_{Ch} (Zeeje-ms.), adnominal demonstratives take pronominal plural marking. This pattern is not attested in other sources where plural marking only occurs with demonstratives in pronominal function.

- (8. 195) a. <ti nanu reyno maliqui> b. <nanu pulaqui juliqui>
 ti:(?) nanu reyno ma-liki nanu pula-ki hu-liki
 IO FOC Sp:kingdom DEM-PL FOC make-VN DEM-PL
 'of those kingdoms' 'these deeds'
 OT: "de esos reinos" (Ch-Z) OT: "estos hechos" (Ch-Z)

The adnominal demonstrative *man* occurs in X_G also without the determiner, but always in position following the nominal referent that can function as S or O argument, nominal predicate or adjunct; there are no examples of this pattern in the ALS.

- (8. 196) a. Ø-tero-ʔ hurak man
 3sS-die-STAT man DEM
 'that man died' (G-SH)
- b. kuy samu-n nin miya man
 AUX.FUT catch-1sA PN:1s chicken DEM
 'I am going to catch that chicken' (G-JAP)

- c. na nin ʔan-neʔa siya man
 DET PN:1s 1sP-BEN Sp:bench DEM
 'that bench is mine' (G-SH)
- d. muh-ku ša kosta man
 1pS-go PREP Sp:coast DEM
 'let's go to that coast' (G-SH)

8.5.2.2 Demonstratives in pronominal function

In pronominal function, demonstratives do not form discontinuous patterns. In most contexts, they co-occur continuously with a determiner. These pronominal demonstratives can precede or follow the predicate. They substitute for the third person pronoun functioning as S and O arguments, nominal predicates in cleft-constructions and with adpositions.

The only case of a demonstrative in pronominal function in the ALS is attested in an interrogative clause (8. 197). The pronominal demonstrative in S function follows the predicate. In the second example (b), not all forms can be identified as the translation context does not provide any literal indications, although the marker *šan* suggests a similar syntactic context.

- (8. 197) a. <ɿcà pè taguà na aszue?>
kaʔ peʔ ta-waʔ na ʔaʃi
 INT CENT come-ANT DET DEM/3s
 'where does this one come from?'
 OT: "¿de donde vino ésto?" (2010.)
- b. <amaszán ácá namán>
ʔama šan akaʔ na man
 ? INT:what ? DET DEM/3s
 '? that one'
 OT: "refrán" (3622.)

The comparative data confirm that in non-declarative clauses pronominal demonstratives in S function follow the predicate (8. 198); this includes interrogative (a-b) and negative clauses (c-d). The same pattern is attested for clauses with a complex verbal predicate (8. 199).

- (8. 198) a. mu-ǵ'uwe na hí
 3sA-bend corn DEM DEM/3s
 'this one bent corn' (G-JS)
- b. <di xa na na>
 di ša na na
 INT name DET DEM/3s
 '...what is his name'
 OT: "se llama..." (Ch-F)
- c. <hin šaʔ hamana 'naʔ>
 hin šaʔ hama na naʔ
 NEG INT PREP DET DEM/3s
 'there is nothing inside (of) this'
 OT: "está vacío, no tiene nada" (Ch-MQ)
- d. <laya mán>
 la ya man
 NEG be+3s DEM/3s
 'there is none'
 OT: "no tiene un" (Jum-G)
- (8. 199) a. ku-y ʔipla=ʔin man
 go=3sS_{DEP} bath=SUBJ DEM/3s
 '(that) he went to bath' (G-JS)
- b. <hucay consolidar quiqui na jú>
 ʔuka-y *consolidar* kiki na hu
 do-3sA Sp:consolidate INTENS/REFL+3s DET DEM/3s
 'this one has consolidated himself'
 OT: "se ha consolidado éste" (Ch-Z)

There are no examples of pronominal demonstratives in declarative clauses in the ALS. The comparative data in contrast indicate that in declarative clauses, pronominal demonstratives in S function precede the predicate.

- (8. 200) a. na tupa-wa?
DEM/3s leave-ANT
'he left it' (G-RHG)
- b. <namán rúka>
na man ruka
DET DEM/3s eat
'he eats'
OT: "él come (habitual)" (G-S)
- c. <na ni irijlá>
na ni ?iri-4a?
DET PN:1s see-PAST.ACT
'he sees/saw me'
OT: "él me ve" (Ch-C)
- d. <man saprikilá>
man sapriki-la?
DEM/3s desgrain-PAST.ACT
'that one degained'
OT: "desgranó la mazorca" (Y-C)

Pronominal demonstratives are also attested as subjects of nominale predicates. In all the examples below a third person singular pronoun occurs in the function of a nominal predicate that is followed by pronominal demonstratives in S function. In all of these cases the demonstratives are preceded by the definite determiner *na*.

- (8. 201) a. nah na man
PN:3s DET DEM
'(it is) him that = he, who' (G-SH)
- b. nah na man šawu hi?
PN:3s DET DEM sit be+3sS_{DEP}
'(it is) him that is sitting (there)' (G-SH)
- c. <najna majliki>
nah na ma-4iki
PN:3s DET DEM-PL
'(it is) them'
OT: "aquellos" (Ch-C)
- d. <najna-na>
nah na na
PN:3s DET DEM
'(it is) these/those'
OT: "éste, ése" (Ch-F), (Ch-C)

In the comparative data pronominal demonstratives in O function follow the verbal predicate in declarative as well as non-declarative clauses. Pronominal demonstratives mark the O argument, or direct object (8. 202a, c-d), as well as the indirect object (b).

- (8. 202) a. hanta wena tupa-wa-n na hu?
INT:what? INT:who leave-ANT-SUBJ DET DEM/3s
'who left this?' (G-RHG)
- b. nuka-ka mapu na man
give-2sA tortilla DET DEM
'you gave him/that one a tortilla' (G-RHG)
- c. <turá na>
tura-7 na
bring-STAT DEM/3s
'they brought it'
OT: "lo llevaron" (Ch-F)
- d. <nen yuntili man>
nen yu-n tili man
PN:1s be-1sS_{DEP} see DEM/3s
'I am seeing him'
OT: "yo lo veo" (Y-C)

In X_Y *na* in O function is also attested preceding the predicate (8. 203). This seems to be a syntactic influence from Spanish where object pronouns precede the predicate in declarative clauses.

- (8. 203) <inay na ucay>
?inay na ?uka-y
PN:2s DET/3s do/put-2sA
'you did it'
OT: "tú [lo] haces" (Y-C)

In the comparative data demonstratives function frequently as nominal predicates that are followed by a noun phrase in S function. In many cases, the demonstrative is preceded by the focus-determiner *nana* (8. 204a-c). There are, however, also contexts where the definite determiner is used (d), or the demonstrative is not marked at all (e-f). The coreferential relativised noun phrase following the demonstrative can consist in a simple, complex, or a relational noun. Literally, the construction translates as: "ésto/éso es NP"; although this reflects only in a few translation contexts.

- (8. 204)
- | | | | | | | | | | |
|----|------------------------------|-----|-------------|-------|----|---|------|------------------------|--------------|
| a. | nana | hi? | ʔən-neʔa | | b. | nana | man | ʔan-nwera | |
| | FOC | DEM | 1sP-BEN | | | FOC | DEM | 1sP-Sp:daughter-in-law | |
| | 'this is mine' (G-RHG) | | | | | 'that one is my daughter-in-law' (G-SH) | | | |
| c. | <nanu jú ical elag> | | | | d. | <namán na kú mu túma> | | | |
| | nanu | hu? | ʔikal | ʔelah | | na | man | na | kumu tuma |
| | FOC | DEM | DET/NUM:'1' | new | | DET | DEM | DET | Sp:like deer |
| | 'this is a new one' | | | | | 'that one is like a deer' | | | |
| | OT:"a ésta una nueva" (Ch-Z) | | | | | OT:"aquel es un venado" (G-S) | | | |
| e. | <na? na 'maskara> | | | | f. | <manchítz'üöma> | | | |
| | na? | na | maskara | | | man | *çi | ç'i?ma | |
| | DEM | DET | Sp:mask | | | DEM | DIM? | black | |
| | 'this is the mask' | | | | | 'that (little) one is black' | | | |
| | OT:"máscara" (Ch-MQb) | | | | | OT:"aquel es negro" (Y-C) | | | |

Schumann gives pronominal demonstratives functioning as nominal predicates also in a discontinuous pattern with the demonstrative following the referent noun phrase.

- (8. 205)
- <nana kumu túma mán>
 nana kumu túma man
 FOC Sp:like deer DEM
 'that one is like a deer'
 OT:"aquel es un venado" (G-S)

Pronominal demonstratives can precede a verbal predicate that functions syntactically as a relative clause to the nominal predicate. Literally, the construction translates as: "it is that VP". The pronominal demonstrative in initial position can function as the S argument (8. 206a-b) or as the O argument (c) of the clause.

- (8. 206)
- | | | | | |
|----|--|----------|-----------|----------------|
| a. | nana | man | ture-y | |
| | FOC | DEM | take-3sA | |
| | 'that is (what) he brought (me)' (G-SH) | | | |
| b. | nana | kuy | ku=ya-ʔ | ša mak'u-k |
| | FOC | AUX.FUT | go=PROG-? | PREP house-2sP |
| | 'he will be going to your house' (G-JAP) | | | |
| c. | <man musuca pelu> | | | |
| | man | mu-suka | pe:lu(?) | |
| | DEM | 3sA-bite | Sp:dog | |
| | 'the dog bites him/that one' | | | |
| | OT:"el perro le muerde" (Y-C) | | | |

In X_G and X_{Ch} the nominal predicate may consist of an interrogative pronoun and the demonstrative *man*. All examples of such cleft-constructions give the relativised verbal predicate inflected with -ʔ, which either marks past-time reference or a stative participle (see § 11.1.2.1).

- (8. 207) a. wena man Ø-wiriki-? hina naka
 INT:who? DEM 3sS-speak-STAT PREP PN:2s
 '...who (is) the one (who) spoke with you' (G-RHG)
- b. <guanin namá japá>
 wanin na ma? Ø-hapa-?
 INT:who? DET DEM 3sS-pass-STAT
 'who is it who passed by?'
 OT: "¿quién fue el que pasó?" (Ch-JC)
- c. <n'di man pata rama>
 ndi man pata-(?) rama
 INT:what? DEM *accomplish-(STAT) PREP
 'what (is it) that is remembered?'
 OT: "¿qué piensa, pues, él?" (Ch-C)

The ALS includes examples of pronominal demonstratives marking the subject on interrogative pronouns that function as nominal predicates.

- (8. 208) <szanda szue na mán>
šanta š **na man**
 INT:what? EXTEN DET DEM
 'what is that one?'
 OT: "¿y qué es eso?" (4437.)

In X_G the demonstrative *man* can precede the non-spatial preposition *ʔaʔi*, which functions as a causal conjunction.

- (8. 209) a. man ʔaʔi ture-y maʔik
 DEM PREP.CAUS bring-3sA firewood
 'that is why he brought firewood' (G-SH)
- b. man ʔaʔi šin šan mura
 DEM PREP.CAUS NEG INT:what *elote*
 'that is why there is no *elote*' (G-JAP)

Pronominal demonstratives can occur in a position following adpositional forms. In all of these contexts, the demonstrative can be preceded by the determiner *na*.

- (8. 210) a. <néŁa axuě> b. <aŁi na axuě>
neŁa ʔaʔi **ʔaʔi na ʔaʔi**
 BEN DEM/3s PREP.CAUS DET DEM/3s
 'of this one' 'because of this one'
 OT: "de éste" (118.) OT: "por éste" (121.)
- c. <néŁa na mán>
neŁa na man
 BEN DET DEM
 'of that one'
 OT: "de ése" (131.)

The pattern attested in the ALS is confirmed in the comparative data where the demonstratives *na(ʔ)* and *man* substitute for the noun phrase/third person pronoun in prepositional phrases.

- (8. 211) a. šuka-n nin hina na?
 eat-1sA PN:1s PREP:with DET/3s
 'I ate with him' (G-JAP)
- b. <pa raj na>
 para-h na
 PREP-3sP DET/3s
 'underneath him'
 OT: "debajo de él" (Ch-C)

- c. <ra urrutij na ma>
 ra ʔuruti-h na ma
 PREP face-3sP DET DEM/3s
 'before him'
 OT: "delante de él" (Ch-C)
- d. <alájli man>
 ʔala-ʔi man
 underneath-? DEM/3s
 'underneath him'
 OT: "debajo de él" (Y-C)

In genitive constructions (see § 16.1.3), demonstratives can substitute for the third person pronoun functioning as possessor. This context is not attested in the ALS.

- (8. 212) a. mu-tita naʔ
 3sP-leg DET/3s
 'his legs' (G-JS)
- b. <mu macu na man>
 mu-maku na man
 3sP-house DET DEM
 'his house'
 OT: "esta casa es suya" (Y-C)

8.5.2.3 Third person pronoun in demonstrative function

The third person pronoun *nah* (see § 7.1.1) occurs in demonstrative function. Maldonado de Matos translates the form as "aquel" or Latin '*ille, illa, illud*', which would correspond to a demonstrative indicating a referent that is remote from speaker and addressee (see above). This reference is, however, not indicated by the translation contexts in the comparative data, which show an affinity of the third person pronoun with proximal and distal demonstratives.

Table 8. 17: Third person pronoun *nah* in demonstrative function

	FORM		ORIGINAL GLOSS
X _M	<nág>	nah	"él, aquel", "ille, illa, illud" (101.)
	<naggLic>	nah ʔik	"aquellos", "ille pl." (114.)
X _G	<nah>	nah	"este, éste" (G-S)
X _{Ch}	<nahá>	naha(ʔ)	"todos ellos" (Ch-S)
	<naj>	nah	"este, ese" (Ch-C), (Ch-F)
X _Y	<naj>	nah	"élla" (Y-C)

The third person pronoun *nah* co-occurs with the determiner *na* and the focus determiner *nana* (8. 213). The only attested syntactic context for *na nah* in the ALS is preceding the intensifier-reflexive noun *k'iwa-* (§ 7.2). In all of these contexts, Maldonado de Matos indicates a demonstrative meaning of the form as "aquel". The combination of determiner and *nah* with demonstrative translation context is also attested in X_{Ch} (8. 214).

- (8. 213) a. <na nag>
na nah
 DET PN:3s
 'he, him'
 OT: "a aquel, a él" (108.)
- b. <nana nag>
nana nah
 FOC PN:3s
 'he'
 OT: "él, aquel" (103.)
- c. <na naggLic>
na nah ʔik
 DET PN:3s PL
 'they, them'
 OT: "a aquellos" (114.)
- d. <na nag eiguág>
na nah ki-wa-h
 DET PN:3s INTENS/REFL-?-3sP
 'he himself'
 OT: "aquel mismo (acusativo)" (179.)
- (8. 214) <naʔ näj>
 naʔ nah
 DEM PN:3s
 'this'
 OT: "this" (Ch-MA)

In the comparative data the pronoun *nah* can combine with other demonstratives. In this case, the third person pronoun always occurs in initial position, the demonstratives *na(?)* or *man* may either follow the pronoun or the referent noun, forming a discontinuous pattern. In most cases these combinations are used in pronominal function, not as demonstratives.

- (8. 215) a. <nahná>
 nah na?
 DEM/3s DEM
 'this'
 OT: "este, éste" (G-S)
- b. ti:ki hi? nah na
 sleep be+3s_{DEP} PN:3s DEM
 'he is sleeping' (G-SH)
- c. <naj man>
 nah man
 PN:3s DEM
 'he, she, it'
 OT: "él, élla, lo" (Y-C)
- d. <munta nay tili naj man>
 mun=ta nay tili nah man
 DEM=INT PN:2s see PN:3s DEM
 'where he sees you'
 OT: "él te ve" (Y-C)

8.5.2.4 Demonstratives functioning as relative pronouns

In the comparative data there are contexts of demonstratives and interrogative pronouns that combine with the interrogative marker *ta* (see § 13.2.1) to indicate a relative pronoun. The form *man=ta*, that is not attested in the ALS, is translated by Schumann as "dónde" or "adónde" (8. 216a); literally, it would be "*that one who comes". The other forms (c-d) are not attested in syntactic context.

- (8. 216) a. <mánta>
 man=ta
 DEM=INT
 'whereto, that one'
 OT: "dónde, adónde" (G-S)
- b. <manda>
 man=ta
 DEM=INT
 'whose'
 OT: "cuyo, las que" (Ch-Z)
- c. <natá>
 na=ta?
 DET=INT
 '(he) who'
 OT: "el que" (G-S)
- d. wena=ta?
 INT:who=INT
 'who?' (G-SH)

The demonstrative-interrogative combination *man=ta* occurs only in the comparative data in the function of a relative pronoun before noun phrases (8. 217a) and verb phrases (b). In initial position it can substitute for the third person pronoun in cleft-constructions (c-d).

- (8. 217) a. na nin kiri-n man=ta tíʔa
 DET PN:1s pick/pull-1sA DEM=INT yucca
 'I pulled/picked yucca' (G-SH)
- b. <naj man aya munta tili nen>
 nah man=ʔaya mun=ta tili nen
 PN:3s DEM=PL DEM=INT see PN:1s
 'they are those who see me'
 OT: "ellos me ven" (Y-C)
- c. man=ta ladron ture-y ʔikaʔ miya
 DEM=INT thief take-3sA INDEF/NUM:1 chicken
 'that is the thief who took a/one chicken' (G-SH)

- d. <munta tili nalica naj man>
mun=ta tili nalica nah man
DEM=INT see PN:2p PN:3s DEM
'that is him who sees you (pl.)'
OT: "él vos ve" (Y-C)

In pronominal function, *man=ta* can co-occur with the demonstrative *man* in discontinuous and continuous pattern.

- (8. 218) a. man=ta miko man
DEM-INT Sp:kinkajou DEM
'that one is (a) kinkajou' (G-SH)
b. man=ta man naʔu-n
DEM=INT DEM son-1sP
'that one is my son' (G-SH)
c. <mug huca unbu resistir manduma>
muh-ʔuka *ʔən *pəʔ resistir man=*tə ma
3sA-do INT? FUT Sp:resist DEM-INT DEM
'he will resist that one'
OT: "resistirá a aquel" (Ch-Z)

In the ALS we find examples of the demonstrative *na(ʔ)* following the interrogative pronoun *wena*. The pattern is not attested in syntactic context. Maldonado de Matos indicates both forms as 'accusatives', employing *na* as the accusative marker (see § 8.5.1).

- (8. 219) a. <guéna na>
wena na
INT:who DEM
'(he) who'
OT: "quien o el que (acusativo)" (190.)
b. <ni guéna maquí na>
ni=wena ma ki na
NEG=INT:who SUBJ INTENS DEM
'nobody'
OT: "ninguno (acusativo)" (232.)

8.5.3 Indefinite determiner

Indefiniteness of a noun is expressed by means of the numeral *ʔik'aʔ* 'one' (see next § 8.6). There is only one example in the ALS where we find the numeral in the function of an indefinite determiner.

- (8. 220) <... ca taana naL ical santo>
ka-tana na(ʔ)ʔ ʔik'aʔ santo
2sS-be IMPFV INDEF Sp:saint
'you were a saint'
OT: "... serías un santo" (2031.)

The semi-speakers of X_G often abbreviate *ʔik'aʔ* to *kaʔ* or *k'aʔ*, the same forms of abbreviations are found in the comparative data from X_{Ch} and X_Y .

Noun phrases where the numeral functions as an indefinite determiner and noun phrases where it actually indicates the number 'one' do not differ structurally; the difference only reflects in the semantic context.

- (8. 221) a. ʔikah hiši
INDEF/NUM:'1' stone
'a/one stone' (G-JS)
b. ʔiki-n kaʔ gešpo
find-1sA INDEF/NUM:'1' iguana
'I found an/one iguana' (G-SH)
c. <ca taguck>
ka tawuk'
INDEF/NUM:'1' tortoise
'a/one tortoise'
OT: "una tortuga" (Ch-P)
d. <cajl uxuti>
kaʔ ʔuʔuti?
INDEF/NUM:'1' eye
'an/one eye'
OT: "un ojo" (Ch-F)

In X_G the indefinite determiner co-occurs with the demonstrative *man* that follows the head noun. The co-occurrences of indefinite determiners derived from numeral 'one' and demonstratives is known from Mayan languages, where the combination of both markers indicates a distal demonstrative (López Ixcoy 1997:127-130). However, the semantic contexts in the X_G -data do not indicate that the pattern derives a different semantic meaning.

- (8. 222)
- | | | | | | |
|----|--|---------------|---------|---------|----------|
| a. | horo-ka? | ʔikaʔ | ču | turi | man |
| | get-2sA | INDEF | DIM | child | DEM |
| | 'you got (=have) a small child' (G-JS) | | | | |
| b. | na | nin | horo-n | ka | hutu man |
| | DET | PN:1s | get-1sA | NUM | tree DEM |
| | 'I got (= have) one/a tree' (G-SH) | | | | |
| c. | mu-šuy | naka | nahi? | kah | pari |
| | 3sS?-return | PN:2s | LOC | INDEF | day |
| | 'you return there one day' (G-JS) | | | | |
| d. | ʔikah | ka-taho | ta | lagriyo | hi? |
| | INDEF | NUM:'1'-piece | ? | Sp:sour | DEM |
| | '(an) one piece of cheese' (G-JAP) | | | | |

8.6 Numerals

Cardinal numbers function as determiners inasmuch as they provide specific information about the noun phrase; i.e. the quantity of countable entities. Morphosyntactically, they take the same slot as quantifiers that indicate number on inanimate nouns. In the sequence of markers within the noun phrase they precede other modifiers (§ 8.7) including prepositions (see § 9).

In the ALS, only the numerals 'one' to 'three' are attested and the numeral system needs to be reconstructed from the comparative sources. It has been pointed out elsewhere that the Xinka numeral system is vigesimal like that of other Mesoamerican languages (see Campbell, Kaufman & Smith-Stark 1986:556). The field notes of Campbell and Kaufman as well as the number terms found in Calderón's data from X_{Ch} confirm this analysis.

The basic numerals from 'one' to 'ten' consist of a numeral base and classifier suffixes. Numerals higher than 'ten' are compounds which combine the basic numerals and specific numeral markers. There is a separate term for the number twenty.

8.6.1 Numerals 1-10

The numbers from one to ten are represented by different numeral roots. In most cases the numeral base takes some sort of marker/suffix including *-ʔ (or -ʔi) and *-ʔar. It would make sense to identify this suffix as the animate plural marker -ʔi. However, the suffix -ʔ occurs also on the numeral base 'one', where it is not likely to function as a pluraliser. We will therefore refer to the operator simply as 'numeral suffix'.

Numerals (consisting of numeral base and numeral suffix) often take the additional suffix *-(ʔ)ar*. In X_Y and X_{Jut} , this suffix occurs on all numerals from 'two' to 'ten'. Etymology and function of the marker are not understood, although it is probably a classifier that occurs with cardinal numbers.

Table 8. 18: Comparative chart of numerals 'one' – 'ten'

	X_M	X_G	X_{Ch}	X_S	X_{Jum}	X_Y	X_{Jut}
#1	ʔik'aʔ	ʔikaʔ, kaʔ ʔikah, kah ʔikaʔ, kaʔ	ʔik(')aʔ, kaʔ ʔikah, kah ʔikaʔ?, kaʔ	ʔika	kal, kaʔ, kak	ʔikal, kal	ʔikal
#2	pi	piʔ	pi, piʔ piʔar	ti	piʔar	piʔar piʔal waʔi,	piaʔr
#3	*waʔi	waʔ, wah ʔiwah	waʔ, wal, wahu, waʔ walar	wala		walar wa:lal	warar
#4	-	hiriya, hiryā	hiriya, ʔiriya iriʔar	hiria	ʔiriʔar	ʔiriʔar ʔiriʔahim	ʔiriʔar
#5	-	pihi	puh, puhu, pihi tanak	puh		puh, pih, pihar pihi	puhar
#6	-	takaʔ, takaʔ	tak(')aʔ, takaʔ, taka heyk	takal		takal *pulwa	takalar
#7	-	-	pilwa, puʔna	puhwa		puʔar puʔa	pulwar
#8			hirte				hiʔ-ar
#9				ʔuʂtu			
#10			pak'iʔ, pakil	pak'il			pakilar

The basic form of the numeral 'one' is *ʔikaʔ* (see Table 8. 19). It consists of the root *ʔika-* and the numeral suffix *-ʔ* that can be realised as *-h*. The final consonant and the initial vowel *ʔi* can be omitted. In many examples in X_G and X_{Ch} , the root consonant *k* is glottalised. Maldonado de Matos also seems to indicate glottalisation by representing the consonant with *<ε>*, but these contexts are not systematic and do not allow for establishing any rule. Glottalisation may, however, result from suffixation (see § 4.4.6).

The root for the numeral 'two' is *pi-* (see Table 8. 20). In some sources and contexts the numeral is attested with a final glottal stop *-ʔ*. The numeral root indicated in X_S is *ti-*, which is likely a typographic error. In X_{Ch} , X_{Jum} , X_Y and X_{Jut} the numeral root occurs with the classifier *-ar* or *-al*.

Numeral 'three' (see Table 8. 21) is attested in X_G and X_{Ch} as *waʔ* or *wal*, which combines the numeral base *wa-* and the numeral suffix *-ʔ* (or *-l*). In the ALS and in X_Y , the numeral base takes the suffix *-ʔi*. It is tempting to suggest that the marker may be indicating plural. In X_{Ch} , X_S , X_Y , and X_{Jut} the basic numeral *wal* occurs with the classifier *-ar* or *-al*.

Table 8. 19: Representations of numeral 'one'

	X _M	X _G	X _{Ch}	X _S	X _{Jum}	X _Y	X _{Jut}
ʔik(')a-ʔ	<ieál> <yεaɫ>	ʔikaʔ (JAP) ʔik'aʔ (JS)	<icalg> (Z) <hical> (Z) <ical> (C) <ical> (L)			<ical>(C, V) <icalj> (C) <ical> (L)	<ical> (V)
ka-ʔ		kaʔ (SH)	<cəj> (C) <'kaʔ> (MQ) <kʔaʔ> (S) <calh> (JC)		<calj> (E) <cal> (G)	<cal> (C)	
ʔika-h		ʔik'ah (RHG) ʔikah (JS)					
k(')a-h		kah (SH)	<cəj> (C) <c'aj> (MA) <k'a ^h > (MQ)				
ʔik'aš		ʔik'aš (SH)	<caz> (F)				
ʔik(')a	<yεa>	ʔika (SH) ʔitáʔ (JS)	<ica> (C)	<ica> (Gav)			
k(')aʔ		kaʔ (PE) k'aʔ (SH)	<ka> (F) <ca> (P)		<các> (G)		
ʔikaʔ-ak						<icájla> (C) <icajlac> (C)	

Table 8. 20: Representations of numeral 'two'

	X _M	X _G	X _{Ch}	X _S	X _{Jum}	X _Y	X _{Jut}
pi	<pi>		<pi> (Z) <pi> (C), (L) <pi> (MA)	<ti> (Gav)		<pi> (C)	
pi-ʔ		<piʔ> (S) piʔ (JAP)	<piʔ> (MQ) <piʔ> (S)				
pi-ʔar			<piar> (C, F)		<piar> (E)	<piar>(C, V) <bial> (L)	<pia'r>(V)

Table 8. 21: Representations of numeral 'three'

	X _M	X _G	X _{Ch}	X _S	X _Y	X _{Jut}
waʔi	<guaLi>		<uaju> (F)		<huajli> (C)	
waʔ		<waɫ> (S) waʔ (SH)	<huajl> (C) <guazl> (F) <waɫ> (S) <güalh> (JC)			
wal			<guaal> (F) <'wal> (MQb)			
wa			<cvuá> (L) <'gwa> (MQa)			
waʔ-ar			<hualár> (C) <gualar> (F)	<uala> (Gav)	<hualár>(C) <ualar> (V) <vuaalal> (L)	<guarar> (V)

The marker for the number four is not attested in the ALS (see Table 8. 22). It can be reconstructed to consist of the root *hi-*, the numeral marker *-ʔi* or *-li* (laterals become *r* between high vowels; see § 4.3.1.5) and the classifier *-ar*. In X_G and X_{Ch}, the suffix has become *-ya*. The initial consonant *h* may be omitted.

Table 8. 22: Representations of numeral 'four'

	X _G	X _{Ch}	X _S	X _{Jum}	X _Y	X _{Jut}
hi-ri-ya	hiriya (SH)	<hiriya/Λ> (MQ)	<jiria> (Gav)			
		<jiria> (Z)				
		<hiliya/Λ> (MQ)				
iriya		<ʔiriya/Λ> (MQ)				
		<iria> (L), (F)				
		<iría> (JC)				
hirya	<hírya> (S)	<ʔírya> (S)				
iri-ʔar		<iriar> (C)		<iriar> (E)	<iriar> (C, V)	<iriar> (V)
					<iria-him> (L)	

Likewise not attested in the Maldonado-data, the term for the number five **pʔ* possibly derives etymologically from the noun denoting the body part 'hand', i.e. *pu*, referring to the five fingers on the human hand (see Table 8. 23). The basic numeral is attested in X_G and X_{Ch} in the forms *pʔhi* and *pʔh*. In X_Y the numeral is given as *pʔhi*, which clearly combines the numeral base *pʔ* and the numeral suffix *hi*. In X_Y and X_{Jut}, the basic numeral takes the classifier-suffix *-ar*.

Table 8. 23: Representations of numeral 'five'

	X _G	X _{Ch}	X _S	X _Y	X _{Jut}
pʔhi	<pʔhi> (S)	<puju> (Z)		<pʔjli> (C)	
		<pujō> (L)			
		<pöjü> (F)			
		<puxu> (MQ)			
		<pʔhi> (S)			
pʔh		<pʔj> (C)	<pvj>	<pʔj> (C)	
		<puj> (JC)	(Gav)	<pji> (L)	
pʔh-ar				<pʔjar> (V)	<pujar> (V)

The numeral for the number six (see Table 8. 24) consists of the base *taka-* and the suffix *-ʔ*, which may be realised as *-r*, *-š* or *-ʔ*. In X_{Jut} the classifier *-ar* follows the full cardinal form *takal*. In X_{Ch} and X_Y, the numeral 'six' can also be represented by the base *tana-*, which takes the suffix *-k* in X_{Ch} and the suffix *-l* in X_Y. Beyond this, the morphology of the numeral is not understood. The form is not attested in the ALS.

Table 8. 24: Representations of numeral 'six'

	X _G	X _{Ch}	X _S	X _Y	X _{Jut}
taka-ʔ	<takáʔ> (S)	<tacal> (F)	<tacal> (Gav)	<tacal> (L)	<tacalar> (V)
		<ta'k'aʔ> (MQb)			
		<taʔ'kaʔ> (MQb)			
		<tak'ál> (S)			
taka-h	tákáh (SH)				
	tak'ah (RHG)				
taka-r		<tácar> (F)			
		<tacash> (JC)			
taka-ʔ	takaʔ (SH)	<tacá> (C, F, L)			
	t'akaʔ (SH)				
tana-		<ta'n/ák> (MQa)		<tanal> seis (C)	

The number seven is indicated by the numeral stem **pu-ʔ*, which likely combines the numeral root *pu-* and the plural marker *-ʔ* (see Table 8. 25). The numeral stem combines with the suffix *-wa* and/or *-ar*.

Table 8. 25: Representations of numeral 'seven'

	X _{Ch}	X _S	X _V	X _{Jut}
pulwa	<pulgua> (Z)		<pulfa> (C)	
	<púlua> (F)		<pulja> (L)	
	<puljna> (C)			
puhwa		<pujua> (Gav)		
puʔ(u)-ar			<puljar> (V)	<pulluar> (V)

A numeral for 'eight' is only attested in X_{Ch} and X_{Jut} (see Table 8. 26). The semantic identification of the form is problematic, as all sources associate the numeral base *hʔ(r)-* with a different number. McQuown indicates <heyk> as referring to 'six', and for X_{Jut} <gerjsar> is given as 'nine'. All attested examples share the numeral base **hʔ-*, which may be followed by the numeral suffix (taking into account that *ʔ* may become *ʃ*, which again may change into *ʒ*; see § 4.3.1.5.2, § 4.3.1.4.1). In X_{Jut} the basic numeral is marked with the numeral classifier *-ar*.

Table 8. 26: Representations of numeral 'eight'

	X _{Ch}	X _{Jut}
hi-r-te	<jüörte> (C, F)	
hi-rš-ar		<gerjsar> (V)
hi-k	<'heyk> (MQa)	

In the examples from X_{Ch}, the root/stem is suffixed by *-te*. The function of this operator is unclear, but it may also be a numeral classifier. The marker is also attested in X_S, with the only representation of the numeral 'nine' that seems to consist of the numeral base *ʔuʃ-* and the suffix *-tuʔ*. The marker may be related to the spatial deixis marker *tʔ* (see § 14.2.1).

- (8. 223) <uxtuʔ>
 ʔuʃ-tuʔ
 *NUM:'9'-CL(?)
 'nine'
 OT: "nueve" (S-Gav)

The numeral 'ten' (see Table 8. 27) is given in X_{Ch} and X_S as *pakil* or *pakiʔ*, which combines the numeral base *paki* and the numeral suffix *-l* or *-ʔ*. In X_{Jut} the form is attested with the suffix *-ar*.

Table 8. 27: Representations of numeral 'ten'

	X _{Ch}	X _S	X _{Jut}
pakil	<paquil> (Z)	<pakil> (Gav)	
	<pakil> (C)		
	<pakis!> (F)		
pakil-ar			<paquilar> (V)

8.6.2 Numerals >10

Terms for the numbers eleven to eighteen are only attested in X_{Ch} (a numeral for 'nineteen' is not represented). They are formed in decimal style consisting of the term for the number ten that combines with the number terms 'one' - 'eight', which follow in second position; e.g. *pakin pʰi* [NUM:10'-NUM:5'] 'fifteen'. The number term for 'ten' is attested in X_{Ch} and X_S with the numeral suffix *-t*, i.e. *paki-t* [NUM:10-CL]. When combining with numerals 'one' - 'eight' the numeral root *paki-* receives the suffix *-n*.

Table 8. 28: Number terms 10-19 (X_{Ch})

	TERM	MORPHOLOGY	ORIGINAL	ORIGINAL GLOSS
10	pak'i-t			
11	paki-n ʔika-t	[NUM:10-CL + NUM:1]	<pakincal> <pakin-kal>	"once" (Ch-C) (Ch-F)
12	paki-n pi(ʔ)	[NUM:10-CL + NUM:2]	<paquin pi> <pakinpi> <pakin-pi>	"doce" (Ch-Z) (Ch-C) (Ch-F)
13	paki-n wa-t	[NUM:10-CL + NUM:3]	<pakinhuajl> <pakin-guajl>	"trece" (Ch-C) (Ch-F)
14	paki-n ʔiriʔa(r)	[NUM:10-CL + NUM:4]	<pakiniria> <pakiniriar> <pakin-iria>	"catorce" (Ch-C) (Ch-F)
15	paki-n pih	[NUM:10-CL + NUM:5]	<pakinpüj> <pakin-ptj>	"quince" (Ch-C) (Ch-F)
16	paki-n takaʔ	[NUM:10-CL + NUM:6]	<pakintacá> <pakin-tacá>	"diez y seis" (Ch-C) (Ch-F)
17	paki-n pulwa	[NUM:10-CL + NUM:7]	<pakin puljina> <pakin-pulgua>	"diez y siete" (Ch-C) (Ch-F)
18	paki-n hirte	[NUM:10-CL + NUM:8]	<pakin jöürte> <pakin-jüorte>	"diez y ocho" (Ch-C) (Ch-F)

The vigesimal character of the Xinka numeral system shows in the formation of number terms above 'twenty'. The term for the number twenty in X_{Ch} consists of the root *frak* 'hombre', preceded by the term *ʔika-t* for the number one, literally translating as 'one time twenty'. Analogically, the term for the number forty combines the numeral base *pi* 'two' and the root *frak* 'twenty' indicating 'two times twenty'.

Table 8. 29: Number terms higher than 'twenty' (X_{Ch})

	TERM	MORPHOLOGY	ORIGINAL	ORIGINAL GLOSS
20	ʔika-t frak	[NUM:1-NUM:20]	-	-
22	ka-t frak pi	[NUM:1-NUM:20 + NUM:2]	<calfrag pi>	"veintidos" (Ch-Z)
25	ka-t frak puhu	[NUM:1-NUM:20 + NUM:5]	<calfrag pujú>	"veinticinco" (Ch-Z)
27	ʔika-t frak pulwa	[NUM:1-NUM:20 + NUM:7]	<icalfrag pulgua>	"veintisiete" (Ch-Z)
30	ka-t frak paki-t	[NUM:1-NUM:20 + NUM:10]	<calfrag paquil>	"treinta" (Ch-Z)
40	pi frak	[NUM:2-NUM:20]	<pi-frag>	"treinta" [sic] (Ch-Z)

The term denoting the number twenty derives from the noun *hurak* (X_{Ch} *frak*) 'hombre'. The use of the term 'human' for the number twenty is a common concept in Mesoamerica and usually explained by the fact that a human being has ten fingers and ten toes. The same concept of 'twenty' symbolising human completeness is

found in neighbouring Mayan languages. In K'iche' the term *winaq* 'human' is only used to refer to the number twenty in the count of days/time. The same concept might apply in Xinka, since the term *kal-frak* 'twenty' is attested in the Zeeje-ms. only with Christian calendar dates. However, since there are no attested cases of a number term 'twenty' preceding non-temporal nouns, the sample is not representative.

- (8. 224) a. <nanu calfrag pi ti Julio ti 1812>
 nanu kal-frak pi ti(:?) julio
 FOC NUM:'1'-NUM:'20' NUM:'2' IO/PREP July
 'the one-(times)-twenty (and) two of July = the 22nd of July'
 OT: "el 22 de Julio" (Ch-Z)
- b. <nanu calfrag pújú ti hig qui mismo [mes]>
 nanu kal-frak puhú?
 FOC NUM:'1'-NUM:'20' NUM:'5'
 'it is the one-(times)-twenty (and) five'
 ti(:?) hi? ki mismo mes
 IO/PREP be+3s_{DEP} INTENS Sp:self Sp:month
 'of the same month'
 '= it is the 25th of the same month'
 OT: "el 25 del mismo [mes]" (Ch-Z)

8.6.3 Numeral contexts

Numerals occur mostly in noun phrase contexts. They generally precede the head noun, which can be a simple countable noun, pronoun and classifiers indicating 'quantity', 'times' or temporal distance. Numerals also occur with verbal deixis markers deriving temporal adverbs. Distributive numerals are derived by reduplication of the basic numeral. Not all of these processes are attested in Maldonado-Xinka.

8.6.3.1 Numerals in noun phrases

The only attested context in the ALS where a numeral precedes a simple noun phrase involves the numeral 'one' that occurs here in the function of an indefinite determiner.

- (8. 225) <catana naL ical santo>
 ka-tana na(?)† ?ik'a† santo
 2sS-be IMPFV NUM:'1' Sp:saint
 'you were a saint'
 OT: "...serías un santo" (2032.)

Constructions where *?ika†* precedes a noun phrase and indicates the number 'one' cannot be structurally distinguished from those where it functions as the indefinite article 'a(n)'. The difference reflects in the semantic context.

- (8. 226) a. ?ik'a† libro man b. <caj mapo>
 NUM:'1' Sp:book DEM kah mapu
 'one (that) book' (G-JS) NUM:'1' tortilla
 'one tortilla'
 OT: "una tortilla" (Ch-P)

- c. <ixpáy caj (lado)>
 ʔišpa-y kah lado
 leave-IMP.VI NUM:'1' Sp:side
 'leave to one side'
 OT: "hazte a un lado" (Ch-C)
- d. <pi pu>
 pi pu
 NUM:'2' hand
 'two hands'
 OT: "dos manos" (Y-C)

When expressing the indefinite reference, the numeral may occur as the head of a noun phrase. In X_{Ch} the numeral/indefinite determiner can take animate plural marking showing that numerals have nominal properties.

- (8. 227) <icalig>, <calig>, <kalig>
 ʔika-lih
 NUM:'1'-PL
 'some, others'
 OT: "(alg)unos, otros" (Ch-Z)

In X_Y there are other contexts where numerals occur as noun phrase heads. In the first example the numeral functions as a nominal predicate.

- (8. 228) a. <nay piar>
 nay pi-ʔar
 PN:2p NUM:'2'-CL
 'you (pl.) two'
 OT: "vosotros dos" (Y-C)
- b. <ical (i) jutz'u>
 ʔikal y huɕ'u
 NUM:'1' Sp:and half
 'one and a half'
 OT: "uno y medio" (Y-C)

Numerals can function as the modifying element in modifier-modified compound nouns. There is only one such context in the ALS of the numeral 'two' preceding a body part noun.

- (8. 229) <pijúsíc>
pi hu:ši-k
 NUM:'2' head-INSTR
 'two-head(ed) = two-headed serpent'
 OT: "culebra de dos cabezas" (4292.)

In the comparative data we find such compounds only with the numeral 'one'. In some contexts the head noun of such noun phrases or nominal compounds can be omitted and the numeral occurs in the function of the head noun being preceded by determiners. The omission of the head noun can be reconstructed from the semantic contexts.

- (8. 230) a. <icaltátay>
 ʔikal tatay
 NUM:'1' father
 'one father = stepfather'
 OT: "padrastró" (Y-C)
- b. <carúmu>
 kar-umu
 NUM:'1'-male
 'one-male = widower'
 OT: "viudo" (Ch-C)
- c. na kah
 DET NUM:'1'
 'the one = only child'¹⁴⁷ (G-SH)
- d. <na-k'a^h>
 na k'ah
 DET NUM:'1'
 'the one = widower'
 OT: "viudo" (Ch-MQb)

¹⁴⁷ The meaning of this phrase is indicated by the field translation context (see Appendix 6).

8.6.3.2 Numerals deriving temporal adverbs

There are three types of temporal adverbs involving numerals indicating the distance in time and temporal deixis:

- numerals preceding temporal nouns
- numerals preceding deictic markers
- numerals preceding temporal adverbs

The first type of temporal adverb is not attested in the ALS. Numerals preceding temporal nouns derive temporal adverbs that indicate the distance in time into the past. The Spanish translations give the temporal concept as "hace", i.e. 'ago'. The temporal nouns that occur in these compounds indicate the countable unit of time that has passed; i.e. *pari* 'day' (8. 231a-d), *ʔayapa* 'year' (e-f).

- (8. 231)
- | | |
|---|---|
| <p>a. <kaʔ pari>
 kaʔ pari
 NUM:'1' day
 '(in) one day = early'
 OT:"temprano" (Ch-MQb)</p> | <p>b. <tacaz pari>
 taka[ʔ] pari
 NUM:'6' day
 'six days (ago)'
 OT:"la semana pasada" (Ch-F)</p> |
| <p>c. <iriar pari ray hoy>
 ʔiriʔar pari ray hoy
 NUM:'4' day be+3s Sp:today
 'is has been four days today = four days ago'
 OT:"(hace) 4 días" (Ch-C)</p> | <p>d. <jurri iriar parri>
 huri ʔiriʔar pari
 ? NUM:'4' day
 'four days (ago)'
 OT:"hace 4 días" (Y-C)</p> |
| <p>e. <pi ayapá ray>
 pi ʔayapaʔ ray
 NUM:'2' year be+3s_{DEP}
 'it has been two years = two years ago'
 OT:"hace dos años" (Ch-C)</p> | <p>f. <jurri piar apahuina>
 huriʔ piʔar ʔapawina
 ? NUM:'2' year
 'two years (ago)'
 OT:"hace dos años" (Y-C)</p> |

Numerals higher than 'one' can combine with directionals to indicate the distance in day (see also § 14.3.2.2). As directionals in Xinka derive from motion verbs, these constructions are essentially verb phrases with the numeral in S function. The centric directional *peʔ* indicates a number of days ahead into the future (8. 232a) (e.g. 'three [days] ahead', 'in three [days]'); the exocentric directional *kan* marks the number of days that have passed (b) (e.g. 'two [days] ago'); and the locative adverb *hiʔ* indicates the 'day after tomorrow'.

- (8. 232)
- | | |
|--|--|
| <p>a. <gualipè>
 waʔ-i=peʔ
 NUM:'3'=CENT
 'in three (days)'
 OT:"de aquí a tres días" (3838.)</p> | <p>b. <piican>
 pi:=ka-n
 NUM:'2'=EXO-SUBJ/IRR
 'two (days) ago'
 OT:"anteayer" (4288.)</p> |
| <p>c. <pigi>
 pi=hiʔ
 NUM:'2'=LOC:allí
 'two (days) from here = the day after tomorrow'
 OT:"pasado mañana" (4291.)</p> | |

This pattern is confirmed in the comparative data. In X_{Ch} the deictic roots *hi-* and *ka-* can co-occur. In X_G and X_Y numerals also occur with the directional *wa*, which derives from the motion verb 'to go' (§ 14.1.1.3).

- (8. 233) a. <píhi>
pi=hi
NUM:'2'=LOC
'two (days) from here'
OT: "pasado mañana, en dos días" (G-S)
- b. <píjican>, <pejicán>
pi=hi=ka-n
NUM:'2'=LOC=EXO-SUBJ/IRR
'two (days) ago'
OT: "antes de ayer" (Ch-C)
- d. <píjivuc>
pi=wa=k
NUM:'2'=DIR-?
'(in) two (days) = day after tomorrow'
OT: "pasado mañana" (Y-C)
- d. ʔaʔa peʔ pi=wa-n
tomorrow CENT NUM:'2'=DIR-SUBJ/IRR
'tomorrow in two (days) = day after tomorrow' (G-SH)

Numerals also combine with temporal adverbs. An example that is attested in the ALS is the adverb ʔak'aʔ 'yet' ('todavía') that combines with the numeral 'one'. The form is translated as "uno falta"; i.e. 'yet one' or 'one is still missing'. In other contexts, this temporal adverb occurs with negative markers (§ 13.4.5, § 13.6).

- (8. 234) <yeaLaaL>
ʔik'aʔ ʔak'aʔ
NUM:'1' still, yet
'yet one = one is missing'
OT: "uno falta" (4748.)

8.6.3.3 Numerals with intensifier/distributive marker

The intensifier *ki* 'self, alone' can occur in a distributive function with numerals, indicating 'quantity' and 'times'. The ALS gives only one example where the intensifier combines with the numeral 'one', which is translated by Maldonado de Matos as "solo uno".

- (8. 235) <iealqui>
ʔik'aʔ-ki
NUM:'1'-INTENS/DISTR
'one alone/only'
OT: "solo uno" (3892.)
- (8. 236) a. <ikáhki>
ʔik'ah-ki
NUM:'1'-INTENS/DISTR
'one alone'
OT: "uno" (G-S)
- b. <calki nay>
kal-ki nay
NUM:'1'-INTENS/DISTR PN:2s
'you (are) one alone'
OT: "tú estás solo" (Y-C)

In X_G and X_{Ch} the marker occurs with the numerals 'one' and 'two' in contexts where it is translated as Spanish "vez", indicating the number of 'times' that an action is taking place. In X_Y the same concept is expressed with the nominal root *siy* "volver" (8. 238).

- (8. 237) a. <pa ikáhki>
paʔ ʔikah-ki
PFV NUM:'1s'-DISTR
'once ago'
OT: "una vez" (G-S)
- b. <piki (vez) huirkihui>
pi-ki vez wirki-wiʔ
NUM:'2'-DISTR Sp:times speak-?
'he spoke twice'
OT: "sólo dos veces habló" (Ch-C)

- (8. 238) <piar siy>
 pi-ʔar siy
 NUM:'2'-CL return
 'two returns = twice'
 OT: "dos veces" (Y-C)

The distributive function of the marker *ki* may be attested in the Zeeje-ms. with the numeral 'one' that seems to be inflected with the plural marker *-ʔi* as a literal translation of the Spanish indefinite pronoun "unos".

- (8. 239) <nelag calig qui>
 nelaʔ ka-lih=ki
 BEN NUM:'1'-PL=DISTR
 'of/for some (of them)'
 OT: "de unos" (Ch-Z)

In X_G the distributive marker *ki* is also attested preceding numerals. There is no direct semantic context given for this example.

- (8. 240) hin horo-ka na ki waʔ
 NEG get-2sA DET DISTR NUM:'3'
 'you did not get (= you do not have) (of) the three' (G-JS)

8.6.3.4 Distributive numerals

Distributive numerals are formed by means of reduplication. The category is not attested in the ALS. Only in X_{Ch} and X_Y , there are a few examples of reduplicated numerals with distributive semantics. The translation context from X_{Ch} does not indicate the semantic function of the process. However, the examples from X_Y are all translated as distributive numerals: i.e. "de NUM en NUM" = 'one by one', 'two by two' etc. Despite the fact that the process has only been documented by Calderón, we may assume that the reduplication of numerals may have the same function in other varieties, including Maldonado-Xinka.

(8. 241) a. <pii-pij> piʔ-piʔ NUM:'2'-REDUP 'two by two' OT: "dos" (Ch-F)	b. <icájla (por) icájla> ʔikaʔa-ʔikaʔa NUM:'2'-REDUP 'one by one' OT: "de uno en uno" (Y-C)
c. <huajli huajli> waʔi-waʔi NUM:'3'-REDUP 'three by three' OT: "de tres en tres" (Y-C)	d. <püjli püjli> puʔi-puʔi NUM:'5'-REDUP 'five by five' OT: "de cinco en cinco" (Y-C)

8.7 Modifiers

This section deals with adjectives in their main function as modifiers of a head noun. They share this function with determiners, numerals, non-numeral quantifiers and adpositions, but occupy a different position in the noun phrase (i.e. closer to the head noun) than the other operators. Adjectives also occur as nominal predicates (see § 10.2).

Most adjectives in Xinka are underived roots, but there are also attested processes of adjectivisation, some of which are non-productive.

Adjectives share many morphosyntactic properties of the noun: they occur as the modifying element in nominal compounds, take nominal cross-referencing and number marking, and may function as the head of a noun phrase.

The distinction of adjectives and nouns is universally problematic. In Xinka, underived adjectives can be distinguished from nouns only based on semantic and syntactic criteria. In the ALS, however, adjectives are often indicated with a nominal translation context, i.e. "cosa + Spanish ADJ". They are mainly identified by an inherent adjectival meaning indicating colour, dimension, physical states etc.

In Xinka modifiers always precede the modified noun; in some cases the modified head noun can be omitted and the modifier/adjective syntactically becomes the head (e.g. "el chiquito").

The grammatical categories universally inherent to adjectives are comparison and equation. Comparison is attested in the ALS as a morphological category that is marked by means of specific modifiers and reduplication of the adjective root. These are the only morphosyntactic categories in Xinka that are exclusive to adjectives.

Xinka-modifiers/adjectives fall into different semantic groups.¹⁴⁸ All of these exhibit the same morphosyntactic properties and therefore do not form separate classes. The following list contains loanwords as well as a few derived forms. Most of the listed adjectives are attested in Maldonado-Xinka with nominal semantic contexts.

HUMAN CHARACTERISTICS: *haya* 'female', *humu* 'male', *šuya* 'older (sibling)', *tiši* 'lazy', *teškoy* 'naughty', *nunu* 'dumb', *pĩmĩ* 'dumb', *meme* 'crazy', *harana* 'ill'

DIMENSION/DISTANCE: *kosek* 'big, large', *ʔĩra ʔ* 'big, large', *pe:re* 'small', *k'ĩwĩ* 'thin', *šunu* 'long, deep', **tš(ʔ)k'ĩ* 'far, distant', *ša ʔka* 'distant'

QUANTITY/DEGREE/MEASURE: *čʔ* 'little, few', *ʔur ʔu* 'full, whole', *puy* 'half, middle', *ʔuč'ĩʔ* 'in the middle', *č'ʔk'ĩ* 'middle, centre', *ʔama ʔ* 'be left over, more than enough'

AGE: *ʔone* 'tender' (see 'physical properties'), **ʔuk-* 'old', *ʔe ʔa* 'new', *hawa ʔ* 'unripe', *hama ʔ* 'ripe, mature', *ʔpč'ĩʔ* 'ripe, grown'.

VALUE: *ša ʔ* 'good', *č'ama* 'good', *ʔliwis* 'bad'.

COLOUR: *tena, ten* 'red', *tolo* 'yellow', *me:(ʔ)* 'green', *sʔma, sʔn* 'black', *mu ʔa, mu ʔ* 'white', **mu ʔ-ča* [white-ash] '*gray'; there are also the loanwords *šak* 'white' (L-M) and *ti ʔik* 'black' (L-N)

Physical Properties:

'Weight': *kara* 'heavy' (derives from verb)

'Consistence': *čawi* 'hard' (L-M), *ʔone* 'tender' (see Age), *ma:sa:* 'sticky', *k'ĩwĩ* 'dry'

'State': *k'o:čo* 'dirty'

'Taste': *šaya ʔ* 'sour', *č'amĩ* 'sour, bitter', *hamĩ* 'sour, acid', *mʔa(ʔ)* 'bitter', *pša* 'smelly'

'Temperature': *pari* 'hot' (N), *ʔome* 'tepid, lukewarm' (L-M), *sarara ʔ* 'cold'

'Disability': *čonko* 'crippled', *lunku* 'one-armed', *šolko* 'tooth-less', *pohmo* 'blind', *tanč'ĩ* 'deaf'

¹⁴⁸ The semantic groups have been taken from Aikhenvald (2003) who again follows Dixon (1991).

8.7.1 Modified noun phrase

Adjectives always precede the head noun. Structurally, a modified noun phrase cannot be distinguished from a modifier-modified adjective-noun compound (§ 8.3.1.2). Some of the following examples qualify as compounds based on semantic criteria. Formally, they all preserve the final vowel of the adjective and could therefore be argued to be descriptive expressions rather than compounds.

- (8. 242)
- | | |
|--|--|
| <p>a. <múŁasziuc>
 muŁa šiyuk
 white rattlesnake
 'white rattlesnake'
 OT: "víbora de cascabel, culebra" (4099.)</p> | <p>b. <toloau>
 tolo ʔaʔu
 yellow corn
 'yellow corn'
 OT: "maíz amarillo" (4594.)</p> |
| <p>c. <száya naru>
 šaya naru
 bitter/acid earth
 'bitter/acid earth = vitriol'
 OT: "tierra de caparrosa" (4464.)</p> | <p>d. <Łóme hui>
 Łome ʔuy
 tepid water
 'tepid water'
 OT: "agua tibia" (4029.)</p> |

In the ALS modifiers are not marked for agreement with the head noun, although there are examples of such patterns in the X_{Ch}-data (8. 243). The following examples show that the animate plural marker can occur on the modifier, on the head noun, or on both. It is unclear whether these forms are erratic or indicate existent agreement patterns, which might have to be reconstructed for Maldonado-Xinka as well.

- (8. 243)
- | | |
|--|---|
| <p>a. <perejli jixi>
 pere-Łi hiši
 DIM-PL stone
 'small stones'
 OT: "piedras pequeñas" (Ch-C)</p> | <p>b. <pere onejle>
 pereʔone-Łe
 DIM tender/infant-PL
 'small infant'
 OT: "los niños" (Ch-C)</p> |
| <p>c. <perejli-nesjle>
 pere-Łi ne-Łe
 DIM-PL infant-PL
 'small infant'
 OT: "hijos pequeños" (Ch-F)</p> | |

In adjective-noun compounds (§ 8.3.1.2) the final vowel of the modifier may be omitted (8. 244a) and the final syllable can undergo phonetic assimilation (e.g. *sʃ(ʔ)ma* > *sʃn*) (b). Some adjectives are only attested as bound forms in nominal compounds and do not occur as free lexemes at all (c) (see also Schumann 1967:42).

- (8. 244)
- | | |
|---|---|
| <p>a. <muŁckeguesza>
 muŁ-k'eweša
 white-anona
 'white anona'
 OT: "la anona blanca" (4100.)</p> | <p>b. <sűen au>
 šin-ʔaʔu
 black-corn
 'black corn'
 OT: "el maíz negro" (4403.)</p> |
| <p>c. <ucszumu>
 ʔuk-šumu
 old-male
 'old man/elder'
 OT: "el viejo" (4674.)</p> | |

Diminutive markers precede the head noun as bound forms that can take alienable possessor marking. Possessor-marking with cross-referencing prefixes is only attested with compounds.

- (8. 245) a. <ʔanmikušurumu>
 ʔan-miku-šurumu
 1sP-DIM-boy
 'my little boy'
 OT: "mi hombre pequeño, mi muchacho" (G-S)
- b. ʔən-ču-šuruk
 1sP-DIM-walking cane
 'my little walking cane' (G-RHG)

8.7.2 *Derived modifiers*

Depending on their morphological properties we may distinguish underived and derived modifiers. Most underived adjectives in Xinka are two-syllabic. Three-syllabic adjectives are either borrowed or derived forms. Some modifiers have a verbal base and can be identified as product nominalisations that are treated in more detail in § 11.1.2. There are a few non-productive processes of derivation from nominal and positional bases.

8.7.2.1 *Modifiers with a verbal base*

Participles and instrumental nouns can function as modifiers. Most participle forms that occur in modifying position are product nominalisations marked as stative (8. 246a-b), perfect (c), or active participles (d-e) (§ 11.1.2).

- (8. 246) a. <jaamáa>
ha:ma:-ʔ
 ripen-STAT
 'ripened (thing)'
 OT: "cosa madura" (3921.)
- b. <guitá jugua>
wita-ʔ **huwa**
 tender-STAT zapote
 'mashed banana/plantain'
 OT: "plátano pasado" (3871.)
- c. <tupágua>
tupa-wa
 leave-PART.PF
 'left (thing)'
 OT: "cosa dejada" (4615.)
- d. <ɛataŁa>
k'ata-Ła
 lay down-PART.ACT
 'laid down'
 OT: "acostado" (3720.)
- e. <saraŁ huy>
sara-Ł **ʔuy**
 get cold-PART.ACT water
 'cold water'
 OT: "la agua fría" (4373.)

A number of adjectives in the ALS end in *-k*. In composite contexts, modifying elements marked with *-k* can often be identified as instrumental nouns (8. 247a) (see § 11.1.3.1). Most other adjectives ending in *-k* have a verbal basis as well (b). However, there are several contexts where the derivational basis of the adjective is not morphologically or semantically transparent. The function of *-k* as an instrumental marker cannot be confirmed in these cases (c). Other adjectives ending in *-k* can be identified as Nahuatl loans (d; see also § 4.5.2.2, § 4.4.1.2).

- (8. 247) a. <guisuzucnuguí>
wišu-k **nuwi**
 beat-INSTR cotton
 'beating instrument (from) cotton'
 = cotton whip'
 OT: "sacudidor de algodón" (3883.)
- b. <eplec>
ʔeple-k
 be afraid-INSTR
 'instrument of being afraid'
 = frightening thing'
 OT: "cosa espantosa" (3812.)
- c. <coséc>
kose-k
 ʔ-INSTR
 'big/large thing'
 OT: "cosa grande" (10.)
- d. <tiŁtick>
tiŁtik
 L-PIP: tiltik
 'black'
 OT: "el negro, negra" (4578.)

8.7.2.2 Positional adjectives with $-kV_1$

Some adjectives denoting position and physical state consist of a root and the ending $-kV_1(?)$. In some cases the positional meaning of the root is separately attested in the corpus of data; e.g. the diminutive modifier $\check{c}\acute{h}$ (§ 8.7.3.2.2) (8. 248a), or the locative adverb $t\acute{h}$ (§ 14.2.1) (b) – both roots are marked with $r\acute{i}$ or $\check{s}\acute{i}$. In all other cases, the translation context alone indicates that $-kV_1(?)$ derives positional adjectives. The process is not productive and the origin of the marker is not known. In example (c) $-ka$ may also be identified as the exocentric directional marker (see § 14.1.1.1).

- (8. 248) a. <chueueue>
 $\check{c}\acute{h}$ - $r\acute{i}$ - $k\acute{h}(?)$
 DIM-?-ADJ.POS
 'small'
 OT: "chico, pequeño" (3697.)
- b. <tueszeue>
 $*\acute{t}\acute{i}$ - $\check{s}\acute{i}$ - $k\acute{h}(?)$
 'Distance'-?-ADJ.POS
 'far, distant'
 OT: "lejos" (4634.)
- c. <saLca>
 $sa\acute{t}$ - $ka(?)$
 ?-ADJ.POS
 'distant'
 OT: "distante, lejos" (4369.)

Most positional adjectives delete V_2 or glottalise the velar in the suffix, which suggests that they are marked with a final $-?$. However, in none of the examples from the ALS stress is indicated on the vowel.

The operator is also attested with nominal forms indicating disabilities. It is not entirely clear whether these forms fall into the category of positional adjectives as none of the roots can be identified elsewhere in the comparative data.

- (8. 249) a. <szolco>
 $\check{s}ol$ - $ko(?)$
 ?-ADJ.POS
 'tooth-less'
 OT: "sin dientes" (4486.)
- b. <lungú>
 lun - $ku?$
 ?-ADJ.POS
 'one-handed'
 OT: "manco" (4030.)

In X_{Ch} a positional adjective indicating disability is attested in predicative function.

- (8. 250) <chungó na guapí>
 $*\check{c}on$ - $ko?$ na wapi?
 *crush-ADJ.POS DET foot
 'the foot is crushed = crippled'
 OT: "paralítico" (Ch-F)

There are other nominal forms indicating disabilities marked with the suffix $-mV$, which also seems to derive positional verbs; i.e. poh - mo [$*?-VI.POS = N$] 'blind', $\check{c}oh$ - mo [$*?-VI.POS = N$] 'pustules' (cf. § 11.3.3). In the given translation contexts, these verbal stems seem to occur in nominal function.

8.7.2.3 Adjectives with $-C_2V_1?$

There is a group of three-syllabic adjectives that share the morphotactic structure CVCV.C₂V₁?. The reduplication of the second syllable $-C_2V_1$ can be identified as a process that derives adjectives from nominal roots. Only some of these nominal roots can be identified in the corpus of data. The process does not seem to be productive.

- (8. 251) a. <jururú>
huru-ru?
 heat-ADJ
 'hot (thing)'
 OT: "cosa calorosa" (3987.)
- b. <sararà>
sara-ra?
 cold-ADJ
 'cold (thing)'
 OT: "cosa helada" (4374.)
- c. <uemüemi>
?imí-mi(?)
 *excrement-ADJ
 'stinking (thing)'
 OT: "cosa olorosa" (4736.)
- d. <ueszueszüé>
?isi-si?
 good, tasty-ADJ
 'good (thing)'
 OT: "cosa sabrosa, gustosa" (4746.)

In Mesoamerican languages, reduplication of morphemes usually indicates plurality, intensity or repetition of action (see Suárez 1983:69). The translation contexts given in the ALS do not indicate any of these functions. But since most terms seem to refer to sensations ('temperature', 'taste', etc), intensity might be implied, even if it is not reflected in the translation. Semantic contexts in the comparative data confirm the functional analysis of the operator as an intensifier.

- (8. 252) a. <xuru'ru?>, <ururuj>
 huru-ru?
 heat-ADJ
 'hot'
 OT: "caliente" (Ch-MQ)
 "calor muy grande" (Y-C)
- b. kayayá?, <cayayá>
 kaya-ya?
 ?-ADJ
 'hot' (G-SH)
 OT: "relumbroso" (Ch-C)
- c. sarara?, <sar'ara?>, <tzarará>
 sara-ra?
 cold-ADJ
 'cold, cool'
 OT: "frio" (G-SH)
 "(mucho) frio" (Ch-MQ), (Ch-F)
 "está tronando" (Ch-MQb)
- d. <tereré-uy>, <tururu?ay>
 tiri-ri ?uy
 *'flow'-ADJ water
 'flowing water'
 OT: "trueno el agua" (Ch-F),
- e. ?isi-či?, ?usu-ču?
 good, tasty-ADJ
 'good, tasty' (G-RHG)

The reduplicated syllable is followed by a final glottal stop. It is not clear whether -? is part of the operator or whether it may have to be identified as a separate morpheme. There are examples of three-syllabic nouns in the ALS that follow the same morphotactic structure but mark the accent on the second syllable and, thus, lack the final -?. Comparative contexts even suggest that the accent marks the glottalisation of V₂. The translation contexts clearly indicate that these forms are not adjectives, but nouns. This may suggest that the reduplication of the syllable may be a nominal process, while -? is the operator that allows the derived noun to function as a modifier.

- (8. 253) a. <surúru>
suru-ru
 Sp: *sur* = south?-ADJ
 'southern = south wind'
 OT: "viento sur, remolino de aire" (4398.)
- b. <cooròro>
ko:ro-ro
 net-ADJ
 'liana, vine'
 OT: "bejuco" (3747.)
- (8. 254) <koró?ro> (G-S), <cororo> (Ch-F)
 koro-ro
 net-ADJ
 'liana, vine'
 OT: "bejuco" (G-S), (Ch-F)

Adjectives derived by reduplication of the second syllable do not delete their final vowel when preceding the head noun.

- (8. 255) a. <jururú pari>
huru-ru? **pari**
 temperature-ADJ heat
 'hot (thing)'
 OT: "cosa calorosa" (3986.)
- b. <sararà tau>
sara-ra? **ta?u**
 cold-ADJ wind
 'cold'
 OT: "frio" (4375.)

8.7.2.4 Reduplicated adjectives

Reduplication of adjective roots seems to indicate intensity. There are only a few examples of such forms in the ALS and it is not clear whether reduplication is actually a productive process in Xinka. With respect to this it needs to be noted that reduplication of adjectives as a morphosyntactic process that indicates intensification is attested in Mayan and Nahuatl (see Campbell 1985:64). The scarcity of examples in the Xinka corpus may therefore indicate that it might be a borrowed feature (cf. also Suárez 1983:68-69).

- (8. 256) a. <jurjur>
hur-hur
 right-REDUP
 'far (to the) right'
 OT: "muy derecho" (3972.)
- b. <poy poy>
poy-poy
 truth-REDUP
 'very true'
 OT: "de verdad" (4328.)
- c. <suemp suemp>
šimp-šimp
 L-M: tied?-REDUP
 'tense, tight'
 OT: "cosa tirante" (4405.)

8.7.2.5 Antonyms of adjectives

Antonyms of adjectives (and adverbs) are formed by positioning the negative marker *ʔašin* before the adjective. These antonyms do not occur in syntactic contexts in the ALS and their function as modifiers or predicates is not fully understood.

- (8. 257) a. <aszinszaŁ>
ʔašin-šaʔ
 NEG-ADJ: good
 'not good = bad'
 OT: "malo, no está bueno" (3658.)
- b. <aszintueszeue>
ʔašin-tišk'i
 NEG-ADJ: far
 'not far = close'
 OT: "no lejos" (3657.)
- c. <aszinaeál>
ʔašin-ʔak'aʔ
 NEG-ADV: yet
 'not yet'
 OT: "todavía no" (3655.)

The same pattern of antonym formation is found in X_G and X_{Ch} . Here, the given forms are mostly attested as nominal predicates.

- (8. 258) a. hin ɛ'ama
 NEG good
 'not good = useless' (G-RHG)

b.	<lantz'ama> ʔan ɕ'ama NEG good 'not good = ugly' OT: "feo" (Ch-C)	c.	<landajá> ʔan taha? NEG much/QUANT 'not much = little' OT: "poco" (Ch-F)

8.7.3 Comparison and degree

Comparison and degree are basic morphosyntactic categories of adjectives. In Xinka, augmentatives, moderatives and diminutives are marked by modifiers of 'quantity' and 'degree' preceding a head noun. In several cases the same modifiers are used to indicate comparison on adjectives. Only augmentative modifiers indicating 'more than' are attested.

8.7.3.1 Augmentative

Comparison and augmentation of adjectives are indicated in the ALS with the modifier *ɕ'ama* 'good' and by the Spanish loan *más*. Basically, these forms function like quantifiers that precede a noun phrase. The use of the modifier *ɕ'ama* may be an influence from Spanish, as the same adverb is used in Spanish for the same functional purpose.

(8. 259)	a.	<txama chueueue> ɕ'ama č'rik'ɨ AUG:good small 'very small' OT: "muy chico" (4639.)	b.	<txama uerrá> ɕ'ama ʔiraʔ AUG:good big, large 'very large' OT: "muy grande" (4638.)
(8. 260)	a.	<mas chueueue> más č'rik'ɨ AUG/Sp:more small 'very small' OT: "pequenito, muy chico" (4066.)	b.	<mas uerrá> más ʔiraʔ AUG/Sp:more large 'very large / larger' OT: "más grande" (4067.)

None of the augmentative modifiers from the ALS is attested in the comparative data. In X_G and X_{Ch} the modifier *ki* is used to indicate the augmentative of adjective forms. The modifier is glossed here as an intensifier and may indeed be etymologically related to the intensifier-reflexive root (§ 7.2). It is also possible that the modifier is a loan from Mayan *ki* 'much'. Occasionally, the clitic realised by the semi-speakers as *ke*, and may therefore also be derived from the Spanish "qué".

(8. 261)	a.	<i>ki</i> <i>kayayaʔ</i> INTENS heat 'very hot' (G-PE)	b.	<ki tzamá> <i>ki</i> <i>ɕ'amaʔ</i> INTENS dark 'very dark' OT: "muy oscuro" (Ch-F)

8.7.3.2 Diminutive

There are several modifiers in Xinka marking diminutives. Attested in the ALS are the forms *pe:re* 'small' and **č'č'* 'few, little'. The comparative data indicate even more diminutive modifiers; i.e. *miku* 'small', and possibly the modifier *ku*.

8.7.3.2.1 Modifier *pe:re*-

The adjective *pe:re* 'small' precedes the head noun functioning as a diminutive in modifier-modified compounds. The modifier is attested in the ALS as well as in the comparative data.

- (8. 262) a. <peere míya>
pe:re miya
 DIM hen, chicken
 'small chicken'
 OT: "los pajarillos y pollos" (4282.)
- b. <peere jutu>
pe:re hutu
 DIM tree/pole
 'small pole = sticks (for wattle)'
 OT: "varilla para hacer casas" (4281.)
- (8. 263) a. <na perepiki>
 na pere piki
 DET DIM bird
 'the small birds'
 OT: "los pajaritos" (Ch-C)
- b. <pere pu>
 pere pu
 DIM hand
 'small (of) hand = fingers'
 OT: "dedos" (Y-V)

8.7.3.2.2 Modifier *čĩ*

The diminutive modifier *čĩ* or *ču-* is a bound form that precedes head nouns and modified noun phrases. The root is the base of the positional adjective *čĩ-#ĩ* 'small'. It occurs as a free form with marker *-rĩ* or *-ru* (realised as *-lu* in X_{Ch} and X_Y), *-y* and the derivational marker of positional adjective *-kĩ*.

Table 8. 30: Diminutive modifier *čĩ*

	FORM		ORIGINAL GLOSS
X_M	<chuey>	čiy	"poco"
	<churu>	ču-ru	Intensifier "pequeño"
X_G		ču	'diminutive'
X_{Ch}		čuy	
	<chulu>	ču-lu	"pequeño" (Ch-F)
	<čw'ku?>	čĩ-ku	"pequeño" (Ch-MQ)
	<čöcoy>		"despacio" (Ch-F)
X_{Jum}			
X_Y	<chulu>	ču-lu	"pequeño" (Y-C)

The root *čĩ* is widely diffused (pM **ty'i* 'small', CHR *č'ix*, KCH *č'uti ʔn* [K-03]; LEN (Salvador) *č'iris* 'small' [C-78]; PIP *čupi* 'poquito, poco' [C-85]). It is not possible to identify the source of lexical origin, but it is to be noted that the adjective attested in Lenka *č'iris* and the free Xinka form *čuru* are structurally rather similar.

In the ALS, the modifier occurs only as a free form. In the only attested syntactic context, the free form *čuru* precedes the adjective *čĩ-#ĩ* 'small'; the translation context indicates a comparative, i.e. 'smaller'. The modifier functions here as a comparative diminutive marker. Structurally, the form is analogical to the comparative augmentative marked with the modifiers *č'ama* and *más* (see above).

- (8. 264) <churu chuerueue>
čuru čĩrik'ĩ
 DIM small
 'very small, smaller'
 OT: "más chico" (3699.)

In X_Y the free form *čulu* occurs before a head noun, modifying the meaning of the noun.

(8. 265)	a. <chulu jurra> čulu hura(?) DIM man 'small man = dwarf' OT: "enano" (Y-C)	b. <chulu mijya> čulu miya DIM hen 'small hen = chick' OT: "pollito" (Y-C)

The other free form of the modifier *čuy* occurs in the same syntactic context in X_{Ch} , preceding the head noun. There are no contextual examples in the ALS; the free modifier *čŋ* is only listed as a lexical item in the vocabulary.

- (8. 266) <chuyone>
čuy-ŋone
DIM-tender/infant
'small infant'
OT: "la criatura, el recién nacido" (Ch-C), (Ch-F)

Another free form of the modifier, which combines the diminutive root *čŋ* with the derivational suffix for positional adjectives *-kV₁ʔ*, is attested in X_{Ch} (see § 8.7.2.2).

(8. 267)	a. <chöcoy> či-koy DIM-ADJ.POS 'slowly' OT: "despacio" (Ch-F)	b. <čŋ'kuʔ> či-kuʔ DIM-ADJ.POS 'small' OT: "pequeño" (Ch-MQ)

In X_G the diminutive modifier is attested as a bound form, preceding head nouns functioning as S argument, O argument, as nominal predicate or in a prepositional phrase. The diminutive function of *ču* is not reflected in the translation contexts, which rather suggest a deictic function of the modifier.

(8. 268)	a. ču-naʔu-n DIM-son-1sP 'my little son' (G-RHG, (G-PE)	b. taʔa-ʔ ču-mak'u-ʔ burn-STAT DIM-house-3sP 'his little house burned' (G-RHG)
	c. ku šawaʔ'a-n ču-ʔayma go sow-1sP DIM-corn 'I go to sow (little) corn' (G-JAP)	d. kiʔ ʔiriʔ'iʔ hina ču-naki Sp:that tasty PREP DIM-chilli 'that it is tasty with little chilli' (G-JAP)

The modifier can be marked with cross-referencing prefixes denoting alienable possession (see § 6.1, § 8.2.2). These examples establish that *ču-* is a bound morpheme. Inalienably possessed nouns also mark the possessor with cross-referencing suffixes (8. 269b).

(8. 269)	a. yuwa-n ʔən-ču-tumin lose-1sA 1sP-DIM-money 'I lost my little money' (G-RHG)	b. ki nama ʔən-ču-wapili-n Sp:that hurt 1sP-DIM-leg-1sP 'that my little leg hurts' (G-PE)

If the head noun is modified by an adjective, the bound diminutive modifier *ču-* precedes the noun phrase, marking the modifier of the head noun.

(8. 270)	a. ču-ŋone turi DIM-tender child 'the little tender child' (G-JS)	b. ču-miku šurumu DIM-small boy 'the little small boy' (G-RHG)

Determiners always precede the noun phrase modified with diminutive markers.

(8. 271)	a. kayi-n nin ʔikaʔ ču-kamisa sell-1sA PN:1s INDEF DIM-Sp:shirt 'I sold a little shirt' (G-JAP)	b. na ču-humu turi maʔ DET DIM-male child DEM 'that little boy' (G-JS)

Depending on individual preference of the semi-speakers, the modifier *ku* can precede or follow the diminutive modifier *ču*.

- (8. 272) a. šamuy ʔika ču ku weša ku pe:loʔ
 catch-3sA INDEF DIM MOD iguana MOD Sp:dog
 'the dog caught a little iguana' (G-RHG)
- b. kuy ʔurtu-n nin ku ču ʔuy
 AUX.FUT drink-1sA_{DEP} PN:1s MOD DIM water
 'I will drink a little water' (G-JS)

Some semi-speakers of X_G use the diminutive *ču* to mark the possessor in possessum-possessor constructions. Whether the modifier actually indicates the possessor, or whether its function is that of a bound diminutive which occurs in a syntactic possessum-possessor context, is not entirely clear.

- (8. 273) a. harari ču-pu-n b. ša ʔeskina ču-mak
 flesh DIM?-hand-1sP PREP Sp:corner DIM-house
 'the flesh of my hand'¹⁴⁹ (G-PE) 'in the corner of the house' (G-RHG)

Moreover, the diminutive modifier is attested in adverbial function, preceding verbal predicates.

- (8. 274) ču-ʔiwiči ču-turi
 DIM-hear DIM-child
 'little hears the little child = the child does not listen' (G-RHG)

8.7.3.2.3 Modifier *miku* (X_G , X_{Ch})

The diminutive modifier *miku* or *miko* is not attested in the ALS. It occurs in X_G and X_{Ch} and is simply translated as "pequeño" or "chiquito". Morphologically, the modifier seems to consist of the root *mi-* and the derivational suffix of positional adjectives.

- (8. 275) a. <miku šuráya> b. <miko máku>
 miku šuraya miko maku
 MOD:small/DIM girl MOD:small/DIM house
 'little girl' 'little house'
 OT: "niña" (G-S) OT: "casa pequeña" (Ch-S)

The modifier precedes the head noun. Unlike the other diminutive modifiers, *miku* is not a bound form. The adjective is attested as a free form with animate plural marking and functioning as a nominal predicate.

- (8. 276) a. <micusli> b. <miko na máku>
 miku-ti miko na maku
 small-PL MOD:small DET house
 'small ones' 'the house is small'
 OT: "pequeñito, muchachito" (Ch-F) OT: "la casa es pequeña" (Ch-S)

As with the other diminutive marker, determiners that reference the head noun always precede the modifier.

- (8. 277) <ical micu xurumu>
 ʔikal miku šurumu
 INDEF MOD:small boy
 'a small boy'
 OT: "un muchachito" (Ch-C)

¹⁴⁹ This translation is based on the original field translation context (see Appendix 6).

The modifier *miku* occurs in combination with other diminutives; in all attested cases, *miku* occurs in 'initial' position of the compound, preceding the other modifier.

- (8. 278) a. <ʔah-ʔan-miku-čuk-máku>
 ʔah ʔan-miku-ču-(u)k-maku
 EXCL 1sP-MOD-DIM-*old-house
 'my little old house'
 OT: "mi pequeña casa vieja" (G-S)
- b. <muko pere reuma>
 *miko pere rima
 MOD DIM rat
 'little small rat'
 OT: "rata" (Ch-F)

8.7.3.2.4 Modifier *ku*

The modifier *ku* is attested among some of the semi-speakers in X_G (i.e. JS, RHG), as well as in a few singular cases in X_{Ch} . There are several options for the etymological origin of the marker: (1) *ku* may represent another diminutive modifier, which may either derive from *miku* (see above), may be related to the suffix for positional adjectives *-kV*, (see § 8.7.2.2) or the form *ʔakʔ* 'little, few' that is exclusively attested in X_Y ; (2) Schumann identified *ku* as a particle translating as 'like this' and thus deriving from the Spanish adverb *como* preceding noun phrases, e.g. "es como caballo" = 'it is like a horse'; (3) the modifier may as well have become grammaticalised from the motion verb (*ʔa*)*ku* 'go', which would be suggested by contexts in which the modifier precedes verbal predicates.

The modifier *ku* occurs before simple and complex noun phrases.

- (8. 279) a. ku maʔik
 MOD firewood
 'go and make firewood' (G-JS)
- b. ku ču-muti paʔaʔ
 MOD DIM-hair PFV
 'go little hair yet = grow old' (G-RHG)

Structurally, *ku* can precede or follow other modifiers that occur before the head noun. Definite and indefinite determiners as well as quantifiers generally precede the noun phrase.

- (8. 280) a. kuy šuka na ku mura man
 AUX.FUT eat DET MOD ear of corn DEM
 'he will eat those cobs of corn' (G-JS)
- b. šamu-y ʔika ču ku weša ku pe:loʔ
 catch -3sA INDEF DIM MOD iguana go Sp:dog
 'the dog caught a little iguana' (G-RHG)

Noun phrases modified by *ku* occur as predicate arguments in S/A and O function. The full noun phrase marked with *ku* also functions as a nominal predicate.

- (8. 281) a. ku ču mapu man
 MOD DIM tortilla DEM
 'that is the tortilla' (G-JS)
- b. šamu-y ku pe:loʔ ču šurumu
 catch-3sA MOD Sp:dog DIM boy
 'the dog caught the boy' (G-RHG)
- c. <cu najlic rucay na xuxo>
 ku naʔik ruka-y na šušo
 MOD PN:3p bite-3s DET dog
 'the dog bit them'
 OT: "el perro los muerde" (Ch-C)

In possessive syntactic contexts, *ku* precedes the possessum, while the possessor is marked with the diminutive *ču*.

- (8. 282) a. ku naka? ču šuraya man
 MOD petticoat DIM girl DEM
 'the petticoat of the girl' (G-JS)
- b. ku šapun ču miya
 MOD soap DIM chicken = 'Gallo'¹⁵⁰
 'Gallo soap' (G-RHG)

In some contexts, *ku* seems to function like a preverbal element with the meaning 'go', e.g. 'go sowing', 'go dancing'. Verbs preceded by *ku* do not take cross-referencing affixes, which suggests that they occur in nominal function in these contexts.

- (8. 283) a. ku šawaɕ'a na senyor
 MOD sow DET Sp:gentleman
 'the gentleman goes sowing' (G-RHG)
- b. na nin hin ku lawaro man
 DET PN:1s NEG MOD dance DEM
 'I do not go dancing' (G-JS)

There are further contexts where *ku* occurs in position following the verbal predicate or noun, which may suggest that the form functions as a determiner (§ 8.5).

- (8. 284) a. <na ira? šuraya poʔɕa hi? ku>
 na ʔira? šuraya poʔɕa hi? ku
 DET big girl wash be+3sS_{DEP} MOD
 'the woman is doing laundry'
 OT: "la mujer se está lavando" (G-S)
- b. harari k'u
 bone MOD
 'leg' (G-RHG)

¹⁵⁰ The local soap brand used for laundry is called 'Gallo', i.e. 'rooster' in Spanish.

9 Prepositions

Prepositions indicate spatial and grammatical relations between syntactic constituents (cf. Metzler 1993:479). In Xinka, only non-core arguments are linked to the predicate by means of prepositions. Xinka does not have true postpositions; all adpositions that occur in final position can be identified as prepositional phrases which omit the noun phrase.

Xinka prepositions fall into two functional and morphological categories: spatial prepositions and non-spatial prepositions.

SPATIAL PREPOSITIONS specify location and direction of a non-core argument. In one case a spatial preposition can even indicate the direction of the verbal action. All spatial prepositions occur as bound forms in prepositional compounds.

NON-SPATIAL PREPOSITIONS are used to establish grammatical relations with oblique and other non-core arguments of the predicate. In accordance with the Latin model, Maldonado de Matos categorised most of these non-spatial prepositions as case markers.

There is one spatial preposition that also occurs in a non-spatial function, indicating a causal relation. Otherwise, spatial and non-spatial prepositions are represented by different roots. Both categories are historically derived from nouns; they take nominal morphology (possessor-marking) and are used as noun phrase heads. Most prepositions can function as a full prepositional phrase, in which case they usually host pronominal marking or combine with a demonstrative.

In the comparative data there we find examples of body part terms and other nouns expressing spatial concepts. These complex prepositions take possessor-marking affixes, which specify the person with respect to whom the position is indicated. None of these forms is attested in Maldonado-Xinka, although non-spatial prepositions that take possessor-marking affixes may fall structurally into the same category.

9.1 Spatial prepositions

There are three basic prepositional roots in Xinka that indicate spatial relations: *ša-* 'in(side), on (top of)', *ʔaʔ-* 'over, through' and *pa-* 'under, below, behind'.

These roots can occur as bound and as free forms. Most free forms are complex and combine the prepositional root with a demonstrative **ma*, **na*, **ra*, e.g. *ša-ma*, *pa-ra*. The complex free prepositional forms introduce a prepositional phrase which can omit the nominal complement. This pattern occurs mainly with phrasal verbs (§ 10.1.4.2).

As bound forms, spatial prepositional roots occur in prepositional compounds denoting body parts, toponyms, directionals and complex prepositions (§ 8.3.1.4). The distinction of prepositional compounds and prepositional phrases that consist of a preposition and a nominal complement, is not in all cases clear.

The prepositional bases *ʔaʔ-* and *para-* can furthermore take possessor-marking suffixes, cross-referencing their nominal complement that may follow as a noun phrase (e.g. *ʔaʔ-i*, *para-y*). The basic prepositional root *ša-* is not attested with possessor-marking affixes.

9.1.1 Prepositional root *ša-*

The prepositional root *ša-* is the most common and most widely attested prepositional marker in Xinka. The ALS-corpus includes three prepositionals based on the root *ša-*, which are given with distinct semantic contexts (see Table 9. 1). While *ša* is translated by Maldonado de Matos into Spanish as "en" (i.e. 'in' or 'on'), the free preposition *šama* is specified as 'inside' and *šan* is given as 'on top of'.

Table 9. 1: Prepositionals based on the root *ša-* (ALS)

	FORM		ORIGINAL Gloss
in	<sza>	ša	"en" (4406.)
in, inside	<száma>	šama	"en, dentro" (4429.)
in, on top of	<szan>	šan	"en, encima"

The three different prepositional forms are attested in most Xinka varieties. In X_{Ch} the forms *ha*, *han* and *hama* are more frequent; in the more recent data from X_{Ch} , the prepositions are also realised with an initial vibrant *r*.

Table 9. 2: Comparative chart of prepositional root *ša-*

	X_M	X_G	X_{Ch}	X_S	X_{Jum}	X_Y	ORIGINAL GLOSSES
in, on	ša	ša	ša			ša	"a, hacia"
towards, from		ša ča	sa ša ra ha			sa ha	"en" (adentro, encima), "de"
in, on	šan	šan	han	san	san	san	"sobre de",
towards			šan san ran	šan šam	šan šam	šan šam	"en, encima" "a"
in, inside	šama		hama	šama hama			"en, entre" "alli"
inside		šaw					"adentro"

The semantic differentiation of the three forms indicated by Maldonado de Matos seems to be confirmed by the data from the comparative material. Schumann distinguishes the prepositional forms *ša* 'towards' ("a, hacia"), *šan* 'over, on top of' ("sobre de") and *šaw* 'inside' ("adentro") (1967). The etymology of the prepositional root *ša* is therefore not entirely straightforward. The intransitive verb *šawu* 'to sit down' may be related to the preposition (cf. *šawe* "asiento para sentarse" (4422.), *šawu ʔa* "el que está sentado" (4423.)). The verbal root *šawu* seems to imply two different spatial concepts: (a) to be located at a place and (b) to move towards it. The following Table 9. 3 summarises the main morphosyntactic functions of the different prepositional forms based on the root *ša*.

Table 9. 3: Functional and semantic differentiation of prepositional root *ša-*

	directional	locational in, inside	on, on top of
ša	+	+	+
šan	+	+	+
šama	-	+	-
šaw	-	+	-

The prepositional forms can be distinguished as to whether they express only a locational, non-dynamic spatial concept or whether they have a dynamic directional meaning. All forms are attested as locational prepositions with the semantic context 'in, inside', which could therefore be defined as the basic meaning of the preposition. The prepositions *šama* and *šaw* occur exclusively in this context, while the forms *ša* and *šan* also express the locational concept 'on, on top of' as well as the direction 'towards' a deictic centre. Depending on the context and the accompanying motion verb, the preposition *ša* can also indicate the opposite direction, i.e. 'from' a deictic centre.

9.1.1.1 Preposition *ša*

The prepositional form *ša* is attested in the ALS only as a lexical entry in the vocabulary and as a prepositional complement of a phrasal verb (see below and § 10.1.4.2). In X_G , X_{Ch} and X_Y , *ša* is attested in contexts where Maldonado de Matos employs *šama*. Based on the contexts found in the comparative material, we can conclude that the preposition *ša* expresses two concepts of spatial location, i.e. 'in, inside' and 'on, on top of'. In intransitive clauses with motion verb functioning as a predicate, *ša* indicates spatial direction, i.e. 'towards' or 'from'. In X_{Ch} the form *ha* is also used as a locative adverb indicating 'here' or 'there to'. When *ša* precedes verbal nouns or finite verbs in a dependent clause, it indicates purposiveness. Semantically, directionality and purposiveness are related concepts.

LOCATIONAL FUNCTION: With non-dynamic verbs, the preposition *ša* indicates primarily location in X_G and X_{Ch} . The two basic semantic contexts of the preposition are 'in(side)' (9. 1) and 'on (top of)' (9. 2), which are both encoded in Spanish in the preposition "en".

- (9. 1)
- | | | |
|----|--|--|
| a. | šuraya ʔuwaka heʔ
girl play PROG+3s _{DEP}
'the girl is playing in the water' (G-SH) | ša ʔuy
PREP water |
| b. | <ra macu ay>
ra maku ʔay
PREP house be+3s _{DEP}
'he/it is in the house'
OT: "se encuentra o está en mi casa" (Ch-C) | c. <salig>
sa lih
PREP 3PL
'in them'
OT: "en ellos" (Ch-Z) |
- (9. 2)
- | | | |
|----|---|---|
| a. | ša ʔoflak
PREP tortilla griddle
'on the comal' (G-JAP) | b. ša hutu man
PREP tree DEM
'on top of that tree' (G-SH) |
| c. | <ra 'naru>, <ranaru>
ra naru
PREP ground, earth
'on the ground = down'
OT: "suelo" (Ch-MQb), "debajo, abajo" (Ch-F) | |

DIRECTIONAL FUNCTION: Likewise in X_G and X_{Ch} , the prepositions *ša* and *šan* both indicate direction when following motion verbs. While *ša* can indicate direction 'towards' (9. 3) as well as 'from' (9. 4) a point of deictic reference, *šan* only indicates direction 'towards' a location or landmark.

- (9. 3)
- a. <ša máku>
 ša maku
 PREP house
 'towards the house'
 OT: "hacia la casa" (G-S)
- b. ku=ya-n nin ša ʔaʔtepet
 go=PROG-1s_{DEP} PN:1s PREP town
 'I am going into town' (G-JAP)
- c. <un xayé ra maku>
 ʔun-šaye ra maku
 1s-return PREP house
 'I returned home'
 OT: "yo regresé a casa" (Ch-F)
- d. <cuyá rhatálti>
 ku=ya-ʔ ra taʔti
 go=PROG-1sS/STAT PREP (hill)slope
 '(I am) going to the hillslope'
 OT: "voy a la loma" (Ch-JC)
- (9. 4)
- a. na níʔ ʔispa ša mak'u-ʔ
 DET PN:1s emerge PREP house-1sP?
 'I come out of the house' (G-SH)
- b. ʔišapi-n ša ʔuray
 take out-1sA PREP fire
 'I took it out of the fire' (G-RHG)
- c. <ta laray xagraua>
 ta lara-y ša krawa
 come descend-3s_{DEP} PREP woods
 'he descended (coming) from the woods'
 OT: "viene del monte" (Ch-F)

PREPOSITION *ša* INDICATING PURPOSIVENESS OF ACTION: In X_G , X_{Ch} and X_Y we find intransitive clauses with a motion verb as predicate, which is followed by a prepositional phrase consisting of *ša* and an unmarked verb. The construction indicates purposive action; i.e. 'someone does sth. in order to do sth. else'. In the Spanish translation contexts *ša* is given as the directional prepositions "a" and "para". The unmarked verbs following *ša* function as nominal complements, i.e. they are used as verbal nouns.

- (9. 5)
- a. huraʔ Ø-ʔaku:-ʔa ša sawaɕ'aʔ
 man 3sS-go-PAST.ACT PREP sow
 'the man went to sow' (G-JAP)
- b. wašata ša ti:ki
 enter PREP sleep
 'enter to sleep' (G-RHG)
- c. <da xa potza>
 da ša poɕ'a
 IMP:go/EXH PREP wash
 'let's go to wash'
 OT: "vamos a lavar" (Ch-F)
- d. <n'da jamacá>
 nda ha *mukaʔ
 IMP:go/EXH PREP work
 'let's go to work'
 OT: "vamos a trabajar" (Y-C)

In X_G there are a few selected examples of *ša* preceding verbs that mark person agreement with cross-referencing affixes.

- (9. 6) a. na nin hin mu-ʔaya ša tura-n ʔakani?
 DET PN:1s NEG 3sA-carry PREP bring-1sA ADV
 'I do not carry to bring it?' (G-SH)
- b. hin=ka ša mu-ʔika
 NEG=do PREP 3sA-find
 'there is nothing for him to find' (G-RHG)

9.1.1.2 Preposition *šan*

The preposition *šan* is attested in the ALS only as a prepositional modifier in nominal compounds. In these contexts, it references two different types of spatial location: 'in, inside' and 'on, on top of, above'. In the comparative data *šan* occurs basically in the same functional contexts as *ša*. Besides the locational reference, *šan* can indicate direction when accompanied by a motion verb.

LOCATIONAL FUNCTION: In the comparative data *šan* is attested as a free preposition indicating location and direction. It encodes the same spatial concepts as *ša* (see above): 'on, on top of' (9. 7) and 'in, inside' (9. 8).

- (9. 7) a. ku=ya-n šan montanya
 go=PROG-1sS_{DEP} PREP:on, to Sp:mountain
 'I am/was going to the mountain' (G-RHG)
- b. <šan hutu>
 šan hutu
 PREP:on tree
 'on top of, in the tree'
 OT:"sobre el árbol" (G-S)
- c. <nen japá san türu>
 nen hapa san türu
 PN:1s pass, cross PREP river
 'I crossed over (the) river'
 OT:"paso un río" (Y-C)
- (9. 8) a. weske-y šam posa
 throw-3sA PREP:in Sp:pond
 'he threw (himself?) into the pond' (G-SH)
- b. <rancumí utu>
 ran kumi ʔutu
 PREP shade? tree
 'in the shade of the tree'
 OT:"a la sombra de un árbol" (Ch-C)
- c. <xanjui>
 šan ʔuy
 PREP:in water
 'in the water'
 OT:"río" (S-Gav)
- d. <nen huasata san caragua>
 nen wasata san karawa
 PN:1s enter PREP woods
 'I enter (into) the woods'
 OT:"yo entro al monte" (Y-C)

DIRECTIONAL FUNCTION: In combination with motion verbs, *šan* indicates direction 'towards' a location or landmark. In most contexts where motion verbs precede prepositional compounds with *šan* (see below), the preposition is prefixed to the locative noun, losing the marker *-n* (9. 9b).

- (9. 9) a. ku=ya-n šan kuku
 go=PROG-1sS_{DEP} PREP TOPN
 'I am going toward Taxisco' (G-RHG)
- b. <acugüi rhagona>
 ʔaku-wi ra-wona
 go-? PREP-hill/mountain
 'let's go towards the hill = north/cold'
 OT:"vamos a tierra fría" (Ch-JC)

Such prepositional compounds can be preceded by another preposition indicating direction towards a location.

- (9. 10) a. <šašawóna>
 ša ša-wona
 PREP PREP-hill/mountain
 'towards toward the hill = northwards'
 OT:"hacia el norte" (G-S)
- b. <xanguarantigüina>
 šan wa ran tiwina
 PREP DIR PREP sky
 'towards there to the sky = upwards'
 OT:"allá arriba" (Ch-F)

PREPOSITION *šan* IN NOMINAL COMPOUNDS: In the ALS the prepositional form *šan* only occurs in the function of a modifier in nominal compounds, i.e. in prepositional compounds designating body part terms (9. 11a-b), toponyms (c), absolute directionals (d) and temporal adverbs (e). Body part compounds with the preposition *šan* specify a part of the body that is located 'in(side)' the body part denoted by the head noun. There are several body part compounds as well as toponymical compounds with *šan* where the prepositional modifier does not change the meaning of the head noun and is therefore optional (see § 8.3.1.4). The preposition *šan* is furthermore used in compounds that function as absolute directionals and temporal adverbs.

- (9. 11) a. <szanszaja>
šan-šaha
 PREP-mouth
 'in/at the mouth = teeth'
 OT: "los dientes" (4444.)
- b. <szamini>
šam-(h)ini
 PREP-stomach
 'in the stomach = stomach-ache'
 OT: "dolor de barriga" (4490.)
- c. <szampiya>
šan-piya
 PREP-leaf
 'in/below the leaf'
 OT: "Ixhuatán; pueblo" (4441.)
- d. <szantiguina>
šan-tiwina
 PREP-sky
 'in the sky'
 OT: "arriba, en el cielo" (4442.)
- f. <szam pari pał.>
šam pari pał
 PREP day PFV
 'already in the day'
 OT: "ya es de día, ya es tarde" (4440.)

In compounds the preposition *šan-* is realised as *šam-* before *p* (9. 11c,f), (9. 12b) and before vowels (9. 11b). This might indicate, that *šan* is an allomorphic variant of the free preposition *šama*. The comparative data show that before nasals, *šan* becomes *ša* (9. 12a).

- (9. 12) a. *ša-mami*
 PREP-ear
 'at the ear = ear' (G-PE)
- b. <xampú>
šam-pu
 PREP-hand
 'inside the hand = palm'
 OT: "palma de la mano" (Ch-F)
- c. <šanǵ'éhe>
šan ǵ'ehe
 PREP TOPN
 'Chiquimulilla'
 OT: "Chiquimulilla (población)" (G-S)
- d. <sanzuma>
san suma
 PREP night
 'in the night'
 OT: "en la noche, oscuro" (Jum-E)
- e. <šan gona>
san wona
 PREP hill/mountain
 'at/towards the mountain' (G-RHG)
- f. <xangona>, <ssangu-o-na>
san wona
 PREP hill/mountain
 'towards the mountain'
 OT: "hacia el norte/cerro" (Ch-F)

There are also examples where the use of *šan* or *ša* does not seem to be conditioned by the phonetic environment. With the temporal noun *šĩma* both prepositional forms are attested in X_G as well as X_{Ch} . The functional difference of both prepositional markers is indicated by an inchoative form derived from the temporal compound with preposition *ra-*.

- (9. 13) <rassumaki>
 ra-su(?)ma-ki
 PREP-night-INCH
 'to become night, dark'
 OT: "anochece" (Ch-F)

In X_{Ch} and X_Y , prepositional compounds with *šan* occur in the function of complex prepositions. Combining the preposition *šan* or **ša* and a body part term, these forms define spatial deixis relative to the human body. They take possessor-marking suffixes. None of these forms are attested in the ALS.

- (9. 14) a. <ra urrutiy>
 ra ʔuruti-y
 PREP eyes-2sP
 'at your eyes = before you'
 OT: "delante de ti" (Ch-C)
- b. <n'dupani ran uluc>
 n-tupa ni ran ʔulu-k
 1sS-stay PN:1s PREP back-2sP
 'I stayed at your back = behind you'
 OT: "me quedo detrás de ti" (Ch-C)
- c. <san pajan>
 šan paha-n
 PREP arm-1sP
 'at my arm = below me'
 OT: "abajo de sobaco" (Y-C)

In X_{Ch} the prepositional form *han* is also attested in contexts where it functions as a locative adverb indicating spatial deixis (see § 14.2). In these contexts it can occur on its own or in combination with other markers of spatial deixis, such as directional (9. 15a-b) or locative adverbs (d).

- (9. 15) a. <haʔ ʔwaʔ>
 han-wa-ʔ
 PREP-DIR
 'at-go away= over there'
 OT: "allá" (Ch-MQb)
- b. <janhuac>; <janguac>
 han wa-k
 PREP-DIR-ʔ
 'at-go away= over there'
 OT: "allá" (Ch-C); (Y-C)
 "allí, allá, lejos, retirado" (Ch-F)
- c. <ja ni yá>
 ha ni ya-ʔ
 PREP PN:1s be-STAT
 'here I am'
 OT: "estoy aquí" (Ch-C)
- d. <atijan>
 ʔati-han
 LOC-PREP
 'there'
 OT: "ahí" (Ch-C, Y-C), "allí" (Ch-F)

9.1.1.3 Prepositions *šama* and *šaw*

The form *šama* is attested in the ALS as a free preposition that precedes a nominal complement. In these contexts, it expresses the locational reference 'in, inside' with regard to physical state, time and abstract concepts. The preposition *šama* can occur as a prepositional phrase on its own. In this function it complements phrasal verbs. This basic meaning is confirmed by the comparative data.

- (9. 16) a. <śi szàma macutiusz naŁ ayacà>
śi **šama** **maku-tyuš** **na(?)†** **ʔaya-kaʔ**
 Sp:if PREP house-god IMPFV COP:be-2sS_{DEP}
 'if you were/had been in the church'
 OT: "si hubieras estado en la iglesia" (1959.)

- b. <szamà na pari axvè>
šama na pari ʔahí
 PREP DET day DEM
 'on this day = now'
 OT: "ahora" (2037.)
- c. <szamà na ca confesion>
šama na ka-confesión
 PREP DET 2sP-Sp:confession
 'in your confession'
 OT: "en tu confesión" (2033.)

There is one case in the ALS where the preposition *šama* occurs with the marker *-k*, the exact function of which in this context is unclear. In the Zeeje-ms. comparative prepositional forms are indicated with an accent on the final vowel, suggesting the presence of a glottal stop. Functionally, these forms do not seem to differ from the unmarked ones.

- (9. 17) <szamac suema>
šama-k síma
 PREP-? night
 'in/on top of the night'
 OT: "de mañana" (4430.)

In the comparative data from X_{Ch} and X_Y , the prepositional form occurs likewise in locational contexts, indicating the concept 'in, inside'.

- (9. 18) a. <jama Madrid>
 hama Madrid
 PREP TOPN
 'in Madrid'
 OT: "en Madrid" (Ch-Z)
- b. <amuca jama ka beneficio hay>
 ʔa-muka hama ka-beneficio ʔay
 3sS-work PREP 2pP-Sp:benefit 2PL
 'he works in (= for) our benefit'
 OT: "trabaja en vuestro beneficio" (Ch-Z)
- c. <samanarro>
 sama naro
 PREP earth/ground
 'on the ground'
 OT: "el suelo, en el suelo, abajo" (Y-C)

In X_{Ch} *hama* occurs before verb phrases that can be unmarked or marked for person with cross-referencing affixes. In the Zeeje-manuscript, *hama* is used as a relative pronoun. In the second example the preposition is used as a locative adverb.

- (9. 19) a. <situacion jama tupaguay liqui>
situación hama tupa-wa-y liki
 Sp:situation PREP leave-ANT-3pA 3PL
 'the situation in (which) they have left him'
 OT: "situacion en que le han puesto" (Ch-Z)
- b. <jamacú nagüinac>
 hama kuʔ na winak
 PREP go DET witch
 'there goes/comes the witch'
 OT: "allí viene el brujo" (Ch-JC)
- c. <jamá ajkubar>
 hamaʔ *ʔaku bar
 PREP go PFV
 'there (he) already goes'
 OT: "allí viene ya" (Ch-F)

The prepositional form *šaw* does not occur in the ALS and is only attested in the comparative data. In all attested contexts, it refers to the locational concept 'inside'. It is unclear whether *šaw* is an allomorph of *šama*. It occurs in prepositional phrases and functions as a locative adverb.

- (9. 20) a. <šaw máku>
 šaw maku
 PREP:inside house
 'inside the house'
 OT: "adentro de la casa" (G-S)
- b. <raguray>
 raw ʔuraya
 PREP:inside fire
 'inside the fire = inferno, firestorm'
 OT: "infierno" (Ch-F)
- c. <sau cárcel>
 saw cárcel
 PREP:inside Sp:jail
 'inside the jail'
 OT: "a la cárcel" (Y-C)

9.1.1.4 Prepositional form in phrasal verbs

In phrasal verbs the prepositional root *ša* and the free form *šama* can function as modifiers to a main verb. In the Maldonado-data, the root *ša* occurs only in one context as part of the phrasal verb *niwa ša* [ask-PREP] 'want' ('querer'). The free prepositional form *šama* is attested in several verbal compounds in the ALS (9. 21) as well as in the comparative data (9. 22). In these compound verbs, the preposition specifies the location or direction of the activity described by the main verb, whereby a new verbal meaning is derived. In the given examples, the preposition *ša* specifies direction 'towards', while *šama* specifies location 'inside'. As described in § 10.1.4.2, inflectional marking is taken by the verb, which confirms that the preposition functions as a complement and is not incorporated.

- (9. 21) a. <niguaszâa>
 niwa **ša**
 ask PREP
 'ask/wish towards = to want'
 OT: "querer" (2751.)
- b. <yueguaszáma>
 yíwa **šama**
 lose PREP
 'lose inside = forget'
 OT: "olvidar" (3559.)
- c. <pataszáma>
 pata **šama**
 *accomplish PREP
 'accomplish inside = think, remember'
 OT: "pensar, acordarse" (2832.)
- d. <nuema szama>
 níma **šama**
 eat PREP
 'eat inside = sadness'
 OT: "tristeza, cuidados" (3592.)
- (9. 22) a. yiwa-n šama
 lose-1sA PREP
 'I have lost inside = I have forgotten' (G-RHG)
- b. <n'di man pata rama>
 nti man pata rama
 INT:what DEM occur PREP
 'what can he inside = what does he think?'
 OT: "¿qué piensa, pues, él?" (Ch-C)
- c. <jan mug lucuguasa>
 han muh-luku-wa sa
 PREP 3pA-reach(?) -ANT PREP
 'where they have reached inside = groaned'
 OT: "donde gimen" (Ch-Z)

Some verb stems ending in *ša* are possibly former phrasal verbs that have become lexicalised. However, none of the forms is really semantically transparent enough to prove this statement.

- (9. 23) a. <tariša>
 tari-ša
 *come-PREP
 'divert, change direction'
 OT: "desviar" (3232.)
- b. <szacatxa>
 šaka-č'a
 *take out-PREP
 '*take out from inside = steal'
 OT: "hurtar" (3088.)

(9. 24)	a. <pojora> poho-ra *break-PREP 'thread' OT: "ensartar" (Ch-F)	b. <tz'antz'a> ɕ'an-ɕ'a *suck?-PREP 'chew' OT: "mascar" (Y-C)

All prepositional forms based on the root *ša* can function as full prepositional phrases; as such they can be used as locative adverbs that follow the verb.

- (9. 25)
- a. šawu-ya šaw
sit down-IMP.VI PREP
'sit down here' (G-PE)
- b. <ay quic cahl guapash ragúic ja>
aquí ?ikaʔ wapaʔ rawu-k ha
LOC NUM:'1' seat to sit-2sIMP PREP
'here is a seat, (to) sit on'
OT:"aquí está la silla" (Ch-JC)

9.1.2 Prepositional root *ʔaʔ-*

The spatial prepositional root $\mathcal{A}t$ is given in the ALS with two translation contexts: as the prepositional concept 'over, above' ("sobre, encima") and as a preposition that is translated and used by Maldonado de Matos as the Spanish preposition "por", i.e. 'by, through'. In this translation context, the preposition also occurs in a non-spatial function, as will be discussed in § 9.2.3.

Table 9. 4: Functional contexts of the prepositional root *ʔaʔ* (ALS)

	FORM	ORIGINAL GLOSS
over, above	<aŁ>, <aLi>	"encima o sobre" (3607.)
by, through	<aŁ>, <aLi>	"por" (3606.)

The prepositional root *ʔaʔ* occurs as a bound form and as a free form. It is not clear whether the free form *ʔaʔi* combines the prepositional root and the third person singular cross-referencing suffix *-y*.

In the ALS, the spatial preposition *ʔaʔ* occurs only in prepositional compounds denoting body parts. The preposition precedes other body part nouns, forming a new descriptive term of the body by specifying a position that is 'over' the body part indicated by the head noun. Most of these compounds are found in the ALS (9. 26); in the comparative data only the term *ʔaʔpamaʔ* 'shoulder' is attested (9. 27).

- (9. 26)
- | | | | |
|----|---|----|---|
| a. | <aɭ guapi>
ʔat-wapi
PREP:over-foot
'over the foot = dorsum of the foot'
OT:"empeine del pie" (3619.) | b. | <aɭ pamag>
ʔat-pama-h
PREP:over-arm-3sP
'over his arm = shoulder'
OT:"los hombros" (3614.) |
| c. | <aɭ te>
ʔat-te
PREP:over-female genitals
'over female genitals = male genitals'
OT:" <i>membrum virile</i> " (3616.) | | |

- (9. 27) <aʔpamá>
 ʔaʔ-pama-ʔ
 PREP:over/above-arm-ʔ
 'over the arm = shoulder'
 OT:"hombro" (G-S)

In X_G and X_{Ch} , ʔaʔ functions as a free preposition. It occurs in prepositional phrases where it precedes a nominal complement, which can also be an independent pronoun. In example (9. 28d), the prepositional phrase has become lexicalised and functions as a direct object to the transitive verb.

- (9. 28) a. ʔime-y na ku senyorida ʔaʔ naka
 say-3sA DET MOD girl PREP PN:2s
 'the girl said about you' (G-JS)
- b. <pohuoy ajuaru na pári>
 powo-y ʔaʔ naru na pari
 shine-3sA PREP earth DET sun
 'the sun shone over the earth'
 OT:"el sol alumbra todo el mundo" (Ch-C, Ch-F)
- c. <al-otek ay na xagua>
 ʔaʔ ʔo(:)tek ʔay na šawa
 PREP bed COP DET blanket
 'the blanket is over/on the bed'
 OT:"está sobre la cama la frazada" (Ch-F)
- d. <huca hig aljurai>
 ʔuka hiʔ ʔaʔ huray
 do PROG+3sS_{DEP} PREP eyes
 'he is having it in sight'
 OT:"teniendo a la vista" (Ch-Z)

In X_{Ch} the prepositional root ʔaʔ can take possessor-marking suffixes that express the nominal complement of the preposition. These possessor-marked prepositions function as full prepositional phrases. Both meanings of ʔaʔ, i.e. 'over, above' ("sobre, encima") and 'by, through' ("por") are attested in this morphosyntactic context. The third person singular form ʔaʔi corresponds to the free preposition that is indicated in the ALS. In X_{Ch} the form is given with the meaning 'over, above'.

- (9. 29) a. <alan>
 ʔala-n
 PREP:over/by-1sP
 'over/above me'
 OT:"sobre de mí"; "por mí" (Ch-C, Ch-F)
- b. <alay>
 ʔala-y
 PREP:over/above-2sfP
 'over/above you'
 OT:"sobre de ti" (Ch-C)
- c. <ajli>
 ʔaʔ(a)-y = ʔaʔ-i
 PREP:over/above-3sP
 'over/above him/her/it'
 OT:"sobre de él" (Ch-C)
- d. <ajlajli>
 ʔaʔa-ʔi
 PREP:over/above-PL
 'over/above them'
 OT:"sobre de ellos" (Ch-C)
- e. <alaljki>, <alaljki>
 ʔala-ʔki
 PREP:by/through-1pP
 'by us'
 OT:"por nosotros" (Ch-C, Ch-F)

Maldonado de Matos uses the free preposition *para* only in prepositional compounds that denote body parts or other positional terms. From the translation

contexts of the compounds it can be concluded that the meaning of *para* is 'under, behind' ("debajo, detrás").

- (9. 33)
- | | |
|--|---|
| <p>a. <para guapi>
 para-wapi
 PREP:below-foot
 'below the foot = sole of the foot'
 OT:"planta del pie" (4246.)</p> | <p>b. <para szaja>
 para-šaha
 PREP:below/behind-mouth
 'below the mouth = jaw'
 OT:"cachetes" (4250.)</p> |
| <p>c. <para táLi>
 para-taŋi
 PREP:below-throat
 'below the throat = neck'
 OT:"pescuezo" (4249.)</p> | <p>d. <para paɛi>
 para-pak'i
 PREP:below/behind-wall
 'below/behind the wall = corner'
 OT:"el rincón de la casa" (4247.)</p> |
| <p>e. <para páamag>
 para-pama-h
 PREP:below/behind-arm-3sP
 'below his arm = arm pit'
 OT:"los senos, sobacos de los brazos" (4248.)</p> | |

The translation contexts of prepositional compounds with the preposition *para* or the root *pa* in the comparative data indicate that the spatial concept expressed by the preposition is 'below' and 'behind'.

- (9. 34)
- | | |
|---|---|
| <p>a. pa-šaha-k
 PREP-mouth-INSTR
 'mouth' (G-PE)</p> | <p>b. <pokche pa ra tajla>
 pokče para-taŋa
 goitre PREP:below/behind-throat
 'the goitre is at the neck'
 OT:"el bocio está en el pescuezo" (Ch-C)</p> |
|---|---|

In X_G and X_{Ch} , the free prepositional form *para* occurs in prepositional phrases preceding the nominal complement. In all contexts, *para* is given as 'below', 'under' or 'down'. In example (9. 35d) *para* is translated as "por", which may suggest that it is a Spanish loan, although the spatial concept of 'downwards' would equally bear sense.

- (9. 35)
- | | |
|--|--|
| <p>a. ʔa-mukaʔ para wayaʔ
 3sS-work PREP:below milpa
 'he works below the field' (G-JAP)</p> | |
| <p>b. <para maku>
 para maku
 PREP:below house
 'inside the house'
 OT:"dentro de la casa" (Ch-F)</p> | |
| <p>c. <urlú pa ra uto tero guarle>
 Ø-ʔuʔu-ʔ para ʔutu tero-wa-ʔa
 3sS-fall-STAT PREP tree die-ANT-AGT
 'he fell down the tree, the dead one'
 OT:"se cayó de un árbol y ya se murió" (Ch-P)</p> | |
| <p>d. <para gragua>
 para krawa
 PREP woods
 '*downwards/through the woods'
 OT:"por los montes" (Ch-Z)</p> | |

In X_{Ch} the preposition *para* occurs with possessor-marking suffixes. These forms are given with the prepositional meaning 'below, under'. The possessor-marked preposition can function as a prepositional phrase on its own, although it is attested with nominal complements as well (9. 36b).

- (9. 36) a. <paray>
 para-y
 PREP-2sP
 'below you'
 OT: "debajo de ti" (Ch-C)
- b. <paraj na>
 para-h na?
 PREP-3sP PN:3s
 'below him'
 OT: "debajo de él" (Ch-C)
- c. <parajli>
 para-ti
 PREP-PL
 'below them'
 OT: "debajo de ellos" (Ch-C)

9.2 Non-spatial prepositions

Non-spatial prepositions define the relation of oblique or non-core arguments to the predicate. The oblique arguments encoded by non-spatial prepositions in Xinka are benefactive/possessive, indirect object of ditransitive predicates, cause/reason and comitative. Xinka non-spatial prepositions can take possessor-marking affixes to reference the person of the oblique argument. This is usually the case, if no nominal complement follows. If the nominal complement is present, non-spatial prepositions are usually unmarked, although there are exceptions that are not entirely understood. Non-spatial prepositions are predominantly marked with cross-referencing suffixes; the benefactive preposition can also take prefixes.

Most Xinka non-spatial prepositions are not etymologically transparent. Again, with the exception of the benefactive, they can all be reduced to a one-syllabic prepositional root, which makes them formally similar to spatial prepositions. However, non-spatial prepositions do not occur in nominal compounds as spatial prepositions do. Yet, they are morphologically nominals, since they can take possessor-marking affixes.

In Mesoamerican languages, oblique arguments are primarily encoded by the functional category of the 'relational nouns', that is obligatorily possessed nominal roots (Campbell, Kaufman & Smith-Stark 1986:545-546). Structurally, Xinka non-spatial (as well as spatial) prepositions are relational nouns and they have previously been categorised as such (ibid:556). However, since most forms that encode non-core arguments in Xinka occur primarily unmarked and take possessor-marking only when functioning as a full prepositional phrase, they are categorised here simply according to their function as 'non-spatial prepositions'.

Table 9. 5: Overview of non-spatial prepositions (ALS)

Function	FORM		ORIGINAL GLOSS
benefactive / possessive	<neLa>	-neʔa/neʔa-	"para"
indirect object	<tiy>	ti:ʔ-	"a, para"
cause/reason	<aLi>	ʔaʔ-i	"por"
	<aLparaquigua>	ʔaʔ-para kiwa-	"por"
comitative	<Liná>	ʔi-naʔ	"con"

Table 9. 6: Comparison of benefactive preposition in Xinka

	FORM	ORIGINAL GLOSS
X _M	<neſa>	neſa
X _G	<néſa>	neſa
		"partícula nominal; de" (4169.)
		"su (posesivo)" (G-S)
		"de él, de élla" (G-S)
X _{Ch}	<nejla>	neſa
	<nelag>	nela-h
		"para" (Ch-C), (Ch-F)
		"de, a, para" (Ch-Z)
X _v	<naſa>	naſa
		"de él" (Y-C)

Table 9. 7 illustrates the pattern of prefix-marking on the benefactive preposition *ne fa* and the corresponding glosses by Maldonado de Matos.

Table 9. 7: Benefactive/possessive preposition with person-marking prefixes (ALS)

	FORM		ORIGINAL GLOSS
1s	<anneLa>	ʔan-neʔa	[1sP-BEN] "mío, de mí" (59.)
2s	<cá neLa>	ka-neʔa	[2sP-BEN] "tuyo, de ti" (77.)
3s	<muneLa>	mu-neʔa	[3sP-BEN] "suyo" (95.), "de aquel" (105.)
1p	<muc néLa>	muk-neʔa	[1pP-BEN] "de nosotros, nuestro" (68.)
2p	<caneLa ay>	ka-neʔa ʔay	[2pP-BEN 2PL] "de vosotros" (88.)
3p	<mu neLa ʔic>	mu-neʔa ʔik	[3pP-BEN + PL] "de aquellos" (112.)
	<neLa ʔic>	neʔa ʔik	[BEN + PL] (111.)

(9. 37) a. ʔan-neʔa
 1sP-BEN
 'mine' (G-SH, G-RHG)

 b. mu-neʔa
 3sP-BEN
 'his/her' (G-RHG)

- c. <macnejla>
 *mik-neʔa
 2sP-BEN
 'yours'
 OT: "tuyo, tuya" (Ch-F)
- d. <majlic nejla>, <majlicuejla>
 maʔik-neʔa
 2pP-BEN
 'yours (pl.)'
 OT: "vuestros" (Ch-F), (Ch-C)

The paradigm of suffix-marking for the preposition *neʔa* that is indicated in the ALS is illustrated in

Table 9. 8. Maldonado de Matos gives *neʔa* with possessive suffixes that are clearly written separately from the prepositional root; suffixes of the "shape" –VC are given with alternating vowels. This way of indicating the form may suggest that the possessor-marking suffixes do not mark the preposition but occur with the nominal complement that would be following *neʔa*. Neither of the patterns is attested in syntactic context in the ALS, which is why we may have to rely on comparative data to interpret Maldonado de Matos' paradigm of the benefactive preposition.

Table 9. 8: Benefactive/purposive preposition with person-marking suffixes (ALS)

	FORM		ORIGINAL GLOSS
1s	<neʔa an, en, in, on, ʊen, un>	neʔa –n	"mi (genitivo)" (244.)
2s	<neʔa ca>	neʔa –ka	"tu (genitivo)" (253.)
3s	<neʔa ag, eg, ig, og, ʊeg, ug>	neʔa –h	"él (genitivo)" (262.)
1p	<neʔa ac, ec, ic, oc, ʊec, uc>	neʔa –k	"nuestro (genitivo)" (281.)
2p	<neʔa ca ay>	neʔa –ka ʔay	"vuestro (genitivo)" (292.)
3p	*<neʔa ag, eg, ig, og, ʊeg, ug ʔic>	*neʔa –h ʔik	"*ellos, (genitivo)"

In the comparative data there are examples of benefactive prepositions taking person-marking suffixes. In the Zeeje-manuscript, the benefactive preposition is given as <nelag> which might be rendered as **neʔa-h*, combining the root and the third person possessor-marking suffix *-h*. However, since the form is also attested with the third person singular prefix *mu-*, it is more likely that the final grapheme <g> does not represent the functional category of person-marking but is simply part of the prepositional root. There are other contexts in the Zeeje-manuscript which suggest that <g> is also used to represent a glottal stop, i.e. *neʔaʔ* (§ 9.2.1).

- (9. 38) a. neʔa-k'aʔ
 BEN-2sP
 'yours' (G-SH)
- b. <neʔaʔik>
 neʔa ʔik
 BEN+3p PL
 'theirs'
 OT: "de ellos" (G-S)
- c. <nelagqui>
 nela-h-ki
 BEN-ʔ-PL/3pP?
 'theirs'
 OT: "de ellos" (Ch-Z)
- d. <nanu mug nelag>
 nanu muk-nelah
 DET 1pP-BEN
 'ours'
 OT: "con la nuestra" (Ch-Z)

Maldonado de Matos provides examples of the benefactive preposition *neʔa* preceding person-marking prefixes (e.g. <neʔa mu> "él, *genitive*" (261.); <neʔa muc> "nuestro, *genitive*" (280.)). These forms can be identified as abbreviated annotations of the preposition preceding possessive nouns, since both morphemes are written separately and not as one word. There is no context in the corpus of data where the form **neʔa* + *prefix* would appear as a prepositional phrase on its own.

The free preposition *neʔa* always occurs in prepositional phrases with a nominal complement that references the beneficiary or possessor of the action expressed by the predicate. The nominal complement can consist in a simple (9. 39a) or complex noun phrase (b) or in a pronoun/demonstrative (c-d).

- (9. 39) a. <neʔa mácu>
neʔa maku
 BEN house
 'of the house ...'
 OT: "de la casa" (42.)
- b. <neʔa an ucszáya>
neʔa ʔan-ʔukšaya
 BEN 1sP-wife
 'of my wife, my wife's ...'
 OT: "de mi mujer" (311.)
- c. <nana jau-tuma axue neʔa turiʔi>
nana haw-tuma ʔahi neʔa turi-ti
 FOC skin-deer DEM BEN child-PL
 'this deerskin (= whip) is for the children'
 OT: "este azote o cuero es para los muchachos." (1.)
- d. <neʔa nag>
neʔa nah
 BEN PN:3s
 'his, her'
 OT: "de aquel" (104.)

In X_G and X_{Ch} , the free benefactive preposition *neʔa* is confirmed to occur in the same functional contexts as in the ALS, i.e. preceding a noun phrase.

- (9. 40) a. ʔan-ʔo:tek neʔa nin
 1sP-bed BEN PN:1s
 'my bed is mine' (G-SH)
- b. ʔayaʔa neʔa naʔu-m
 woman/wife BEN son-1sP
 'my son's wife' (G-RHG)
- c. <nanu heredad nelag tatalig>
 nanu heredad nelah tata-lih
 FOC Sp:inheritance BEN father-PL
 'the inheritance of their fathers'
 OT: "la heredad de sus padres" (Ch-Z)
- d. <nela muc consuelo>
 neʔa muk-consuelo
 BEN 1pP-Sp:consolation
 'for/to our consolation'
 OT: "para nuestro consuelo" (Ch-Z)
- e. <nijla na frac>
 *neʔa na frak
 BEN DET man
 'of the man, the man's ...'
 OT: "de este hombre" (Ch-C)

When preceding a nominal complement, *neʔa* can take possessor-marking prefixes. The functional difference between constructions where the preposition is marked and those where it is unmarked is not transparent.

- (9. 41) <na gracia muneʔa dios>
na gracia mu-neʔa dios
 DET Sp:thanks 3sP-BEN Sp:god
 'the grace/thanks of god = god's grace'
 OT: "la gracia de dios" (15.)
- (9. 42) a. na nin ʔan-neʔa wapaʔ man
 DET PN:1s 1sP-BEN bench DEM
 'this bench is mine' (G-SH)
- b. ka-neʔa ša maku-n
 2sP-BEN PREP house-?
 'it is yours inside the house' (G-JAP)

The prefix-marked preposition *neʔa* can function as nominal predicate. In all attested examples from X_G and X_{Ch} , the subject precedes the preposition. This form is not attested in the ALS.

- (9. 43) a. tayuk siʔmaʔ ʔan-neʔa
 hat black 1sP-BEN
 'the black hat is mine' (G-SH)
- b. nana hiʔ ka-neʔa
 FOC DEM 2sP-BEN
 'this is yours' (G-RHG)

- c. <naj na macu na macnejla>
 nah na maku na *mik-neʔa
 PN:3s DET house DEM 2sP-BEN
 'this is the house that is yours'
 OT: "esta casa es tuva" (Ch-C)

In the ALS as well as in X_{Ch}, the preposition *meta* is attested with intensifier-reflexive pronouns. In these contexts the preposition occurs in initial position and takes person-marking prefixes. This pattern may be analogical to the complex causal preposition <aLparaquigua> indicated by Maldonado de Matos (see § 9.2.3).

- (9. 44) <an neLa eigián>
 ?an-neʔa **ki-wa-n**
 1sP-BEN INTENS/REFL-?-1sP
 'of myself'
 OT:"de mí mismo" (144.)
- (9. 45) <majkinejla kiauaki>, <majkinejla kiguaki>
 mahki-neʔa ki-wa-ki
 1pP-BEN INTENS/REFL-?-1pP
 'of ourselves'
 OT:"nuestro" (Ch-C), (Ch-F)

In interrogative clauses, the preposition *neŋa* follows the question word that occurs in clause-initial position (see word order in interrogative clauses, § 16.2.4). The pattern is found in the ALS as well as in X_{Ch} and X_Y .

- (9. 46) a. <guèna neLa>
wena neLa
 INT:who BEN
 'whose? / for whom?'
 OT:"quien, el que (genitivo)" (188.)
- b. <ni guéna maquí muneLa>
ni wena ma ki mu-neLa
 NEG INT COND INTENS 3sP-BEN
 'of / for nobody'
 OT:"ninguno (genitivo)" (230.)
- (9. 47) a. <huanin nejlá na mácu ne>
wanin neLa na maku ne
 INT:who? BEN DET house DEM
 'whose house is this?'
 OT:"¿de quién es esta casa?" (Ch-C)
- b. <huenin nala mu mácu>
wenin nala mu-maku
 INT:who? BEN 3sP-house
 'whose house (is it)?'
 OT:"¿de quién es esta casa?" (Y-C)

In X_{Ch} the free benefactive preposition also appears in position following independent pronouns. The difference of constructions where the pronoun follows and those where it precedes the preposition might be semantically determined, as both translation contexts given below indicate a purposive connotation rather than the possessive meaning that is attested with constructions in which the pronoun follows the preposition (9. 39).

(9. 48)	a. <nan nejla> nan neʔa PN:1s BEN 'for me' OT: "para mi" (Ch-JC)	b. <nac nejla> nak neʔa PN:2s BEN 'for you' OT: "tengo, para ti" (Ch-C)

Preceding a verb phrase, the preposition *neʔa* indicates purposiveness of action, which is expressed in the Spanish translation contexts as "para", i.e. 'for, in order to'. The verbal predicate that follows the free preposition *neʔa* takes cross-referencing affixes. In the ALS, only prefixes are attested in this context.

- (9. 49) a. <neʔa a acù>
neʔa ʔa-ʔakuʔ
 BEN 3sS-go
 'for/so he/one goes'
 OT: "para ir" (1717.)
- b. <neʔa a oròmo>
neʔa ʔa-ʔoromo
 BEN 3sA-pick up
 'for/so he/one picks it up'
 OT: "para recoger" (981.)
- c. <neʔa capùla cacumbision...>
neʔa ka-pula ka-cumbision
 BEN 2sA-make 2sP-Sp:confession
 'for/so you make your confession'
 OT: "para confesarte..." (2042.)

In X_G and X_{Ch} , we find evidence that *neʔa* can precede verbal predicates, which take cross-referencing prefixes (9. 50), complex predicates with suffix-marking (9. 51), or unmarked nonfinite predicates (9. 52).

- (9. 50) a. hiši neʔa mu-ʔiwa ʔayaʔa
 stone BEN 3sA-make tortillas woman
 'the stone (is) for the woman to make tortillas' (G-SH)
- b. <nanu unico medio nela mug huca conseguir>
 nanu unico medio nela muh-ʔuka conseguir
 FOC Sp: only means BEN 3sA-do Sp:get
 'this is the only means to get it'
 OT: "el único medio de conseguirla" (Ch-Z)
- (9. 51) a. hin horo-kaʔ ʔima-Ø nin neʔa ku=ya-n ša ʔotra parte
 NEG get-2sA say-IMP.VT PN:1s BEN go=PROG-1sS_{DEP} PREP Sp:elsewhere
 '(if) you do not have it, tell me, so that I am going (= can go) elsewhere' (G-SH)
- b. tamaʔiʔ neʔa kuy puʔa-n k'aʔ waruk
 thread/rope BEN AUX.FUT make-1sA INDEF hammock
 '(the) thread (is) for I am going to make a hammock' (G-SH)
- (9. 52) a. kuy kunu-n neʔa nuka naka
 AUX.FUT buy-1sA BEN give PN:2s
 'I will buy (it) in order to give it to you' (G-SH)
- b. <lantz'ama nejla ma ijaxaca>
 lan ɕ'ama neʔa ma ʔišaka
 NEG good BEN COND drink
 'it is not good for drinking'
 OT: "no sirve para que se pueda beber" (Ch-C)

Before verb phrases, *neʔa* can take person-marking suffixes or it can occur unmarked with all inflectional morphology being referenced on the verbal predicate. In this function, *neʔa* never takes cross-referencing prefixes. The suffix-marked preposition is not attested in syntactic context in the ALS. In the comparative data from X_G and X_{Ch} , suffix-marking only occurs when the benefactive preposition precedes a verb phrase, which may suggest that the person-marker, instead of being suffixed to the benefactive preposition, may be prefixed to the following verb.

- (9. 53) a. na nin ʔuka preparar yaʔ neʔa(-)n(-)šawaʔ'a-ʔ waya-n
 DET PN:1s do Sp:prepare PROG+3sS_{DEP} BEN(-)1sP/A(-)sow-STAT milpa-1sP
 'I am preparing to sow/plant my milpa' (G-SH)

- b. kuy šuwi-n nin neʔa(-)n(-)šawu-ʔ hi-naʔ
 AUX.FUT sweep-1sP PN:1s BEN(-)1sP/A(-)sit down-STAT PREP:with-DEM/3s
 'I will sweep for me to sit down with him/her' (G-SH)
- c. neʔa(-)ka(-)ʔišaka
 BEN(-)2sP/A(-)drink
 '...for you to drink' (G-SH)

9.2.2 Indirect object

The preposition *ti:ʔ* is used to mark the indirect object of ditransitive predicates. It occurs in two forms: (a) as a free preposition with a nominal complement and (b) as a form that takes person-marking suffixes and functions as a prepositional phrase on its own. Maldonado de Matos defines the root *ti:ʔ* as a dative case marker and translates it into Spanish as "a, para".

Table 9. 9: Comparison of the preposition marking indirect object in Xinka

	FORM		ORIGINAL GLOSS
X _M	<tiý>	ti:ʔ-	"a, para"
X _G	-	ti:	"a"
	<tiʔ->	ti:ʔ-	"a, para x" (G-S)
X _{Ch}	<ti>	ti(:ʔ)	"a, para" (Ch-C)
			"de" (Ch-Z), "con" (Ch-C)
X _Y	<tiy>, <tij>	ti:	"a" (Y-C)

The ALS gives <tiý> as the preposition that marks the indirect object. The comparative data suggest that Maldonado de Matos' grapheme <ý> likely represents a long vowel that is followed by a glottal stop. Examples from X_{Ch} do not seem to indicate a long vowel or final glottal stop graphemically; also, there are several contexts in this Xinka-variety where the marker is used the same way as the Spanish preposition "de", suggesting a process of borrowing (see below). It needs to be mentioned that **ti* is a prepositional root and marker for dative/indirect object in most Western Mayan languages (see e.g. Smailus 1989:105; Kaufman 2003:1512), and it is therefore not unlikely that the Xinka preposition may be a diffused form.

There are only a few examples in the ALS that illustrate the indirect object preposition in syntactic context. More information about the function of the preposition can be obtained from the comparative data. As a free preposition, *ti:ʔ* precedes the nominal complement, which functions within the clause as the indirect object. It can be represented by a simple or complex noun phrase including independent pronouns, demonstratives and reflexives.

- (9. 54) a. <tiý jútu>
ti:ʔ hutu
 IO tree
 'to/for the tree'
 OT:"al palo" (27.)
- b. <tiý nen>
ti:ʔ nen
 IO PN:1s
 'to/for me'
 OT:"a mí, para mí" (60.)
- c. <tiýca eica>
ti:ʔ-ka ki-ka
 IO-2sP INTENS/REFL-2sP
 'to you, to yourself'
 OT:"tú mismo (dativo)" (160.)
- d. <...mu nariLa pè ... tiy turiLi>
mu-nariʔa peʔ [...] ti:ʔ turi-ti
 3sA-teach FUT IO child-PL
 '...he will teach (it) ... to the children'
 OT:"...enseñará ... a los niños" (2020.)

In X_G and X_{Ch} , there are more contexts where the preposition *ti:ʔ* is used to introduce the constituent that expresses the indirect object of a ditransitive verb.

- (9. 55) a. hanta ʔima ti:ʔ nin
INT:what? say IO PN:1s
'what (does he) say to me?' (G-SH)
- b. <nucac ti na utac>
nuka-k ti:ʔ na ʔuta-k
give-2sA IO DET mother-2sP
'give it to your mother'
OT:"dalo a mi madre" (Ch-C)
- c. <alig hucay deber liqui ti empeño>
ʔalih ʔuka-y *deber* liki ti:ʔ *empeño*
PREP:by do-3sA Sp:owe PL IO Sp:pawnshop
'by owing them to the pawnshop'
OT:"por deberlos al empeño" (Ch-Z)

In the ALS the preposition *ti:ʔ* can take possessor-marking suffixes to reference the person of the indirect object. Prepositions with person-marking can make up a prepositional phrase on their own and are used in all those contexts where the nominal complement is omitted. The prepositional root **ti:ʔ* is never attested with person-marking prefixes. As the benefactive preposition, the preposition *ti:ʔ* is also given by Maldonado de Matos preceding person-marking prefixes (e.g. <tiy ca> "tú, *dativo*" (254.); <tiy muc> "nuestro, *dativo*" (263.)), which can be identified as generalised abbreviations of a following prefix-marked possessive noun. The form **ti:ʔ + prefix* does not appear as a prepositional phrase on its own.

Table 9. 10: Indirect object preposition with person-marking suffixes (ALS)

	FORM	ORIGINAL GLOSS
1s	<tiyn> ti:ʔ-n	"a mí, para mí, Dat" (61.)
2s	<tiyca> ti:ʔ-ka	"a ti, para ti" (79.)
3s	<tiyg> ti:ʔ-h	"a, para aquel" (106.)
1p	<tiyε> ti:ʔ-k'	"a, para nosotros" (70.)
2p	<tiyca ay> ti:ʔ-ka ʔay	"a, para vosotros" (89.)
3p	<tiyg Lic> ti:ʔ-h ʔik	"a, para aquellos" (113.)

There is only one context in the ALS that shows the person-marked indirect object preposition following the verbal predicate and preceding the direct object of the clause.

- (9. 56) <ca-nuca pà pè tiy-g na doctrina>
ka-nuka paʔ peʔ ti:ʔ-h na doctrina
2sA-give PFV CENT/FUT IO-3sP DET Sp:creed
'(if) you gave (= told) him the creed'
OT:"... si les dieras la doctrina" (2038.)

The pattern of cross-referencing is confirmed in X_G , X_{Ch} and X_Y . In all examples, the person-marked preposition follows the verbal predicate. S and O constituents follow in final position after the prepositional phrase.

- (9. 57) a. <na ulsih imawáy tiʔiʔ>
na ʔulsi-h ʔima-wa-y *ti:ʔ-h
DET mother-in-law-3sP say-ANT-3sA IO-3sP
'his/her mother in law said to him/her'
OT:"la suegra le preguntaba" (G-S)

- b. <4andi ndi pulayán ti?k>
 4an-di ndi pula=ya-n ti(:)?-k
 NEG-INT INT make=PROG-1sS_{DEF} IO-2sP
 '(it is) nothing that I am doing to you'
 OT: "nada que hago a ti" (G-S)
- c. <tura-pe-dín-xuk>
 tura-Ø pe(?) ti?:n šuk(a)
 bring-IMP.VT CENT IO-1sP food
 'bring me food'
 OT: "tráeme que comer" (Ch-F)
- d. <acuay upulan mayaya tic>
 7akw=ayu pula-n mayaya ti(:)?-k
 go=AUX make-1sA tickle IO-2sP
 'I am going to make/give you tickeling'
 OT: "voy a hacerte cosquillas" (Ch-C)
- e. <jarputiy tin>
 harputi:-Ø ti(:)?-n
 rub off-IMP.VI IO-1sP
 'rub me off'
 OT: "frótame!" (Y-C)

In X_Y the person-marked preposition $ti(:)?$ is employed in reflexive constructions, which does not seem to be a regular pattern, as the reflexive pronoun $ki-$ is likewise attested in X_Y (§ 7.2.1).

- (9. 58) a. <n'patá patin> b. <neu kōtu tin>
 n-pata pa(?) ti(:)?-n nen kīti ti(:)?-n
 1sA-accomplish PFV IO-1sP PN:1s scratch IO-1sP
 'I have accomplished me/myself' 'I scratch myself'
 = I have recovered'
 OT: "yo sané" (Y-C) OT: "yo me rasco" (Y-C)

In X_{Ch} there is a syntactic pattern of a stative participle followed by a prepositional phrase with $ti(:)?$. In these contexts, the preposition precedes the nominal complement, which takes the semantic role of the direct object. However, as the verbal predicate is not transitive but intransitive, the preposition $ti(:)?$ may be required to link the object to the predicate in an oblique construction.

- (9. 59) a. <chengóc ti pu> b. <xu-umi ti na guapí>
 čenko-k ti(:)? pu *šu:nu ti(:)? na wapi?
 twist-STAT? IO arm swell IO DET foot
 'his arm is twisted = dislocated' 'the foot is swollen'
 OT: "su brazo está torcido" (Ch-C) OT: "hinchóse el pie" (Ch-F)
- c. <chirí ti guapan>
 čiri-? ti(:)? wapa-n
 twist-STAT IO foot-1sP
 'my foot/ankle is twisted'
 OT: "el pie está torcido" (Y-C)

There are several examples in X_{Ch} and X_Y where the free preposition $ti(:)?$ follows the verbal or nominal predicate of the clause. In most of these contexts, $ti(:)?$ seems to refer to the third person singular.

- (9. 60) a. <ay ojo tí> b. <cayayá ti>
 7ay 7oho ti:?
 Sp:EXIST cough IO
 'he has a cough' 'it is hot to/for him/it = it sparkles(?)'
 OT: "tiene catarro" (Ch-F) OT: "relumbrar" (Ch-C)

- c. <tuyac ti>
tuya-k ti(:?)
scold-2s/IMP IO
'scold him'
OT:"regáñalos" (Ch-C)
- d. <pu naj mau chiri ti>
pu naj man ħiri(-?) ti(:?)
arm PN:3s DEM twist(-STAT) IO
'the arm of him is twisted = dislocated'
OT:"el brazo de él está torcido" (Y-C)

There are several verbs ending in *-ti(:)ʔ* or *-tik*, which could possibly be identified as grammaticalisations of the preposition *ti(ʔ)*. In the comparative data most verbs that end in *-ti(:)ʔ* seem to indicate positionals (cf. § 11.2.3).

- (9. 61) <tunáti>
 tuna-ti
 L-M:drum-IO?
 'to drum = play an instrument'
 OT: "tocar instrumento" (3325.)
- (9. 62) a. mur-ti?
 break/tear-IO?
 'it burst' (G-SH)
- b. <jorotik>
 horo-tik
 guard/get-IO?
 'to hold a vigil'
 OT: "vigilar, velar" (Ch-F)
- c. <vuirutiy>
 *wiri-ti: (?)
 wrap-IO?
 'to wrap'
 OT: "enrollar" (Y-C)

There are several contexts where the preposition *ti(:ʔ)* occurs in postposition. There is an example in the ALS where the marked form of *ti:ʔ* can follow the unmarked benefactive preposition *neʔa*.

- (9. 63) <neLa tiy>
 ne.ta **ti:ʔ-h**
 BEN IO-3sP
 'for him'
 OT: "a, para aquel" (107.)

The preposition *ti*: 2 also follows question words. These patterns are not attested in syntactic context, although the other non-spatial preposition described by Maldonado de Matos also follow question words in interrogative clauses.

- (9. 64) a. <guèna tiyǎng>
wena **ti:7-h**
 INT:who IO-3sP
 'to whom?'
 OT: "quien, el que (dativo)" (189.)
- b. <ni guèna maquí tiyǎng>
ni **wena** **ma** **ki** **ti:7-h**
 NEG INT:who COND INTENS IO-3sP
 'to nobody'
 OT: "ninguno (dativo)" (231.)

In X_{Ch} the preposition *ti(:)ʔ* is attested in non-declarative clauses: either in interrogative clauses where it follows the question marker (9. 65a-c), or in negative clauses, following the negative marker (d).

- (9. 65)
- a. <ena ti mug huca deber tanto>
 ʔena ti(:ʔ) muh-ʔuka *deber tanto*
 INT:who IO 3sA-do Sp:owe much
 'to whom he owes a lot'
 OT:"a quien tanto debe" (Ch-Z)
- b. <huanin ti nucaj huacan>
 wanin ti(:ʔ) nuka-wa-kan
 INT:who? IO give-ANT-2sA_{DEP}
 'to whom have you given it?'
 OT:"¿a quién se lo diste?" (Ch-C)

- c. <n'di ay tijlic>
 n'ti ʔay ti(:ʔ)-tik
 INT PROG+3sS_{DEP} IO-3pP
 'what is to them = what do they have?'
 OT: "¿qué tienen, pues, ustedes?" (Ch-C)
- d. <lan junucá ti naj utác>
 lan hunu-kaʔ ti(:ʔ) nah ʔuta-k
 NEG know-2sA IO DET? mother-2sP
 'you do not know your mother'
 OT: "ya [sic: no] conoces a tu madre" (Ch-C)

Some examples in the comparative data show that *ti(:ʔ)* can occur in contexts where in Spanish the preposition "de" is used. Some of these examples indicate a possessive relationship where one would expect the use of the benefactive preposition *neʔa* (see § 9.2.1). This may suggest that in these cases, *ti(:ʔ)* is either a direct loan from Spanish, i.e. *de* > *ti* (see patterns of assimilation, § 4.5.2.3), or that the Xinka preposition has become instrumentalised in *X_{Ch}* to function in the same syntactic contexts as the Spanish preposition "de".

- (9. 66) a. *ti:ʔ mu-teritoriyo man*
 PREP 3sP-Sp:territory DEM
 'of/from his territory/country = from abroad' (G-SH)
- b. <castianuli ti America>
 kastyanu-li ti(:ʔ) America
 Sp:Spanish-PL PREP America
 'Spanish of America'
 OT: "Españoles de America" (Ch-Z)
- c. <pujla ti rapu>
 puʔa-(ʔ) ti(:ʔ) rapu
 make-STAT PREP cotton
 'it is made from cotton'
 OT: "está hecho de algodón" (Ch-C)
- d. <ti sséima>
 ti(:ʔ) siʔma
 PREP night
 'at night'
 OT: "de noche" (Ch-F)
- e. <ti parri>
 ti(:ʔ) pari
 PREP day
 'in/during the day'
 OT: "día" (Jut-V), (Y-V)

In the Calderón-data from *X_{Ch}* and *X_Y*, <ti> is often given with translation context "con". Nevertheless, in all given contexts, the form can be interpreted again as substituting for the Spanish preposition "de"; i.e. "de una espina", "de mi pie".

- (9. 67) a. <tz'ajmá kihuan ti ricayijli>
 ɛ'ahma-ʔ ki-wa-n ti(:ʔ) rikayi-ti
 sting-STAT INTENS/REFL-ʔ-1s P PREP thorn-PL
 'I stung myself with thorns'
 OT: "me piqué con una espina" (Ch-C)
- b. <cuay netkan ti guapí na jixi na>
 kway netka-n ti(:ʔ) wapiʔ na hiši na(ʔ)
 FUT kick-1sA PREP foot DET stone DEM
 'I will kick this stone with the foot'
 OT: "voy a enjugar con mi pie esta piedra" (Ch-C)
- c. <ti pamá>
 ti(:ʔ) pamaʔ
 PREP wing/arm
 'with wings/arms'
 OT: "con las alas" (Y-C)

9.2.3 Cause/reason

The spatial preposition *ʔaʔ* 'over, by' is used in a non-spatial function to introduce the causee of the action that is expressed by the predicate. It occurs as the free preposition *ʔaʔ* and as the complex form *ʔaʔparak'iwa-*, which seems to combine two types of spatial prepositions and the reflexive pronoun that can take possessor-marking suffixes. This complex form is only attested in the ALS and may be an invention by the colonial author.

The causal preposition *ʔaʔ* consists of the spatial prepositional root *ʔaʔ* and the third person singular cross-referencing suffix *-y*. The person-marking suffix cross-references the causee expressed by the nominal complement of the prepositional phrase. The preposition is found in all Xinka varieties. In the Zeeje-manuscript the orthographic rendering as <alig> may suggest that the form takes the third person singular possessor-marking suffix *-h*. In analogy with other forms from the same source it seems, however, more likely that <g> is part of the root and does not have a morphological function. Also in X_{Ch} we find the form *ʔayin*, which occurs in dependent clauses and combines the prepositional root *ʔaʔ* and the dependent-marking suffix of the third person singular *-yin* (see § 6.2.2.3).

Table 9. 11: Comparison of causal preposition in Xinka

	FORM		ORIGINAL GLOSS
X_M	<aLi>	<i>ʔaʔ</i>	"por" (3606.)
X_G	-	<i>ʔaʔ</i> , <i>ʔaʔe</i>	"por"
X_{Ch}	<alig>	<i>ʔalih</i>	"por, pro, contra, sobre, a" (Ch-Z)
	<ajli>	<i>ʔaʔ</i>	"por" (Ch-C)
	<ayin>	<i>ʔa-yin</i>	"por" (Ch-C), (Ch-F)
X_Y	<ajli>	<i>ʔaʔ</i>	"por" (Y-C)

The preposition *ʔaʔ* occurs in the ALS (9. 68) and the comparative data (9. 69) preceding noun phrases. The whole prepositional phrase always follows the predicate. The nominal complements can be simple and complex, including pronouns and demonstratives.

- (9. 68) a. <aLi náca>
ʔaʔ **naka**
 PREP.CAUS PN:2s
 'by/because of you'
 OT: "por ti" (83.)
- b. <aLi na axuvé>
ʔaʔ **na** **ʔahi**
 PREP.CAUS DET DEM
 'by/because of this'
 OT: "por éste" (121.)
- c. <nana macu pulà pataguàg aLi Pedro>
nana **maku** **pula** **pata-wa-h** **ʔaʔ** **Pedro**
 FOC house make *accomplish-ANT-3sP PREP.CAUS Pedro
 'this is the house (that) was made by Pedro'
 OT: "la casa fue hecha por Pedro" (4775.)
- (9. 69) a. kawi-ʔ ʔaʔ šuraya
 Ø-cry-STAT PREP.CAUS girl
 'he cried because of the girl' (G-SH)
- b. ʔaʔ ware hin ka-ta:-yi-ʔ naka
 PREP.CAUS rain NEG 2sS-come-STAT PN:2s
 'because of the rain you did not come' (G-SH)
- c. <á parafriqui alig mug libertad>
 ʔa-para-wriki ʔalih muh-libertad
 3sS-search-word PREP.CAUS 3sP-Sp:liberty
 'he fought because of (= for) his liberty'
 OT: "pelea por su libertad" (Ch-Z)

As other non-spatial prepositions, *ʔaʔi* follows question words in interrogative clauses (9. 70). This pattern is confirmed in X_G, X_{Ch} and X_Y (9. 71).

- (9. 70) a. <szanda szue aLi>
 ʃan=ta **ʃi** **ʔaʔi**
 INT:what?=INT EXTEN PREP.CAUS
 'because of what = why?'
 OT: "¿y por qué? (interrogativo)" (4435.)
- b. <guèna aLi>
 wena **ʔaʔi**
 INT:who PREP.CAUS
 'because of whom?'
 OT: "quien, el que (ablativo)" (191.)
- (9. 71) a. han=ta ʔaʔi tupa-wa-kaʔ
 INT:what?=INT PREP.CAUS leave/let-ANT-2sA
 'because of what (= why?) have you left it?' (G-RHG)
- b. <n'diajli huixu huacá>
 nti ʔaʔi wišu-wa-kaʔ
 INT:what? PREP.CAUS hit-ANT-2sA
 'because of what = why have/were you beaten?'
 OT: "¿por quién te pegaron?" (Ch-C)
- c. <huanin ajlinu acanay>
 wanin ʔaʔi *nuka nay
 INT:who? PREP.CAUS give PN:2s
 'because of whom (did he) beat you?'
 OT: "¿por quién te pegaron?" (Y-C)

The comparative data show that the causal preposition *ʔaʔi* also follows the negative marker in negative clauses (9. 72) as well as demonstratives in dependent clauses (9. 73). None of these contexts is attested in the ALS.

- (9. 72) a. hin ʔaʔi nana hini-kan nin
 NEG PREP.CAUS FOC know-2sA_{DEP} PN:1s
 '(it is) not because of this (that) you know me' (G-JAP)
- b. hin ʔaʔi hin
 NEG PREP.CAUS NEG
 'not because of this = why not'¹⁵¹ (G-JAP), (G-RHG)
- (9. 73) a. man ʔaʔi šin šan mura
 DEM PREP.CAUS NEG INT corn cob
 'because of this there were no corn cobs' (G-JAP)
- b. hin ka-niʔma-ʔa man ʔaʔi ʔuk-ey ʔenfriyar ka-komida
 NEG 2sA-eat-PAST.ACT DEM PREP.CAUS do-3sA Sp:get cold 2sP-food
 'you did not eat, because of that your food got cold' (G-SH)
- c. ku šuwí na ʔaʔi
 go sweep DET PREP.CAUS
 'go sweeping because of him' (G-JS)
- d. <jarána ya ma ájli lan puri tá>
 harana ya ma ʔaʔi lan puri taʔ
 ill PROG+3sS_{DEP} DEM PREP.CAUS NEG ? come
 'because of being ill, I did/have not come'
 OT: "porque estuve enfermo no he venido" (Ch-C)

Preceding a verbal predicate, the causal preposition *ʔaʔi* functions as a conjunction, indicating 'because'. This pattern is known from Mayan languages, where causal prepositions likewise function as causal conjunctions (see e.g. Kaufman 1990a:76-77).

¹⁵¹ This translation is based on the field translation context (see Appendix 6).

- (9. 74) a. <aLi aguiszù na turiLi a erLèque>
ʔaʔi **ʔa-wišu-ʔ** **na** **turi-ti** **ʔa-ʔerʔeke**
 PREP.CAUS 3sS-beat-STAT DET child-PL 3pS-get frightened
 'because of beating (= one beats) the children, they get frightened'
 OT: "de azotar a los niños se espantan" (2041.)
- b. <aLi ca yguitzi na misza [...] a szin ca pùla na jamaà>
ʔaʔi **ka-ʔiwiç'iʔ** **na** **miša** **ʔašin** **ka-pula** **na** **hamaʔ**
 PREP.CAUS 2sA-listen DET Sp:mass NEG 2sA-make DET sin
 'because you listen to the mass, you commit no sin'
 OT: "por oír misa [...] no pecas" (2044.)
- (9. 75) a. te:ro yípi nin ʔaʔi šuka-n nak'i
 want throw up PN:1s PREP.CAUS eat-1sA chilli
 '(I) want to throw up because I ate chilli' (G-SH)
- b. <alig hucay deber liqui ti empeño>
ʔalih **ʔuka-y** *deber* *liki* *ti(:ʔ)* *empeño*
 PREP.CAUS do-3pA Sp:owe PN:3p IO Sp:pawnhouse
 'because they owe it to the pawnhouse'
 OT: "por deberlos al empeño" (Ch-Z)
- c. <ayín nānuma>
ʔayi-n **na** **numa**
 PREP.CAUS-1sP DET eat
 'because I (already) ate'
 OT: "ya comí" (Ch-F)

Maldonado de Matos gives the form <aLparaquigua> as an alternative marker for the Latin ablative, and thus as another causal preposition. As mentioned above, the form is only attested in the ALS and is likely an artificial construction. Just like *ʔaʔi* it is translated into Spanish as "por"; both prepositional forms introduce the causee in passive constructions.

- (9. 76) <aLparaquiguá>
ʔaʔ-para **kiwa-ʔ**
 PREP.CAUS-ʔ INTENS/REFL-STAT
 'by-ʔ X-self = by/through X'
 OT: "por" (3615.)

With the exception of the prepositional root *ʔaʔ* in initial position, the etymology of the individual elements not entirely transparent. The following element *para* could be prepositional as well, indicating either the spatial concept 'under, behind' (§ 9.1.3) or the Spanish preposition *para* 'for'. The element *ki-wa-*, which takes cross-referencing suffixes, may be identical with the intensifier-reflexive pronoun (§ 7.2). In the ALS, the intensifier-reflexive is always spelled with the tresillo <ɛ>, suggesting the presence of a glottalised velar stop¹⁵², while in the prepositional form we only find an unglottalised velar represented by <qu>. In the comparative data the intensifier-reflexive root *ki-* is primarily given with an unglottalised velar (§ 7.2.1). Such a composite form would literally translate as 'by/for x-self'.

¹⁵² As this glottalisation is not attested in the comparative data, the intensifier-reflexive is transliterated with a simple velar stop (see § 7.2.1).

In the Zeeje-manuscript, the causal preposition *ʔaʔi* is attested with the intensifier pronoun *ki*, which could be an indication that the complex preposition may not be a pure invention by Maldonado de Matos.

- (9. 77) <mug lucu sa aliqui>
 muh-lukusa ʔaʔi ki
 3sA-breath PREP.CAUS INTENS
 'he breathes because of him-/her-/itself'
 OT: "suspira por élla" (Ch-Z)

The free causal preposition *ʔaʔi* does not take person-marking suffixes to cross-reference the causee in constructions where the nominal complement of the prepositional phrase is omitted. In these contexts, Maldonado de Matos employs the complex form *ʔaʔ para kiwa*.

- (9. 78) a. <aŁparaquiguàn>
ʔaʔ-para kiwa-n
 PREP.CAUS-? INTENS/REFL-1sP
 'by/for myself = by me'
 OT: "por mí" (64.)
- b. <nucà pà pè patai tiyg aŁparaquiguaca na doctrin>
nuka-ʔ paʔ peʔ pata-y ti:ʔ-h
 give-STAT PFV FUT *accomplish-3sA IO-3sP
 'it was already given (= told) to him'
ʔaʔ-para kiwa-ka na doctrina
 PREP.CAUS-? INTENS/REFL-2sP DET Sp:creed
 'the creed, by yourself'
 OT: "si la doctrina le fuere dada por ti" (2039.)
- c. <pùla Łan patai ... aŁparaquiguàc>
pula Łan pata-y ʔaʔ-para kiwa-k
 make OPT *accomplish-3sA PREP.CAUS-? INTENS/REFL-1pP
 'it would be made by ourselves'
 OT: "dicen que...sea hecho por nosotros" (43.)

In most examples given in the ALS, the complex preposition appears like a free form preceding a nominal complement that indicates the semantic agent of the clause. It functions the same way as the preposition *ʔaʔi*. A reflexive construction may function as a complement noun phrase (9. 79c).

- (9. 79) a. <aŁparaquiguà an ucszáya>
ʔaʔ-para kiwa-ʔ ʔan-ʔukšaya
 PREP.CAUS-? INTENS/REFL-? 1sP-wife
 'because of my wife herself'
 OT: "por mi mujer" (315.)
- b. <aŁparaquiguà jùtu>
ʔaʔ-para kiwa-ʔ hutu
 PREP.CAUS-? INTENS/REFL-? tree
 'because of the tree itself'
 OT: "por el palo" (31.)
- c. <aŁparaquiguà nen eiguán>
ʔaʔ-para kiwa-ʔ nen kiwa-n
 PREP.CAUS-? INTENS/REFL-? PN:1s INTENS/REFL-1sP
 'by/because of me myself itself'
 OT: "por mí mismo" (147.)

Just like the free preposition *ʔaʔi* the complex preposition functions as the causal conjunction 'because' (= "porque") when preceding a verbal predicate.

- (9. 80) a. <aLparaquiguà jarana ayacà>
ʔaʔi-para **kiwa-ʔ** **harana** **ʔaya-kaʔ**
 PREP.CAUS-? INTENS/REFL-? ill be-2s_{DEP}
 'because you were ill'
 OT: "porque estuvistes enfermo" (1958.)
- b. <aLparaquiguà aszin pa ayù juenvei>
ʔaʔi-para **kiwa-ʔ** **ʔašin** **pa(ʔ)** **ʔayuʔ** **hini-y**
 PREP.CAUS-? INTENS/REFL-? NEG PFV AUX know-3sA
 'because he would not have known'
 OT: "porque no habrá sabido" (2022.)
- c. <aLparaquiguà ca yguitzí na misza>
ʔaʔi-para **kiwa-ʔ** **ka-ʔiwiʔi** **na** **miša**
 PREP.CAUS-? INTENS/REFL-? 2sA-hear DET Sp:mass
 'because you hear the mass'
 OT: "por oír misa" (2044.)

9.2.4 Comitative/instrumental

A comitative or instrumental marker introduces a second agent to the clause. The prepositional root *ʔi-* expresses that an action is carried out 'with' the agent of the predicate. In the majority of attested examples, the oblique argument encodes the notion of 'company' rather than 'instrument'.

In the ALS and the comparative data, the preposition is attested as *ʔina(ʔ)*, which combines the root *ʔi-* and the demonstrative *na(ʔ)* that can function as the third person singular independent pronoun (§ 8.5.2). In X_G and X_{Ch} the prepositional root *ʔi-* is used with independent pronouns of the first and second person singular. In the semi-speaker data from X_G the initial lateral-fricative *ʔ* has changed into the glottal fricative *h* (cf. § 4.3.1.5.2). There are a few examples in X_G and X_Y where the initial consonant is deleted altogether. In X_{Ch} the form is also attested as *ninaʔ*.

Etymologically, the prepositional root *ʔi* is likely related to the plural marker of human/person nouns *-ʔi* (§ 8.4.2). The plural morpheme may have become grammaticalised from a prepositional phrase following the noun.

Table 9. 12: Comparison of comitative/instrumental prepositions in Xinka

	FORM	ORIGINAL GLOSS
X_M	<Lina>	ʔi-na
	<Linà>	ʔi-naʔ
X_G		hi-na
		ʔi-na
	<hína>	hi-na
X_{Ch}	<lig>	lih
		li
	<lina>	li-na
	<ninaʔ>	ni-naʔ
X_Y		li
	<lina>	li-na
	<ina>	ʔi-na

The preposition *#ina(?)* functions as the head of a prepositional phrase and is followed by its dependent nominal complement, which references the second agent and can be expressed by a pronoun, noun or by a complex noun phrase.

- (9. 81) a. <tu eaŁ paraqui upu ayacà Linà nà ayàŁa man>
tuk'aŁ para ki ʔupu ʔaya-kaʔ ʔi-naʔ na ʔayaŁa man
 CONJ Sp:for stand be-2s_{DEP} PREP-DEM DET woman DEM
 'if you are standing with this woman'
 OT: "si por haber de estar con esa mujer" (1955.)
- b. <niguan nàŁqui szà Linà juicio ayacà>
niwa-n naʔʔ ki ša ʔi-naʔ juicio ʔaya-kaʔ
 ask-1sA IMPFV INTENS PREP:inside PREP-DEM Sp:judgement be-2s_{DEP}
 'I wished you were sober'
 OT: "quisiera yo que estuvieras en juicio" (1957.)

From the comparative data (X_G and X_{Ch}) we can conclude that the preposition precedes noun phrases indicating either the company of a person (9. 82), the addition of an object (9. 83) or the instrument with which the action is carried out (9. 84).

- (9. 82) a. mu-weriki hi-naʔ ʔayaŁa pari
 3sA-speak PREP-DEM woman/moon sun
 'the sun speaks with the moon' (G-SH)
- b. <acuy-li na frac>
ʔaku-y li-na frak
 go-IMP.VI PREP-DEM man
 'go with the man'
 OT: "vete con el hombre" (Ch-F)
- c. <...cuyan gruique nimá one guarla>
ku=ya-n wrike *ni-na ʔono-wa-Ła
 go=PROG-1s_{DEP} talk PREP-DEM get drunk-ANT-AGT
 'I am going to talk with the drunks'
 OT: "a mí me gusta pelear con los bolos" (Ch-P)
- (9. 83) a. hi-naʔ pari mapu
 PREP-DEM hot tortilla
 'with hot tortilla' (G-JAP)
- b. <nuca ni mapo niná rinack>
nuka ni mapu ni-na rinak'
 give PN:1s tortilla PREP-DEM beans
 'give me tortilla with beans'
 OT: "comamos frijoles con tortillas" (Ch-P)
- (9. 84) a. hi-naʔ ʔikah šapun
 PREP-DEM INDEF soap
 'with a (piece of) soap' (G-JS)
- b. <cuyan ipala nimá rapún>
ku=ya-n ʔipala *ni-na rapun
 go=PROG-1s_{DEP} bath PREP-DEM soap
 'I am going to bath with soap'
 OT: "voy al río a bañarme con jabón" (Ch-P)

In all the examples given above the prepositional root *#i* combines with the demonstrative *na(?)*. The syntactic contexts seem to suggest that the element *na* may actually be a simple determiner preceding the second agent noun. In X_{Ch} and X_Y , the prepositional root *#i* occurs in the same functional context also without pronominal complements.

- (9. 85) a. <nanu sullag lig papag>
 nanu suya-h lih papa-h
 FOC brother-3sP PREP uncle-3sP
 'his brother and his uncle'
 OT: "su hermano y tío" (Ch-Z)
- b. <n'ojto eya li (arroz)>
 n-ohto ʔeyma li arroz
 1sA-blend corn PREP Sp:rice
 'I blend corn with rice'
 OT: "revuelvo maíz con arroz" (Y-C)

The second agent does not need to be expressed by a nominal complement but can be referenced by the preposition itself. In examples (9. 86) and (9. 87) the comitative preposition functions as a full prepositional phrase. The contexts from the ALS and the comparative data show that the second element of the prepositional form **i-na* can indeed be identified as the demonstrative *na(ʔ)* in the function of a third person singular pronoun. In X_{Ch} the independent pronouns of the first and second person are attested in the same context (9. 87b-c).

- (9. 86) <ca- puriqui Linà>
ka-puriki ***i-naʔ**
 2sS-get married PREP-DEM/PN:3s
 'you get married with him/her'
 OT: "...te casas con élla" (1955.)
- (9. 87) a. na nin wirki-ʔa hi-naʔ
 DET PN:1s speak-PAST.ACT PREP-DEM
 'I spoke with him/her' (G-SH)
- b. <japé liní>
 ha peʔ li-ni
 PREP come PREP-PN:1s
 'come with me'
 OT: "ven conmigo" (Ch-C)
- c. <n'gu ni linac>
 n-ku ni li-nak
 1sS-go PN:1s PREP-PN:2s
 'I go with you'
 OT: "yo voy contigo" (Ch-C)
- d. <ajla mycô ina>
 ʔaʔa mi-ko i-na
 tomorrow 2sS-go PREP-DEM/PN:3s
 'tomorrow you go with him/her'
 OT: "mañana te vas con élla" (Y-C)

The functional difference between **ina(ʔ)* and **i-* is unclear. In most comparative contexts, the second agent is represented by a pronoun following the free preposition **ina*.

- (9. 88) a. šuka-n nin hi-na naʔ
 eat-1sA PN:1s PREP-DEM PN:3s
 'I ate with him/her' (G-JAP)
- b. <ulan tamiki lina nay>
 ʔula-n *ta *wriki li-na nay
 want-1sA DIR talk PREP-DEM PN:2s
 'I want to come (and) talk with you'
 OT: "quisiera hablar contigo" (Ch-C)
- c. <naj man ti lina nec>
 nah man *taʔ li-na nek
 PN:3s DEM come PREP-DEM PN:1p
 'this is the one (who) comes with us'
 OT: "él viene con nosotros" (Y-C)
- d. <li nanen>
 li-na nen
 PREP-DEM PN:1s
 'with me'
 OT: "mit mir" (Y-L)

Just like other prepositions, the comitative/instrumental preposition follows the question word in interrogative clauses (§ 13.2.1, § 16.2.4). The pattern is not attested in the ALS, but in X_{Ch} and X_Y where both, the prepositional root *ʃi* and the form *ʃina*, can follow the question word.

- (9. 89) a. <huanin li parvúki>
 wanin li(?) *par(a)wriki
 INT:who? PREP fight
 'with whom (did he) fight?'
 OT: "¿con quién te has peleado?" (Ch-C)
- b. <huenin una muyu calamárra>
 wenin *li-na muy-ʔuka-la mara
 INT:who? PREP-DEM 2sA-do-PAST.ACT get angry
 'with whom did you get angry?'
 OT: "¿con quién te has peleado?" (Y-C)

The ALS gives the preposition *ʃina*(ʔ) in combination with the adverbial of extension *ʃʃi* 'also', forming the conjunction 'as well, and'. The form is not attested in syntactic context or elsewhere in the corpus.

- (9. 90) <Liná szvequi>
ʃi-naʔ **ʃiki**
 PREP-DEM ADV:also, in addition
 'as well, also'
 OT: "también, y" (4028.)

In X_G we find another prepositional root that indicates the semantic concept 'in the company of'. The comitative root *moka* takes cross-referencing prefixes to mark the second agent. This form has only been documented by Schumann and by Campbell and Kaufman; it is not attested elsewhere and constitutes an illustrative example of the kinds of systemic gaps that are characteristic for the corpus of Xinka data.

- (9. 91) a. <náka anmóka kayák šan šanʔéhe>
 naka ʔan-moka kaya-k šan šan-ʔ'ehe
 PN:2s 1sP-COMIT sell-1pA PREP PREP-TOPN
 'you with me, we sold (things) in Chiquimulilla'
 OT: "tú y yo vendemos en Chiquimulilla" (G-S)
- b. <kamóka>
 ka-moka
 2sP-COMIT
 'with you'
 OT: "contigo" (G-S)

10 Predicate structure

This chapter deals with the structure of verbal and nominal predicates in Xinka. Verbal predicates fall into different classes based on their morphosyntactic categories and clause types in which they occur (§ 10.1). Nominal predicates are frequent in Xinka. They can be unmarked, but mostly employ copula verbs (§10.2).

10.1 Verbal predicates

Based on their morphosyntactic properties, we can distinguish several structural types of verbal predicates:

- transitive single verbal predicates
- intransitive single verbal predicates
- complex verbal predicates, including
- auxiliary and copula verbs
- light verbs in verb compounds
- and verb compounds incorporating nouns.

Single verbal predicates consist of primary verbs, "directly referring to some activity or state [...] which can make up a sentence by themselves with appropriate NPs filling the various semantic roles" (Dixon 1991:88 *apud* Aikhenvald 2003:234).

Xinka distinguishes INTRANSITIVE and TRANSITIVE primary verbs. Transitivity status is not overtly marked on verbal roots; i.e. the form of the root does not indicate whether a verb is transitive or intransitive. Transitive and intransitive verbs are morphosyntactically distinguished by different sets of cross-referencing affixes and by the presence or absence of the relevant core arguments.

Verbs in Xinka take cross-referencing prefixes and suffixes that mark S/A, while O is not regularly cross-referenced on the verb. Prefixes and suffixes fall into different sets, the use of which is conditioned by transitivity status of the verb, tense/aspect, mood (declarative/non-declarative clause) and syntactic hierarchy (main/dependent clause).¹⁵³ The system of cross-referencing affixes is discussed in detail in § 6.

Transitivity status in Maldonado-Xinka is determined on the basis of the inherent semantics of the verb, the allocation of the verb to the ALS-categories of *verbos regulares* (transitive verbs) and *verbos comunes* (intransitive verbs), and the analysis of marking patterns in the comparative data. Ambitransitive verbs are not a separate category in Xinka; there are only a few verb roots that can function as both transitive and intransitive predicates, distinguished only by the cross-referencing affixes.

Cross-referencing is tense/aspect-based: Intransitive predicates in declarative main clauses take cross-referencing prefixes to mark S. Transitive verbs take cross-referencing prefixes in the nonpast/imperfective and suffixes in the past/perfective to reference A. Cross-referencing prefixes on intransitive and transitive predicates

¹⁵³ Distinct person-marking in main and dependent clauses is a feature that is also attested in other Mesoamerican languages (see e.g. Zavala 2006 for Olutec).

differ in the third person, where nonpast/imperfective A is marked with *mu-*, nonpast/imperfective S with *ʔa-* and past/perfective S is unmarked. The sets of cross-referencing affixes that mark A on transitive predicates are largely identical with the sets that reference the possessor on nouns.

In subordinate clauses, intransitive and transitive predicates can be balanced or deranked (see Stassen 1985; Cristofaro 2003; see § 17). Deranked subordinate predicates either take cross-referencing suffixes to mark person agreement, or occur as unmarked forms or participles.

Tense/aspect-based cross-referencing on verbs can be concluded from the regular occurrence of the respective affixes with the Latin tense categories of *presente* and *pretérito perfecto* given in the ALS. Maldonado de Matos uses the same set of cross-referencing affixes to mark the Latin tense categories of *presente*, *pretérito imperfecto* and *futuro imperfecto*. These tense categories share the semantic notion, or aspect, of imperfectivity as well as temporal proximity of the activity expressed by the verb. The verb forms of the Latin categories *pretérito perfecto*, *pretérito plusquamperfecto* and *futuro perfecto* are likewise marked with the same set of cross-referencing affixes. They share the notion, or aspect, of perfectivity or distance and remoteness into the past and future (see § 12).

Maldonado de Matos combines the respective pattern of personal cross-referencing with additional TAM-adverbials that accompany the verb (see § 12.5).

Transitive and intransitive primary verbs can be derived from other roots. Derived verbal stems include intransitive antipassive/inchoative and positional stems, the derivation of transitive verbs from nouns and adjectives as well as causative verbs. Transitivity and intransitivity share the morphosyntactic properties of verb roots. They take the same inflectional markers and TAM-adverbials and are therefore not defined as a separate verb class.

Complex verbal predicates include auxiliary verb constructions (AVC) and verbal compounds.

AUXILIARY VERB CONSTRUCTIONS fall into two structural types: The first and more common types show the auxiliary verb following the lexical main verb that is unmarked, while the auxiliary verb carries the inflectional information. In these AVCs the auxiliary verb is marked as a subordinate verb. In the second type of AVCs the auxiliary verb precedes the lexical main verb.

The grammatical categories that are realised by AVCs in Xinka are progressive, future, optative and abilitative (that is interpreted or even artificially constructed by Maldonado de Matos as the form that represents the passive of the Latin model of grammar). There are some verbal stems that can be argued to derive from grammaticalisations of former auxiliary constructions (i.e. *-na*, *-ʔa*). Most auxiliary verbs that are categorised by Maldonado de Matos as *verbos defectivos* can be identified as existential verbs.

Some of the auxiliary verbs used in AVCs function as COPULA VERBS and EXISTENTIAL VERBS (see § 10.2.2). Auxiliaries and copulas take the same inflectional markers. They are structurally identical, with the only difference that auxiliaries follow lexical verbs while copulas follow lexical nouns.

Verbal compounding includes the strategies of light verb periphrasis (§ 10.1.4.1), phrasal verbs (§ 10.1.4.2) and noun incorporation (§ 10.1.4.3).

LIGHT VERBS are auxiliary verbs that are employed to integrate loan verbs from Spanish. Unlike auxiliaries, light verbs do not have any grammatical function themselves. They are semantically bleached and simply function as 'vehicles' for the grammatical markers that cannot be taken by the mostly Spanish main verbs.

PHRASAL VERBS combine verbs and prepositions in the function of a complement.

NOUN INCORPORATION: Complex verbal predicates can also consist of a verb and an incorporated noun, which form together an idiomatic expression that is used the same way as a single verb.

10.1.1 Transitive predicates

The minimum structure of the simple transitive predicate consists of the transitive verb root or stem and a cross-referencing affix that marks A. Xinka distinguishes transitive predicates in declarative main clauses and transitive predicates in non-declarative and subordinate clauses morphologically. Subordinate transitive predicates take distinct inflectional markers for person and TAM.

In declarative main clauses, transitive verbs employ cross-referencing prefixes to mark person in the nonpast/imperfective and cross-referencing suffixes to mark person in the past/perfective. The set of prefixes that marks A of the transitive predicate is the same that is employed to mark the possessor on alienably possessed nouns (see § 8.2.2). Analogically, the suffixes that mark A on past/perfective transitive predicates mark the possessor on inalienably possessed nouns; with the exception of the third person that is marked with -y while the inalienable possessor is indicated by -h (see § 8.2.3).

In subordinate clauses, person is marked with a separate set of cross-referencing suffixes.

Table 10. 1: Cross-referencing of A on transitive verbs (ALS)

	Main clause		Subordinate clause
	Nonpast/Impfv.	Past/perfective	Nonpast/Impfv. / Past/perf.
1s	ʔan-	-n	-n
2s	ka-	-kaʔ	-kan
3s	mu-	-y	-y
1p	muk-	-k	-k
2p	ka- ... ʔay	-ka ... ʔay	-kan ʔay
3p	mu- ... (ki)-ʔik	-y ... (ki)-ʔik	-y ʔik

Table 10. 2 illustrates the structure of transitive predicates and the relative position of optional TAM-adverbials as attested in the ALS.

The following sections describe the structure of transitive predicates in main/declarative and subordinate/non-declarative clauses. Marking patterns that are not entirely understood are treated in the last section.

Table 10. 2: Structure of transitive predicate (ALS)

CATEGORY	ELEMENT/OPERATOR
cross-referencing (A _{NONPAST})	
ROOT	
derivation	
- transitivity/causative	-ya, -ʔa, -ka, -ha
TAM-suffix	-ʔa, -wa
cross-referencing (A _{PAST} , A _{DEP})	
TAM-suffix	
- stative-resultative	-ʔ
- subjunctive	-n
plural	ʔay, ʔik
[auxiliary]	[ʔan, ʔayu]
TAM-adverbials	maʔ
	paʔ, paʔʔ
	naʔʔ
	peʔ
intensifier	ki
plural	ʔik

10.1.1.1 Transitive predicate in declarative main clauses

The majority of examples of transitive verb marking in the ALS are given in form of conjugational paradigms that lack syntactic context. However, these forms correspond morphologically with transitive predicates in main clauses, i.e. they mark imperfective predicates (corresponding to the Latin tense categories of *presente*, *pretérito imperfecto* and *futuro imperfecto*) with cross-referencing prefixes and perfective predicates (corresponding to *pretérito perfecto*, *pretérito plusquamperfecto*, and *futuro perfecto*) with cross-referencing suffixes.

IMPERFECTIVE TRANSITIVE PREDICATES employ cross-referencing prefixes to mark A (§ 6.1.2.2). The examples under (10. 1) illustrate the transitive cross-referencing prefixes of all six person categories. Transitive roots (b-f) and derived transitive stems (a) show the same marking pattern. Three-syllabic roots (d) do not change upon inflection. Transitive predicates require an O argument that follows the verb, if it is represented at all (10. 1a).

- (10. 1)
- | | |
|--|--|
| <p>a. <an nariʔa nauriʔi>
 ʔan-nariʔa na turi-ʔi
 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1977.)</p> <p>c. <mu piri>
 mu-piri
 3sA-see
 'he/she sees it'
 OT: "aquel ve" (739.)</p> <p>e. <cà sàmu ay>
 ka-samu ʔay
 2pA-catch 2PL
 'you (pl.) caught it'
 OT: "vosotros cogéis" (1074.)</p> | <p>b. <cà mere>
 ka-mere
 2sA-break
 'you break it'
 OT: "tú rompes" (575.)</p> <p>d. <muc oròmo>
 muk-ʔoromo
 1pA-pick up
 'we pick it up'
 OT: "nosotros recogemos" (909.)</p> <p>f. <mù pùla quiʔic>
 mu-pula ki=ʔik
 3pA-make INTENS=3PL
 'they (themselves) make'
 OT: "aquellos hacen" (398.)</p> |
|--|--|

The marking pattern is confirmed in the comparative data from X_G (10. 2), X_{Ch} (10. 3) and X_Y (10. 4). The O constituent always follows the inflected verb. The S argument, if represented, can either follow the verb and precede the O argument, or it precedes the verb altogether.

(10. 2)	a.	ʔan-ʔiki naka _O 1sA-find PN:2s 'I find you' (G-SH)	b.	ka-sawaʔ'a naka _A tri:go _O 2sA-sow PN:2s Sp:wheat 'you sow wheat' ¹⁵⁴ (G-SH)
	c.	mu-kunu mapu _O 3sA-buy tortilla 'he buys tortillas' (G-SH)	d.	mu-hapa-ya natiya _{7E} 3sA-pass-TRANS LOC 'there he passes by' (G-SH)
(10. 3)	a.	<n'dala ni pumu> n-tala ni _A pumu _O 1sA-burn PN:1s incense 'I burn copal' OT:"quemo copal" (Ch-C)	b.	<xuxo murruca naljki> šušo _A mu-ruka naʔki _O dog 3sA-bite PN:1p 'the dog bites us' OT:"el perro nos muerde" (Ch-C)
(10. 4)	a.	<nen nitz'api elay> nen _A n-ʔig'api ʔelay _O PN:1s 1sA-stick out tongue 'I stick out (my) tongue' OT:"saco (afuera) la lengua" (Y-C)	b.	<mu suca nay pelu> mu-suka nay _O pe:lu(ʔ) _A 3sA-bite PN:2s Sp:dog 'the dog bites you' OT:"el perro te muerde" (Y-C)
	c.	<mucúru tinátu> mu(k)-kuru tinatu _O 1pA-run flute 'we run the flute = we play flute' OT:"vamos a tocar flauta" (Y-C)	d.	<nkichi ical taju mun úvui> n-k'ichi ʔikal tahu mun ʔuwi 1sS-fry NUM:'1' piece DEM meat 'I will fry a piece of that meat' OT:"voy a asar un pedazo de carne" (Y-C)

PERFECTIVE TRANSITIVE PREDICATES are marked with cross-referencing suffixes that always follow in last position after derivational morphology and bound TAM-markers. Three-syllabic transitive roots delete V_2 upon inflection (10. 5c) (see also § 4.4.3.1.2).

(10. 5)	a.	<piriyn> piri:-n see-1sA 'I saw (it)' OT:"yo vi, he visto" (749.)	b.	<mere cá> mere-kaʔ break-2sA 'you broke (it)' OT:"tú rompistes" (587.)
	c.	<ormo i> ʔor(o)mo-y pick up-3sA 'he picked it up' OT:"aquel recogió, ha recogido" (920.)	d.	<sàmuuc> samu:-k catch-1pA 'we caught it' OT:"nosotros cogimos" (1086.)
	e.	<εUetUecà ay> k'it̩-ka ʔay measure-2pA 2PL 'you (pl.) measured it' OT:"vosotros medisteis, habéis medido" (1250.)	f.	<pulái quiLic> pula-y ki=ʔik make-3pA INTENS=3PL 'they (themselves) made (it)' OT:"aquellos hicieron, han hecho" (410.)

The pattern of perfective marking on transitive predicates is confirmed by examples from X_G (10. 6), X_{Ch} (10. 7) and X_Y (10. 8). As with nonpast/imperfective

¹⁵⁴ The original field translation context suggests that the speaker uses the marker of the second person singular here to refer to the second person plural (see Appendix 6).

predicates, if the O constituent is present, it follows the verb (10. 6b-e), (10. 7a). The S constituent is in most cases inserted between verb and O argument (10. 6c), (10. 8a), but can also precede the verb (10. 6e), (10. 7b), (10. 8b) or follow the object (10. 6d).

- (10. 6) a. <pulaká>
pula-ka?
make-2sA
'you made it'
OT: "tú hiciste, Uds. hicieron" (G-S)
- b. kiri-n nin_A ti[†]a_O
pull-1sA PN:1s yucca
'I harvested yucca' (G-SH)
- c. tero-y kah miya_O
kill-3sA INDEF chicken
'he/she killed a chicken' (G-SH)
- d. šamu-y nin_O ku ʔampuki_A
catch-3sA PN:1s MOD snake
'the snake caught me' (G-RHG)
- e. na naka_A simi-ka? ʔuraya_O
DET PN:2s put out-2sA fire
'you put out the fire' (G-SH)
- (10. 7) a. <pirín nak>
piri-n nak_O
see-1sA PN:2s
'I saw you'
OT: "desde que te vi" (Ch-F)
- b. <najli pulay>
na[†]i_{S/A} pula-y
PN:3p make-3s/pA
'they made (it)'
OT: "ellos hacen" (Ch-C)
- c. <ru'kay>
ruka-y
eat/bite-3sA
'he ate/bit (it/him)'
OT: "lo mordió" (Ch-MQ)
- (10. 8) a. <sukí nay pelu>
suk-i nay_O pe:lu(ʔ)_A
bite-3sA PN:2s Sp:dog
'the dog bit you'
OT: "el perro te mordió" (Y-C)
- b. <inay avuájla culay>
ʔinay_A ʔawa[†]a kula-y
PN:2s yesterday want-2sfA
'you wanted (it) yesterday'
OT: "ayer quisiste tú" (Y-C)

TRANSITIVE PREDICATES EXTENDED BY TAM-ADVERBIALS: The simple transitive predicate can be extended by TAM-adverbials. Maldonado de Matos combined the cross-referenced verb with various TAM-adverbials to form the different tense categories of Latin grammar (see § 12.5). Only a few of these adverbials are attested in identical context in the comparative data. In most given examples from the conjugational paradigms, Maldonado de Matos indicates adverbials and auxiliaries following after the transitive predicate that may take cross-referencing prefixes (10. 9) or suffixes (10. 10).

- (10. 9) a. <ca yguitzi ma nãŁ>
ka-ʔiwiç'i ma naʔ
2sA-hear COND IMPFV
'you had heard (it)'
OT: "oyeras" (2031.)
- b. <ca pùla pè>
ka-pula peʔ
2sA-make FUT
'you will make it'
OT: "tú harás" (418.)
- c. <mu piri pa pè>
mu-pi:ri: pa(ʔ) peʔ
3sA-see PFV FUT
'he would have seen'
OT: "aquel viere, hubiere visto" (808.)

- (10. 10) a. <sàmuun mà>
samu:-n ma?
 catch-1sA COND
 'I should have caught'
 OT: "yo haya cogido" (1122.)
- b. <mere cà ayù pè>
mere-ka? ?ayu? pe?
 break-2sA AUX FUT
 'you will have broken'
 OT: "tú habrás rompido" (605.)
- c. <uiszicà paL nàL qui>
?uyši-ka? pa† na?† ki
 hear-2sA PFV IMPFV INTENS/OBJ
 'if you had heard it(self)'
 OT: "hubieras oído" (2018.)

While the second person plural clitic *?ay* always seems to precede the TAM-adverbials, the third person plural clitic *?ik* can occur preceding or following the TAM-adverbials and auxiliaries.

- (10. 11) a. <pulaí naL qui Lic>
pula-y na(?† ki=?ik
 make-3pA IMPFV INTENS=3PL
 'they would have made it'
 OT: "aquellos hubieran hecho" (462.)
- b. <sàmui Lic pà ayù>
samu-y ?ik pa? ?ayu
 catch-3pA 3PL PFV AUX
 'they will have caught it'
 OT: "aquellos habrán cogido" (1105.)

The comparative data confirm TAM-adverbials in the position following the inflected transitive verb. While the future adverbial **pe?* is only attested with nonpast/imperfective verb forms (10. 13a), the perfective/relational adverbial **pa?* indicating completion is attested with past (10. 12) as well as nonpast/imperfective verbs (10. 13b) (see § 12.5.2).

- (10. 12) a. na nin šuka-n pa?a?
 DET PN:1s eat-1sA PFV
 'I have already eaten' (G-JAP)
- b. <hīnika pa?á†>
 hīni-ka pa?a†
 know-2sA PFV
 'you already knew it'
 OT: "supiste, lo supiste" (G-S)
- c. <sucaibar>
 suka-y bar
 eat-3sA PFV
 'he has already eaten it'
 OT: "él lo comió, comido" (Ch-F)
- (10. 13) a. <en-ni xaca pú>
 ?ən-?išaka pə?
 1sA-drink FUT
 'I will drink'
 OT: "beberá" (Ch-F)
- b. <mug pula bal mas de jiria allapá>
 muh-pula bal mas de hiria ?ayapa
 3sA-make PFV Sp:more than NUM:'4' year
 'it makes (= it is) more than 4 years ago'
 OT: "hace más de cuatro años" (Ch-Z)

In X_G we find examples of S (10. 14a) and O constituents (b) being inserted between the inflected transitive verb and the TAM-adverbial. Schumann even provides an example that shows the TAM-adverbial at the end of a full sentence following the predicate, O constituent and prepositional phrase (c).

- (10. 14) a. pula-n nin_A pa?a? waru?o
 make-1sA PN:1s PFV net
 'I already made the net' (G-JAP)

- b. ʔiki-kaʔ weyša_o paʔaʔ
find-2sA iguana PFV
'you already found an iguana' (G-SH)
- c. <na tumáʔi horoʔik tímáʔi šan hawíʔi paʔaʔ>
[na tuma-ʔi]_A horo =ʔik tíma-ʔi_o šan hawi-ʔi paʔaʔ
DET deer-PL get =3PL lice-PL PREP skin/fur-PL PFV
'the deer (pl.) got lice in their fur'
OT: "los venados tenían piojos en sus pieles" (G-S)

RESULTATIVE TRANSITIVE VERBS: In all Xinkan languages, the verbs expressing the concepts of 'to have' and 'to know' are marked exclusively with cross-referencing suffixes. The best explanation for this might be that the verbal roots may actually refer to the process that leads to the state of 'having' and 'knowing' rather than to the state itself, e.g. *horo* '*to guard/get' > *horo-n* '*I guarded/got' = 'I have'; *híní* '*to learn about sth.' > *híní-n* '*I learned' = 'I know'.

- (10. 15) a. <joróon>
horo:-n
guard/get-1sA
'I guarded/got = I have'
OT: "cuidar, tener (pretérito)" (2511.)
- b. <juenuvei>
híní-y
*learn-3sA
'he learned = he knows'
OT: "habrá sabido" (2022.)

Such 'resultative verbs' are given in the ALS just as lexical entries in the vocabulary. However, the pattern of cross-referencing is attested in syntactic context in the comparative data. The following examples show that *horo-* is used in exactly the same way as the Spanish verb "tener".

- (10. 16) a. horo-n nin ʔayma
*guard/get-1sA PN:1s corn
'I guarded/got corn = I have corn' (G-SH)
- b. <joroy>
horo-y
guard/get-3sA
'he guarded/got = he has'
OT: "tiene" (Ch-Z)
- c. <jorón tz'arará>
horo-n ʕ'araraʔ
get-1sA cold
'I got cold = I have/am/feel cold'
OT: "tengo frío" (Y-C)

In X_{Ch} the verb *híní* is attested with the meaning 'to learn' (10. 17b). X_Y indicates a distinction between the verbs *híní* "conocer" ('recognize, know') (c) and *yamu* "saber" ('know, be able to') (d). Both of these verbs take cross-referencing suffixes to mark person.

- (10. 17) a. <hínika>
híní-ka
learn-2sA
'you learned = you know'
OT: "ustedes saben, tú sabes" (G-S)
- b. <jünún>
híní:-n
learn-1sA
'I learned = I know'
OT: "aprender" (Ch-F)
- c. <junún san juraty>
hunu-n san hurati
know-1sA INT eyes
'I know what (is his) eyes/face'
OT: "conozco su cara" (Y-C)
- d. <yamun ca guáru>
yamu-n ka-waru
know-1sA make-hammock
'I know (to) make hammock(s)'
OT: "sé hacer hamacas" (Y-C)

According to Schumann, past and non-past forms of the verb *horo* 'get/have' are realised by stress shift. This pattern is not confirmed by the semi-speaker data, where the second person cross-referencing suffix is always *-kaʔ*.

- (10. 18) a. <horóka>
 horo-ka
 get/have-2sA?
 'you got = you have'
 OT: "tú o Uds. tienen" (G-S)
- b. <horoká>
 horo-ka?
 get/have-2sA
 'you had'
 OT: "tú o Uds. tuvieron" (G-S)

10.1.1.2 Subordinate transitive predicates

Transitive predicates in subordinate clauses exhibit different coding properties than predicates in main clauses. The syntactic examples in the ALS do not reflect subordinate marking patterns regularly on transitive roots and stems; most examples of subordinate marking are attested with complex predicates (auxiliary constructions) (§ 10.1.3) and verbal compounds (light verb constructions) (see § 10.1.4).

SUBORDINATE TRANSITIVE PREDICATES IN COMPLEMENT CLAUSE: Complement clauses are subordinate clauses that function as S/A or O arguments of the main predicate. In Xinka we can distinguish finite and nonfinite complement clauses.

The only example of a transitive predicate in a complement clause in the ALS is found in a construction where the main clause consists of a nominal predicate and the complement clause functions as its subject. The transitive predicate of the complement clause is finite and marked with a transitive cross-referencing prefix and does not exhibit any dependent/subordinate morphology.

- (10. 19) <szàŁ Łan muc pùla na oracion>
šaŁ **Łan** **muk-pula** **na** **oración**
 good OPT 1pA-make DET Sp:prayer
 'they say, it is good (that) we make (= say) our prayer'
 OT: "dicen que es bueno que hagamos oración" (2028.)

In the comparative data most attested complement clauses function as objects. In the given examples from X_G (10. 20) and X_{Ch} (10. 21) the subordinate transitive predicates take dependent-marking cross-referencing suffixes.

- (10. 20) a. dixe ke sə nama-n wapili-n
 Sp: I said Sp:that Sp:REFL hurt-1sA_{DEP} foot/leg-1sP
 '... that I have hurt my foot' (G-JAP)
- b. hapa-n tura-n nin naka
 pass by-1sA take-1sA/SUB? PN:1s PN: 2s
 'I passed by to take/bring (to) you' (G-JAP)
- (10. 21) a. <hucay despreciado pulacan burla ti libertad>
 Łuka-y despreciado pula-kan burla ti(:?) libertad
 do-3sA Sp:depreciated make-2sA_{DEP} Sp:joke PREP Sp:liberty
 'he has depreciated/despised that you make a joke of liberty'
 OT: "haber despreciado el burlarte de la libertad" (Ch-Z)
- b. <lugnu y nuca y nelag nanu felicidad>
 luhnu-y nuka-y nela-k nanu felicidad
 believe-3sA give-3sA_{DEP} BEN-1p DET Sp:happiness
 'he believed he gave happiness to us'
 OT: "creyó darnos la felicidad" (Ch-Z)

- c. <cuní ay ascan pulan taljma>
 ku ni ʔay ʔaska-n pula-n taʔma
 go PN:1s PROG+3sA_{DEP} open-1sA_{DEP} make-SUBJ path
 'I am going to make open (the) path'
 OT: "yo abro, hago un camino" (Ch-C)

In the comparative data there are also examples of syntactic complements that consist of nonfinite verbs.

- (10. 22) kuy tumu-y šuka ɕ'oko
 AUX.FUT end-3sA_{DEP} eat bird:zanate
 'the grackle is going to finish eating' (G-JAP)

SUBORDINATE TRANSITIVE PREDICATE IN ADVERBIAL CLAUSE: There are different examples of subordinate transitive predicates in adverbial clauses in the ALS. In the following example of a purposive clause the light verb in the function of the subordinate predicate is coreferential in subject with the predicate of the main clause. It employs transitive dependent-marking cross-referencing suffixes in a context where the main verb makes reference to a future event.

- (10. 23) <ca tà pè aLa uea can confesar>
 ka-taʔ peʔ ʔaʔa ʔuka-kan confesar
 2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

In the following sample sentence from the ALS, main and subordinate predicate are likewise coreferential in subject. However, A does not appear to be cross-referenced on the subordinate predicate, which could indicate that the transitive subordinate predicate is either nonfinite or that the transitive dependent cross-referencing suffix -y has become assimilated to the subjunctive marker *ʔn*, which follows the verb (10. 24).

- (10. 24) <taí na maestro nari Ła in na turi Łi>
 Ø-ta:-yi-ʔ na maestro nariʔa=ʔin na turi-ʔi
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 OT: "vino el maestro a enseñar a los niños" (2043.)

It can be argued that the form <ucain> (and <ucayun>) given by Maldonado de Matos as a causal preposition that introduces the agent of a passive predicate can in fact be identified as the same construction; i.e. a subordinate verb followed by the subjunctive marker *ʔn*.

- (10. 25) <nana doctrina nariŁa pè patai ucain maestro ...>
 nana doctrina nariʔa peʔ pata-y ʔuka=ʔin maestro ti:ʔ turi-ʔi
 FOC Sp:creed teach CENT *accomplish-3sA do=SUBJ Sp:teacher IO child-PL
 'the creed will be taught to the children by the teacher'
 OT: "la doctrina será enseñada por el maestro ..." (2021.)

In X_G there are examples of adverbial subordinate predicates whose subjects are not coreferential with the subject of the main predicate. It is possible that in the given example the third person singular suffix -y indicates that the second verb is relativised (see § 17.3).

- (10. 26) kuy hapa-n tura-y
 AUX.FUT pass-1sS_{DEP} take-3sA_(DEP)
 'I will pass by to take/bring it' (G-SH)

Examples from the ALS show that transitive predicates in causal clauses exhibit the same cross-referencing affixes as predicates in declarative independent or main clauses.

- (10. 27) a. <aLi ca yguitzi na misza [...]a szin ca pùla na jamaà>
ʔaʔi ka-ʔiwic'i-ʔ na miša ʔašin ka-pula na hamaʔ
 because 2sA-hear-STAT DET Sp:mass NEG 2sA-make DET pecado
 'because you hear the mass ... you do not make (= commit) sin'
 OT: "por oír misa [...] no pecas" (2044.)
- b. <aLparaquguà á szin pa ayù juenuei na doctrina>
ʔaʔ-para kiwa-ʔ ʔašin pa(ʔ) ʔayuʔ hini-y na doctrina
 PREP.CAUS-ʔ INTENS/REFL-ʔ NEG PFV AUX know-3sA DET Sp:creed
 'because he himself will not have known the creed'
 OT: "... porque no habrá sabido la doctrina" (2022.)

SUBORDINATE TRANSITIVE AUXILIARY VERB ʔUKA: In transitive progressive constructions the transitive auxiliary verb *ʔuka* is always marked with transitive dependent-marking suffixes, irrespectively of whether the progressive construction occurs in a subordinate (10. 28a) or in a main clause (b).

- (10. 28) a. <asuec naL pùla uean na an oracion>
ʔasik na(ʔ)ʔ pula ʔuka-n na ʔan-oracion
 when IMPFV make PROG-1sA_{DEP} DET 1sP-Sp:prayer
 'when I was making (= saying) my prayer'
 OT: "cuando yo estaba haciendo mi oración" (1992.)
- b. <yguitzi naL u ea can naca na misza>
ʔiwic'i naʔʔ ʔuka-kan naka na miša
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)

The comparative data confirm that dependent-marking pronominal suffixes mark A on transitive progressive constructions that function as complements (10. 29) or adverbs (10. 30) to the main predicate.

- (10. 29) a. na nin hapa=ka-n tero-waʔ-ʔa
 DET PN:1s wait=PROG-1sA_{DEP} die-ANT-AGT
 'here I was waiting for the dead' (G-JAP)
- b. niwe-y man=ta pula=ke-y pilares
 ask-3sA DEM=INT make=PROG-3sA_{DEP} Sp:pillar
 'he wanted to be making pillars' (G-SH)
- (10. 30) a. porke piri=ka-kan naka ke nankun paʔaʔ
 Sp:because see=PROG-2sA_{DEP} PN:2s Sp:that afternoon PFV
 'because you are seeing that it is already afternoon' (G-JAP)
- b. <hupú ka-can manga hay>
 ʔupu=ka-kan man-ka ʔay
 close=PROG-2pA_{DEP} ear-2s/pP 2PL
 '(that) you are closing your ears'
 OT: "cerrando vuestros oídos" (Ch-Z)

SUBORDINATE TRANSITIVE PREDICATES WITH ANTERIOR/PERFECT -WA: The anterior/perfect suffix *-wa* marks past-time reference on subordinate transitive and intransitive predicates with subjects that are not coreferential with the subject of the main clause (see § 12.2.3). There is one example of an anterior/perfect transitive

predicate in the ALS that is marked with dependent cross-referencing suffixes. This subordinate marking pattern is, however, not attested in syntactic context.

- (10. 31) <piriguacàn>
piri-wa-kan
 see-ANT-2s_{DEP}
 'you saw/ have seen'
 OT: "tú vistes, has visto" (753.)

In the comparative data transitive predicates with the suffix *-wa* are only attested in subordinate and non-declarative contexts. All examples from the Zeeje-ms. indicate the verb form as the predicate of relative clauses that are derived from embedded interrogative clauses (see § 17.3). The translation contexts suggest a passive or impersonal meaning of the verb forms. Subordinate predicates with *-wa* are attested with intransitive cross-referencing prefixes (i.e. with the intransitive third person/ impersonal prefix *ʔa-*) (10. 32) and intransitive dependent-marking suffixes (10. 33).

- (10. 32) a. <nanu cortes jai natuca tumuqui ... há uhuigua>
 nanu cortes hay natu-ka tumu-ki ʔa-ʔuwi-wa
 DET Sp:courts INT LOC QUANT-DISTR 3sS-call-ANT/PASS
 'the courts whereto all are called'
 OT: "las cortes, a que todos ... son ... llamados" (Ch-Z)
- (10. 33) a. <ka hucaguay entregar quiqui>
 ka ʔuka-wa-y entregar kiki
 INT do-ANT-3s_{DEP} Sp:submit INTENS/REFL+3p
 '... where they submitted themselves'
 OT: "se entregaron" (Ch-Z)
- b. <n'diajli huixu huacá>
 ndi ʔaʔi wišu-wa-ka?
 INT:what PREP.CAUS beat-ANT/PASS-2s_{DEP}
 'because of what were you beaten?'
 OT: "¿por quién te pegaron?" (Ch-C)

In the following example from X_G the translation context suggests that *-wa* indicates anterior/perfect and not passive; however, the subject of the subordinate clause is not cross-referenced on the verb but only present in form of an independent pronoun.

- (10. 34) hin tupa-n nin, naka tupa-wa?
 NEG leave-1sA PN:1s PN:2s leave-ANT
 'I did not leave it, (it was) you (who) left it' (G-RHG)

Similar examples are attested in the ALS. Here the translation contexts suggest again an impersonal or passive function of the predicate. It cannot be entirely ruled out that the predicate may also be identified as a perfect participle, which would, however, be regularly marked with *-wa* not *-waʔ* (§ 11.1.2.2).

- (10. 35) <asüec pulaguà nà sermon>
ʔasük pula-waʔ na sermon
 CONJ make-ANT DET Sp:sermon
 'when one made (= was made?) the sermon'
 OT: "... al tiempo del sermón" (1957.)

10.1.1.3 Transitive predicates in interrogative clauses

Transitive predicates in interrogative clauses are attested with both, subordinate and non-subordinate cross-referencing. Which set of cross-referencing affixes is employed, seems to be determined by the morphosyntactic context.

In the ALS and the comparative data from X_G and X_{Ch} , transitive roots functioning as predicates of content questions take regular transitive cross-referencing suffixes. There are two examples of such contexts in the ALS, including direct (10. 36a) and indirect (b) interrogative clauses.

- (10. 36) a. <szàn para-cà nem?>
šan para-ka? nem
 INT search-2sA PN:1s
 'what have you searched me for?'
 OT: "¿para qué me quieres?" (1870.)
- b. <a szin szàn paraan nàca>
?ašin šan para:-n naka
 NEG INT search-1sA_{DEP} PN:2s
 'I have not searched you for anything'
 OT: "no te quiero para nada" (1871.)
- (10. 37) a. hanta ?ima-ka? naka
 INT:what? say/tell-2sA PN:2s
 'what did you say?' (G-SH)
- b. <ndí mok ni guá?>
 nti *mík-niwa
 INT:what? 2sA-want
 'what do you want?'
 OT: "¿qué quieres?" (Ch-F)
- c. <huanín teró ca>
 wanin tero:-ka
 INT:who? kill-2sA
 'who did you kill?'
 OT: "¿a quién has matado?" (Ch-C)

In clefted interrogative clauses the main referent of the question occurs as a nominal predicate to the left of the sentence. The transitive predicates that follow are relativised and therefore take subordinate verbal inflection in the shape of dependent-marking pronominal suffixes to mark person agreement and the anterior suffix *-wa* to mark past-time reference. Both examples from the ALS are polar questions with the interrogative marker *ʔin* (10. 38). The same pattern of subordinate morphology is attested in X_G and X_{Ch} with content questions.

- (10. 38) a. <nem in púlaguàn?>
nem ʔin pula-wa-n
 PN:1s INT make-ANT-1sA_{DEP}
 '(is it) me what/who I have made it? = have I done it?'
 OT: "¿yo lo hice?" (4770.)
- b. <¿naca in szàc szà guacàn na tumín?>
naka ʔin šakša-wa-kan na tumín
 PN: 2s INT steal-ANT-2sA_{DEP} DET money
 '(is it) you what/who you have stolen the money = have you stolen the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)
- (10. 39) a. hanta wena tupa-wa-n na-hi?
 INT:what? INT:who leave-ANT-SUBJ DET-DEM
 'what (is) who has left this?' (G-RHG)
- b. <ca tupagua kan?>
 ka tupa-wa-kan
 INT:where? leave-ANT-2sA_{DEP}
 'where (is it) that you have left it = where have you left it?'
 OT: "¿dónde lo dejaste?" (Ch-F)

In X_G and X_{Ch} dependent-marking pronominal suffixes also occur on transitive progressive forms in interrogative clauses, which raises the question whether subordinate person-marking in these contexts may also be conditioned by the respective TAM-markers; i.e. *-wa* (anterior/perfect) and *=ka* (progressive). Both progressive and anterior predicates seem to be structurally analogical, which may suggest that the anterior/perfect form has likewise grammaticalised from an auxiliary verb construction.

- (10. 40) a. hanta taʔma tura=*ka*-kan naka
 INT road take=PROG-2sA_{DEP} PN:2s
 'which road (is it that) you are taking?' (G-JAP)
- b. <jam bulá cacán quejín catá luego>
 han pula=*ka*-kan ke hin ka-taʔ lwego
 INT:what? make=PROG-2sA_{DEP} Sp:that NEG 2sS-arrive Sp:soon
 'what is it that you were doing that you did not arrive soon (= in time)?'
 OT: "¿por qué te tardaste tanto" (Ch-P)

10.1.1.4 Transitive predicates in imperative clauses

Transitive predicates in imperative clauses do not take cross-referencing affixes to mark the addressee of the order; the transitive imperative predicate is unmarked. The O argument of the transitive event follows the predicate. The same pattern is attested in X_G and X_{Ch} ; in X_Y the object can precede the predicate.

- (10. 41) a. <púla naca penitencia>
pula-Ø **naka** **penitencia_O**
 make-IMP.VT PN:2s(Poss) Sp:penitence
 'make your penitence!'
 OT: "haz tu penitencia" (2027.)
- b. <...pata szàma szàL na jamàca>
pata-Ø **šama** **šaʔ** **na** **hama-ka_O**
 *accomplish-IMP.VT PREP good DET sin-2sP
 '... remember well your sin(s)'
 OT: "...pensad bien tus pecados" (2042.)
- (10. 42) a. tura-Ø naka ka-tamaʔ'iʔ
 take-IMP.VT PN:2s 2sP-lasso
 'take your lasso!' (G-JAP)
- b. <tupanan> c. <nen lájta nay akü>
 tupa-Ø na-n nen_O lahta-Ø nay ʔaki
 leave-IMP.VT LOC-? PN:1s push-IMP.VT PN:2s ADV:little
 'leave it there!' 'push me a little'
 OT: "déjalo ahí" (Y-C) OT: "empújame un poco" (Y-C)

10.1.1.5 Transitive predicates in negative clauses

The ALS gives examples of transitive predicates in negative main clauses that take the same cross-referencing affixes as transitive predicates in declarative clauses.

- (10. 43) a. <... a szin ui szicà nà miszà>
ʔašin **ʔuyši-kaʔ** **na** **miša**
 NEG hear-2sA DET Sp:mass
 'you did not hear the mass'
 OT: "... no oíste misa" (1958.)

- b. <... a szin ca ŁòèèÙe na perdon>
ʔašin ka-ʔikʔ na perdón
 NEG 2sA-find DET Sp:forgiveness
 '... you do not find forgiveness'
 OT: "... no conseguiréis el perdón" (2033.)

The comparative data from X_G and X_{Ch} confirm that transitive cross-referencing in declarative and negative main clauses does not differ.

- (10. 44) a. hin mu-piri na?
 NEG 3sA-see PN:3s
 'he does not see it' (G-JS)
 b. hin ʔan-ʔušiki nay
 NEG 1sA-hear PN:2sf
 'I do not hear you' (G-SH)
 c. hin ka tura-ka? naka maʔik
 NEG EXO take-2sA PN:2s firewood
 'you did not bring firewood' (G-JAP)
 d. <ʃlhan mujnicua tajá>
 ʃan muh-nikwa taha?
 NEG 3sA-ask all, much
 'he does not want much'
 OT: "no quiero [sic] bastante" (Ch-JC)

In subordinate negative clauses, transitive predicates take dependent-marking cross-referencing suffixes, as attested in X_G . It needs to be pointed out that the predicate in the second example is a transitive progressive construction, which is always marked with dependent cross-referencing suffixes (10. 45b)

- (10. 45) a. hin hini-kan naka
 NEG know-2sA_{DEP} PN:2s
 'you do/did not know' (G-JAP)
 b. hin piri=ka-kan naka
 NEG see=PROG-2sA_{DEP} PN:2s
 'you are not seeing/watching' (G-JAP)

10.1.1.6 Ditransitive predicates

The predicate structure of ditransitive verbs, i.e. those that require three arguments, does not differ from that of transitive verbs with only two arguments. As on other transitive predicates, only A is cross-referenced on the verb. Ditransitive verbs attested in the ALS and the comparative data include *nuka* 'give' (= "dar"), *kšma* 'give as present' (= "regalar"), *tura* 'take' etc.

In the ALS and the comparative data, we find several strategies employed to express or mark the indirect object (IO) of the ditransitive predicate, including the representation of IO by an unmarked noun phrase (10. 46), pronouns preceded by determiner *na* (10. 47) and the preposition *ti*: ʔ (10. 48).

IO REPRESENTED BY NOUN PHRASE: In X_G the 'recipient' of the ditransitive action (e.g. 'give', 'ask') functions as the direct object of the clause following the predicate; the IO describing the 'thing/message/gift' referred to by the ditransitive verb follows as an unmarked noun phrase.

- (10. 46) a. nuka-n naka_O kah mapu_E
 give-1sA PN:2s INDEF tortilla
 'I gave you a tortilla' (G-RHG)

- b. na hura-4e ki? šə mu-niwa nin_O waru?E
 DET man-PL INTENS Sp:REFL? 3pA-ask PN:1s matate
 'the men ask me a lot for nets' (G-JAP)

IO REPRESENTED BY PRONOUN: In X_G there are several examples which indicate that, if both object arguments accompany a ditransitive predicate and the IO is expressed by an independent pronoun, the pronoun is preceded by the determiner *na*. All attested cases of this construction involve the verb *nuka* 'give'.

- (10. 47) a. nuka-y na_O [na nin]_E
 give-3sA DET DET PN:1s
 'he/you give it to me' (G-JS)
- b. nuka-ka mapu_O [na man]_E
 give-2sA tortilla DET DEM/3s
 'you gave him the tortilla' (G-RHG)
- c. nuk-ey [na ku šunik]_O [na nin]_E
 give-3sA_{DEP} DET MOD pot DET PN:1s
 '... (that) he/you gave me the pot' (G-JS)

IO MARKED WITH PREPOSITION *ti*: 2: There is only one example of this kind in the ALS. Here, A is marked on the transitive verb with a cross-referencing prefix. The preposition references the recipient of the verbal action with a nominal person-marking suffix of the third person singular.

- (10. 48) <ca nuca pà pè tiyg na doctrina>
ka-nuka pa? pe? ti:ʔ-h_E [na doctrina]_O
 2sA-give PFV FUT IO-3sP DET Sp:creed
 '(if) you gave (= told) him the creed'
 OT: "si le dieres la doctrina" (2038.)

10.1.1.7 Deviating marking pattern on transitive verbs

There are a few cases in the X_G -data where we find the auxiliary *nuka* and other transitive verbs to be marked with third person cross-referencing prefixes and in addition with the suffix *-y*. The exact functional context of these predicates is unclear.

There is a quite regular pattern of the third person transitive cross-referencing prefix *mu-* co-occurring on verbs that are marked with the suffix *-y*. In most cases the final vowel of verbal stems regularly ending in *a* is realised as *e*.

- (10. 49) 3A → 3O
- a. tata? ʔi ʔuta? mu-ʔime-y šuraya
 father CONJ mother 3sA-say-? girl/miss
 'the parents tell the girl' (G-SH)
- b. ka šuka naka ka mu-nuke-y naru
 INT? eat PN:2s INT? 3sA-give-? earth
 'where you eat, there they bury you'¹⁵⁵ (G-SH)
- c. na naka mu-(u)ka-y na mentir man
 DET PN:2s 2/3sA-do-? DET Sp:lie DEM
 'you are lying' (G-JS)

¹⁵⁵ The translation is based on the original field translation (see Appendix 6).

Analogical examples may suggest that the suffix may reference one of the arguments of the transitive predicate. As to whether A or O are referenced, the context below seems to suggest that the suffix cross-references A while the prefix marks O on the verb.

- (10. 50) 3A → 1O
 ʔan-pule-y mal nin ʔaʔiʔ šuka-n mučo
 1s?-make-3s? Sp:sick PN:1s PREP.CAUS eat-1sA_{DEP} Sp:a lot
 'it/he made me? sick'¹⁵⁶, because I ate a lot' (G-SH)

It is, however, not understood whether -y (or -ey) can be identified as a cross-referencing suffix at all, or whether it has cliticised from another form, e.g. the impersonal of the auxiliary *ʔaya* or the subjunctive clitic -*ʔn*. There are a few other cases of possible double cross-referencing in the X_G data that may involve the subjunctive clitic (§ 13.3). Whether in this case -*n* marks the first person singular agent of the transitive predicate or a subjunctive, is unclear.

- (10. 51) 1A → 3O
 neʔa muʔ-suka-n nin
 BEN 3sA-eat-1sA/SUBJ? PN:1s
 'for I ate it (*= for the one who ate it was me?)' (G-SH)

The cases of double cross-referencing on the verb are rare and only attested in the primary data. It is not clear whether they reflect a regular pattern of person-marking. For the remainder of this study, we will assume that they do not.

10.1.2 Intransitive predicates

The basic intransitive predicate combines an intransitive verb root or stem and a cross-referencing affix that marks S. This basic structure can be extended by TAM-adverbials.

Just like transitive predicates, intransitive predicates in main and dependent clauses take different morphological markers. In declarative main clauses, intransitive verbs are generally marked for person with cross-referencing prefixes. The cross-referencing prefixes that mark S on intransitive verbs are the same in nonpast/imperfective and past/perfective, with the exception of the third person, which is marked with the prefix *ʔa-* in the nonpast/imperfective and unmarked (*Ø-*) in the past/perfective.

In subordinate and non-declarative clauses, person is marked with suffixes.

Table 10. 3: Cross-referencing of S on intransitive verbs (ALS)

	Main clause		Dependent clause	
	Nonpast/impfv.	Past/perfective	Nonpast/impfv.	Past/perfective
1s	ʔan-		-n	
2s	ka-		-kaʔ	
3s	ʔa-	Ø-	-i / -y	(-ʔ)
1p	muk-		-k	
2p	ka- ... ʔay		-kaʔ ʔay	
3p	ʔa- ... (ki)-ʔik	Ø- ... (ki)-ʔik	-i / -y ʔik	(-ʔ)

¹⁵⁶ The translation of the verb is concluded from the original field translation (see Appendix 6).

Table 10. 4 illustrates the structure of intransitive predicates and the relative position of optional adverbials and auxiliaries as they are attested in the ALS.

Table 10. 4: Structure of intransitive predicates (ALS)

CATEGORY	OPERATOR
cross-referencing (S)	
ROOT	
derivation	
- antipassive/inchoative	-ki
TAM-suffix	-ʔa, -wa
dependent cross-referencing suffixes (S _{DEP})	
TAM-suffix	
- stative-resultative	-ʔ
plural	ʔay, ʔik
[auxiliary]	[ʔan, ʔayu]
TAM-adverbials	ma
	paʔ, paʔʔ
	naʔʔ
	peʔ
[auxiliary]	ʔayu
intensifier	ki
plural	ʔik

Intransitive predicates in Xinka can be distinguished according to their morphological properties into (a) intransitive roots, (b) derived intransitive stems (i.e. inchoative and positional verbs), and de-transitivised stems (i.e. impersonal predicates). All types of intransitive predicates employ the same cross-referencing affixes. Intransitive roots can be distinguished into roots that mark past with -ʔ and those that take the active past suffix -ʔa.

10.1.2.1 Intransitive predicate in declarative main clause

In declarative main clauses, intransitive predicates are generally marked with cross-referencing prefixes. In the third person, Maldonado de Matos marks the Latin categories of *presente*, *futuro imperfecto* and *pretérito imperfecto* (all in the indicative and subjunctive mood) with the cross-referencing prefix *ʔa-*, whereas third person forms in the categories of *pretérito perfecto*, *pretérito plusquamperfecto*, and *futuro perfecto* are unmarked.

Maldonado de Matos gives conjugational paradigms for the intransitive roots *ma:ra* 'rest', *taʔ* 'come', *ʔakuʔ* 'go', and the complex forms *wa-ka* [go-CAUS] and *wa-ʔa* [go-ʔ] of the motion verb *wa* 'go away', as well as a few forms of the motion verb *wašata* 'enter'. These verbs show slight differences in cross-referencing S in the perfective (see below).

IMPERFECTIVE INTRANSITIVE PREDICATES mark subject with cross-referencing prefixes. Three-syllabic intransitive roots and stems do not delete V₂ upon inflection (10. 52a).

- (10. 52)
- | | |
|--|---|
| <p>a. <an guaszata>
 ʔan-wašata
 1sS-enter
 'I enter'
 OT: "yo entro" (1971.)</p> <p>c. <a màra>
 ʔa-ma:ra
 3sS-rest
 'he/she rests'
 OT: "aquel descansa" (1473.)</p> <p>e. <cà tá ay>
 ka-taʔ ʔay
 2s/pS-come 2PL
 'you (pl.) come'
 OT: "vosotros venís" (1402.)</p> | <p>b. <cà acù>
 ka-ʔakuʔ
 2sS-go
 'you go'
 OT: "tú vas" (1643.)</p> <p>d. <muc tá>
 muk-taʔ
 1pS-come
 'we come'
 OT: "nosotros venimos" (1401.)</p> <p>f. <a acù qui Łic>
 ʔa-ʔakuʔ ki=ʔik
 3s/pS-go INTENS=3PL
 'they go'
 OT: "aquellos van" (1647.)</p> |
|--|---|

The pattern of cross-referencing on nonpast/imperfective intransitive predicates is confirmed in X_G (10. 53a-b), X_{Ch} (c-d) and X_Y (e). If represented, the S constituent can precede or follow the verb. Intransitive stems that are only marked with a cross-referencing prefix and do not exhibit any further inflectional suffixes are associated with nonpast translation contexts, including simple present tense, progressives or future and subjunctive semantic contexts. In the semi-speaker data from X_G , the third person prefix *ʔa-* is not regularly attested with intransitive roots, but occurs with transitive roots and stems in passive/impersonal contexts (§ 10.1.2.2).

- (10. 53)
- | | |
|--|--|
| <p>a. <anwiriki>
 ʔan-wiriki
 1sS-speak
 'I speak / I am speaking'
 OT: "yo estoy hablando" (G-S)</p> <p>c. <n'gu ni linac>
 n-ku ni li=nak
 1sS-go PN:1s PREP:with=PN:2s
 'I go with you'
 OT: "yo voy contigo" (Ch-C)</p> <p>e. <ajla muj tiki nec>
 ʔaʔa muh-ti:ki nek
 tomorrow 1pS-sleep PN:1
 'tomorrow we sleep'
 OT: "mañana dormiremos" (Y-C)</p> | <p>b. na nin ʔan-ti:ki ša ʔo:tek
 DET PN:1s 1sS-sleep PREP bed
 'I sleep in the bed' (G-SH)</p> <p>d. <a kagui>
 ʔa-k'awi
 3sS-cry
 'he/she cries'
 OT: "llora" (Ch-Z)</p> |
|--|--|

PERFECTIVE INTRANSITIVE PREDICATES likewise mark S with cross-referencing prefixes. The set of prefixes is the same that is used in the nonpast/imperfective, with the exception that the third person is unmarked ($\emptyset$ -) for person in the past/perfective. The marking of past/perfective on intransitive predicates depends on the intransitive root or stem. The following Table 10. 5 gives an overview of inflectional patterns of the intransitive verbs attested in the ALS.

Table 10. 5: General pattern for third person singular on intransitive verbs

	General pattern	First person singular	Third person singular
imperfective	Prefix-VI	ʔan-ʔakuʔ	ʔa-ʔakuʔ
		ʔan-ma:ra	ʔa-ma:ra
		ʔan-wašata	ʔa-wašata
		ʔan-taʔ	ʔa-taʔ
perfective	Prefix-VI-ʔ	ʔan-ma:ra-ʔ	Ø-ma:ra-ʔ
		ʔan-wašta-ʔ	Ø-wašta-ʔ
		ʔan-waka-ʔ	Ø-waka-ʔ
		ʔan-ta:-y(i)-ʔ	Ø-ta:-y(i)-ʔ
	Prefix-VI-ʔa	ʔan-ʔaku-ʔa	ʔa-ʔaku-ʔa
		ʔan-wa-ʔa	Ø-wa-ʔa

INTRANSITIVE VERBS MARKED WITH -ʔ: Most intransitive roots/stems take the stative past-suffix -ʔ, which leads to the deletion of V₂ three-syllabic roots and stems (10. 54d).

- (10. 54) a. <an mārà>
ʔan-ma:ra-ʔ
 1sS-rest-STAT
 'I rested'
 OT: "yo descansé, he descansado" (1483.)
- b. <ca guacà>
ka-waka-ʔ
 2sS-go away-STAT
 'you went away'
 OT: "tú te fuistes, has ido" (1740.)
- c. <mārà>
Ø-ma:ra-ʔ
 3sS-rest-STAT
 'he rested'
 OT: "aquel descansó, ha descansado" (1487.)
- d. <guasztà>
Ø-waš(a)ta-ʔ
 3sS-enter-STAT
 'he entered'
 OT: "aquel entró" (1976.)
- e. <cà mārà ay>
ka-ma:ra-ʔ **ʔay**
 2s/pS-rest-STAT 2PL
 'you (pl.) rested'
 OT: "vosotros descansasteis" (1491.)
- f. <guacà qui Lic>
Ø-waka-ʔ **ki=ʔik**
 3pS-enter-STAT INTENS=3PL
 'they (themselves) entered'
 OT: "aquellos se fueron, han ido" (1748.)

The one-syllabic motion verb *taʔ* 'come' lengthens the root vowel and adds the ligature -yi when marked with the stative-resultative suffix -ʔ. It is the only verb that undergoes this change (see also § 12.2.1).

- (10. 55) a. <an tá y>
ʔan-ta:-yi-ʔ
 1sS-come-LIG-STAT
 'I came'
 OT: "yo vine, he venido" (1410.)
- b. <tá y qui Lic>
Ø-ta:-yi-ʔ **ki=ʔik**
 3s/pS-come-LIG-STAT INTENS=3PL
 'they (themselves) came'
 OT: "aquellos vinieron" (1415.)

In some cases the final past-suffix -ʔ can be lost when plural clitics follow.

- (10. 56) <mārà qui Lic>
Ø-ma:ra **ki=ʔik**
 3pS-rest INTENS=3PL
 'they (themselves) rested'
 OT: "aquellos descansaron, han descansado" (1476.)

In the comparative data this marking pattern is confirmed in the past/perfective for all intransitive predicates, irrespectively of whether the subject is the semantic agent (10. 57a, c) or the semantic patient (b, d, e?) of the action.

- (10. 57) a. na naka ka-ʔaku-ʔ
DET PN:2s 2sS-go-STAT
'you went' (G-SH)
- b. ʔan-ʔuʔu-ʔ
1sS-fall-STAT
'I fell' (G-RHG)
- c. <un xayé ra maku>
ʔən-šaye-ʔ ra maku
1sS-return-STAT PREP house
'I returned home'
OT: "y regresé a casa" (Ch-F)
- d. <muc mochó>
muk-močo-ʔ
1pS-get wet-STAT
'we got wet'
OT: "¿estás mojado?" (Ch-C)
- e. <n'patá>
n-pata-ʔ
1sS-take a bath-STAT
'I bathed'
OT: "ya se bañó [sic]" (Y-C)

INTRANSITIVE VERBS MARKED WITH *-ʔa(ʔ)*: Maldonado de Matos gives the past/perfective form of the motion verbs *ʔaku* 'go' and *wa* 'go away' with the active past marker *-ʔa* (§ 12.2.2). When inflected with *-ʔa*, the verb *ʔaku* marks the third person with the cross-referencing prefix *ʔa-* that is otherwise only used in the nonpast/imperfective. In contrast, the motion verb *wa* when taking the suffix *-ʔa*, expresses the third person by zero-marking. The accent pattern in example (10. 58) does not suggest the presence of the final *-ʔ* that is attested in the comparative data (see below).

- (10. 58) a. <an acù La>
ʔan-ʔaku:-ʔa
1sS-go-PAST.ACT
'I went'
OT: "yo fui, he ido" (1654.)
- b. <a acù La>
ʔa-aku:-ʔa
3sS-go-PAST.ACT
'he went'
OT: "aquel fue, ha ido" (1656.)
- (10. 59) a. <anguaLa>
ʔan-wa-ʔa
1sS-go away-PAST.ACT
'I went away'
OT: "yo me fui, me he ido" (1739.)
- b. <guaLa>
Ø-wa-ʔa
3sS-go away-PAST.ACT
'he/she went away'
OT: "aquel se fue, ha ido" (1743.)

In X_G , X_{Ch} and X_Y , the active past marker is attested with the intransitive verbs *ʔaku*, *ti:ki*, *wiriki* or *šapriki*. In the comparative data verbs that take *-ʔa* mark the third person with zero; there are no examples of the third person being marked with the cross-referencing prefix *ʔa-*, as indicated by Maldonado de Matos for the intransitive verb *ʔaku*.

The functional distinction of past forms with *-ʔa* and *-ʔ* is not entirely clear. The function of the active past marker seems to be independent of syntactic hierarchy (main/subordinate clause) or the declarative/non-declarative contrast (see § 12.2.2).

- (10. 60) a. na nin ʔan-ti:ki-ʔa?
DET PN:1s 1sS-sleep-PAST.ACT
'I slept' (G-SH)
- b. hin Ø-ti:ki-ʔa? siʔma
NEG 3sS-sleep-PAST.ACT night
'he did not sleep (last) night' (G-SH)
- (10. 61) a. <man saprikilá>
man Ø-sapriki-la?
DEM/PN:3s 3sS-degrain-PAST.ACT
'he degraded'
OT: "desgranó la mazorca" (Y-C)
- b. <nec muc saprikilá>
nek muk-sapriki-la?
PN:1p 1pS-degrain-PAST.ACT
'we degraded'
OT: "desgranemos la mazorca" (Y-C)

In the comparative data we find *-ta* in contexts where the translation contexts express purposiveness of action and volition (10. 62). The past marker therefore seems to be etymologically related to the optative auxiliary *ʔa-ta-* (§ 10.1.3.5, § 12.2.2).

- (10. 62) a. huraʔ Ø-ʔaku:-ta ʃa sawaɕ'a-ʔ
man 3sS-go-PAST.ACT PREP sow-STAT
'the man went to sow (his milpa)' (G-JAP)
- b. kiri-n nin tiʔa ʔi Ø-ʔaku:-ta ʔayaʔa ʔuka bender
pull-1sA PN:1s yucca Sp:and 3sS-go-PAST.ACT woman do Sp:sell
'I pulled/harvested yucca and the woman went to sell it' (G-SH)

In X_G intransitive verb roots that mark past with *-ta* are also attested without cross-referencing affixes; S is represented by personal pronouns.

- (10. 63) a. ti:ki-ta naka
sleep-PAST.ACT PN:2s
'you slept' (G-SH)
- b. na nin wirki-ta hi-naʔ
DET PN:1s speak-PAST.ACT PREP:with-DEM/PN:3s
'I spoke with him/her' (G-SH)

INTRANSITIVE PREDICATES EXTENDED BY TAM-ADVERBIALS: Maldonado de Matos combines intransitive predicates with TAM-adverbials to express the Latin tense categories of *presente subjuntivo* (a), *pretérito imperfecto* (b), *pretérito imperfecto subjuntivo* (c), *futuro imperfecto* (d) and *futuro imperfecto subjuntivo* (e). As with transitive predicates, the adverbials follow the inflected verb.

- (10. 64) a. <muc guaLa nàŁ>
muk-wa-ta naʔt
1pS-go-PAST.ACT IMPFV
'we went away'
OT:"nosotros nos íbamos" (1733.)
- b. <cà acù mà nàŁ ay>
ka-ʔakuʔ ma naʔt ʔay
2s/pS-go COND IMPFV 2PL
'you (pl.) would have gone'
OT:"vosotros fuerais, iríais, fueséis" (1692.)
- c. <a acù pè>
ʔa-ʔakuʔ peʔ
3sS-go FUT
'he will go'
OT:"aquel irá" (1667.)
- d. <an tà pà pè>
ʔan-taʔ paʔ peʔ
1sS-come PFV FUT
'I would have come'
OT:"yo viniere, hubiere venido" (1464.)
- e. <capa ca acùLa paŁ nàŁ>
ka=pa ka-ʔaku:-ta paʔ naʔt
EXO=PFV 2sS-go-PAST.ACT PFV IMPFV
'you had gone'
OT:"tú habías ido" (1661.)

While *ʔaku* marks the third person singular in all contexts with *ʔa-*, Maldonado de Matos indicates the intransitive verbs *ma:ra* 'rest' and *waka* 'go away' with zero-marking in all *imperfecto* forms.

- (10. 65) <màra nàŁ>
Ø-ma:ra naʔt
3sS-rest IMPFV
'he would have rested'
OT:"que descansará, hubiera haber descansado" (1550.)

All forms that fall into the Latin category of *perfecto* are marked with *-ʔ*. In the third person, the marker is zero (see above).

- (10. 66) a. <màrà mà>
Ø-ma:ra-ʔ **maʔ**
 3sS-rest-STAT COND
 'he would have rested'
 OT: "aquel haya descansado" (1531.)
- b. <cà tà í mà ayù ay>
ka-ta:-yi-ʔ **maʔ** **ʔayuʔ** **ʔay**
 2s/p-come-LIG-STAT COND AUX 2PL
 'you (pl.) would have come'
 OT: "vosotros hubierais, habríais, hubieseis venido" (1462.)

Maldonado de Matos also indicates that some imperfecto forms (*pretérito imperfecto*, *futuro imperfecto subjuntivo*, *imperfecto subjuntivo*) likewise mark past with *-ʔ*.

- (10. 67) <an guacà nàĽ>
ʔan-waka-ʔ **naʔ**
 1sS-go-STAT IMPFV
 'I went'
 OT: "yo me iba" (1726.)

The comparative data confirm the position of TAM-adverbials following the person-marked intransitive verb. Only perfective/relational and future adverbials are attested. The adverbial *paʔa* or *paʔaʔ* combines with nonpast/imperfective and past/perfective verb forms, depending on whether it refers to a present (10. 68) or past event (10. 69).

- (10. 68) a. ʔan-muču paʔaʔ wiriki
 1sS-get tired PFV speak
 'I am already tired (of) speaking' (G-RHG)
- b. n-haɣ'a-ki paʔ
 1sS-ʔ-INCH PFV
 'I already rest = I am resting'
 OT: "está descansando" (Y-C)
- (10. 69) a. <anderó paʔáʔ>
ʔan-tero-ʔ **paʔaʔ**
 1sS-die-STAT PFV
 'I already died'
 OT: "tal vez yo muerto he" (G-S)
- b. <ta ibar na te Juan?>
Ø-ta:-yi-(ʔ) bar na te Juan
 3sS-come-LIG-STAT PFV DET ? Juan
 'Juan already came (here?)'
 OT: "¿vino ya el señor Juan?" (Ch-F)

The future adverb *peʔ* is only attested with nonpast/imperfective verbs.

- (10. 70) a. <enguapé>
ʔen-wa peʔ
 1sS-go FUT
 'I will go'
 OT: "iré" (Ch-F)
- b. <atu pa unbu vengada>
ʔa-tupa=*ʔən **=*pəʔ** **vengada**
 3sS-stay=SUBJ? =FUT Sp:avenged
 'he will have to be avenged'
 OT: "ha de quedar vengado" (Ch-Z)

The plural clitic *#ik* can precede or follow TAM-adverbials, while the complex form *ki=#ik* only occurs in final position.

- (10. 71) a. <guacaLic mà nàL>
Ø-waka **ɬik** **ma?** **naʔɬ**
 3s/p-go away 3PL COND IMPFV
 'they would have gone away'
 OT: "aquellos se fueran, irían, y fuesen" (1767.)
- b. <guala pà pè Lic>
Ø-wa-ta **pa?** **pe?** **ɬik**
 3s/p-go-OPT PFV FUT 3PL
 'they would have gone away'
 OT: "aquellos se fueren, hubieren ido" (1786.)
- c. <tà í mà qui Lic>
Ø-ta:-yi-? **ma?** **ki=ɬik**
 3s/p-come-LIG-STAT COND INTENS=3PL
 'they (themselves) would have come'
 OT: "aquellos hayan venido" (1457.)

10.1.2.2 Impersonal predicates

Impersonal predicates are detransitivised verb forms that are attested in the ALS as the Xinka correspondent to Spanish infinitives. Cross-linguistically impersonal cross-referencing is often used on subordinate predicates (see Aikhenvald 2003). In the following example the transitive verb *wišu* 'beat' takes the impersonal cross-referencing prefix *ʔa-* and the stative-marker *-?*. Maldonado de Matos translates this subordinate verb form as an infinitive; i.e. '(by) beating'.

- (10. 72) <aLi aguiszù na turiLi a erLèque>
ʔaɬi **ʔa-wišu-?** **na** **turi-ti** **ʔa-erɬeke**
 PREP.CAUS 3sS-beat-STAT DET child-PL 3pS-get frightened
 'because of beating (= one beats) the children, they get frightened'
 OT: "de azotar a los niños se espantan" (2041.)

In the conjugational paradigms of the ALS, the Latin categories of infinitive and gerund are indicated on transitive and intransitive roots/stems with the third person intransitive/impersonal cross-referencing prefix *ʔa-*. The accent marking on these infinitive forms suggests that the verb form is not marked with the stative *-?* that is attested in the example above.

- (10. 73) a. <á pùla>
ʔa-pula
 3sS-make
 'to make'
 OT: "hacer" (469.)
- b. <a oròmo>
ʔa-ʔoromo
 3sS-pick up
 'to pick up'
 OT: "recoger" (976.)
- c. <a acù>
ʔa-aku?
 3sS-go
 'to go'
 OT: "ir" (1712.)

In X_G and X_{Ch} , impersonal verb forms consisting of the impersonal cross-referencing prefix *ʔa-* and the stative marker *-?* are attested on transitive verb roots. The impersonal predicates are attested in main clauses and are reflected in the semantic context.

- (10. 74) a. η a-piri- η hina naka η akuki hi?
 3sS-see-STAT PREP PN:2s walk PROG+3sS_{DEP}
 'one sees/they see (that) he/she is walking with you' (G-SH)
- b. hin η a-pata- η η akuki
 NEG 3sS-*accomplish-STAT walk
 'one does not accomplish to walk = one cannot walk' (G-RHG)
- c. <na šuunik apu η a η hina η wati>
 na šu:nik η a-pu η a- η hina η wati
 DET pot 3sS-make-STAT PREP clay
 'the pot is made with clay'
 OT: "las ollas se hacen de barro" (G-C&K)

Impersonal cross-referencing is also used to express general states. For instance, the verb form η a- η ima [3sS-speak] 'he speaks' expresses that someone generally speak (i.e. he is capable of speaking), while the transitive predicate *mu- η ima* [3sA-speak] 'he speaks/says it' would express that someone says something specific.

- (10. 75) a. na η u-n ... hin η a- η ima b. man=ta η a-tero- η čiriki?
 son-1sP NEG 3sS-speak DEM=INT 3sS-die-STAT small
 'my son does not speak (in general)' (G-SH) 'that who dies young' (G-SH)

In the Zeeje-ms. and in X_Y there are cases of impersonal cross-referencing on the main/light verb η uka that also takes the suffix -y (cf. § 10.1.1.7).

- (10. 76) a. <ha-ucai labrar> b. <inaj man auki>
 η a- η uka-y labrar η i-nah-man η a- η uki- η
 3sS-do-? Sp:labrar ?-PN:3s-DEM 3sS-do-?
 'one/he works' 'he/one does'
 OT: "se labra" (Ch-Z) OT: "él hace" (Y-C)

10.1.2.3 Subordinate intransitive predicates

The morphosyntactic properties of intransitive predicates in subordinate and non-declarative clauses differ from those of main predicates. There are few examples of intransitive subordinate predicates in the ALS and most of them include the existential verb η aya 'be' either as a primary or as an auxiliary verb.

SUBORDINATE INTRANSITIVE PREDICATES IN COMPLEMENT CLAUSE: In Xinka intransitive predicates in complement clauses can be finite or nonfinite deranked subordinate verb forms.

The only ALS-examples of intransitive subordinate predicates in complement clauses are finite forms of the existential verb η aya 'be', which regularly takes cross-referencing suffixes. In both of the following examples, the complement clause functions as the S argument of a nominal predicate.

- (10. 77) a. <szàŁ cangui szàma gracia ayaàc asuec muc terò>
šaŁ ka-n wi šama gracia η aya-k
 good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP}
 'it is good (that) we are in grace'
 OT: "bueno es que estemos en gracia" (1953.)
- b. <guenaquí nà pè agi aŁa temprano pè acùg>
wena=ki na? pe? η ahi η aŁa temprano pe? η aku-h
 INT=INTENS LOC come be+3sS_{DEP} ADV Sp:early FUT/IMP go-3sp
 '(he) who has to be here tomorrow, has to go early (= early must be his-going)'
 OT: "el que ha de estar mañana aquí, ha de venir temprano" (1964.)

In the comparative data intransitive predicates marked with dependent-marking pronominal suffixes are attested in the function of O arguments of transitive main predicates. They can consist of intransitive roots/stems or complex verbs (intransitive progressive). In the secondary data, especially in Schumann (1967), intransitive verbs with cross-referencing suffixes are often given without syntactic context; in nonpast/imperfective and past/perfective the same cross-referencing suffixes are attested.

- (10. 78) a. <yiwán we>
 yiwa-n we
 descend/enter-1s_{DEP} DIR?
 'that I would enter'
 OT: "para que entre" (G-S)
- b. <wašatay sima>
 wašata-y sima
 enter-3s_{DEP} night
 '(that) it became evening'
 OT: "ya entró la noche" (Ch-F)
- c. ʔaku-n paʔaʔ
 go-1s_{DEP} PFV
 '(that) I am already going' (G-SH)
- d. hin ʔan-niwa ʔakuki hiʔ hina nin
 NEG 1sA-want walk be+3s_{DEP} PREP PN:1s
 'I do not want that he walks with me' (G-SH)

Complement clauses with nonfinite intransitive predicates are only attested in the comparative data. The subject of the nonfinite subordinate predicate can be coreferential (a) or non-coreferential (b) with the agent of the main predicate.

- (10. 79) a. ʔan-muču paʔaʔ wiriki
 1sS-get tired PFV speak
 'I have got tired (of) speaking' (G-RHG)
- b. na nin piri-n wiriki hina ʔayaʔa
 DET PN:1s see-1sA speak PREP woman
 'I saw him speaking with a woman' (G-SH)
- c. <curú a cuc na'c>
 kuru ʔakuk(i) nak
 run walk PN:2s
 'you run walking'
 OT: "te vas corriendo" (Ch-JC)

There are also examples of complement clauses in X_G and X_{Ch} , where the intransitive predicate occurs in the form of a stative participle (see § 11.1.2.1).

- (10. 80) a. man=ta ka-piri hapa-ʔ šan-tiwina
 DEM=INT 2sA-see pass-STAT PREP-sky
 'this is (what) you see passing by in the sky' (G-SH)
- b. <lugnuy tumú nanu conquista>
 luhnu-y tumu-ʔ nanu conquista
 believe-3sA end-STAT DET Sp:conquest
 'he believed that the conquest was over'
 OT: "creyó acabada la conquista" (Ch-Z)

SUBORDINATE INTRANSITIVE PREDICATES IN ADVERBIAL CLAUSE: There are examples of temporal and causal adverbial clauses in the ALS. Subordinate intransitive predicates in temporal clauses do not exhibit different inflectional properties than intransitive predicates in main clauses.

- (10. 81) a. <asÙec uLù na macu tiusz> b. <asÙec muc terò>
ʔasik Ø-ʔuʔu-ʔ maku tyuš ʔasik muk-tero
 CONJ 3sS-fall-STAT house Sp:god CONJ 1pS-die
 'when the church fell (= collapsed)' 'when we die'
 OT: "... cuando cayó la iglesia" (2018.) OT: "...cuando nos muramos" (1953.)

All examples of causal clauses in the ALS include complex intransitive progressive predicates. The intransitive auxiliary *ʔaya-* takes dependent-marking suffixes.

- (10. 82) a. <paraqui jarana ayaân>
para ki harana ʔaya:-n
 CONJ sick be-1sS_{DEP}
 'because I am/was sick'
 OT: "el haber estado enfermo fue causa de" (1954.)
- b. <tu eaL paraqui upu ayacà Linà nà ayàLa>
tuk'aʔ para ki ʔupu ʔaya-kaʔ ʔinaʔ na ʔayaʔa man
 CONJ CONJ stand be-2sS_{DEP} PREP DET woman DEM
 'because if you are standing with that woman'
 OT: "si por haber de estar con esa mujer...." (1955.)

In X_G we find examples that illustrate the following: When main predicate and subordinate predicate are coreferential in subject, intransitive predicates in adverbial clauses can mark subordination with the suffix *-n*, which may be identified as the subordinate marker *ʔn* (see § 13.3). The pattern is normally attested with transitive subordinate predicates (see § 10.1.1.2). In the given example, the verb *šawu* 'sit' is used transitively with an extended argument, 'to sit on sth.'.

- (10. 83) ʔanta-mah=ta šawu-n man
 IMP:go-EXH=DIR sit down-SUBJ DEM/3s
 'let's go + sit down = let's enter' (G-JS)

10.1.2.4 Intransitive predicates in interrogative clause

Intransitive predicates in interrogative clauses exhibit distinct inflectional properties; they employ subordinate cross-referencing to mark S. There is only one example of an intransitive predicate in an interrogative clause attested in the ALS. Here the predicate is a nonfinite verb form that is marked with the anterior/perfect suffix *-waʔ*.

- (10. 84) <¿cà pè taguà na aszÙeʔ>
kaʔ peʔ ta-waʔ na ʔaʃi
 INT:where? CENT come-ANT DET DEM
 'from where did this (one) come?'
 OT: "¿de dónde vino ésto?" (2010.)

In X_G and X_{Ch} , intransitive predicates in interrogative clauses take dependent-marking suffixes to reference the subject.

- (10. 85) a. <hándah maráka káka> b. <capi ixpacá>
 hanta mara-ka k-aka ka pi ʔiʃ(a)pa-kaʔ
 INT get angry-2sS_{DEP} INTENS/REFL-2sP INT:where? CENT emerge-2sS_{DEP}
 'why are you angry at yourself?' 'from where did you leave?'
 OT: "¿por qué enojas a ti?" (G-S) OT: "¿de dónde vienes?" (Ch-C)

(10. 86) <naca curug>
 na ka kuru-h
 LOC INT run-3sP
 'whereto did he run?'
 OT: "¿a dónde huyó?" (Y-C)

There are no intransitive predicates in imperative clauses attested in the ALS; all examples stem from the conjugational paradigms. On imperative intransitive predicates S is not cross-referenced by means of affixes; the imperative mood is marked with the suffix *-ya* (see § 13.1.2).

- The comparative data confirm the morphology of intransitive imperative predicates.

- The ALS includes only one example of an intransitive predicate in a negative clause. In this case the nonpast/imperfective intransitive predicate exhibits the same cross-referencing morphology as intransitive predicates in declarative main clauses.

- Comparative data from X_G and X_{Ch} likewise do not suggest distinct marking for intransitive predicates in negative clauses. Intransitive predicates also take regular cross-referencing in subordinate negative clauses (10. 90c).

- (10. 90) a. hin ʔan-ʔišapa nin
NEG 1sS-leave PN:1s
'I do not leave' (G-SH)
- b. <gen atupa>
hen ʔa-tupa
NEG 3sS-stay
'he does not stay'
OT:"no queda" (Ch-Z)
- c. <jam bulá cacán quejin catá luego>
han pula=ka-kan que hin ka-taʔ luego
INT make=PROG-2sA_{DEP} Sp:that NEG 2sS-come Sp:soon
'what is it that you were doing that you did not arrive soon (= in time)?'
OT:"¿por qué te tardaste tanto?" (Ch-P)

10.1.2.7 Transitivity marked intransitive predicates

In the comparative data from X_G and X_{Ch}, there are examples of intransitive predicates with extended arguments that take transitive cross-referencing affixes. Most attested cases are motion verbs that show some sort of "object/purpose-relation" to a following noun phrase or prepositional phrase that functions as an extended argument. The presence of the extended argument requires the verbal predicate to take transitive cross-referencing affixes.

- (10. 91) a. natiya mu-ti:ki ša ʔo:tek b. neʔa mu-ʔišapa paseyo
LOC 3sA-sleep PREP bed BEN 3sA-emerge/leave Sp:walk
'there he sleeps in the bed' (G-SH) 'so that he leaves for a walk' (G-SH)
- c. hin mu-ʔulu na ku mutiʔ d. <mutzá gu ar>
NEG 3sA-fall DET MOD hair mu-ʕ'awu *ʔaʔ
'the (little) hair does not fall' (G-JS) 3sA-sit PREP
'he sits/sat (down) on it'
OT:"ya me senté" [sic] (Ch-F)

There are also cases of intransitive verbs that can be used transitively with a changed meaning. In the following example the Spanish loan *kuru* 'run' (from Spanish "correr") is used transitively as in Spanish, signifying 'to chase'.

- (10. 92) kuru-y nin ku ʔampuki
run/chase-3sA PN:1s MOD snake
'he chased¹⁵⁷ a snake (for) me' (G-RHG)

The following examples illustrate a transitive usage of the verb, marked with *mu-* (10. 94a), and with cross-referencing suffixes (b). The verb *wiriki* 'speak' may be ambitransitive, expressing both, the intransitive concept 'speak/talk' and the transitive concept 'speak/talk to somebody'. For instance, the intransitive predicate *ʔa-wiriki* in the first example seems to indicate that 'he (generally) does not speak' (because he does not want to or is not able to do so), while transitive cross-referencing in *mu-wiriki* 'he speaks' and *wiriki-n* 'I spoke' refers to the concept of 'speaking with somebody' or 'saying something specific'.

¹⁵⁷ The translation of the verb is based on the original field translation (see Appendix 6).

- (10. 93) hin ʔa-wiriki nin
 NEG 3sS-speak PN:1s
 'he does not speak to me' (G-SH)
- (10. 94) a. mu-weriki hina ʔayaʔa pari_A
 3sA-speak PREP:with moon sun
 'the sun speaks with the moon' (G-SH)
- b. na nin wirki-n hina na?
 DET PN:1s talk-1sA PREP PN:3s
 'I spoke with her' (G-SH)

10.1.3 Auxiliary verb constructions

The topic of this section are complex predicates that express grammatical categories. Most of these predicates can be generally classified as auxiliary verb constructions (AVCs), although there are also other verb-verb combinations with grammatical function. An auxiliary verb construction is a mono-clausal verb phrase combining a lexical main verb and an auxiliary verb that has become semantically bleached and grammaticalised to serve as a functional operator (see Anderson 2006:5; 9). Auxiliaries can express TAM-categories, polarity or voice and have the same functions otherwise expressed by inflectional categories (Schachter 1985:41; Anderson 2009:9).

Most of the verbs employed as auxiliaries in Xinka are existential verbs that can also occur with other types of predicates, functioning as light verbs in verb compounds (§ 10.1.4) or copula verbs with nominal predicates (§ 10.2.2). Some existential verbs in the same functional slot have been grammaticalised as imperatives (§ 13.1.2) and causative derivations (see § 11.2.2). Maldonado de Matos included most verbs that function as auxiliaries and copulas into the Latin category of "*voces del sum est fui*", defining them as existential verbs, which are translated as 'be' and 'have'. But auxiliaries are also based on other verbal concepts, such as 'want', 'can' and 'go'. Most auxiliaries in Xinka that are not identified as existential verbs can be shown to be based on motion verbs. Auxiliaries based on the verb root **ku* 'go' indicating periphrastic future are not attested in the ALS. The auxiliaries *pata* '*accomplish' and *šata* 'return, repeat' could be complex forms that combine a prepositional root (*pa-* 'behind, under', *ša-* 'in, on'; see § 9.1) and the motion verb *taʔ* 'come, arrive elsewhere'. Table 10. 6 provides an overview of the auxiliary verbs attested in the ALS and comparative corpus.

AVCs in Xinka exhibit different patterns of word order. In the ALS, the main pattern involving all the auxiliaries based on existential verbs is V + AUX. The pattern AUX + V is mostly, but not exclusively, attested in the comparative data and involves auxiliaries based on motion verbs. The auxiliaries *pata* and (*ʔu*) *ʔan* occur in the ALS following the main verb, but are attested in the comparative data in initial position. The difference in word order also reflects a difference in grammatical function.

Table 10. 6: Auxiliary verbs in the ALS and comparative corpus

	Auxiliary		ORIGINAL GLOSS	ENGLISH GLOSS	FUNCTIONAL CATEGORY
V + AUX	<ayà>	ʔaya:	"estar"	'be in a place'	progressive VI
	<ucà>	ʔuka:-	"tener/haber"	'have, do'	progressive VT
			"poner/hechar"	'put, throw'	
	<ayu>	ʔayu:	"tener/haber"	'have, get'	subjunctive
	<una>	ʔuna	"tener/haber"	'have, get'	verb derivation
	<Łan>	ʔan	*"querer"	'want'	optative
AUX + V	<paátaa>	pa:-ta:	"poder"	'can' = *accomplish	abilitative?
	<pata>		"ser"	'be' = *accomplish	"passive"
					(interpretation)
	<szàta>	ša-ta	"estar"	*'be returning'	repetitive
	-	ku-ya**	-	'going to'	future
	-	ko**	-	'go'	future
	-	te:ro**	-	'want'	optative

all forms marked with ** are not attested in the ALS

It seems that AVCs in Xinka have arisen from different types of structural patterns (cf. origin of AVCs in Anderson 2006:9). There are two structural types of AVCs in Xinka:

- AVCs where the auxiliary verb is subordinate to the lexical main verb; i.e. all AVCs of the pattern V + AUX
- AVCs where the lexical main verb is subordinate to the auxiliary verb; i.e. all AVCs of the pattern AUX + V

AVCS WITH SUBORDINATE AUXILIARY: Most AVCs in Xinka combine an unmarked lexical main verb that is followed by an auxiliary verb. The auxiliary verb hosts all the inflectional information, marking S/A with dependent-marking pronominal suffixes. As can be seen in the more recent comparative Xinka sources, some of the AVCs attested in the ALS underwent processes of grammaticalisation with the auxiliary having become cliticised to the lexical verb. It needs to be noted that only AVCs of the structure V + AUX undergo processes of grammaticalisation/clitisation. The pattern always expresses grammatical function and cannot be interpreted lexically. The grammatical categories expressed by these AVCs include: tense/aspect such as progressive and future, as well as the modes of subjunctive, optative and abilitative (used by Maldonado de Matos as a passive construction; see below). The structural pattern of V + AUX with the auxiliary carrying subordinate marking could suggest that these AVCs may have their origin in constructions that combine a verb and an embedded subordinate clause.

- (10. 95)
- <tà ayacà>
taʔ ʔaya-kaʔ
come AUX/PROG.VI-2sS_{DEP}
'you are coming'
OT:"estás viniendo" (1969.)
 - <yguitzi nàŁ u ɛa can naca ...>
ʔiwiɛ'i naʔʔ ʔuka-kan naka
hear IMPFV AUX/PROG.VT-2sA_{DEP} PN:2s
'you were hearing [the mass]'
OT:"tú estabas oyendo [misa]" (1989.)

TAM-adverbials always precede auxiliaries and existential verbs. So, in AVCs all adverbials carrying information about tense/aspect or mode follow the lexical main verb and precede the marked auxiliary. Auxiliary verbs are attested with inflectional TAM-suffixes that precede the subordinating cross-referencing person marker. In the third person plural, the clitic *#k* always follows in final position. A few forms classified by Maldonado de Matos as TAM-adverbials can be shown to derive from auxiliary verbs that were grammaticalised and lost all person-marking/inflectional morphology.

Table 10. 7: Structure of AVCs with subordinate auxiliary verb (ALS)

CATEGORY	OPERATOR
VERB₁ (lexical verb)	
TAM-adverbials	peʔ, paʔ(ʔ), naʔt
VERB₂ (auxiliary verb)	ʔaya-, ʔuka-, pata-
TAM-suffix	ʔayu, ʔuna, ʔan
dependent-marking pronominal suffix	-wa
plural clitics	ʔik, ʔay

AVCS WITH SUBORDINATE LEXICAL VERB: AVCs of the structure AUX + V correspond with complex constructions that combine an fully marked finite verb in a main clause and a deranked, unmarked nonfinite subordinate verb in complement or adverbial function (see § 17.1, § 17.2). AVCs of this pattern are often ambiguous as to whether they express grammatical functions or more literal lexical concepts. This is why they are functionally not easily distinguished from serial verb constructions, which are a common source for the grammaticalisation of AVCs (cf. Aikhenvald 2006:22).

TAM-adverbials occur either between the auxiliary and lexical verb or follow the auxiliary verb. Most AVCs with subordinate lexical verb are attested in the comparative data.

Table 10. 8: Structure of optional elements of AVCs with subordinate lexical verb (ALS)

CATEGORY	ELEMENT/OPERATOR
cross-referencing prefix	
VERB₁ (auxiliary verb)	šata, pata, **ku-ya, **ko
TAM-suffix	-ʔa / -wa
TAM-adverbials	peʔ, paʔ(ʔ), naʔ etc.
VERB₂ (lexical verb)	
dependent-marking pronominal suffix	
plural	ʔik, ʔay

all forms marked with ** are not attested in the ALS

The basic marking pattern in nonfinite subordinate clause-based AVCs shows person-marking on the auxiliary while the lexical main verb is not marked (or carries -ʔ).

- (10. 96) a. <a patà oròmo> **ʔa-pata-ʔ** **ʔoromo** b. <ca szàta pùla> **ka-šata** **pula**
 3sS-can/able-STAT pick up 2sS-return make
 'one is able to pick up = to be picked up' 'you return to make it'
 OT: "a ser recogido" (1065.) OT: "... lo vuelvas a decir" (1887.)

- (10. 97) ʔan-ko yiwa-ʔ
 1sS-FUT descend-STAT
 'I go/will to descend/enter'
 OT: "entraré" (G-S)

In the following sections we will treat auxiliary verbs and auxiliaries, their lexical origins and the different functional contexts they occur in. Some auxiliary verbs are used in both finite and nonfinite subordinate clause-based AVCs. § 10.1.3.8 deals with AVCs that are not attested in Maldonado-Xinka.

10.1.3.1 Auxiliary ʔaya

The intransitive existential verb ʔaya 'be in a place' functions as an auxiliary verb marking progressive aspect on intransitive verbs (§ 12.3.1). In that function it has also become grammaticalised following the motion verb ʔaku, or *ku*, in future periphrasis (§ 12.4.1). The existential verb also occurs as a copula verb with nominal predicates (§ 10.2.2.2).

Maldonado de Matos defines the verbal root ʔaya as a defective verb (*verbo anómalo*) that he translates into Spanish as "estar". The existential meaning of the root as 'to be in a place' is confirmed by the comparative data (see also the field notes by Campbell and Kaufman). The root might be a very early loan from Mayan.¹⁵⁸ The existential ʔaya can occur as a primary verb, but functions in most contexts as an auxiliary and copula verb in complex and nominal predicates. In all contexts, the verb takes subordinate marking in form of cross-referencing suffixes to mark S, it is not attested with prefix-inflection at all. In the ALS, ʔaya takes the same set of cross-referencing suffixes that mark past/perfective A on transitive verbs (see § 6.2.2.3).

Table 10. 9: Auxiliary verb ʔaya with dependent-marking suffixes in the ALS

FORM	ORIGINAL GLOSS		
<ayaan>	ʔaya-n	[be-1s _{DEP}]	"yo estoy, estuve" (1888.)
<ayacà>	ʔaya-kaʔ	[be-2s _{DEP}]	"tú estás, estuvistes" (1889.)
<agi>	ʔahi [=ʔaya-y]	[be+3s _{DEP}]	"aquel está, estuvo" (1890.)
<ayaac>	ʔaya-k	[be-1p _{DEP}]	"nosotros estamos, estuvimos" (1891.)
<ayacà ay>	ʔaya-kaʔ ʔay	[be-2p _{DEP} + 2PL]	"vosotros estabais, estuvisteis" (1892.)
<agi qui Lic>	ʔahi ki ʔik	[be-3p _{DEP} + INTENS + 3PL]	"aquellos están, estuvieron" (1893.)

The comparative data confirm that the existential ʔaya does only take cross-referencing suffixes (see Table 10. 10). In X_{um} the root carries the suffix *-wa* that is followed by the person-marking suffix (see Campbell and Kaufman: field notes). The suffix is probably identical with the anterior/perfect suffix that is used subordinate and non-declarative clauses to mark past-time reference (§ 12.2.3). The anterior suffix is also attested with the auxiliary verb ʔuka (see next § 10.1.3.2), which suggests that auxiliaries take subordinate TAM-inflection and are therefore also syntactically subordinate forms.

¹⁵⁸ The direction of borrowing seems to be suggested as the root with the basic meaning 'be, exist, have' is attested in various Mayan languages; i.e. pM *ʔar 'to be, exist, have' ("estar, existir, haber"); CHR ʔay [pmed]; pCh *ʔayan 'there is' ("hay"); CHT ʔaya(n) 'to be, exist' ("estar, existir") (Kaufman 2003). It needs to be pointed out that final *-n* does not seem to be morphologically transparent in pCh and Ch'orti'.

With the exception of X_{Jum} , the auxiliary is attested in the comparative data as a grammaticalised marker that has lost the initial vowel λa - and cliticises to the preceding main verb.

Table 10. 10: Comparative chart of auxiliary λaya with cross-referencing suffixes

	X_M	X_G	X_{Ch}	X_{Jum}	X_Y
1s	λaya -n	ya-n λya -n*	ya-n ya- λ *	λaya - $\acute{w}a$ -n*	ya-n
2s	λaya -ka	ya-ka ya-ka λ *	ya-ka ya-ka λ *	λaya - $\acute{w}$ -ka λ *	-
2sf			ya-y*	λaya - $\acute{w}a$ -y*	-
3s	λah -i	hi λ , he λ	hi λ ~ hi $\acute{e}$ λay λay -i λ ~ λay λ *	λay -i λ *	<hi> λay ya * $\lambda anya$
1p	λaya -k	λya -k*	ya- $\dagger ki$ λ *	λaya - $\acute{w}a$ -lki λ *	
2p	λaya -ka λay	ya-ka λ λay *	ya- $\dagger ka$ *	λaya - $\acute{w}a$ -lka λ *	
2pf				λaya - $\acute{w}a$ -liy*	
3p	λah -i ki $\dagger tik$	hi λ nah $\dagger tik$ *	λay λ - $\dagger tik$ *	$\lambda ayili$ *	
		$\dagger tik$ *			

*Example from Campbell & Kaufman: field data

In the third person the root consonant changes from y to h , i.e. λaya -n [be-1s S_{DEP}] 'I am' ('estoy); λahi [be+3s S_{DEP}] 'he/she is' ('está'). Comparative data from X_{Ch} , X_{Jum} and X_Y suggest that the original form was * λaya -y > * λay -i [be-3s S_{DEP}], which subsequently changed into λah -i (cf. sound change $y > h$, § 4.3.1.4.2). In X_G λahi > hi λ , although in X_{Ch} the form λay prevails. Both forms are attested in X_Y , although hi λ may occur in a distinct functional context (see below). In X_{Ch} the variant form [λey] is attested. In X_G ki λ can occur instead of hi λ .

Alternatively, the third person can be marked with ya . This form is attested in X_G , X_{Ch} and in a few cases in X_Y . It occurs in all functional contexts in which the auxiliary λaya is attested (i.e. progressive, future marking and with nominal predicates). The suffix may be followed by cross-referencing personal suffixes, which supports the analysis that it has grammaticalised from the full auxiliary verb.

Schumann (1967:53) points out that the suffix - ya indicates present durative if there is no temporal marker preceding or following the predicate. He identifies the cliticised forms - ya and λay as a marker for obligatory or necessary action and translates it as "por necesidad".

The variation of all third person markers hi λ , λay and ya is not quite understood. The following examples give all three realisations functioning as copulas of nominal predicates in the same semantic and lexical context. The first two examples are from X_G , the last one from X_{Ch} .

- (10. 98)
- | | | | | | |
|----|-----------------------------|------------------------|----|------------------------|------------------------|
| a. | harana | ya- λ | b. | harana | he λ |
| | ill | be-STAT | | ill | be+3s S_{DEP} |
| | 'you are ill' (G-RHG) | | | 'he/she is ill' (G-SH) | |
| c. | harana | λay | | | |
| | ill | be+3s S_{DEP} | | | |
| | 'he/she is ill' | | | | |
| | OT: "está enfermo" (Ch-MQb) | | | | |

Maldonado de Matos gives the inflectional paradigm of *ʔaya* as that of a full verb, excluding the Latin tense forms *presente de infinitivo*, *presente perfecto y plusquamperfecto*, *futuro de infinitivo*, *circumloquio segundo*, and the *gerundios*. In all examples, TAM-adverbials precede the verb.

- (10. 99) a. <nàL aýaan>
naʔt **ʔaya:-n**
 IMPFV be-1s_{DEP}
 'I was'
 OT: "yo estaba" (1894.)
- b. <pè agí>
peʔ **ʔahiʔ**
 CENT/FUT be+3s_{DEP}
 'he will be'
 OT: "aquel estará" (1908.)
- c. <mà ayacà>
maʔ **ʔaya-kaʔ**
 COND be-2s_{DEP}
 'you would have been'
 OT: "tú hayas estado" (1936.)

PROGRESSIVE AUXILIARY: The auxiliary *ʔaya* is used to mark the progressive aspect on intransitive verbs in the ALS, X_G and X_{Ch} (§ 12.3.1).

- (10. 100) a. <tà ayacà>
taʔ **ʔaya-kaʔ**
 come be/PROG-2s_{DEP}
 'you are coming'
 OT: "estás viniendo" (1969.)
- b. <yszàpa agí>
ʔišapa **ʔahiʔ**
 leave be/PROG+3s_{DEP}
 'he is leaving'
 OT: "está aquel saliendo" (1970.)
- (10. 101) a. ti:ki=ya-n
 sleep=PROG-1s_{DEP}
 'I am sleeping' (G-RHG)
- b. šawu hiʔ
 sit PROG+3s_{DEP}
 'he is sitting' (G-SH)
- c. <tiki ay>
 ti:ki ʔay
 sleep PROG+3s_{DEP}
 'he is sleeping'
 OT: "durmiendo" (Ch-F)

In X_Y verbs followed by *-hi* are translated in the simple past, not as progressives, which does, however, not exclude that the given examples do indicate progressive and have simply not been given with exact translation contexts by Calderón.

- (10. 102) a. <tiliji nay>
 tili hiʔ nay_O
 see *be+3s_{DEP} PN:2s
 'he saw you = *he was seeing you'
 OT: "él te vió" (Y-C)
- b. <sucaji nen pelu>
 suka hiʔ nen_O pe:lu(?)_A
 bite *be+3s_{DEP} PN:1s Sp:dog
 'the dog bit me = *was biting me'
 OT: "el perro me mordió" (Y-C)

In X_{Ch} the auxiliary is used with transitive main verbs, taking dependent-marking pronominal suffixes. In their notes, Campbell and Kaufman give the progressive marker *-yan* with the gloss 'do', contrasting it with *-yaʔ* 'to be there (in a place)'. They indicate the full set of subordinate forms of the auxiliary, while Calderón gives only the third person singular form.

Table 10. 11: Auxiliary **ʔaya* with subordinate marking in X_{Ch}

	Ch-C	Ch-C&K	
1s		ya-n	[be-1sS/A _{DEP}]
2s		ya-kan	[be-2sS/A _{DEP}]
3s	ʔayin	(ʔo)yin	[be+3sS/A _{DEP}]
1p		ya-ʔkin	[be-1pS/A _{DEP}]
2p		ya-ʔkan	[be-2pS/A _{DEP}]

- (10. 103) a. <cuan rucá ayin xuxo>
 *kwan ruka-ʔ ʔayin šušo
 INT:who? bite-STAT PROG+3sA_{DEP} dog
 '... who the dog was biting'
 OT: "el perro le muerde" (Ch-C)
- b. <najlic irinac ayin>
 naʔik ʔiri nak ʔayin
 PN:3p see PN:2s PROG+3sA_{DEP}
 'they are seeing you'
 OT: "ellos te ven" (Ch-C)

Schumann also gives transitive verbs with the progressive marker *-ya* in X_G . It cannot be determined whether the form originally existed in X_G or whether this is an influence from X_{Ch} .

- (10. 104) <rukayan>
 ruka=ya-n
 eat=PROG-1sS/A_{DEP}
 'I am eating'
 OT: "yo estoy comiendo" (G-S)

In the function of progressive the auxiliary *ʔaya* following the intransitive motion verb *ʔaku* has been grammaticalised as a future auxiliary (§ 12.4.1). The periphrastic progressive construction, which is the source of the future auxiliary in the comparative data, is also attested in the ALS (see § 12.3).

- (10. 105) <acù ayaan Guathemala>
ʔaku? ʔaya:-n Guatemala
 go be-1sS_{DEP} LOC:Guatemala
 'I am going to be in Guatemala'
 OT: "me voy a estar a Guatemala" (1961.)

FUTURE PERIPHRAISIS: The grammaticalised auxiliary verb *ku=ya-* precedes predicates that take dependent-marking pronominal suffixes. In the semi-speaker data from X_G , only transitive verbs are attested in this context, while Schumann also indicates intransitive lexical verbs. Future periphrasis is thus basically a grammaticalisation of serialised subordinate predicates: **ku + ʔaya-S_{DEP} + V-S/A_{DEP}* 'go to be to do X'.

- (10. 106) a. ku=ya-n čuma-n wiyan
 go=PROG-1sS_{DEP} suck-1sA_{DEP} sugar cane
 'I am going to suck sugar cane' (G-RHG)
- b. <kuyáka yiwáka>
 ku=ya-ka yiwa-ka
 go=PROG-2sS_{DEP} enter-2sS_{DEP}
 'you are going to enter'
 OT: "entrarás" (G-S)

In X_{Ch} the grammaticalised complex predicate *ku=ya-* precedes unmarked verbs.

- (10. 107) <cuyan guarata>
 ku=ya-n warata
 go=PROG-1sS_{DEP} enter
 'I am going to enter'
 OT: "voy a entrar" (Ch-P)

Likewise in X_{Ch} , *kuya-?* is attested unmarked preceding a cross-referenced verb.

- (10. 108) <cuyá ghuajtán rhamacú>
 ku=ya-? wahta-n ra maku-?
 go=PROG-STAT enter-1s_{DEP} PREP house-?
 'I am going to enter (his) house'
 OT: "voy a entrar a tu casa" (Ch-JC)

The majority of periphrastic future constructions in X_G and X_{Ch} combine the auxiliary in the third person singular, *kuy* (X_G) or *kway* (X_{Ch}), with a cross-referenced subordinate transitive or intransitive verb.

- (10. 109) a. kuy ?aku-n nin ya
 AUX.FUT go-1s_{DEP} PN:1s Sp:already
 'I am already going' (G-SH)
 b. kuy pula-n maʔik
 AUX.FUT make-1s_{A_{DEP}} firewood
 'I am going to make (= chop) firewood' (G-RHG)
 c. hanta kuy šuka-kan naka
 INT AUX.FUT eat-2s_{A_{DEP}} PN:2s
 'what will you eat?' (G-JAP)
- (10. 110) a. <acuay upulan mayaya tic>
 ?akway ?u pula-n mayaya ti:-k
 FUT ? make-1s_A tickle IO-2sP
 'I am going to make you tickeling'
 OT: "voy a hacerte cosquillas" (Ch-C)
 b. <na'c cuay tero ca>
 nak kway tero-ka
 PN:2s FUT die-2s_{DEP}
 'you are going to die'
 OT: "te vas a morir" (Ch-JC)

There are a few examples in X_G where the lexical verb takes cross-referencing prefixes; it is not quite understood whether this is a regular pattern.

- (10. 111) a. kuy ?an-ti:ki nin paʔa
 AUX.FUT 1sS-sleep PN:1s PFV
 'I am already going to sleep' (G-JAP)
 b. <hántah hin kuyáka kaʔakúki nti amuká>
 han-tah hin ku=ya-ka ka-akuki nti ?a-muka
 INT:why? NEG go=PROG-2s_{DEP} 2sS-walk INT:what? 3sS-work
 'why are you not going to go to work (= what he/one works)'
 OT: "¿por qué no vas a trabajar?" (G-S)

COPULA VERB: The existential verb *ʔaya* also functions as a copula verb with non-verbal predicates (§ 10.2.2.2).

- (10. 112) a. <jarana ayaàn>
 harana ʔaya:-n
 ill COP:be-1s_{DEP}
 'I am ill'
 OT: "estuvistes enfermo" (1954.)
 b. <szàma gracia ayaàc>
 šama gracia ʔaya:-k
 PREP Sp:grace COP:be-1p_{DEP}
 'we are in grace'
 OT: "estemos en gracia" (1953.)

In X_Y the copula verb *ʔanya* can precede or follow nominal predicates. It is translated into Spanish as "hay".

- (10. 113) a. <añá mapu>
 *ʔanya mapu
 COP:be+3sS tortilla
 'there are tortillas'
 OT: "¿hay tortillas?" (Y-C)
 b. <(qué) uy añá>
 qué ?uy *ʔanya
 Sp:what water COP:be+3sS
 '...that there is water'
 OT: "... que agua hay" (Y-C)

- c. <santur anya-lamu>
 san tur ʔanya lamu
 PREP river COP:be+3sS fish
 'there are fish in the river'
 OT: "im Fluss gibt es Fische" (Y-L)

Although it seems that speakers of the other Xinkan varieties mostly use the existential verb *ʔuka* with nominal predicates, there are also examples of the existential *ʔaya* functioning as a copula in X_G.

- (10. 114) <áwa hiʔ>
 ʔawa hiʔ
 moon COP:be+3sS
 'the moon is shining'
 OT: "está haciendo luna" (G-S)

In the ALS and in X_{Ch}, the auxiliary *ʔaya* occurs with the suffix *-k* indicating the adverbial form 'like, such as'. Origin and function of the suffix *-k* is not entirely clear. Semantically, it seems most plausible to define the form as a verbal noun (§ 11.1.1).

- (10. 115) a. <ayác>
ʔaya-k
 be-VN?
 'being = like, as'
 OT: "como, así como, parece" (3660.)
- b. <æʋeca ayac anic>
ʔak'í-ka ʔaya-k ʔanik
 now-EXO be-VN? today
 'eight days from now'
 OT: "ahora ocho días" (3593.)
- (10. 116) a. <allac>
 ʔaya-k
 be-VN?
 'being = like, as'
 OT: "como, caso, parecia, como que" (Ch-Z)
- b. <ayac jíxi ti>
 ʔaya-k híši ti:ʔ
 be-VN? stone IO
 'being stone to him = like stone to him'
 OT: "parece piedra" (Ch-C)

10.1.3.2 Auxiliary *ʔuka*

The transitive verb *ʔuka* (or *ʔuk'a*) 'put, throw, do' functions as an auxiliary verb that marks progressive aspect on transitive verbs (§ 12.3.2). The same verb has become grammaticalised as a causative marker on transitive or nominal/adjectival roots (§ 11.2.2.1). It furthermore functions as a light verb preceding Spanish verbs (§ 10.1.4.1) and as an existential with nominal predicates (§ 10.2.2.3).

The ALS gives the verb in different orthographic representations and with different glosses. The contextual analysis of these forms in the ALS and the comparative data suggests that we are dealing in all cases with the same root that is used as a primary verb and as a functional element in several complex predicates.

Table 10. 12: Attested cases of *ʔuka* in the ALS

	FORM		GLOSS
auxiliary	<ucáa>	ʔuka-ʔ	"tener, haber; defectivo" (3417.)
auxiliary	<uεa>	ʔuka	"estar ejecutando, haciendo aquello" (1985.)
full verb	<uεa>	ʔuka	"poner, hechar alguna cosa en algun lugar" (3418.)

The full verb is listed in the vocabulary with the full range of transitive morphosyntactic markers, but is not attested in syntactic context. Maldonado de

Matos gives the root consonant as <ɛ>, which may suggest that it is glottalised, although the comparative data do not fully support that.

- (10. 117) a. <úɛa>
ʔuka-Ø
 put-IMP.VT
 'put (it)!'
 OT: "poner (imperativo)" (3422.)
- b. <úɛaguaan>
ʔuka-wa-n
 put-ANT-1sA
 'I put it'
 OT: "poner (pretérito)" (3421.)

The etymological origin of the verb root is not known. While the ALS gives the basic meaning of *ʔuka* as 'put, throw', comparative data suggest that it can also mean 'do, make'.

- (10. 118) a. ʔuka-Ø na ša suni?
 put/throw-IMP.VT PN:3s (O) PREP pot
 'throw it into the pot!' (G-JAP)
- b. <mug huca ical simple piriq̃i>
 muh-ʔuka ʔikal simple piri-ki
 3sA-put/throw NUM:'1' Sp:simple see-VN
 'he throws one simple look'
 OT: "hechar una simple ojeada" (Ch-Z)
- (10. 119) a. natiya mu-ʔuka kural čiwō
 LOC:there 3sA-do/make Sp:shed Sp:goat
 'there he makes the goat shed' (G-SH)
- b. <ucan pa>
 ʔuka-n pa?
 do/make-1sA PFV
 'I (already) made it'
 OT: "yo hago" (Y-C)

As a primary verb *ʔuka* exhibits the same inflectional morphology as other transitive verbs. That is, it takes cross-referencing affixes to mark person, the past markers *-ʔa* and *-wa* and hosts TAM-adverbials.

Table 10. 13: Combinations of the auxiliary *ʔuka* with TAM-adverbials (ALS)

FORM		ORIGINAL GLOSS
<ucà mà>	ʔuka ma?	"hubiese habido" (1819.)
<ucà nàɬ>	ʔuka naʔɬ	"había" (1806.)
<ucà pè>	ʔuka pe?	"habrá" (1807.)
<ucà pàpè>	ʔukaʔ paʔ pe?	"hubiese, hubiere habido" (1808.)

Cross-referencing prefixes are only attested with *ʔuka* functioning as a full or as a light verb. Table 10. 14 gives a comparative statement of the person-marking prefixes attested with the root in the corpus (not including the Campbell & Kaufman-data).

Table 10. 14: Comparative chart of auxiliary *ʔuka* with cross-referencing prefixes

	X _M		X _G	X _{Ch}	X _Y
1s	<an uɛa>	ʔan-ʔuk'a	ʔan-ʔuka		
2s	<ca uɛa>	ka-ʔuk'a	ka-ʔuka	ka-ʔuka	
3sA	<mu uɛa>	mu-ʔuk'a	mu-ʔuka	mu-ʔuka	
3sS			ʔa-ʔuka	ʔa-ʔuka	ʔa-ʔuki
1p				muk-ʔuka	
2p				ka-ʔuka ... ʔay	

Prefix-marking is mostly attested in the singular persons, with the exception of X_{Ch} , where we also find examples in the first and second person plural.

- (10. 120) a. <an uea naLqui absolver naca>
ʔan-ʔuka na(ʔ) ki absolver naka
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I myself would absolve you'
 OT: "te absolviera yo" (2037.)
- b. <mu uea pè castigar naca Dios ay>
mu-ʔuka peʔ castigar naka dios ʔay
 3sA-do FUT Sp:punish PN:2p Sp:god 2PL
 'god will punish you (pl.)'
 OT: "os ha de castigar dios" (2040.)
- (10. 121) a. hurah man mu-ʔuka leʔer
 man DEM 3sA-do Sp:read
 'that man reads' (G-SH)
- b. <ka uca pa meditar hay>
ka-ʔuka pa(ʔ) meditar ʔay
 2pA-do PFV Sp:meditate 2PL
 'you (pl.) meditated'
 OT: "meditáis (Ch-Z)

In the comparative data the third person singular is marked with the transitive cross-referencing prefix *mu-* or the impersonal cross-referencing prefix *ʔa-*.

- (10. 122) a. naʔu-n hin ʔa-ʔuka mandar
 son-1sP NEG 3sS-do Sp:order/send
 'my son does not order (= work)¹⁵⁹ (G-SH)
- b. <hauca unbu aliviar>
ʔa-ʔuka *=ʔən *pəʔ aliviar
 3sS-do =SUBJ FUT Sp:relieve
 'he will have to be relieved'
 OT: "ha de ser aliviado" (Ch-Z)
- c. <jan ha-ucagua abrumar>
han ʔa-ʔuka-wa abrumar
 INT 3sS-do-ANT Sp:charge
 'what was he charged with?'
 OT: "con que se le abrumaba" (Ch-Z)

Cross-referencing suffixes are attested with *ʔuka* in all functional contexts: (a) as an auxiliary marking progressive on transitive verbs, (b) as a light verb in past contexts or (c) as a copula following nominal predicates.

Table 10. 15: Comparative chart of *ʔuka* with cross-referencing suffixes

	X_M		X_G	X_{Ch}	X_Y
1sA/ A_{DEP}	<uεan>	ʔuk'a-n	ʔuka-n	ʔuka-n	ʔuka-n
			ka-n*		
2sA/ A_{DEP}	<uεaca>	ʔuk'a-ka	ʔuka-ka	ʔuka-ka	
2sA $_{DEP}$	<uεacan>	ʔuk'a-kan	ka-kan*		
3sA/ A_{DEP}			ʔuka-y	ʔuka-y	ʔuka-y
			ʔuke-y		ʔuki
			k'e-yʔ*		
3sP			ʔuka-h	ʔuka-h	ʔuka-h
1pA			k'a-k*		
2pA			ka-kan ʔay*		

*Example from Campbell & Kaufman: field data

¹⁵⁹ The translation is based on the original field translation (see Appendix 6).

In subordinate context *ʔuka* takes transitive dependent-marking suffixes (A_{DEP}). In X_G the third person form *ʔukay* varies with *ʔukey*; both forms occur in the same contexts as full verbs, light verb and existentials in main and subordinate context, as well as a progressive auxiliary that is always subordinate. The functional difference of *ʔukay* ~ *ʔukey* is unclear.

The nominal form *ʔukah* occurs as a progressive auxiliary in subordinate contexts and as an existential referring to past events, i.e. *ʔuka-h* [have-3sP] 'there was' ('había'), which contrasts with the *ʔuka-y* [have-3sA] 'there is' ('hay').

PROGRESSIVE AUXILIARY: In auxiliary function, *ʔuka* marks progressive aspect on transitive verbs. It follows the lexical main verb and takes transitive dependent-marking suffixes. All examples in the ALS are referring to past events.

- (10. 123) a. <asvec naL pùla uean na an oracion>
ʔasik na(?)ʔ pula ʔuka-n na ʔan-oracion
 CONJ IMPFV make PROG-1sA_{DEP} DET 1sP-Sp:prayer
 'when I was making (= saying) my prayer'
 OT: "cuando yo estaba haciendo mi oración" (1992.)
- b. <yguitzi naL u ea can naca na misza>
ʔiwic'i naʔ ʔuka-kan naka na miša
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)

In the majority of examples from X_G the auxiliary *ʔuka* has become grammaticalised as a progressive suffix, or at least cliticised to the lexical verb. In the majority of examples the third person singular is given with the suffix -y.

- (10. 124) a. niwa=ka-kan hina nin
 ask=PROG-2sA_{DEP} PREP PN:1s
 '(what) are you asking (for) with me?' (G-SH)
- b. k'aʔu=k'e-y šinak
 cook=PROG-3sA_{DEP} beans
 '(she) is cooking beans' (G-SH)
- c. <jaro cay guayack>
 horo=ka-y wayak'
 guard=PROG-3sA_{DEP} milpa
 'he is/was guarding the milpa'
 OT: "estaba cuidando la milpa" (Ch-P)

One semi-speaker of X_G (JAP) inserts the subject-constituent in form of an independent pronoun between the unmarked lexical main verb and the coreferential auxiliary, which shows that the auxiliary has lost the initial vowel *u* even when it occurs in non-cliticised contexts.

- (10. 125) a. pula nin ka-n
 make PN:1s PROG-1sA_{DEP}
 'I am making (it)' (G-JAP)
- b. te:ro šuka nin ka-n
 want eat PN:1s PROG-1sA_{DEP}
 'I want to be eating' (G-JAP)

The progressive construction can occur as the dependent of other AVCs with the grammaticalised future marker *kuya-* 'going to'.

- (10. 126) <kuyán kayakán tíʔla ša šankúko>
 ku=ya-n kaya=ka-n tíʔla ša šan-kuko
 go=PROG.VI-1sS_{DEP} sell=PROG.VT-1sA_{DEP} salt PREP PREP-Taxisco
 'I am going to be selling salt in Taxisco'
 OT: "venderé sal en Taxisco" (G-S)

In X_G we also find transitive progressive constructions that are only marked with the suffix *-ʔ*, which is possibly identified as the stative-resultative marker (10. 127), or the third person singular possessive suffix *-h* (10. 128). The subject is expressed by a personal pronoun; most examples are attested with pronouns in the first person singular.

- [illegible]

LIGHT VERB: The verb *ʔuka* also functions as a light verb to incorporate Spanish verbs, as is described in detail in § 10.1.4.1. In the function of a light verb, *ʔuka* exhibits transitive inflectional morphology.

- (10. 129) a. <ueaca mă restituiți șan gui șzac șzacă... >
ʔuka-ka ma restituiți șan wi șakša-ka
do-2sA COND Sp:restitute INT DIR? steal-2sA
'you would have restituted what you have stolen'
OT:'hayáis restituido lo que hurtasteis" (2035.)
- b. <ca tâ pè aŁa uea can confesar>
ka-taʔ peʔ ʔaŁa ʔuka-kan confesar
2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
'you will come tomorrow to confess'
OT:"te vendrás a confesar mañana" (1990.)

In X_G and X_{Ch} the light verb *ʔuka* is attested preceding Spanish infinitives (10. 130) as well as Xinka participles (10. 131), which seems to suggest that light verbs can precede noun phrases.

- (10. 130) a. ʔuka-y ʔenkontrar ʔuruʔ
do-3sA Sp:find egg
'he found (an) egg' (G-RHG)
- b. <nanu mug huca ofreser liqui>
nanu muh-ʔuka ofrecer liki
DET 3pA-do Sp:offer 3PL
'they offer'
OT: "la ofrecen" (Ch-Z)
- (10. 131) ʔuka-y ɕ'imi-ʔ
do-3sA extinguish-STAT
'he extinguished (it)' (G-SH)

EXISTENTIAL: With predicate nominals *ʔuka* functions as an existential verb indicating existence and possession (i.e. "hay" = 'there is') (see § 10.2.2.3). There are no examples of *ʔuka* in this function in the ALS. Depending on the morphosyntactic context, the auxiliary takes different markers for the third person singular: -y, -h and -ʔ. The form *ʔukah* is used in the past, while *ʔukay* indicates the present.

- (10. 132) a. ʔuka-y frixol
EXIST:have-3sA Sp:beans
'he got beans = there are beans' (G-SH)
- b. ʔuka-h na ku ʔaʔu
EXIST:have-3s DET MOD corn
'he/it got corn = there was corn' (G-JS)

The copula *ʔuka* also follows participles and adjectives. In most of these contexts, *ʔuka* carries the nominal third person suffix *-h*. If mentioned, the subject of the predicate follows in final position.

- (10. 133)
- | | | | |
|----|---|-------------------|---------------------|
| a. | muču-ʔ | ʔuka-h | nin _{S/A} |
| | get tired-STAT | EXIST:have-3sP | PN:1s |
| | 'I got tired' (G-JS) | | |
| b. | harana | ʔuka-h | naʔ _{S/A} |
| | ill | EXIST:have-3sP | PN:3s |
| | 'he got ill' (G-JS) | | |
| c. | ʔone | ʔuka-h | ʔawa _{S/A} |
| | tender | EXIST:have-3sP | moon |
| | 'the moon got (= is) tender' (G-JAP) | | |
| d. | hono-ʔ | ʔuka-ka | naka _{S/A} |
| | get drunk-STAT | EXIST:have-2sA/P? | PN:2s |
| | 'you got (= are) drunk' (G-JS) | | |
| e. | ʔiraʔ | nahaʔ | ʔuke-y |
| | big | LOC | EXIST:have-3sA |
| | 'it is big there = there is a lot' (G-SH) | | |

In the Zeeje-ms. the verb existential *ʔuka* is attested with the marker *ki*. In all given examples the form seems to function like a copula verb.

- (10. 134)
- | | | | | | | |
|----|---|-------------|-----------------------|------------|-----------|-----------------|
| a. | <tumuqui empleado sujeto hucaqui alig constitucion> | | | | | |
| | tumu=ki | empleado | sujeto | ʔuka=ki | ʔalih | constitución |
| | QUANT=DISTR | Sp:employee | Sp:subject | have=? | PREP.CAUS | Sp:constitution |
| | 'every employee is subjected by the constitution' | | | | | |
| | OT:"todo empleado está sujeto por la constitución" (Ch-Z) | | | | | |
| b. | <jama hucaqui hig tanta parte nanu Gobierno jú> | | | | | |
| | hama | ʔuka=ki | hiʔ | tanta | parte | nanu |
| | PREP | have=? | be+3sS _{DEF} | Sp:so much | Sp:part | FOC |
| | Sp:government DEM | | | | | |
| | 'in which this government had so much part' | | | | | |
| | OT:"en que ha tenido tanta parte este gobierno" (Ch-Z) | | | | | |

CAUSAL/SUBJUNCTIVE: Maldonado de Matos translated the forms *ʔuka=ʔin* and *ʔuka=yun* into Spanish as "por"; i.e. 'by, because of'. Syntactically, the form functions as the causal non-spatial preposition *ʔaʔi* in that it introduced the agent of a passive predicate (§ 9.2.3). Morphologically, it can be identified as a subordinate form of the verb *ʔuka* 'do' that is followed by the subjunctive marker *ʔin* (§ 13.3) or the cliticised subordinate form of an existential verb *ʔaya*; i.e. **ʔaya=ʔin* > *-yun* (§ 10.1.3.1). The function of the cliticised markers can be reconstructed from the comparative data.

- (10. 135)
- | | | | | | | |
|----|---|----------|--------|-----|-----------------|----------|
| a. | <ucayun> | | | | | |
| | ʔuka=yu=(i)n | | | | | |
| | do-be/PROG=SUBJ | | | | | |
| | 'by, because of' | | | | | |
| | OT:"por" (4667.) | | | | | |
| b. | <nana doctrina nariʔa pè patai ucain maestro ...> | | | | | |
| | nana | doctrina | nariʔa | peʔ | pata-y | ʔuka=ʔin |
| | FOC | Sp:creed | teach | FUT | *accomplish-3sA | do=SUBJ |
| | Sp:teacher | | | | | |
| | 'the creed will be taught by the teacher' | | | | | |
| | OT:"la doctrina será enseñada por el maestro" (2021.) | | | | | |

The author of the Zeeje-ms. employs the form *(u)kayin* in the same functional context. In X_{Ch} the form is morphologically transparent, as combining the verb *ʔuka* and the third person singular subordinate auxiliary verb *ʔayin* or *ʔoyin* (see § 10.1.3.1).

- (10. 136) <callin mug cortes>
 ka=(a)yin *muk-cortes
 do=PROG+3sS_{DEP} 1pP-Sp:courts
 'by our courts'
 OT: "por nuestras cortes" (Ch-Z)

There are further contexts in the Zeeje-ms., where the same form *(u)kayin* occurs in the function of a light verb (10. 137a) or as a progressive auxiliary (b). In both contexts, *-yin* marks subordinate predicates.

- (10. 137) a. <hucallin naca asegurar hay> b. <muca callin>
 ʔuka=yin naca asegurar ʔay muka ka=yin
 do=be+3sS_{DEP} PN:2p Sp:assure 2PL work PROG.VT=be+3sS_{DEP}
 '[that would be] assuring you (pl.)' 'working, serving'
 OT: "asegurando os" (Ch-Z) OT: "sirviendo" (Ch-Z)

10.1.3.3 Auxiliary ʔayu?

The verbal root *ʔayu?* 'have' occurs in the ALS in three different functional contexts. In the vocabulary it is listed as a defective verb with the Spanish translation "tener, haber". The colonial source does not provide any example of the verb with inflectional markers. The verb is also indicated with the translation context "hay, tiene", which suggests that it may be used as a copula with nominal predicates. Elsewhere in the ALS, *ʔayu?* is referred to as an optative marker (*partícula optativa*).

Table 10. 16: Attested cases of *ʔayu* in the ALS

	FORM		ORIGINAL GLOSS
auxiliary	<ayù>	ʔayu?	"tener, haber; defectivo" (1814., 2087.)
*copula	<ayù>	ʔayu?	"hay, tiene" (1814.)
TAM-adverbial	<ayú>	ʔayu?	"partícula optativa" (3671.)

Maldonado de Matos combines *ʔayu?* with the imperfective adverbial *naʔ* (see § 12.5.3) indicating the Latin category of *imperfecto*; with the future adverb *peʔ* (see § 12.5.1) to mark the *futuro imperfecto*; with the perfective *paʔ* (see § 12.5.2) to form *futuro subjuntivo*, and with the conditional *ma* (§ 12.5.4) to form the *plusquamperfecto subjuntivo*. In all instances, *ʔayu?* follows the marked verb and precedes the other adverbials. All Latin tense categories indicate a future or past situation that is not real.

Table 10. 17: Combinations and categories of the auxiliary *ʔayu?* in the ALS

FORM		Latin category	ORIGINAL GLOSS
<ayù nàʔ>	ʔayu? naʔ	imperfecto	"había, tenía" (1816.)
<ayù pè>	ʔayu? peʔ	futuro imperfecto	"habrá, tendrá" (1817.)
<ayupè>			"partícula verbal" (3673.)
<páayú>	paʔ ʔayu	futuro perfecto	"partícula verbal" (4214.)
<ayù pá pè>	ʔayu? paʔ peʔ	futuro, subjuntivo	"hubiere, hubiere habido" (1818.)
<ayù mã>	ʔayu? mãʔ	plusquamperfecto, subj.	"hubiera, habría y hubiese habido" (1819.)

In the ALS *ʔayuʔ* never takes inflectional marking and does not function like a full auxiliary verb. The auxiliary occurs with transitive and intransitive verbs. The main verb is marked for past: transitive verbs by means of cross-referencing person suffixes and intransitive verbs by means of the past marker -*ʔa*.

- (10. 138) a. <pulâi ayù pè>
pula-y ʔayuʔ peʔ
 make-3sA AUX FUT
 'he will have made (it)'
 OT: "aquel habrá hecho" (425.)
- b. <sâmuun pâ ayù>
samu-n paʔ ʔayuʔ
 catch-1sA PFV AUX
 'I will have caught (it)'
 OT: "yo habré cogido" (1100.)
- c. <a acùŁa pa ayù>
ʔa-ʔaku:-ʔa pa(ʔ) ʔayuʔ
 3sS-go-PAST.ACT PFV AUX
 'he would have gone'
 OT: "aquel habrá ido" (1674.)
- d. <pulacâ ma ayù na penitencia, ...>
pula-kaʔ ma ʔayuʔ na penitencia
 make-2sA COND AUX DET Sp:penitence
 'you should have made penitence'
 OT: "si hubieras hecho la penitencia" (2036.)

It cannot be clarified whether the order of *ʔayuʔ* and the perfective *paʔ* may be determined by clause-type. There is one syntactic example in the ALS, where *ʔayuʔ* precedes *paʔ* in a main clause (10. 139a), and follows the perfective in a non-declarative subordinate clause (b).

- (10. 139) a. <naca ayù pâ guiszacâ na Juan aŁparaquiguâ...>
naka ʔayuʔ paʔ wišu-kaʔ na Juan ʔaʔ-para kiwa-ʔ
 PN:2s AUX PFV beat-2sA DET Juan PREP.CAUS-? INTENS/REFL-?
 'you will have beaten Juan himself, because...'
 OT: "tú habrás azotado a Juan, porque ..." (2022.)
- b. ...á szin pa ayù jüenüei na doctrina>
ʔašin pa(ʔ) ʔayuʔ hñi-y na doctrina
 NEG PFV AUX know-3sA DET Sp:creed
 'he will/would not have known the creed'
 OT: "...no habrá sabido la doctrina" (2022.)

Maldonado de Matos gives the subjunctive auxiliary preceding the existential main verb *ʔaya*, suggesting that *ʔayu* is not just a subordinate form of *ʔaya* but an independent form with a separate meaning.

- (10. 140) <pa ayù ayacâ>
pa(ʔ) ʔayuʔ ʔaya-kaʔ
 PFV AUX be-2sS_{DEP}
 'you will have been'
 OT: "tú habrás estado" (1913.)

In combination with the indefinite pronoun, Maldonado de Matos employs *ʔayu* to express a conditional mood. In the given examples, *ʔayu* can precede or follow the interrogative root.

- (10. 141) a. <guéna ayu qui>
wena ʔayu =ki
 INT:who AUX =INTENS
 'he/the one who would = if someone'
 OT: "si alguno" (3858.)
- b. <ayuguenaqui>
ʔayu wena=ki
 AUX INT:who=INTENS
 'he/the one who would = if someone'
 OT: "si alguno" (3674.)

In the comparative data the form *ʔayu* is almost not attested. In the Campbell & Kaufman-notes from X_G , the form occurs in combination with the perfective marker, i.e. *pa ʔa yu^h*, indicating perfective. In the semi-speaker data from X_G , there are a few occurrences of a form *ʔayu* following motion verbs. The semantic contexts are not straightforward and the grammatical function of the form cannot be concluded from the few examples.

- (10. 142) a. kaʔ ta:=ya-ka wiʔ ʔayuʔ
 INT:where? come=PROG-2s_{DEP} DIR? AUX
 'where are you coming/arriving at?' (G-SH)
- b. ʔaku ʔayuʔ ʔaʔ nasyon man
 go AUX PREP Sp:nation DEM
 '*that nation is going?' (G-JS)

For X_{Ch} , Schumann lists an existential <ayúʔ> "hay, existe" as a lexical entry in his vocabulary. In the earlier Zeeje-ms. *ʔayu* occurs as a primary verb followed by the future marker *pu*.

- (10. 143) <hallu puti nanu mayor complascencia>
 ʔayu pu ti:ʔ nanu mayor complascencia
 EXIS FUT IO DET Sp: greatest pleasure
 'he will have of the greatest pleasure'
 OT:"tendrá la mayor complascencia" (Ch-Z)

In X_Y the auxiliary form *ʔayun* is attested in the function of a progressive marker. Unlike other progressive auxiliaries, *ʔayun* in X_Y precedes the main verb. It is not entirely clear whether the suffix *-n* marks the first person singular that is indicated by most translation contexts, or whether it is identified as the subjunctive marker.

- (10. 144) a. <ayun curuki huerxeké> b. <nen yuntili man>
 ʔayu-n kuruki weršeke nen yu-n tili man
 PROG-1s_{DEP}? run throw down PN:1s PROG-1s_{DEP} see DEM
 'running I threw down = running I fell'
 OT:"corriendo me caí" (Y-C) OT:"yo lo veo" (Y-C)
- (10. 145) a. <ʔayum-pumupa> b. <ayun pachi nu aya>
 ʔayu-n pumu pa(?) ʔayu-n pači nu ʔaya
 PROG-1s_{DEP} swim PFV PROG-1s_{DEP} grind DET woman
 'he was swimming'
 OT:"está nadando, es nadador" (Y-C) OT:"molendera" (Y-C)

Furthermore, the X_Y -data attest the auxiliary form *-yun* that is marked for person with cross-referencing prefixes and precedes the lexical main verb. The O constituent may be inserted between auxiliary and main verb. In both examples, the auxiliary is marked with the second person singular *m* (see § 6.1.1).

- (10. 146) a. <nay miyun sürir>
 nay *mi-yun sirir
 PN:2s 2sA-have/got tremble
 'you got tremble'
 OT:"tú tiembles" (Y-C)
- b. <nay muyunta nen tili>
 nay *mi-yun ta nen tili
 PN:2s 2sA-have DIR PN:1s see
 'you have come to see me'
 OT:"tú me ves" (Y-C)

10.1.3.4 Auxiliary *ʔuna*

The verb *ʔuna* 'have' ("tener, haber") is attested in the ALS only as a lexical entry without morphosyntactic context. Since Maldonado de Matos indicates it as a "verbo defectivo", *ʔuna* may function as an auxiliary that follows the lexical main verb.

Table 10. 18: Attested cases of *ʔuna* 'have' in the ALS

FORM		ORIGINAL GLOSS
<unà>, <unáa>	ʔuna?	"tener, haber, defectivo" (1809.), (3449.)
<unà>	ʔuna?	"hay" (1810.)

It is possible that the auxiliary may have become grammaticalised as an operator that derives intransitive positional verbs. As pointed out in § 11.3.3 some of the attested positional verbs are Mayan loans and the suffix *-na* has been borrowed along with them.

- (10. 147)
- | | |
|---|---|
| <p>a. <jarana>
hara-na
ill-have
'get ill'
OT: "enfermarse" (2465.)</p> <p>c. <yoŁana>
yoŁa-na
L-M: throw-have
'get thrown = to slip'
OT: "desbarrancarse" (3529.)</p> | <p>b. <tajana>
taha-na
exist-have
'get existing = to get born'
OT: "nacer" (3205.)</p> |
|---|---|

Such verbs ending in *-na* are frequently attested in the comparative data.

- (10. 148)
- | | |
|---|---|
| <p>a. harana hi?
hara-na hi?
ill-have be+3sS_{DEP}
'he is being ill' (G-SH)</p> <p>b. <tz'orana>
ǵ'ora-na
ʔ-have
'drip'
OT: "gotear" (Ch-C, Ch-F)</p> | <p>c. <man ay upá huoróna>
man ʔayu pa? woroʔ-na
DEM be+3sS_{DEP} PFV *boil-have
'it is already boiling'
OT: "el agua está hirviendo" (Y-C)</p> |
|---|---|

10.1.3.5 Auxiliary *ʔuŁa* (optative)

Complex predicates with *ʔuŁa-* are regularly attested only in X_{Ch} and X_Y. In Maldonado-Xinka we find the causative transitive verb *ʔuŁaka* 'wish, desire' ("desear") as a lexical entry in the vocabulary. In X_{Ch} and X_Y the transitive root *ʔuŁa* or *ʔula* (X_Y) is given with the meaning 'want, love'.

Table 10. 19: Comparative statement of occurrences of the verb **ʔuŁa*

	FORM		ORIGINAL GLOSS
X _M	<úŁaea>	ʔuŁa-ka	[want-CAUS] "desear" (3428.)
	<Łan>	Ła-n	[*want-SUBJ] "partícula optativa" (4009.)
X _{Ch}	<ulán>	ʔuŁa-n	[want-SUBJ] "querer" (Ch-F)
X _Y	<ulan>	ʔula-n	[want-SUBJ] "querer, amar" (Y-C)

In X_G the verb stem is attested with the meaning 'to lend'.

- (10. 149) ʔuʔa-ka naʔ
 want-CAUS DEM/3s
 'he lent (money)'¹⁶⁰ (G-JS)

The root ʔuʔa , or ʔula , seems to function in X_{Ch} and X_Y as a full transitive verb. However, in all given examples the verb takes cross-referencing suffixes in nonpast/imperfective contexts, suggesting that this might be subordinate person-marking.

- (10. 150) a. <nən ulan nən>
 nən ʔula-n nən
 PN:1s want-1sA PN:2s
 'I want you'
 OT: "te quiero, te amo" (Y-C)
- b. <nən ajla ulay>
 nən ʔaʔa ʔula-y
 PN:2s tomorrow want-2sA
 'tomorrow you want'
 OT: "mañana querás tú" (Y-C)

In X_Y ʔula is used as a secondary verb that takes cross-referencing affixes and precedes its complement. The secondary verb form occurs mostly with the subjunctive marker $-n$; these examples show that the subjunctive and cross-referencing pronominal prefixes can co-occur on a verb (10. 151).

- (10. 151) a. <mij ulan cotoy tiy>
 *mu- ʔula-n koto-y ti:ʔ
 3sA-want-SUBJ peel-3sA IO
 'he wants to peel/undress it/him'
 OT: "quiere desvestirse" (Y-C)
- b. <nec muculau tiki ketü>
 nek muk- ula-n ti:ki keti
 PN:1p 1pA-want-SUBJ sleep a bit
 'we want to sleep a bit'
 OT: "nosotros dormimos" (Y-C)

The main verb of these complex predicates can be finite, i.e. take person-marking (10. 152a), or nonfinite (b). This same type of construction is attested in X_{Ch} (10. 153). In these contexts, it is unclear whether $-n$ marks the subjunctive or the first person singular.

- (10. 152) a. <ulan anjatz'aki>
 ʔula-n ʔan-haʕ'aki
 want-SUBJ/1sA 1sS-rest
 'I want to rest'
 OT: "quiero descansar" (Y-C)
- b. <nən ula-n jonó>
 nən ʔula-n hono-ʔ
 PN:1s want-SUBJ/1sA get drunk-STAT
 'I want to be drunk'
 OT: "quiero embriagarme" (Y-C)
- (10. 153) <ulan tamiki lina nən>
 ʔula-n tamiki(?) lina nən
 want-1sA talk PREP PN:2s(formal)
 'I want to talk to you'
 OT: "quisiera hablar contigo" (Ch-C)

There is one example in X_Y that shows ʔuʔa in the auxiliary slot following the main verb. It is not clear whether the $liʔ$ functions as a plural marker or as a comitative preposition (§ 9.2.4).

- (10. 154) <tintulí ulán>
 tin(a)tu liʔ ʔula-n
 play music ? want-1sA
 'I want to play music'
 OT: "lo quiero tocar" (Y-C)

¹⁶⁰ The translation is based on the original field translation (see Appendix 6).

In X_Y *ɲula* is attested with the motion verb *ku* forming an auxiliary with optative function that precedes a lexical main verb. The pattern resembles that of the future periphrasis with *ku=ya-* (§ 12.4.1).

- (10. 155) <kula-n mukan nay>
 ku-(u)la-n muka-n nay
 go-OPT-1sA beat-SUBJ PN:2s
 'I want to go to beat you'
 OT: "ya te voy a pegar" (Y-C)

Maldonado de Matos employs the form *ɬan* that he defines as an optative particle (4009.) to mark the Latin grammatical category of present subjunctive. The form is not attested elsewhere in the corpus of data and it will be suggested here that *ɬan* is a grammaticalised form of the auxiliary verb *ɲuɬa*. Maldonado de Matos' own categorisation of the form as an 'optative marker', i.e. as a grammatical category that expresses the wish or hope of the speaker (cf. Metzler 1993:439; Bybee *et al.* 1994:179), makes it likely that the form derives from the verb **ɲuɬan* 'want' (see above). With respect to this it needs to be kept in mind that *ɬan* is also attested in the ALS and in X_{Ch} as a marker for negation (§ 13.4.1.2). It cannot be determined whether the two functionally distinct markers may have a common etymological origin. The conditions for the phonetic reduction of the initial vowel *u* are not understood.

Maldonado de Matos uses the optative particle *ɬan* with intransitive (10. 156) and transitive verbs (10. 157) that are always marked for person with cross-referencing prefixes. The optative marker does not co-occur with other TAM-adverbials. The form is translated either as a Spanish *presente subjuntivo* or with the phrase 'they say' ("dicen que").

- (10. 156) a. <an ta ɬan>
ʔan-ta(ʔ) ɬan
 1sS-come OPT
 'I wished (to) come = I came (subj.)'
 OT: "yo venga" (1440.)
- b. <a acù ɬan>
ʔa-ʔakuʔ ɬan
 3sS-go/walk OPT
 'he wished (to) walk = he walked (subj.)'
 OT: "aquel vaya" (1684.)
- (10. 157) a. <mu mere ɬan>
mu-mere ɬan
 3sA-break OPT
 'he wished (to) break (it) = he broke it (subj.)'
 OT: "aquel rompa" (616.)
- b. <mucpùla ɬan na penitencia>
muk-pula ɬan na penitencia
 1pA-make OPT DET Sp:penitence
 'they say, we wished (to) make penitence'
 OT: "dicen que hagamos penitencia" (2029.)

In most contexts in the ALS, *ɬan* follows a verbal predicate. The form can, however, also occur in position following a nominal predicate.

- (10. 158) <szâŁ ɬan mucpùla na oracion>
šat ɬan muk-pula na oracion
 good OPT 1pA-make DET Sp:prayer
 'they say, (it is) good (that) we wished (to) make (our) prayer'
 OT: "dicen que es bueno que hagamos oración" (2028.)

Although it follows the predicate in most contexts, *ɬan* occurs in initial position before the auxiliary verbs *ɲaya* and *pata-*. This may be taken as evidence that *ɬan* is not functionally identical with the active past marker *-ta* (§ 12.2.2), although both forms may have developed from the same verbal source. Maldonado de Matos also distinguished both forms orthographically in that the past marker is mostly spelled

as <Laan> with a double vowel, while the subjunctive <Lan> is always given with short vowel.

- (10. 159) a. <Lan ayaan>
 ʔan **ʔaya:-n**
 OPT be-1s_{DEP}
 '(I wish) I were'
 OT: "yo esté" (1923.)
- b. <evètue Lan pataan>
 k'iti **ʔan** **pata:-n**
 measure OPT *accomplish-1sA
 '(I wish) I were measured'
 OT: "yo sea medido" (1357.)

Indications that the optative marker and the past suffix *-ʔa* have grammaticalised from the same source are found in the semi-speaker data from X_G. Here the past suffix *-ʔa* is attested with the transitive verb *nɪʔma* 'to eat' and is either identified as an active participle (§ 11.1.2.3) or as an optative marker, i.e. 'want/wish to do' (see also § 12.2.2).

- (10. 160) a. hin ka-nɪʔma-ʔaʔ
 NEG 2sA-eat-PAST.ACT/OPT
 'you did not want to eat' (G-SH)
- b. numa-ʔa-n nin hina naʔ
 eat-PAST.ACT/OPT-1sA PN:1s PREP:with PN:3s
 'I ate (= *wanted to eat) with him' (G-JAP)

10.1.3.6 Auxiliary *pata*

Complex predicates with the auxiliary verb *pata* are attested in Maldonado-Xinka as well as in X_G and X_{Ch}. The functional contexts in the ALS and the comparative data, however, differ.

Maldonado de Matos uses auxiliary constructions with the auxiliary *pata(ʔ)* to fill the slot of passive voice in the Latin grammatical model. Accordingly, the colonial author labels the form as "*sum est fui*" with the meaning 'be'. The forms *pa:ta:* and *ʔapata(ʔ)* are given by Maldonado de Matos as defective verbs with the meaning 'be able to/can' ("poder"). There are no syntactic examples of the auxiliary in the ALS other than the so-called passive forms, but in the comparative data the auxiliary is attested in complex predicates with abilitative meaning. The verb *pata* can also function as the head of phrasal verbs.

Table 10. 20: Attested cases of *pata* in the ALS

	FORM		ORIGINAL GLOSS
auxiliary	<patā>	pata(ʔ)	" <i>sum est fui</i> , ser" (1877.)
auxiliary	<paátaa>	pa:ta:	"poder; defectivo" (2831.)
auxiliary	<apatā>	ʔapata-ʔ	"poder; defectivo" (2073.)
phrasal verb	<pata + ...>	pata + PREP	"pensar..." (2832.)

Although Maldonado de Matos formally and functionally distinguishes the "passive auxiliary" that means 'be' and the defective verbs indicating the concept 'be able, can', we seem to be dealing with the same verbal root. Throughout this study, **pata-* will therefore be glossed as 'to accomplish', which may cover both meanings – the abilitative 'be able, can' as well as the auxiliary 'be' that seems to be defined by Maldonado de Matos to mark a passive construction. It needs to be stressed that this glossing is a reconstruction and may not reflect the actual etymology of the form, which is not fully understood. The translation of the root as 'to accomplish' would allow for the fact that the verb is used by Maldonado de Matos only with transitive cross-referencing suffixes and takes other

transitive morphology. The auxiliary may therefore be a resultative transitive verb that expresses the concept of 'to have accomplished'.

In the ALS and the comparative data, the verb is frequently realised as *ʔapata*. The fact that this verb stem takes additional cross-referencing prefixes suggests that the initial vowel *ʔa* may be part of the root/stem. It is not clear whether the verb form may be in some way related to the circumstantial question word *ʔapa* 'how?' (see § 13.2.3.3). The verb might also be a diffused form. In Yukatek we find the verb *pa:htal* 'be able, succeed, realise, attain' ("poderse, acertarse, verificarse, realizarse, lograrse") (Barrera Vásquez 1991:619), which may be etymologically related to **pataan* 'tribute, service' that occurs in Western and Eastern Mayan languages; in Ch'orti' we find the verb *patnar* 'work' (Kaufman 2003:59-60). However, both suggestions are speculative.

As mentioned above, Maldonado de Matos indicates the auxiliary exclusively with cross-referencing suffixes. The orthographic realisation suggests that in the first person singular and plural the final vowel (V₂) is lengthened.

Table 10. 21: Auxiliary *pata-* with cross-referencing suffixes in the ALS

	FORM		GLOSS	
1s	<pataan>	pata:-n	[*accomplish-1sA]	'I accomplished'
2s	<patacà>	pata-kaʔ	[*accomplish-2sA]	'you accomplished'
3s	<pataí>	pata-y	[*accomplish-3sA]	'he/she accomplished'
1p	<pataac>	pata:-k	[*accomplish-1pA]	'we accomplished'
2p	<pataca ay>	pata-ka ʔay	[*accomplish-2pA + 2PL]	'you (pl.) accomplished'
3p	<pataí Lic>	pata-y ʔik	[*accomplish-3pA + 3PL]	'they accomplished'

Suffix-marking is confirmed in the comparative material. It needs to be pointed out that Campbell and Kaufman indicate in their field notes glottalisation of the alveodental stop upon suffixation (see § 4.4.6). The ejective does not reflect in the secondary corpus data and is not attested in the semi-speaker data from X_G.

Table 10. 22: Comparative chart of auxiliary *pata* with cross-referencing suffixes

	X _M	X _G	X _{Ch}		X _Y
			C&K	C&K	
1s	pata-n	ʔapata-n ʔapata-ʔ	pat'a-n	pat'an	n'-pataʔ
2s	pata-ka	pata-ka	pat'a-ka	pata-ka pat'ak pat'ay	pataʔ
3s	pata-y	ʔapata-ʔ	pat'-ey	pata ʔapata pat'ay	
1p	pata-k		pat'a-k	pat'aʔki	
2p	pata-ka ʔay				
3p	pata-y ʔik		pat'-ey	pat'ay	

The comparative data also have examples of *pata* or *ʔapata* occurring as full verbs. In these cases the transitive root takes cross-referencing prefixes to mark person.

Table 10. 23: Comparative chart of auxiliary *pata* with cross-referencing prefixes

	X _G	X _{Ch}	X _Y
1s	ʔan-pata-ʔ	ʔan-pata	n'-pataʔ
2s	-	-	-
3s	ʔapata-ʔ	ʔapata mu-ʔapata	pataʔ

In the function of a full verb, *pata* can take cross-referencing prefixes as well as suffixes to mark the subject. In examples (10. 161a, c) the verb seems to be used intransitively.

- (10. 161) a. na nin hin ʔan-pata-ʔ
 DET PN:1s NEG 1sS/A-*accomplish-STAT
 'I did not accomplish = I am unable' (G-SH)
- b. <indi pataca na'c>
 ʔinti pata-ka nak
 INT:what? *accomplish-2sA PN:2s
 'what have you accomplished (to get)? = what do you have?'
 OT: "y que tienes" (Ch-JC)
- c. <n'patá patin>
 n-pata-ʔ paʔ ti:-n
 1sS/A-*accomplish-STAT PFV IO-1sP
 'I already accomplished (to) me = I already recovered'
 OT: "yo sané" (Y-C)

When *pata* functions as the head of phrasal verbs (see § 10.1.4.2), the subject is only marked with cross-referencing suffixes.

- (10. 162) a. <pataszáma> b. <pata an mà szàma>
pata **šama** **pata:-n** **maʔ** **šama**
 *accomplish PREP:inside *accomplish-1sA COND PREP:inside
 'accomplished inside = think, remember' 'I should have accomplished inside
 = remembered'
 OT: "pensar, acordarse" (2832.) OT: "yo me haya acordado" (1611.)

As mentioned before, Maldonado de Matos employs *pata* primarily as an auxiliary to form passive constructions. In this function *pata* carries the inflectional markers and can precede or follow the unmarked main verb. TAM-adverbials always occur in the position between the auxiliary and the main verb.

As the passive connotation of complex predicates with *pata* cannot be reconfirmed in the comparative data, it is possible that we are dealing with an artificial construction, in the sense that Maldonado de Matos seems to reinterpret an existing abilitative auxiliary construction as a passive.

In the categories *presente* and *perfecto* of the Latin model of grammar Maldonado de Matos marks the auxiliary *pata* differently. In the tense categories of *presente* including present tense, *imperfecto*, as well as imperative, the auxiliary *pata-* takes cross-referencing suffixes and follows behind the lexical main verb. In Latin present tense forms, the lexical main verb is unmarked. It is followed by the auxiliary that is marked for person by means of intransitive dependent-marking suffixes.

- (10. 163) a. <mère patacà>
mere **pata-kaʔ**
 break *accomplish-2sA
 'you have accomplished to break = you are broken'
 OT: "tú eres roto" (656.)
- b. <oròmo pataan>
ʔoromo **pata:-n**
 pick up *accomplish-1sA
 'I have accomplished to pick up = I am picked up'
 OT: "yo soy recogido" (989.)

- c. <nariŁa patai Lic nana turiLi>
nariŁa **pata-y** **Łik nana** **turi-Łi**
 teach *accomplish-3sA PL FOC child-PL
 'the children accomplished teaching = are taught'
 OT: "los muchachos son enseñados" (1979.)
- d. <ima nàŁ patai nana misza>
Łima **naŁ** **pata-y** **nana** **miŁa**
 say IMPFV *accomplish-3sA FOC Sp:mass
 'he accomplished to speak the mass = the mass was spoken'
 OT: "la misa era dicha" (1984.)

When referring to the Latin category of *imperfecto*, the preceding main verb seems to be marked with -ʔ. The pattern can be extended by TAM-adverbials (10. 164c). Structurally, the finite auxiliary verb would follow a stative participle in these contexts. This pattern of tense/aspect or stative participle on the main verb and person-marking on the auxiliary is also attested with other periphrastic constructions in Xinka (§ 12.3.2).

- (10. 164) a. <mèrè patacà>
me:re-ʔ **pata-kaʔ**
 break-STAT *accomplish-2sA
 'you were broken'
 OT: "tú fuistes, has sido roto" (669.)
- b. <pulà patai>
pula-ʔ **pata-y**
 make-STAT *accomplish-3sA
 'he was made'
 OT: "aquel fue, ha sido hecho" (497.)
- c. <guiszupe ayu patai nana Juan...>
wiŁu-ʔ **peʔ** **Łayu** **pata-y** **nana** **Juan**
 beat-STAT FUT AUX *accomplish-3sA FOC Juan
 'Juan will have been beaten'
 OT: "Juan habrá sido azotado..." (2025.)

In the tense categories of *perfecto*, including perfect, pluperfect and future perfect, Maldonado de Matos marks the auxiliary *pata* with the anterior/perfect-suffix *-wa* (§ 12.2.3). In the third person he uses the possessor-marking suffix *-h* (10. 165d-e). This might suggest that the form is nominal; although in the second person singular the transitive dependent-marking suffix *-kan* is attested (10. 165b-c), which would not support this analysis. It needs to be taken into account that the apparent irregularities in the marking pattern might have to be attributed to the fact that Maldonado de Matos may have defined these AVCs rather artificially to fit the slot of a passive construction.

- (10. 165) a. <mèrè pataguàn>
mere-ʔ **pata-wa-n**
 break-STAT *accomplish-ANT-1sA
 'I was broken'
 OT: "yo fui, he sido roto" (668.)
- b. <sàmù pataguacà>
samu-ʔ **pata-wa-kaʔ**
 catch-STAT *accomplish-ANT-2sA
 'you were caught'
 OT: "tú fuistes, has sido cogido" (1166.)
- c. <pulà pataguacàn>
pula-ʔ **pata-wa-kan**
 make-STAT *accomplish-ANT-2sA_{DEP}
 'you were made'
 OT: "tú fuistes, has sido hecho" (495.)
- d. <pirii pataguaag>; <pirii pataguàg>
piri-ʔ **pata-wa-h**
 see-STAT *accomplish-ANT-3sP
 'he was seen'
 OT: "haber sido visto" (896.);
 "aquel ha sido visto" (839.)
- e. <nana macu pulà pataguàg>
nana **maku** **pula-ʔ** **pata-wa-h**
 FOC house make-STAT *accomplish-ANT-3sP
 'the house was made'
 OT: "la casa fue hecha" (4775.)

Three-syllabic lexical main verbs are generally not marked with -ʔ.

- (10. 166) <oromo pataguaac>
ʔoromo pata-wa-k
 pick up *accomplish-ANT-1pA
 'we were picked up'
 OT: "nosotros fuimos, hemos sido recogidos" (1004.)

There are a few cases where the auxiliary form *pata-waʔ* occurs in nonfinite form without person-marking suffixes. In these cases the translation context signals either an infinitive or a third person subject.

- (10. 167) a. <pulà Lic pataguà>
pula-ʔ tik pata-waʔ
 make-STAT 3PL *accomplish-ANT
 'they were made'
 OT: "aquellos fueron, han sido hechos" (502.)
- b. <samù pataguà>
samu-ʔ pata-waʔ
 catch-STAT *accomplish-ANT
 'to have been caught'
 OT: "haber sido cogido" (1224.)

All cases where the auxiliary precedes the main verb are given by Maldonado de Matos with infinitive or impersonal translation contexts. The auxiliary is here always marked with -ʔ, -n or -ta.

- (10. 168) a. <patà mere>
pata-ʔ mere
 *accomplish-STAT break
 'be broken'
 OT: "a ser roto" (732.)
- b. <patà nàL sàmu>
pata-ʔ naʔt samu
 *accomplish-STAT IMPFV catch
 'would have been caught'
 OT: "que fuera, hubiera de haber sido cogido" (1226.)
- c. <patàn piri>
pata-n piri(-ʔ)
 *accomplish-SUBJ see(-STAT)
 'to be seen'
 OT: "de ser visto" (899.)
- d. <aLi pataLa orómo>
ʔati pata-ta ʔoromo
 PREP.CAUS *accomplish-PAST.ACT pick up
 'because of being picked up'
 OT: "por ser recogido" (1066.)

Maldonado de Matos also indicates the form *ʔapataʔ* that precedes unmarked verb forms and is translated by him into Spanish as an impersonal passive. In these contexts, the initial vowel *ʔa-* seems to be identified as the intransitive impersonal cross-referencing prefix *ʔa-* that is regularly employed by Maldonado de Matos to mark infinitives (see § 10.1.2.2). However, it needs to be pointed out that the cross-referencing prefix and the stative-resultative marker -ʔ do usually not co-occur on the same root (see § 6.1.2.2, § 12.2.1.2), which would suggest that *ʔapata-* is the stem.

- (10. 169) a. <a patà oròmo>
ʔa(-)pata-ʔ **ʔoromo**
 (3sS-)*accomplish-STAT pick up
 'to be picked up'
 OT: "a ser recogido" (1065.)
- b. <neLà á patà euetue>
neʔa ʔa(-)pata-ʔ **k'iti**
 BEN (3sS-)*accomplish-STAT measure
 'for being measured'
 OT: "para ser medido" (1392.)

In the Zeeje-ms. the auxiliary *ʔapata* precedes light verb constructions with *ʔuka* (§ 10.1.4.1). In all cases person is marked on the light verb *ʔuka* and thus on the head of the verbal compound that functions as the main verb of the auxiliary construction. In the third person, *ʔuka* is marked with -y (10. 170b); in subordinate contexts it takes the nominal third person suffix -h (c).

- (10. 170) a. <jen apata hucacan dudar>
 hen ʔapata ʔuka-kan dudar
 NEG *accomplish do-2sA_{DEP} Sp:doubt
 'you (pl.) do not accomplish to doubt = you cannot doubt'
 OT: "no podréis dudar" (Ch-Z)
- b. <apata hucay producir>
 ʔapata ʔuka-y producir
 *accomplish do-3sA Sp:produce
 'they accomplish to produce'
 OT: "puedan producir" (Ch-Z)
- c. <apata hucag edificar>
 ʔapata ʔuka-h edificar
 *accomplish do-3sP Sp:build
 'accomplish his building = be able to build'
 OT: "sea posible edificar" (Ch-Z)

In the Zeeje-ms., both forms *pata* and *ʔapata* are attested in identical contexts, preceding person-marked main verbs.

- (10. 171) a. <pata turay liqui>
 pata tura-y liki
 *accomplish bring-3pA 3PL
 'accomplish to bring them'
 OT: "de poder atraerlos" (Ch-Z)
- b. <jen apata patay sama>
 hen ʔapata pata-y sama
 NEG *accomplish *accomplish-3sA PREP
 'he does not accomplish to remember'
 OT: "no puede recordar" (Ch-Z)

Furthermore, the Zeeje-ms. gives *ʔapata* with cross-referencing prefixes. This strongly suggests that the initial vowel *ʔa-* is part of the stem and does not mark the impersonal or third person singular.

- (10. 172) <mug apata pú llacay completar>
 muh-ʔapata pəʔ yaka-y completar
 3sA-*accomplish FUT do-3sA So:complete
 'he will accomplish to complete (it)'
 OT: "podrá completar" (Ch-Z)

In X_G the auxiliary *pata* (or *ʔapata*) generally expresses abilitative action, i.e. 'can, be able to'. None of the contexts in which it occurs signals passive voice, as suggested in the ALS. In all cases the auxiliary precedes the lexical main verb and takes cross-referencing suffixes.

(10.174) a.	<patan iguán>, <patan ihuan> pata-n ?i-wa-n *accomplish-1sA INTENS-?-1sP 'I accomplished myself = I alone' OT: "yo solo" (Ch-C), (Ch-F);	b.	<patay kihuary> pata-y ki-wa-y *accomplish-2sA INTENS-?-2sP 'you accomplished yourself = you alone' OT: "tú vosotros solo(s)" (Ch-C), (Ch-F) "estov solo" (Ch-C)

In X_Y the full verb *pata* occurs with the non-spatial preposition *ti:(ʔ)-* (§ 9.2.2), expressing the concept 'accomplished me/you/him', which is used here to denote the meaning 'to recover (from illness)'. The primary verb and the prepositional form *ti:(ʔ)-* show agreement in person-marking.

(10. 176) a. <n'patá patin>
n-pata-? pa? ti:-n
1sS/A-**accomplish*-STAT PFV IO-1sP
'I already accomplished (to) me = I already recovered'
OT: "yo sané" (Y-C)

b. <patá tiy injarana>
pata-? ti:? ?in harana
**accomplish*-STAT IO+3s INT ill
'who is sick accomplished him(self) = the sick one recovered'
OT: "sane el enfermo" (Y-C)

The verb *šata* is given in the ALS with two different translation contexts. In the vocabulary Maldonado de Matos translates it as 'to be doing or repeating the same thing', which suggests that in auxiliary function the form marks continuous aspect. It is also simply given with the semantic context 'be'. It is not entirely clear whether both entries refer to the same form, or whether the accent on <szàta> "estar" might indicate a long vowel or the presence of a glottal stop, i.e. *ša:ta or *šaʔa.

Table 10. 24: Attested cases of *šata* in the ALS

FORM	ORIGINAL GLOSS	
<szàta>	ša-ta	"estar" (1880.), (1885.)
<szata>	ša-ta	"estar haciendo, repitiendo una misma cosa" (3135.)

Morphologically, *šata* could be a combination of the prepositional root *ša* and the directional verb *ta* 'come, arrive elsewhere'; though the semantics do not reflect that morphology well. Maldonado de Matos gives *šata* with transitive inflectional properties, i.e. imperative with zero-marking and past/perfective cross-referencing suffixes. This may indicate that *šata* occurs in AVCs derived from verb-plus-subordinate clause constructions where it follows the main verb and takes subordinate person-marking suffixes. However, no such form is attested in the ALS.

- (10. 177) a. <szata> **šata-Ø**
to be doing/repeating-IMP.VT
'do (this)!'
OT:"estar haciendo, repitiendo (imper.)" (3139.)
- c. <szataa> **šata:-n**
to be doing/repeating-1sA
'I was doing/repeating (it)'
OT:"estar haciendo (pret.)" (3136.)
- d. <szataLán> **šata-ŋa-n**
to be doing/repeating-PAST.ACT-1sA
'I was doing/repeating (it)'
OT:"estar haciendo (pret.)" (3137.)
- e. <szataguan> **šata-wa-n**
to be doing/repeating-ANT-1sA
'I was doing/repeating (it)'
OT:"estar haciendo (pret.)" (3138.)

The only syntactic context where *šata* occurs in the ALS suggests that it functions as an auxiliary verb with the meaning '*return to do', which takes prefix-marking and precedes the lexical main verb.

- (10. 178) < á szin ca szàta pùla>
ʔašin ka-šata pula
NEG 2sA-return make
'you do not return to make it'
OT:"no lo vuelvas a decir" (1887.)

In X_G and X_{Ch} , we find a few contexts where an auxiliary verb form *ta* seems to mark continuous or future aspect. Hypothetically, *ta* may be related to the verb form *šata* attested in the ALS.

- (10. 179) a. Ø-tay ti:ki
3sS-? sleep
'he is sleeping' (G-JS)
- b. ʔih ʔuka ta šunik
LOC COP ? pot
'there is the pot' (G-JAP)
- c. <tamuy ululh>, <tamuy urluc>
ta muy-ʔuŋu-h
FUT? 2sA-fall-?
'you will fall'
OT:"te vas a caer" (Ch-JC)

10.1.3.8 Other auxiliary constructions

A few types of AVCs indicating future tense and optative mood are only attested in the comparative data. Whether these patterns existed in Maldonado-Xinka can neither be confirmed nor excluded. Structurally, in all these AVCs the auxiliary verb precedes the lexical verb.

10.1.3.8.1 Auxiliary *ku*

In X_G and X_{Ch} , future is expressed with a periphrastic construction including the grammaticalised auxiliary verb *ku-ya* that consists of the intransitive verb *ku* or *ʔaku* 'go' and the intransitive progressive marker *-ya* (see § 10.1.3.1, § 12.4.1). In X_Y the motion verb *ku* can function alone as a future auxiliary. The marker *-la* in the following example can tentatively be identified as the grammaticalised form of the optative auxiliary (§ 10.1.3.5).

- (10. 180) <kula-n mukan nay>
 ku-la-n muka-n nay
 go-OPT?-1sA beat-1sA PN:2s
 'I wish to go to beat you'
 OT: "ya te voy a pegar" (Y-C)

The auxiliary *ku* occurs without person-marking in the semi-speaker data from X_G (mostly JS). Here, it likewise indicates an immediate future event.

- (10. 181) a. ku šuka-n nin b. ku šawaɣ'a-n ču ʔayma
 FUT eat-1sA_{DEP} PN:1s FUT sow-1sA_{DEP} DIM corn
 'I will eat' (G-JS) 'I will sow (little) corn' (G-JAP)

10.1.3.8.2 Auxiliary *ko*

Complex predicates with the verbal root *ko* are only attested in Schumann's data for X_G (1967) and in Calderón's lexical compilations from X_{Ch} and X_Y . In X_Y the intransitive verb *ko* is attested as a primary verb with the meaning 'to go'.

- (10. 182) <ncó lina nay>
 n-ko ʔina nay
 1sS-go PREP:with PN:2s
 'I go with you'
 OT: "voy con ustedes" (Y-C)

In complex predicates the verb *ko* functions as an auxiliary indicating immediate future events (Schumann 1967:48). It only takes cross-referencing prefixes and always precedes the main verb that can take both, cross-referencing prefixes and suffixes.

- (10. 183) a. <anko anwiriki> b. <koʔik wirikiʔik>
 ʔan-ko ʔan-wiriki Ø-ko ʔik Ø-wiriki ʔik
 1sS-FUT 1sS-talk 3sS-FUT 3PL 3sS-talk 3PL
 'I will talk' 'they will talk'
 OT: "platicaré" (G-S) OT: "platicarán" (G-S)
- c. <anko yiwan>
 ʔan-ko yiwa-n
 1sS-FUT enter-1sS_{DEP}
 'I will enter'
 OT: "entraré" (G-S)

Most examples given by Schumann exhibit coreferential inflection on auxiliary and main verb, but he also includes cases where person-marking is only indicated on the auxiliary. From the given contexts, no functional explanation can be concluded from the different marking patterns.

- (10. 184) <kakó yiwá>
 ka-ko yiwa-?
 2sS-FUT descend-STAT
 'you will descend = you will enter'
 OT: "entrarás" (G-S)

In the semi-speaker data from X_G and in X_Y , *ko* always carries the inflectional information while the following main verb is unmarked.

- (10. 185) a. ka-ko ša lawaro natiya b. <n'co pata>
 2sS-go/FUT PREP dance LOC n-ko pata
 'you go to dance there' (G-SH) 1sS-go/FUT bath
 'I go to bath = I will bath'
 OT: "voy a bañarme" (Y-C)

In X_G *ko* is also attested in the function of an existential with future reference preceding nominal predicates. In this function it resembles the existential verb *k'olik* attested in K'iche', e.g. KCH *k'o: wa?* [EXIST + tortilla] 'there are tortillas'.

- (10. 186) <ko mápu>
 ko mapu
 COP tortilla
 'there will be tortilla'
 OT: "habrá tortilla" (G-S)

10.1.3.8.3 Auxiliary *te:ro* (optative)

In X_G and X_{Ch} the form *te:ro* is used as an auxiliary to express optative. The auxiliary is not attested in the ALS and its etymological origin is not entirely clear. The form occurs mostly in the first person singular, which may suggest that it has been borrowed from Spanish "quiero" = 'I want'. However, there are a few contexts in X_G and X_{Ch} that confirm *te:ro* to occur with other inflectional markers.

- (10. 187) a. <terolá> b. <acuni atero hucay compensar>
 tero-4a? 7akuni 7a-tero 7uka-y compensar
 want-PART.ACT/AGT ADV:like 3sA-want do-3sA Sp:compensate
 'wanting = the wish' 'like (this) he wants to compensate'
 OT: "deseo" (G-S) OT: "así quiere compensar" (Ch-Z)

Example (10. 187b) shows *te:ro* preceding a light verb construction. The auxiliary always precedes the lexical main verb that is mostly unmarked, but can be followed by TAM-adverbials (10. 188b).

- (10. 188) a. te:ro ti:ki na nin b. te:ro nu7ma pa7a?
 want sleep DET PN:1s want eat PFV
 'I want to sleep' (G-PE) 'I already want to eat' (G-JAP)
 c. <tero núma ní>
 te:ro nu7ma ní?
 want eat PN:1s
 'I want to eat = I am hungry'
 OT: "hambre" (Ch-P)

The lexical verb can also be marked with cliticised auxiliaries indicating progressive aspect. In this context, both, intransitive (10. 189) and transitive progressive constructions (10. 190) are attested. Here, the person marked on the progressive auxiliary determines the subject of the AVCs, confirming that the form *te:ro* itself does not indicate the first person singular.

- (10.189) a. te:ro ʔišaka=ya-n
want drink=PROG.VI-1sS_{DEP}
'I want to be drinking' (G-RHG)
- b. te:ro ʔawaro hiʔ
want dance PROG+3sS_{DEP}
'she wants to be dancing' (G-SH)
- c. <tero xacayá>
te:ro šaka=ya-ʔ
want drink=PROG.VI-STAT?
'I want to be drinking = I am thirsty'
OT: "tengo sed" (Ch-F)
- d. <tero nemma ya ca>
te:ro niʔma=ya-ka
want eat=PROG.VI-2sS_{DEP}
'you want to be eating = you are hungry'
OT: "¿tienes hambre?" (Ch-F)
- (10.190) a. na nin te:ro šuka=ka=ka-n
DET PN:1s want eat=do=PROG.VT-1sA_{DEP}
'I want to be eating = I am hungry' (G-SH)
- b. te:ro piri=ke-y
want see=PROG.VT-3sA_{DEP}
'they want to be seeing' (G-SH)

The root *te:ro* or *te:re* is attested in X_{Ch} and X_Y preceding nouns referring to wheather phenomena.

- (10.191) a. <tere pulain guare>
te:re pula=ʔin ware
want make=SUBJ rain
'it wants to make rain'
OT: "quiere hacer temporal" (Ch-F)
- b. <tero tau>
te:ro taw(u)
want wind/cold
'[it wants] wind = cold'
OT: "frio" (Ch-C), (Ch-F)
- c. <teroj párrí>; <teron parri>
te:ro-h/-n pari
want-ʔ heat
'[it wants] heat = sweat'
OT: "sudor" (Ch-C); (Y-C)

10.1.4 Verbal compounds

Another type of complex predication in Xinka are verbal compounds. The verbal compounds that occur in Maldonado-Xinka are light verb constructions which are used to integrate Spanish loan verbs (§ 10.1.4.1), phrasal verbs (§ 10.1.4.2) and verbal predicates with noun incorporation (§10.1.4.3). All these types of verbal compounds share the same structural pattern, in that the marked head verb occurs in initial position. In light verb constructions the head verb is semantically bleached and modifies the lexical main verb, while phrasal verbs and verbs with noun incorporation are structurally analogical to verb-noun compounds where the preposition/noun functions as a syntactic complement to the lexically meaningful verb.

10.1.4.1 Light verbs

The term light verb construction (LVC) is usually applied to $V + NP$ predicates (e.g. English *have a rest*) that are verb-complement constructions in which the main predicative function is taken by the noun phrase, while the semantically bleached 'light verb' only modifies (and verbalises) the nominal predication (cf. Butt 2003; citing Jespersen 1965, VI:117). Although structurally similar to auxiliary verbs (cf. Anderson 2006:16-17), light verbs are a separate cross-linguistically defined verbal class that can combine with noun phrases as well as with verbs to form monoclausal

complex predications. Light verbs are formally identical with main verbs but do not predicate fully. However, they derive a separate or new meaning and can therefore be identified as a realisation strategy of verbal compounding.

In Xinka, light verbs are mainly used for embedding Spanish loan verbs into the predicate structure. The so-called 'light verb strategy' (see Wichmann & Wohlgemuth 2008) is a common syntactic feature in many languages for verbal borrowing and is also attested in other Mesoamerican languages, such as Pipil of El Salvador or Chinantec (cf. Suárez 1983:126; Campbell 1985:143).

The transitive verb *ʎuka* 'put, do' is used as a light verb with the meaning 'do/make'. Functioning as the head of the verb compound, it hosts all inflectional morphology and always precedes the unmarked dependent Spanish verb that expresses the lexical meaning of the predicate. TAM-markers follow the light verb *ʎuka* and occur between the head and the Spanish verb. Morphosyntactically, *ʎuka* functions like a transitive verb with a nominal complement. In some contexts the Spanish infinitive verb can be replaced by a Spanish noun without changing the meaning of the predicate, e.g. 'do/make confession' or 'do/make confess' (cf. 2038. and 2039.).

Diachronically, light verbs develop from full verbs by semantic bleaching (Hopper & Traugott 1993: 108). In Xinka, this universal pathway is illustrated by the different functions of the verb *ʎuka*. The light verb *ʎuka* takes the same inflectional morphology as the full verb and appears before the main verb, while not having much lexical meaning itself. Morphosyntactically, it differs from the auxiliary verb *ʎuka* (§ 10.1.3.2), which always follows its referent verb and marks the subject with cross-referencing suffixes.

In the ALS, the light verb *ʎuka* marks the subject by means of cross-referencing prefixes and suffixes. Just like on full transitive verbs, cross-referencing prefixes indicate nonpast/imperfective (10. 192), while suffixes indicate past/perfective (10. 193) (see also § 10.1.1.1).

- (10. 192) a. <an uea naLqui absolver naca>
ʎan-ʎuka na(ʎ)ʈ ki absolver naka
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I would absolve you'
 OT: "te absolviera yo" (2037.)
- b. <ca Ûea condenar naca anima>
ka-ʎuka condenar naka anima
 2sA-do Sp:condemn PN:2s Sp:soul
 'you condemn your soul'
 OT: "te has de condenar" (1955.)
- c. <mu uea pè castigar naca Dios ay>
mu-ʎuka peʈ castigar naka dios ʎay
 3sA-do FUT Sp:punish PN:2p Sp:god 2PL
 'god will punish you (pl.)'
 OT: "os ha de castigar dios" (2040.)
- (10. 193) <ueaca mà restituir szan gui szac szacà>
ʎuka-ka maʈ restituir šan wi šakša-kaʈ
 do-2sA COND Sp:restore INT DIR? steal-2sA
 '... you would have restored what you have stolen'
 OT: "hayáis restituido lo que hurtasteis" (2035.)

Loan verb embedding by means of the light verb *ʔuka* is also attested in X_G and X_{Ch} . In both Xinka varieties, the light verb is confirmed to take cross-referencing prefixes in the nonpast/imperfective (10. 194) and suffixes in the past/perfective (10. 195).

- (10. 194) a. ka-ʔuka labar ka-ropa
2sA-do Sp:wash 2sP-Sp:clothing
'you wash your clothing/laundry' (G-SH)
- b. mu-ʔuka doler mu-ʔestomago
3sA-do Sp:hurt 3sP-Sp:stomach
'his stomach hurts' (G-SH)
- c. <que mug huca contribuir>
qué muh-ʔuka *contribuir*
Sp:that 3sS-do Sp:contribute
'so that he (may) contribute'
OT:"que contribuya" (Ch-Z)
- (10. 195) a. na nin ʔuka-n ʔapagar ʔuray
DET PN:1s do-1sA Sp:extinguish fire
'I extinguished the fire' (G-RHG)
- b. ʔuka-kaʔ naka kosečar wayak
do-2sA PN:2s Sp:to harvest milpa/field
'you harvested the milpa' (G-SH)
- c. <hucay conseguir nanu gloria>
ʔuka-y *conseguir* nanu *gloria*
do-3sA Sp:earn DET Sp:glory
'he earned the glory'
OT:"ha conseguido la gloria" (Ch-Z)

In X_G and X_{Ch} the light verb *ʔuka* is attested with impersonal cross-referencing (see § 6.1; § 10.1.2.2) that may occur in combination with a first or second person pronouns or possessive markers.

- (10. 196) a. naʔu-n hin ʔa-ʔuka mandar
son-1sP NEG 3sS-do Sp:order
'my son cannot be sent' (G-SH)
- b. pi:=kan ʔuka-y desgranar ʔan-ʔayma
Num:'2'=EXO do-3sS Sp:degrain 1sP-corn
'two (days) ago one/they degraigned my corn' (G-SH)
- c. <hauca prometer>
ʔa-ʔuka *prometer*
3sS-do Sp:promise
'one promises'
OT:"se promete" (Ch-Z)

There are several examples in X_G and X_{Ch} of possible double marking of the third person. In all cases the light verb *ʔuka* takes cross-referencing prefixes as well as the suffix -y, the exact function of which is not understood (see § 10.1.1.7).

- (10. 197) a. na naka m-uka-y na mentir man
DET PN:2s 3sA-do-ʔ DET Sp:lie DEM
'you do/did (it) this lie = you lied' (G-JS)
- b. <ha ucai labrar>
ʔa-ʔuka-y *labrar*
3sS-do-ʔ Sp:work
'one does working = one works'
OT:"se labra" (Ch-Z)

There are also contexts in X_G and X_{Ch} where *ʔuka* is unmarked. Most of these cases occur in syntactic positions where the parallel Spanish translation uses an infinitive or participle.

- (10. 198) a. ʔaku:-ʔa ʔayaʔa ʔuka bender
go-PAST.ACT woman do Sp:sell
'the woman went (to) sell (it)' (G-SH)
- b. neʔa ʔuka barer ʔayaʔa
BEN do Sp:sweep woman
'for the woman to sweep' (G-SH)
- c. <huca pronunciar>
ʔuka pronunciar
do Sp:pronounce
'it is pronounced'
OT:"es pronunciado" (Ch-Z)

As a light verb *ʔuka* hosts the same inflectional markers as the full verb (§ 10.1.3.2). Besides person-marking it can take TAM-inflection. This is not attested in the ALS, but in the Zeeje-ms., where we find the light verb *ʔuka* marked with the suffix *-wa* that may be indicating a passive in this context (§ 12.2.3).

- (10. 199) a. <ha-ucagua abrumar>
ʔa-ʔuka-wa abrumar
3sS-do-ANT/PASS Sp:charged
'he was charged'
OT:"se le abrumaba" (Ch-Z)
- b. <ka hucaguay entregar quiqui>
ka ʔuka-wa-y entregar kiki
INT:where? do-ANT-3sA_{DEP} Sp:submit INTENS/REFL+3p
'where they delivered themselves = surrendered'
OT:"se entregaron" (Ch-Z)

Examples from the Zeeje-manuscript seem to suggest that other constituents can be inserted between light verb and lexical verb. In the given example *ʔuka* is followed by a pronoun in O function.

- (10. 200) <que mug huca naca repetir>
qué muh-ʔuka naka_O repetir
Sp:that 3s/pA-do PN:2s/p Sp:repeat
'that they repeat to you (pl.)'
OT:"que os repitan" (Ch-Z)

When occurring in subordinate context, the light verb *ʔuka* takes transitive subordinate/dependent cross-referencing suffixes to mark the subject. The pattern is confirmed in the data from X_G and X_{Ch} .

- (10. 201) <ca tà pè aʔa uəa can confesar>
ka-taʔ peʔ ʔaʔa ʔuka-kan confesar
2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
'you will come tomorrow to confess'
OT:"te vendrás a confesar mañana" (1990.)
- (10. 202) a. ʔuka-kan madurar
do-2sA_{DEP} Sp:ripen
'(in order to) ripen' (G-SH)

- b. <que si junuca pá hay hucacan aprovechar>
que si hunu-ka pa? ʔay ʔuka-kan aprovechar
 Sp:that Sp:if know-2pA PFV 2PL do-2pA_{DEP} Sp:take advantage
 'that if you had known to take advantage [of them] ...'
 OT: "que si sabéis aprovecharlos" (Ch-Z)

In the Zeeje-ms., there are examples of subordinate light verbs in the third person preceding a Spanish participle instead of an infinitive verb form.

- (10. 203) a. <allac balqui hucay despreciado>
ʔayak bal ki ʔuka-y despreciado
 like PFV ? do-3sA Sp:despise
 'it appeared already to be despised'
 OT: "ya parecía haber despreciado" (Ch-Z)
- b. <que apata hucay sufrido>
que ʔapata ʔuka-y sufrido
 Sp:that *accomplish do-3sA Sp:suffered
 'that it/they could have suffered'
 OT: "que puedan haber sufrido" (Ch-Z)

LVCs can occur as lexical verbs in AVCs, which provides further evidence for the functional distinction of light verbs and auxiliaries in Xinka. All given examples of complex predicates involving LVCs are found in the comparative data. The complex predicates attested in this context are AVCs expressing future tense, abilitative mood and progressive aspect.

In future periphrasis, either the light verb (10. 204a) or the future auxiliary (b) hosts the inflectional information. Unmarked LVCs seem to indicate an impersonal form (c).

- (10. 204) a. kuy mu-ʔuka gwardar nin
 AUX.FUT 3sA-do Sp:guard PN:1s
 'he is going to guard me' (G-SH)
- b. ku=y-an ʔuka tirar ku tuma
 go=PROG-1sS_{DEP} do Sp:shoot MOD deer
 'I am going to shoot a deer' (G-RHG)
- c. kuy ʔuka desgranar ʔan-ʔayma
 AUX.FUT do Sp:degrain 1sP-corn
 '(one/he) is going to degrain my corn' (G-SH)

Like the future auxiliary, the abilitative auxiliary can precede the LVC in X_G and X_{Ch}. In this context the light verb can take nominal cross-referencing (10. 205b).

- (10. 205) a. hin ʔapata-ʔ ʔuka benir
 NEG *accomplish-STAT do Sp:come
 'he could not come' (G-SH)
- b. <apata hucag edificar>
ʔapata ʔuka-h edificar
 *accomplish do-3sP Sp:build
 'its building was accomplished = it could be built'
 OT: "sea posible edificar" (Ch-Z)

Progressive aspect is marked on intransitive LVCs with the auxiliaries *ʔaya* (10. 206) and transitive LVCs with the auxiliary *ʔuka* (10. 207). Again, all examples of these constructions are found in X_G and X_{Ch}.

- (10. 206) a. ʔuka teher =ya-n
 do Sp:to weave PROG-1sS_{DEP}
 'I am weaving' (G-RHG)

- b. <jen mug huca faltar hig>
 hen muh-7uka *faltar* hi?
 NEG 3sA-do Sp:be lacking PROG+3sS_{DEP}
 'he is not lacking'
 OT: "no ha defecharle" (Ch-Z)
- (10. 207) a. 7uka=ka-y 7enkontrar
 do=PROG-3sA Sp:meet
 'he was meeting [me]' (G-SH)
- b. <huca-cay abusar ti santidad>
 7uka=ka-y *abusar* ti:7 *santidad*
 do=PROG-3sA SP:abuse IO Sp:sacredness
 'he is abusing of the sacredness'
 OT: "abusando de la santidad" (Ch-Z)

LVCs can be followed by a subordinate complement clause; in the following example from X_G the complement is marked as a stative participle.

- (10. 208) 7uka-n mandar ɕ'iri-7 mutu?
 do-1sA Sp:send cut-STAT hair
 'I ordered to have the hair cut' (G-SH)

Furthermore, LVCs can function as adverbial clauses and complements of other complex predicates.

- (10. 209) a. 7akuki hi? 7uka bagar hi?
 walk PROG+3sS_{DEP} do Sp:be lazy PROG+3sS_{DEP}
 'he/she walks being lazy' (G-SH)
- b. <que huca obligacion hucay nucay jama nelag>
qué 7uka *obligación* 7uka-y nuka-y hama nela-k
 Sp:that do Sp:obligation do-3sA give-3sA PREP BEN-1p
 'that it has to give/produce among us'
 OT: "que debe producir entre nosotros" (Ch-Z)

The last example includes an LVC with a Xinka verb as lexical main verb. It is mostly in the semi-speaker data from X_G, but also in other secondary sources, where we find these Xinka LVCs that occur in the same structural contexts as LVCs with Spanish loans. It cannot be determined whether this pattern existed in Maldonado-Xinka or earlier, providing the syntactic strategy for the incorporation of Spanish verbal loans, or whether its application to Xinka verbs is recent and contact-induced.

In most cases a finite form of *7uka* that is marked with cross-referencing suffixes (-*h* is used in nominal contexts) precedes a stative participle (10. 210) or unmarked verb form (10. 211). Unmarked verb forms can occur in active-direct and passive contexts (10. 211b).

- (10. 210) a. mu-7uka poɕ'a-7 b. 7uka-h šawi-7
 3sA-do wash-STAT = laundry do-3sP sit down-STAT
 'she does laundry' (G-SH) 'he sat down' (G-JS)
- c. 7uke-y pa7aɕ'i-7 mu-masa
 do-3sA grind-STAT 3sP-Sp:corn dough
 'she ground her dough' (G-SH)
- (10. 211) a. 7uka-y 7uɬu 7uy b. na nin 7uke-y 7ipa?la
 do-3sA fall water DET PN:1s do-3sA bath
 '(the) water/rain fell' (G-SH) 'it was me who bathed' (G-SH)

There are also examples where the light verb is unmarked and precedes a lexical verb that can be marked for S/A by means of cross-referencing affixes (10. 212) or an independent pronoun (10. 213).

- (10. 212) η uka na nin šamu-n η ən-ču-šuruk
do DET PN:1s take, catch-1sA 1sP-DIM-cane
'I took my cane' (G-RHG)

- (10. 213) a. na nin η uka †awaro
DET PN:1s do dance
'I dance' (G-SH)
b. <nen k'amusa>, <nen kamusa>
 nen ka musa
 PN:1s do bury
'I bury'
 OT: "yo entierro" (Ch-F), "yo sepulto" (Y-C)

Xinka LVCs also can occur in the function of the lexical verb in AVCs or function as a verbal complement clause.

- (10. 214) a. η a†a pe? kuy η uka ti:ki hi? nin
tomorrow CENT AUX.FUT do sleep PROG+3s PN:1s
'tomorrow I am going to be sleeping' (G-SH)
b. η uka η uwake hi? ku pe:lo?
do play PROG+3s MOD Sp:dog
'the dog is playing' (G-RHG)
(10. 215) hin η an-piri ka η ušaki-?
NEG 1sA-see do smoke-STAT
'I do not like to smoke'¹⁶¹ (G-SH)

In the Zeeje-manuscript, light verb periphrasis is also formed with the verb *yak'a* 'make' (10. 216). Just like *η uka*, the light verb *yak'a* is marked like a full transitive verb, taking cross-referencing prefixes in the nonpast/imperfective and suffixes in the past/perfective. The light verb *yak'a* is not attested elsewhere in the corpus of data. Morphologically, it seems to combine the existential verb *η aya* and the causative derivation *-ka*, i.e. * *η aya-ka* [be-CAUS] 'to do'. In subordinate clauses *yak'a* occurs with the third person singular progressive marker *-yin* (c) (§ 6.2.2.3, § 12.3).

- (10. 216) a. <mug-llaca puti proporcionar>
 muh-yaka pə? ti:? proporcionar
 3sA-make FUT IO Sp:provide
'he must/will provide for him'
 OT: "le ha de proporcionar" (Ch-Z)
b. <apata pu llacay completar>
 η apata pə? yaka-y completar
 *accomplish FUT make-3sA Sp:complete
'he can complete it'
 OT: "es lo que podrá completar" (Ch-Z)
c. <llaca-yin dedicar quiqui>
 yaka=yin dedicar kiki
 make=PROG+3sS_{DEP} Sp:dedicate INTENS/REFL+3p
'they are dedicating themselves'
 OT: "en dedicarse" (Ch-Z)

¹⁶¹ The semantic analysis is based on the original field translation (see Appendix 6).

10.1.4.2 Phrasal verbs

Xinka phrasal verbs are compounds that consist of a marked primary verb and the preposition *šama* or *ša*. Syntactically, the preposition follows the verb as a complement. Semantically, the preposition specifies the direction or location of the action described by the verb, deriving a separate meaning for the phrasal verb. In these contexts, it is not clear whether the prepositional forms *šama* and *ša* show any semantic difference or whether both indicate 'in, inside' (cf. § 9.1.1). Phrasal verbs appear in the ALS (10. 217) as well as in the comparative data from X_{Ch} and X_Y (10. 218). The concept *yíwa šama* [lose inside] 'forget' (10. 217c) seems to be a calque, as similar concepts occur in other Mesoamerican languages (e.g. K'iche' *šinsač pa nu-xolom* [I lost it in/from my-head] 'I forgot').

- (10. 217) a. <niguaszaà>
niwa **ša**
 ask/want PREP:inside
 'ask inside = want'
 OT:"querer" (2751.)
- b. <pataszáma>
pata **šama**
 *accomplish PREP:inside
 'accomplish inside = remember'
 OT:"pensar, acordarse" (2832.)
- c. <yueguaszáma>
yíwa **šama**
 lose PREP:inside
 'lose inside = forget'
 OT:"olvidar" (3559.)
- (10. 218) a. <yeguá rama>, <yugúa rhama>
yíwa **rama**
 lose PREP:inside
 'to lose inside = to forget'
 OT:"olvidar" (Ch-F), (Ch-JC)
- b. <joché sama>
hoče **sama**
 break PREP:inside
 'to break inside'
 OT:"quebrado" (Y-C)
- c. <jalni sáma>
halni **sama**
 ? PREP:inside
 'to part inside'
 OT:"para dividir o partir" (Y-C)

Examples of phrasal verbs in the ALS show that the verb can carry inflectional information in form of cross-referencing and TAM-suffixes (§ 12.2), while the preposition always follows in last position. There are no syntactic contexts which would indicate whether any constituent can be inserted between verb and preposition. In analogy to the pattern of verbal compounds with noun incorporation, we may assume that apart from TAM-adverbials no other element may occur between the components.

- (10. 219) a. <pata cà száma>
pata-ka? **šama**
 *accomplish-2sA PREP:inside
 'you accomplished inside
 = you remembered'
 OT:"tú te acordaste, te has acordado" (1572.)
- b. <niguaŁaanszaa>
niwa-Ła-n **ša**
 ask-PAST.ACT-SUBJ PREP:inside
 'to have asked inside = to have wanted'
 OT:"querer; anómalo (pretérito)"(2753.)
- c. <yueguaan száma>
yíwa-wa-n **šama**
 lose-ANT-SUBJ PREP:inside
 'to have lost inside = to have forgotten'
 OT:"olvidar (pretérito)" (3560.)
- d. <guapatain száma>
wa **pata=?in** **šama**
 go/IMP *accomplish=SUBJ PREP
 'go to accomplish inside
 = may he remember!'
 OT:"acuértese aquel" (1596.)

- (10. 220) a. yiwa-n šaʔma
lose-1sA PREP
'I lost inside = I forgot' (G-RHG)
- b. <nelec yugualic sáma>
ne:lek yuwa-lik sama
PN:1p lose-1pA PREP
'we lost inside = we forgot'
OT:"lo hemos olvidado" (Y-C)

There are examples in the semi-speaker data from X_G where person is marked on the verb as well as on the preposition. It cannot be determined whether these patterns are regular or the result of over-generalisation by semi-speakers. The translation context only reflects the meaning of the transitive verb, but not the meaning of the phrasal verb compound. However, the pattern of cross-referencing suggests that verb and preposition function together as a single predicate.

- (10. 221) yuwa-n šama-n ʔan-ču-semiya
lose-1sA PREP-1sP? 1sP-DIM-seed
'I lost inside (= forgot) my little seeds = I lost my seed'
OT:"está perdida su semilla" (G-RHG)

A few phrasal verbs are indicated by Maldonado de Matos with nominal translation contexts. They are structurally analogical to verb noun compounds (§ 8.3.4).

- (10. 222) <nuema szama>
n̄ma šama
eat PREP:inside
'(the) eat-inside = sadness'
OT:"tristeza, cuidados" (4187.)

10.1.4.3 Noun incorporation

Verbal compounds can consist in a verb that is complemented by a noun. In this pattern of noun incorporation the noun always follows the verb. No other constituent can be inserted between verb and nominal complement. Such verbal predicates with incorporated nouns are syntactically not distinct from an analytical clause consisting of a verbal predicate and a noun phrase as core argument. Semantically, these constructions qualify as verbal compounds only in the sense that they are idiomatic and refer to a separate verbal concept.

- (10. 223) a. <paraguíriqui>
para=wiriki
search=word/speaking
'to search words = to argue'
OT:"pleitear" (2826.)
- b. <pæuszaja>
pak'u=šaha
VT:nail=mouth
'to nail/fix mouth = to lie'
OT:"mentir" (2806.)
- c. <jayápu>
haya=pu
*give=hand
'to give hand = to receive'
OT:"recibir" (2491.)

All examples of noun incorporation in the ALS regard transitive verbs, with the incorporated noun functioning syntactically as O arguments. The comparative data confirm that most cases of noun incorporation are straightforward idiomatic expressions of object-oriented activities.

- (10. 224) a. <haypú>
hay(a)=pu
*give=hand
'give hand = to receive'
OT:"aceptar" (G-S)
- b. <xuka-mama>
šuka=mama
eat/bite=ear
'bite ear = to have ear pain'
OT:"doler el oído" (Ch-F)

In X_{Ch} verbs with noun incorporation exhibit the same inflectional properties as single verb roots. In the first given example, the verbal compound that consists of a transitive verb and its O argument functions as an intransitive predicate that takes an intransitive cross-referencing prefix in third person and is translated accordingly.

- (10. 225) a. <a-parafriki>
 ʔa-para-friki
 3sS-search-word
 'he/one fights'
 OT: "pelea" (Ch-Z)
- b. <jajpuy>
 hay-pu-y
 give-hand-3sA
 'he received (it)'
 OT: "recibió" (Ch-C)

The only attested case of a verbal predicate with noun incorporation that exhibits inflectional marking in the ALS is the term *para wiriki* 'to quarrel' ("pleitar"). In this case, TAM- and cross-referencing suffixes mark the verb that precedes the semantically incorporated noun – just like it is the case with phrasal verbs (§ 10.1.4.2), which shows that noun incorporation is mainly a syntactic phenomenon in Xinka.

- (10. 226) a. <paraʔan guiriqui>
para-ʔa-n **wiriki**
 search-PAST.ACT-1sA word
 'I did search word = I did argue'
 OT: "pleitar (pretérito)" (2828.)
- b. <paraguan guiriqui>
para-wa-n **wiriki**
 search-ANT-1sA word
 'I have searched word = I have argued'
 OT: "pleitar (pretérito)" (2829.)

In this sense, verbal predicates with noun incorporation and structurally identical to verb-noun compounds (§ 8.3.4). In the following example the verb carries the stative-resultative marker -ʔ, separating the two components of the nominal term into syntactic constituents.

- (10. 227) <japáginí>
Ø-hapa-ʔ **hiniʔ**
 3sS-pass-STAT stomach
 'it passed stomach = diarrhea'
 OT: "evacuaciones" (3926.)

It could be argued that such constructions do not qualify as cases of noun incorporation, as they do not treat verb and noun morphologically as an entity. However, the following example from X_G may provide a counter-argument. The clause refers to the activity of net-making in general and therefore uses intransitive inflection; if the 'net' was not incorporated, the inflection would have to be transitive, i.e. **pula* = (*ʔu*)*ka-y* [make=PROG.VT-3sA] 'he is making' (cf. § 12.3.2).

- (10. 228) ʔuka pula hiʔ nin tamaɕ'i
 do make PROG+3sS_{DEP} PN:1s net
 'I am making nets' (G-SH)

In X_G and X_{Ch} there are several examples of similarly idiomatic expressions that consist of intransitive predicates and their S argument. It is not entirely clear, whether any of these examples presents a case of noun incorporation.

- (10. 229) a. kiša hini-n
 hurt? stomach-1sP
 'my stomach hurts' (G-RHG)
- b. ʔuʔu ʔuy
 fall water
 'water fell = it rained' (G-SH)
- c. <juye-naru>
 huyi naru
 tremble earth
 'it trembles the earth'; "temblar" (Ch-F)

10.2 Nominal predicates

Non-verbal predicates include predicate nominals, predicate adjectives and predicate locatives (cf. Payne 1997:111). In Xinka, all these notions are not distinguished by different types of construction and will therefore generally be referred to as nominal predicates.

A nominal predicate is by definition a construction in which the predication of a clause is embodied in a noun. Nominal predicates in Xinka consist of a nominal core that can be a simple nominal root/stem as well as a complex noun phrase. Pronouns, adjectives and participles can likewise have predicative function. Non-verbal predicates can host TAM adverbials just like verbal predicates do; TAM adverbials always follow the predicate (§ 12.5).

Nominal predicates indicate state in contrast to verbal predicates that mostly indicate activity. There are no dynamic nominal predicates in Xinka. The dynamic notion 'to become X' is expressed by inchoative verbs (see relation of antipassive/inchoative verbs and verbal nouns § 11.1.1, § 11.3.1).

There are three types of construction for nominal predicates attested in Xinka:

- zero-copula encoding of nominal predicates; i.e the relation between the nominal predicate and the subject is not marked and both noun phrases occur in juxtaposition.
- inflectional copula constructions; i.e. the relation between the nominal predicate and the subject is marked on the predicate by a cross-referencing affix
- verbal copula constructions; i.e. the nominal predicate is accompanied by a copula verb of existence/possession

Zero-copula encoding and inflectional copula constructions are common features in Mesoamerican languages (see Campbell, Kaufman & Smith-Stark 1986:552).

10.2.1 Predicate nominals with zero-copula encoding

Nominal predicates express relations of inclusion and relations of equation (cf. Payne 1997:111). In Maldonado-Xinka both types of relations can be encoded by zero-copula marking, which is also referred to as 'NP NP juxtaposition' (see Payne 1997:114).

The ALS gives examples of zero-copula nominal predicates, including nominal roots or pronouns (10. 230a) as well as complex noun phrases (b-c).

- (10. 230) a. <¿guena náca?>
wena naka
 INT:who PN:2s
 'who are you?'
 OT:"¿quién sois vos?" (1872.)
- b. <òro naca eica>
?oro naka k'i-ka
 Sp:alone PN:2s INTENS/REFL-2sP
 'you are alone yourself'
 OT:"tú mismo serás quien solo" (1876.)
- c. <nana jautuma axwe neLa turiLi>
nana haw-tuma ?ahi neLa turi-ti
 FOC skin-deer DEM BEN child-PL
 'this deerskin (=whip) is for the children'
 OT:"este azote es para los muchachos " (1.)

There are no examples of free pronouns in S function complementing a nominal predicate in Maldonado-Xinka. However, this pattern is rather frequent in the

comparative data. The independent pronoun can both, precede (10. 231) or follow (10. 232) the predicate, which suggests that word order is not a relevant marker in predicate nominal constructions. In some contexts, zero-copula constructions express a possessive relation between the nominal predicate and the subject (10. 231c).

- (10. 231) a. na nin ku muka-*ta* nin
DET PN:1s MOD work-AGT PN:1s
'I am (a) worker' (G-JS)
- b. ne:*teke* wa[†]
PN:1p NUM:'3'
'we are three' (G-SH)
- c. na naka kwatro šurumu
DET PN:2s Sp:four boy/adolescent
'you are four boys' (G-SH)
- d. <nag nanu necesidad>
nah nanu *necesidad*
PN:3s DET Sp:necessity
'this is the necessity'
OT:"es la necesidad" (Ch-Z)
- (10. 232) <nanu desolacion nag>
nanu *desolación* nah
DET Sp:desolation PN:3s
'this is the desolation'
OT:"la desolacion es" (Ch-Z)

Demonstratives and interrogative markers can function as nominal predicates in cleft-constructions (see § 16.2.5.3). Cleft-constructions consist of a nominal predicate and a co-referential relativised noun phrase (Payne 1997:278). There are no examples of cleft-constructions in the ALS, the pattern is only attested in the comparative data from X_G and X_{Ch}.

- (10. 233) a. man=*ta* ladron ture-y *ʔika[†]* miya
DEM=INT Sp:thief take-3sA NUM:1 chicken
'that is the thief who took a/one chicken' (G-SH)
- b. nana hi[?] *ʔan-ne[†]*
FOC DEM 1sP-BEN
'this is what is mine' (G-RHG)
- c. <nanu jú nag nubase>
nanu hu[?] nah nu *base*
DET DEM DEM/3s DET base
'this is what is the base'
OT:"ésta es la base" (Ch-Z)
- d. <guanin namá japá>
wanin na ma[?] hapa-[?]
INT:who DET DEM pass-STAT
'who is that one (who) passed'
OT:"¿quién fue el que pasó?" (Ch-JC)

Predicate adjectives are encoded in the same way as predicate nominals. The only example of an adjective in predicative function provided by Maldonado de Matos is a simple predicate adjective followed by the optative auxiliary *tan*.

- (10. 234) <szal Lan>
ša† †an
 good OPT
 'it would be good'
 OT: "dicen que es bueno" (2028.)

In X_G and X_Y we find zero-copula constructions of predicate adjectives with independent pronouns marking the subject. The pronoun can precede or follow the predicate (see above).

- (10. 235) a. harana naka
 ill PN:2s
 'you are ill' (G-JS)
 b. sarara? na nin
 cold DET PN:1s
 'I am cold' (G-PE)
 c. <naljki muljki urajkilma>
 na†ki mu†ki-7urah *kiwa(?)
 PN:1p 1pS-big INTENS
 'we ourselves are big'
 OT: "nosotros somos grandes" (Ch-C)
 d. <calki nay>
 kal ki nay
 NUM:'1' INTENS PN:2s
 'you are alone'
 OT: "tú estás solo" (Y-C)

In X_G stative participles can occur in zero-copula constructions. In all attested examples the subject is referenced by the first person singular pronoun *nin* that is translated as "me". Predicate participles correspond structurally with nominal predicates and differ from full verbal predicates in that they do not take cross-referencing affixes.

- (10. 236) a. muču-7 nin
 get tired-STAT PN:1s
 'I am tired' (G-JS)
 b. 7erteke-7 nin
 get frightened-STAT PN:1s
 'I am frightened' (G-SH)

An example from the ALS illustrates that zero-copula encoding of the subject also works on prepositional phrases functioning as predicate locatives. This pattern is confirmed in the data from X_G . In most attested cases, however, predicate locatives are marked with a verbal copula (see 10.2.2). The functional difference of both strategies, i.e. zero-copula and verbal copula-marking, is unclear.

- (10. 237) <szam pari paL>
šam pari pa†
 PREP day PFV
 'it is already in the day'
 OT: "ya es de día" (4440.)

- (10. 238) nin ša mak'u-?
 PN:1s PREP house-?
 'I am in the house' (G-SH)

The ALS-data include examples of TAM-adverbials accompanying predicate adjectives (10. 234) and predicate locatives (10. 237). In the comparative data there are several examples of pronouns in predicative function that host TAM-adverbials. In the following example from X_{Ch} (10. 239a), the third person plural pronoun takes the suffix *-n*, which seems to function as the subjunctive marker that is otherwise attested on verbs (§ 13.3).

- (10. 239) a. <nagquinqui seductores>
 nah=ki-n ki *seductores*
 PN:3p=INTENS-SUBJ INTENS Sp:seducers
 'they themselves would be seducers'
 OT: "sean seductores" (Ch-Z)

- b. <nag unbu jama nanu historia>
 nah =*ʔən =*pəʔ hama nanu historia
 PN:3s =SUBJ =FUT PREP DET Sp:history
 'they would be in the story'
 OT: "serán en la historia" (Ch-Z)

10.2.2 Predicate nominals with copula and existentials

The relation between the subject and the nominal predicate can also be marked with a copula. In Xinka there are two types of copulas: 'inflectional copulas' and 'verbal copulas'.

Inflectional copulas are identical with the cross-referencing affixes used to mark person on verbs. They are only attested in the first and second person singular.

There are two existential verbs that occur with nominal predicates and can be argued to function as copulas. The primary copula verb is the intransitive existential *ʔaya* 'be (in a place)' ('estar'). The transitive existential verb *ʔuka* 'have' ('haber') indicates 'possession'; here, the noun functions in fact syntactically as an O argument. However, the form is included here under copulas as it is semantically empty and the predicative function rests on the noun. The function of both copula verbs resembles that of their Spanish equivalents, with *ʔaya* indicating the location of sb./sth and referring to a specific subject, while *ʔuka* refers to mere existence in generic context.

10.2.2.1 Inflectional copula

In X_G and X_{Ch} , the relation between the subject and the nominal predicate can be marked by a cross-referencing affix. In the following examples, cross-referencing prefixes function as inflectional copulas, marking S on nominal predicates (10. 240). This pattern is only attested for the first and second person, while the third person is unmarked and therefore structurally a zero-encoded construction. Cross-referencing affixes functioning as copulas can co-occur with independent pronouns that mark the subject syntactically (10. 240c).

- (10. 240) a. ʔan-wena
 1sS-INT:who
 'I am who...'
 OT: "estoy, tengo" (G-S)
- b. ʔən-čuh-čumuti paʔaʔ
 1sS-DIM-old PFV
 'I am already old' (G-RHG)
- c. na nin ʔan-pobre
 DET PN:1s 1sS-Sp:poor
 'I am poor' (G-SH)
- d. <n'frac kilac ni>
 n-frac k'i *kal ni
 1sS-man INTENS INDEF PN:1s
 'I myself/alone am a man'
 OT: "soy también un hombre..." (Ch-C)
- e. <naljki muljki urajkilma>
 naʔki miʔki-ʔurah *kiwa(?)
 PN:1p 1pS-big INTENS
 'we ourselves are big'
 OT: "nosotros somos grandes" (Ch-C)

In X_G inflectional copulas also mark S on predicate locatives. The following example illustrates the functional difference of the possessor-marking suffix, which is hosted by the nominal predicate (i.e. 'my little house' = "mi casita"), and the person-marking prefix *ʔan-*, which references the subject of the clause indicating existence and state.

- (10. 241) ʔan-ču-mak'u-n
 1sS-DIM-house-1sP?
 'I am (in) my little house' (G-RHG)

Schumann (1967:40) indicates that the adjective/locative adverb *tški* "lejos" can take cross-referencing affixes, implying that predicate locatives can employ cross-referencing person markers as copulas. He gives examples for both, cross-referencing prefixes (10. 242a) and suffixes (b), without specifying a functional difference. Personal prefixes marking S on predicate adjectives are also attested in X_{Ch} (c).

(10. 242)	a.	<an-tiški>	b.	<tiška-ka>	c.	<n-uraki>
		ʔan-tiški		tiška-ka		n-ʔuraki
		1sS-far		far-2sS		1sS-big
		'I am far'		'you are far'		'I am big'
		OT:"estoy lejos" (G-S)		OT:"estás lejos" (G-S)		OT:"yo soy grande" (Ch-C)

10.2.2.2 Copula verb of existence ʔaya

The copula verb *ʔaya* occurs with all types of non-verbal predicates: predicate nominals, predicate adjectives and predicate locatives. It takes intransitive dependent-marking suffixes and always follows the predicate.

In the Maldonado-data, there is only one attested context of the copula with a predicate nominal. In the given example (10. 243), the third person singular copula *ʔahi* follows the human/person the indefinite pronoun that consists of the question word *wena* and the intensifier *ki* (see § 7.3). In X_G and X_{Ch} the copula is attested with personal pronouns and other noun phrases in predicative function (10. 244). In example (10. 244b) it cannot be determined whether the pronoun marks the possessor on the noun or the subject of the copula verb.

(10. 243)	<guena qui agi>	
	wena=ki	ʔahi?
	INT:who?=INTENS	COP:be+3sS _{DEP}
	'(he) who is'	
	OT:"el que está, estaba" (1962.)	
(10. 244)	a.	b.
	nana hi?	<ra maku ni ya>
	FOC COP:be+3sS _{DEP}	ra maku ni =ya
	'this one is' (G-JAP)	PREP house PN:1s COP:be+3sS _{DEP}
		'I am in my house'
		OT:"estoy en mi casa" (Ch-C)

The ALS indicates the cross-referenced copula *ʔaya-* occurring with predicate adjectives. In the given example the translation context suggests a past event. Examples from the comparative data indicate that the same type of construction would refer to a non-past event (see below).

- (10. 245) <jarana ayacà>
harana ʔaya-ka?
 ill be-2sS_{DEP}
 'you were ill'
 OT:"estuvistes enfermo" (1958.)

In X_G and X_{Ch} , the initial *a-* of the copula is frequently lost and the cross-referenced form *-ya* becomes cliticised, or even suffixed, to the predicate. The third person singular irregular form *ʔahi* 'he/she/it is (in a place)' attested in the ALS can become cliticised as *hiʔ* (X_G) or as *ʔay* (X_{Ch}) (see § 10.1.3.1). There are several contexts in X_G where the copula is cross-referenced for the third person singular, while the co-occurring pronoun referencing the subject of the clause marks the first or second person (10. 246d).

- (10. 246)
- | | | | |
|----|--|----|---|
| a. | harana=ya-n
ill=COP:be-1s _{DEP}
'I am ill' (G-RHG) | b. | <marak-yakáʔ>
marak=ya-kaʔ
angry=COP:be-2s _{DEP}
'you are angry'
OT: "enojas a ti" (G-S) |
| c. | hono heʔ
drunk COP:be+3s _{DEP}
'he is drunk' (G-SH) | d. | harana hiʔ nin
ill COP:be+3s _{DEP} PN:1s
'I am ill' (G-JS) |
| e. | <jarana ya cá>
harana=ya-kaʔ
ill-COP:be-2s _{DEP}
'you are ill'
OT: "estás enfermo" (Ch-F) | f. | <məməʔayʔ>
meme ʔay
mad/crazy COP:be+3s _{DEP}
'he is mad'
OT: "está demente" (Ch-MQb) |

In X_Y the copula verb *ʔaya* can also precede the predicate adjective. It is unclear whether word order may have a semantic function in these contexts.

- (10. 247)
- <keti ʔay harana>
ke-ti ʔay harana
now-ADV COP:be+3s_{DEP} ill
'he is ill now'
OT: "ahora está enfermo" (Y-C)

The copula verb *ʔaya-* occurs with predicate locatives consisting of prepositional phrases. In the examples given by Maldonado de Matos, the locative can refer to an actual location (10. 248a) or indicate an abstract concept (10. 248b-c).

- (10. 248)
- a. <szama macutiusz naŁ ayacà>
ʃama maku-tyuš na(ʔ)ʔ ʔaya-kaʔ
PREP house-god IMPFV COP:be-2s_{DEP}
'you would have been in the church'
OT: "hubieras estado en la iglesia" (1959.)
- b. <Linà juicio ayacà>
ʃinaʔ juicio ʔaya-ka
PREP Sp:judgement COP:be-2s_{DEP}
'you were sober'
OT: "hubieras estado en juicio" (1957.)
- c. <szama pecado mortal agi>
ʃama pecado mortal ʔahi
PREP Sp:mortal sin COP:be+3s_{DEP}
'he is in mortal sin'
OT: "está en pecado mortal" (1963.)

In X_G and X_{Ch} predicate locatives that employ the copula *ʔaya-* can consist of prepositional phrases (10. 249) as well as locative adverbs (10. 250).

- (10. 249) a. ša ʔuraya heʔ
PREP fire COP:be+3sS_{DEP}
'it is in/on the fire' (G-SH)
- b. <ra macu yacá>
ra maku=ya-ka
PREP house=COP:be-2sS_{DEP}
'you were in the house'
OT:"estaba/estabas en mi casa" (Ch-C)
- c. <al-otek ay na xagua>
ʔal ʔo(:)tek ʔay na šawa
PREP bed COP:be+3sS_{DEP} DET blanket
'the blanket is on (top of) the bed'
OT:"allí está sobre la cama la frazada" (Ch-F)
- (10. 250) a. ka-ta hiʔ ʔeskale:ra
INT:where-DIR COP:be+3sS_{DEP} Sp:stairs
'where(to) are the stairs?' (G-RHG)
- b. nati-ya heʔ
LOC:there-be COP:be+3sS_{DEP}
'there he/it is' (G-SH)
- c. nahaʔ heʔ hapun
LOC COP:be+3sS_{DEP} Sp:soap
'there is soap' (G-SH)

10.2.2.3 Existential verb ʔuka

In the ALS-vocabulary we find an entry of the existential <ucà> "hay", i.e. ʔuka-ʔ 'there is'. Maldonado de Matos does not provide any examples of this verb in functional context, but in the comparative data the verb ʔuka 'have' ("haber") is attested in the function of an existential verb indicating existence and possession.

The existential occurs with noun phrases that can be argued to function as predicates. Although the existential could be understood to function syntactically like a regular transitive verb that accompanied by its O argument, the fact that the form never occurs with verbal person-marking affixes suggests that the noun is the predicate of the clause and the existential functions like a copula. In X_G and X_{Ch} the existential can precede (10. 251a-b, d-e) or follow (10. 251c) the predicate.

- (10. 251) a. ʔuka ʔuy
have water
'it has water = there is water' (G-SH)
- b. na naka ʔuka-ʔ harana
DET PN:2s have-STAT ill(ness)
'you have (an) ill(ness)' (G-JAP)
- c. pari ʔuka-ʔ
sun/heat have-STAT
'it has sun/heat = it is hot' (G-JS)
- d. <ʔukatumin'ti>
ʔuka tumin ti:ʔ
have Sp:money IO
'it has money for him = he has money'
OT:"tiene pisto" (Ch-MQa)
- e. <ucá jururuck>
ʔuka-ʔ hururuk'
have-STAT heat
'it has heat'
OT:"si, hay calor" (Ch-P)
- f. <uca urá>
ʔuka ʔuraʔ
have fire
'it has fire = make fire?'
OT:"hacer fuego" (Y-C)

With predicate nominals, *ṛaka* can indicate existence as well as possession depending on the given contexts. As determined by the semantic context it indicates existence with predicate locatives in form of locative adverbs or prepositional phrases. In this function the existential can precede (10. 252a-b) or follow the predicate (c-d).

- (10. 252)
- a. ʔuka-ʔ nahaʔ sararaʔ
have-STAT LOC:here cold
'it has cold here = it is cold here' (G-SH)
- b. <na kokóʔ uʔká šaw uráy>
na kokoʔ ʔuka šaw-uray
DET crab have PREP-fire
'it has crab in the fire = the crab is in the fire'
OT: "el cangrejo está en el fuego" (G-S)
- c. ʔi-h-uka-ʔ ču-wapaʔ
LOC:there-LIG=have-STAT DIM-bench
'here it has the little bench = the bench is here' (G-JAP)
- d. ša merkado ʔuka-ʔ
PREP Sp:market have-STAT
'in the market has = in the market it is' (G-SH)

The same pattern is attested with predicate adjectives; here *ʔuka* likewise indicates existence and can occur in position preceding (10. 253a) or following (b-c) the predicate. When following the predicate, the existential is marked with -ʔ. This form is attested in X_G.

- (10. 253) a. miya ʔuka gorda b. mal ʔuka-ʔ
 chicken /hen have Sp:fat Sp:bad have-STAT
 'the hen got fat = the hen is fat' (G-SH) 'it got bad = it is bad' (G-RHG)
- c. kontento ʔuka-ʔ hina naka
 Sp:happy have-STAT PREP PN:2s
 '(I) got happy with you = [I am] happy with you' (G-JS)

While the existential can precede or follow predicate adjectives, intransitive stative participles in X_G, which are structurally identical with predicate adjectives in zero-copula encoded contexts (see § 10.2.1), are always followed by a form of *ŋuka*.

- (10. 254)
- | | | | | | |
|----|------------------------------|-----------|----|----------------------|-----------|
| a. | muču-? | ʔuka-? | b. | tero-? | ʔuka-? |
| | get tired-STAT | have-STAT | | die-STAT | have-STAT |
| | 'he has gotten tired' (G-JS) | | | 'he has died' (G-JS) | |
| c. | wereke | ʔuka-h | | | |
| | angry/anger | have-3sP | | | |
| | 'he had anger' (G-JS) | | | | |

In X_G the existential verb *ɲuka* occurs with the stative-resultative marker -ʔ indicating existence/ possession in the non-past; i.e. *ɲuka-ʔ* 'there is' ('hay'). In contexts with past-time reference, the existential takes the third person singular nominal cross-referencing suffix -h. The past form *ɲuka-h* 'there was' ('había') precedes predicate nominals (10. 255) and usually follows predicate adjectives (10. 256). No other cross-referencing affixes are attested with *ɲuka* functioning as an existential.

- (10. 255) a. ʔuka-h na ku ʔaʔu b. ʔuka-h ʔigwana naʔ
have-3sP DET MOD corn have-3s igwana LOC:here
'there was the corn' (G-IS) 'there was an igwana here' (G-SH)

- (10. 256) a. ʔone ʔuka-h ʔawa b. harana ʔuka-h naʔ
 tender have-3s moon ill(ness) have-3s DEM/3s
 'the moon had (= was) tender' (G-JAP) 'he had ill(ness) = he was ill' (G-JS)

Preceded by negative markers, the existential indicates negation of the inclusion or equation expressed by the predicate. In X_G and X_{Ch} , the negative marker *šin* or *hin* precedes *ʔuka* to indicate 'there is not' (= "no hay") (10. 257a-b). In X_{Ch} this can combine with the question word *šan* 'what?' to express the negative quantifier 'nothing' (c).

- (10. 257) a. hin ʔuka
 NEG have
 'it has not = there is no(t)' (G-PE), (G-RHG), (G-SH)
- b. <gen huca duda>
 hən ʔuka duda
 NEG have Sp:doubt
 'it has no doubt = there is no doubt'
 OT: "sin duda" (Ch-Z)
- c. <jenzan huca jama nanu mundo>
 hən san ʔuka hama nanu mundo
 NEG INT have PREP DET Sp:world
 'not that it has in the world = there is nothing in the world'
 OT: "nada hay en el mundo" (Ch-Z)

10.2.2.4 Other verbal copulas

In the comparative data from X_Y and X_{Ch} , another verbal copula is attested as *su* 'be, be in a place' ("ser, estar"). This form could be related to the auxiliary verb *šata* "estar haciendo o repitiendo una misma cosa" from the ALS (§ 10.1.3.7), which may be a combination of the preposition *ša* and the directional verb *taʔ* 'come, arrive' (§ 14.1.2.2). Both markers might be related, although the etymological origin of *su* (or **ša-* as attested in the ALS) is not known.

- (10. 258) a. <nen su (bueno)> b. <su sa maku>
 nen su bueno su sa maku
 PN:1s COP:be good COP:be PREP house
 'I am good' 'he is in the house'
 OT: "yo estoy bueno" (Y-C) OT: "está en la casa" (Y-C)

11 Derivation

The subject-matter of this chapter are derivational operations. Following Payne (1997:25), the term 'derivation' is used here to include: (1) operations that change the word class, (2) operations that change the valency or transitivity of a verb root and (3) operations that change the lexical meaning or concept of the root. Valency-changing operations are morphological processes that adjust the argument structure of the verb by removing or adding a core argument to the predicate (i.e. causatives), or by changing the semantic role of the core arguments. In Xinka, some of the participles and valency-adjusting operations seem to be encoded by the same formal operators.

The derivational operations attested in Xinka include the derivation of

- nominal categories: action/product nominalisations, instrumentals, agentives and locatives
- transitive stems: simple transitivity, causatives and transitive positional verbs
- intransitive stems: antipassive verbs, inchoatives and intransitive positional verbs.

Several of the operators that change word classes are also employed as bound inflectional TAM-suffixes to mark past-time reference (see § 12.2). Furthermore, most markers that are used in valency-changing operations (including processes of verbalisation) seem to be formally identical with operators deriving nominals or marking TAM-categories. This may suggest that the operators have grammaticalised from the same source; e.g. active past and causative markers both seem to derive from the verb *ʒuʔu* 'wish'. But such correspondence may also be accidental with both markers developing through different pathways. It is, for instance, not clear whether the marker of verbal nouns and the operator that derives antipassive and inchoative verbs have both been grammaticalised from the intensifier-reflexive morpheme. Table 11. 1 provides an overview of the multiple derivational operations and TAM-categories marked by identical operators in Maldonado-Xinka.

Table 11. 1: Multiple functions of derivational/valency-changing operators (ALS)

	TAM	Participles/ nominalisation	Valency change/ verbalisation
-ʔ	stative/resultative	stative product = S	
-wa	anterior/perfect	perfect participle past product = O locative	(passive?)
-ʔa/-ʔ	active past	agentive = A active participle	causative
-ya			causative
-ka			causative
-ha			causative
-ki		verbal noun	antipassive/inchoative
-k		instrumentaliser, adjectiviser	

11.1 Nominalisations and participles

Nominalisations are derivational operations that turn verbal stems into nouns, or into syntactic elements that function as nouns. A noun that is derived through a process of nominalisation refers to the meaning of the verb, e.g. indicating its agent, result, place etc. (see Payne 1997:223-224; Muysken 1999:248). There are several processes in Xinka that derive nouns. All nominalisers are suffixes; one of these also derives nouns from a nominal basis.

Xinka distinguishes the two basic types of nominalisation: 'process nominalisation' and 'participant or agent nominalisation' (cf. Muysken 1999:248-252).

PROCESS NOMINALISATIONS (also called 'event nominalisation') include 'action nominalisation', which refers to the activity/process/state described by the verb (§ 11.1.1), and 'product nominalisation', which denotes the result of the activity (§ 11.1.2). In Xinka these process nominalisations comprise verbal nouns and participles.

PARTICIPANT NOMINALISATION refers to nouns that denote the participants/arguments of the nominalised verb stem. These include instrumentals (§ 11.1.3.1), agentives (§ 11.1.3.2) and locatives (§ 11.1.3.3).

Process and participant nominalisation are partially realised through the same operators, which are again etymologically related to inflectional TAM-suffixes. At some stage the nominal forms seem to have become reanalysed as verbal TAM-markers; e.g. *pula-ta* [make-AGT] = '(the one) who makes' > *pula-ta* [make-PAST.ACT] 'he made'.

Table 11. 2: Process and participant nominalisation realised by the same operators

Operator	Process nominalisation	Participant nominalisation
-k(i)	verbal noun adjectives	instrumental
-ʔ	stative participle	-
-wa	perfect participle	locative
-ta	active participle	agentive

Participles are defined as verb forms with reduced verbal attributes that occur in nominal function (Payne 1997:38). The term 'participle' is used here to denote a nominalisation that refers to the result of the action described by a verbal basis. Xinka distinguishes stative-resultative participles with a present-time reference (e.g. 'is cooked'), perfect participles (e.g. 'has/was cooked') and active participles (e.g. 'has cooked/cooking'). These participles can function as modifiers/adjectives (e.g. 'cooked meat').

- (11. 1) a. <potxa>
poɕ'a-ʔ
wash-STAT
'is (being/to be) washed'
OT: "ropa ... para lavar..." (4319.)
- b. <poszàgua>
poša-wa
wash-PART.PF
'(has/was) washed = the washed (thing)'
OT: "ropa lavada" (4325.)

As in other cases of suffixation, three-syllabic forms may lose their V_2 when marked with the nominaliser *-ki*.

(11. 4)	a.	<posnáqui> pos(a)na-ki jump-VN 'to jumping' OT: "brincar, saltar (supino)" (2920.)	b.	<ormòque> ʔor(o)mo-ke pick up-VN 'to picking up' OT: "a recoger" (984.)
	c.	<guaszcui> waš(a)ku-ki throw (stones)-VN 'to throwing (stones)' OT: "tirar con piedras (supino)" (2318.)		

The suffix *-ki* is also attested in the function of an intransitiviser of antipassive (§ 11.3.1) and inchoative verbs (§ 11.3.2). It needs to be noted that Maldonado de Matos does not mark the *supinum* or verbal noun of antipassive stems with a separate suffix; i.e. **ʔara-ki-ki*. This may either suggest that one marker is simply omitted to avoid reduplication, or that verbal nouns are in fact antipassive stems in nominal function.

(11. 5)	ANTIPASSIVE INTRANSITIVE VERBS	cf.	TRANSITIVE VERB ROOTS
	a.		cf.
	<aráqui> ʔara-ki -Ø send-AP-NOM 'the watching' OT: "mirar (supino)" (2085.)		<araqui> ʔara-ki send sb.-VN 'the sending' OT: "enviar (supino)" (2079.)
	b.		cf.
	<tuyáqui> tuya-ki-Ø scold-AP-NOM 'the litigation, arguing' OT: "pleitear (supino)" (3367.)		<tuyaqui> tuya-ki scold sb.-VN 'the scolding' OT: "reñir (supino)" (3362.)
	c.		cf.
	<cagui ei> kawi-k(')i-Ø cry-AP-NOM 'the screaming' OT: "gritar (supino)" (2128.)		<caguiqui> kawi-ki cry out sth.-VN 'the crying out' OT: "llorar (supino)" (2122.)

Although the majority of attested translation contexts indicate a *supinum*, there are also contexts where the operator *-ki* is given with an explicit nominal translation. These nominal translation contexts reflect the semantics of verbal nouns as process nominalisations. In some cases it is not clear whether *-ki* is to be identified as a nominaliser or as an intransitiviser, e.g. the term *wiri-ki* [ʔ-VN/AP] is attested in verbal as well as nominal function, translating either as 'to speak/talk' or as 'word'. As it cannot be determined whether the root **wiri* is verbal or nominal, the function of the suffix is categorised based on the translation context. In these contexts the suffix is mostly spelled by Maldonado de Matos as <ei>, which may indicate the glottalisation of the velar and the implied presence of a final glottal stop (see § 4.4.6). This may suggest that these forms are actually antipassive stems that are marked with the stative-resultative suffix -ʔ (§ 11.1.2.1).

(11. 6)	a.	<ckuenuēei> k'ini-k'i-(ʔ) be happy-VN/AP-(STAT) 'happiness' OT: "alegría, contento" (3784.)	b.	<guiriqui>, <guiri ei> wiri-ki / wiriʔ-k'i-(ʔ) ʔ-VN/AP-(STAT) 'word, speaking' OT: "palabra" (3866.); "hablar" (2553.)

- c. <púrici>
pu:ri-k'i-(?)
 respond-VN/AP-(STAT)
 'to respond = wedding'
 OT: "casamiento" (4342.)

In the comparative Xinka data, transitive verbs marked with the suffix *-ki* are mostly given with nominal translation contexts (11. 7). The example from X_G illustrates a case of assimilation where *-ki* > *-kí*. The example from X_Y indicates a semantic connection between the verbal noun and locatives; i.e. the 'settlement/village' is the place where there is 'settling'.

(11. 7) a. <lipiki> †ipi-ki carry-VN 'the carrying' OT: "carga [sic]" (G-S) (Ch-F); "ojo" (Ch-MQb)	b. <piriqui>, <periki>, <piriki> piri-ki see-VN 'the seeing = sight, glimpse, aspect' OT: "ojeada, aspecto" (Ch-Z); "cara"
c. <nawΛ†'tiki> na wa†ti-ki DET dress-VN 'the dressing = clothes' OT: "vestido, ropa" (Ch-MQb)	d. <saguqui>, <savuki> sawu-ki seat/settle-VN 'the seating/settling down = settlement' OT: "pueblo" (Y-V), (Jut-V), (Y-C)

In X_{Ch} the nominal stems marked with the suffix *-ki* are attested with further inflectional markers, such as plural.

- (11. 8) <japaquiliqui>
 hapa-ki-liki
 wait-VN-PL
 'the waitings = hopes'
 OT: "esperanzas" (Ch-Z)

It is unclear whether there is any etymological relation of the action nominaliser *-ki* and the participle derivation *-k* attested in X_{Ch} ; e.g. (11. 15).

11.1.2 Product nominalisation

Product nominalisations are deverbal stems that are otherwise categorised as participles. They indicate realised action and derive nominal forms that refer to the result or 'product' of the activity denoted by the verb stem (Payne 1997:229). Participles are derived with the same operators that also indicate stative-resultative and anterior past-time reference on finite verbs.

11.1.2.1 Stative participle

The stative-resultative marker *-?* derives participles and product nouns from intransitive verbs. Morphologically, this form is identical with the third person singular past/perfective of intransitive verbs that is marked with the suffix *-?*, the third person singular is not cross-referenced on the verb (see § 6.1.2.2, § 12.2.1.2). Semantically, the past intransitive verb describes the result or product of the activity denoted by the root; i.e. *Ø-ha:ma-?* [3sS-ripen-STAT] 'it ripened' = 'it is ripe'. It can be argued that the inflectional function of *-?* has grammaticalised from the participle function of the

marker, as it has been shown by cross-linguistic analysis that simple pasts/perfectives can develop through anteriors from resultatives (see Bybee *et al.* 1994:68).

The translation contexts in the ALS are either nominal or adjectival and indicate a resultative state that is brought about by the action indicated in the verbal root. In example (11. 9d) the final glottal is not orthographically represented by an accent sign, but implicit in the glottalised initial consonant.

(11. 9)	a. <jaamáa> ha:ma:-ʔ ripen-STAT 'is ripened = ripe (thing)' OT: "cosa madura" (3921.)	b. <seLè> seʔe-ʔ twist-STAT 'is laid aside / = laid aside (thing)' OT: "[*puesto] de lado, torcido" (4377.)
	c. <szàgù> ša:wu-ʔ sit, be seated-STAT 'is seated = seated (thing)' OT: "estar sentado" (1918.)	d. <ckueguve> k'iwi-ʔ dry-STAT 'is dried = dry (thing)' OT: "cosa seca" (3783.)

Translation contexts in the comparative data confirm the pattern from the ALS. Schumann defined the form as a past participle that is marked with the suffix *-ʔ* on verbal roots that end in vowels, and *-aʔ* for roots that end in consonants (1967:52). All Spanish translation contexts give a participle form. There are a few syntactic contexts that indicate a participle-function or a deverbal noun that describes a state. In X_{Ch} the form can be preceded by determiners (e).

(11. 10)	a. hama-ʔ paʔaʔ ripen-STAT PFV 'it is already ripe(ned)' (G-RHG)	b. <pupúʔ> pupu-ʔ grow-STAT 'is grown' OT: "crecido" (G-S)
	c. <ixí> ʔiši-ʔ live-STAT 'is alive' OT: "vivo, despierto" (Ch-C), (Ch-F)	d. <na kunúʔ> na kunu-ʔ DET buy-STAT 'the (thing that) is bought = the buy' OT: "lo comprado" (Ch-S)
	e. <lachú> laču-ʔ wet-STAT 'is wet' OT: "mojado" (Y-C)	f. <tero'> tero-ʔ die-STAT 'is dead' OT: "muerto" (Jut-V)

In the comparative data the stative-resultative marker *-ʔ* is also attested with intransitivised stems. As pointed out in the previous section, there are forms in the ALS that end in <ɛi> and have been categorised by Maldonado de Matos as *supinum* or nouns (11. 6). Although these forms are not given with stative translations contexts, it is possible that they are in fact reflexive or antipassive stems with stative-resultative participle marking (§ 11.1.1).

- (11. 11) <huerxeké>
 werše-ke-ʔ
 throw-REFL/APʔ-STAT
 'thrown oneself = fallen'
 OT: "caído" (Y-C)

In the ALS the stative participles are regularly only attested with intransitive verbs. There are a few exceptions of transitive roots occurring in the same context, although in all of these cases the transitive roots attested could be argued to be ambitransitive.

- (11. 12) a. <jueɛa>
 hik'a-ʔ
 weave-STAT
 'is woven = woven (thing) = weaving'
 OT: "tejido" (3996.)
- b. <guayá>
 waya-ʔ
 weed-STAT
 'is weeded = weeded (thing) = milpa'
 OT: "milpa" (3855.)

The comparative data, in contrast, provide several examples of transitive verbs marked with -ʔ that derive a product noun or stative participle. While the majority of translation contexts indicate a participle function, some forms reflect a progressive meaning. This corresponds with the analysis of -ʔ marking a present state that expresses the result of the activity described by the verb. In the following examples, marker -ʔ derives intransitive states from transitive verbs in the sense that translation contexts do not indicate any reference to the O argument.

- (11. 13) a. <imaʔ>
 ʔima-ʔ
 say (sth.)-STAT
 'is said = the said (thing)'
 OT: "dicho" (G-S)
- b. ʔuray čeno-ʔ
 fire burn-STAT
 '(the) fire burned' (G-JS)
- c. <yeogúa>
 yiwa-ʔ
 lose-STAT
 'is lost = the lost (thing)'
 OT: "cosa perdida" (Ch-F)
- d. <piriʔ>
 piri-ʔ
 fill-STAT
 'is filled = the full (thing)'
 OT: "lleno" (Ch-S)
- e. <jonó>
 hono-ʔ
 get drunk-STAT
 'got drunk = the drunk (man)'
 OT: "ebrio, borracho" (Y-C)

In X_{Ch} stative participles with -ʔ are also indicated with agentive translation contexts. The semantic transition from the stative participle to the agentive is unclear.

- (11. 14) <joká>
 hik'a-ʔ
 weave-STAT=AGT?
 'is woven = *the weaver(?)'
 OT: "tejedor" (Ch-F)

In X_{Ch} and X_S , there are various examples of participles marked with the suffix -k. These forms could correspond with the stative participles derived by -ʔ, but we may also be dealing with a different pattern of nominalisation that is only attested in the mentioned varieties. Translation contexts suggest a function as a stative participles. Most given examples seem to be transitive roots.

- (11. 15) a. <chengóc ti pu>
 čenko-k ti:(ʔ) pu
 twist-STAT PREP/IO arm/hand
 'the arm is twisted (= dislocated)'
 OT: "su brazo está torcido" (Ch-C)
- b. <tumúc>
 tumu-k
 end-STAT
 'is finished/ended'
 OT: "se acabó" (Ch-JC)

- c. <ya'puk'>
 yapu-k'
 vomit-STAT
 'is vomited'
 OT: "vomitó (arrojó)" (Ch-MQ)

11.1.2.2 *Perfect participle*

The operator *-wa* derives past participles or product nouns from transitive and intransitive verbs. The translation contexts indicate that nominal forms derived by *-wa* denote the product or result of realised and completed action. The suffix appears to be related to the anterior/perfect marker (§ 12.2.3); the examples in the ALS, however, suggest that in deverbal function *-wa* is never followed by -ʔ (see marking pattern of the anterior/perfect *-wa*). The nominalised form is defined here as a perfect participle.

In the ALS (11. 16) and the comparative data from X_{Ch} and X_Y (11. 17), the participle marker *-wa* is primarily attested with transitive roots.

(11. 16)	a. <pulâgua> pula-wa make-PART.PF 'made (thing)' OT: "cosa hecha" (4333.)	b. <poszâgua> poša-wa wash-PART.PF 'washed (thing)' OT: "ropa lavada" (4325.)
	c. <órmôgua> ʔormo-wa pick up-PART.PF 'picked up (thing)' OT: "cosa recogido" (1067.)	
(11. 17)	a. <pakagua>, <pacahua> paka-wa nail-PART.PF 'nailed thing = the wall' OT: "pared" (Ch-F), (Y-C)	b. <pocouhua> poko-wa break-PART.PF 'broken (thing) = corn husk' OT: "la tuza, el doblador" (Y-C)

In Maldonado-Xinka perfect participles marked with *-wa* are also attested with intransitive roots as well as with antipassive/reflexive and inchoative stems (see § 11.3). It could be argued that *-wa* is mostly used on intransitives with stative semantics, i.e. verbs that describe events where the grammatical subject functions semantically as the patient, not the agent action.

(11. 18)	a. <uŁugua> ʔuŁu-wa fall-PART.PF 'fallen (thing)' OT: "cosa caída" (4687.)	b. <cúnusigua> kunu-k'i-wa buy-AP-PART.PF 'bought (thing) = the buy, purchase' OT: "cosa comprada" (3767.)
	c. <taguaŁeigua> tawa-Ł-k'i-wa bless-PART.ACT-INCH-PART.PF 'blessed (thing)' OT: "cosa bendita" (4531.)	

11.1.2.3 Active participle

The suffixes *-ʔa* and *-ʔ* derive participles and product nominalisations from verbal roots. The operator is defined here as a derivation of an active participle and seems to be etymologically related to the active past marker *-ʔa* (§ 12.2.2). In the ALS, the suffix *-ʔ* is primarily attested as an agentive marker (see § 11.1.3.2). However, there are a few examples where the morpheme occurs with participles (11. 19) and forms in adjectival function, i.e. either as a modifier preceding a head noun (b) or as the derivational basis of inchoative verbs (c, see also § 11.3.2).

- (11. 19) a. <ɬataʔa>
k'ata-ʔa
 lay down-PART .ACT
 'laid down'
 OT: "acostado" (3720.)
- b. <saraʔ huy>
sara-ʔ **ʔuy**
 get cold-PART.ACT? water
 'cold water'
 OT: "agua fría" (4373.)
- c. <taguaʔ eigua>
tawa-ʔ-k'i-wa
 bless-PART.ACT-INCH-PART.PF
 'blessed thing'
 OT: "cosa bendita" (4531.)

Participles and non-agentive nouns marked with *-ʔ* or *-h* are widely attested in the comparative data. The majority of forms are given with nominal translation contexts (11. 20), but there are frequent examples in the Xinka data from X_G , X_{Ch} and X_Y where verbs marked with *-ʔ* or *-h* are given with infinitive translation contexts (11. 21). This seems to suggest that the form may function as an active participle that either has a present-time reference or describes action at some unspecific moment.

- (11. 20) a. <húyuh>
 huyu-h
 tremble-PART.ACT
 'trembled, trembling'
 OT: "temblor" (G-S)
- b. <pulag>
 pula-h
 make-PART.ACT
 'made = sanctioned'
 OT: "sancionada" (Ch-Z)
- c. <kühual>
 *k'iwi-l
 dry-PART.ACT
 'toasted = totopostle'
 OT: "totopoxte" (Y-C)
- d. <isig>
 ʔisi-h
 live-PART.ACT
 'alive'
 OT: "alive" (Jut-V)
- (11. 21) a. nama-h
 hurt-PART.ACT
 'hurt, the hurting' (G-JS)
- b. <ümul>
 ʔimu-l
 *say?-PART.ACT
 'write, the writing'
 OT: "escribir" (Ch-F)
- c. <iǎác'aj>
 ʔišaka-h
 drink-PART.ACT
 'drink, the drinking'
 OT: "to drink" (Ch-MA)
- d. <jaypúj>
 haypu-h
 receive-PART.ACT
 'receive, the receiving'
 OT: "recibir" (Y-C)

In the Zeeje-ms. we find an example of an active participle in syntactic context. The active participle marked with *-ʔa* functions as a modifier, preceding the noun.

- (11. 22) <ka muna quila gragua hay>
 ka-muna-ki-la =krawa ʔay
 2pP-fruit-INCH-PART.ACT =shrubs/woods 2PL
 'your (pl.) fertile fields'
 OT: "vuestras fertiles campiñas" (Ch-Z)

In X_{Ch} and X_Y , there are further patterns of product nominalisation derived from transitive verbs by means of the suffix $-y$. As $-ʔ$ can be realised as $-y$ in some contexts (§ 4.5.1), it is possible that we are dealing here with the same morpheme.

- (11. 23) a. <kiiguay> b. <sagullay>
 *k'iwi-y sawu-ya-y
 dry-PART.ACT? seat-TRANS-PART.ACT?
 'dried thing = toasted' 'place'
 OT: "totoposte" (Ch-F) OT: "puesto" (Ch-Z)
- c. <élkey>
 ʔelke-y
 drink-PART.ACT?
 'gourd'
 OT: "guacal" (Y-C)

11.1.2.4 Unmarked product nominalisation

There are nouns that are morphologically identical to verb roots. It is not clear whether the nominal form is derived from the verb by means of conversion, or whether the process is reverse. In the following examples the stress pattern represented by the accent sign indicates that there is no final glottal stop that distinguishes these nouns from stative participles.

- (11. 24) a. <chichi> b. <chichi>
čiči **čiči-Ø**
 VI: defecate defecate-NOM
 'defecate, relieve stomach' 'defecating/defecation = excrement'
 OT: "exonerar vientre" (2195.) OT: "excremento" (3691.)

There are examples of stative participles ending in $-ʔ$ contrasting semantically with nominals that are unmarked. Both forms are given with nominal translation contexts, but seem to have a verbal basis.

- (11. 25) a. <isztu> cf. <isztú>
ʔištú-Ø **ʔištú-ʔ**
 ?-NOM ?-STAT
 'scar, mark' 'rash, disease'
 OT: "señal" (3913.) OT: "jiote; enfermedad" (3912.)
- b. <núru> cf. <nuurú>
nuru-Ø **nu:ru-ʔ**
 *rot-NOM *rot-STAT
 'pus, secretion' 'abscess, ulcer, disease'
 OT: "la materia, podre" (4182.) OT: "bubas; enfermedad" (4183.)

11.1.3 Participant nominalisation

Participant nominalisations employ the same markers as process nominalisations, but form a special semantic category. The derivational basis can be verbal as well as nominal.

11.1.3.1 Instrument nominalisation

Instrument nominalisations derive nouns which refer to an instrument that is used to carry out the action described by the verb (Payne 1997:228). In the ALS, instrument nominalisation is marked on the verb stem by means of the suffix *-k*. The instrument marker *-k* occurs with transitive, intransitive and nominal roots and stems. There is one example in the ALS where the Spanish translation of the form is given as "instrumento con que..." (11. 26a), which indicates the grammatical function of the nominalisation.

Cross-linguistically, instrumentals and locative nominalisations are often formed with the same markers used for action nominalisation. Therefore, *-k* could be etymologically related to the suffix *-ki* that derives verbal nouns (see § 11.1.1). In X_{Ch} the suffix *-k* is also attested as a stative participle-marker (§ 11.1.2.1). The nominal stems derived by *-k* can take inflectional morphology.

(11. 26)	a. <Łuepuec> łipł-k carry behind-INSTR 'instrument for carrying' OT: "instrumento para cargar" (4037.)	b. <guisúc> wišu-k beat, flog-INSTR 'whip' OT: "azote" (3880.)
	c. <paaszíc> pa:ši-k grind-INSTR 'kitchen' OT: "cocina" (4263.)	d. <nucszuc> nukšu-k smoke-INSTR 'censer, incense burner' OT: "sahumador, incensario" (4178.)

The pattern is confirmed in the comparative data, where the suffix *-k* is attested with transitive roots and derives instrumental nouns.

(11. 27)	a. <tutúk> tutu-k suck-INSTR 'breast' OT: "senos" (G-S)	b. šuwi-k sweep-INSTR 'broom' (G-RHG), (G-JS)
	c. <su'kuk> suk'u-k' tie-INSTR 'knot' OT: "nudo" (Ch-MQb)	d. <pulak> pula-k' make-INSTR 'net' OT: "rede" (¿red o redes?) (Jum-E)
	e. <yayic> yayi-k ?-INSTR 'tumpline, mecapal' OT: "mecapal" (Y-C)	

In three-syllabic transitives, V_2 is lost upon marking with the instrumental suffix. The pattern is attested in the ALS (11. 28) as well as in X_G and X_{Ch} (11. 29).

- (11. 28) a. <iszcac>
ʔiʃ(a)ka-k
 drink-INSTR
 'cup, dish'
 OT: "jícara de beber" (3908.)
- b. <everszac>
k'ir(i)ša-k
 comb-INSTR
 '(the) comb'
 OT: "peine" (3788.)
- (11. 29) <wišták>
 wiš(a)ta-k
 whistle-INSTR
 'flute'
 OT: "flauta" (G-S)

A few examples in the ALS seem to suggest that suffixation with the instrumental marker causes deglottalisation or deaffrication in the root. However, the pattern is not exclusive and there are several counter examples.

- (11. 30) a. <ɛagui> → <caguic>
k'awi **kawi-k**
 catch with lasso catch with lasso-INSTR
 'catch with lasso' 'lasso'
 OT: "lazar, enredar" (2135.) OT: "araypa, lazo" (3683.)
- b. <iszaca>, <yszàca> → <iszcac>
ʔiʃak'a / ʔiʃaka **ʔiʃka-k**
 drink drink-INSTR
 'to drink' 'instrument for drinking = cup'
 OT: "drink" (2420.) OT: "jícara de beber" (3908.)
- c. <iguatxa> → <uyszác>
ʔiwaç'a **ʔuyša-k**
 spin spin-INSTR
 'to spin' 'instrument for spinning = spindle'
 OT: "hilar" (2391.) OT: "malacate" (4727.)
- d. <patxi>, <paaszí> → <paaszíc>
paç'i, pa:ši **pa:ši-k**
 grind grind-INSTR
 'to grind' 'instrument for grinding = kitchen'
 OT: "moler" (2843., 2837.) OT: "cocina" (4263.)

With intransitive roots the semantic context of the instrumental marker also has a locative connotation. Instrument and location are semantically related concepts, inasmuch as the instrument that is used to carry out an activity may be identical with the place where this activity is taking place; e.g. *ma:ra-k* [rest-INSTR] is the 'instrument of resting' as much as it is the 'place of resting'.

- (11. 31) a. <maarác>
ma:ra-k
 rest-INSTR
 'resting instrument = resting place'
 OT: "descansadero, sesetrado" (4061.)
- b. <tiçiguaru>
ti:k'i-k' waru
 sleep-INSTR net, *matate*
 'sleeping instrument (made) from net
 = hammock'
 OT: "hamáca" (4573.)

The locative function is confirmed by comparative data from X_G and X_{Ch} . The verb noun compounds *ʔiʃpa-k pari* [rise-INSTR + sun] 'east' and *yiwa-k pari* [descend-INSTR + sun] 'west' have parallels in the ALS where the verb is marked with the locative suffix *-wa*: e.g. *ʔiʃpa-wa pari* [rise-LOC + sun] (see § 11.1.3.3).

- (11. 32) a. <išpák pári>
 ʔišpa-k pari
 rise, come out-INSTR/LOC sun, day
 'rising of the sun/day = east'
 OT: "oriente" (G-S)
- b. <yiwák pári>
 yiwa-k pari
 descend-INSTR/LOC sun, day
 'descending of the sun/day = west'
 OT: "poniente" (G-S)
- c. <tiki'kwaru>
 ti(:)k(')i-k waru?
 sleep-INSTR/LOC net, *matate*
 'sleeping instrument (made) from net = hammock'
 OT: "hamaca, sábana" (Ch-MQb)

The translation contexts in the ALS indicate a purely instrumental meaning for contexts in which *-k* derives nouns from antipassive stems.

- (11. 33) a. <sueuckie>
suk'u-k'i-k'
 tie-AP-INSTR
 'instrument for tying, knotting = rope?'
 OT: "cosa con que se amarra" (4391.)
- b. <evetveic>
kitt-k'i-k
 measure-AP-INSTR
 'measuring rod'
 OT: "medida, vara de medir" (3794.)
- (11. 34) a. <guastitkik>
 wastit-k'i-k
 dress-AP-INSTR
 '(the) dress'
 OT: "vestido" (Ch-F)
- b. <sujikic>
 suhi-k'i-k
 sweep-AP-INSTR
 'broom'
 OT: "escoba" (Y-C)

Alternative markers for the instrumental are found in selected examples in X_G and X_{Ch} . Here, the instrumental nominalisation is also attested with the suffix *-ki*, which supports the analysis that verbal nouns and instrumental nominalisations are formed with the same type of marker.

- (11. 35) a. <kulumáʔki>
 kuluma-k'i
 ʔ-INSTR
 'shuttle (for weaving)'
 OT: "lizo, espada de telar..." (G-S)
- b. <ku'nuk'i>
 kunu-k'i
 sell-INSTR
 'market'
 OT: "mercado" (Ch-MQb)

In X_{Ch} and X_G , we also find the suffix *-ka* in the role of an instrumental marker; it is, however, not clear whether this is a distinct morpheme.

- (11. 36) a. <raguca>
 raw-ka
 seat-INSTR
 '(the) seat'
 OT: "silla" (Ch-P)
- b. <wájca>
 wa-h-ka
 go (away)-ʔ-INSTR
 'instrument for walking = feet'
 OT: "feet" (G-MA)

Instrumental nouns can function as head nouns of possessive compounds (see § 8.3.2).

- (11. 37) a. <guiszucnuguí>
wišu-k nuwi
 beat-INSTR cotton
 'beating-instrument (from) cotton'
 = cotton whip'
 OT: "sacudidor de algodón" (3883.)
- b. <jayuc szaja>
hayu-k šaha
 clean-INSTR mouth
 'cleaning instrument for the mouth'
 = napkin'
 OT: "pañó de cholate, servilleta" (4261.)

There are examples of nominalised forms with *-k* functioning as modifiers in modifier-modified compounds (cf. § 8.3.1). In these contexts, it is not entirely clear whether *-k* has to be identified as an instrumental or action/product nominaliser.

- (11. 38) <nucszucséma>
nukšu-k sema
 smoke-? fish
 'smoking/smoked fish'
 OT: "pescado asado" (4179.)

The instrumental marker *-k* is also attested with nominal roots, where it indicates an object that is functionally related to the nominal basis; e.g. *wapi-k* [foot-INSTR] 'sandal'; i.e. the sandal is seen as an instrument that is used by the foot.

- (11. 39) <guapic>
wapi-k
 foot-INSTR
 'instrument of foot = sandals'
 OT: "caites, zapatos de los indios" (3841.)

Instrumentals with a nominal basis, including designations for objects as well as animal and plant names, are widely attested in the comparative corpus of data.

(11. 40)	a.	pa	šaha-k	b.	wapi-k
		PREP	mouth-INSTR		foot-INSTR
			'mouth' (G-PE)		'sandal' (G-PE)
	c.	<xu'tuk>		d.	<rumuck>
		hutu-k			rumu-k'
		wood-INSTR			smell-INSTR
		'pole, tree'			'skunk'
		OT: "madera" (Ch-MQa)			OT: "zorillo" (Ch-P)

The suffix *-k* also occurs with body part terms in nominal compounds that designate animal names. These compounds function as *pars pro toto* forms that denote animals by their typical attributes, with the derivational morpheme *-k* marking the characteristic feature (body part) of the animal referred to. It seems that in these cases *-k* derives an adjectival form, which defines the body part as a property of the animal, i.e. head > headed. Whether this function and the instrumental marker are related, cannot be determined.

(11. 41)	a.	<ten júsic>	b.	<muł pàamac>
		ten-hu:ši-k		muł-pa:ma-k
		red-head-INSTR?		white-wing, arm-INSTR?
		'red-headed = vulture'		'white-winged = dove'
		OT: "quebrantahueso" (4563.)		OT: "paloma de monte" (4103.)

There are further animal and plant names that seem to be marked with the suffix *-k*. However, in most of these cases, the derivational basis and literal meaning are not understood.

(11. 42)	a.	<táuc>	b.	<paguác>
		ta?u-k		pawa-k
		?-INSTR?		?-INSTR?
		'tortoise'		'pine'
		OT: "tortuga" (4552.)		OT: "ocóte" (4221.)

In X_{Ch} there are singular cases of agentives being marked with the suffix *-k*. Agent and instrument nominalisation are semantically very close, given that the instrument with which an action is carried out is in some way also the acting agent.

(11. 43)	a.	<cunuk>	b.	<marac>
		kunu-k'		mara-k
		buy-INSTR/AGT		get angry, upset-INSTR/AGT
		'buyer, customer'		'choleric, bad person'
		OT: "comprador" (Ch-F)		OT: "malos, bravos, coléricos" (Ch-C)

11.1.3.2 Agent nominalisation

Agentives denote nouns that refer to the one who carries out the activity described by the verb (Payne 1997:226). Agent nominalisation by morphological marking is common in Mesoamerican languages. In Xinka agentives are attested with a verbal and nominal derivational basis. The nominal derivation either indicates the agent referred to by the verbal basis, i.e. 'the one who does X', or the possessor of a nominal basis, i.e. 'the one who has/is X' (cf. Payne 1997:226). Etymologically, the operator may have grammaticalised from the optative auxiliary *ʔiʔa* 'want' (§ 10.1.3.5).

Agent nominalisation is derived by the suffix *-ʔ(a)* that is attested with transitive and intransitive roots/stems as well as with nominal roots. On verb stems marked with inflectional TAM-suffixes the agentive marker always takes the final slot. The agentive might be related to the active past suffix that marks past-time reference on verbs (see § 12.2.2), which may suggest that Xinka agentives are morphologically action nominalisations (cf. Muysken 1999:249).

In the ALS, the agentive marker *-ʔa* (11. 44) and its variant *-ʔ* (11. 45) occur with transitive and intransitive verbs. The two markers do not seem to exhibit any functional difference.

(11. 44)	a.	<màrà Là> ma:ra-ʔa rest-AGT '(the one) who rests' OT: "el que descansa" (1556.)	b.	<acúLa> ʔaku-ʔa go-AGT '(the one) who goes' OT: "el que se va huido" (3587.)
	c.	<pulaLa> pula-ʔa make-AGT 'maker, (the one) who makes' OT: "el que hace, hacía" (479.)	d.	<juveəLa> hi:k'a-ʔa weave-AGT 'weaver' OT: "la tejendera" (3997.)
(11. 45)	a.	<pulàL> pula-ʔ make-AGT 'maker, (the one) who makes' OT: "el que hace, hacía" (478.)	b.	<piriiL> piri-ʔ see-AGT 'seer, (the one) who sees' OT: "el que ve, veía" (821.)
	c.	<jooroL> ho:ro-ʔ guard-AGT 'caretaker, (the one) who takes care' OT: "el cuidador" (3956.)		

In the comparative data the two markers *-ʔa* and *-ʔ* do not occur in complementary distribution, but occur in identical contexts. In X_G there are instances of glottalisation of C_2 (stops) in the root upon suffixation (11. 46c). The number of agentive forms in the semi-speakers' data is scarce, most comparative examples stem from X_{Ch} and X_Y . In X_G the agentive marker can also be realised as *-ha* or *-h*. The suffix *-ʔa* is attested in the comparative sources with transitive roots.

(11. 46)	a.	<parila> pari-la grind-AGT 'grinder, who grinds' OT: "molendera" (Ch-F)	b.	<joróla> horo-la guard-AGT 'guardian, protector' OT: "guardián" (Y-C)

- c. muk'a-**ʔa** ~ muka-**ʔa**
work-AGT
'worker' (G-JS)

On transitive verbs the agentive marker **-ʔ** occurs in the same contexts as **-ʔa**. It is attested with two- and three-syllabic transitive roots. The Zeeje-ms. and earlier X_{Ch} -data by Calderón (1908) distinguish the suffixes **-la** and **-l**, whereas more recent sources only indicate **-ʔ**, which can be realised as **-l**, **-h** or **-r**. In X_Y we find **-la** and **-l** as agentive markers.

- (11. 47) a. mok'a-**ʔ**
work-AGT
'worker' (G-JS)
- b. <rac-rah>
rakra-**ʔ**
steal-AGT
'thief'
OT: "ladrón" (Ch-JC)
- c. <larbur>
*lawu-r
dance-AGT
'dancer'
OT: "bailador" (Ch-F)

Three-syllabic intransitive and transitive roots delete V_2 upon suffixation with the agentive marker (see § 4.4.3.1.2).

- (11. 48) a. <iplaLa>
ʔip(a)la-ʔa
bath-AGT
'(the one) who bathes'
OT: "bañador, bañadora" (3902.)
- b. <eLmaLá>
ʔet(a)ma-ʔa
borrow-AGT
'(the one) who borrows'
OT: "el que presta" (3806.)

Maldonado de Matos marks agentive nouns that occur in the first position of nominal or verbal compounds with the suffix **-ʔ** only. In X_{Ch} and X_Y , we find the full agentive marker **-ʔa** in the same context, which supports the idea that both agentive suffixes are used interchangeably.

- (11. 49) a. <joroL guáyá>
horo-ʔ **wayaʔ**
guard-AGT milpa
'guardian of the milpa'
OT: "guardián de milpa" (3960.)
- b. <patáL szàma>
pata-ʔ **šama**
*accomplish-AGT PREP
'(the one) who accomplishes inside
= rememberer'
OT: "el que se acuerda, acordaba" (1637.)
- (11. 50) a. <pujlaj huayá>
puʔa-h wayaʔ
make-AGT milpa
'(the one) who makes milpa = milpa worker'
OT: "milpero" (Ch-C)
- b. <rucag-jente>
ruka-h gente
eat-AGT Sp: people
'(the one) who eats people = tiger'
OT: "tigre" (Ch-P)
- c. <sacsal mijya>
saksa-l miya
steal-AGT chicken
'(the one) who steals chicken
= chicken thief'
OT: "ladrón de gallinas" (Y-C)
- d. <ocolá tajma>
*ʔaku-la tahma
go-AGT path
'(the one) who walks the path
= traveller'
OT: "caminante" (Ch-F)

Most cases of agentive marking in the ALS are attested with intransitivised verbs. The reflexive/ antipassive suffix **-ki** (see § 11.3.1) occurs with transitive roots, causative stems as well as with a few intransitive verb roots. Maldonado de Matos spells the marker as <qui> or <ei>, suggesting that the form may be glottalised as a result of further suffixation (see § 4.4.6). Several examples indicate that the

variation of *ki* and *k'i* is not morphologically significant, e.g. *piri-k'i-ta* '(the one) who sees/looks' ('el que mira') ~ *piri-ki-ta pe?* '(the one) who has to see' ('el que ha o tiene de ver'). The vowel in *-k'i* is optionally deleted.

The agentive marker always refers to the verbal meaning of the intransitive stem, not to the root. Agent nominalisations of antipassive stems denote general activities, not specific events. The nominalised form *ʔaku-ki-ta* 'vagabond' refers to somebody who generally goes, i.e. walks around, not to somebody who happens to be going somewhere on a specific occasion (see Payne 1998:226). That latter person is given in the ALS as *ʔaku-ta* '(the one) who goes' ('el que anda/se va huido').

- (11. 51)
- | | |
|--|--|
| <p>a. <araquiLa>
ʔara-ki-ta
send-AP-AGT
'(the one) who sends = who looks'
OT: "mirón" (3646.)</p> | <p>b. <pula quiLa>
pula-ki-ta
make-AP-AGT
'(the one) who makes = maker'
OT: "el que hace, hacía" (480.)</p> |
| <p>c. <jooro eéLa>
ho:ro-k'e-ta
guard-AP-AGT
'(the one) who guards = guardian'
OT: "el guardián..." (3958.)</p> | <p>d. <tuLtuéiLa>
tuʔtu-k'i-ta
sting-AP-AGT
'(the one) who stings'
OT: "el que pica" (4604.)</p> |
| <p>e. <tiyieiLa>
ti:k'i-k'-ta
sleep-REFL?/AP-AGT
'(the one) who sleeps = sleepyhead'
OT: "dormilón" (4574.)</p> | |

The comparative data (from X_{Ch} and X_Y) confirm this pattern. In X_{Ch} antipassive stems can also be marked with the agentive suffix *-ʔ* (11. 52b).

- (11. 52)
- | | |
|---|---|
| <p>a. <teerókilá>
te:ro-k'i-la
kill-AP-AGT
'killer'
OT: "matador, asesino" (Ch-F)</p> | <p>b. <caykil>
kay-k'i-l
sell-AP-AGT
'seller, merchant'
OT: "vendedor" (Ch-F)</p> |
| <p>c. <cayikila>
kay-i-k'i-la
sell-AP-AGT
'seller, merchant'
OT: "vendedor" (Y-C)</p> | |

The agentive marker *-ta* is furthermore attested with causative stems (ending in *-ha* and *-ta*) that are detransitivised by means of the antipassive marker. These forms are of diachronic interest as they show the agentive suffix and the formally identical causative marker to take different functional slots on the verb.

- (11. 53)
- | | |
|---|---|
| <p>a. <nuemajaeiLa>
nima-ha-k'i-ta
eat-CAUS-AP-AGT
'(the one) who makes (sb.) eat = servant'

OT: "sirviente" (4185.)</p> | <p>b. <ereLaquiLa>
ʔere-ta-ki-ta
*fear-CAUS-AP-AGT
'(the one) who makes (sb.) afraid
= scarecrow'
OT: "espantador" (3818.)</p> |
| <p>c. <mèreLa qui La>
mere-ta-ki-ta
destroy, break-CAUS-AP-AGT
'(the one) who breaks, destroys (sth.)'
OT: "el que ha, tiene de romper" (654.)</p> | |

The functional difference of the active past marker *-ʔa* and the agentive marker is illustrated by a few forms where both operators co-occur on the same root. In these contexts, the agentive marker follows the inflectional marker and is realised in the abbreviated form *-ʔ* omitting the final vowel.

- (11. 54) <acùLaŁ>
ʔaku-ʔa-ʔ
 go-PAST.ACT-AGT
 '(the one) who has gone'
 OT: "el que va, iba" (1722.)

- (11. 55) <mucalal>
 muka-la-l
 work-PAST.ACT-AGT
 '(the one) who has worked'
 OT: "trabajador" (Ch-F)

The sequential order of operators is confirmed by an analogical pattern where the agentive marker *-ʔ(a)* follows verbal roots marked with the anterior/perfect suffix *-wa* (see § 12.2.3). In these examples it is not entirely clear whether the suffix *-ʔ* marks agentive or an active participle.

- (11. 56) a. <jamaguáŁa>
hama-wa-ʔa
 sin-ANT-AGT
 'sinner'
 OT: "el pecador" (20.)
- b. <jóεóguàŁ>
hok'o-wa-ʔ
 break-ANT-PART.ACT/AGT
 'what has broken = corn husk'
 OT: "doblador, cáscara de mazorca" (3954.)
- c. <poszáguáŁ>
poša-wa-ʔ
 wash-ANT-PART.ACT/AGT
 'what has washed = soap rest'
 OT: "la sobra del jabón" (4324.)
- (11. 57) a. <tero-wa-ʔa>
 die/kill-ANT-AGT
 '(the one) who has died = the dead' (G-JAP), (G-JS)
- b. <hoko-wá-ʔ>
 hoko-wa(ʔ)-ʔ
 break-ANT-PART.ACT/AGT
 'what has broken = corn husk'
 OT: "hoja de maíz, totemostle (tuza)" (G-S)
- c. <jono hualo>
 hono-wa-lo
 get drunk-ANT-AGT
 '(the one) who has drunk = the drunk'
 OT: "el bolo" (Ch-JC)

There are very few examples of agentives that are derived from nominal roots and denote the one 'who has or makes X'.

- (11. 58) a. <macuŁa>
maku-ʔa
 house-AGT
 'plan/layout of house'
 OT: "diseño de la casa" (4045.)
- b. <nauŁa>
naʔu-ʔa
 offspring-AGT
 '(the one) who has offspring
 = pregnant (woman)'
 OT: "la preñada" (4165.)

- c. <guapáŁ>
wapa-Ł
 foot?-AGT?
 'bench'
 OT: "el banco" (3839.)

A significant number of Xinka animal (11. 59) and plant names (11. 60) end in *-Ł*. It is not clear whether these forms can be seen as agentives as they are for the most part not semantically transparent. Several of the animal names do suggest an agentive function of *-Ł* in these contexts, but forms such as *huhu-Ł* 'honey-comb' (3965.) or *Łuwa-Ł* 'ant' (4678.) might indicate that the marker has grammaticalised from the animate plural marker *-Łi* (§ 8.4.2).

(11. 59) a. <urúŁ> Łuru-Ł *fall-NOM/AGT 'egg' OT: "el huevo" (4693.) c. <cucúguaŁ> kuku-wa-Ł ?-ANT?-NOM/AGT? 'turtledove' OT: "la tortola" (3758.) (11. 60) a. <amùŁ> Łamu-Ł ?-NOM/AGT 'nettle, <i>chichicaste</i>' OT: "la ortiga, chichicastle" (3627.) c. <szupímaŁ> Łupima-Ł ?-NOM/AGT 'izcanal, tree with thorns' OT: "el yscanal, árbol de espina" (4512.)	b. <tueuemaŁ> Łima-Ł dye-NOM/AGT 'louse' OT: "piojo" (4632.) d. <itúŁ> Łitu-Ł ?-NOM/AGT 'flea' OT: "las pulgas, niguas" (3905.) b. <sza eaayaŁ> Łak'aya-Ł ?-NOM/AGT 'thorn' OT: "la espina" (4414.) d. <yueguueŁ> Łiwi-Ł ?-NOM/AGT 'coachipilin, tree' OT: "el coachipilín; árbol" (4769.)

The ALS gives examples of the agentive form combining with the centric directional *pe?* to mark deontic mode (see § 13.1.5.1, § 12.5.1). There are no examples of this pattern in the comparative data.

(11. 61) a. <acùŁa pè> Łaku-Ła pe? go-AGT CENT/DEON '(the one) who has to go' OT: "el que ha, tiene de ir" (1723.)	b. <màrà Łà pè> ma:ra-Ła(?) pe? rest-AGT CENT/DEON '(the one) who has to rest' OT: "el que ha, tiene de descansar" (1557.)

The agentive marker *-Ła* derives nominal stems that may take the animate plural marker *-Łi* (§ 8.4.2) or function as the basis for instrumental derivation.

(11. 62) a. <aculaŁi> Łaku-Ła-Łi go-AGT-PL 'those who flee' OT: "el que se va huido (plural)" (3588.) c. <jooro eŁaŁi> horo-k'e-Ła-Łi guard-AP-AGT-PL 'guardians' OT: "el guardián (plural)" (3959.)	b. <tupaŁaŁi> tupa-Ła-Łi leave (sth.)-AGT-PL 'those who leave (sth.)' OT: "el que deja (plural)" (4617.)

- (11. 63) a. <puriqui lhajli>
puri-ki-*ṭa*-*ṭi*
respond-AP-AGT-PL
'those who respond = those who get married'
OT: "los del casamiento" (Ch-JC)
- b. <ragulajli>
rawu-la-*ṭi*
seat-AGT-PL
'those who seat/settle = settlements'
OT: "pueblos, aldeas" (Ch-C, Ch-F)

There are several attested cases in the ALS, where agentives derived from anterior/perfect verb forms do not mark plural with the expected animate/human plural suffix *-ṭi*, but with the quantifiers *te:nan*, *tumuki* (X_M) and *taha* (X_{Ch}) that usually occur with inanimate nouns and animal names. In X_{Ch} , however, both plural markers are attested in the same context (11. 65).

- (11. 64) a. <teenan jamaguaḶa>
te:na-n **hama-wa-ṭa**
QUANT:many-IRR sin-ANT-AGT
'sinners'
OT: "los pecadores" (21.)
- b. <tumuqui na jamaguaḶa>
tumuki **na** **hama-wa-ṭa**
QUANT:all DET sin-ANT-AGT
'all sinners'
OT: "todos los pecadores" (22.)
- (11. 65) a. <tajá jono huajlo>
taha? hono-wa-*ṭo*
QUANT:many get drunk-ANT-AGT
'many drunks'
OT: "muchos bolos" (Ch-JC)
- b. <terohuajla jli>
tero-wa-*ṭa*-*ṭi*
die-ANT-AGT-PL
'the dead (pl.)'
OT: "muertos" (Ch-C)

In X_{Ch} there are examples of agentive forms ending in *-y*. It is not clear whether the suffix *-y* is a variant of the agentive marker *-ṭ* (cf. § 11.1.3.2), or whether these forms are transitive verbs marked with the third person singular cross-referencing suffix, and are thus simply descriptive verb phrases; i.e. 'he has burned copal' = 'burner of copal'.

- (11. 66) a. <tajlay pumu>
taṭa-y pumu
burn-3sA/AGT copal
'he burned copal = burner of copal'
OT: "quemador de copal" (Ch-C)
- b. <talay-naguapi-ayarla>
tala-y na wapi ʔayaṭa
burn-3sA/AGT DET foot woman
'the woman burned the foot
= unfaithful woman'
OT: "mujer infiel" (Ch-F)

11.1.3.3 Location nominalisation -wa

The locative nominalisation refers to the place where the activity described by the verb occurs or is carried out (see Payne 1997:229). It is marked with the suffix *-wa*, which also derives perfect participles or product nouns (see § 11.1.2.2). Although the use of identical markers for action nominalisers and locatives is cross-linguistically confirmed (cf. Payne 1997:225, 229), it cannot be determined whether the locative marker is related to the suffixes that mark anterior/perfect and perfect participle.

In Maldonado-Xinka the suffix *-wa* is attested in the function of a locative marker with transitive and intransitive verbal roots. The grammatical function of the morpheme may be derived from the translation contexts "lugar en que se ..." (11. 67b) or "lugar donde ..." (c), which both mean 'place where/of...'.¹

- (11. 67) a. <mUetxagua>, <mUeszagua>
mṣa-wa
bury-LOC
'burial'
OT: "sepultura" (4125.), (4128.)
- b. <maszigua>
maṣi-wa
fry-LOC
'place where sth. is fried'
OT: "lugar en que se fríe algo" (4074.)

These processes are realised by derivational suffixes and reflect in the use of transitive cross-referencing affixes on the verb. Some of the operators that derive transitive verbs can be shown to have grammaticalised from the same auxiliary verbs that are the source for inflectional TAM-markers. Accordingly, different transitivity markers express different semantic connotations. Table 11. 3 provides a functional and distributional summary of transitivity markers in Maldonado-Xinka.

Table 11. 3: Distribution of transitivity markers (ALS)

	Intransitive roots	Transitive roots	Nominal roots	Gloss	Derived from
-ya	with positionals	-	with adjectives	'VI sth.'	*haya 'give'
-ka	?	+	+	'do VT/N'	ʔuka 'do'
-ha	-	+	+	'give VT/N'	*haya 'give'?
-ʔa	?	-	+	'want N'	ʔuʔa 'want'

11.2.1 Transitivity of intransitive verbs

The operator *-ya* derives transitive stems from intransitive motion verbs and positional roots. The etymological origin of the marker is not transparent, but it may have grammaticalised from the now unproductive verb root *haya 'give' that appears in the verbal compound *haya-pu* [give-hand] 'to receive'. The derived transitive verb describes an activity of bringing an object into the position or state indicated by the root. This derivation is therefore a valency-increasing process, which adds an object argument to the verb. Morphologically, the transitivity reflects in the use of specific cross-referencing affixes and TAM-markers that inflect transitive verbs. The Spanish translation contexts also indicate the extension of the number of core arguments, specifying the activity as directed towards 'something' (i.e. "algo", "otra cosa").

- (11. 70)
- | | |
|--|---|
| <p>a. <japaya>
 hapa-ya
 pass by-TRANS
 'to come in, step forward'
 OT: "ir, pasar adelante" (2460.)</p> <p>c. <ulúya>
 ʔulu-ya
 fall-TRANS
 'to throw to the ground'
 OT: "derribar" (3437.)</p> <p>e. <Laráya>
 ʔara-ya
 ascend-TRANS
 'to lift (sth.)'
 OT: "subir algo de abajo a arriba" (2589.)</p> | <p>b. <curúya>
 kuru-ya
 run/flee-TRANS
 'to run'
 OT: "correr (defectivo)" (2189.)</p> <p>d. <szaguya>
 šawu-ya
 sit/be seated-TRANS
 'to seat, put sth.'
 OT: "sentar, poner otra cosa" (3108.)</p> |
|--|---|

Besides motion verbs, the operator occurs with adjectives or positional roots. The following verbs are indicated by Maldonado de Matos with transitive morphology.

- (11. 71)
- | | |
|---|--|
| <p>a. <jamaya>
 hama-ya
 ripe-TRANS
 'to make ripe = to cook'
 OT: "madurar, dar cocimiento" (2450.)</p> | <p>b. <ckueguya>
 k'iw(ʔ)-ya
 dry-TRANS
 'to dry (sth.)'
 OT: "secar" (2230.)</p> |
|---|--|

The comparative data (X_G , X_{Ch} , X_Y) confirm the pattern attested in the ALS (11.72). In X_{Ch} and X_Y the operator may also be realised as $-y$ (b-c).

- (11.72)
- | | |
|---|--|
| <p>a. wišu-ya
beat-TRANS
'to beat (sth., sb.)' (G-RHG)</p> <p>b. <upuy>
ʔupu-y
stand upright-TRANS
'stand up, rise'
OT: "levantarse, ponerse en pie" (Ch-F)</p> | <p>c. <licay>
lika-y
come down-TRANS
'to bring down'
OT: "bajar" (Y-C)</p> |
|---|--|

In X_{Ch} the transitivity marker *-ya* occurs with derived intransitive stems. This context is unattested in Maldonado-Xinka.

- (11.73)
- | | |
|---|--|
| <p>a. <puriki ya>
puri-k'i-ya
respond-AP-TRANS
'to marry'
OT: "desear casarse" (Ch-F)</p> <p>c. <jarackey>
hara-k'e-y
break-AP-TRANS
'to scratch'
OT: "rascar" (Ch-P)</p> | <p>b. <mutajkiya>
muta-h-ki-ya
?-PART.ACT-INCH-TRANS
'to dream'
OT: "soñar" (Ch-F)</p> |
|---|--|

11.2.2 Causative verbs

A causative verb form is defined by the addition of another core argument, i.e. the causee who coerces the agent of the predicate (Croft 1990:241; see Payne 1997:176). Normally, a causative construction has the following core arguments: (a) a causee, i.e. the agent of the caused event, and (b) a causer, i.e. the agent of the predicate of cause; e.g. "I made him eat". Causative stems are literally translated as 'causing somebody to do something' or 'make somebody/something X' with 'something/X' being the action/object described by the root.

Generally, we distinguish lexical, analytic and morphological causatives (cf. Payne 1997:176). In Xinka, valency-increasing operations and causatives are morphological. Causative markers are attested with transitive as well as intransitive and nominal roots. The causative meaning is encoded in the lexical meaning of the causative verb stem; the second agent is not cross-referenced (cf. Payne 1997:177). However, transitive cross-referencing confirms the transitivity of the derived verb forms.

There are various morphological markers for causatives in Xinka. Attested forms in the ALS are *-ka*, *-ha* and *-ʔa*. It is not clear whether *-ha* and *-ʔa* are variant representations of the same operator. A distinct etymological origin of causative markers is suggested, i.e. *ʔuka* 'do' and *ʔuʔa* 'want'. The causative markers *-ka*, *-ha* and *-ʔa* are all attested in identical contexts with a transitive basis; however, *-ka* can also derive causative verbs from nouns and nominal stems. It is not uncommon for causative markers in Mesoamerican languages to occur with a nominal basis (cf. Campbell 1985:85; López Ixcoy 1997:249).

The suffix *-ka* derives transitive verbs from transitive and nominal roots. The marker is semantically transparent in that it has been grammaticalised from the verb *ʔuka* 'do' that functions otherwise as an auxiliary verb in periphrastic constructions that mark progressive on transitive nouns (see § 12.3.2). The causative suffix derives productive transitive verb stems that can take further derivational suffixes, e.g. the agentive marker *-ʔa*.

The operator *-ka* occurs with nominal roots. The derived transitive verb describes that something is brought into the state indicated by the derivational basis. The literal translation of the derivation is 'to do/make N', e.g. *pari-ka* [hot-CAUS] 'to do/make hot' ("calentar"). The marker also appears with Spanish loans (d). Spanish uses the same coding principle for causatives, expressing them by means of a verb with the meaning 'do/make', e.g. *me hizo comer* 'he made me eat'.

(11. 75)	a. <parica> pari-ka heat-CAUS 'to heat' OT:"calentar" (2821.) c. <guilica> wili-ka naked-CAUS 'to undress' OT:"desnudar" (2346.)	b. <zšunuca> šunu-ka long-CAUS 'to lengthen' OT:"alargar" (3174.) d. <selica> seli-ka Sp:blessed-CAUS 'to receive communion' OT:"comulgar" (3051.)
(11. 76)	a. <ʔiška 'mut'> ʔiš-ka mut(i) good/alive-CAUS hair '(he) ordered (his) hair = combed himself' OT:"se peinó" (Ch-MO)	b. <sarcaca> sarka-ka far-CAUS 'elevate, raise' OT:"alzar" (Ch-P)

Otherwise the causative marker *-ka* derives transitive verbs from transitive roots. It does not introduce a causee by grammatically increasing the number of core arguments that accompany the predicate. The causee is semantically represented in the lexical meaning of the derived causative stem. For instance, the form *híní'ka* [know-CAUS] 'to prove, experiment' may be literally translated as 'to make know (sth.).'

- (11.77) a. <juɲvɐɐa>
hiɲi-ka
 know-CAUS
 'make know = to prove, experiment'
 OT: "probar, hacer experiencia" (2563.)
- b. <úɬaɐa>
ʔuɬa-ka
 *want-CAUS
 'make want = to wish, long for'
 OT: "desear" (3428.)

- (11. 78)
- | | |
|--|---|
| <p>c. <túyúεa>
 tuyu-ka
 begin/scold-CAUS
 'to provoke, make upset'
 OT: "torear, provocar" (3373.)</p> | <p>b. <imacack>
 ?ima-ka-k'
 say-CAUS-AP
 'to tell'
 OT: "decir" (Ch-P)</p> |
| <p>a. <ími-ká>
 tumu-ka
 finish-CAUS
 'to complete'
 OT: "completar" (G-S)</p> | |
| <p>c. <táca>
 ta-ka
 ?-CAUS
 'to harvest'
 OT: "tapiscar" (Y-C)</p> | |

11.2.2.2 Causative verb with -ha

The causative marker *-ha* is only attested with transitive roots. Etymologically, the operator could either be a variant form of the causative marker *-ʔa* (§ 11.2.2.3) or it could likewise derive from the verb **haya* 'give' (§ 11.2.1). The translation contexts reflect the causative function of the marker; e.g. *níma-ha* [eat-CAUS] 'feed = make sb. eat sth.' ("dar de comer"). The number of core arguments that accompany these causative verbs is not increased.

- (11. 79)
- | | |
|---|--|
| <p>a. <nuemaja>
 níma-ha
 eat-CAUS
 'to feed'
 OT: "dar de comer" (2772.)</p> | <p>b. <tutuja>
 tutu-ha
 suck-CAUS
 'to breastfeed'
 OT: "dar de mamar" (3351.)</p> |
| <p>c. <iónója>
 to: no-ha
 be silent-CAUS
 'to deceive'
 OT: "engañar" (3301.)</p> | <p>d. <tuyujæiLa>
 tuyu-ha-k'i-ʔa
 begin-CAUS-AP-AGT
 'who provokes = bull-fighter'
 OT: "el torador" (4630.)</p> |

The comparative data confirm the function of the marker. In X_{Ch} and X_Y , causative stems ending in *-ha* occur with cross-referencing suffixes and are thus clearly identified as transitive predicates.

- (11. 80)
- | | |
|---|---|
| <p>a. <sirujaca na'c>
 siru-ha-ka nak
 abbreviate-CAUS-2sA PN:2s
 'make abbreviate = hurry up'
 OT: "apurate vos" (Ch-JC)</p> | <p>b. <tuyujay>
 tuyu-ha-y
 begin-CAUS-3sA
 '(he) began sth.'
 OT: "empezar" (Ch-F)</p> |
| <p>c. <tatijaytiy>
 tati-ha-y ti:?
 VT?-CAUS-3sA IO
 'to undress him'
 OT: "desnudarse" (Y-C)</p> | |

The operator *-ha* derives causative stems that are fully productive and take further TAM-suffixes.

- (11. 81) a. <nuemajaan>
nima-ha-n
eat-CAUS-1sA
'I fed (sb.)'
OT:"dar de comer (pretérito)" (2773.)
- b. <nuemajaLaan>
nima-ha-ta-n
eat-CAUS-PAST.ACT-1sA
'I have fed (sb.)'
OT:"dar de comer (pretérito)" (2774.)
- c. <nuemajaguan>
nima-ha-wa-n
eat-CAUS-ANT-1sA
'I had fed'
OT:"dar de comer (pretérito)" (2775.)

11.2.2.3 Causative verb with -*ta*

Causative derivations with the operator -*ta* are less frequent in the ALS. The marker likely derives from the transitive verbal root *tu ta* 'want' ("querer"). Accordingly, the causative stems derived by this operator indicate that something is wanted in the state or condition indicated by the root; i.e. "to want X"; e.g. *hara-ta* [heat-CAUS] 'to want heat = 'to toast' ("tostar").

- (11. 82) a. <jaraLa>
hara-ta
heat-CAUS
'to toast'
OT:"tostar" (2468.)
- b. <eréLa>
ʔere-ta
*fear?-CAUS
'to frighten'
OT:"espantar" (2268.)
- c. <nariLá>
nari-ta
*know-CAUS
'to teach'
OT:"enseñar" (2732.)

In X_G and X_{Ch} , this pattern is attested in several examples with transitive roots. In X_{Ch} the causative marker also occurs with anterior stems ending in -*wa* (d).

- (11. 83) a. <eré-ta>
ʔere-ta
*fear?-CAUS
'to chase, scare away'
OT:"arrear" (G-S)
- b. <na adislay ni?>
*nari-ta-y ni
*know-CAUS-3sA PN:1s
'he taught me'
OT:"¿quién te enseño? [sic]" (Ch-F)
- c. <omola>
(ʔoš)omo-la
smell-CAUS
'to smell'
OT:"oler" (Ch-F)
- d. <yaguarla>
(hi)ya-wa-ta
chop-ANT-CAUS
'to chop with machete'
OT:"machetear" (Ch-P)

Causative stems derived by -*ta* exhibit transitive morphology and are attested with transitive cross-referencing suffixes (11. 84a) and TAM-markers (b).

- (11. 84) a. <jaraLán>
hara-ta-n
heat-CAUS-1sA
'I toasted (it)'
OT:"tostar (pretérito)" (2469.)
- b. <jaraLaguan>
hara-ta-wa-n
heat-CAUS-ANT-1sA
'I had toasted'
OT:"tostar (pretérito)" (2471.)

The causative marker -*ta* differs functionally from the homonymic agentive and active past marker. The following examples illustrate that both operators co-occur on the same roots. Causative stems with -*ta* can also take the antipassive marker -*ki* (b).

- (11. 85) a. <jaraLaLan>
hara-*ta-ta-n*
 heat-CAUS-PAST.ACT-1sA
 'has toasted'
 OT: "tostar (pretérito)" (2470.)
- b. <nariLaeiLa>
nari-*ta-k'i-ta*
 *know-CAUS-AP-AGT
 'who teaches = the teacher'
 OT: "el doctrinero, maestro" (4155.)

The following examples suggest that there is a functional difference between a causative marker *-ta* and a causative marker *-t*. The term *nari~~t~~ak'i~~t~~a* 'teacher' literally translates as '(the one) who teaches' whereas the term *nari~~t~~k'i~~t~~a* 'student/pupil' is semantically '(the one) who learns/studies'. The difference between the given stems is *nari-~~t~~a* [*know-CAUS] 'to teach' and *nari-~~t~~* [*know-CAUS] 'to study'. Both verb stems indicate active activities. Whereas 'to teach' requires three core arguments, 'to study' is a simple transitive verb that requires only two. Since this is the only example of this kind in the data, it remains unresolved whether *-ta* and *-t* are indeed distinct operators.

- (11. 86) a. <nariLaeiLa>
nari-*ta-k'i-ta*
 *know-CAUS-AP-AGT
 'who teaches = the teacher'
 OT: "el doctrinero, maestro" (4155.)
- b. <nariLeiLa>
nari-*t-k'i-ta*
 *know-CAUS-AP-AGT
 'who learns = the student'
 OT: "el discípulo" (4157.)

11.2.3 Transitive positionals

There are transitive verbs that denote a verbal action of something being brought into the state described by a positional root. Transitive positional verbs in Xinka are formed with suffixes of the pattern *-Ci* and with the directional verbs *ta* and *ku*. None of these processes of derivation is productive.

11.2.3.1 Transitive positional verbs derived by *-Ci*

Transitive positional verbs occur with the suffixes *-ni*, *-ri* (*-ši*) and *-ti*. These forms seem to differ semantically, but have in common that they end in vowel *-i*, although the underlying morphological pattern is not understood.

Three-syllabic positional verbs ending in *-ni* are attested in the ALS as well as in X_{Ch} and X_Y .

- (11. 87) a. <taçani>
taka-ni
 order-POS.VT
 'to impute, ascribe sth.'
 OT: "imputar, achacar" (3200.)
- b. <Łapini>
Łapi-ni
 carry-POS.VT
 'to carry, bear'
 OT: "cargar al hombro (pret.)" (2580.)
- c. <curnicapusz>
***kur(u)-ni kapuš**
 ?-POS Sp: end
 'candle stub'
 OT: "cabo de candela" (3774.)
- (11. 88) a. <čoyeʔni ʔay>
 čoyeʔ-ni ʔay
 cut-POS.VT PROG+3s_{DEP}
 'they are bending down (corn stalks)'
 OT: "están doblando" (Ch-MQa)
- b. <guurunin>
 wuru-ni-n
 ?-POS.VT-?
 'fall down, plunge down'
 OT: "rodar, desbarrancarse" (Ch-C)

- c. <josní>
 hos-ni
 ?-POS.VT
 'stumble, fall'
 OT: "tropezar" (Y-C)

The same suffix is attested in X_{Ch} and X_Y , where it occurs in most contexts in an abbreviated form *-n*. The abbreviated forms are not definitely identified. Since all examples are from secondary sources, the marker *-n* could also simply indicate the first person singular, or it could derive etymologically from the postpositional determiner *na* (and not *ni*), which may originally have indicated the unspecific object of the transitive action that has become grammaticalised.

(11. 89)	a. <caman> kama-n *hug-POS.VT 'embrace' OT: "abrazar" (Ch-C)	b. <turin> turi-n ?-POS.VT 'put, insert' OT: "echar, meter" (Y-C)

Three-syllabic transitive verbs that end in *-ri* imply a directional meaning away from the deictic focus, i.e. 'from' or 'off' (Spanish *des-*). The origin of the operator cannot be determined.

(11. 90)	a. <pipiri> pipi-ri ?-POS.VT 'to gin cotton' OT: "desmotar" (2872.)	b. <szapári> šapa-ri ?-POS.VT 'to de grain' OT: "desgranar" (3118.)
	c. <szaɛari> šak'a-ri ?-POS.VT 'to scare away' OT: "ahuyentar, espantar y correr animales" (3092.)	

In the comparative data the suffix is attested with the same and similar semantic contexts (i.e. 'to gin or comb cotton', 'to burp, have hiccup', 'to shake, tremble'). Most contexts indicate that something is 'taken from X'.

(11. 91)	a. <pípri> pip(i)-ri ?-POS.VT 'to gin (cotton)' OT: "desmotar" (G-S)	b. <pöpöre> pipi-ri full-POS.VT 'to burp' OT: "eructar" (Ch-F)
	c. <süstürre> sisi-ri ?-POS.VT 'to tremble' OT: "temblar" (Y-C)	

It is not clear whether verbs ending in *-ši* or *-ɕ'i* are functionally related to this operator. It may actually indicate the semantic opposite, i.e. 'to add sth. to X'

(11. 92)	a. <tamptxi> tan-ɕ'i ?-POS.VT 'to twist' OT: "torcer" (3215.)	b. <szaczi> šak-si L-M:white-POS.VT 'to bleach' OT: "colar, cerrir" (3097.)

- c. <szárszi>
šar-ši
 ?-POS.VT
 'to pour, to water'
 OT: "regar, esparar el agua menudamente" (3129.)
- (11. 93) a. tama-ǵ'i?
 ?-POS.VT
 'to twist, spin' (G-RHG)
- b. <yuncháchi>
 yu-n ča-či
 PROG-1s_{DEP} *L-M:white?-POS.VT
 '*I am bleaching'
 OT: "colar" (Y-C)

The function of the operator *-fi* that likewise seems to derive transitive verbs from positional roots cannot be concluded from the semantic contexts. The marker could be etymologically related to the comitative preposition *fi* "con".

- (11. 94) a. <guaszaLi>
waša-ti
 ?-POS.VT
 'to dress'
 OT: "meter, ponerse el vestido" (2319.)
- b. <yueguaLi>
yíwa-ti
 ?-POS.VT
 'to lose'
 OT: "perder" (3554.)
- (11. 95) a. <?uwa-ti>
 ?uwa-ti
 ?-POS.VT
 'to kill'
 OT: "matar" (G-S)
- b. <yicualjli>
 yikwa-ti
 ?-POS.VT
 'to lose'
 OT: "perder" (Ch-F)
- c. <n'guajli>
 n-wa-ti
 1sS-irse-POS.VT
 'to close'
 OT: "tapar" (Y-C)

11.2.3.2 Motion/positional verbs with directional markers

There are a number of verbs expressing motion and position that end in *-ta* and *-ku*. Both markers seem to be directionals/motion verbs that have become grammaticalised. Most of these verbs are transitive.

The centric directional *ta?* 'come' (see § 14.1.2) derives motion verbs and is attested with Xinka (11. 96a-b) and with borrowed roots (c-d). It is not clear whether *-ta* in the Spanish loan *pahata* 'to pay' ("pagar") has to be identified as an assimilation of Spanish final *-r* to Xinka phonology, or whether the syllable is identical with the directional marker (c). The morphology of the intransitive form *wašata* 'enter' is transparent in that it likely combines the intransitive root *wa* 'go', the preposition *ša* and the centric directional *ta* (a).

- (11. 96) a. <guaszata>
wa-ša-ta
 go-PREP:inside-DIR
 'to enter'
 OT: "entrar" (2325.)
- b. <jurta>
hur-ta
 opening-DIR
 'to dislocate'
 OT: "desocar, dislocar" (2532.)
- c. <pajata>
paha-ta
 Sp:pay-DIR
 'to pay (sth.)'
 OT: "pagar" (2810.) [L-S]
- d. <pueŁta>
pit-ta
 ?-DIR
 'to punch, shoot with arrow'
 OT: "flechar, dar de estocadas o tastasos" (2988.) [L-M]

In the comparative data there are several attested cases of intransitive and transitive verbs ending in *-ta*, but the forms are often not morphologically or semantically transparent.

- (11. 97) a. wiša-ta
? -DIR
'to whistle' (G-SH)
- b. <nanactá>
nanak-ta
? -DIR
'to loosen'
OT: "soltar" (Ch-F)
- c. <lájta>
lah-ta
? -DIR
'to push'
OT: "empujar" (Y-C)

A number of transitive positional verbs end in *-ku*, the etymological origin of which may be the motion verb *ku* 'go, walk'. The semantic contexts suggest that the function of *-ku* is to derive a transitive verb that indicates that something is brought into the state indicated by the nominal root (or derivational basis).

- (11. 98) a. <nuszucu>
nušu-ku
smoked-DIR
'to smoke sth.'
OT: "ahumar" (2761.)
- b. <piszáeu>
piša-ku
tight-DIR
'to blunt'
OT: "despicar, despuntar" (2890.)
- (11. 99) a. mumu-k'u hi?
sing-DIR PROG+3s_{DEP}
'he/she is singing' (G-SH)
- b. <jamacú>
hama-ku
ripe-DIR
'to fulfill, complete'
OT: "cumplir" (Ch-P)

11.2.4 Verbalisation with prefix *ʔi-*

The prefix *ʔi-* could be the trace of an earlier and now non-productive verbalisation process. The indication that *ʔi-* may be a separate morpheme is provided by the verbs *ʔiwa* and *ʔišaka*, which have been borrowed from Western Mayan languages, with *ʔiwa* originally deriving from pMZ *way* and *ʔišaka* from **sak ha* [white-water] 'corn gruel'. The semantic contexts would suggest that the prefix *ʔi-* could mean something like 'do, make', i.e. *ʔi-wa* [*make-food] 'make tortillas'; *ʔi-pala* [do-bath] 'to take a bath', *ʔi-saka* [do-*atole] 'to drink'.

- (11. 100) a. <ygua>
ʔi-wa
CAUS-food from corn
'make tortillas'
OT: "tortear" (2385.)
- b. <iszaca>
ʔi-šaka
CAUS- L-M:corn gruel
'to drink'
OT: "tomar" (2420.)
- c. <ipala>
ʔi-pala
CAUS-*bath
'to bath'
OT: "bañar" (2411.)
- d. <iguatxa>
ʔi-waɕ'a
CAUS-?
'to spin'
OT: "hilar" (2391.)
- e. <yszâpa>
ʔi-šapa
CAUS-?
'to leave'
OT: "salir" (1967.)

11.3 Derivation of intransitive verbs

Processes that derive intransitive stems in Xinka include (1) the detransitivisation of antipassive verbs, (2) the derivation of inchoative verbs from nouns and possibly (3) the formation of intransitive positional verbs. It needs to be pointed out that antipassive and inchoative verbs employ the same operator *-ki*, but express different functions and occur in different formal contexts.

11.3.1 Antipassive verbs

The suffix *-ki* (or *-ke*, depending on the vowel harmonic pattern of the root, see § 4.4.2) derives intransitive verbs from transitive roots/stems; it is in some cases also attested with intransitive roots.

The derived form takes intransitive inflectional morphology and can be argued to function as an antipassive verb.¹⁶² Antipassive voice mostly occurs in ergative languages, where it defines detransitive predicates that are characterised by the omission or peripheral function of the O argument, the overt marking of intransitivity on the verb, and the transformation of A > S (Dixon 1994:146; Payne 1997:219). In this, antipassive is distinguished from other detransitive operations, such as passive (O > S = patient), anticausative (O > S = agent) and reflexive (S = O).

The operator seems to have been grammaticalised from the intensifier-reflexive root *ki-* (§ 7.2). It has been cross-linguistically shown that diachronic reanalysis of reflexives can give rise to detransitivising operators such as passive, antipassive (Dixon 1994:147) and anticausatives (see Kemmer 1988 *apud* Givón 2001(II):105; 119; Heine & Kuteva 2002:252). Antipassive, or depatientive, verb forms grammaticalised from reflexives often express general situations (see e.g. Lichtenberk 2000:42). Transitive verbs marked with the suffix *-ki* form intransitive stems that often express generic, habitual/customary or occupational activities (11. 101). The operator decreases the valency of the transitive verb by reducing the object argument of the predicate. The lexical meaning of the root is only changed peripherally. The derived intransitive stem expresses the same concept as the transitive basis, but demotes the object of the transitive action. However, in the case of the detransitivised verb form *ʔerteke* (11. 101e), the suffix may also be interpreted as a reflexive or an anticausative marker.¹⁶³

(11. 101) a. <tuyáquí> tuya-ki scold sb.-AP 'scold (generally) = litigate, argue' OT:"pleitar" (3363.)	b. <teeròque> te:ro-ke kill sb.-AP 'kill (generally) = to fish' OT:"pescar" (3287.)

¹⁶² Chris Rogers indicated the antipassive function of this operator in his paper on the 'Theoretical Significance of Xinkan' (see footnote 128).

¹⁶³ It would also be plausible to analyse the verb form *ʔerteke* as an inchoative verb (see next § 11.3.2) that derives an intransitive from an adjectival stem, i.e. **ʔerte-ke* [*scared/frightened-INCH] 'become scared/frightened'. However, it is not clear whether the stem **ʔerte-* does indeed have a nominal/adjectival function.

c. <araqui> ʔara-ki send sth.-AP 'to send (generally) = view, observe' OT: "mirar" (2080.)	d. <uýszici> *ʔuyši-k('i) hear sth.-AP 'to hear (generally)' OT: "oir" (3487.)
e. <a erLèque> ʔa-ʔerte-ke 3pS-fear/scare-AP/REFL/INCH? 'they get scared' OT: "se espantan" (2041.)	

The comparative data confirm the distribution of *-ki* as an intransitiviser. Some examples illustrate the reflexive origin of the marker; e.g. *werše-ki* [throw-REFL] 'throw oneself' = 'to fall' (11. 102d). The final vowel *i* of the suffix is often dropped and antipassive verbs are simply marked with final *-k* or *-k'* (b, e).

(11. 102) a. šuwi-ki sweep (sth.)-AP 'to sweep' (G-RHG)	b. čuku-k tie sth.-AP 'to tie (generally)' (G-RHG)
c. <puriki> puri-ki respond-REFL/AP 'respond oneself = get married' OT: "casarse" (Ch-C)	d. <huerxeki> werše-k'i throw-REFL 'throw oneself = to fall' OT: "caer, caerse" (Y-C)
e. <ripick> ripi-k' hurt/wound-AP 'cut, wound' OT: "cortar, herir" (Ch-JC), (Ch-P)	

Maldonado de Matos represents the antipassive marker mostly as <qui>. There are only a few examples where the suffix is indicated as <ei> (11. 101d-e), suggesting that the morpheme may be glottalised when occurring on derived verbal stems or on roots with the consonant *k*. In their field notes from X_G Campbell and Kaufman give the marker as *-k'i*. In the prephonemic comparative data, the morpheme is also indicated with the grapheme <k>, which is often used to mark glottalisation (see § 4.1.3.1). In the ALS the antipassive marker is mostly attested with agentive and instrumental nouns, i.e. it derives intransitive verb stems that take further derivational morphology in form of the agentive marker *-ʔa* (§ 11.1.3.2) or the instrumental suffix *-k* (§ 11.1.3.1). With agentive (11. 103) and instrumental nouns (11. 104) the antipassive suffix is generally indicated as <ei>. This seems to suggest that the glottalisation of the velar may be morphophonemic and caused by the suffixation of the antipassive stem (see § 4.4.6).

(11. 103) a. <nuemajasiLa> nima-ha-k'i-ʔa eat-CAUS-AP-AGT '(the one) who nourishes = servant' OT: "sirviente" (4185.)	b. <εverszaeiLa> k'irša-k'i-ʔa comb-AP-AGT '(the one) who combs = hairdresser' OT: "peinador" (3790.)
(11. 104) a. <sueuckie> suk'u-k'i-k' tie-AP-INSTR 'instrument for tying, knotting = rope?' OT: "cosa con que se amarra" (4391.)	b. <εvetueic> kñ-k'i-k measure-AP-INSTR 'measuring rod' OT: "medida, vara de medir" (3794.)

Agent nominalisations that are derived from antipassive verbs indicate that the activity carried out by the referenced agent is general or occupational/institutional. Instrumental nouns with an antipassive basis denote an item that is generally used for the activity described by the transitive root. Agentive (11. 105) and instrumental marking (11. 106) on antipassive stems is also attested in the comparative data.

(11. 105)	a. <pirikijli> *piri-k'i- ta see-AP-AGT '(the one) who sees = the doctor' OT: "el médico" (Ch-C)	b. <caykil> kayi-ki- ta(a) sell-AP-AGT '(the one) who sells = seller, merchant' OT: "vendedor" (Ch-F)
(11. 106)	a. <guastitikik> wastit-k'i-k dress-AP-INSTR '(the) dress' OT: "vestido" (Ch-F)	b. <sujikic> suhi-k'i-k sweep-AP-INSTR 'broom' OT: "escoba" (Y-C)

The intransitivised stems can occur with other inflectional markers, such as tense/aspect suffixes (§ 12.2) or the imperative marker *-ya* (§ 13.1.2). In the majority of cases, however, antipassive verbs mark past-time reference with the stative-resultative suffix *-ʔ* (§ 12.2.1).

(11. 107)	a. <luququila> luku-ki-la find-AP-PAST.ACT 'has met' OT: "se encontró" (Ch-Z)	b. <muy tz'ana kiya> muy- ɕ' ana-k'i-ya 2sS/A-?-AP-IMP.VI 'shut up!' OT: "cállate!" (Y-C)

In the ALS and the comparative data, the operator *-ki* also occurs on a few intransitive roots. In these cases the morpheme cannot function grammatically as an antipassive, since antipassive verbs can only be derived from transitive stems. However, the semantics correspond with the function of the antipassive suffix attested on transitive stems, in that the verb forms seem to express that the activity is general and non-specific. It is possible that these forms actually mirror the Spanish reflexive verbs "irse" and "dormirse".

(11. 108)	a. <acùquí> ʔaku:-ki go-REFL? 'go (oneself/generally) = walk, go for a walk' OT: "andar, pasear" (2055.)	b. <tiɕiɕLa> ti:k'i-k'(i)-ta sleep-REFL?-AGT '(the one) who generally sleeps = sleepyhead' OT: "dormilón" (4574.)

In the comparative data this derivational process is mostly attested with motion verbs.

(11. 109)	a. <akúki>, <akuki> ʔaku-ki go-REFL? 'go (oneself/generally) = to walk' OT: "andar" (G-S), (G-RHG); "andar" (Ch-F)	b. <curúki> kuru-k'i run-REFL? 'run oneself = hurry' OT: "de prisa, correr" (Y-C)

The intensifier-reflexive root seems to be the source not only for the antipassive suffix, but also for the operator that derives inchoative verbs from nominal stems (see next § 11.3.2); whether these two operators are related to the suffix *-ki* that derives verbal nouns, is not fully understood (see § 11.1.1).

11.3.2 Inchoative verbs

The term 'inchoative' is applied here to refer to intransitive stems that denote a change-of-state, i.e. 'become X' with X being indicated by the derivational basis (Payne 1997:95). In Mesoamerican linguistics, inchoative verbs are often more appropriately designated as 'versives' (see e.g. Kaufman 1990). The inchoative originally indicates an inceptive aspect 'to begin sth.', which is not necessarily expressed by Xinka inchoative stems that may simply indicate that sth./sb. turns into the state indicated by the nominal stem.

In Xinka, inchoative verbs are derived by means of the operator *-ki*, which seems to derive from the intensifier-reflexive and can thus be considered to be related to the valency-reducing operator that marks antipassive on transitive roots (see above § 11.3.1).

In Maldonado-Xinka we find inchoative verbs with a nominal basis, including nouns, adjectives and participles. The intransitive stem describes that the subject is turning into the state (or assuming the properties) that are expressed by the nominal/adjective root, e.g. 'to become blind', 'to become blessed'.

- (11. 110) <pogmóque>
 pohmo-ke
 blind-INCH
 'become blind'
 OT: "cegar" (2895.)

Examples with a true noun base are only attested in the comparative data. Schumann defines *-ki* as an operator that derives verbs from nominal roots (1967:52). In the given examples, the derived inchoative stems indicate that the subject becomes or gets what is indicated by the noun; e.g. 'to get cough' = 'to cough'.

(11. 111)	a.	<tuʔúki> tuʔu-ki flower-INCH 'to bloom, flourish' OT: "florear" (G-S)	b.	<ojo-ki-ay> ʔoho-ki ʔay cough-INCH PROG 'be coughing' OT: "toser" (Ch-F)

Inchoative verbs derived from active participles marked with *-ʔ* (see § 11.1.2.3) seem to glottalise the velar stop of the inchoative marker.

(11. 112)	a.	<saraŁei> tawa-ʔ-k'i *bless?-PART.ACT-INCH 'become blessed' OT: "bendecir" (3247.)	b.	<taguaŁei> sara-ʔ-k'i cold-PART.ACT-INCH 'become cold' OT: "enfriar" (3042.)

Examples of inchoative verbs with a participle basis are also attested in X_{Ch}. The use of the grapheme <k> in the Fernández-data likewise seems to indicate the glottalisation of the suffix.

(11. 113)	a.	<turáhki> tura-h-k'i bring-PART.ACT-INCH 'to submit' OT: "entregar" (Ch-S)	b.	<mötajki> míta-h-k'i ?-PART.ACT-INCH 'to dream' OT: "soñar" (Ch-F)

11.3.3 Intransitive positionals

There are several non-productive processes that seem to derive intransitive positional verbs. Many of these forms can be identified as Mayan loans, so the non-productive operators may have been borrowed along with the form.

There is a group of intransitive verbs ending in *-na* that describe states and may therefore be classified as positional verbs. The operator may have its etymological origin in the auxiliary verb *ʔuna* 'have' ('tener, haber'); e.g. *hara-na* [heat-have] 'to have heat' = 'to get ill' (cf. § 10.1.3.4).

(11. 114) a. <jarana> hara-na heat-POS.VI 'to get ill' OT: "enfermarse" (2465.)	b. <yoʔana> yoʔa-na slippery-POS.VI 'to slip, fall' OT: "desbarrancarse" (3529.) [L-M]
c. <taana> ta:-na come-POS.VI 'to be' OT: "ser" (1878.)	d. <chèʔna> čēʔ(e)-na twist-POS.VI 'to mess up, put in disorder' OT: "desbaratar" (2190.)
e. <posana> posa-na ?-POS.VI 'to jump' OT: "brincar" (2915.)	

In a number of contexts, three-syllabic intransitive verbs indicating position or state end in the suffix *-ma*. The origin of the operator is not entirely clear, but it might be related to the deictic root *ma-*, which is attested in demonstrative and interrogative contexts (§ 8.5.2). The suffix *-ma* could simply be an assimilation of *-na*.

(11. 115) a. <ɛocama> ko(mo)-ka-ma knee-CAUS-POS.VI 'to kneel down' OT: "hincarse" (2159.)	b. <txajama> ɕ'aha-ma ?-POS.VI 'to sting, hurt with thorn' OT: "espinarsse, lastimarse" (3389.)
c. <teʔama> teʔa-ma burned-POS.VI 'to flare' OT: "lamear" (3267.)	d. <Locama> ʔoka-ma boiling-POS.VI 'to boil' OT: "hervir el agua" (2605.) [cf. pCh * <i>lok</i> 'boiling, froth']

In the comparative data the marker is attested primarily with Mayan loans.

(11. 116) a. <tz'orana> ɕ'ora-na *dripping-POS.VI 'to drip' OT: "gotear" (Ch-F)	b. <huoróna> woro-na foam-POS.VI 'to boil' OT: "hervir" (Y-C) [L-M: GK * <i>woq</i> 'to boil']
(11. 117) a. <kišma> *kiɕ'u-ma change-POS.VI 'to give as present' OT: "regalar" (G-S) [cf. pM * <i>k'eš</i> 'change']	b. <jatixma> hatiš-ma sneeze-POS.VI 'to sneeze' OT: "estornudar" (Ch-C) [cf. pM * <i>hat'is</i> ~ * <i>hat'iš</i>]

There are several three-syllabic verbs that share the final suffix $-mV_1$. However, since this pattern is attested with intransitive as well as transitive verbs that are both not semantically transparent, it is not clear whether we are dealing with a regular morphological process. Examples of verbs following this pattern are: *ʒoromo* 'to collect, pick up', *ʒiʒumu* 'smell', *ʒiyumu* 'to hurt (oneself)', *pe#te-me* 'to return', *tuha-mi* 'spit out'.

12 Tense/aspect/mode

This chapter deals with all morphosyntactic operations that indicate temporality and aspectuality of Xinka predicates (cf. Payne 1997:233-4). Although modality is treated in the following § 13, some grammatical categories of mode interrelate with tense/aspect and are included within the scope of the present chapter.

Xinka employs various formal coding strategies to express TAM-categories, including tense/aspect-based person-marking on the verb by means of cross-referencing affixes, inflectional TAM-markers, auxiliary verb constructions and other periphrastic expressions, as well as TAM-adverbials that can accompany any of the aforementioned predicate types. Together these coding devices form the system of TAM-marking in Xinka. The precise morphosyntactic function of some of these TAM-markers is not well understood, though syntactic hierarchy and pragmatic factors play a role.

The Xinka TAM-system interacts with the system of grammatical relations, as pronominal cross-referencing on the verb is dependent on tense/aspect (see § 15). Maldonado de Matos employs cross-referencing prefixes to mark person agreement on intransitive and transitive verbs in the temporal categories of *presente*, *pretérito imperfecto* and *futuro imperfecto*. These Spanish categories share the notion of a non-completed event in a present, past and future situation (cf. Quilis 1980:32-36; Nebrija 1980 [1492]:237-245). The tense categories of *pretérito perfecto*, *plusquamperfecto* and *futuro perfecto* that share a common reference to a completed event are indicated with a different set of inflectional markers. In these categories, transitive verbs are marked for person agreement with cross-referencing suffixes, while intransitive verbs employ prefixes and the stative-resultative suffix *-ʔ*. The distribution of person-marking patterns in the different temporal categories of the ALS seems to suggest that verbs with cross-referencing prefixes refer to 'imperfective events', while transitive verbs employing cross-referencing suffixes or intransitive verbs that take prefixes and the stative marker *-ʔ* refer to 'perfective events'. This means that the functional categories of the Latin model of grammar applied in the ALS seem to indicate two basic verbal aspects that are encoded by person-marking, i.e. imperfective, which describes a temporally not bounded situation and is characterised as duration, and perfective, which describes a temporally bounded situation and is characterised as completion.

However, analysing the distribution of cross-referencing affixes in the comparative data, the aspectual character of the person-marking patterns is less clear. Here, cross-referencing prefixes are generally associated with nonpast events, while cross-referencing suffixes on transitive verbs (and *-ʔ* on intransitives) seem to relate to past-time situations only. Syntactic contexts and translations in the secondary data are not specific as to whether the marking pattern indicates the perfectivity or imperfectivity of a situation, or whether it simply distinguishes past and nonpast events.

A tense-based distinction of person-marking on the verb would refer to the location of an event in time, i.e. past, present and future (Comrie 1999:363), while an aspect-based distinction indicates a difference in the internal temporal structure or

constituency of a situation, thus referring to the type of action at a specific location in time (Comrie 1976:3; Chung & Timberlake 1985:202). Verbal aspect is generally more common in Mesoamerican languages than tense (cf. Campbell 1979:957; Suárez 1983:71-72; Campbell, Kaufman & Smith-Stark 1986:551) and is shown to often combine with other TAM-markers (see Suárez 1983:71). An aspectual definition of the person-marking pattern would imply that 'perfective' and 'imperfective' verb forms would be contrastive with respect to present- and past-time reference (Bybee *et al.* 1994:125). Perfectives, for instance, would have by definition other, nonpast uses (e.g. future), by which they are distinguished from simple pasts (*ibid.*:95).

Cross-referencing suffixes and stative-resultative marking are categories that occur in Xinka not only with predicates signalling 'past' or 'perfective' events, but also with subordinate predicates. In subordinate context, lexical and auxiliary verbs with cross-referencing suffixes can refer to other than past events, including progressives and futures. However, in these periphrastic constructions it is the construction as a whole, not the individual verb form, which indicates progressive aspect or future tense.

The nonpast/imperfective and past/perfective verb forms correlate with other tense/aspect categories in Xinka. Verbs marked with the active past suffix *-ʔa* take nonpast/imperfective person-marking prefixes, while verbs with the anterior/perfect suffix *-wa* are followed by cross-referencing suffixes.

Table 12. 1: Correlation of person-marking and past-time reference on the verb

	nonpast cross-referencing	past cross-referencing
stative/resultative	-ʔ	
active past	-ʔa	
anterior/perfect		-wa

Categories discussed in this section include present- (§ 12.1) and past-time references (§ 12.2), progressive aspect (§ 12.3), periphrastic future constructions only attested in the comparative data (§ 12.4) and TAM-adverbials (§ 12.5).

12.1 Present-time reference

Xinka predicates referring to a present situation are unmarked for tense/aspect; this excludes progressives (§ 12.3) and stative-resultatives (§ 11.1.2.1, § 12.2.1.2) that are realised by different coding strategies. Intransitive (12. 1) and transitive (12. 2) verbs referring to nonpast events mark person agreement with cross-referencing prefixes. In the third person, transitive and intransitive verbs use different prefixes (see § 6).

(12. 1) a. <an guaszata> ʔan-waʂata 1sS-enter 'I enter' OT:"yo entro" (1971.)	b. <cà acù> ka-ʔakuʔ 2sS-go 'you go' OT:"tú vas" (1643.)
c. <a màra> ʔa-ma:ra 3sS-rest 'he/she rests' OT:"aquel descansa" (1473.)	d. <muc tá> muk-taʔ 1pS-come 'we come' OT:"nosotros venimos" (1401.)

- (12. 2) a. <ca mere>
ka-mere
 2sA-break
 'you break it'
 OT: "tú rompes" (575.)
- b. <mu piri>
mu-piri
 3sA-see
 'he/she sees it'
 OT: "aquel ve" (739.)
- c. <muc oròmo>
muk-?oromo
 1pA-pick up
 'we pick up it'
 OT: "nosotros recogemos" (909.)
- d. <ca sàmu ay>
ka-samu ?ay
 2pA-catch 2PL
 'you (pl.) caught it'
 OT: "vosotros cogéis" (1074.)

This marking pattern for present situations is confirmed by the comparative data, where we find intransitive (12. 3) and transitive verbs (12. 4) with cross-referencing prefixes referring to present as well as future situations. In some cases translation contexts are given as progressives. However, since progressive is a separate grammatical category in Xinka (§ 12.3) and since habitual situations are expressed with the same verb form (12. 5), it can be positively affirmed that verbs that express person with cross-referencing prefixes refer to the temporal category of present/nonpast.

- (12. 3) a. <anwiriki>
 ?an-wiriki
 1sS-speak
 'I speak / I am speaking'
 OT: "yo estoy hablando" (G-S)
- b. <a kagui>
 ?a-k'awi
 3sS-cry
 'he/she cries'
 OT: "llora" (Ch-Z)
- c. <ajla muj tiki nec>
 ?a?ta muh-ti(:)ki nek_s
 tomorrow 1pS-sleep PN:1p
 'tomorrow we sleep'
 OT: "mañana dormiremos" (Y-C)
- (12. 4) a. mu-kunu mapu_o
 3sA-buy tortilla
 'he buys tortillas' (G-SH)
- b. <n'dala ni pumu>
 n-tala ni_A pumu_o
 1sA-burn PN:1s incense
 'I burn copal'
 OT: "quemo copal" (Ch-C)
- c. <mucúru tinátu>
 mu(k)-kuru tinatu_o
 1pA-run flute
 'we run the flute = we play flute'
 OT: "vamos a tocar flauta" (Y-C)
- (12. 5) ka-sawaç'a naka_A trigo_o
 2sA-sow PN:2s Sp:wheat
 'you sow wheat' (G-SH)

In the ALS nonpast predicates combine with TAM-adverbials to indicate the different tense categories of the Latin model of grammar, including future (a), future imperfective (b), future infinitive (c), imperfective (d) and imperfective subjunctive (e). The Latin categories all signal an event that is not-completed or imperfective.

- (12. 6) a. <an acù pè>
?an-?aku? pe?
 1sS-go FUT
 'I will go'
 OT: "yo iré" (1666.)
- b. <canuca pà pè tiyg...>
ka-nuka pa? pe? ti:?-h
 2sA-give PFV FUT IO-3s
 'you gave (= would give) him/her...'
 OT: "si le dieres..." (2038.)

- c. <a acù nàL pè>
ʔa-ʔakuʔ naʔt peʔ
 3sS-go IMPFV FUT
 'one will have to go'
 OT: "haber de ir" (1714.)
- d. <cà pùla nàL ay>
ka-pula naʔt ʔay
 2pA-make IMPFV 2PL
 'you (pl.) made (it)'
 OT: "vosotros hacíais" (403.)
- e. <ca yguitzi ma nàL>
ka-ʔiwiʔ'i ma(?) naʔt
 2sA-hear COND IMPFV
 '(if) you heard (= would hear)'
 OT: "si oyeras..." (2031.)

Some of these forms are attested in the comparative data. The perfective adverbial can co-occur with nonpast verbal predicates indicating an immediate event. The future adverbial regularly combines with nonpast verbs.

- (12. 7) a. ʔan-muču paʔaʔ wiriki
 1sS-get tired PFV talk
 'I am already tired of talking' (G-RHG)
- b. <n'paljta bari>
 n-paʔta bari
 1sA-pay PFV
 'I already paid'
 OT: "he sido pagado" (Ch-C)
- c. <npula pi ní>
 n-pula pi níʔ
 1sA-make FUT PN:1s
 'I will make (it)'
 OT: "yo haré" (Ch-C)

In the Maldonado-data intransitive and transitive nonpast/present verbs in subordinate clauses are attested with both, cross-referencing prefixes and dependent-marking cross-referencing suffixes.

- (12. 8) a. <asüec muc terò>
ʔasik muk-tero:
 CONJ 1pS-die
 'when we die'
 OT: "...cuando nos muramos" (1953.)
- b. <szàL Lan muc pùla na oracion>
ʃaʔ ʔan muk-pula na oración
 good OPT 1pA-make DET Sp:prayer
 'they say, it is good (that) we make (= say) our prayer'
 OT: "dicen que es bueno que hagamos oración" (2028.)
- (12. 9) a. <szàL cangui szàma gracia ayaàc asüec muc terò>
ʃaʔ ka-n wi ʃama gracia ʔaya:-k
 good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP}
 'it is good (that) we are in grace'
 OT: "bueno es que estemos en gracia" (1953.)
- b. <ca tà pè aLa uea can confesar>
ka-taʔ peʔ ʔaʔa ʔuka-kan confesar
 2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

In the comparative data subordinate predicates that are not introduced by a syntactic subordinator are always indicated as deranked verb forms, i.e. with dependent-marking cross-referencing suffixes (12. 10), or as nonfinite verbs; i.e. unmarked infinitives, stative participles (intransitive verbs) or forms with subjunctive marking *-n* (transitive verbs) (see § 13.3).

- (12. 10) ʔaku-n paʔaʔ
 go-1s_{DEP} PFV
 '(that) I am already going' (G-SH)

Nonpast/imperfective verbs can also occur as unmarked or stative stems, with the subject being expressed by an independent pronoun that usually precedes the verb. These constructions may be interpreted as simplified and reduced forms of verbal expression, although they also correspond structurally to cleft-constructions (§ 16.2.5.3).

(12. 11) a. <naca curú> nakaʃ kuru-ʔ PN:2s run-STAT 'you run / (it is you who runs)' OT: "tú corres" (Ch-C)	b. <nay tili naj man> nay_A tili nah man_O PN:2s see PN:3s DEM 'you see it / (it is you who sees him)' OT: "tú lo ves" (Y-C)

12.2 Past-time reference

There are different strategies for expressing past-time reference in Xinka including person-marking and inflectional TAM-suffixes.

Following the Latin style of lexical compilations (e.g. Nebrija's *Diccionario latino-español*) Maldonado de Matos indicates all verbal entries in the ALS-vocabulary with three stem forms.¹⁶⁴ While in traditional Latin grammar the stem forms indicate the preterite, passive and supinum, the three Xinka stem forms are defined by the colonial author as preterites that he all translates identically into Spanish as indefinite past or present perfect.

The first preterite stem indicated by Maldonado de Matos is the simple past/perfective verb form. Depending on their transitivity status verbs take distinct cross-referencing affixes; intransitives are additionally marked with the stative suffix -ʔ. The second stem form is marked with the suffix -*wa*(ʔ), the third stem form with the suffix -*wa*(ʔ). The stem forms of intransitive and transitive verbs in the ALS-vocabulary differ. Most intransitive stems seem to mark the presence of a final -ʔ in form of an accent on the final vowel of the stem or the glottalisation of the middle root consonant. Transitive stems, in contrast, are marked with the first person singular cross-referencing suffix -*n*, which corresponds again with the Latin tradition of dictionary compilation where stem forms are always indicated in the first person.

(12. 12) a. <màrà>, <maarà> Ø-ma:ra-ʔ 3sS-rest-STAT 'he is rested' OT: "aquel descansó..." (1487.) "descansar (pretérito)" (2644.)	b. <màra Łà>, <maralaa> Ø-ma:ra-ʔaʔ 3sS-rest-PAST.ACT 'he rested/did rest' OT: "aquel descansó ..." (1488.) "descansar (pretérito)" (2645.)

¹⁶⁴ It needs to be pointed out here that most of the missionary dictionaries compiled in Guatemala in the colonial era do not follow Nebrija's model of indicating preterite and passive stem forms with each verbal entry. Instead it had become a more common practice to indicate lexical entries in syntactic context and provide examples (e.g. the Coto-dictionary for Kaqchikel among others; Coto 1983 [1650]).

- c. <màraguà>, <maraguaa>
Ø-ma:ra-wa?
 3sS-rest-ANT
 'he has rested'
 OT: "haber descansado" (1548.)
 "descansar (pretérito)" (2646.)
- (12. 13) a. <piriyn>, <piriin>
piri:-n
 see-1sA
 'I saw (it)'
 OT: "yo vi, he visto" (749.)
 "ver (pretérito)" (2879.)
- b. <piriLa>, <piriLaan>
piri-ʔa:-n
 see-PAST.ACT-1sA
 'I saw/did see (it)'
 OT: "yo vi, he visto" (750.)
 "ver (pretérito)" (2880.)
- c. <piriguàn>, <piriguan>
piri-wa:-n
 see-ANT-1sA
 'I saw (it)'
 OT: "yo vi, he visto" (751.)
 "ver (pretérito)" (2881.)

The morphosyntactic functions of the different markers of past-time reference are not well understood. Maldonado de Matos' sees the use of the morphemes to be mainly determined by pragmatic and syntactic factors:

A mas de el preterito principal yà explicado, tienen los verbos de esta lengua otros dos preteritos menos principales, que hazen en *Guàn* y en *Lan*, vgr.: El verbo *Púla* el primer preterito haze *Pulàn*, el segundo *Pulaguàn*, y el terzero *Púla Lan*. Mas para la inteligencia de estos otros dos preteritos, se ha de advertir, que los naturales de esta lengua no usan generalmente siempre de ellos, sino solamente en algunos casos, como en interrogaciones, y respuestas, especialmente las afirmativas. De modo que siempre que se ofresca preguntar, responder, ó afirmar alguna cosa por el preterito, es mui elegante el uso de los dichos preteritos, pero siempre con la expresion de los pronombres primitivos correspondientes á la persona que haze (*Arte de la lengua szinca*, fol. 95v; Sachse 2004:89).

According to the colonial author past-time reference with the suffixes *-ʔa* and *-wa* is used in interrogative clauses and their declarative responses. The comparative data indicate that the function of the forms may be a bit more complex.

The suffixes employed in past-time reference are etymologically related with the operators for product and participant nominalisations. The simple past/perfective of intransitive verbs is marked with the same suffix *-ʔ* that derives the stative participle (§ 11.1.2.1), which denotes the result of a verbal action that is in process¹⁶⁵. The suffix *-wa* functions as an anterior/perfect-marker that occurs in clauses with adverbial left-dislocation and with subordinate predicates that are not coreferential with the subject of the main clause. The suffix seems to be etymologically related to the operator that derives the perfect participle (§ 11.1.2.2), which denotes the result of a verbal action after its completion (b). Given that the two participles and forms

¹⁶⁵ Note that the presence of a glottal stop in word final position causes the glottalisation process of the C₂ *š* > *ç*' (see § 4.4.6). Thus, the presence of the grapheme <tx> in the ALS-orthography implies the presence of final *-ʔ* even though it is not separately indicated by an accent on the last vowel.

(12. 14) a. <potxa> poç'a-? wash-STAT 'to be washed = laundry that is ready for washing' OT: "ropa que está pronta para lavar ..." (4319.)	b. <poszáguá> poša-wa wash-PART.PF 'has/was washed = laundry that has been washed' OT: "ropa lavada" (4324.)

- The suffix *-ʔa* indicates a past event that may have an optative connotation. The marker seems to be etymologically related to the nominaliser that derives the active participle (§ 11.1.2.3) and agentives (§11.1.3.2).

Table 12. 2: Functional comparison of markers for past-time reference

It will be argued in the following sections that with respect to the diachronic development it seems more likely that the TAM-suffixes develop out of the nominalisers/participles rather than vice versa.

12.2.1 Past/perfective

Transitive and intransitive verbs form past/perfective in different ways. Past/perfective intransitive verbs are marked with cross-referencing prefixes and the stative-resultative suffix *-ʔ*, while transitive verbs employ cross-referencing suffixes, suggesting a change in grammatical relations that is tense/aspect based (see § 15). The fact that the inflectional morphology of intransitive and transitive verbs differs in the past/perfective requires some comment. Employing the marker of the stative-participle, intransitive verbs express a resultative meaning, when referring to past-time events. Transitives employ suffixes that are otherwise used to mark the possessor on inalienably possessed nouns. Although the suffixes for past/perfective and possession

differ in the third person, both functions seem to be semantically related in the sense that inalienable possession and past both express unchangeable situations or states that have been brought about or are permanent. The simple past/perfective form of transitive verbs may therefore also be defined as a resultative.

12.2.1.1 Past/perfective of transitive verbs

Transitive verbs employ cross-referencing suffixes to encode past time-reference. The marking pattern is attested in the ALS (12. 15) as well as in the comparative data (12. 16). Maldonado de Matos defines the form as *pretérito perfecto* and translates it into Spanish with indefinite past tense or as present perfect.

- (12. 15) a. <piriyn>
piri:-n
 see-1sA
 'I saw (it)'
 OT: "yo vi, he visto" (749.)
- b. <mere cà>
mere-ka?
 break-2sA
 'you broke (it)'
 OT: "tú rompistes" (587.)
- c. <ormo i>
ʔor(o)mo-y
 pick up-3sA
 'he picked it up'
 OT: "aquel recogió, ha recogido" (920.)
- (12. 16) a. tero-y kah miya
 kill-3sA INDEF chicken
 'he/she killed a chicken' (G-SH)
- b. <pirín nak>
 piri:-n nak
 see-1sA PN:2s
 'I saw you'
 OT: "desde que te vi" (Ch-F)
- c. <sukí nay pelu>
 suk-i nay pe:lu(?)
 bite-3sA PN:2sf Sp:dog
 'the dog bit you'
 OT: "el perro te mordió" (Y-C)

To create the *pretérito*-categories of the Latin model of grammar including *pretérito perfecto*, *plusquamperfecto* and *futuro perfecto*, Maldonado de Matos combines suffix-marked transitive predicates with TAM-adverbials.

- (12. 17) a. <sàmuun mà>
samu:-n ma?
 catch-1sA COND
 'I should have caught'
 OT: "yo haya cogido" (1122.)
- b. <mere cà ayù pè>
mere-ka? ʔayu? pe?
 break-2sA AUX FUT
 'you will have broken'
 OT: "tú habrás rompido" (605.)
- c. <uiszicà paL nàL qui>
ʔuyši-ka? paʔ naʔʔ ki
 hear-2sA PFV IMPFV INTENS
 'you yourself had heard (it)'
 OT: "hubieras oído" (2018.)
- d. <puláí nàL qui Lic>
pula-y naʔʔ ki=ʔik
 make-3pA IMPFV INTENS=3PL
 'they (themselves) would have made it'
 OT: "aquellos hubieran hecho" (462.)

In the comparative data the only TAM-adverbial that is attested with past/perfective transitive predicates is the perfective **paʔ* (§ 12.5.2).

- (12. 18) a. na nin šuka-n paʔaʔ
 DET PN:1s eat-1sA PFV
 'I have already eaten' (G-JAP)
- b. <sucaibar>
 suka-y bar
 eat-3sA PFV
 'he has already eaten it'
 OT: "él lo comió, comido" (Ch-F)

In subordinate context transitive verbs employ the same set of dependent-marking cross-referencing suffixes that is used in present/nonpast contexts. There are no examples of past/perfective dependent predicates in the ALS, but the comparative data confirm the pattern.

- (12. 19) a. dixə ke sə nama-n wapili-n
 Sp: I said Sp: that Sp:REFL hurt-1sA_{DEP} foot/leg-1sP
 '... that I have hurt my foot' (G-JAP)
- b. <hucay despreciado pulacan burla ti libertad>
 ʔuka-y despreciado pula-kan burla ti:ʔ libertad
 do-3sA Sp:depreciated make-2sA_{DEP} Sp:joke PREP Sp:liberty
 'he has depreciated/despised that you make a joke of liberty'
 OT: "haber despreciado el burlarte de la libertad" (Ch-Z)

12.2.1.2 Resultative past/perfective of intransitive verbs

Intransitive verbs in declarative clauses with basic word order express past/perfective by means of the suffix *-ʔ* that is otherwise attested as a derivational marker for stative participles (§ 11.1.2.1). It can be argued that the past/perfective forms of intransitive verbs indicate 'resultatives' that describe the state brought about by past action rather than the action itself (cf. Bybee *et al.* 1994:63ff.).

In the ALS, *-ʔ* marks past/perfective on intransitive roots and stems that are translated into Spanish as preterite forms. Three-syllabic intransitive verbs delete *C*₂ upon inflection with *-ʔ*. In the original orthographic context the marker is represented by an accent on the last vowel or, if the final vowel is <i>, by adding <y>. In some contexts where *-ʔ* is not represented orthographically by accent or long vowel, its presence is suggested by the glottalisation of a velar stop in initial or mid position (see § 4.4.6). However, in a number of examples from the ALS there are orthographic markers on the verb signalling the existence of the final glottal stop; the reconstruction of *-ʔ* in these cases is based on comparative data (see below).

Past/perfective intransitive verbs take cross-referencing prefixes to mark person agreement; in the third person the person marker is zero.

- (12. 20) a. <an mārà> b. <ca guacà>
ʔan-ma:ra-ʔ **ka-waka-ʔ**
 1sS-rest-STAT 2sS-go-STAT
 'I (am) rested' 'you (are) gone = you went'
 OT: "yo descansé" (1483.) OT: "tú te fuistes, has ido" (1740.)
- c. <ca guasztà> d. <teerò>
ka-wašta-ʔ **Ø-te:ro-ʔ**
 2sS-enter-STAT 3sS-die-STAT
 'you entered' 'he (is) dead = he died'
 OT: "tú entraste" (1975.) OT: "morirse (pretérito)" (3284.)
- e. <isziy> f. <Líea>
Ø-ʔiʃi-ʔ **Ø-ʔi:k'a-ʔ**
 3sS-live-STAT 3sS-descend-STAT
 'he/it (is) alive' 'he descended'
 OT: "estar vivo (pretérito)" (2436.) OT: "bajarse (pretérito)" (2596.)

The marking-pattern is confirmed in the comparative data. Cross-referencing prefixes in the other Xinka varieties may differ formally from the inflectional affixes

attested in the ALS, but they occur in the same functional context, i.e. on intransitive verbs that refer to a situation in the past and are marked with *-ʔ*. The third person of past/perfective intransitive verbs is generally zero-marked.

- (12. 21)
- | | |
|---|--|
| <p>a. na naka ka-ʔaku-ʔ
DET PN:2s 2sS-go-STAT
'you went' (G-SH)</p> <p>c. <tu'pʌʔ>
Ø-tupa-ʔ
3sS-stay-STAT
'it/he stayed'
OT: "se quedó" (Ch-MQ)</p> <p>e. <n'patá>
n-pata-ʔ
1sS-bath-STAT
'I bathed'
OT: "ya se bañó" [sic] (Y-C)</p> | <p>b. Ø-yiwa-ʔ
3sS-get lost-STAT
'it got lost' (G-RHG)</p> <p>d. <un xayé ra maku>
ʔən-šaye-ʔ ra maku
1sS-return-STAT PREP house
'I returned home'
OT: "y regresé a casa" (Ch-F)</p> <p>f. <avujla n'tiki ne>
ʔawaʔa n-ti(:)ki ne
yesterday 1sS-sleep PN:1s
'yesterday I slept'
OT: "ni ayer dormí yo" (Y-C)</p> |
|---|--|

The pattern is also attested with derived intransitive stems. The accent placed on the vowel preceding the derivational operator might indicate the insertion of a glottal stop that might be determined/predicted by the fact that V_1 is a long vowel (12. 22a).

- (12. 22)
- | | |
|--|--|
| <p>a. <teeròquè>
Ø-te:ro-ke-ʔ
3sS-kill-AP-STAT
'he fished'
OT: "pescar (pretérito)" (3288.)</p> | <p>b. <kevuén huerxeké>
kewe-n Ø-werše-ke-ʔ
leg-1sP 3sS-throw/fall-AP-STAT
'my leg is fallen = fell'
OT: "la pierna se cayó" (Y-C)</p> |
|--|--|

The one-syllabic motion verb *taʔ* 'come' lengthens its root vowel and adds the ligature *-y(i)* when marked with *-ʔ*. We can define *-y(i)* as a ligature that is not part of the suffix itself, as this alteration of the stem also occurs with other markers of past-time reference (12. 52). The verb *taʔ* seems to be the only intransitive verb that takes a ligature. The irregular pattern is attested in all Xinka varieties, and could be explained by the fact that the verb regularly ends in *-ʔ*, therefore requiring an additional marker to distinguish it from its nonpast/imperfective form.

- (12. 23)
- | | |
|---|---|
| <p>a. <an tá y>
ʔan-ta:-y(i)-ʔ
1sS-come-LIG-STAT
'I came'
OT: "yo vine, he venido" (1410.)</p> | <p>b. <tá y>
Ø-ta:-y(i)?
3sS-come-LIG-STAT
'he came'
OT: "aquel vino, ha venido" (1412.)</p> |
|---|---|
- (12. 24)
- | | |
|---|---|
| <p>a. ʔan-ta:-yi-ʔ paʔ kaʔ
1sS-come-LIG-STAT PFV DIR
'I already came' (G-RHG)</p> <p>c. <ent tay curruck eperle>
ʔan-t'a:-yi-(ʔ) kuru-k ʔepeʔe
1sS-come-LIG-STAT run-ʔ fear
'I came running (with) fear'
OT: "me vine corriendo por miedo" (Ch-P)</p> | <p>b. hin ka-ta:-yi-ʔ nahaʔ
NEG 2sS-come-LIG-STAT LOC
'you did not come here' (G-SH)</p> <p>d. <tayí pa naj moch>
Ø-ta:-yi-ʔ pa(?) nah moč
3sS-come-LIG-STAT PFV DET owner
'the owner already came'
OT: "ya vino el patrón" (Y-C)</p> |
|---|---|

In the third person plural, when followed by the plural *ki=ʔik*, the verb *ma:ra* does not take the stative suffix *-ʔ*. This does, however, not seem to be a rule since other intransitive stems carry the accent on the last grapheme and therefore likely do end in *-ʔ*.

- (12. 25) a. <màra qui Lic>
Ø-ma:ra ki=ɬik
 3sS-rest INTENS=3PL
 'they (themselves) rested'
 OT: "aquellos descansaron, han descansado" (1492.)
- b. <gualá qui Lic>
Ø-waɬa-ʔ ki=ɬik
 3pS-go-STAT INTENS=3PL
 'they (themselves) went'
 OT: "aquellos se fueron, han ido" (1749.)

There are also entries of intransitive verbs in the ALS-vocabulary where the first stem form of past-time reference is given with no overt marker. It is not clear whether in these cases the form is indeed unmarked, or whether Maldonado de Matos missed to indicate the marker -ʔ. Other cases of unmarked intransitive verbs with past-time reference are attested in the comparative data, including forms that indicate the insertion of a glottal stop in the root (12. 27b).

- (12. 26) a. <igui>
ʔiwi
 VI:drown
 'drown'
 OT: "ahogarse en el agua (pretérito)" (2397.)
- b. <púriqui>
pu:ri-ki
 respond-AP
 'get married'
 OT: "casarse (pretérito)" (2974.)
- (12. 27) a. pu:riki hinaʔ šurumu
 get married PREP boy/young man
 '(she) gets married with/to the boy' (G-SH)
- b. <muʔmu>
miʔmu
 sing+?
 'he sang'
 OT: "cantó" (Ch-MQ)

There are a few cases in the ALS-vocabulary, where Maldonado de Matos marks the first preterite stem form of an intransitive verb with the first person singular cross-referencing suffix *-n* that is usually only attested with past/perfective forms of transitive verbs (see above). It is not clear whether the author is indicating the first person singular dependent form of the verb, or whether he simply confuses the verb classes.

- (12. 28) a. <Laaràn>
ɬa:ra:-n
 ascend-1sS_{DEP}
 '(that) I ascended'
 OT: "subir (pretérito)" (2586.)
- b. <iszpaan>
ʔiʃpa:-n
 leave-1sS_{DEP}
 '(that) I left'
 OT: "salir de un lugar (pret.)" (2426.)
- c. <caguicín>
kawi-k'i:-n
 cry-AP-1sS_{DEP}
 '(that) I screamed'
 OT: "gritar (pretérito)" (2124.)

PAST/PERFECTIVE VERBS AND TAM-ADVERBIALS: Maldonado de Matos combines intransitive past/perfective verb forms with TAM-adverbials to create the *pretérito*-categories of the Latin model of grammar, i.e. present perfect, pluperfect, future perfect and all the subjunctive forms of these. The same categories are attested with past/perfective transitive predicates (see § 12.2.1.1).

- (12. 29) a. <cà mārà mār>
ka-ma:ra-ʔ maʔ
 2sS-rest-STAT COND
 'you would have rested'
 OT: "tú hayas descansado" (1530.)
- b. <mārà pà pè>
Ø-ma:ra-ʔ paʔ peʔ
 3sS-rest-STAT PFV FUT
 'he will have rested'
 OT: "aquel habrá descansado" (1508.)
- c. <tá ý pa ayù>
Ø-ta:-yi-ʔ pa(?) ʔayuʔ
 3sS-come-STAT PFV AUX
 'he will/would have come'
 OT: "aquel habrá venido" (1430.)
- d. <muc mārà mār ayù>
muk-ma:ra-ʔ maʔ ʔayuʔ
 1pS-rest-STAT COND AUX
 'we would have rested'
 OT: "nosotros hubieramos ...
 descansado" (1538.)
- e. <capa an mārà paŁ nāl>
ka=pa ʔan-ma:ra-ʔ paŁ naʔŁ
 EXO=PFV 1sS-rest-STAT PFV IMPFV
 'I had rested'
 OT: "yo había descansado" (1494.)

Campbell & Kaufman point out that intransitive past/perfective forms occur in declarative clauses with basic word order (12. 30); in other contexts with marked word order verb forms with past-time reference would be marked with the anterior/perfect suffix *-wa* (see § 12.2.3).

- (12. 30) a. Ø-tero-ʔ hurak man
 3sS-die-STAT man DEM
 'that man died' (G-SH)
- b. <ʔuuʔuʔ Hwan ša ʔuy>
 Ø-ʔu:ʔu-ʔ Hwan ša ʔuy
 3sS-fall-STAT Juan PREP water/river
 'Juan fell into the river'
 OT: "Juan se cayó en el río" (G-C&K)

In the semi-speaker data, past/perfective verb forms are used in narrative sequences (12. 31), which seems to suggest that *-ʔ* indeed marks result rather than indicating the priority of an event.

- (12. 31) Ø-wašta-ʔ Ø-niwa-ʔ hin Ø-ʔiki-ʔ
 3sS-enter-STAT 3sS-ask-STAT NEG 3sS-find-STAT
 'he entered, he asked, (but) he did not find' (G-SH)

ETYMOLOGY/COMPARISON WITH STATIVE-RESULTATIVE PARTICIPLES: That intransitive verbs mark past/perfective with the same suffix that is used to derive stative participles may suggest that the two grammatical categories are etymologically related. The stative participle or resultative describes a continuous and persistent state brought about by some past action (see Bybee *et al.* 1994:63). Unlike other participles, stative participles/resultatives do not function as descriptive adjectives, but retain a verbal character. Cross-linguistically, simple pasts and perfectives can develop through anteriors from resultatives (Bybee *et al.* 1994:68), which could suggest that in Xinka the past/perfective form of intransitive predicates developed from the stative participle/resultative.

Depending on syntactic context the distinction of a resultative/stative participle in predicative function and a third person singular past/perfective verb form is not always straightforward.

- (12. 32) a. (Ø-)kara-? hutu
(3sS-)weigh-STAT tree
'the tree weighted ~ the tree is heavy' (G-JAP)
- b. (Ø-)taʔa-? pišiʔ
(3sS-)burn-STAT gourd
'the gourd burned ~ the gourd is burned' (G-RHG)

In the comparative data we find the third person singular past/perfective verb form also with transitive roots. The transitivity status of the root is in all cases undisputed, as these predicates can be accompanied by the O argument of the transitive action. In all of the following examples, the active translation contexts suggest that the verb form does not function as a stative participle.

- (12. 33) a. Ø-ǵ'amu-? nin
3sA-sting-STAT PN:1s
'he bit me' (G-SH)
- b. <mu'yoʔ>
Ø-muyo-?
3sS-help-STAT
'he helped him'
OT: "le ayudó" (Ch-MQ)
- c. <man suaká pelu>
man Ø-suka-? pe:luʔ
PN:3s 3sS-bite-STAT Sp:dog
'the dog bit him'
OT: "el perro le mordió" (Y-C)

Stative or resultative participles of transitive roots are attested in the comparative data as well as in the ALS where they are categorised as infinitives. These forms occur in various contexts in which they can function like a 'stative passive'. In fact, it can be shown that passives arise diachronically from predicate adjectives or stative-resultatives (see Givón 1994:8).

- (12. 34) a. <aLparaquíguà merè>
ʔaʔ-para kiwa-? mere-?
PREP.CAUS-? INTENS/REFL-? break-STAT
'because it itself is broken'
OT: "por romper" (651.)
- b. <pirii>
pi:ri-?
see-STAT
'to be seen'
OT: "a ver" (818.)
- (12. 35) a. Ø-wišu-?
3sS-beat-STAT
'he is beaten' (G-JS)
- b. man=ta naʔuʔ senyora Ø-ʔuwi-?
DEM=INT son Sp:lady 3sS-call-STAT
'that is the son the lady called' (G-SH)

In the comparative data there are frequent examples of resultative intransitive and transitive predicates that lack person-marking on the verb and express the subject by means of independent and reflexive pronouns, which can precede (12. 36) or follow (12. 37) the predicate. Similar combinations of unmarked verbs (or verbs marked for the third person singular) and independent pronouns are frequently found in the corpus of data and have in most cases been identified as cleft-constructions (§ 16.2.5.3).

- (12. 36) a. na nin ʔispa-? ša mak'uʔ
DET PN:1s leave-STAT PREP home
'I left from the house' (G-SH)
- b. <nen japá san tūru>
nen hapa-? san tiri
PN:1s pass-STAT PREP river
'(it was) me (who) passed over (the/a) river'
OT: "paso un río" (Y-C)

- (12. 37) a. ϕ' imi-? nin ʔuraya
 extinguish-STAT PN:1s fire
 '(who) extinguished the fire (was) me = I extinguished the fire' (G-SH)
- b. <tz'ajmá kihuan ti ricayijli>
 ϕ' ahma-? ki-wa-n ti(:ʔ) rikayi-ʔi
 sting-STAT INTENS/REFL-ʔ-1sP IO thorn-PL
 '(I) stung myself with/by thorns'
 OT: "me piqué con una espina" (Ch-C)

Resultatives of intransitive and transitive verbs are attested with the TAM-adverbial *paʔ* or *paʔaʔ* indicating the concept of 'already' or 'still'. It is cross-linguistically not uncommon for resultatives to combine with the adverbial 'still' (Bybee *et al.* 1994:65).

- (12. 38) a. tero-? paʔaʔ b. si ʔuka-? paʔaʔ
 die-STAT PFV Sp:if have-STAT PFV
 'he is already/still dead' (G-JS), (G-SH) 'if there still is' (G-JAP)
- c. <tupapá>
 *tupa-(ʔ) paʔ
 stay-(STAT) PFV
 'he still stayed'
 OT: "se quedó" (Y-C)

There are various comparative examples of predicates marked with -ʔ that are accompanied by temporal adverbs specifying the point in time when the event described by the verb occurred. This implies that -ʔ does not mark relative past events (see Bybee *et al.* 1994:61-62)

- (12. 39) a. ʔahmukan Ø- ϕ' uʔma-ʔ
 yesterday 3sS-water-STAT
 'yesterday he watered (his field)' (G-RHG)
- b. ʔahmukan puʔi-ʔ na nin
 yesterday wash-STAT DET PN:1s
 'yesterday I washed it' (G-RHG)

Stative-resultative verb-marking on lexical verbs is one subordination strategy attested with auxiliary verb constructions and other complex predicates. In X_G we find the form in light verb constructions with *ʔuka* (see § 10.1.4.1) (12. 40) and future constructions with the grammaticalised future auxiliary *ku=ya-* (§ 12.4.1) (12. 41).

- (12. 40) a. nana maʔ ʔuka-y ϕ' imi-ʔ
 FOC DEM do-3sA extinguish-STAT
 'he extinguished it' (G-SH)
- b. ʔuke-y ϕ' iri-ʔ mutiʔ na nin
 do-3sA cut-STAT hair DET PN:1s
 'he cut the hair (of) mine' (G-SH)
- (12. 41) a. ku=y wašta-ʔ ša mak'uʔ
 go=3sS_{DEP} enter-STAT PREP house/home
 'he will enter the home' (G-SH)
- b. ku=y wišu-ʔ
 go=3sS_{DEP} beat-STAT
 'he will beat (him)' (G-SH)

In the ALS, auxiliary constructions with *pata* 'can, occur', which are used by Maldonado de Matos to fill the functional slot of passive in the Latin-style grammatical model, exhibit a pattern of stative-resultative marking on the transitive lexical verb.

- (12. 42) a. <pulà pataguàag>
pula-? **pata-wa:-h**
 make-STAT *accomplish-ANT-3sP
 'to have been made'
 OT: "haber sido hecho" (558.)
- b. <pulà pataguàn>
pula-? **pata-wa:-n**
 make-STAT *accomplish-ANT-1sA/P
 'I was/have been made'
 OT: "yo fui, he sido hecho" (494.)

In the field notes of Campbell and Kaufman the same type of auxiliary verb constructions with *pata* (here used to express abilitative) is attested with stative-marking on the auxiliary verb, while the intransitive lexical verb carries person-marking in form of cross-referencing suffixes (12. 43a). It is not exactly the same pattern that is attested in the semi-speaker data from X_G , where the auxiliary *ʔapata* that is marked with the stative suffix *-?* precedes an unmarked intransitive lexical verb (b).

- (12. 43) a. <hin paata? wašat'an>
 hin pa:ta-? wašata-n
 NEG *accomplish-STAT enter-1sS_{DEP}
 'it is not accomplished that I have entered = I cannot enter'
 OT: "no puedo entrar" (G-C&K)
- b. hin ʔa(n)-pata-? ʔakuki
 NEG 1sS-*accomplish-STAT walk
 'I do not accomplish to walk = I am not able to walk' (G-RHG)

12.2.2 Active past

The second *pretérito*-stem form that Maldonado de Matos indicates with verbal entries in the ALS-vocabulary are intransitive and transitive roots/stems marked with the suffix *-ʔa(ʔ)*. In syntactic context, the past suffix *-ʔa(ʔ)* is attested with subordinate predicates of affirmative (2035., 4771.) and negative (4775.) clauses. In all these cases Maldonado de Matos translates the form into Spanish as an indefinite past or present perfect.

The past marker *-ʔa(ʔ)* is spelled in the ALS as <-Laa> or <-Lá> (on the higher page numbers Maldonado de Matos exclusively uses the variety with double vowel). This suggests that the author tried to distinguish this marker orthographically from the agentive suffix *-ʔa* that is never indicated with a double vowel and only carries an accent sign. In X_G and X_{Ch} the suffix is also attested as *-la* or *-ha*. Despite the orthographic distinction it is not unlikely that the past marker, the agentive (see § 11.1.3.2) and the active participle (§ 11.1.2.3) are etymologically related and derive ultimately from the optative auxiliary verb *ʔuʔa* 'want' (see § 10.1.3.5). The optative connotation is suggested by certain translation contexts of transitive verbs marked with *-ʔa* that are attested in the comparative data (see below). However, in

analogy with the stative-resultative (§ 12.2.1.2) and the anterior past markers (§ 12.2.3) the past marker *-ʔa* may have grammaticalised from one of the nominalised forms, i.e. the active participle or the agentive. It is therefore labelled here as 'active past marker'.

Maldonado de Matos uses the past marker *-ʔa* (?) with two- and three-syllabic intransitive (12. 44) and transitive verbs. While intransitive motion verbs only take the suffix *-ʔa* (12. 44a), all other roots and stems indicate a stress on the suffix vowel (b-c), which suggests the presence of a final glottal stop.

- (12. 44) a. <acuLa> **ʔaku:-ʔa**
go-PAST.ACT
'went'
OT: "ir (pretérito)" (2051.)
- b. <tiɛiLá> **ʔik'i-ʔaʔ**
sleep-PAST.ACT
'slept'
OT: "dormir (pretérito)" (3293.)
- c. <teroqueLá> **tero-ke-ʔaʔ**
die/kill-AP-PAST.ACT
'fished'
OT: "pescar (pretérito)" (3289.)

Transitive stems in *-ʔa* are indicated with the first person singular cross-referencing suffix *-n* (12. 45); the vowel of the suffix seems to be lengthened upon inflection with *-n*.

- (12. 45) a. <nuemaLaan> **nima-ʔa:-n**
eat-PAST.ACT-1sA
'I ate'
OT: "comer (pretérito)" (2769.)
- b. <iszapiLán> **ʔišapi-ʔa:-n**
take out-PAST.ACT-1sA
'I took out'
OT: "sacar, quitar (pretérito)" (2432.)
- c. <LicayaLaan> **ʔika-ya-ʔa:-n**
descend-TRANS-PAST.ACT-1sA
'I put/took down'
OT: "bajar otra cosa (pretérito)" (2602.)

There are, however, also a few lexical entries that are not consistent with the pattern. Some transitive roots marked with *-ʔa* are not marked for person (12. 46). Furthermore, we find several antipassive and inchoative intransitive stems that are indicated by Maldonado de Matos with the cross-referencing suffix of the first person singular (12. 47). It is not clear whether these are erroneous forms.

- (12. 46) a. <cunuLá> **kunu-ʔaʔ**
buy-PAST.ACT
'(he) bought'
OT: "comprar (pretérito)" (2180.)
- b. <piriLa> **piri-ʔa**
see-PAST.ACT
'[I] saw'
OT: "yo vi, he visto" (750.)
- (12. 47) a. <araquiLan> **ʔara-ki-ʔa-n**
send-AP-PAST.ACT-1s_{DEP}
'has generally sent = looked'
OT: "mirar (pretérito)" (2082.)
- b. <taguaLɛiLan> **tawa-ʔ-k'i-ʔa-n**
*bless?-PART.ACT-INCH-PAST.ACT-1s_{DEP}
'blessed'
OT: "bendecir (pretérito)" (3249.)

In the ALS the intransitive roots *ʔakuʔ* 'go', *ma:ra* 'rest', *hama* 'sin' and *wa* 'go away' are attested with the past suffix *-ʔa* and cross-referencing prefixes that mark

person agreement. The verbs *ʔakuʔ* and *ma:ra* are given with distinct marking in the third person. While the motion verb *ʔakuʔ* takes the person-marking prefix *ʔa-*, *ma:ra* has zero-marking when inflected with the past marker *-ʔa*. It is striking that the motion verbs *ʔakuʔ*, *ku* and *wa* exhibit a different stress pattern than other intransitive verbs. Motion verbs simply employ the past suffix *-ʔa* putting the stress on the vowel preceding the suffix (12. 48), while other intransitive verbs mark an accent on the suffix vowel, which again suggests the presence of a final *-ʔ* (12. 49).

- (12. 48) a. <an gùLà>
ʔan-ku-ʔa
 1sS-go-PAST.ACT
 'I went'
 OT: "yo fui, he ido" (1795.)
- b. <anguaLà>
ʔan-wa-ʔa
 1sS-go-PAST.ACT
 'I left/went'
 OT: "yo me fui, me he ido" (1739.)
- c. <a acùLà nàL>
ʔa-ʔaku:-ʔa **naʔʔ**
 3sS-walk-PAST.ACT IMPFV
 'he would have gone'
 OT: "que hubiera de haber ido" (1715.)
- (12. 49) a. <ca jama Là>
ka-hama-ʔaʔ
 2sS-sin-PAST.ACT
 'you sinned'
 OT: "pecasteis" (2035.)
- b. <màra Là>
Ø-ma:ra-ʔaʔ
 3sS-rest-PAST.ACT
 'he rested'
 OT: "aquel descansó" (1488.)
- c. <muc màra Là>
muk-ma:ra-ʔaʔ
 1pS-rest-PAST.ACT
 'we rested'
 OT: "nosotros descansamos" (1490.)

This verb class-dependent stress pattern is confirmed by the comparative data where we find motion verbs in X_G , X_{Ch} and X_Y being generally marked for past with the simple suffix *-ʔa* or *-la* (12. 50), while other intransitive roots and stems add a glottal stop, i.e. *-ʔaʔ* (12. 51). All attested cases of the suffix *-ʔa(ʔ)* in the comparative data are referring to past events. There are not many examples of the form with cross-referencing prefixes in the semi-speaker data from X_G ; in the third person, only zero-marking is attested.

- (12. 50) a. ʔən-ku-ʔa ʔipaʔa
 1sS-go-PAST.ACT bath
 'I went to bath' (G-RHG)
- b. Ø-wa-ʔa
 3sS-go-PAST.ACT
 'he went' (G-JAP)
- c. <un guala ra misa>
 ʔən-wa-la ra misa
 1sS-go-PAST.ACT PREP Sp:mass
 'I went to mass'
 OT: "fui a misa" (Ch-F)
- d. <hacula nanu castiano>
 Ø-ʔaku-la
 3sS-go-PAST.ACT
 'the Spaniard went'
 OT: "ha ido el español" (Ch-Z)
- (12. 51) a. pi=ka-n ʔan-ti:ki-ʔaʔ
 NUM:'2'=EXO-IRR 1sS-sleep-PAST.ACT
 'two days ago I slept' (G-SH)
- b. Ø-ti:ki-ʔaʔ šurumu man
 3sS-sleep-PAST.ACT boy DEM
 'that boy slept' (G-SH)

- c. <ipalajlá vari>
 Ø-ʔipala-ʔaʔ bari
 3sS-bath-PAST.ACT PFV
 'he already bathed'
 OT: "se bañó" (Ch-C)
- d. <nec muc saprikilá>
 nek muk-sapriki-laʔ
 PN:1p 1pS-degrain-PAST.ACT
 'we degrained'
 OT: "desgranemos la mazorca" (Y-C)

In X_{Ch} the motion verb *taʔ* 'come' is attested to insert the ligature *-yi* between the root and the past suffix *-ʔa*; the ligature is mostly attested with simple past/perfective forms of the motion verb. The fact that the intransitive stem *ta:yi-* is used with both past markers *-ʔa* and *-ʔ* shows that the two morphemes occupy the same functional slot on the verb and are therefore contrastive. As with other motion verbs, there is no indication that the past form of this verb is marked with *-ʔ*.

- (12. 52) <tallila>
 Ø-ta:-yi-la
 3sS-come-LIG-PAST.ACT
 'he came'
 OT: "vino" (Ch-Z)

There are only a few rare examples in the semi-speaker data from X_G showing transitive stems with *-ʔa* taking cross-referencing prefixes to mark person agreement.

- (12. 53) ka-kiwa-ʔaʔ nin
 2sA-lend-PAST.ACT PN:1s
 'you lent me (sth.)' (G-SH)

In the majority of attested cases in the comparative data, transitive stems with *-ʔa* are not marked for person and the subject is expressed by an independent pronoun preceding or following the predicate (12. 54). The pattern is as frequent with intransitive past stems in *-ʔa* (12. 55). In other sections of this study analogical constructions or unmarked or third person predicates with independent pronouns have been identified as a cleft-construction (cf. § 16.2.5.3).

- (12. 54) a. na naka šuka-ʔaʔ
 DET PN:2s eat-PAST.ACT
 'you ate = *it was you who ate' (G-SH)
- b. horo-ʔaʔ na huʔ mura man
 get-PAST.ACT DET DEM ear of corn DEM
 'he got that ear of corn = *it was him who got ...' (G-JS)
- c. <ni pulajlá>
 ni pula-ʔaʔ
 PN:1s make-PAST.ACT
 'I made (it) = *it was me who made it'
 OT: "yo hice" (Ch-C)
- d. <naj naljki rucajlá xuxo>
 nah naʔki ruka-ʔaʔ šušo
 DET PN:3s bite-PAST.ACT dog
 'the dog bit him = *it was him who the dog bit'
 OT: "el perro le mordió" (Ch-C)
- e. <naj nucajlá tijlí>
 nah nuka-ʔaʔ ti:ʔ-ʔi
 PN:3s give-PAST.ACT IO-PL
 'he gave it to them = *it was him who gave it to them'
 OT: "él se los dio a ellos" (Y-C)

- (12. 55) a. na nin ʔaku:-ʔa ʔipaʔʔa
 DET PN:1s go-PAST.ACT bath
 'I went to bath = *it was me who went to bath' (G-SH)
- b. <nac tikilá ahujlaca>
 nak ti(:)ki-laʔ ʔawʔakan
 PN:2s sleep-PAST.ACT yesterday
 'you slept yesterday = *it was you who slept yesterday'
 OT: "ni ayer dormistes tú" (Ch-C)

In the semi-speaker data from X_G , there are a few attested cases of independent pronouns following the intransitive predicate with $-ʔa$. In these contexts it is not clear whether the pronouns could be understood as clefted constituents, or whether we are dealing with cases where anaphoric person reference is simply replaced by an analytic construction.

- (12. 56) a. ti:ki-ʔaʔ naka
 sleep-PAST.ACT PN:2s
 'you slept' (G-SH)
- b. ʔahmukan ʔaku:-ʔa nin
 yesterday go-PAST.ACT PN:1s
 'yesterday I went' (G-SH)

In the sample sentences that Maldonado de Matos gives in the ALS, there are two cases of transitive predicates marked with $-ʔa$ that occur in subordinate clauses and do not mark person by means of cross-referencing affixes. The subject of the subordinate predicate that is coreferential with the subject of the main clause is indicated by an independent pronoun. In both examples, the past marker $-ʔa$ is followed by the suffix $-n$. While in example (12. 57b) one could argue that $-n$ marks the first person singular that is indicated as the subject by the preceding independent pronoun, the lack of agreement in example (a) suggests that the marker needs to be identified as the subjunctive marker that is also attested in other cases to occur with subordinate transitive predicates that are coreferential with the subject of the main clause.

- (12. 57) a. <naca qui púlaLàn>
naka ki púla-ʔa-n
 PN:2s INTENS make-PAST.ACT-SUBJ
 '(it was) you yourself (who) did make it'
 OT: "tú lo hiciste" (4771.)
- b. <aszin nen ... szàc szà Làn>
ʔašin nen šakša-ʔa-n
 NEG PN:1s steal-PAST.ACT-SUBJ
 '(it was not) me (who) did steal it'
 OT: "no lo hurté yo" (4775.)

In the comparative data there are only rare cases where the subjunctive marker is attested with the suffix $-ʔa$. While there are some cases where $-n$ might mark the first person singular (12. 58a), the lack of agreement between predicate and the person of the subject suggests in other examples that the marker may function as a subjunctive. It needs to be pointed out that in the second example (b) $-ʔa$ occurs in a context where it does not seem to indicate past-time reference.

- (12. 58) a. numa-ʔa-n nin hina naʔ
 eat-PAST.ACT-SUBJ/1sA? PN:1s PREP DEM/3s
 '(that)¹⁶⁶ I ate with him' (G-JAP)

¹⁶⁶ The subordinate context of the clause is indicated by the original field translation of the phrase (see Appendix 6).

- b. hin kuy nima-*ʔa*-n naka
 NEG AUX.FUT eat-*ʔ*-SUBJ PN:2s
 '(that) you will not eat' (G-JAP)

ETYMOLOGY/FUNCTION: The precise function of the marker *-ʔa* is not well understood.¹⁶⁷ In the majority of contexts the morpheme is attested on predicates that indicate past-time reference. Predicates with *-ʔa* co-occur with temporal adverbs, which suggests that the suffix does not mark an anterior or perfect function, but simply past or resultative action (cf. Bybee *et al.* 1994:61-62).

- (12. 59) a. pi=ka-n ʔan-ti:ki-*ʔa*?
 NUM:'2'=EXO-IRR 1sS-sleep-PAST.ACT
 'two days ago I slept' (G-SH)
- b. <najlij na ma tikijlá ahujlaca>
 naʔi na ma ti(:)ki-*ʔa*? ʔawaʔakan
 PN:3p DET DEM sleep-PAST.ACT yesterday
 'they are the ones who slept yesterday'
 OT:'ni ayer durmieron ellos' (Ch-C)

Predicates marked with *-ʔa* can be followed by the temporal adverbial *pa ʔa ʔ*, which again underlines the function of the morpheme as a past marker. In all given examples where *pa ʔa ʔ* follows, the suffix *-ʔa* is not marked with *-ʔ* in final position (12. 60).

- (12. 60) a. nima-*ʔa* paʔaʔ šurumu
 eat-PAST.ACT PFV young man
 'the young man already ate' (G-JAP)
- b. <guikaslabar>
 wika-*ʔa* bar
 throw-PAST.ACT PFV
 'he already threw (it)'
 OT:'tirado, tiro' (Ch-F)

Verbal stems with the past marker *-ʔa* can function as a derivational basis. There is one example of an agentive form in the ALS that is derived from an active past verb. This form confirms that the TAM-marker *-ʔa* and the derivational suffix for agent nominalisation are separate morphemes.

- (12. 61) <acùLaŁ>
ʔaku-*ʔa*-ʔ
 go-PAST.ACT-AGT
 '(the one) who went'
 OT:'el que iba' (1722.)

The fact that the suffix *-ʔa* occurs with causative verbs derived by *-ʔa* and *-ha* suggests that TAM-marking and causative-derivation are not realised by the same operator, although the morphemes may ultimately have the same etymological origin.

¹⁶⁷ In the handout to his recent paper (see footnote 128), Rogers suggests that the use of the suffix is related to syntactic alignment in that active intransitive verbs with S corresponding to the semantic agent (S_a) employ *-ʔa ʔ*, while stative intransitives with S corresponding to the semantic patient (S_o) use the marker *-ʔ*. The data from the ALS and the comparative source support Rogers' analysis inasmuch as in all examples where *-ʔa ʔ* is used on intransitive verbs, S corresponds to the semantic agent. It needs to be pointed out that the suffix is not exclusively attested with intransitive verbs and that syntactic hierarchy and coreferentiality with the subject of the main clause also seem to determine its function.

- (12. 62) a. <nariLaLaan> b. <tutujaLaan>
nari-*ta*-*ta*-n **tutu-ha-*ta*-n**
 *know-CAUS-PAST.ACT-1sA suck-CAUS-PAST.ACT-1sA
 'taught' 'breastfed'
 OT: "enseñar (pretérito)" (2735.) OT: "dar de mamar (pretérito)" (3353.)

In the comparative data we find a few attested cases of intransitive lexical verbs with *-ta* in intransitive progressive and future constructions. Intransitive progressives with *-ta* are only attested in X_G; the construction expresses a past progressive.

- (12. 63) a. na? ʔaku:-*ta* hi? ʔipaʔ*ta*?
 PN:3s walk-PAST. ACT PROG+3sS_{DEP} bath
 'he was going to bath' (G-SH)
 b. ka-ti:ki-*ta*? ʔay
 2pS-sleep-PAST.ACT PROG+3s
 'you (pl.) were sleeping' (G-RHG)

Lexical verbs marked with *-ta* are also attested in future constructions with the third person form of the grammaticalised future auxiliary *kuy* (see § 12.4.1). In these contexts, *-ta* may mark either an active participle (§ 11.1.2.3) or an optative mood, i.e. *nima-ta* ʔ [eat-OPT] 'wish to eat'.

- (12. 64) a. kuy nima-*ta*? nin
 AUX.FUT eat-PART.ACT/OPT? PN:1s
 'I am going to eat' (G-SH)
 b. kuy ʔipla-*ta*? na nin
 AUX.FUT bath-PART.ACT/OPT? DET PN:1s
 'I am going to bath' (G-PE)

In X_Y the motion verb *ku* marked with *-ta* and cross-referencing suffixes seems to function as an auxiliary in a construction with future reference. This context would be coherent with an optative function of *-ta*.

- (12. 65) <nen culan mucan nay>
 nen ku-la-n muka-n nay
 PN:1s go-OPT?-1sS_{DEP} beat?-1sA PN:2s
 'I will beat you'
 OT: "ya te voy a pegar" (Y-C)

With an optative connotation the past marker *-ta* would express a concept of deliberateness of action, which may be reflected in Maldonado de Matos' explanation that the morpheme is elegantly used in affirmative and other declarative contexts; for which he provides examples. In the comparative data the marker is also attested in interrogative clauses. In all these contexts, an optative connotation of the morpheme seems to bear sense.

SUBORDINATE CLAUSES: In the ALS and the comparative data, the agentive past marker *-ta* is attested with transitive and intransitive subordinate predicates. The examples from the ALS are subordinate predicates in affirmative and negative declarative clauses that function as responses to a question; in the associated interrogative clause the predicate is marked with the anterior suffix *-wa* (see § 12.2.3).

- (12. 66) <a señor naca qui púla Làn. >
ʔa *señor* **naka** **ki** **pula-ʔa-n**
 AFF Sp:sir PN:2s INTENS make-PAST.ACT-SUBJ
 'yes sir, (it was) you yourself (who) did it'
 OT: "si señor, tú lo hiciste" (4771.)
- (12. 67) <aszin nen ... szàc szà Làn>
ʔašin **nen** **šakša-ʔa-n**
 NEG PN:1s steal-PAST.ACT-SUBJ
 '(it was) not me (who) stole it'
 OT: "no lo hurté yo" (4775.)

In the comparative data there are examples of independent and subordinate negative clauses with intransitive and transitive predicates marked with *-ʔa*. The verb form is attested also in clauses where negation is realised by negative quantifiers ('nothing', 'no one' etc.). It needs to be pointed out that the other past markers *-ʔ* and *-wa* are likewise attested in negative clauses.

- (12. 68) a. hin (Ø-)ku-ʔa ša krawa
 NEG (3sS-)go-PAST.ACT PREP woods
 'he did not go to the woods' (G-RHG)
- b. hin ka-niʔma-ʔa? man ʔaʔi
 NEG 2sS/A-eat-PAST.ACT DEM PREP
 '(because of this)¹⁶⁸ you did not (want to) eat' (G-SH)
- (12. 69) a. <landí huanin pulajlá>
 lan-ti wanin pula-ʔa?
 NEG-INT:what? INT:who? make-PAST.ACT
 '(it is) nobody (who) made it'
 OT: "ninguno lo hizo" (Ch-C)
- b. <navuan ncalá>
 na=wan *ʔuka-la?
 NEG=INT:who? do-PAST.ACT
 '(it is) nobody (who) did (it)'
 OT: "ninguno lo hizo" (Y-C)

INTERROGATIVE CLAUSES: In the comparative data the marker is attested on the main predicate of interrogative clauses. In all attested cases the predicates are transitive. The function of *-ʔa* does not seem to be in any way dependent on the interrogative clause, as the anterior suffix *-wa* is attested in the same functional context (see following § 12.2.3).

- (12. 70) a. <guanín rucaslá>
 wanin ruka-ʔa?
 INT:who? eat/bite-PAST.ACT
 'who ate (it)?'
 OT: "quién lo comió?" (Ch-F)
- b. <huenin nu cala tanay>
 wenin nuka-la ta nay
 INT:who? give/beat-PAST.ACT DIR? PN:2s
 'who did you beat?'
 OT: "con quién te has golpeado?" (Y-C)

¹⁶⁸ The subordinate context of the clause is the result of the interview situation and indicated by the original field translation (see Appendix 6).

- c. donde weske-ʔaʔ
 INT:where throw away-PAST.ACT
 'where did he throw it?' (G-SH)

PAST-TIME REFERENCE WITH MOTION VERB *wa*: The active past marker occurs with the motion verb *wa* 'go away', in which form it has lexicalised as the intransitive verb *wa-ʔa* 'go away' that is attested in the ALS and the comparative data. Maldonado de Matos indicates this verb with intransitive inflectional morphology and only in contexts with past-time reference.

(12. 71)	a. <guala> wa-ʔa go-PAST.ACT 'to go away' OT:"irse, anómalo" (1725.)	b. <caguaLa> ka-wa-ʔa 2sS-go-PAST.ACT 'you went away' OT:"tú te fuistes, has ido" (1741.)

The form seems to be structurally analogical to the intransitive verb stem *waka* 'go away', which is likewise only used for past-time reference. Morphologically, the form combines the motion verb *wa* and the exocentric suffix *-ka* that functions in other contexts as a marker for past-time reference (§ 14.3.2.2). In the ALS person agreement is marked by means of intransitive cross-referencing prefixes; in the comparative data the use of the third person nominal suffix *-h* suggests that the derived form may have nominal function.

(12. 72)	a. <guacá> wa-kaʔ go-EXO 'go' OT:"irse; anómalo" (1724.)	b. <an guacà nàʔ> ʔan-wa-kaʔ naʔʔ 1sS-go-EXO IMPFV 'I went' OT:"yo me iba" (1721.)
(12. 73)	a. <wa-káh> wa-ka-h go-?-3sP? 'go away' OT:"irse" (G-S)	b. <guacá> wa-kaʔ go-? 'go away, separate' OT:"separarse, irse" (Ch-F)

12.2.3 *Anterior/perfect*

The third *pretérito*-stem form indicated in the ALS-vocabulary are transitive and intransitive verbs marked with the suffix *-wa(ʔ)*. The operator can be identified as a marker of anterior-/perfect aspect that signals past-time reference on transitive and intransitive predicates in (1) dependent clauses, including auxiliary verb constructions with dependent-marked auxiliary verb, and (2) clauses with marked word order, including adverbial left-dislocation and interrogative clauses. The subject of subordinate predicates marked with *-wa* is not coreferential with the subject of the main clause (switch-reference).

That the suffix *-wa(ʔ)* indicates an anterior or perfect, i.e. past-time situation with relevance to the reference time (see Bybee *et al.* 1994:54; 61), can be concluded from the syntactic contexts where the marker is attested (see below). Subordinate predicates marked with the anterior-suffix show relevance to the primary event expressed by the main predicate and therefore *-wa(ʔ)* can be identified to indicate relative tense (see Chung & Timberlake 1985:210). Cross-linguistically,

anterior categories often combine with relational adverbs 'already' and 'just' (Bybee *et al.* 1994:54). This is not the case in Xinka where predicates marked with the anterior suffix *-wa* are never accompanied by TAM-adverbials at all. Although anteriors usually do not co-occur with temporal adverbs indicating a specific time in the past (e.g. 'yesterday', 'a week ago' etc.) (Bybee *et al.* 1994:62), there are a few cases in the Xinka corpus where predicates marked with *-wa* are accompanied by the temporal adverb 'yesterday' (12. 106).

In the ALS, most verb forms that carry the anterior suffix *-wa* are not attested in syntactic context, but as paradigmatic examples in the vocabulary. Maldonado de Matos employs the marker for the grammatical category of *pretérito perfecto*, which he translates with the Spanish grammatical tenses of indefinite past and present perfect. The colonial author distinguishes the anterior/perfect-suffix orthographically from the perfect participle: while the participle-derivation is generally spelled as <-gua>, the TAM-suffix is written as <-guaa>, <-guá> or <-guà>, suggesting a lengthening of the vowel and/or the presence of a final glottal stop. Comparative examples from X_G indicate that the syllable is stressed and followed by -ʔ when occurring on two-syllabic verb roots. In contrast, three-syllabic roots and stems use *-wa* and put the word stress on the vowel preceding the suffix. Despite the orthographic distinction, the anterior suffix seems to be etymologically related to the derivational operator *-wa* that is attested with the perfect participle (§ 11.1.2.2) and locative nouns (§ 11.1.3.3).

Maldonado de Matos gives the anterior as the third preterite stem form that he indicates with every verbal entry in the vocabulary. Just like simple past/perfective forms and past verbs marked with *-ʔa* the transitive roots/stems with the anterior-suffix *-wa* are indicated with the first person singular cross-referencing suffix *-n*.

- (12. 74)
- | | |
|--|---|
| <p>a. <nucaguaan>
 nuka-wa:-n
 give-ANT-1sA
 'I have given'
 OT:"dar (pretérito)" (2758.)</p> | <p>b. <ormoguaan>
 ʔormo-wa:-n
 pick up-ANT-1sA
 'I have picked up'
 OT:"recoger, pepenar (pret.)" (2781.)</p> |
| <p>c. <nuemajaguaan>
 nima-ha-wa:-n
 eat-CAUS-ANT-1sA
 'I have fed/given to eat'
 OT:"dar de comer (pretérito)" (2775.)</p> | |

Again, there are a few intransitive verbs that are given with the same marking pattern. However, since the form is not attested in syntactic contexts, it cannot be determined whether these are meant to be verbs in subordinate clauses.

- (12. 75)
- | | |
|---|---|
| <p>a. <uLuguaan>
 ʔuʔu-wa:-n
 fall-ANT-1s_{DEP}
 '(that) I have fallen'
 OT:"caer (pretérito)" (3435.)</p> | <p>b. <posnaguaan>
 posna-wa:-n
 jump-ANT-1s_{DEP}
 '(that) I have jumped'
 OT:"brincar, saltar (pretérito)" (2918.)</p> |
| <p>c. <araquiguan>
 ʔara-ki-wa:-n
 send-AP-ANT-1s_{DEP}
 '(that) I have looked/observed'
 OT:"mirar (pretérito)" (2083.)</p> | |

On two-syllabic intransitive verb stems, including motion verbs, the anterior suffix is indicated by Maldonado de Matos with an accent sign or a double vowel, suggesting that the suffix vowel is stressed and followed by -ʔ. In contrast, three-syllabic intransitive stems simply employ -*wa* (12. 76). These intransitive entries are translated by Maldonado de Matos as infinitive perfect forms.

- (12. 76) a. <acuguà>
ʔaku-waʔ
 go-ANT
 'went, has gone'
 OT: "ir (pretérito)" (2052.)
 "haber ido" (1713.)
- b. <màraguà>, <maraguaa>
ma:ra-waʔ
 rest-ANT
 'rested, has rested'
 OT: "descansar (pretérito)" (2646.)
 "haber descansado" (1548.)
- c. <acuquígua>
ʔaku-ki-wa
 go-REFL/AP-ANT
 'walked'
 OT: "andar (pretérito)" (2057.)

Person-marking with anterior verb forms is attested in the ALS only on transitive roots. These take dependent cross-referencing suffixes to mark person agreement. There are no examples in Maldonado-Xinka that indicate the use of cross-referencing affixes on intransitive verbs marked with the anterior/perfect suffix.

- (12. 77) a. <piriguàn>
piri-wa:-n
 see-ANT-1sA
 'I saw / I have seen'
 OT: "yo vi, he visto" (751.)
- b. <piriguacàn>
piri-wa-kan
 see-ANT-2sA_{DEP}
 'you saw / you have seen'
 OT: "tú vistes, has visto" (753.)
- c. <piriguaac>
piri-wa:-k
 see-ANT-1pA
 'we saw / we have seen'
 OT: "nosotros vimos, hemos visto" (756.)

This marking-pattern is confirmed in the comparative data from X_G. Schumann identifies the suffix -*wa* as an immediate past marker, which he translates as 'to have just made X' ("acabar de hacer X") (1967:53) (12. 78a). This categorisation corresponds with the analysis of the morpheme as an anterior-marker, as immediate past also expresses a past situation with relevance to the present. Schumann also translates the form with the Spanish imperfect past (b). The semi-speakers from X_G use -*wa* only rarely; the syntactic context is not in all cases clear, although most forms indicate a reference to a past event (12. 79).

- (12. 78) a. <pulawán>
 pula-wa-n
 make-ANT-1sA
 'I have just made it'
 OT: "acabo de hacer" (G-S)
- b. <na ulsíh imawáy tiʔiʔ>
 na ʔulsíh ʔima-wa-y tiʔ-h
 DET mother-in-law say-ANT-3sA IO-3s
 'the mother-in-law said/told to him'
 OT: "la suegra le preguntaba" (G-S)

- (12. 79) a. piri-wa-n ne naka
 see-ANT-1sA PN:1s PN:2s
 'I have seen you' (G-JS)
- b. na nin horo-wa-n ʔikaʔ
 DET PN:1s get-ANT-1sA NUM:'1'
 'I have gotten (= had) one' (G-JS)

In X_{Ch} we also find intransitive verbs with the anterior/perfect-suffix to be marked for person agreement with cross-referencing suffixes (12. 80); on intransitive verbs cross-referencing suffixes always indicate dependent status of the predicate. In Zeeje-ms. there is one example of an intransitive verb with anterior-suffix that is marked with the impersonal third person singular cross-referencing prefix; it is not clear whether this is a regular form (12. 81).

- (12. 80) <waraʔwey>
 (la)waraʔ-we-y
 dance-ANT-2sfS_{DEP}
 '(he has) danced'
 OT:"bailó" (Ch-MQ)
- (12. 81) <kaca a sullugua para gruiqui>
 ka=ka ʔa-suyu-wa para-wriki
 INT:where?=EXO 3sS-return-ANT search-word = fight
 'whereto he/one returned to fight'
 OT:"donde se volvía a pelear" (Ch-Z)

ANTERIOR VERBS WITHOUT PERSON-MARKING: In the ALS as well as in the comparative data, verbs with anterior-marking often occur without cross-referencing affixes indicating person agreement. In these cases *-wa* is generally followed by *-ʔ*, which is analysed here as part of the anterior suffix, although it may also be identified as a separate morpheme that might be identical with the stative-resultative marker or indicates the third person singular. Maldonado de Matos gives all translation contexts as infinitive perfects, however, comparative data suggest that the form refers to the third person. In the comparative data we find anterior verb forms that are not marked for person and occur in cleft-constructions with independent pronouns expressing the subject of the event (see below). There are several examples where accent-marking on the second vowel (V_2) seems to indicate the insertion of a glottal stop that may be part of the derivational suffix (12. 82a, d); such forms are also attested in X_{Ch} (12. 84), but the stress or marking pattern is not understood.

- (12. 82) a. <pulà guà>
 pula:-waʔ
 make-ANT
 'to have made'
 OT:"haber hecho" (470.)
- b. <sámugua>
 samu-waʔ
 catch-ANT
 'to have caught'
 OT:"haber cogido" (1141.)
- c. <ormo guà>
 ʔormo-waʔ
 pick up-ANT
 'to have picked up'
 OT:"haber recogido" (977.)
- d. <patàguà szàma>
 pata:-waʔ **šama**
 *accomplish-ANT PREP
 'to have remembered'
 OT:"haberse acordado" (1630.)

- e. <maraguaa>
ma:ra-wa?
 rest-ANT
 'rested, has rested'
 OT: "haber descansado" (1548.)
- (12. 83) a. $\gamma i\dot{s}p'a$ -wa?
 pass-ANT
 'he left' (G-SH)
- b. tupa-wa? $\gamma en=\dot{c}u=na\gamma u$ -n
 stay-ANT 1s=DIM=son-1sP
 'my little son stayed' (G-PE)
- c. <kunuwá?>
 kunu-wa?
 buy-ANT
 'he has bought'
 OT: "obsequió" (G-S)
- (12. 84) a. < $\gamma i\dot{s}'ta\gamma w\Lambda$ >
 $\gamma i\dot{s}ta\gamma$ -wa
 ?-ANT
 '(he has) emptied'
 OT: "lo vacié" (Ch-MQa)
- b. <tereré guá uy>
 terere?-wa? γuy
 ?-ANT water
 'the water has poured down'
 OT: "viene ya el aguacero" (Ch-F)

In the following examples the first element of the verb-noun compound could function either as a perfect participle, as a locative marker or as an anterior verb followed by the subject (see also § 8.3.4).

- (12. 85) a. <guasztaguasUema>
wašta-wa -sima
 enter-ANT/LOC -night
 '(where) the night has entered = nightfall'
 OT: "la entrada de la noche" (3851.)
- b. <iszpaguapari>
 $\gamma i\dot{s}pa$ -wa -pari
 come out/emerge-ANT/LOC -sun
 '(where) the sun has come out/rise = sunrise'
 OT: "la salida del sol" (3911.)

McQuown gives two examples from X_{Ch} which indicate that the stress pattern differs when verbs marked with the anterior suffix *-wa* precede nouns.

- (12. 86) a. < $\gamma i\dot{s}i'wa$ >
 $\gamma i\dot{s}i$ -wa?
 *become-ANT
 'it has become'
 OT: "ya está hecho" (Ch-MQa)
- b. < $\gamma i\dot{s}iwa \gamma oh'te$ >
 $\gamma i\dot{s}i$ -wa $\gamma ohte$?
 *become-ANT confusion, upset
 'confusion has become'
 OT: "se descompusó" (Ch-MQ)

COMPARISON WITH THE PERFECT PARTICIPLE: It needs to be noted that anterior verbs that lack person-marking are structurally different from the perfect participle that is not attested with an accent on the final vowel in the ALS (§ 11.1.2.2). The participle derives a resultative meaning that describes the product or state of a person/object after the action indicated by the verb has been completed. The marker occurs mostly with transitive roots and stems, but is also attested with intransitives. Bybee *et al.* suggest that resultatives serve as a source for anteriors, with the participle losing its adjectival function (1994:68). In Xinka, the anterior/perfect-suffix is plausibly related to the operator that marks the perfect participle.

PASSIVE FUNCTION: There are contexts where the anterior marker may have a passive function. In X_{Ch} we find cases where the person-marking cross-referencing affixes seem to indicate the patient of the underlying transitive action, or the subject of a passive predicate. In this case, *-wa* would have a valency-reducing function.

There are, however, too few examples in the data to postulate a passive marked with *-wa* as a functional category. In both cases a nominal or impersonal translation of the predicate form would be possible as well.

- (12. 87) a. <n'diajli huixuhua cá>
 nti ʔaʔi wišu-wa-kaʔ
 INT:what? PREP.CAUS beat-ANT(PASS?)-2sS_{DEP}
 'because of what have you been beaten?'
 OT: "¿por quién te pegaron?" (Ch-C)
- b. <nanu cortes jai natuca tumuqui ... há uhuigua>
 [nanu cortes]_{Pred} [hay [natu-ka]_{ADV} [tumuki]_S ʔa-ʔuwi-wa]_{REL}
 FOC Sp:courts INT LOC-DIR QUANT 3sS-call-ANT(PASS?)
 'the courts whereto all are/were called (=whereto one/they call(s) all)'
 OT: "las cortes, a que todos ... son ... llamados" (Ch-Z)

AGENTIVES WITH ANTERIOR STEMS: The anterior suffix *-wa* occurs with transitive roots forming the basis for agentive nominalisations and participles derived with *-ʔa* or *-ʔ*. It needs to be noted that Maldonado de Matos indicates agentives marked with *-ʔ* with an accent on the second root vowel (V₂), which may suggest the presence of either a glottal stop or vowel lengthening; the pattern is not confirmed in the comparative data.

- (12. 88) a. <jamaguáʔa>
hama-wa-ʔa
 sin-ANT-AGT
 'who has sinned = sinner'
 OT: "el pecador" (20.)
- b. <poszáguáʔa>
pošaʔ-wa-ʔ
 wash-ANT-PART.ACT/AGT
 'what/who has washed = soap rest'
 OT: "la sobra del jabón" (4324.)
- c. <jósóguáʔa>
ho:k'oʔ-wa-ʔ
 break-ANT-PART.ACT/AGT
 'what/who has broken = corn husk'
 OT: "doblador, cáscara de mazorca" (3954.)
- (12. 89) a. <terouala>
 tero-wa-la
 die-ANT-AGT
 'who has died = dead, soul'
 OT: "alma" (S-Gav)
- b. <hokowáʔa>
 hoko-wa-ʔ
 break-ANT-PART.ACT/AGT
 'what/who has broken = corn husk'
 OT: "hoja de maíz, totomostle" (G-S)
- c. <iriki hual>
 ʔiri-ki-wa-ʔ
 see-AP?-ANT-PART.ACT/AGT
 'what/who has revealed = rainbow'
 OT: "arco iris" (Y-C)

Anterior-marking is attested in certain syntactic contexts, including dependent clauses, interrogative clauses, clauses with a left-dislocation of adverbials, as well as in auxiliary verb constructions with the auxiliary *pata* that are used by Maldonado de Matos to fill the slot of passive voice in the Latin model of grammar.

A. ANTERIOR-MARKING OF DEPENDENT PREDICATES: The anterior marks past-time reference on dependent predicates that are not coreferential with the subject of the main clause.

The ALS includes examples where the anterior-marker is attested on subordinate transitive predicates in temporal adverbial clauses that are introduced by the conjunction *ʔasik* 'when' (§ 17.2.1). In all three attested cases, the verbal predicate follows immediately after the temporal conjunction. The conjunction determines the temporal relation of the subordinate predicate to the time-frame of the predicate in the main clause, i.e. in this case a simultaneous-to-anterior past-time event. In example (12. 90c) the predicate is complex and the suffix marks the transitive verb *pata* that functions as an auxiliary. The accent on the suffix suggests that the verb forms end in a final glottal stop, which is either part of the morpheme or might be identical with the stative-resultative marker (§ 12.2.1.2). The translation contexts suggest an impersonal or passive function of the predicate. In all three examples the subject of the subordinate clause is not identical with that of the main clause (see full examples in Appendix 3).

- (12. 90) a. <asUec pulaguà nà sermon>
ʔasik pula-waʔ na sermon
 CONJ make-ANT(PASS?) DET Sp:sermon
 'when one made (=was made?) the sermon'
 OT: "... al tiempo del sermón" (1957.)
- b. <asUec imaguà na miszà>
ʔasik ʔima-waʔ na miša
 CONJ speak-ANT(PASS?) DET Sp:mass
 'when one spoke (= was spoken?) the mass '
 OT: "... cuando se dijo la misa... " (1959.)
- c. <asUec uLù pataguà nana macu tiusz>
ʔasik ʔuʔu-ʔ pata-waʔ nana maku tyuš
 CONJ fall-STAT *accomplish-ANT(PASS?) FOC house Sp:god
 'when the church collapsed'
 OT: "cuando fue caída la iglesia" (2019.)

In X_G and X_{Ch} the anterior-suffix is attested on subordinate predicates in complement and adverbial clauses that do not share the subject of the main clause. The functional difference of third person dependent predicates marked with *-y* (12. 91b-c) and nonfinite anterior predicates marked with *-waʔ*(a) is unclear.

- (12. 91) a. piri-n keʔ hapa-waʔ ʔaniʔ nahaʔ
 see-1sA Sp:that pass-ANT ? LOC
 'I saw that he passed by ? there' (G-SH)
- b. hin ʔuka-y [hin hapa-wa-y man=ta ku ʔima nin hinaʔ]_{SUB}
 NEG have-3sA NEG wait-ANT-3sA DEM=INT MOD say PN:1s PREP:with
 'it was not that he has waited what I (would) tell him' (G-SH)
- c. <ka hucaguay entregar quiqui>
 ka ʔuka-wa-y entregar kiki
 INT do-ANT-3sA_{DEP} Sp:submit INTENS/REFL+3s/p
 '... where they submitted themselves'
 OT: "se entregaron" (Ch-Z)

In the following example from X_G the anterior-suffix marks the subordinate predicate of a non-coreferential nominal main clause that occurs as part of a coordinate complex clause. This may suggest that the use of the anterior-suffix is determined by syntactic dependency and switch-reference.

- (12. 92) hin tupa-n nin naka [tupa-waʔ]_{REL}
 NEG leave/let-1sA PN:1s PN:2s leave-ANT
 'I did not leave it, (it was) you (who) left it' (G-RHG)

There are other examples from X_G where the anterior-suffix is attested on the predicate of the main clauses, apparently indicating anteriority.

- (12. 93) na nin hapa-wa-n natiya pero ʔiki-y mu-dwenyo
 DET PN:1s pass-ANT-1sS_{DEP} LOC Sp:but find-3sA 3sP-Sp:owner
 'I had passed by there, but the owner found (me)' (G-SH)

Schumann gives an example from X_G where the anterior marker *-wa* occurs in a main clause. In this construction the subject and tense/aspect of the main clause and the negative complement clause differ. The complement clause expresses direct speech and its transitive predicate is given in the nonpast/present. The predicate of the main clause defines the tense/aspect of the second predicate.

- (12. 94) <na tiši huráki imaway, hin anníʔwa>
 na tiši huraki ʔima-wa-y [hin ʔan-niwa]_{O-COM}
 DET lazy man say-ANT-3sA NEG 1sA-want
 'the lazy man said, (that) I do not want (it)'
 OT: "el hombre decía que no quería" (G-S)

In X_G and X_{Ch} , transitive (12. 95) and intransitive (12. 96) verbs marked with the anterior/perfect-suffix *-wa* can occur without person-marking affixes; the subject being expressed by an independent pronoun. As in other cases where third person singular or unmarked verbs combine with pronouns, it is possible that we are dealing with the syntactic pattern of a cleft-construction (see § 16.2.5.3). This would mean that the anterior suffix marks the subordinate predicate. In the majority of these cases, *-wa* does not seem to be followed by *-ʔ*.

- (12. 95) a. naka tupa-wa
 PN:2s leave/let-ANT
 'you left/let it' (G-RHG)
 c. <piri va ni (bien)>
 piri-wa ni
 see-ANT PN:1s
 'I saw/see'
 OT: "veo muy bien" (Ch-C)
 b. piri-wa naka_O na nin_A
 see-ANT PN:2s DET PN:1s
 '(because)¹⁶⁹ I saw you' (G-JS)
 d. <imagua ay qui na'c>
 ʔima-wa ʔay ki nak
 tell-ANT PROG+3sS_{DEP} ? PN:2s
 'I was telling you'
 OT: "te estoy diciendo vos" (Ch-JC)
- (12. 96) a. hap'a-wa nin
 pass-ANT PN:1s
 'I passed (by)' (G-SH)
 b. tupa-wa naka ʔen=ču maku-m
 stay-ANT PN:2s 1sP=DIM house-1sP
 '(that) you stay in my small house' (G-PE)
 c. na nin hin ʔapata-wa yaʔ
 DET PN:1s NEG *accomplish-ANT PROG
 'I was not able to...' (G-SH)

In X_G and X_{Ch} , *-wa* also occurs on subordinate lexical verbs in future constructions with the grammaticalised future auxiliary *kuya-*. In all of these contexts, *-wa* does not refer to a past event. It is not clear, in which way these future constructions differ functionally from other future constructions that do not employ *-wa*. The following

¹⁶⁹ The subordinate context of the clause is the result of the interview situation and indicated by the original field translation (see Appendix 6).

examples illustrate that in X_G the subordinate intransitive lexical verb takes dependent-marking cross-referencing suffixes (12. 97a), while the subordinate transitive verbs in the examples from X_{Ch} are not marked for person (b-c).

- (12. 97) a. *ku=y ʔišpa-wa-n nin ša parakeʔ*
 go=PROG+3sS_{DEP} leave-ANT-1sS_{DEP} PN:1s PREP search
 'I am going to leave to search/look for (sth.)' (G-SH)
- b. <hlamú cuay, pulagua na míc jeregue>
ʔamu kw=ay pula-wa na mik-herewe
 NEG go=PROG+3sS_{DEP} make-ANT DET 2sP-gruel
 'is it not that he is going to make/have made your gruel (= cafe)'
 OT: "hace tu café" (Ch-JC)
- c. <cuyá turacá, mura cuay phulhagua athul nán >
ku=ya-ʔ tura-kaʔ mura kw=ay puʔa-wa at'ul nan
 go=PROG+ʔ take-2sA ear of corn go=PROG+3sS_{DEP} make-ANT Sp:gruel mother
 'you are going to take ears of corn for atol/gruel to be made, mother/lady'
 OT: "voy a traer elotes, para que haga atole la señora" (Ch-JC)

B. ANTERIOR-MARKING IN INTERROGATIVE CLAUSES: The anterior marker *-wa* is attested in the ALS on transitive (12. 98) and intransitive (12. 99) predicates in interrogative clauses, including yes/no questions as well as content questions. Structurally, both types of interrogatives are cleft constructions consisting of a pronoun or question word in initial position that functions as a nominal predicate and is followed by a relativised verbal predicate. Transitive predicates with *-wa* mark person agreement with dependent cross-referencing suffixes. The only example of an intransitive predicate marked with an anterior-suffix in the Maldonado-data is a nonfinite form marked with *-waʔ* that indicates a third person singular subject. Predicates of declarative responses to the following yes/no questions are marked by Maldonado de Matos with the past suffix *-ʔa*.

- (12. 98) a. <¿nem in púlaguàn?>
nem ʔin pula-wa-n
 PN:1s INT make-ANT-1sA
 '(is it) me what/who I have made it? = have I done it?'
 OT: "¿yo lo hice?" (4770.)
- b. <¿naca in szâc szâ guacân na tumin?>
naka ʔin šakša-wa-kan na tumin
 PN: 2s INT steal-ANT-2sA_{DEP} DET money
 '(is it) you what/who you have stolen the money? = have you stolen the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)
- (12. 99) <¿cà pè taguà na aszue?>
kaʔ =peʔ ta-waʔ na ʔaš
 INT:where? =CENT come-ANT DET DEM
 'from where (is it that) has come this (one)?'
 OT: "¿de dónde vino ésto?" (2010.)

In X_G and X_{Ch} *-wa* occurs in the same contexts with transitive (12. 100) and intransitive verbs (12. 101). Transitive predicates are attested with dependent as well as regular cross-referencing suffixes, which might be explained by the fact that the verb *tupa* can be used intransitively as well as transitively (the translation contexts below, however, only indicate the transitive function). The subordinate status of the

predicate is illustrated by the marking of the predicate with the subjunctive marker *-n* that follows the anterior suffix *-wa* in example (b).

- (12. 100) a. han=ta ʔaʔi tupa-wa-kaʔ
 INT=INT PREP.CAUS leave (sth.)-ANT-2sA
 'because of what have you left it?' (G-RHG)
- b. han=ta wena tupa-wa-n n=ahiʔ
 INT=INT:what INT:who? leave-ANT-SUBJ DET=DEM
 'who has left this?' (G-RHG)
- c. <catu-pa guakán>
 ka tupa-wa-kan
 INT:where? leave-ANT-2sA_{DEP}
 'where have you left it?'
 OT: "¿dónde lo dejaste?" (Ch-F)
- d. <huanin tinucay huacan>
 wanin ti(:ʔ) nuka-h-wa-kan
 INT:who? IO give-?-ANT-2sA_{DEP}
 'to whom have you given it?'
 OT: "¿a quién se lo diste?" (Ch-C)

Intransitive predicates employ dependent-marking cross-referencing suffixes to indicate person on verbs that are marked with *-wa*.

- (12. 101) a. <ndi miniski guacá>
 nti *mini-ʔ-ki-wa-kaʔ
 INT:what? clear-PART.ACT-INCH-ANT-2sS_{DEP}
 'what/how have you become clear (= dawned)?'
 OT: "¿cómo amaneciste?" (Ch-F)
- b. <qui tal miniguiquay nac... >
 ki tal *mini-ʔ-ki-wa-y nak
 Sp:how clear-PART.ACT-INCH-ANT-2sS_{DEP} PN:2s
 'how have you woken up?'
 OT: "¿qué tal amaneciste?" (Ch-JC)
- c. <huanin u huitz'ukij huacá>
 wanin *ti:ʔ wiç'u-ki-wa-kaʔ
 INT:who? IO beat-AP-ANT-2sS_{DEP}
 'who have you fought with?'
 OT: "¿con quién te has golpeado?" (Ch-C)

Examples from the Campbell & Kaufman-notes show the suffix *-wa* marking anterior/perfect on intransitive predicates in direct interrogative clauses and complement clauses. In these examples the predicate in the interrogative clause is marked for person with possessor-marking suffixes. It needs to be noted that the subjects of main and subordinate clause in examples (12. 102a-b) are not co-referential.

- (12. 102) a. <hin birin kaa ʔiʃpawah>
 hin piri-n ka: ʔiʃpa-wa-h
 NEG see-1sA INT:where leave-ANT-3sP
 'I did not see where he left'
 OT: "no vi de donde salió" (G-C&K)
- b. <han hiʔ tawaka ʃaʔtepet>
 han hiʔ ta-wa-ka ʃaʔtepet
 INT be+3sS_{DEP} come-ANT-2sP PREP-town
 'what is it (that) you have come to town?'
 OT: "¿en qué viniste del pueblo?" (G-C&K)

- c. <kaa ʔiʃpawah taata-ka>
 ka: ʔiʃpa-wa-h ta:ta-ka
 INT:where? leave-ANT-3sP father-2sP
 'where did you father leave/emerge? = *where was the having left of your father?'
 OT: "¿de dónde salió tu papá?" (G-C&K)

C. ANTERIOR-MARKING WITH LEFT-DISLOCATION OF ADVERBIALS: Campbell and Kaufman give carefully elicited examples in their notes from Guazacapán which show that *-wa* occurs in clauses with adverbial left-dislocation. All attested cases are with intransitive predicates that are preceded by prepositional phrases. Person agreement is marked by the same set of cross-referencing suffixes that mark the possessor on nouns, suggesting that *-wa* derives a nominal stem.

- (12. 103) a. <ša ʔuy ʔuʔuwah Hwan>
 ša ʔuy ʔuʔu-wa-h Hwan
 PREP water fall-ANT-3sP Juan
 'into the water fell Juan'
 OT: "Juan se cayó en el río" (G-C&K)
- b. <ša pwerta ʔiʃpawah Hwan>
 ša pwerta ʔiʃpa-wa-h Hwan
 PREP Sp:door leave-ANT-3sP Juan
 'through the door left Juan'
 OT: "Juan salió por la puerta" (G-C&K)
- c. <hina Hwan tawah>
 hina Hwan ta-wa-h
 PREP:with Juan come-ANT-3sP
 OT: "vino con Juan" (G-C&K)
- d. <ʔaʔ kawayu tawanʔ>
 ʔaʔ kawayu ta-wa-n
 PREP Sp:horse come-ANT-1sP
 OT: "vine en mula" (G-C&K)

The same pattern is attested in the semi-speaker data from X_G (12. 104) and in the Zeeje-ms. where transitive predicates marked with *-wa* are attested following prepositions (12. 105).

- (12. 104) ʔi hiʔ hapa-wa natiya mu-ʔuka pikar nin
 LOC pass-ANT LOC:there 3sA-do Sp:bite PN:1s
 ' (I) had passed by there, it (a bee)¹⁷⁰ bit me' (G-SH)
- (12. 105) a. <jama tupaguay liqui>
 hama tupa-gua-y =liki
 PREP leave/let-ANT-3pA 3PL
 'on which/where they have left it'
 OT: "en que le han puesto" (Ch-Z)
- b. <jani jaypuguac>
 hani haypu-wa-k
 ? receive-ANT-1pA
 'with which we have received it'
 OT: "con que lo recibimos" (Ch-Z)

In X_G and X_{Ch} the suffix *-wa* occurs with predicates preceded by temporal adverbials that refer to a specific point in time (12. 106). In X_{Ch} *-wa* even occurs on the intransitive lexical verb of a future construction following the temporal adverb 'tomorrow' (c). This future reference as well as the fact that anteriors usually do not co-occur with temporal adverbs may indicate that the operator *-wa* does not function as an anterior/perfect in contexts of adverbial left-dislocation, but that it rather has a syntactic function.

¹⁷⁰ The context is clarified by the original field translation (see Appendix 6).

- (12. 106) a. <ahmukan muka-wa-ka
yesterday work-ANT-2sA
'yesterday you have worked' (G-RHG)
- b. ?ahmukan hapa-wa-n ka† ?aya†a ?im-ey nin
ADV:yesterday pass-ANT-1sS_{DEP} INDEF woman say-3sA PN:1s
'yesterday I have/had passed by, (when) a woman said to me' (G-SH)
- c. <alaguac cuay ixpagua na procesión>
?ala=wak kw=ay ?išpa-wa na *procesion*
tomorrow=DIR go=PROG+3sS_{DEP} leave-ANT DET Sp:procession
'tomorrow it is going to leave (= have left?) the procession'
OT:"mañana va salir la procesión" (Ch-JC)

D. ANTERIOR-MARKING IN AUXILIARY VERB CONSTRUCTIONS: Maldonado de Matos uses the anterior suffix *-wa* on the auxiliary verb *pata-* (see § 10.1.3.6) in the tense categories *pretérito perfecto*, *plusquamperfecto* and *futuro perfecto*. Person is marked with dependent as well as regular transitive cross-referencing suffixes that follow *-wa* (12. 107b-c).

- (12. 107) a. <evètùè pataguaan>
k'í:ti-? **pata-wa-n**
measure-STAT *accomplish-ANT-1sA
'I was measured'
OT:"yo fui, he sido medido" (1329.)
- b. <pulà pataguacàn>
pula-? **pata-wa-kan**
make-STAT *accomplish-ANT-2sA_{DEP}
'you were made'
OT:"tú fuistes, has sido hecho" (495.)
- c. <merè pè ayù pataguàca>
mere-? **pe?** **?ayu?** **pata-wa-ka**
break-STAT FUT AUX *accomplish-ANT-2sA
'you will have been broken'
OT:"tú habrás sido roto" (686.)
- d. <pulà pataguài>
pula-? **pata-wa-y**
make-STAT *accomplish-ANT-3sA
'he was made'
OT:"aquel fue, ha sido hecho" (498.)

In infinitive and some third person contexts *pata-wa* seems to end in *-?*, which seems to suggest that the auxiliary is nonfinite, while the main verb is marked with the stative-resultative suffix.

- (12. 108) a. <samù pataguà>
samu-? **pata-wa?**
catch-STAT *accomplish-ANT
'has been caught'
OT:"haber sido cogido" (1224.)
- b. <pulà mà pataguà>
pula-? **ma?** **pata-wa?**
make-STAT COND *accomplish-ANT
'would have been made'
OT:"aquel haya sido hecho" (541.)

Maldonado de Matos marks the third person in several cases with the possessor-marking suffix *-h*. These nominalised forms of the auxiliary verb are mostly attested following unmarked lexical verbs (12. 109). However, we also find examples where the preceding main verb appears to be marked with the stative-resultative suffix *-ʔ* (12. 110).

- (12. 109) a. <ɛvètʷe pataguaag>
k'i:ti **pata-wa-h**
 measure *accomplish-ANT-3sP
 'have been measured'
 OT: "haber sido medido" (1388.)
- b. <maŁca oromo ma pataguag ... tu muqui na jamaca>
maŁka **ʔoromo** **ma** **pata-wa-h** **tumu=ki** **na** **hama-ka**
 CONJ gather COND *accomplish-ANT-3sP QUANT=DISTR DET Sp:sin-2sP
 'although all your sin(s) should have been gathered'
 OT: "aunque vuestros pecados hayan sido bien recogidos" (2034.)
- (12. 110) a. <merè pataguàg>
mere-ʔ **pata-wa-h**
 break-STAT *accomplish-ANT-3sP
 'to have been broken'
 OT: "haber sido roto" (727.)
- b. <nana macu pulà pataguàg aŁi Pedro>
nana **maku** **pula-ʔ** **pata-wa-h**
 FOC house make-STAT *accomplish-ANT-3sP
 'the house was made by Pedro'
 OT: "la casa fue hecha ..." (4775.)

12.3 Progressive

The imperfective aspectual category of 'progressive' describes a continuous event that is dynamic and specific, and thus contrasts with the likewise continuous stative aspect (cf. Comrie 1976:25; see also Payne 1997:239ff.).

In Xinka progressive is expressed by means of existential auxiliaries. Structurally, Xinka progressives are auxiliary verb constructions that consist of an auxiliary verb following a lexical verb. Progressives of transitive and intransitive verbs are expressed with different existential or auxiliary verbs. Intransitive verbs employ the existential verb *ʔaya-* 'be in a place' that follows the lexical verb and is marked with intransitive dependent-marking cross-referencing suffixes. Transitive verbs form the progressive with the existential verb *ʔuka-* 'have'; it likewise follows the verb and is marked with transitive dependent-marking suffixes.

- (12. 111) a. <guasàta ayaan>
wašata **ʔaya:-n**
 VI:enter PROG.VI-1sS_{DEP}
 'I am entering'
 OT: "estoy entrando" (1968.)
- b. <... pulà uean na an oracion>
pula **ʔuka-n** **na** **ʔan-oracion**
 VT:make PROG.VT-1sA_{DEP} DET 1sP-Sp:prayer
 '... I was making my prayer'
 OT: "cuando yo estaba haciendo mi oración" (1992.)

The more recent comparative data show that these progressive auxiliaries have become cliticised to the verb. This process of grammaticalisation of progressive auxiliaries is not attested in the ALS, although it may well have been present in eighteenth-century Xinka, as is suggested by the examples of cliticised progressives that are found in the Zeeje-manuscript.

Campbell and Kaufman indicate this pattern in their field notes for all three varieties X_G , X_{Ch} and X_{Jum} . In Schumann this type of construction is defined as a present durative (1967:53).

Periphrastic progressive constructions in Xinka can be shown to have developed from predicate nominal patterns involving a nominal predicate and a copula or existential verb (cf. Payne 1997:113). The progressive auxiliaries *ʔaya* and *ʔuka* are also found in the function of copulas and existentials with nominal predicates (see § 10.2.2).

(12. 112)	a.	ʔuraya hiʔ fire COP:be+3sS _{DEP} 'it/there is fire' (G-SH)	b.	<wariʔay> wari ʔay 'it/there is rain' OT:"está lloviendo" (Ch-MQb)
(12. 113)	a.	pari ʔuka-ʔ sun/heat EXIS:have-STAT 'it has sun/heat = it is hot' (G-JS)	b.	mal ʔuka-ʔ Sp:bad EXIS:have-STAT 'it got bad = it is bad' (G-RHb)

12.3.1 *Progressive of intransitive verbs*

The intransitive existential verb *ʔaya* 'be in a place' functions as an auxiliary verb marking progressive aspect on intransitive verbs. The auxiliary verb takes dependent-marking cross-referencing suffixes and is not attested with prefix-inflection at all. For an analysis of the functional contexts of the existential verb see § 10.1.3.1, Table 10. 9 and Table 10. 10.

All attested cases of intransitive progressives in the ALS show the auxiliary *ʔaya*- following the unmarked lexical main verb. The auxiliary carries all the inflectional information. Most attested examples are translated as present progressives (12. 114a-b). There is only one case in the ALS where the periphrastic expression relates to past progressive semantics (c).

(12. 114)	a.	<tà ayacà> taʔ ʔaya-kaʔ come PROG-2sS _{DEP} 'you are coming' OT:"estás viniendo" (1969.)	b.	<yszàpa agí> ʔiʂapa ʔahiʔ leave PROG+3sS _{DEP} 'he is leaving' OT:"está aquel saliendo" (1970.)
	c.	<upu ayacà> ʔupu ʔaya-kaʔ stand PROG-3sS _{DEP} 'you are/were standing' OT:"haber de estar..." (1955.)		

In the comparative data the majority of intransitive progressives with *ʔaya*- are attested as cliticised forms that follow the intransitive root having deleted the initial vowel *a*. Progressives of intransitive verb stems derived with *-ki* are formed the same way as progressives of transitive roots (12. 115c).

- (12. 115) a. ti:ki=ya-n
sleep=PROG-1s_{DEP}
'I am sleeping' (G-RHG)
- b. ʔišapa hiʔ
leave PROG+3s_{DEP}
'he is leaving' (G-SH)
- c. ʔiši-ki=ya-n
*VT:hear-AP=PROG-1s_{DEP}
'I am hearing' (G-RHG)

In X_{Ch} and X_Y the third person singular of the progressive auxiliary is expressed as *ʔay* (or *ʔey*) (12. 116) (see § 10.1.3.1), the author of the Zeeje-ms., however, also employs the form *hiʔ* that is found in X_G (12. 117).

- (12. 116) a. <yegwá ei pari>
yiwa ʔey pari
descend PROG+3s_{DEP} sun
'the sun is descending'
OT: "se está poniendo el sol" (Ch-F)
- b. <ʔuya ʔay nah man>
ʔuya ʔay nah man
laugh PROG+3s_{DEP} PN:3s DEM
'he is laughing'
OT: "él se está riendo" (Y-C)
- (12. 117) <huca hig aljurai>
ʔuka hiʔ ʔal-huray
have PROG+3s_{DEP} PREP-eyes
'having in sight'
OT: "teniendo a la vista" (Ch-Z)

There are also cases in X_{Ch} where the form =*ya* is attested (12. 118). It seems that in these cases the construction is not marked for person.

- (12. 118) a. <akuki-ya>
ʔaku-ki=ya
go-REFL?/AP=PROG
'going / walking'
OT: "caminando" (Ch-F)
- b. <konoki-ya>
*kini-ki=ya
content-AP/INCH=PROG
'being content'
OT: "estar contento" (Ch-F)

With respect to person-marking it needs to be mentioned that one semi-speaker from X_G (JAP) employs both, intransitive and transitive dependent-marking cross-referencing suffixes with the progressive construction; it is not clear whether this use of transitive marking is systematic. The following two examples are structurally analogical constructions that only differ in the person-marking pattern on the verb.

- (12. 119) a. hin ku=ya-ka naka ša wayaʔ
NEG go=PROG-2s_{DEP} PN:2s PREP milpa
'you are not going to the milpa' (G-JAP)
- b. hin ku=ya-kan naka ša ʔuy
NEG go=PROG-2s_{A_{DEP}} PN:2s PREP river
'you are not going to the river' (G-JAP)

TRANSITIVE VERBS: There are no cases of the progressive auxiliary *ʔaya* occurring with transitive lexical main verbs in the ALS. In the comparative data, however, the progressive auxiliary *ʔaya* is attested with transitive verbs. The cases attested in X_G could be argued to be transitive verbs that are used intransitively, referring to general, non-object-oriented activities.

- (12. 120) a. nuʔma=ya-n
VT:eat=PROG-1s_{DEP}
'I am eating' (G-RHG)
- b. k'awu hiʔ
VT:cook PROG+3s_{DEP}
'it/he is cooking' (G-RHG)

- c. <poʔéa hiʔ>
 poʔé'a hiʔ
 VT:wash PROG+3sS_{DEP}
 'it/he is washing'
 OT: "se está lavando" (G-S)

Progressives with *ʔaya* are also attested with light verb constructions that include a transitive lexical main verb. In the given examples, the activity does not seem to be object-oriented; e.g. example (12. 121b) seems to refer to the activity of 'net-making' in general.

- (12. 121) a. ʔuka remendar =ya-n
 do Sp:mend =PROG-1sS_{DEP}
 'I am mending' (G-RHG)
- b. ʔuka pula hiʔ nin tamaç'i
 do make PROG+3sS_{DEP} PN:1s net
 'I am making nets' (G-SH)

In Schumann's X_G -data there are examples of ditransitive progressive constructions with the auxiliary *ʔaya*. In these cases the predicate is clearly transitive. Whether this indicates that the analysis of *ʔaya* as an intransitive progressive auxiliary is imprecise, or whether this may be regarded as an influence from X_{Ch} , is unclear.

- (12. 122) <ʔandi ndi pulayán tiʔk>
 ʔanti nti pula=ya-n tiʔ-k
 NEG INT make/do=PROG-1sA_{DEP} IO-2s
 'not what I am doing to you'
 OT: "nada qué hago a ti" (G-S)

The Campbell & Kaufman-data indicate that in X_{Ch} the auxiliary *ʔaya* is used to mark progressive on intransitive and transitive verbs alike. In X_{Ch} the auxiliary occurs regularly with transitive verbs and takes transitive dependent-marking cross-referencing suffixes, which distinguishes these forms structurally from those progressives attested with transitive verbs in X_G as these always take intransitive dependent-marking cross-referencing suffixes (12. 120). In the X_{Ch} -data both forms are attested: transitive verbs that combine with an intransitive progressive form of *ʔaya* describe a general activity (12. 123b), while those that include an auxiliary with transitive cross-referencing indicate an object-oriented event (c-d).

- (12. 123) a. <ihuitz'iyan> b. <išak'a ʔay>
 ʔiwiç'i=ya-n ʔišk'a ʔay
 hear=PROG-1s drink PROG+3s
 'I am hearing it' 'he is drinking'
 OT: "lo estoy oyendo" (Ch-C) OT: "anda tomando" (Ch-MQb)
- c. <pirillin val columnas>
 piri=yin *baʔ columnas
 see=PROG+3s PFV Sp:columns
 'he is already seeing columns'
 OT: "viendo ya las columnas" (Ch-Z)
- d. <n'di pulayin pere oneje>
 nti pula=yin pere ʔone-ʔe
 INT make=PROG+3sA_{DEP} small tender-PL
 'what are the little tender ones (= children) doing?'
 OT: "¿qué hacen los niños?" (Ch-C)

In X_{Ch} examples of progressive forms that are followed by the preposition *ti:ʔ* are attested with translation contexts that suggest both, a transitive (12. 124a), as well as a general, not object-oriented activity (b).

- (12. 124) a. <chamayán ti>
 čama=yan ti(:ʔ)
 crush=PROG+3sS/A_{DEP} PREP/IO
 'crushing (stones)'
 OT: "picando (piedra)" (Ch-F)
- b. <ssirianti>
 siri=ʔan ti(:ʔ)
 spin=PROG+3sS/A_{DEP} PREP/IO
 'spinning'
 OT: "está hilando" (Ch-F)

In X_Y transitive verbs followed by the auxiliary *ʔaya* are regularly translated into Spanish as simple past. It is not clear whether the past context is only the result of inadequate translation or elicitation by Calderón, or whether the existential verb has indeed a different grammatical function in X_Y . It is possible that in all cases we are simply dealing with past progressive constructions that have been translated by Calderón as simple past.

- (12. 125) a. <kawayan nay>
 kawa=ya-n nay_O
 lend=PROG-1sS/A_{DEP} PN:2s
 'I lent you = *I was lending you'
 OT: "yo presté a ti" (Y-C)
- b. <sucaji nen pelu>
 suka hiʔ nen pe:luʔ_A
 bite *be+3sS_{DEP} PN:1s Sp:dog
 'the dog bit me = was biting me'
 OT: "el perro me mordió" (Y-C)
- c. <naj yamu jijüöka>
 nah yamu hiʔ hika
 PN:3s know PROG+3sS_{DEP} weave
 'he has learned weaving'
 OT: "él sabe tejer" (Y-C)
- d. <huenin teroyin>
 wenin tero=yin
 INT:who? die/kill=PROG+3sA_{DEP}
 'who was dying/killing?'
 OT: "¿a quién has matado?" (Y-C)

DISCONTINUOUS PATTERN: In the comparative data other constituents can be inserted between the lexical verb and the auxiliary =ya-, indicating that the progressive marker has not become grammaticalised as a suffix.

In X_G and X_{Ch} , the TAM-adverbial *paʔ* can occur between the lexical main verb *ku* 'go' and the cliticised progressive auxiliary. This form confirms the syntactic pattern indicated by Maldonado de Matos that TAM-adverbials precede auxiliary verbs, while usually following primary verbs (see § 12.5).

- (12. 126) a. ku=pa=ya-n paʔaʔ
 go=PFV=PROG-1sS_{DEP} PFV
 'I am already going' (G-SH)
- b. <kubaniyá>
 ku=pa=ni=ya
 go-PFV-PN:1s=PROG
 'I am already going'
 OT: "ir, salir" (Ch-F)

In X_{Ch} free pronouns can occur between the lexical main verb and the progressive marker.

- (12. 127) <ne irinajlic yan>
 ne ʔiri naʔik =ya-n
 PN:1s see PN:2p PROG-1sS_{DEP}
 'I am seeing you (pl.)'
 OT: "yo os veo" (Ch-C)

SUBORDINATE INTRANSITIVE PROGRESSIVE CONSTRUCTIONS: In the comparative data intransitive progressive constructions can be preceded by other auxiliaries and

verb forms, such as the auxiliary *te:ro* 'want' (§ 10.1.3.8.3) or the future auxiliary *kuy* (§ 12.4.1, § 10.1.3.1). It needs to be pointed out that only uninflected auxiliaries are attested; in all cases the preceding auxiliary modifies the entire progressive expression.

- (12. 128) a. *te:ro ti:ki=ya-n*
want sleep=PROG-1sS_{DEP}
'I want to be sleeping' (G-RHG)
- b. *te:ro ni?ma he?*
want eat PROG+3sS_{DEP}
'I want to be eating' (G-SH)
- c. <*tero 'nu?mani yam'ba^h*>
te:ro nu?ma ni =ya-n pa?
want eat PN:1s PROG-1sS_{DEP} PFV
'I already want to be eating'
OT: "tengo hambre" (Ch-MQ)
- d. <*tero cubar ya*>
te:ro ku=bar =ya
want go=PFV=PROG
'(I) want to be going'
OT: "quiero marchar, caminar" (Ch-F)
- (12. 129) *kuy ti:ki hi? nin*
AUX.FUT sleep PROG+3sS_{DEP} PN:1s
'I am going to be sleeping' (G-SH)

Intransitive progressives are also attested as subordinate predicates in adverbial clauses.

- (12. 130) *?anta-ma?ta ?a ti:ki hi?*
IMP:go-EXH=DIR Sp:to sleep PROG+3sS_{DEP}
'let's go to be sleeping' (G-JS)

In X_G intransitive progressive constructions in the third person singular can combine with an independent pronoun in the first or second person representing the S argument. As will be argued in the chapter on clause subordination, it is likely that these patterns are constructions where the progressive functions as a relative clause that refers to a nominal predicate (§16.2.5.3, § 17.3).

- (12. 131) a. *?akuki hi? naka_s*
walk PROG+3sS_{DEP} PN:2s
'you are walking = *(who) is walking (is) you' (G-SH)
- b. [*na nin*]_{S/A} *wiriki hi?*
DET PN:1s talk PROG+3sS_{DEP}
'I am talking = *(it is) me (who) is talking' (G-SH)

The same pattern is attested with transitive main verbs.

- (12. 132) a. *na nin piri naka_o he?*
DET PN:1s see PN:2s PROG+3sS_{DEP}
'I was seeing you = *(it is) me (who) is seeing you' (G-SH)
- b. <*saacsaji neu*>
saksa hi? nen
steal PROG+3sS_{DEP} PN:1s
'I stole it = *(who) was stealing it (was) me'
OT: "yo robé" (Y-C)

INTRANSITIVE PROGRESSIVE OF EXISTENTIAL CONSTRUCTIONS: In X_G and X_{Ch} , there are progressive constructions of intransitive lexical verbs followed by the existential verb *ʔuka* and the third person progressive marker. The existential verb *ʔuka* indicates existence/possession of a nominal predicate (§ 10.2.2.3), suggesting that the lexical main verb may function here as a noun. In some cases *ʔuka* is unmarked (12. 133), in others it takes transitive dependent-marking cross-referencing suffixes (12. 134). This type of construction is also attested with transitive lexical verbs and the transitive progressive auxiliary (§ 12.3.2).

- (12. 133) a. ti:ki ʔuka hi?
 sleep do/have PROG+3sS_{DEP}
 'he is doing/having sleep = he is sleeping' (G-JS)
- b. na nin kini=ka he?
 DET PN:1s content=do/have PROG+3sS_{DEP}
 '(it is) me (who) is being content' (G-SH)
- (12. 134) niwa=ka-kan he?
 wish/ask=do/have-2sA_{DEP} PROG+3sS_{DEP}
 'you are doing/having wish = you are wishing' (G-SH)

GRAMMATICALISATION OF AUXILIARY HI?: There are a few rare examples in X_G which show that the third person singular progressive auxiliary *hi?* is functioning as an auxiliary that follows fully inflected lexical verbs. In the following example (12. 135a) the intransitive verb *ʔupu* takes a cross-referencing suffix, suggesting that the progressive predicate occurs in subordinate context.

- (12. 135) a. ʔupu-n hi?
 stand-1sS_{DEP} PROG
 'I am standing' (G-JAP)
- b. ʔan-pula nin_{S/A} he?
 1sA-make PN:1s PROG
 'I am making (it)' (G-SH)

PROGRESSIVES WITH STATIVE PARTICIPLES AND NOMINALS: In X_G the third person progressive marker *hi?* can follow stative predicates. It is not clear in which way these constructions differ functionally from regular intransitive progressive constructions where the lexical main verb is unmarked. Structurally, the pattern is analogical to predicate nominals with copula-encoding which could in fact be the source structure for intransitive progressive marking (§ 10.2.2.2).

- (12. 136) a. ʔipla-ʔ hi?
 bath-STAT PROG+3sS_{DEP}
 'he is bathing' (G-JS)
- b. ti:k'i-ʔ hi?
 sleep-STAT PROG+3sS_{DEP}
 'he is sleeping' (G-SH)
- c. kiʔwa-ʔ hi?
 bend corn-STAT PROG+3sS_{DEP}
 'he is bending corn' (G-SH)

In X_G intransitive verb forms with the active past suffix *-ʔa* are attested as lexical verbs in progressive constructions. This form seems to be indicating a past progressive for intransitive verbs.

- (12. 137) naʔ ʔaku:-ʔa hi? ʔipaʔʔa?
 PN:3s walk-PAST.ACT PROG+3sS_{DEP} bath
 'he was going to bath' (G-SH)

In the following example from X_G , the transitive verb *pula* is given with the possessor-marking suffix *-h*, indicating that the predicate is nominal and that *ɔaya* again functions as a copula.

- (12. 138) hurak puʔa-h maʔik heʔ
 man make-3s firewood PROG+3sS_{DEP}
 'the man is making firewood = *it is the man's making (of) firewood' (G-SH)

12.3.2 *Progressive of transitive verbs*

The transitive verb *ɔuka* 'do, have' (§ 10.1.3.2) functions as an auxiliary verb that marks progressive aspect on transitive verbs. Maldonado de Matos indicates the verb <uea> [ʔuka] with the literal meaning "estar ejecutando o haciendo aquello" (1985.), i.e. 'to be carrying out/doing sth.'. This progressive auxiliary marks person with transitive dependent-marking cross-referencing suffixes (for a detailed chart of cross-referencing suffixes attested with the auxiliary see Table 10.15).

All attested cases of transitive progressives in the ALS indicate the auxiliary *ɔuka-* in position following the unmarked lexical main verb. The auxiliary carries the inflectional information. The examples are translated as past progressives and occur in subordinate clauses. Maldonado de Matos combines the progressive construction with the TAM-adverbial *na ʔɔ* (§ 12.5.3) that can occur preceding or following the lexical main verb. In this the progressive contrasts with light verb constructions (§ 10.1.4.1), where TAM-adverbials always refer to the head verb *ɔuka*, not to the dependent lexical verb.

- (12. 139) a. <asvec naL pùla uean na an oracion>
 ʔasik na(ʔ)ʔ pula ʔuka-n na ʔan-oracion
 CONJ IMPFV make PROG-1sA_{DEP} DET 1sP-Sp:prayer
 'when I was making (= saying) my prayer'
 OT: "cuando yo estaba haciendo mi oración" (1992.)
- b. <yguitzi nàL u ɛa can naca na misza>
 ʔiwie'i naʔɔ ʔuka-kan naka na miša
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)

Transitive progressive constructions with the auxiliary *ɔuka* are attested in X_G , X_{Ch} and X_Y . In the majority of examples from X_G the auxiliary *ɔuka* has become cliticised to the lexical verb. Also in X_G , the third person form of the progressive auxiliary *ɔukay* varies with *ɔukey*. It is not clear whether the two forms indicate any functional difference.

- (12. 140) a. na nin pula=ka-n waruʔo b. šuka=ka-n
 DET PN:1s make=PROG-1sA net eat=PROG-1sA
 'I am making a net' (G-JAP) 'I am/was eating (it)' (G-RHG)
- c. niwa=ka-kan hina nin_O c. šuka=ka-kan naka_{S/A}
 ask=PROG-2sA_{DEP} PREP PN:1s eat=PROG-2sA_{DEP} PN:2s
 '(what) are you asking me (for)?' (G-SH) 'you are eating' (G-SH)
- e. suʔma=k'a-y f. k'aʔu=k'e-y šinak_O
 water=PROG-3sA cook=PROG-3sA beans
 'he/she is watering (the field)' (G-RHG) '(she) is cooking beans' (G-SH)

- g. <rukakak>
 ruka=ka-k
 eat=PROG-1pA
 'we are eating'
 OT: "estamos comiendo" (G-S)

The transitive progressive construction with the auxiliary *ʔuka* is also attested in X_{Ch} in the Zeeje-ms. and in the Pivarál-data. In the remainder of the data from X_{Ch} transitive verbs form the progressive with the auxiliary *ʔaya* that marks intransitive verbs (see below).

- (12. 141) a. <hupú kakan manga hay>
 ʔupu=ka-kan man-ka ʔay
 close?=PROG-2pA_{DEP} ear-2pP 2PL
 'you (pl.) are closing your ears'
 OT: "cerrando vuestros oídos" (Ch-Z)
- b. <jaro cay guayack>
 horo=ka-y wayak'o
 guard=PROG-3sA_{DEP} milpa
 'he is/was guarding the milpa'
 OT: "estaba cuidando la milpa" (Ch-P)

The pattern is attested unaltered in negative and interrogative clauses.

- (12. 142) hin piri=ka-kan
 NEG see=PROG-2sA_{DEP}
 'you are not seeing/watching (it)' (G-JAP)
- (12. 143) a. hanta taʔma tura=ka-kan naka
 INT path take=PROG-2sA_{DEP} PN:2s
 'which path are you taking?' (G-JAP)
- b. <jam bulá cacán quejín catá luego>
 han pula=ka-kan ke hin ka-taʔ lwego
 INT do=PROG-2sA_{DEP} Sp:that NEG 2sS-come-STAT Sp:soon
 'what is it that you were doing that you did not arrive soon (= in time)?'
 OT: "¿por qué te tardaste tanto?" (Ch-P)

That the progressive auxiliary has been cliticised but not grammaticalised as a suffix becomes clear in the following two examples, where semi-speaker JAP inserts the S constituent in form of an independent pronoun between the unmarked lexical main verb and the coreferential auxiliary. These examples furthermore show that the auxiliary has generally lost the initial vowel *u* in recent X_G .

- (12. 144) a. pula nin =ka-n
 make PN:1s =PROG-1sA
 'I am making (it)' (G-JAP)
- b. te:ro šuka nin =ka-n
 want eat PN:1s =PROG-1sA
 'I want to be eating' (G-JAP)

When functioning as a full and light verb the transitive verb *ʔuka* with the meaning 'put, throw' can occur in a transitive progressive form.

- (12. 145) ʔuka=ka-y na mapu
 put/throw=PROG-3sA DET tortilla
 'he is putting/throwing (on the griddle) the tortillas' (G-RHG)
- (12. 146) a. ʔuka=ka-y ʔenkontrar
 do=PROG-3sA Sp:find
 'he is/was finding' (G-SH)
- b. <hucakay cultivar>
 ʔuka=ka-y cultivar
 do=PROG-3sA Sp:cultivate
 '(he is) cultivating'
 OT: "cultivando" (Ch-Z)

SUBORDINATE TRANSITIVE PROGRESSIVE CONSTRUCTIONS: As it is the case with intransitive progressive constructions, transitive progressives are attested in subordinate context. They can occur as dependent predicates of other AVCs, including the grammaticalised future auxiliary *kuya-* 'going to' and the auxiliary *te:ro* 'want'.

- (12. 147) a. <kuyán kayakán tiʔla ša šankúko>
 ku=ya-n kaya=ka-n tiʔla ša šan-kuko
 go=PROG.VI-1s_{DEP} sell=PROG.VT-1sA salt PREP PREP-Taxisco
 'I am going to be selling salt in Taxisco'
 OT: "venderé sal en Taxisco" (G-S)
- b. ʔaʔa peʔ kuy ʔima-ka-n
 tomorrow CENT AUX.FUT say=PROG-1sA
 'tomorrow I will be telling (him)' (G-SH)
- (12. 148) te:ro piri=ke-y
 want see=PROG-3sA_{DEP}
 'they are wanting to see' (G-SH)

In X_G transitive progressive constructions in the third person singular can occur with first or second person subjects that are expressed by independent pronouns. These constructions can be identified as clefted constructions in which the third person singular form of the predicate indicates that the verb is relativised (§ 16.2.5.3).

- (12. 149) a. na nin hapa=ka-y
 DET PN:1s wait=PROG-3sS/A
 'I am waiting = *(it is) me (who) is waiting' (G-SH)
- b. šuka=ke-y nin
 eat=PROG-3sS/A PN:1s
 'I am eating = *(who) is eating (is) me' (G-SH)

In other cases the subordinate or relativised transitive progressive form is only marked with the stative-suffix -ʔ.

- (12. 150) a. piri=ka-ʔ nin_A [ʔikah ʔawe]_o
 see=PROG-STAT PN:1s INDEF Sp:bird
 'I am seeing a bird' (G-JS)
- b. nana nin ʔima=ka-ʔ naka_o
 FOC PN:1s tell=PROG-STAT PN:2s
 'it was me (who) was telling you' (G-RHG)

TRANSITIVE PROGRESSIVE OF EXISTENTIAL CONSTRUCTIONS: SH is the only speaker who employs a progressive form that consists of the unmarked lexical main verb and a cliticised progressive form of the existential verb *ʔuka*. This type of construction is also attested with intransitive lexical verbs and the intransitive progressive auxiliary (§ 12.3.1). Participant reference shows agreement with the subject constituent, which can precede or follow the verb (12. 151a-b). In examples (c-d), where this is not the case, the subject seems to be clefted and the third person reference on the verb marks the relative clause (see § 17.3). SH also uses the pattern as part of more complex predicates (d).

- (12. 151) a. šuka=ka=ka-n nin_{S/A}
 eat=do/have=PROG-1sA PN:1s
 'I am doing/having (to) eat' (G-SH)

- b. na nin para=ka=ka-n nuwi_o
 DET PN:1s search=do/have=PROG-1sA straw
 'I am doing/having (to) search/look for straw' (G-SH)
- c. na nin nuka=ka=ke-y
 DET PN:1s give=do/have=PROG-3sA
 '(it is) me (who) is doing/having (to) give' (G-SH)
- d. na nin te:ro šuka=ka=ka-n
 DET PN:1s want eat=do/have=PROG-1sA
 '(it is) me (who) wants to be doing/having (to) eat' (G-SH)

TRANSITIVE PROGRESSIVE WITH STATIVE PARTICIPLE: As with intransitive progressives in X_G , the transitive auxiliary is attested with stative participles in a pattern that is structurally analogical to predicate nominals with existentials (§ 10.2.2.3). As argued above, these patterns consisting of nominal predicate and copula/existential may be the source structures of progressive constructions in Xinka.

- (12. 152) a. šuwi-? ʔuka-y naʔ_{s/A}
 sweep-STAT PROG-3sA DET/PN:3s
 'he is sweeping' (G-JS)
- b. hono-? ʔuka-kaʔ naka_s
 get drunk-STAT PROG-2sA PN:2s
 'you are drunk' (G-JS)

In X_G there are examples of intransitive verbs functioning as nouns and stative participles that are followed by an existential verb that is either marked with the third person singular possessor-suffix, i.e. *ʔuka-h* (12. 153), or with the stative-resultative marker -ʔ, i.e. *ʔuka ʔ* (12. 154).

- (12. 153) a. ti:ki ʔuka-h nin_s
 sleep do/have-3sP PN:1s
 'I am sleeping (= *sleep-having (is) mine)' (G-JS)
- b. ʔušaki ʔuka-h naʔ
 smoke do/have-3sP DEM/3s
 'he smokes (= *smoke-doing (is) his)' (G-JS)
- c. muču-? ʔuka-h nin
 get tired-STAT PROG-3sP PN:1s
 'I am tired (= *tired-having is mine)' (G-JS)
- (12. 154) a. ti:ki ʔuka-ʔ
 sleep PROG-STAT
 'he is sleeping' (G-JS)
- b. hin huma=ka naʔ
 NEG smell=PROG PN:3s
 'he is not smelling' (G-RHG)

TRANSITIVE PROGRESSIVES WITH EXISTENTIAL VERB ʔAYA: As pointed out in the previous § 12.3.1 the existential verb *ʔaya* 'be' is employed in X_{Ch} to mark progressive on transitive verbs. In this function it takes transitive dependent-marking cross-referencing suffixes (see inflectional paradigm of the auxiliary in § 10.1.3.1).

- (12. 155) a. <ihuitz'iyān>
 ʔiwiʔ'i=ya-n
 hear=PROG-1sA_{DEP}
 'I am hearing it'
 OT: "lo estoy oyendo" (Ch-C)

- b. <cuan rucá ayin xuxo>
 *kwan ruka-ʔ ʔayin šušo
 INT:who? bite-STAT PROG+3sA_{DEP} dog
 'who (is it) the dog (is) biting'
 OT: "el perro le muerde" (Ch-C)
- c. <najlic irinac ayin>
 naʔik ʔiri nak ʔayin
 PN:3p see PN:2s PROG+3sA_{DEP}
 'they are seeing you'
 OT: "ellos te ven" (Ch-C)
- d. <potz yacan mac trap>
 poɣ'=ya-kan *mik-trapo
 wash=PROG-2sA_{DEP} 2sP-Sp:cloth
 'you are washing your clothes'
 OT: "du wäscht deine Wäsche" (Ch-L)

Reflecting the heterogeneity of diachronic data from Chiquimulilla, the transitive progressive with *ʔaya* is not attested in the Zeeje-ms. or in the Pivaraal-data, where we find the grammaticalised form of the auxiliary *ʔuka* (see above).

12.4 Periphrastic future constructions

There are different strategies for expressing future events in Xinkan. Not all of these are attested in the ALS. Maldonado de Matos marks all future categories of the Latin grammatical paradigm with nonpast/imperfective cross-referencing on the verb and the TAM-adverbial *peʔ* (see § 12.5.1).

In the comparative data the main strategy for expressing future events in Xinkan is by means of periphrastic constructions. Two types of future constructions are attested in the comparative material:

- future constructions with the auxiliary *ku=ya-* that has been grammaticalised from the motion verb (*a*)*ku* 'go' and the intransitive progressive auxiliary *ʔaya*.
- future constructions with the existential verb *ko*.

Schumann (1967:40-41) distinguishes these two constructions in X_G as remote and immediate future.¹⁷¹

The strategy for expressing future by means of periphrastic constructions with auxiliaries grammaticalised from the motion verb (*a*)*ku* 'go' and the existential verb *ʔaya* is neither attested in the ALS nor in the Zeeje-ms., where future is exclusively marked with the TAM-adverbial *peʔ* (see § 12.5.1). In the other data sources periphrastic marking and future adverbials co-occur, which indicates that they express different functional categories. Both structural types of future marking (i.e. periphrastic constructions and the TAM-adverbial *peʔ*) derive historically from motion verbs meaning 'go' or 'come'.

Although they are not attested as such in the ALS, the source structures for periphrastic future constructions can be identified in Maldonado-Xinka.

¹⁷¹ "Las raíces que marcan futuro aparecen inflectadas: *ko* marca el futuro inmediato y recibe prefijos como marcadores de persona, *kuy* marca el futuro remoto y recibe sufijos como marcadores de persona, en construcción con las raíces verbales. Las raíces verbales a las cuales anteceden estos elementos también

12.4.1 Future constructions with grammaticalised auxiliary *kuya-*

The future constructions that will be discussed in this section employ an auxiliary that has become grammaticalised from an intransitive progressive construction (see § 12.3.1), consisting of the motion verb *ʔaku* or *ku* 'go' in initial position and the existential verb *ʔaya-* 'be' in the function of a progressive auxiliary that takes person-marking in form of cross-referencing suffixes (see § 10.1.3.1).¹⁷²

Table 12. 3: Morphology of future auxiliaries in the comparative data

	MORPHOLOGY				AUXILIARY	GLOSS
1s	*(ʔa)ku	+ ʔaya-n	[go + be-1s _{DEP}]	=	ku=yan	'I am going to'
2s	*(ʔa)ku	+ ʔaya-ka	[go + be-2s _{DEP}]	=	ku=yaka	'you are going to'
3s	*(ʔa)ku	+ ʔahi	[go + be+3s _{DEP}]	=	ku=y (X _G , X _Y) kw=ay (X _{Ch})	'he/she is going to'

The future construction itself is not attested in the ALS, but there is one example of a progressive construction of the motion verb *ʔaku* from which the future auxiliary attested in the comparative data likely became grammaticalised. In the example from the ALS *ʔaku* is followed by the auxiliary *ʔaya-* that is marked with a cross-referencing suffix in the first person singular. The progressive predicate is followed by a locative noun. The literal translation of the construction is given as 'I am going/leaving to be at LOC'.

- (12. 156) <acù ayaan Guatemala>
ʔaku? **ʔaya:-n** **Guatemala**
 go be/PROG-1s_{DEP} LOC:Guatemala
 'I am going to be in Guatemala'
 OT: "me voy a estar a Guatemala" (1961.)

The same pattern of an intransitive progressive with (*ʔa*)*ku* preceding a locative noun (12. 157) or prepositional phrase (12. 158) is attested in X_G and X_{Ch}. In most cases the form is translated as a progressive, but in some cases semi-speakers also use it to refer to future events, i.e. 'going to go' (12. 158a-b).

- (12. 157) a. ku=pa=ya-n ɕ'ehe
 go=PFV=PROG-1s_{DEP} TOPN
 'I am already going to Chiquimulilla' (G-RHG)
- (12. 158) a. ku=ya-n ša krawa
 go=PROG-1s_{DEP} PREP woods
 'I am going (to go) into the woods' (G-RHG)
- b. hin ku=ya-ka naka ša wayá?
 NEG go=PROG-2s_{DEP} PN:2s PREP milpa
 'you are not going (to go) to the milpa' (G-JAP)
- c. <cuyá rhatálti>
 ku=ya-ʔ ra taʔti
 go=PROG-STAT PREP (hill)slope
 'going to the hillslope'
 OT: "voy a la loma" (Ch-JC)

¹⁷² I had suggested this reconstruction in a paper given at Leiden University in December 2002 (see Sachse 2002). The analysis had been proposed earlier by Campbell and Kaufman, as documented in their field notes, which I first had access to in 2005.

In the following example, the progressive form seems to function as the predicate of a dependent clause and is therefore marked with the transitive dependent cross-referencing suffix of the second person singular.

- (12. 159) hin ku=ya-kan naka ša ʔuy
 NEG go=PROG-2sA_{DEP} PN:2s PREP water
 '(that) you are not going to the river' (G-JAP)

The progressive form *ku=ya-* is also attested preceding prepositional phrases that consist of a preposition and a nominalised verb and indicate purposiveness of action (see § 9.1.1).

- (12. 160) a. ʔaʔa peʔ ku=ya-n ša poʔ'aʔ
 tomorrow CENT go=PROG-1sS_{DEP} PREP wash
 'tomorrow I am going to wash' (G-SH)
 b. ku=ya-n ša tero tuma
 go=PROG-1sS_{DEP} PREP kill deer
 'I am going to kill deer' (G-SH)

There are several examples in X_G where the grammaticalised progressive construction is functioning as a full predicate that may be referring to future events (12. 161). In this function, the construction can be followed by the TAM-adverbials *paʔaʔ* (X_G) or *bar* (X_{Ch}) (12. 162). The perfective *paʔ* can also occur between the motion verb and the progressive auxiliary (12. 162). Campbell & Kaufman give examples in their field data where this complex construction has grammaticalised and functions as an auxiliary preceding verbs.

- (12. 161) ʔaku=ya-n nin
 go=PROG-1sS_{DEP} PN:1s
 'I am going to go = I go' (G-SH), (G-PE), (G-JAP)
- (12. 162) a. ku=ya-n paʔaʔ b. <cuyá bar>
 go=PROG-1sS_{DEP} PFV ku=ya-ʔ bar
 'I am already going' (G-SH), (G-JAP) go=PROG-STATPFV
 'I am already going'
 OT: "ya me voy" (Ch-JC)
- (12. 163) a. ku=pa=ya-n paʔaʔ
 go=PFV=PROG-1sS_{DEP} PFV
 'I am already going' (G-SH) b. ku=pa=ya-ka
 go=PFV=PROG-2sS_{DEP}
 'you are already going' (G-RHG)
 c. <cu vari ya>
 ku=bari=ya
 go=PFV=PROG
 'I am already going'
 OT: "ya me voy" (Ch-C)

This progressive construction is very likely the source from which the future auxiliary *kuya-* has been grammaticalised. This is especially suggested by the fact that *kuya-* only takes cross-referencing suffixes. The grammaticalisation of future markers from motion verbs is a common phenomenon (Payne 1997:238) and does not necessarily have to be interpreted as a structural influence from Spanish. Structurally, future constructions combine the grammaticalised intransitive progressive of (*ʔa*)*ku* and a lexical verb that always follows the progressive.

Future constructions with the auxiliary *kuya-* fall into different structural patterns of which all are translated into Spanish as immediate futures ("ir a"). Some patterns

seem to be restricted to certain Xinka varieties, others may depend on the transitivity status of the lexical verb.¹⁷³ In all cases a form of *kuya-* precedes a lexical verb or complex predicate, which in most cases is structurally subordinate to the progressive construction. Subordination strategies include dependent-marking cross-referencing affixes, unmarked and participle verb forms, as well as overt marking for subordination by means of the subjunctive *ʔn* (§ 13.3) or the anterior/perfect past marker *-wa* (§ 12.2.3).

The attested structural patterns include:

- coreferential person-marking of future auxiliary form *kuya-* and transitive or intransitive lexical verb
- future auxiliary form *kuya-* with person-marking preceding unmarked intransitive verb
- future auxiliary form *kuya-* with person-marking preceding stative participle of intransitive and transitive verbs
- third person singular form of the future auxiliary *kuy* (or *kway* in X_{Ch}) preceding lexical verb with person-marking affixes; this pattern occurs mostly with transitive verbs, but is also attested with intransitives (X_G)
- third person singular form of the future auxiliary *kuy* (or *kway* in X_{Ch}) preceding lexical verb marked as subordinate

A. COREFERENTIAL PERSON-MARKING ON FUTURE AUXILIARY AND LEXICAL VERB: The grammaticalised future auxiliary *kuya-* precedes transitive as well as intransitive verbs which are marked for person agreement with cross-referencing affixes that are coreferential with the person-marking on the future auxiliary.

Future auxiliary constructions with coreferential person-marking on auxiliary and intransitive lexical verb are only attested in Schumann (1967:52), who employs cross-referencing prefixes (12. 164) as well as dependent-marking cross-referencing suffixes (12. 165) with intransitive main verbs. From the translation contexts it is not clear whether there is a functional difference between the two that are both categorised by Schumann as remote future. Schumann's description suggests that the difference in the marking pattern may be determined by different semantic contexts in which the verbs occur.¹⁷⁴ However, it seems more likely that the set of cross-referencing affixes employed is dependent on syntactic hierarchy, but as the examples given by Schumann are separated from their syntactic contexts, it cannot be clarified whether suffix-marking may be restricted to dependent clauses alone.

¹⁷³ Campbell & Kaufman suggest a distinct pattern of future marking on intransitive and transitive verbs in X_G, X_{Ch} and X_{Jum}. According to their field notes, intransitive future constructions in X_G and X_{Ch} mark person in form of intransitive dependent cross-referencing suffixes on the auxiliary *kuya-* and leave the intransitive lexical verb unmarked, while transitive verbs mark person on the lexical verb leaving the preceding auxiliary *kuya-* unmarked. Comparative data from X_G and X_{Ch} attest the various patterns with both, intransitive and transitive verbs.

¹⁷⁴ "La raíz verbal /ta/, infinitivo de venir, que es homófona de la raíz /ta/ usada en el futuro del verbo andar se diferencia en que la primera usa sufijos para marcar sujetos y la segunda prefijos..." (Schumann 1967:52). Thus, Schumann distinguishes two meanings of *ta* which indicates 'go' in future contexts (e.g. <kuyan ánta> *ku=ya-n ʔan-ta* [go=PROG-1sS_{DEF} 1sS-arrive/go] "andaré") and 'arrive, come' in all others (e.g. <tan> *ta-n* [arrive/come-1sS_{DEF}] "yo vengo"). However, in both contexts, 'arrive' would seem to be the basic meaning of the verb.

- (12. 164) a. <kuyán anwiriki>
 ku=ya-n 7an-wiriki
 go=PROG-1sS_{DEP} 1sS-speak
 'I am going to speak'
 OT: "platicaré" (G-S)
- b. <kuyáka káta>
 ku=ya-ka ka-ta
 go=PROG-2sS_{DEP} 2sS-come
 'you are going to come (= walk)'
 OT: "andarás" (G-S)
- (12. 165) a. <kuyán yiwán>
 ku=ya-n yiwa-n
 go=PROG-1sS_{DEP} descend-1sS_{DEP}
 'I will descend (= enter?)'
 OT: "entraré" (G-S)
- b. <kuyáka yiwáka>
 ku=ya-ka yiwa-ka
 go=PROG-2sS_{DEP} descend-2sS_{DEP}
 'you are going to descend (= enter?)'
 OT: "entrarás" (G-S)

Coreferential person-marking on auxiliary and lexical verb is also attested in the semi-speaker data from X_G, but only with transitive verbs. In all cases cross-referencing suffixes are employed. As there are no examples for the second person, it cannot be determined whether the main verb is marked with dependent-marking suffixes. If the O argument of the transitive predicate is expressed, it follows the predicate.

- (12. 166) a. ku=ya-n čuma-n wiyan_O
 go=PROG-1sS_{DEP} suck-1sA_{DEP} sugar cane
 'I am going to suck sugar cane' (G-RHG)
- b. ku=y wišu-y nak_O
 go=PROG+3sS_{DEP} beat-3sA PN:2s
 'he is going to beat you' (G-SH)
- c. <nanin kuyán pulán pokóko ki hi?>
 na nin ku=ya-n pula-n pokoko ki hi?
 DET PN:1s go=PROG-1sS_{DEP} make-1sA racoon INTENS/REFL ?
 'I am going to make it (turn it into a) racoon'
 OT: "lo convertiré en mapache" (G-S)

Other constituents in form of independent pronouns representing the subject can be inserted between the components.

- (12. 167) ku=ya-n nin_s kunu-n
 go=PROG-1sS_{DEP} PN:1s buy-1sA_{DEP}
 'I am going (in order) to buy' (G-JAP)

The future auxiliary form *kuya-* can occur with complex predicates such as intransitive or transitive progressive forms (12. 168) or light verb constructions (12. 169).

- (12. 168) a. ku=y ti:ki hi? nin
 go=PROG+3sS_{DEP} sleep PROG+3sS_{DEP} PN:1s
 'I am going to be sleeping' (G-SH)
- b. <naj na ma cuay tiki ray>
 nah na ma kw=ay ti(:)ki ray
 PN:3s DET DEM go=PROG+3sS_{DEP} sleep PROG+3s
 'he is going to be sleeping'
 OT: "él duerme" (Ch-C)
- c. <kuyán kayakán ti?la>
 ku=ya-n kaya=ka-n ti?la_O
 go=PROG-1sS_{DEP} sell=PROG-1sA salt
 'I am going to be selling salt'
 OT: "venderé sal ..." (G-S)
- (12. 169) ku=y 7uka benir lwego
 go=PROG+3sS_{DEP} do Sp:come Sp:soon
 'he is going to arrive soon' (G-SH)

B. PERSON-MARKING ON FUTURE AUXILIARY PRECEDING UNMARKED LEXICAL VERB: Future constructions consisting of the grammaticalised future auxiliary that carries all the inflectional information and an unmarked lexical verb are indicated by Campbell and Kaufman in their field notes as the main pattern for future marking on intransitive verbs. This structural pattern is attested in X_G (12. 170) and X_{Ch} (12. 171).

- (12. 170) a. ku=ya-n ti:ki nin paʔaʔ
go=PROG-1s_{DEP} sleep PN:1s PFV
'I am already going to sleep' (G-JAP)
- b. ku=ya-kaʔ lawaro hina nin
go=PROG-2s_{DEP} dance PREP:with PN:1s
'you are going to dance with me' (G-SH)
- c. <kuy ta>
ku=y ta
go=PROG+3s_{DEP} come
'it/he will come'
OT: "andará" (G-S)
- d. ku=y ʔuʔu ʔuy
go=PROG+3s_{DEP} fall water
'water/rain will fall' (G-PE)
- (12. 171) a. <cuyan guarata>
ku=ya-n warata
go=PROG-1s_{DEP} enter
'I am going to enter'
OT: "voy a entrar" (Ch-P)
- b. <najlic cuyaca tiki ray>
naʔik ku=ya-ka ti(:)ki ray
PN:2p go=PROG-2s_{DEP} sleep 2PL?
'you (pl.) are going to sleep'
OT: "vosotros dormís" (Ch-C)
- c. <cway acuc'>
kw=ay ʔakuk(i)
go=PROG+3s_{DEP} walk
'he is going to walk'
OT: "to walk" (Ch-MA)
- d. <cuay ulú na huy>
kw=ay ʔuʔu-ʔ na ʔuy
go=PROG+3s_{DEP} fall-STAT DET water
'the water is going to fall/be fallen
= it will rain'
OT: "va a llover" (Ch-JC)

The pattern is also attested with transitive verbs. However, one could argue that only transitive roots that express a general and non-object-oriented activity occur in this context. The unmarked transitive verb and its object *tura maʔik* 'bring firewood' in the following example (12. 172a) could function as a general expression, where the noun has at least semantically been incorporated into the verb (see § 10.1.4.3).

- (12. 172) a. ku=ya-n tura maʔik
go=PROG-1s_{DEP} bring firewood
'I am going to bring firewood' (G-RHG)
- b. <acuyán-ruck>
ʔaku=ya-n ruk'
go=PROG-1s_{DEP} eat
'I am going to eat'
OT: "comer" (Ch-P)

The same holds true for the following two examples where the person-marked future auxiliary verb *kuya-* precedes transitive light verb constructions that seem to follow the same pattern of semantic incorporation and describe a generalised activity, i.e. 'to hunt deer' and 'to cut hair'.

- (12. 173) a. ku=ya-n ʔuka tirar ku tuma
go=PROG-1s_{DEP} do Sp:shoot MOD deer
'I am going to shoot deer' (G-RHG)

- b. <cuyan uc cac uruy mute>
 ku=ya-n ʔuka kuru-y muti
 go=PROG-1sS_{DEP} do cut-3s hair
 'I am going to do his cutting hair'
 OT: "me voy a quitar el pelo con el barbero" (Ch-P)

In X_{Ch} unmarked intransitive verbs can also be preceded by the form *kuyaʔ*. In most given translation contexts, *kuyaʔ* refers to the first person singular.

- (12. 174) a. <cuyá ni rina ...>
 ku=ya-ʔ ni rina
 go=PROG-STAT PN:1s urinate
 'I am going to urinate'
 OT: "voy a orinar" (Ch-C)
- b. <a cuyá tíqui>
 ʔaku=ya-ʔ ti:ki
 go=PROG-STAT sleep
 '(I am) going to sleep'
 OT: "voy a dormir" (Ch-JC)
- c. <kuyaʔ ʔi'paʔla>
 ku=ya-ʔ ʔipaʔla
 go=PROG-STAT bath
 '(I am) going to bath'
 OT: "voy a bañarme" (Ch-MQ)

The few examples of *kuyaʔ* in X_G refer to the third person singular.

- (12. 175) ku=ya ʔawaru
 go=PROG dance
 'he is going to dance' (G-RHG)

The form *kuyaʔ* occurs in rare examples from X_G and X_{Ch} preceding a future construction with the third person auxiliary *kuy*, which seems to suggest that *kuyaʔ* and *kuy* are functionally distinct forms.

- (12. 176) a. ku=ya-ʔ ku=y kayi-n
 go=PROG-STAT go=PROG+3sS_{DEP} sell-1sA
 'I am going to go to sell' (G-SH)
- b. <cuyá cuipiqui na eyma>
 ku=ya-ʔ ku=y piki na ʔeyma
 go=PROG-STAT go=PROG+3sS_{DEP} harvest DET corn
 'I am going to go to harvest corn'
 OT: "voy a tapiscar el maíz" (Ch-JC)

The third person singular form of the grammaticalised future auxiliary *kuy* preceding unmarked verbs can occur with independent pronouns in the first and second person that express the subject of the clause. Analogically to other constructions that combine a third person singular predicate with a first or second person subject, we may be dealing with a form of cleft-construction in which the future construction is relativised to the pronoun functioning as a nominal predicate. However, in cleft-constructions, the cleft usually occurs to the left of the relative clause (§ 16.2.5.3), while with these particular future constructions, the pronoun can occur in initial (12. 177a-b) or final position (c-d).

- (12. 177) a. na nin ku=y wašata
 DET PN:1s go=PROG+3sS_{DEP} enter
 'I will enter = *(it is) me (who) will enter' (G-SH)
- b. naka ku=y puʔiki ʔaʔa peʔ
 PN:2s go=PROG+3sS_{DEP} wash tomorrow CENT
 'you will wash tomorrow = *(it is) you (who) will wash' (G-RHG)

- c. ku=y ʔipala nin
 go=PROG+3sS_{DEP} bath PN:1s
 'I will bath = *(who) will bath (is) me'
 "voy a bañarme" (G-SH)
- d. <cuay lhara u na'c>
 kw=ay ʔaraw nak
 go=PROG+3sS_{DEP} dance PN:2s
 'you will dance = *(who) will dance (is) you'
 OT: "vas a bailar vos" (Ch-JC)

The pattern is again mostly attested with intransitive verbs (12. 177); transitive verbs that occur in this context seem to express general, non-object-oriented activities (12. 178).

- (12. 178) a. ku=y nuʔma nin
 go=PROG+3sS_{DEP} eat PN:1s
 'I will eat = *ʔ(who) is going to eat (is) me' (G-SH)
- b. naha ku=y ʔamuk'a naka
 LOC go=PROG+3sS_{DEP} work PN:2s
 'here you will work = *ʔ(who) is going to work is you' (G-JAP)
- c. ne:ʔeke ku=y sawaɣ'a nin
 PN:1p go=PROG+3sS_{DEP} sow PN:1s
 'we will sow = ʔ(it is) us (who) is going to sow' (G-SH)
- d. <cuay, numa ná>
 kw=ay numa nak
 go=PROG+3sS_{DEP} eat PN:2s
 'you are going to eat = *ʔ(who) is going to eat (is) you'
 OT: "vas a comer" (Ch-JC)

In X_G the pattern is also attested with transitive light verb constructions that, again, describe generalised activities and are therefore treated like intransitive verbs. All examples are found in the data of the semi-speaker SH.

- (12. 179) na nin ku=y ʔuka ʔetaka
 DET PN:1s go=PROG+3sS_{DEP} do harvest
 'I am going to harvest = *ʔ(it is) me (who) is going to harvest' (G-SH)

One example from X_Y shows an S constituent inserted between the third person singular future auxiliary and the unmarked lexical verb.

- (12. 180) <naj nay cuy ninjorro>
 nahnay ku=y nin horo
 PN:3s go=PROG+3sS_{DEP} PN:1s guard
 'I will guard it'
 OT: "lo voy a depositar" (Y-C)

C. FUTURE AUXILIARY PRECEDING STATIVE PARTICIPLE: Intransitive lexical verbs also occur in future constructions consisting of the person-marked future auxiliary *kuya-* (*kuy* in the third person) and a stative participle form of the intransitive lexical verb marked with -ʔ (see § 11.1.2.1).

- (12. 181) a. natiyaʔ ku=ya-n tero-ʔ b. ku=ya-n hono-ʔ
 LOC go=PROG-1sS_{DEP} die-STAT go=PROG-1sS_{DEP} get drunk-STAT
 'here I am going to be dead' (G-SH) 'I am going to be drunk' (G-RHG)

- c. ku=y ɬara-ʔ hutuʔ d. <kuyáka yiwá>
 go=PROG+3sS_{DEP} ascend-STAT tree ku=ya-ka yiwa-ʔ
 'he is going to climb the tree' (G-SH) go=PROG-2sS_{DEP} descend-STAT
 'you are going to enter'
 OT: "entrarás" (G-S)

- (12. 182) <cuyán-curú>
 ku=ya-n kuru-ʔ
 go=PROG-1sS_{DEP} run-STAT
 'I am going to run'
 OT: "escapar" (Ch-F)

In the semi-speaker data from X_G, the pattern is also attested with transitive lexical verbs.

- (12. 183) a. ku=ya-kaʔ kayi-ʔ maʔis man
 go=PROG-2sS_{DEP} sell-STAT corn DEM
 'you are going to sell that corn' (G-SH)
 b. ku=y pula-ʔ fyesta
 go=PROG+3sS_{DEP} make-STAT Sp:party
 'he/she is going to make a party' (G-SH)
 c. ʔaku=y k'iʔe'iʔ ša ʔuraya
 go=PROG+3sS_{DEP} fry PREP fire
 'he is going to fry (it) in the fire' (G-SH)

D. THIRD PERSON SINGULAR FUTURE AUXILIARY PRECEDING PERSON-MARKED VERB: Most examples of future constructions in X_G and X_{Ch} combine the third person singular future auxiliary *kuy* (X_G, X_{Ch}) or *kway* (X_{Ch}) with a transitive or intransitive lexical verb that is marked for person agreement with dependent-marking cross-referencing suffixes. Structurally, the lexical verb is subordinate to the third person future form; literally the construction translates as 'he/it is going to be that I/you/he do(es) X'.

Campbell and Kaufman identify this construction in their field notes as a pattern for marking future on transitive verbs. In X_G (12. 184) and X_{Ch} (12. 185) the future construction is indeed mostly attested with transitive verbs that take dependent-marking cross-referencing suffixes to mark person agreement.

- (12. 184) a. ʔaʔa peʔ kuy poko-n hišiʔ
 tomorrow CENT go=PROG+3sS_{DEP} break-1sA stone
 'tomorrow I will break stone' (G-SH)
 b. ku=y wišu-y nako
 go=PROG+3sS_{DEP} beat-3sA PN:2s
 'he is going to beat you' (G-SH)
 c. kuy šuka-kan naka sema
 go=PROG+3sS_{DEP} eat-2sA_{DEP} PN:2s fish
 'you are going to eat fish' (G-JAP)
- (12. 185) a. <cuy turán magle>
 ku=y tura-n maʔe
 go=PROG+3sS_{DEP} bring-1sA firewood
 'I will bring firewood'
 OT: "voy a traer leña" (Ch-P)

- b. <cuay pulan táljma>
 kw=ay pula-n ta[†]ma
 go=PROG+3sS_{DEP} make-1sA path/road
 'I will make the path/road'
 OT: "voy a hacer el camino" (Ch-C)
- c. <kway te[†]may na? u'ray>
 kw=ay te[†]ma-y na ʔuray
 go=PROG+3sS_{DEP} flare-3sA DET fire
 'the fire will flare up'
 OT: "te va alcanzar la llama" (Ch-MQb)
- d. <n'di cuay pulajkin>
 nti kw=ay pula-hkin
 INT go=PROG+3sS_{DEP} make-1pA_{DEP}
 'what are we going to make?'
 OT: "¿qué debemos hacer?" (Ch-C)

However, in both Xinka varieties the pattern is also attested with intransitive verbs that are likewise deranked and marked for person with dependent-marking cross-referencing suffixes (12. 186). There are also a few examples of intransitive lexical verbs taking cross-referencing prefixes in X_G; it is not clear whether this is a regular pattern (12. 187).

- (12. 186) a. ku=y ʔaku-n paʔa?
 go=PROG+3sS_{DEP} go-1sS_{DEP} PFV
 'I am already going' (G-SH)
- b. ku=y wašta-y
 go=PROG+3sS_{DEP} enter-3sS_{DEP}
 'he is going to enter' (G-JAP)
- c. <na'c cuay tero ca>
 nak kw=ay tero-ka
 PN:2s go=PROG+3sS_{DEP} die/kill-2sS_{DEP}
 'you are going to die'
 OT: "te vas a morir" (Ch-JC)
- (12. 187) a. ku=y ʔan-ti:ki nin paʔa?
 go=PROG+3sS_{DEP} 1sS-sleep PN:1s PFV
 'I am already going to sleep' (G-JAP)
- b. <hántah hin kuyáka kaʔakúki nti amuká>
 han-tah hin ku=ya-ka ka-akuki nti ʔa-muka
 INT:why? NEG go=PROG-2sS_{DEP} 2sS-walk INT:what? 3sS-work
 'why are you not going to go to work (= what one works)'
 OT: "¿por qué no vas a trabajar?" (G-S)

Future constructions can also consist of the auxiliary form *kuyaʔ* preceding intransitive (12. 188) and transitive (12. 189) lexical verbs that take cross-referencing suffixes (not dependent-marking) to indicate person agreement. This pattern is more common in X_{Ch}.

- (12. 188) a. <cuyaʔ niʔ utz'in>
 ku=ya-ʔ ni ʔuɕ'i-n
 go=PROG-STAT PN:1s hear-1sA
 'I am going to hear'
 OT: "to hear" (Ch-MA)
- b. <cuyá ghuajtán>
 ku=ya-ʔ wahta-n
 go=PROG-STAT enter-1sS_{DEP}
 'I am going to enter'
 OT: "voy a entrar" (Ch-JC)
- (12. 189) a. <cuyá leöpón>
 ku=ya-ʔ ʔipi-n
 go=PROG-STAT carry-1sA
 'I am going to carry'
 OT: "cargar" (Ch-F)
- b. <cuyá turacá mura>
 ku=ya-ʔ tura-ka? mura
 go=PROG-STAT bring-2sA ear of corn
 'you are going to bring ears of corn'
 OT: "voy a traer elotes" (Ch-JC)

The pattern is also attested with complex predicates, such as the transitive progressive as indicated in the following example from X_{Ch}.

- (12. 190) <cuan rucá ayin xuxo>
 *kw=ay ruka ʔayin šušo
 go=PROG+3sS_{DEP} bite PROG+3sA_{DEP} dog
 'the dog is going to be biting him'
 OT: "el perro le muerde" (Ch-C)

If the lexical verb is the full or light verb *ʔuka* 'do, put' it can become cliticised to the future auxiliary: *ku* + *ʔaya* + *ʔuka* > *ku=ya=ka-* = 'going to do'. This form is only attested in X_G.

- (12. 191) a. ʔaʔa peʔ ku=y ʔišpa-n ku=ya=ka-n wayaʔ
 ADV CENT go=PROG+3sS_{DEP} leave-1sS_{DEP} go=PROG=do-1sS_{DEP} milpa
 'tomorrow I am going to leave (in order to be) going to do milpa' (G-SH)
 b. ku=ya=ka-n resibir hina naka
 go=PROG=do-1sS_{DEP} Sp:receive PREP PN:2s
 'I am going to receive from you' (G-SH)
 c. hin ku=ya=kaʔ desbarankar
 NEG go=PROG=do Sp:slip out
 'do not slip!' (G-SH)

There are examples in X_G where the third person singular future auxiliary *kuy* is omitted and the future context is expressed by the cross-referencing suffix on the transitive verb alone.

- (12. 192) a. tupa-n nins
 leave-1sA PN:1s
 'I am going to leave (it)' (G-SH)
 b. hanta ka tura-kaʔ naka š-aʔtepet
 INT DIR take-2sA PN:2s PREP-town
 'what are you going to bring to/from the town' (G-JAP)

E. THIRD PERSON SINGULAR FUTURE AUXILIARY PRECEDING SUBORDINATE LEXICAL VERB: Several strategies of verb subordination are attested on lexical verbs following third person singular future auxiliary forms. These include marking of lexical verb with:

- subjunctive marker *ʔin* (see § 13.3)
- anterior suffix *-wa* (see § 12.2.3)
- optative clitic = *ʔa* (see § 10.1.3.5, see also § 12.2.2)

(1) Lexical verb marked with *ʔin*: In X_G and X_{Ch} we find the grammaticalised third person singular progressive form *ku=y* or *kw=ay* preceding intransitive and transitive verbs that are marked with the subjunctive = *ʔin*. These constructions may indicate both, present as well as past progressives, which are structurally identical.

- (12. 193) ku=y ʔipla=ʔin man
 go=PROG+3sS_{DEP} bath=SUBJ DEM
 'that one is going to bath' (G-JS)

- (12. 194) a. <cuay-tantzín>
 kw=ay tanǵi-n
 go=PROG+3sS_{DEP} spin-SUBJ
 'he is going to twist (= make rope)'
 OT: "torcer la pita" (Ch-F)

- b. <kuy waš'tiŋ>
 ku=y waš'ti-n
 go=PROG+3sS_{DEP} get dressed-SUBJ
 'he was going to get dressed'
 OT: "se vistió" (Ch-MQ)
- c. <kuy ʔi'wΛŋ>
 ku=y ʔiwa-n
 go=PROG+3sS_{DEP} change-SUBJ
 'he was going to change'
 OT: "lo cambió" (Ch-MQ)

(2) Lexical verb marked with *-wa*: In X_G and X_{Ch} we find examples of future constructions in dependent clauses, where the intransitive (12. 195) or transitive (12. 196) lexical verb is marked with the suffix *-wa* that usually indicates anterior (in subordinate contexts) (§ 12.2.3), which, based on the translation contexts, is not likely case here.

- (12. 195) ku=y ʔišpa-wa-n nin
 go=PROG+3sS_{DEP} leave-ANT-1sS_{DEP} PN:1s
 'I am going to leave' (G-SH)
- (12. 196) a. <cuay ixpagua na procesión>
 kw=ay ʔišpa-wa na *procesión*
 go=PROG+3sS_{DEP} leave-ANT DET SP:procession
 'the procession is going to leave'
 OT: "va salir la procesión" (Ch-JC)
- b. <cuay phulhagua athul nán, ahahl>
 kw=ay puʔa-wa ʔatul nan ahaʔ
 go=PROG+3sS_{DEP} make-ANT atol DET woman
 '..., the woman is going to make atol'
 OT: "para que haga atole la señora" (Ch-JC)

(3) Lexical verb marked with *-ʔa*: There are a few examples in X_G where the lexical verb in a future construction takes the suffix or clitic *-ʔa*, the function of which is not clearly identified in these contexts, but may be marking either an active participle (§ 11.1.2.3) or an optative (see § 10.1.3.5).

- (12. 197) a. ku=y ʔipla=ʔa? na nin
 go=PROG+3sS_{DEP} bath=PART.ACT/OPT? DET PN:1s
 'I am going to want (?) to bath' (G-PE)
- b. hin ku=y nima=ʔa-n naka
 NEG go=PROG+3sS_{DEP} eat=PART.ACT/OPT?-SUBJ PN:2s
 'you are not going to want (?) to eat' (G-JAP)

In X_Y we find future being expressed with *kula-*, which is attested in the Calderón-data with the meaning 'go' as well as 'want' and may indeed combine the two roots *ku* 'go' and the optative auxiliary (*u*) *ʔa* 'want'.

- (12. 198) a. <culau>
 ku=la-n
 go=OPT-1sA_{DEP}
 'I want to go'
 OT: "me voy" (Y-C)
- b. <nen culan mucan nay>
 nen_A ku=la-n muka-n nay_O
 PN:1s go=OPT-1sA_{DEP} beat-1sA/SUBJ? PN:2s
 'I want to go to beat you'
 OT: "ya te voy a pegar" (Y-C)
- c. <inay avuájla culay>
 ʔi-nay ʔawaʔa ku=la-y
 ʔ-PN:2s yesterday go=OPT-3sA_{DEP}
 OT: "ayer quisite tú" (Y-C)

12.4.2 Future constructions with auxiliary *ko*

Another type of future construction involves the existential *ko* that is mainly attested in Schumann's data as well as in Calderón's compilation for X_Y. Schumann (1967:48) defines the form as an immediate future tense, indicating the meaning of the root *ko* as 'already' ("ya") with reference to future events, which he contrasts with the TAM-adverbial *pa ʔa ʔ* that means 'already' with respect to past events.

Despite its similarity with the root *ku*, the auxiliary verb *ko* seems to be a different intransitive root, which also takes distinct person-markers. The auxiliary *ko* itself takes cross-referencing prefixes (12. 199) and always precedes the main verb that can mark person agreement with cross-referencing prefixes or suffixes.

- (12. 199) a. <ankó anwiriki>
 ʔan-ko ʔan-wiriki
 1sS-FUT 1sS-talk
 'I will talk'
 OT: "platicaré" (G-S)
- b. <ko wiriki>
 Ø-ko Ø-wiriki
 3sS-FUT 3sS-talk
 'he will talk'
 OT: "platicará" (G-S)
- c. <ko-ʔik wiriki-ʔik>
 Ø-ko ʔik Ø-wiriki ʔik
 3sS-FUT 3PL 3sS-talk 3PL
 'he will talk'
 OT: "platicarán" (G-S)

Schumann gives mostly examples that show coreferential inflection on auxiliary and main verb, but also includes cases where the lexical verb is deranked and marked as a stative participle. It is not clear whether the distinct marking patterns encode functional difference.

- (12. 200) <kakó yiwá>
 ka-ko yiwa-ʔ
 2sS-FUT descend-STAT
 'you will descend = you will enter'
 OT: "entrarás" (G-S)

Also in the Schumann-data, *ko* is attested in the function of an existential with future reference preceding nouns. This might suggest that *ko* could be a loan from K'iche'an where the existential verb *k'o:lik* is used in the same context, e.g. KCH *k'o: wa ʔ*[EXIST + tortilla] 'there are tortillas'.

- (12. 201) <ko mápu>
 ko mapu
 EXIS tortilla
 'there will be tortilla'
 OT: "habrá tortilla" (G-S)

It is not entirely clear whether the future construction with *ko* is in fact just a variation of the motion verb *ku* 'go' that is attested in future constructions in X_G and X_{Ch}, where it precedes transitive verbs that are marked for person with cross-referencing suffixes. The given examples from X_{Ch} show that the O constituent in form of an independent pronoun can be inserted between *ku* and the lexical verb (12. 203).

- (12. 202) a. ku šuka-n nin
 go/FUT eat-1sA PN:1s
 'I go to eat (sth.)' (G-JS)
- b. ku ɕ'awa-ka naka ʔayma
 go/FUT sow-2sA PN:2s corn
 'you go to sow corn' (G-JAP)
- c. neʔa kuʔ nuk-ey
 BEN go/FUT give-3sA
 'for he goes to give' (G-SH)

- (12. 203) a. <ku naka-i-sukán>
 ku nakay_O suka-n
 go/FUT PN:2s bite-1sA
 'I go to bite you'
 OT: "te voy a morder" (Ch-F)
- b. <cu najlic rucay na xuxo>
 ku natik_O ruka-y na šušo
 go/FUT PN:3p bite-3sA DET dog
 'the dog goes to bite them'
 OT: "el perro los muerde" (Ch-C)

Intransitive verbs following *ku* in X_G and X_{Ch} are unmarked; although most attested examples are given in third person singular.

- (12. 204) a. ku wereke
 go/FUT get angry
 'he goes (to) get angry' (G-SH)
- b. neŋa ku? ʔuka ʔuy
 BEN go throw/do water
 'for to go throw(ing) water
 = for it to rain' (G-SH)
- (12. 205) a. <ku ši'naʔ>
 ku šina-ʔ
 go urinate-STAT?
 'go (to) urinate'
 OT: "voy a orinar" (Ch-MQa)
- b. <kuʔula naʔuy>
 ku ʔula na ʔuy
 go want DET water
 'the water goes to want/fall'
 OT: "va a llover" (Ch-MQ)

Maldonado de Matos classifies the intransitive verb *ku* as a defective verb form that he gives with intransitive inflectional markers. However, in the ALS the form is not attested in syntactic context.

- (12. 206) <an gùŁa>
ʔan-ku-ŋa
 1sS-go-PAST.ACT
 'I went'
 OT: "yo fui" (1795.)

In X_G and X_{Ch} *ku* occurs as a full verb in predicate-function that takes cross-referencing prefixes.

- (12. 207) a. hin ʔan-kuʔ
 NEG 1sS-go
 'I do not go' (G-SH)
- b. hin Ø-ku-ŋa ša krawa
 NEG 3sS-go-PAST.ACT PREP woods
 'he did not go into the woods' (G-RHG)
- (12. 208) <n'gu ni linac>
 n-ku ni li-nak
 1sS-go PN:1s PREP:with-PN:2s
 'I go with you'
 OT: "yo voy contigo" (Ch-C)

In the semi-speaker data from X_G as well as in X_Y , the form *ko* is attested in the same contexts as a primary verb with the meaning 'go'.

- (12. 209) a. ka-ko ša lawaro natiya
 2sS-go/FUT PREP dance LOC
 'you go to dance there' (G-SH)
- b. koʔ ka na ša-šaru man
 go DIR? DET PREP-sea DEM
 'let's go to the sea' (G-JS)
- (12. 210) <ncó lina nay>
 n-ko ŋina nay
 1sS-go PREP:with PN:2s
 'I go with you'
 OT: "voy con ustedes" (Y-C)

past-time reference; Maldonado de Matos uses the adverbial also with past/perfective predicates to form a future perfect form. The imperfective and conditional adverbials *naʔt* and *maʔ* occur with simple nonpast/imperfective and past/perfective predicates.

Table 12. 5: Co-occurrence of TAM-adverbials with tense/aspect categories of predicates

	Nonpast	Past	Past/Opt. -tʰa	Anterior -wa	Imperative
<i>peʔ</i>	+	+	-	-	+
<i>paʔ</i> / <i>paʔt</i>	+	+	+	-	+
<i>naʔt</i>	+	+	-	-	-
<i>maʔ(tʰ)</i>	+	+	-	-	-

12.5.1 Future/deontic

The centric directional *peʔ* 'come' is used in adverbial function to indicate future and obligation. The directional seems to have been borrowed into Xinka from the Mayan verb root *pe* 'come' and indicates movement towards the deictic centre (see § 14.1.2). It can be shown that both adverbial functions, i.e. indicating future as well as obligation or coercive aspect, derive from the basic meaning of the root expressing direction. That future and obligation are related concepts that can be encoded by the same adverbial is cross-linguistically established (Chung & Timberlake 1985:206) and also known from other Mesoamerican languages, e.g. the K'iche' adverbial *na* 'definitely' that can come to express both aspects depending on context (see e.g. Kaufman 1990a:81).

Maldonado de Matos generally marks all future events with *peʔ*. Periphrastic future constructions as described in § 12.4 are not attested in the colonial data, neither in the ALS nor in the slightly later Zeeje-ms. from X_{Ch}. It seems that both strategies express different kinds of future concepts, with periphrastic future constructions apparently referring to immediate future events. From the basic meaning of the root *peʔ* as 'come' and its function as a centric directional it may be inferred that future events encoded with the TAM-adverbial are conceptualised as moving towards the speaker. In contrast, periphrastic future constructions employ auxiliaries with the basic meaning 'go' indicating the opposite concept.

Maldonado de Matos classified the adverbial as a "partícula para futuro y significativa de venir" (2848.) that indicates *futuro imperfecto*, or simple future. Combined with other TAM-adverbials and auxiliaries, *peʔ* is used in the ALS to express the following tense and mode categories of the Latin model of grammar: in combination with the auxiliary form *ʔayuʔ* (see § 10.1.3.3) it indicates *futuro perfecto*, together with the perfective adverbial *paʔ* (§ 12.5.2) the *futuro subjuntivo*, and with the TAM-adverbial *naʔt* (§ 12.5.3) it forms the *infinitivo futuro*. The translation contexts of some of these categories indicate that besides indicating future *peʔ* is used to mark obligation as well as imperatives.

Table 12. 6: Combinations and categories of the TAM-adverbial *peʔ* in the ALS

FORM	LATIN CATEGORY		
<pe>	<i>peʔ</i>	[FUT]	futuro imperfecto
<ayu pe>	<i>ʔayuʔ peʔ</i>	[AUX + FUT]	futuro perfecto
<pa pe>	<i>paʔ peʔ</i>	[PFV + FUT]	futuro subjuntivo
<naL pe>	<i>naʔt peʔ</i>	[IMPFV + FUT]	infinitivo futuro

The TAM-adverbial is attested in the comparative data as *peʔ* (X_G, X_{Ch}, X_Y) or *pi* (X_{Ch}), occurring in both functions, marking future as well as obligation and imperative contexts. Schumann defines *peʔ* as an imperative marker with the meaning 'go/come' ("andar/venir").

In X_{Ch} we find *peʔ* in an imperative translation context marked with *-h*. The exact function of this marker is not understood, but it may be related to the suffix *-ʔ* attested with other TAM-adverbials.

- (12. 212) <peej>
 pe-h
 CENT-?
 'come!'
 OT: "vente" (Ch-F)

FUTURE: To mark future, Maldonado de Matos combines *peʔ* with nonpast/imperfective intransitive and transitive verbs marked for person agreement with cross-referencing prefixes.

- (12. 213) a. <an acù pè>
ʔan-ʔakuʔ peʔ
 1sS-go FUT
 'I will go'
 OT: "yo iré" (1666.)
- b. <an pùla pè>
ʔan-pula peʔ
 1sA-make FUT
 'I will make (it)'
 OT: "yo haré" (417.)
- c. <nana maestro munariLa pè...>
nana maestro mu-nariʔa peʔ
 FOC Sp:teacher 3sA-teach FUT
 'the teacher will teach...'
 OT: "el maestro enseñará..." (2020.)

The future adverbial is attested in the comparative data from X_{Ch} . In the majority of examples, the adverbial follows an unmarked verb, the subject being expressed by an independent pronoun (12. 214a-b).

- (12. 214) a. <rapriki piui>
 raprik'i pi *niʔ
 de grain FUT PN:1s
 'I will de grain (the corn)'
 OT: "desgranaré la mazorca" (Ch-C)
- b. <inuc raia i ni maljki cu pé>
 in-ʔukraya ʔi ni maʔiki ku peʔ
 1sP-wife Sp:and PN:1s PN:1p go FUT
 'my wife and I, we will go'
 OT: "mi mujer y yo iremos juntos" (Ch-C)
- c. <npula pi ní>
 n-pula pi niʔ
 1sA-make FUT PN:1s
 'I will make (it)'
 OT: "yo haré" (Ch-C)

The future adverbial is also attested preceding verbs that are marked or unmarked for person agreement. In example (12. 215a) the position of the adverbial seems to be determined by the interrogative clause construction (see § 16.2.4). There are cases where the subject constituent occurs between the future adverbial and the verb (12. 216).

- (12. 215) a. <likuac pitac>
lika-k pi(?) ta-k
INT:when FUT come-2sS
'when will you come?'
OT: "¿cuándo vienes?" (Ch-C)
- b. <naj pi rapriki>
nah pi(?) rapriki
PN:3s FUT de grain
'he will de grain (corn)'
OT: "desgranará la mazorca" (Ch-C)
- (12. 216) a. <pinac rapriki>
pi(?) nak raprik'i
FUT PN:2s de grain
'you will de grain (corn)'
OT: "desgranarás la mazorca" (Ch-C)
- b. <ajlahuac pini tiki>
ʔaʔa=wak pi(?) ni? ti:ki
tomorrow=DIR FUT PN:1s sleep
'tomorrow I will sleep'
OT: "dormiré" (Ch-C)

In rare cases the future adverbial and the periphrastic future construction can co-occur.

- (12. 217) <cuay cupe>
kw=ay ku pe?
go=PROG+3sS_{DEP} go FUT
'he is going to go'
OT: "voy a palaguear [sic]" (Ch-JC)

Maldonado de Matos combines the future adverbial with the auxiliary *ʔayu* to express future perfect. The adverbial *pe?* either immediately follows the verb or in final position behind *ʔayu*. The combination of these two forms is not attested elsewhere in the corpus of data, which may suggest that this pattern could be an artificial construction that was created to fit the categories of the Latin model of grammar.

- (12. 218) a. <pulàn ayù pè>
pula-n ʔayu? pe?
make-1sA AUX FUT
'I will have made'
OT: "yo habré hecho" (423.)
- b. <ormoon pè ayù>
ʔormo-n pe? ʔayu?
pick up-1sA FUT AUX
'I will have picked it up'
OT: "yo habré recogido" (936.)
- c. <guiszupe ayu patai...>
Ø-wišu-? pe? ʔayu? pata-y
3sS-beat-STAT FUT AUX *accomplish-3sA
'he will have been beaten'
OT: "... habré sido azotado..." (2025.)

In combination with the perfective adverbial *pa?*, the future adverbial is used to indicate future subjunctive forms. The adverbial combination occurs in the position following the predicate (12. 219). Unlike the combination with *ʔayu*, the co-occurrence of the perfective with the future adverbial is attested in X_{Ch} (12. 220). Here, the adverbial is given as <pu>, which indicates the presence of a neutral vowel *pə* (see § 4.1.3.7).

- (12. 219) a. <an acù pà pè>
ʔan-ʔaku? pa? pe?
1sS-go PFV FUT
'I would go'
OT: "yo fuere, hubiere ido" (1706.)
- b. <canuca pà pè tiyg...>
ka-nuka pa? pe? ti:ʔ-h
2sA-give PFV FUT IO-3sP
'you gave (= would give) him/her...'
OT: "si le dieres..." (2038.)
- c. <aszin pà pè ca acù misza ...>
ʔašin pa? pe? ka-ʔaku? miša
NEG PFV FUT 2sS-go Sp:mass
'you would not go (to) mass ...'
OT: "si no fueréis a oir misa ..." (2040.)

- (12. 220) <atupapa puná>
 ʔa-tupa paʔ pəʔ naʔ
 3sS-stay PFV FUT PN:3s
 'he will stay'
 OT: "se quedará" (Ch-C)

There is one example of a light verb construction in the ALS that shows the TAM-adverbial *peʔ* between the light verb and the Spanish lexical verb. In this position the future marker is preceded by the form *kan* and followed by the intensifier clitic *ki*. The form *kan* does not reflect in the translation context, but is otherwise attested in the ALS and the comparative data as an exocentric directional that consists of the directional marker and the subjunctive marker *-n* and occurs in combination with temporal adverbs (§ 14.3.2).

- (12. 221) <mu uɛa can pè qui confesar naca na palè>
 mu-ʔuka ka-n peʔ ki confesar naka_o na pales
 3sA-do EXO-IRR? FUT INTENS Sp:confess PN:2s DET Sp:priest
 'the priest himself will confess you, ...'
 OT: "te confesará el padre" (2038.)

A similar construction is attested in the Zeeje-ms., where the future adverbial occurs between the light and the lexical verb in combination with the form *ʔun* or *win*. In these examples the future marker cliticises to the first element, to which it assimilates. The future translation contexts indicate that <bu> corresponds to the future adverbial *pəʔ* that is otherwise attested in *X_{Ch}*. The combination of the two forms is also attested preceding the light verb construction (c). Here the first marker is also realised as <un>, which, in comparison with the other context where the marker is indicated as <guin>, may suggest that it is also realised with a neutral vowel *ə* or with a high mid vowel *i*. This may mean that the form is functionally identical with the subjunctive marker *ʔn* (see § 13.3), as all attested examples occur with subordinate predicates.

- (12. 222) a. <kaca mug huca unbú desarrollar>
 kaka muh-ʔuka =ʔən =pəʔ desarrollar
 LOC 3pA-do =SUBJ =FUT Sp:develop
 'where they will develop'
 OT: "donde se desarrollarán" (Ch-Z)
- b. <ca-uca guin bu concebir hay>
 ka-ʔuka-w=in =pə(?) concebir ʔay
 2pA-do-LIG=SUBJ =FUT Sp:conceive 2PL
 'you (pl.) will conceive'
 OT: "concebiréis" (Ch-Z)
- c. <que jamas unbú mug huca lograr>
 qué jamas =ʔən =pəʔ muh-ʔuka lograr
 Sp:that ever =SUBJ =FUT 3pA-make Sp:reach
 'that they will ever reach it'
 OT: "lograrán" (Ch-Z)

IMPERATIVE: The TAM-adverbial *peʔ* is also used to express imperative following unmarked intransitive verbs. There are two examples of this form with the intransitive verb *mara* 'to hurry' in the ALS, where the translation context suggests an imperative function of the adverbial (12. 223). The adverbial follows immediately behind the verb. This functional context is corroborated by comparative data from *X_G* and *X_{Ch}* (12. 224).

- (12. 223) a. <màrapè>
mara pe?
 *hurry CENT/IMP
 'hurry up!'
 OT: "darse priesa" (1848.),
 "ven tú de priesa" (1849.)
- b. <màra pè Lic>
mara pe? ɬik
 *hurry CENT/IMP 3PL
 '(may) they hurry up!'
 OT: "vengan aquellos de priesa" (1851.)
- (12. 224) a. <yiwá pe>
 yiwa pe(?)
 enter/descend CENT/IMP
 'enter!'
 OT: "¡entre!" (G-S)
- b. <mare po yu>
 mare *pə(?) yu
 hurry CENT/IMP man
 'hurry up, man!'
 OT: "¡apúrate!" (Ch-F)

In X_G and X_{Ch} , the directional *pe?* is found frequently accompanying intransitive (12. 225) and transitive (12. 226) imperative predicates, specifying the direction of the imperative action.

- (12. 225) a. kuri-ya pe?
 run-IMP.VI CENT
 'run here!' (G-RHG)
- b. <sulluya pe hay>
 suyu-ya pe(?) ʔay
 return-IMP.VI CENT 2PL
 'you (pl.), return here!'
 OT: "¡volved!" (Ch-Z)
- c. <ʔakuy 'pe>
 ʔaku-y pe(?)
 go-IMP.VI CENT
 'come here!'
 OT: "¡ven acá!" (Ch-MQ)
- (12. 226) a. <rúka pe>
 ruka-Ø pe(?)
 eat-IMP.VT CENT
 'come, eat it!'
 OT: "¡que coma! (él, élla)" (G-S)
- b. <im pe tahá?>
 ʔim pe(?) taha?
 say CENT QUANT:all
 'come, say it all!'
 OT: "¡que se diga todo!" (G-S)
- c. tura-Ø pe? ʔan-pewek
 take-IMP.VT CENT 1sP-gourd
 'bring (me) my gourd!' (G-RHG)
- d. <tura pe na mapu>
 tura-Ø pe(?) na mapu
 take-IMP.VT CENT DET tortilla
 'bring the tortilla!'
 OT: "¡trae la tortilla!" (Ch-F)

In the ALS the adverbial *pe?* marks direction of the imperative action on the intransitive verb *kura* 'run' that is marked with the subjunctive *-n*.

- (12. 227) a. <curànbè>
kura-n pe?
 run-SUBJ CENT/IMP
 'come run!'
 OT: "venir" (1838.), "¡ven tú!" (1839.)
- b. <curànbè ay>
kura-n pe? ʔay
 run-SUBJ CENT/IMP 2PL
 'come run you (pl.)'
 OT: "¡veníá vosotros!" (1840.)

In X_G the centric directional *pe?* and exocentric directional *ka?* co-occur in adverbial function, specifying the direction of the imperative action as 'come away and do X'.¹⁷⁶ In most attested examples the verbal predicate is unmarked; both, intransitive and transitive verbs are attested.

¹⁷⁶ Schumann identifies these contexts as cases in which the imperative marker takes pronominal inflection in the second person singular (1967:41).

- (12. 228) a. <rúka peká>
 ruka-Ø pe=ka?
 eat-IMP.VT CENT=EXO
 'come away and eat!'
 OT: "¡come, coman!" (G-S)
- b. <yiwáka peká>
 yiwa-ka pe=ka?
 descend-2sS CENT=EXO
 'come away and enter!'
 OT: "¡entra!" (G-S)
- c. ʔuwe-Ø pe=ka?
 call-IMP.VT CENT=EXO
 'come away call (him)!' (G-SH)
- d. ʔipala pe=ka?
 bath CENT=EXO
 'come away and bath!' (G-SH)

OBLIGATION: In the ALS the adverbial *peʔ* is attested in position following predicates, where it expresses obligation of action.

- (12. 229) <ca-pajata pè qui>
ka-pahata peʔ kiʔ
 2sA-pay FUT/DEON INTENS/OBJ
 'you yourself must pay (it)!'
 OT: "lo has de pagar" (1876.)

Maldonado de Matos fills the slot of the grammatical category "participio de futuro en rus" by combining agentive nominalisations with the TAM-adverbial. The translation context of the form indicates that *peʔ* marks obligation of action. In this function the adverbial is also attested with other nominal predicates, as in example (12. 231) from the ALS, where it modifies a Spanish predicate adjective "temprano".

- (12. 230) a. <pulaquiLa pè>
pula-ki-ʔa peʔ
 make-AP-AGT FUT/DEON
 '(the one) who will/must make'
 OT: "el que ha, tiene de hacer" (481.)
- b. <màràLà pè>
ma:ra:-ʔa peʔ
 rest-AGT FUT/DEON
 '(the one) who will/must rest'
 OT: "el que ha, tiene de descansar" (1557.)
- (12. 231) <temprano pè acùg>
temprano peʔ ʔaku-h
 Sp:early FUT/DEON go-3sP
 'early will/must be his going = he must go early'
 OT: "ha de venir temprano" (1964.)

The TAM-adverbial that modifies predicative nouns is also attested in X_G (see Schumann 1967:41). The translation contexts suggest that in these contexts *peʔ* has two semantic connotations: it expresses a command and describes that something or somebody turns into the state denoted by the nominal root.

- (12. 232) a. <wári pe>
 wari pe(?)
 rain CENT/IMP
 'rain will/must come!'
 OT: "que llueva" (G-S)
- b. <pelóʔ pe>
 pe:loʔ pe(?)
 Sp:dog CENT/IMP
 'dog will/must come!'
 OT: "que se haga perro" (G-S)
- c. kayayaʔ peʔ
 heat CENT/IMP
 'heat will/must come!' (G-SH)

Maldonado de Matos uses *peʔ* in combination with the TAM-adverbial *naʔʔ* to fill the category slot of future infinitive of the Latin model of grammar. Intransitive and transitive verbs both are marked as impersonal with the third person singular prefix *ʔa-* (§ 6.1). The translation context again signalises obligation of action. The exact function of *naʔʔ* in the examples from the ALS cannot be determined. The pattern/functional context as such is not attested elsewhere in the corpus of data.

- (12. 233) a. <a acù nàL pè>
 ʔa-ʔakuʔ **naʔ** **peʔ**
 3sS-go IMPFV FUT/DEON
 'one will have to go'
 OT:"haber de ir" (1714.)
- b. <a pùla nàL pè>
 ʔa-pula **naʔ** **peʔ**
 3sS-make IMPFV FUT/DEON
 'one will have to make'
 OT:"haber de hacer" (471.)

The combination of the locative adverb *naʔ* 'here' and the centric directional verb *peʔ* indicates an imperative of direction expressing movement towards the position of the speaker. In the examples from the ALS, *peʔ* functions as a verbal predicate in the imperative mode.

- (12. 234) a. <nà pè>
 naʔ **peʔ**
 LOC:here CENT/IMP
 'come here'
 OT:"ven acá tú" (1842.)
- b. <nà pè ay>
 naʔ **peʔ** **ʔay**
 LOC:here CENT/IMP 2PL
 'you (pl.), come here'
 OT:"venia acá vosotros" (1843.)

In X_Y the combination of *naʔ* and *peʔ* can precede verbs, indicating a purposive meaning.

- (12. 235) <na pe ratz'a sama>
 naʔ **peʔ** **raç'a** **sama**
 LOC:here CENT/IMP ? PREP:inside = throw up
 'come here to throw up'
 OT:"para arrojar" (Y-C)

Examples from X_G show that the pattern can be extended by further pronouns and demonstratives or locatives.

- (12. 236) a. **naʔ** **peʔ** **na**
 LOC:here CENT DEM
 'come (here), hurry up' (G-RHG), (G-SH)
- b. **naʔ** **peʔ** **na** **naka**
 LOC:here CENT DET PN:2s
 'you, come (there)' (G-SH)
- c. <pe naná>
 pe(ʔ) **na** **naʔ**
 CENT/IMP DET LOC:here
 'come (there)'
 OT:"ven acá" (G-S)

In X_{Ch} a similar construction indicates future tense, i.e. temporal deixis. Here, the element in initial position can be identified as an independent pronoun.

- (12. 237) <nac pe na tiki ajlahuac>
 nak **pe(ʔ)** **na(ʔ)** **tí(ː)ki** **ʔaʔa=wak**
 PN:2s CENT LOC:here? sleep tomorrow=DIR
 'you will/must come here to sleep tomorrow '
 OT:"mañana dormirás" (Ch-C)

12.5.2 Perfective/relational

The most frequently used TAM-adverbials in Xinka are forms specifying priority of an action. These adverbials are comparable to the English adverbials 'already' or 'yet', or to Spanish *ya*, in that they can refer to past as well as future events alike. Such adverbials are often designated as "perfective-like" (see e.g. Aikhenvald 2003:337), a categorisation that we will adopt here, even though it does not capture the adverbial's function precisely.

Maldonado de Matos employs two different perfective adverbials: *paʔ* and *paʔ*. The existence of these two adverbial forms is confirmed by the comparative data. Comparison of the ALS forms with perfective adverbials in the other Xinka varieties suggests that the accent on <pá> represents a glottal stop, i.e. *paʔ*. In X_G the form *paʔaʔ* or *paʔah* is attested, but since Maldonado de Matos does not mark the vowel in <paL> with an accent, there is no evidence that the root vowel of the ALS form would be followed by a glottal stop. In X_G and X_{Ch} , both adverbials are attested, while in X_Y we only find *paʔ*, and in X_S and X_{Jut} only **paʔ* is indicated. In X_{Ch} the initial consonant of the adverbial equivalent to X_M *paʔ* is voiced, i.e. [b] instead of [p] (see § 4.1.3.1), while the short form *paʔ* retains the voiceless stop *p*. Also in X_{Ch} as well as in X_S and X_{Jut} , the final consonant of the adverbial can be realised as *-r* (Table 12. 7).

Table 12. 7: Comparison of perfective adverbials in Xinka

	*paʔ	*paʔ	ORIGINAL GLOSS
X_M	<pá>	<paL>	
X_G	paʔ, paʔaʔ	paʔ, paʔaʔ, pah	"pasado inmediato" / "pas. remoto" (G-S)
X_{Ch}	paʔ	baʔ, bah, bar	"ya", "partícula que marca pasado" (Ch-S)
X_S		bar	"ya"
X_Y	paʔ		"ya"
X_{Jut}		paʔ, pah, par	"ya"

In the ALS, both adverbials occur in different contexts, but the functional difference of *paʔ* and *paʔ* is not straightforward. Although the database does not fully support this analysis, the difference may be determined by syntactic hierarchy, with the adverbial *paʔ* occurring in main clauses and adverbial *paʔ* in subordinate clauses or clauses with divergent, or marked, word order (see below).

TAM-ADVERBIAL *paʔ*. The adverbial *paʔ* occurs in the ALS only in combination with other TAM-adverbials: (1) *peʔ* (see § 12.5.1) used by Maldonado de Matos to indicate the Latin category of *futuro subjuntivo* and (2) with the auxiliary *ʔayu* (§ 10.1.3.3) indicating *futuro perfecto*. The adverbial *paʔ* also seems to occur in combinations with other forms: (1) *ka=paʔ* 'there was' that is used by Maldonado de Matos to create a pluperfect form, (2) the interrogative marker *ʔa=pa* (§ 13.2.1). Since the occurrences are without further contextualisation, it remains unclear whether the morpheme *pa* in these examples is identical with the perfective marker *paʔ*.

Table 12. 8: Combinations of TAM-adverbial *paʔ* with other adverbials (ALS)

FORM			ORIGINAL GLOSS
<pá>	paʔ	[PFV]	"partícula verbal" (4213.)
<páayú>	paʔ ʔayuʔ	[PFV AUX]	"futuro perfecto" (4214.)
<pà pè>	paʔ peʔ	[PFV FUT]	"futuro subjuntivo" (e.g. 463.)
<capa>	ka=pa	[EXO=PF'V]	"partícula verbal" (3707.)
<apa>	ʔa=pa	[?=PFV]	"¿como?" (partícula interrogativa) (3640.)

The adverbial *paʔ* is used by Maldonado de Matos to mark Latin temporal categories which indicate future events that are not real or immediate; i. e. *futuro perfecto* and *futuro subjuntivo*. In both contexts, *paʔ* is attested with transitive as well as intransitive verbs that mark person with cross-referencing affixes. The combinations of *paʔ peʔ* and *paʔ ʔayu* are used by Maldonado de Matos interchangeably to indicate *futuro perfecto* (12. 238c-e); the *futuro subjuntivo* is always marked with *paʔ peʔ* (a-b).

- (12. 238) a. <an acù pà pè>
ʔan-akuʔ paʔ peʔ
 1sS-go PFV FUT
 'I would have gone'
 OT: "yo fuere, hubiere ido" (1707.)
- b. <mu mere pa pè>
mu-mere pa(?) peʔ
 3sA-break PFV FUT
 'he would have broken'
 OT: "aquel rompiere,
 hubiere rompido" (640.)
- c. <màra Lic pàpè>
Ø-ma:ra =tik paʔ peʔ
 3sS-rest =3PL PFV FUT
 'they will have rested'
 OT: "aquellos habrán descansado" (1511.)
- d. <guacà pa ayù Lic>
Ø-waka-ʔ paʔ ʔayuʔ tik
 3pS-go-STAT PFV AUX 3PL
 'they will have gone'
 OT: "aquellos se habrán ido" (1761.)
- e. <sàmucà pa ayù>
samu-kaʔ pa(?) ʔayuʔ
 catch-2sA PFV AUX
 'you will have caught'
 OT: "tú habrás cogido" (1101.)

The combination of forms *ka* and *pa* occurs in initial position of predicates categorised by Maldonado de Matos as *pretérito plusquamperfecto*, which indicates an event prior to a past reference point, or even simply remote past. The colonial author translates *ka=pa* as 'already' ("ya") and defines it as an optional element (fol. 98v); he does, however, not give any examples of pluperfect patterns lacking *ka=pa*. The form is either a combination of the exocentric directional *ka* or an abbreviation of the existential *ʔuka* plus the perfective adverbial. In both cases the form *ka=pa* functions as the main predicate; the following predicate is therefore subordinate.

- (12. 239) a. <capa pulàn paL naL>
ka=pa pula-n paʔ na(?)ʔ
 EXO=PFV make-1sA PFV IMPFV
 'I had done'
 OT: "yo había hecho" (411.)
- b. <capa uisicà paL naL ... >
ka=pa ʔuyši-kaʔ paʔ na(?)ʔ
 EXO=PFV hear-2pA PFV IMPFV
 'you (pl.) had heard'
 OT: "ya habíais oído ... " (2018.)

Schumann indicates a similar construction that loosely translates as 'once upon a time' for X_G . It consists of the form *kaʔi* and the perfective adverbial *pa(?)*, preceding a noun phrase; the function of *-ʔi* is not understood.

- (12. 240) <kaʔi pa ikáhki huráki>
 ka-ʔi =pa ʔikah=ki huraki
 EXO-ʔ =PFV NUM: '1'=INTENS man
 'once there was one man'
 OT: "hubo una vez un hombre" (G-S)

In X_Y a similar form is attested where *pa* precedes the predicate that is again followed by *paʔ*.

- (12. 241) <papulipá>
 pa puli paʔ
 PFV wash PFV
 'it is already washed'
 OT: "ya está lavado" (Y-C)

TAM-ADVERBIAL *paʔ*. The adverbial form *paʔ* is translated by Maldonado de Matos as "ya"; it occurs in the ALS in only two contexts: (1) in combination with the TAM-adverbial *naʔʔ* (§ 12.5.3) indicating the *pretérito plusquamperfecto* and (2) as a single marker following a prepositional phrase.

Table 12. 9: Contexts of adverbial *paʔ* in the ALS

FORM			ORIGINAL GLOSS
<paʔ>	paʔ	[PFV]	"ya" (4231.)
<paʔ naʔʔ>	paʔ naʔʔ	[PFV + IMPFV]	"pretérito plusquamperfecto"

In constructions used by Maldonado de Matos to fill the pluperfect slot of the grammatical model, *paʔ* always precedes the other TAM-adverbial *naʔʔ*. Pluperfect of intransitive and transitive verbs is formed with the same pattern.

- (12. 242) a. <capa cà màrà paʔ naʔʔ>
ka=pa ka-ma:ra-ʔ paʔ naʔʔʔ
 EXO=PFV 2sS-rest-STAT PFV IMPFV
 'it was that you already rested = you had rested'
 OT: "tú habías descansado" (1495.)
- b. <capa mereí paʔ naʔʔ>
ka=pa mere-y paʔ naʔʔ
 EXO=PFV break-3sA PFV IMPFV
 'it was that he already broke (it) = he had broken'
 OT: "aquel había rotpido" (594.)

The pattern is not attested in the comparative data; in the example from X_Y below it is not clear whether the form *nah* functions as an adverbial or as a determiner to the following noun. The translation context does not indicate priority of the event.

- (12. 243) <tayí pa naj moch>
 Ø-ta:-yi-ʔ paʔ nah moč
 3sS-come-LIG-STAT PFV DET/IMPFV? owner
 'the owner already came (had already come)'
 OT: "ya vino el patrón" (Y-C)

The adverbial form *paʔ* is also attested following a prepositional phrase in predicative function. In the comparative data we find both adverbials *paʔ* and *paʔʔ* in this context (see below).

- (12. 244) <szam pari paʔ>
šam pari paʔ
 PREP day PFV
 '(it is) already in the day'
 OT: "ya es de día" (4440.)

Both adverbials *paʔ* and *paʔʔ* are translated by Maldonado de Matos as 'already' and function like the Spanish adverb *ya* in marking relative priority to the situation expressed by the predicate, which can refer to an event in present, past or future. This function and contexts are confirmed by the comparative data; semi-speakers of X_G frequently use the Spanish term "ya" instead of, or even in addition to the Xinka perfective adverbial.

- (12. 245) a. muču ya nin
 get tired Sp:already PN:1s
 'I already got tired' (G-PE)
- b. ya Ø-tero-ʔ paʔaʔ
 Sp:already 3sS-die-STAT PFV
 'he already died' (G-SH)

The exact semantic function of the adverb is determined by the form of the predicate. Perfective adverbials mark priority of an event when following past/perfective predicates and immediate future, when accompanying nonpast/imperfective predicates.

In X_G , X_{Ch} and X_Y transitive and intransitive nonpast/imperfective predicates are attested with both perfective adverbials; there does not seem to be any functional difference of *pa ʔa ʔ* (12. 246) and *pa ʔa †* (12. 248) in this context. Some of these examples seem to express an immediate future event.

- (12. 246) a. ʔan-muču paʔaʔ wiriki
1sS-get tired PFV talk
'I am already tired of talking' (G-RHG)
- b. <ka uca pa meditar hay>
ka-ʔuka paʔ meditar ʔay
2pA-do PFV Sp:meditate 2PL
'you (pl.) already meditate'
OT: "meditáis" (Ch-Z)
- c. <n'pumupá>
n-pumu paʔ
1sS-swim PFV
'I already swim'
OT: "nadar" (Y-C)
- (12. 247) a. muh-k'u paʔa†
1pS-go PFV
'we already go' (G-SH)
- b. <mug pula bal>
muh-pula bal
3sA-make PFV
'he already makes'
OT: "hace" (Ch-Z)
- c. <n'paljta bari>
n-pa†ta bari
1sA-pay PFV
'I already paid'
OT: "he sido pagado" (Ch-C)

In X_{Ch} there is an example where the immediate future reference is additionally marked with the future adverbial *pə ʔ*. The adverbial combination of *pa ʔ* and *pə ʔ* is used by Maldonado de Matos to mark future perfect and future subjunctive (see above).

- (12. 248) <atupapa puná>
ʔa-tupa pa(ʔ) pə(ʔ) naʔ
3sS-stay PFV FUT PN:3s
'he will already stay'
OT: "se quedará" (Ch-C)

There are a few examples of perfective adverbial constructions with immediate future reference in X_{Ch} that do not mark person agreement on the verb.

- (12. 249) a. <cuya bar>
ku=ya bar
go=PROG PFV
'(I am) already going'
OT: "ya me voy" (Ch-JC)
- b. <jamá ajkubar>
hamaʔ ʔaku bar
PREP go PFV
'there he already goes'
OT: "allí viene ya" (Ch-F)

Both perfective adverbials are attested in X_G , X_{Ch} , and X_Y with past/perfective transitive predicates indicating priority to the past situation expressed by the predicate. Again, there does not seem to be any functional difference between *pa ʔa ʔ* (12. 250) and *pa ʔa †* (or *bal* and *bar* as attested in X_{Ch}) (12. 251).

- (12. 250) a. piri-n paʔaʔ
see-1sA PFV
'I already saw (it)' (G-SH)
- b. kawu-n nin paʔaʔ
cook-1sA PN:1s PFV
'I already cooked (it)' (G-JAP)

- c. <hinika pa>
hini-ka pa(?)
know-2sA PFV
'you already knew (it)'
OT: "supiste, lo supiste" (G-S)
- e. <turam'ba'>
tura-n pa?
bring-1sA PFV
'I already brought it'
"ya lo trajo" (Ch-MQ)
- (12. 251) a. nuk'a-n pa?a†
give-1sA PFV
'I (already) gave (it)' (G-SH)
- c. <junuy bal>
hunu-y bal
know-3sA PFV
'he has already learned'
OT: "sabe ya" (Ch-Z)
- e. <taibar>
Ø-ta:-yi-? bar
3sS-come-LIG-STAT PFV
'he already came'
OT: "ya ha venido" (Ch-F)
- d. <junu-ca pa hay>
hunu-ka pa? ?ay
know-2pA PFV 2PL
'you (pl.) already knew'
OT: "sabéis aprovecharlos" (Ch-Z)
- f. <pajtan pa nay>
pahta-n pa(?) nay
pay-1sA PFV PN:2s
'I already paid you'
"*ya te pagé (está pagado)" (Y-C)
- b. <hinin pa?á†>
hini-n pa?a†
know-1sA PFV
'I (already) knew (it)'
OT: "supe, lo supe" (G-S)
- d. <sucaibar>
šuka-y bar
eat-3sA PFV
'he (already) ate'
OT: "él lo comió, comido" (Ch-F)

Past/perfective intransitive predicates marked with the agentive past suffix *-ʔa* (§ 12.2.2) are also attested with the perfective adverbials. This combination occurs in the ALS only with artificial pluperfect constructions (12. 253).

- (12. 252) a. ni?ma-ʔa pa?a?
eat-PAST.ACT PFV
'he already ate' (G-RHG)
- b. <ne xigüilabar>
ne šiwi-ʔa bar
PN:1s bend corn-PAST.ACT PFV
'I already bent corn'
OT: "ya dobló la milpa" (Ch-F)
- (12. 253) <capa a acùla paL nàL>
ka=pa ʔa-ʔaku-ʔa pa† na?†
EXO=PFV 3sS-go-PAST.ACT PFV IMPFV
'he had gone'
OT: "aquel había ido" (1662.)

With intransitive verbs in subordinate context, the adverbials can indicate both, immediate future (12. 254) as well as priority of a past event (12. 255). Since subordinate intransitive predicates are structurally identical in nonpast/imperfective and past/perfective with person agreement being marked by dependent cross-referencing suffixes, the function of the perfective adverbial is determined by the tense/aspect of the main clause.

- (12. 254) a. ʔaku-n pa?a?
go-1s_{DEP} PFV
'I already go' (G-SH)
- b. ku=ya-n pa?a?
go=PROG-1s_{DEP} PFV
'I am already going' (G-SH)
- (12. 255) a. ti:ki-n nin pa?a?
sleep-1s_{DEP} PN:1s PFV
'(that) I already slept' (G-JAP)

- b. <yiwán pa>
 yiwa-n pa(?)
 descend-1s_{DEP} PFV
 '(that) I already descended'
 OT: "entré" (G-S)
- c. <yiwáka paʔáʔ>
 yiwa-ka paʔaʔ
 descend-2s_{DEP} PFV
 '(that) you already descended'
 OT: "entraste" (G-S)

In X_G and X_{Ch} , both adverbials are also attested with progressive translation contexts, i.e. *ti:ki paʔa* 'he already sleeps' = 'he is sleeping'. In most of these cases, the verb is not inflected for person.

- (12. 256) a. ʔamanika paʔaʔ
 dawn PFV
 'it is already dawn
 = it is dawning' (G-RHG)
- b. ti:ki paʔaʔ
 sleep PFV
 'he already sleeps
 = he is sleeping' (G-JAP)
- (12. 257) a. <anyiwapal>
 ʔan-yiwa paʔ
 1sS-descend PFV
 'I descended'
 OT: "yo estoy bajando" (G-S)
- b. <uslubar-uy>
 ʔuʔu bar ʔuy
 fall PFV water
 'water already falls = water is falling'
 OT: "está lloviendo" (Ch-F)

An example of a coordinate clause from X_{Ch} shows that *paʔ* marks the verbal predicate that expresses anteriority.

- (12. 258) <urlú pa ra uto tero guarle>
 ʔuʔu-ʔ paʔ ra ʔuto *tero-wa-ʔa
 fall-STAT PFV PREP tree die-ANT-AGT
 'he already fell from a tree, (and) he died'
 OT: "se cayó de un árbol y ya se murió" (Ch-P)

Schumann (1967:45) distinguishes the two adverbial forms in X_G as markers for different tenses: *paʔa* marking immediate past and *paʔaʔ* marking remote past. He reflects this distinction by translating verb phrases marked with *paʔ* with the indefinite past (e.g. Sp. "fué") (12. 259) and verb phrases marked with *paʔaʔ* with the imperfect past (e.g. Sp. "iba") (12. 260), although not all translation contexts in Schumann's material reflect the proposed functional difference.

- (12. 259) a. <nanín yiwá pa>
 na nin yiwa pa(?)
 DET PN:1s descend PFV
 'I descended'
 OT: "entré" (G-S)
- b. <hinika pa>
 hini-ka pa(?)
 know-2sA PFV
 'you knew'
 OT: "supiste, lo supiste" (G-S)
- (12. 260) a. <nanín yiwá paʔáʔ>
 na nin yiwa paʔaʔ
 DET PN:1s descend PFV
 'I descended'
 OT: "entraba, entré" (G-S)
- b. <hinika paʔaʔ>
 hini-ka paʔaʔ
 know-2sA PFV
 'you knew'
 OT: "supiste, lo supiste" (G-S)

Schumann employs *paʔ* mostly in clause-final position, following the direct object or oblique arguments. The pattern is also attested in the semi-speaker data from X_G . Here, both adverbial forms, *paʔaʔ* and *paʔa* can occur in final position, suggesting that the adverbial form is not determined by its position within the clause.

- (12. 261) a. <nahí akúki ša wayá paʔáʔ...>
 nahi ʔaku-ki ša waya paʔaʔ
 DEM go-REFL? PREP milpa PFV
 'these already walk in the milpa'
 OT: "... fueron a la milpa" (G-S)

- b. <... rúka hi? na é'ama núwi paʔaʔ>
 ruka hi? na é'ama nuwi paʔaʔ
 eat PROG+3s_{DEP} DET good straw PFV
 'he is/was already eating good straw'
 OT: "... estaba comiendo buena paja" (G-S)
- (12. 262) a. ʔima-n naka paʔaʔ b. ke ʔime-y na naka paʔaʔ
 say/tell-1s PN:2s PFV Sp:INT say-2sA DET PN:2s PFV
 'I already told you' (G-SH) 'that he already told you' (G-JS)

In the same way, both adverbial forms are attested in the ALS in position preceding the subordinate existential verb *ʔaya*.

- (12. 263) a. <pàpè ayaan> b. <pà ayù ayaac>
paʔ peʔ ʔaya-n **paʔ ʔayuʔ ʔaya-k**
 PFV FUT be-1s_{DEP} PFV AUX be-1p_{DEP}
 'I would have been' 'we will have been'
 OT: "yo estuviere, hubiere estado" (1947.) OT: "nosotros habremos estado" (1915.)
- c. <capa paL nàL ayaan>
ka=pa paʔ naʔʔ ʔaya-n
 EXIS=PFV PFV IMPFV be-1s_{DEP}
 'I had been'
 OT: "yo había estado" (1900.)

In X_G the use of the two adverbials *paʔ* and *paʔaʔ* may be depending on the marking of the predicate. In the following examples, *paʔaʔ* follows a nominal predicate marked with -ʔ (12. 264), while *paʔaʔ* follows when the predicate is unmarked (12. 265). These alternate patterns correspond with marking patterns in auxiliary verb constructions with *pata* (§ 10.1.3.6, see below), suggesting that the root **pa-* may be verbal and that -ʔ and -ʔ may be participle derivations (see § 11.1.2).

- (12. 264) a. ʔira-ʔ paʔaʔ b. sama-ʔ paʔaʔ ʔah-naru
 big-STAT PFV dark-STAT PFV PREP-earth
 'he is already big' (G-SH) 'the earth is already dark' (G-JAP)
- (12. 265) a. ʔiri paʔaʔ b. sama paʔaʔ ʔah-naru
 big PFV dark PFV PREP-earth
 'he is already big' (G-SH) 'the earth is already dark' (G-JAP)

STATIVE PARTICIPLES/RESULTATIVES: Perfective adverbials combine with stative participles or resultatives (§ 11.1.2.1). It needs to be noted that perfect participles (§ 11.1.2.2) or verbs marked with the anterior suffix *-wa* (§ 12.2.3) do not co-occur with the perfective adverbial.

Following stative participles both perfective adverbials are attested in X_G , X_{Ch} and X_Y , expressing a current resultative state that has relevance to the present. In these contexts the adverbial translates either as 'already' (12. 266a, c-d) or 'still' (b, e), depending on the meaning of the verb. In the secondary data, the stative marker -ʔ is often not orthographically represented and is here reconstructed. However, the fact that McQuown does not indicate -ʔ as part of the form in example (12. 267d) might suggest that the perfective adverbial cliticises to the participle.

- (12. 266) a. tero-ʔ paʔaʔ b. si ʔuka-ʔ paʔaʔ
 die-STAT PFV Sp:if have-STAT PFV
 'he is already dead' (G-JS), (G-SH) 'if there still is' (G-JAP)

- c. <chimi-pa>
 *čimi-(?) pa?
 extinguish-(STAT) PFV
 'it is already extinguished'
 OT: "ya está apagado" (Ch-F)
- d. <chenepá>
 *čene-(?) pa?
 burn-STAT PFV
 'it is already burned'
 OT: "ya está quemado" (Y-C)
- e. <tupapá>
 *tupa-(?) pa?
 stay-(STAT) PFV
 'he still stayed'
 OT: "se quedó" (Y-C)
- (12. 267) a. ?iri-? paʔaʔ
 grow-STAT PFV
 'he/it is already big/grown-up' (G-SH)
- b. kayaya-? paʔaʔ pari
 hot-STAT PFV sun
 'the sun is already hot/strong' (G-JAP)
- c. <llugua bal>
 *yuwa-(?) (=)baʔ
 lose-(STAT) (=)PFV
 'it is already lost'
 OT: "pereció" (Ch-Z)
- d. <tero'baʔ>
 tero (=)bar
 die (=)PFV
 'he already died'
 OT: "ya se murió" (Ch-MQb)
- e. <minabar>
 mina (=)bar
 clear (=)PFV
 'it is already clear'
 OT: "claro" (S-Gav)

IMPERATIVE PREDICATES: The adverbial *paʔaʔ* occurs with imperative predicates. It need to be noted that the form *paʔaʔ* is not attested in this context. The translation contexts suggest an identical function as the Spanish adverb *ya* would have in imperative context; i.e. the adverb refers to an event in the relative past within a future frame of reference. In X_G and X_{Ch} the pattern is attested with intransitive imperative verbs, exhortatives and subordinate predicates.

- (12. 268) a. ʔika-ya paʔaʔ
 descend-IMP.VI PFV
 'come down/descend already!' (G-RHG)
- b. numá-ya peʔ paʔaʔ
 eat-IMP.VI IMP PFV
 'come eat already!' (G-JAP)
- c. ʔanta-maʔ paʔaʔ
 IMP:go-EXH PFV
 'let's go already' (G-JAP)
- d. <ka 'taʔyΛ ya'ba>
 kataʔ-ya ya ba
 lie-IMP.VI Sp:already PFV
 'lie down already!'
 OT: "acuéstate ya" (Ch-MQb)
- e. <ixkimpá>
 ʔiški-n paʔ
 loosen-SUBJ PFV
 '(that) he may make it already loose! = make it loose!'
 OT: "desata tú!" (Y-C)

NOMINAL PREDICATES WITH PERFECTIVE ADVERBIAL: Both adverbial forms, *paʔa* and *paʔaʔ*, are attested with nominal predicates. These can be descriptive or compound nouns. In the majority of cases, the perfective adverbial occurs with temporal nouns referring to time entities or periods. These can be expressed as simple nouns (12. 269), compounds (12. 270) or prepositional phrases (12. 271), (12. 272).

- (12. 269) a. *nankun paʔaʔ*
afternoon PFV
'(it is) already afternoon' (G-SH), (G-RHG)
- b. *siʔma paʔaʔ*
night PFV
'(it is) already night' (G-SH)
- d. <nangubar>
nanku bar
afternoon PFV
'(it is) already afternoon'
OT: "la tarde" (Ch-F)
- e. <tz'üöma pa>
ɕ'ʔma pa(?)
night PFV
'(it is) already night'
OT: "ya es de noche" (Y-C)
- (12. 270) a. *puy pari paʔaʔ*
half day PFV
'(it is) already half day' (G-JAP)
- b. *kayayaʔ pari paʔaʔ*
hot day PFV
'(it is) already (a) hot day' (G-JAP)
- (12. 271) <szam pari paʔ>
šam pari paʔ
PREP day PFV
'(it is) already in the day'
OT: "ya es de día" (4440.)
- (12. 272) a. *šam bari paʔaʔ*
PREP day PFV
'(it is) already (late) in the day' (G-RHG)
- b. <rha suma bar>
ra suma bar
PREP night PFV
'(it is) already in the night'
OT: "ya es noche" (Ch-JC)

Nominal predicates of nouns denoting persons, animals or objects accompanied by the perfective adverbial usually express that something or somebody is already in the state described by the noun.

- (12. 273) a. <pokóko paʔáʔ>
pokoko paʔaʔ
raccoon PFV
'(he is) already racoon'
OT: "se convirtió en mapache" (G-S)
- b. *čuh-čaya paʔaʔ*
old-female PFV
'(she is) already an old woman' (G-RHG)
- c. <eimabar>
ʔeyma bar
corn PFV
'(it is/has) already corn'
OT: "ya está maíz" (Ch-F)
- d. <castiano bal>
kastiyano bal
Sp:Spanish PFV
'(we are) already Spanish'
OT: "ya lo somos [Españoles]" (Ch-Z)
- e. <sombraʔbar>
sombra bar
Sp:shadow PFV
'(it is/has) already shadow'
OT: "ya llegó la sombra" (Ch-MQb)

The perfective adverbial can follow locatives, either in form of prepositional phrases or in adverbial form, to indicate that somebody or something is already at the indicated location. Examples (12. 274a-b) illustrate that *paʔaʔ* and *paʔaʔ* are used interchangeably in the same context.

- (12. 274) a. *šan-tiwina paʔaʔ pari*
PREP-sky PFV sun
'the sun is already in the sky' (G-JAP)
- b. *šan-tiwina paʔaʔ pari*
PREP-sky PFV sun
'the sun is already in the sky' (G-JAP)
- c. *ʔi=hu=kaʔ paʔaʔ*
LOC=DEM=DIR PFV
'there it is already' (G-JAP)

In combination with a negative existential, the perfective adverbial indicates the meaning 'yet' rather than 'already'.

- (12. 275) hin šan paʔaʔ
 NEG INT PFV
 'there is nothing yet' (G-SH)

SYNTAX: In dependent and negative clauses, TAM-adverbials precede the predicate. In all other clause types the perfective adverbial follows the predicate.

- (12. 276) a. <aszin pà pè ca acù misza aŁa>
 ʔašin paʔ peʔ ka-ʔaku-ʔ miša ʔaʔa
 NEG PFV FUT 2sS-go-STAT Sp:mass tomorrow
 '(if) you were not going to mass tomorrow'
 OT: "si no fueréis a oir misa mañana" (2040.)
- b. <naca ayù pà guiszucà na Juan>
 naka ʔayuʔ paʔ wišu-kaʔ na Juan
 PN:2s AUX PFV beat-2sA DET Juan
 'you will have beaten Juan'
 OT: "tú habrás azotado a Juan" (2022.)

As mentioned above, Schumann indicates the adverbial *paʔaʔ* frequently in clause-final position following the predicate and its objects. In these contexts, the form does not seem to convey the meaning 'already' or 'still' but simply refers to a past event.

- (12. 277) a. <na tumáʔi horoʔík tímáʔi šan hawíʔi paʔaʔ>
 na tuma-ʔi horo =ʔík tíma-ʔi šan hawí-ʔi paʔaʔ
 DET deer-PL get =3PL louse-PL PREP skin/fur-PL PFV
 'the deer (pl.) got lice in their fur'
 OT: "los venados tenían piojos en sus pieles" (G-S)
- b. <rúka hiʔ luis mápu ... paʔaʔ>
 ruka hiʔ Luis mapu ... paʔaʔ
 eat PROG+3sS_{DEP} Luis tortilla ... PFV
 'Luis was eating tortilla ...'
 OT: "estaba comiendo Luis tortilla...?" (G-S)

AUXILIARY VERB CONSTRUCTIONS WITH PERFECTIVE ADVERBIAL: In the ALS, temporal adverbials precede subordinate auxiliaries. In the following examples, both adverbial forms, *paʔ* and *paʔaʔ*, are attested preceding the subordinate auxiliary *pata* that carries the inflectional information.

- (12. 278) a. <orómo pa pè Łic pataguaag>
 ʔoromo pa(ʔ) peʔ ʔík pata-wa-h
 pick up PFV FUT PL *accomplish-ANT-3sP
 'they would have been picked up'
 OT: "aquellos hubieren sido recogidos" (1058.)
- b. <samù pa ayù pataguaan>
 samu-ʔ pa(ʔ) ʔayuʔ pata-wa-n
 catch-STAT PFV AUX *accomplish-ANT-1sP
 'I will have been caught'
 OT: "yo haber sido cogido" (1183.)
- (12. 279) a. <capa evètvè paŁ naŁ pataguaag>
 ka=pa k'i:ti-ʔ paʔ na(ʔ)ʔ pata-wa-h
 EXO=PFV measure-STAT PFV IMPFV *accomplish-ANT-3sP
 'he had been measured'
 OT: "aquel habia sido medido" (1337.)

- b. <capa yguitzi paL naL pataguà>
ka=pa **ʔiwiɕ'i** **paʔ** **na(ʔ)ʔ** **pata-waʔ**
 EXO=PFV hear PFV IMPFV *accomplish-ANT
 'it had already been heard'
 OT: "ya la misa había sido oída" (2019.)

Future and optative constructions in X_G and X_{Ch} show the adverbial following the AVC.

- (12. 280) a. ku=y ʔaku-n paʔaʔ
 go=PROG+3s_{DEP} go-1s_{DEP} PFV
 'I am already going to go' (G-SH)
- b. <cuay tiqui bar>
 kw=ay ti(:)ki bar
 go=PROG+3s_{DEP} sleep PFV
 'he is already going to sleep'
 OT: "quiero dormir" (Ch-JC)
- (12. 281) a. te:ro nuʔma paʔaʔ
 want eat PFV
 'he already wants to eat' (G-JAP)
- b. te:ro ti:ki paʔ
 want sleep PFV
 'I already want to sleep' (G-SH)

In X_G and X_{Ch} the perfective adverbial can also become grammaticalised as part of an intransitive progressive construction. The form combines the motion verb *ku* the adverbial root *pa* and the progressive auxiliary *ʔaya-*, yielding *ku=pa=ya-* 'already going' ("irse ya"). The grammaticalised progressive occurs with and without person-marking. It needs to be noted that in most attested cases, the unmarked form *ku=pa=ya(-ʔ)* refers to the first person singular.

- (12. 282) a. ku=pa=ya-ʔ
 go=PFV=PROG-ʔ
 'I am already going' (G-SH)
- b. ku=pa=ya-ka
 go=PFV=PROG-2s_{DEP}
 'you are already going' (G-RHG)
- c. ku=pa=ya-n ɕ'ehe
 go=PFV=PROG-1s_{DEP} TOPN
 'I am already going to Chiquimulilla' (G-RHG)
- d. <cu vari ya>
 ku=bari=ya
 go=PFV=PROG
 'I am already going'
 OT: "ya me voy" (Ch-C)
- e. <tero cubar ya>
 te:ro ku=bar=ya
 want go=PFV=PROG
 'I want to already be walking'
 OT: "quiero marchar, caminar" (Ch-F)

There are several attested cases in X_G where this grammaticalised progressive construction is in addition followed by another perfective adverbial. Both adverbial forms, *pa ʔa ʔ* and *pa ʔa ʔ* are attested.

- (12. 283) a. ku=pa=ya-n paʔaʔ
 go=PFV=PROG-1s_{DEP} PFV
 'I am already going to go already' (G-SH)
- b. ku=pa=ya-n paʔaʔ naʔ
 go=PFV=PROG-1s_{DEP} PFV PN:3s
 'I am already going to go already' (G-SH)

12.5.3 Imperfective/durative

The adverbial *na ʔa* occurs in the ALS with transitive and intransitive verbs. In most contexts, Maldonado de Matos indicates the form with an accent on the root vowel, suggesting that the vowel may be followed by a glottal stop. Campbell & Kaufman indicate in their field notes from X_G the particle *na ʔa ʔ* as a marker for past-time reference, which would support the reconstruction of a glottal stop following the root vowel of the TAM-adverbial in the ALS.

Maldonado de Matos employs the form to mark the Latin categories of *imperfecto* and *circumloquio segundo*. Maldonado de Matos combines *naʔt* with the conditional adverbial *maʔ* (§ 12.5.3) to indicate the Latin category of *imperfecto subjuntivo*, with the perfective adverbial *paʔ* (§ 12.5.2) to mark *plusquamperfecto*, and with the future/deontic adverbial *peʔ* (§ 12.5.1, § 13.1.5.1) to indicate *futuro infinitivo*.

Table 12. 10: Combinations and categories of the TAM-adverbial *naʔt* in the ALS

FORM			LATIN CATEGORY
<nàŁ>	naʔt	[IMPFV]	imperfecto circumloquio segundo also: plusquamperfecto
<mà nàŁ>	maʔ naʔt	[COND + IMPFV]	imperfecto subjuntivo
<... paŁ nàŁ>	paʔ naʔt	[PFV + IMPFV]	plusquamperfecto
<nàŁ pè>	naʔt peʔ	[IMPFV + FUT]	futuro infinitivo

The adverbial *naʔt* is used in the ALS mostly in contexts with past-time reference, although its occurrence with future infinitive does not seem to confirm this function. The basic use of the adverbial is to mark *pretérito imperfecto*, which in Latin as well as in Spanish indicates a past durative action. Nebrija described the *imperfecto* as a "passado no acabado" (cf. Quilis 1980:33), which implies a durative aspect for this temporal category. Accordingly, Campbell & Kaufman define it in their field notes as an imperfective marker.

- (12. 284) a. <cà pùla nàŁ ay>
ka-pula naʔt ʔay
 2pA-make IMPFV 2PL
 'you (pl.) made (it)'
 OT: "vosotros hacíais" (403.)
- b. <an ima nàŁ na misza>
ʔan-ʔima na(ʔ)t na miša
 1sA-say IMPFV DET Sp:mass
 'I said the mass'
 OT: "yo decía misa" (1982.)
- c. <yguitzi nàŁ ucacan na misza>
ʔiwiʕ'i naʔt ʔuk'a-kan na miša
 hear IMPFV PROG-2sA_{DEP} DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1987.)
- d. <nàŁ ayacà>
naʔt ʔaya-kaʔ
 IMPFV be-2sS_{DEP}
 'you were'
 OT: "tú estabas" (1895.)

The use of the adverbial *naʔt* in the artificial formation of pluperfect forms by Maldonado de Matos seems to confirm its function as an adverbial referring to past-time events. Here the adverbial occurs with the perfective adverbial following a subordinate verb. In the Latin model of grammar, pluperfect marks an event prior and relevant to the reference time, and we can assume that Maldonado de Matos constructed the form accordingly.

- (12. 285) a. <capa tá y paŁ nàŁ>
ka=pa Ø-ta:-yi-ʔ paʔ naʔt
 EXO=PFV 3sS-come-LIG-STAT PFV IMPFV
 'it was (that) he had already come'
 OT: "aquel había venido" (1418.)
- b. <capa uiszcà paŁ nàŁ ... ay>
ka=pa ʔuyši-kaʔ paʔ naʔt
 EXO=PFV hear-2pA PFV IMPFV
 'it was (that) you (pl.) had already heard'
 OT: "ya habíais oído ..." (2018.)

In combination with a nonpast/imperfective predicate, *na ʔ* seems to express an irrealis mood. Maldonado de Matos uses the form to mark the category of *circumloquio segundo* that in the Nebrija's grammar expresses an irrealis, i.e. "qué fuera, o hubiera de haber sido". Maldonado de Matos translations reflect the function of the form in Nebrija's grammar.

- (12. 286) a. <cataana naL ical santo>
ka-tana na(ʔ)ʔ ʔikaʔ santo
 2sS-be IMPFV INDEF Sp:saint
 'you were a saint'
 OT:"fueras un santo" (2031.)
- b. <an ʔea naL qui absolver naca>
ʔan-ʔuk'a na(ʔ)ʔ ki absolver naka
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I would absolve you'
 OT:"te absolviera yo" (2036.)
- (12. 287) <sàmu naL>
samu naʔʔ
 catch IMPFV
 'that he (would have) caught'
 OT:"que cogiera, hubiera de haber cogido" (1143.)

Maldonado de Matos uses *na ʔ* furthermore with imperfect (12. 288) and pluperfect (12. 289) subjunctive forms. In these cases, both functions of the adverbial, i.e. past-time reference and reference to unreal events, seem to combine.

- (12. 288) a. <musàmu mà naL>
mu-samu ma naʔʔ
 3sA-catch COND IMPFV
 'he would have caught'
 OT:"aquel cogiera, cogería y cogiese" (1118.)
- b. <ca yguitzi ma naL na misza...>
ka-ʔiwiʔ'i ma naʔʔ na miša
 2sA-hear COND IMPFV DET Sp:mass
 '(if) you heard (= would hear) the mass'
 OT:"si oyeras misa ..." (2031.)
- (12. 289) a. <pulàn naL qui>
pula-n na(ʔ)ʔ ki
 make-1sA IMPFV INTENS
 'I would have made it myself'
 OT:"yo hubiera, habría y hubiese hecho" (452.)
- b. <uiszicà naL qui na doctrina>
ʔuyši-kaʔ naʔʔ ki na doctrina
 hear-2sA IMPFV INTENS DET Sp:creed
 'you would have heard the creed yourself'
 OT:"hubieras oído la doctrina" (1959.)

In combination with the adverbial *peʔ* Maldonado de Matos employs the adverbial *na ʔ* to express the future infinitive. In this context the adverbial does not refer to a past event, though a future situation may qualify as an unreal event.

- (12. 290) <apùla naL pè>
ʔa-pula naʔʔ peʔ
 3sS-make IMPFV FUT/IMP
 'one will have to make'
 OT:"haber de hacer" (471.)

The exact function of the adverbial *naʔ* cannot be determined. The contexts above show that the adverbial is used to refer to past-time and unreal events. The imperfective or durative aspect seems to be only implicit in the Spanish category of *imperfecto* that the adverbial is attested with in the ALS. The form is not unambiguously identified in the semi-speaker data from X_G or the other comparative data to clarify its exact usage.

12.5.4 Conditional

The adverbial *maʔ* is used in the ALS to mark conditional. It follows transitive verbs that are marked with cross-referencing suffixes. The Latin grammatical context is that of the perfect subjunctive. The accent on the vowel seems to indicate a glottal stop, which may be confirmed by examples in the comparative data.

The adverbial can occur in combination with *naʔ* (see § 12.5.3) and nonpast/imperfective verbs marked with cross-referencing prefixes to form the *imperfecto subjuntivo*, as well as with the auxiliary *ʔayu* (§ 10.1.3.3) and a suffix-marked verb to indicate the *plusquamperfecto subjuntivo*.

Table 12. 11: Combinations and categories of the TAM-adverbial *maʔ* in the ALS

FORM	LATIN CATEGORY		
<mà> <i>maʔ</i>	[COND]	perfecto subjuntivo	
<mà nàl> <i>maʔ naʔ</i>	[COND + IMPFV]	imperfecto subjuntivo	
<mà ayù> <i>maʔ ʔayuʔ</i>	[COND + AUX]	plusquamperfecto subjuntivo	

The adverbial is used by Maldonado de Matos to express past subjunctives in conditional clauses.

- (12. 291) a. <sàmucà mà>
samu-kaʔ maʔ
 catch-2sA COND
 'you would have caught'
 OT: "tú hayas cogido" (1123.)
- b. <ca yguitzi ma nàl na misza...>
ka-ʔiwiç'i maʔ naʔ na miša
 2sA-hear COND IMPFV DET Sp:mass
 '(if) you heard (= would hear) the mass'
 OT: "si oyeras misa..." (2031.)
- c. <sàmui mà ayù>
samu-y maʔ ʔayu
 catch-3sA COND AUX
 'he would have had caught'
 OT: "aquel hubiera cogido" (1130.)
- d. <pulacà ma ayù na penitencia>
pula-kaʔ maʔ ʔayu na penitencia
 make-2sA COND AUX DET Sp:penitence
 '(if) you had made the penitence...'
 OT: "si hubieras hecho la penitencia,..." (2036.)

While in all other contexts *maʔ* follows the marked verbal predicate, the adverbial precedes the existential verb *ʔaya*- 'to be'.

- (12. 292) <mà ayaan>
ma? **?aya-n**
 COND be-1s_{DEP}
 'I would have been'
 OT: "yo haya estado" (1935.)

The conditional adverbial also seems to be attested with the negated indefinite pronoun 'nobody'. It is not clear whether this is really the same operator, or whether the form *ma* may be etymologically related to the demonstrative *man*.

- (12. 293) <ní guéna maquí>
ní= **wena** **ma** **=ki**
 NEG= INT:who COND =INTENS
 'nobody'
 OT: "ninguno" (228.)

In the semi-speaker data from X_G the conditional adverbial *ma?* cannot be unambiguously identified. Campbell & Kaufman have documented *ma:* in X_{Jum} as a deontic marker that expresses mild obligation in the sense of 'should'; although in other contexts it is given with the translation 'would'.

- (12. 294) a. <wišu-ka? maa a naw-ik>
 wišu-ka? ma: a naw-ik
 beat-2sA COND/DEON Sp:PREP son-2sP
 'you should have beaten your son' (Jum-C&K)
- b. <ma ... ke>
 ma: ke
 COND Sp:that
 "it would have been that" (Jum-C&K)

For X_G Campbell & Kaufman distinguish the two adverbials *má* and *ma?aʔ*, the use of which seems to be dependent on word order. While *má* precedes the predicate, *ma?aʔ* only seems to occur in the position following the predicate. The exact function of the *má* and *ma?aʔ* in these contexts is not understood.

- (12. 295) <?i má aku? honowaʔa>
 ?i má Ø-ʔaku-ʔ hono-wa-ʔa
 LOC ? 3sS-go-STAT get drunk-ANT-AGT
 'there ? have gone the one who have gotten drunk'
 OT: "ahi viene un bolo" (G-C&K)
- (12. 296) <hoono? maʔaʔ na huurak (na) ?išpa?>
 ho: no-ʔ maʔaʔ na hu: rak na ?išpa-ʔ
 get drunk-STAT ? DET man DET leave-STAT
 'the man who left was drunk'
 OT: "el hombre que alió estaba bolo" (G-C&K)

In X_Y the form *ma* occurs between the intransitive motion verb *ku* and the intransitive imperative suffix *-y*. Again, the exact function of the morpheme is unclear.

- (12. 297) <cumay ne>
 ku-ma-y ne
 go-ʔ-IMP.VI LOC:here
 OT: "¡ven acá!" (Y-C)

13 Modality

Summarised under the heading of 'modality', this chapter deals with pragmatically marked declarative and non-declarative speech acts in Xinka. The term 'modality' itself refers to the status of a speech act and the intent or attitude of the speaker expressed therein (Payne 1997:244; Palmer 2001:1). Non-assertive modes that are realised by special person-marking on the subordinate predicate or modal adverbials that share morphosyntactic properties with tense/aspect-marking categories have been treated in preceding chapters (§ 10 and § 12).

Modal categories discussed in the present chapter are non-declarative speech acts including imperatives and interrogatives and declarative speech acts including assertive/affirmative and negative clauses. Declarative and non-declarative speech acts are marked, but not distinguished by sentence moods. Pragmatically marked clauses also employ distinct predicate marking, depending on whether they occur in main or subordinate function.

13.1 Imperative

Imperatives are non-declarative speech acts that express commands (Payne 1997:303). The addressee of the imperative is the subject of the clause, which therefore usually refers to the second person. There are different strategies for marking imperatives in Maldonado-Xinka.

The direct imperative is marked differently on intransitive and transitive verbs. While intransitives employ the suffix *-ya* (§ 13.1.2), transitive verbs are unmarked in the simple imperative form (§ 13.1.1).

Imperative contexts can furthermore be expressed by declarative verbal predicates that mark the addressed subject of the imperative action with cross-referencing affixes (§ 13.1.3). This form of the imperative is attested in the ALS only with intransitive verbs, whereas in the comparative data it occurs mostly with transitive predicates.

Directionals that indicate spatial and temporal deixis accompany imperative predicates, specifying the direction of the command (§ 13.1.5).

There are several strategies in the corpus of data for marking exhortative-cohortative (§13.1.4), of which only one is attested in the ALS. In all cases we can show that the exhortative is marked with forms either borrowed from Spanish, which were even re-translated into Xinka, or with periphrastic constructions including the auxiliary verb *ʔuka* 'do/have' that express the exhortative only indirectly.

Maldonado de Matos indicates the form *ʔawan* to function as a negative marker in imperative clauses. However, no syntactic context is given for this marker in the ALS. With one exception, there are no specific markers for prohibitives or vetatives in Xinka. Negative imperative is expressed with a negative marker that precedes an imperative predicate.

13.1.1 Unmarked imperative

The unmarked imperative occurs in the ALS with transitive roots and stems as well as with verbs that are semantically intransitive and described by Maldonado de Matos as *anomalos* or *defectivos*. The form marks the second person and indicates a direct command.

For the majority of lexical entries, Maldonado de Matos indicates the imperative form of transitive verbs as unmarked. Most entries are two-syllabic roots that exhibit an accent sign on V₁, irrespectively of whether the first vowel is long or short, which suggests that the stress is carried by the first syllable. There are only a few verbal entries where the position of the accent might suggest that the imperative is marked with a final glottal stop (or long vowel), e.g. <Łapi> *Łapi* ~ <Łapi> *Łapi?* or *Łapi:*. However, these forms are not systematic.

- (13. 1) a. <jóro>
ho:ro-Ø
 guard-IMP.VT
 'guard/keep it!'
 OT:"cuidar, tener (imperativo)" (2514.)
- b. <mére>
mere-Ø
 tear-IMP.VT
 'tear it!'
 OT:"¡rompe tú!" (2672.)
- c. <pùla>
pula-Ø
 make-IMP.VT
 'make it!'
 OT:"¡has tú!" (429.)

The stress pattern is confirmed in the comparative data. In X_G imperative forms of transitive verbs exhibit stress on V₁ (13. 2a-b). Examples from X_{Ch} and X_Y are not indicated with an accent, which suggests that the stress pattern is regular.

- (13. 2) a. tupa-Ø natiya
 let/leave-IMP.VT LOC:here
 'let/leave it here!' (G-SH), (G-JAP)
- b. kisma-Ø nin ka-šinak
 give (as present)-IMP.VT PN:1s 2sP-bean
 'give me your beans!' (G-JAP)
- c. <nuka'nik>
 nuka-Ø nik
 give-IMP.VT PN:1s
 'give (it to) me!'
 OT:"¡déme la mano!" (Ch-MQa)
- d. <guasti qui na mú camisa>
 wasti-Ø ki na mu-camisa
 dress-IMP.VT INTENS DET 2sP-Sp:shirt
 'put on your shirt!'
 OT:"¡ponéte tu camisa!" (Ch-JC)
- e. <tupanan>
 tupa-Ø na-n
 let/leave-IMP.VT LOC-?
 'let/leave it there!'
 OT:"¡déjalo ahí!" (Y-C)
- f. <uca isal>
 Łuka-Ø Łisal
 do/have-IMP.VT good
 'do good'
 OT:"que lo haga bien" (Y-C)

On three-syllabic transitive roots, the intermediate vowel may be deleted in the imperative. This process could be defined as morphophonemic, although it is not general and does not occur with all roots.

- (13. 3) a. <ormo>
ʔormo-Ø
 pick up-IMP.VT
 'pick it up!'
 OT: "¡recoge tú!" (942.)
- b. <etca>
ʔetka-Ø
 harvest-IMP.VT
 'harvest (it)!'
 OT: "¡tapiscar (imperativo)" (2282.)

A significant number of three-syllabic transitive verbs preserve V_2 in the imperative form (13. 4). This may be an indication that these verbs are derived stems that are not morphologically transparent. Causative stems regularly preserve V_2 in the imperative form (13. 5).

- (13. 4) a. <yueckoesza>
ytk'šša-Ø
 shake-IMP.VT
 'shake it!'
 OT: "¡remecer (imperativo)" (3547.)
- b. <szapari>
šapari-Ø
 de grain-IMP.VT
 'de grain it!'
 OT: "¡desgranar (imperativo)" (3126.)
- (13. 5) a. <parica>
pari-ka-Ø
 heat-CAUS-IMP.VT
 'heat it up!'
 OT: "¡calentar (imperativo)" (2825.)
- b. <nuemaja>
nma-ha-Ø
 eat-CAUS-IMP.VT
 'feed (it/him)!'
 OT: "¡dar de comer (imper.)" (2776.)

The unmarked imperative is also employed with complex verbs that consist of a transitive verb and a semantically incorporated nominal form in second position. The pattern is confirmed in X_Y .

- (13. 6) a. <pata szàma>
pata-Ø **šama**
 *accomplish-IMP.VT PREP:inside
 'remember (it)!'
 OT: "¡acuérdate" (1595.)
- b. <pæuszajaca>
pak'u-Ø **šaha-ka**
 nail-IMP.VT mouth-2sP
 'nail your mouth = lie!'
 OT: "¡mentir (imperativo)" (2809.)
- (13. 7) <jóchi samá>
hoči-Ø **sama**
 break-IMP.VT PREP
 'break (it)!'
 OT: "¡¡quebra tú!" (Y-C)

The simple imperative is only used in the second person. While the second person singular is unmarked, the second person plural is marked with the plural clitic γ_{ay} . This is confirmed in X_G and X_{Ch} .

- (13. 8) a. <pùla ay>
pula-Ø **ʔay**
 make-IMP.VT 2PL
 'make it (you, pl)!'
 OT: "¡¡haced vosotros!" (431.)
- b. <pata szàma ay>
pata-Ø **šama** **ʔay**
 *accomplish-IMP.VT PREP 2PL
 'remember (it) (you, pl.)!'
 OT: "¡¡acordaos vosotros!" (1597.)
- (13. 9) a. <šika-Ø>
šika-Ø **ʔay**
 silence-IMP.VT 2PL
 'be quiet/silent (you, pl.)!' (G-RHG)
- b. <junu hay>
hunu-Ø **ʔay**
 know-IMP.VT 2PL
 'know (you, pl.)!'
 OT: "¡¡sabad!" (Ch-Z)

The unmarked imperative verb form may be accompanied by an independent pronoun in the second person (13. 10). There are no examples of this pattern in the ALS. In the only case where an imperative transitive predicate is followed by a second person pronoun, the pronoun seems to function as a possessor (13. 11).

- (13. 10) a. tura-Ø naka ka-tamaɕʻiʔ b. <nen lájta nay akü>
take-IMP.VT PN:2s 2sP-lasso nen_o lahta-Ø nay ʔaki
'take/bring your lasso!' (G-JAP) PN:1s push-IMP.VT PN:2s ADV:bit
'push me a bit'
OT: "¡empújame un poco!" (Y-C)
- (13. 11) <púla naca penitencia>
pula-Ø naka penitencia
make-IMP.VT PN:2s Sp:penitence
'make your penitence!'
OT: "¡haz tu penitencia!" (2027.)

The unmarked imperative occurs with intransitive verbs that usually mark imperative with the suffix *-ya*. In all of these attested cases in the ALS, the verbs take both types of imperative marking; i.e. *-Ø* and *-ya*. The semantic contexts do not suggest that we are dealing with ambitransitive roots, although this interpretation might apply to the root *ʔipala* 'to bath'. The verb *ma:ra* 'rest', however, seems to be inherently intransitive and cannot be understood to have an object.

(13. 12)	a. <ipla> ?ipla-Ø bath-IMP.VT 'take a bath!' OT:"bañar (imperativo)" (2415.)	cf. <iplaya> ?ipla-ya bath-IMP.VI 'bath!' OT:"bañarse (imperativo)" (2419.)
	b. <màrà> ma:ra-(?) rest-IMP.VT 'rest!' OT:"¡descansa tú" (1512.)	cf. <màràya> ma:ra-ya rest-IMP.VI 'rest!' OT:"¡descansa tú" (1513.)

In the comparative data it is mostly intransitive positional verbs and a few motion verbs that are attested as unmarked imperatives. However, most of these verbs do also take the intransitive imperative suffix *-ya* (see § 13.1.2).

- (13. 13) a. <kuri>
 kuru-Ø
 VI:run-IMP.VT
 'run!'
 OT:"andar (imperativo)" (G-S)
- b. <ma tz'údu>
 maɕ'uru-Ø
 VI:bend down-IMP.VT
 'bend down!'
 OT:"jagacharse, agáchate!" (Y-C)

Inchoative and antipassive intransitive stems marked with *-ki* (see § 11.3) form the imperative likewise with zero-marking and – in some cases – delete V_3 .

(13. 14)	a.	<muetaLeki> mita-4-k'i-Ø ?-PART.ACT-INCH-IMP.VT 'dream!' OT:"soñar (imperativo)" (2717.)	b.	<guirici> wiri-k'i-Ø ?-AP-IMP.VT 'speak!' OT:"hablar (imperativo)" (2357.)
(13. 15)	a.	kuru-ki- Ø run-REFL?-IMP.VT 'run!' (G-RHG)	b.	ʔaku-ke-Ø naka <i>despacio</i> go-REFL?-IMP.VT PN:2s Sp:slowly 'go slowly!' (G-SH)

In X_{Ch} a few imperative intransitive predicates are indicated with a final glottal stop -ʔ. This type of imperative marking may be attested in the ALS on transitive imperative forms that carry an accent sign on the final vowel (see above). It is not clear whether this stress pattern, respectively the marking with -ʔ, is based on a rule.

- (13. 16) a. <jaapá>
 ha:pa-ʔ
 pass-IMP.VI
 'pass (by)!'
 OT: "¡venid acá!" (Ch-F)
- b. <ʔuʂtuʔ>
 ʔuʂtu-ʔ
 *sit down-IMP.VI
 'sit down!'
 OT: "¡sientate!" (Ch-MQ)

13.1.2 Imperative marker -ya

The suffix *-ya* marks imperative on intransitive roots and stems. It is used in the second person and indicates a direct command. Where indicated, the accent always marks the vowel before the last consonant, which may either indicate a regular stress pattern (see § 4.4.8) or the insertion of a glottal stop. Etymologically, the imperative marker *-ya* could have become grammaticalised from the existential verb *ʔaya* 'be in a place'; e.g. *šawu-ya* [sit-IMP] 'be seated!'.

- (13. 17) a. <acúya>
ʔaku-ya
 go-IMP.VI
 'go!'
 OT: "¡vaya tú!" (2053.), "¡ve tú!" (1678.)
- b. <Liéáya>
ʔik'a-ya
 descend-IMP.VI
 'descend, come down!'
 OT: "bajarse personalmente (imp.)" (2599.)
- c. <teeroya>
te:ro-ya
 die-IMP.VI
 'die!'
 OT: "morirse (imperativo)" (3286.)

In X_G and X_{Ch} , we find the imperative suffix with the same sort of intransitive roots. In some cases a glottal stop is inserted before the suffix (see (13. 18a). Campbell and Kaufman (in their field notes) indicate the marker for the intransitive imperative in X_G as *-y ʔa*.

- (13. 18) a. mara-ʔ-ya
 rest-ʔ-IMP.VI
 'rest!' (G-SH)
- b. šawu-ya
 sit-IMP.VI
 'sit down!' (G-RHG), (G-JAP)
- c. ʔara-ya hutu man
 ascend-IMP.VI tree DEM
 'climb that tree!' (G-RHG)
- d. <sacaya>
 saka-ya
 get up-IMP.VI
 'get up'
 OT: "¡levántate!" (Ch-P)

In X_{Ch} , X_{Jum} and X_Y intransitive verbs mark the imperative mostly with *-y*. Campbell and Kaufman indicate for X_{Ch} the suffix *-ʔy* that inserts a glottal stop before the last consonant.

- (13. 19) a. <guastay>, <wastáy>
 wasta-y
 enter-IMP.VI
 'enter!'
 OT: "¡entre!, ¡pase!" (Ch-F), (Ch-S)
- b. <tikiy>
 ti(:)ki-y
 sleep-IMP.VI
 'sleep!'
 OT: "¡duerme tú!" (Ch-C)
- c. <shaguy>
 šawu-y
 sit-IMP.VI
 'sit down!'
 OT: "¡sientate!" (Jum-G)
- d. <cumay ne>
 ku-ma-y ne
 go-ʔ-IMP.VI LOC:here
 'go/come here!'
 OT: "¡ven acá!" (Y-C)

- The imperative marker *-ya* occurs with inchoative stems that do not delete any vowel when taking the imperative suffix. The fact that *-ya* marks imperative on inchoative stems confirms that the use of the unmarked imperative and the imperative with *-ya* are mainly determined by the transitivity status of the verb. Inchoative stems with imperative marking are mainly attested in the ALS.

- The command expressed by the imperative verb refers to the second person. The plural clitic follows after the suffix.

- In X_G and X_{Ch} we find the intransitive imperative with *-ya* to be accompanied by second person independent pronouns.

- In rare cases imperative forms marked with *-ya* also take cross-referencing prefixes in the second person. This pattern occurs in X_G and X_Y , but is unattested in the ALS.

- (13. 25) a. <muy huastaya muy casunuya> b. <mi ij curúya>
 muy-wasta-ya muy-kasunu-ya mi-kuru-ya
 2sS-enter-IMP.VI 2sS-sit down-IMP.VI 2sS-run-IMP.VI
 'enter, sit down!' 'run!'
 OT: "¡entra, siéntate!" (Ch-C) OT: "¡huye tú!" (Y-C)

In the comparative data from X_G and X_{Ch} , we find intransitive imperatives with *-ya* that are marked with further deictic markers. The centric directional *pe?* is attested to mark imperative in other contexts (§ 13.1.5). It is not clear whether the combination of both markers mainly indicates the direction of the imperative action (as suggested by example (13. 26c.) or whether it simply functions to emphasise the command.

- (13. 26) a. kuri-ya pe?
 run-IMP.VI CENT/IMP
 'run here!' (G-RHG)
 b. <sulluya pe hay>
 suyu-ya pe(?) ?ay
 return-IMP.VI CENT/IMP 2PL
 'return here (you, pl.)!'
 OT: "¡involved!" (Ch-Z)
 c. <akuy 'pe>
 ?aku-y pe(?)
 go-IMP CENT/IMP
 'go/come here!'
 OT: "¡ven acá!" (Ch-MQ)

The combination of the intransitive imperative and the directional *ta?* in X_G and X_{Ch} presumably indicates the direction of the imperative action; although the translation contexts do neither confirm nor contradict this interpretation.

- (13. 27) a. <ma?ra-ya ta> b. <acuy-ta>
 ma?ra-ya ta?
 rest-IMP.VI DIR:come
 'come rest!'
 OT: "descansar" (G-S)
 ?aku-y ta?
 go-IMP.VI DIR:come
 'come and go!'
 OT: "¡ándate, vetel!" (Ch-F)

The perfective adverbial *pa?a* (X_G) or *ba?* (X_{Ch}) following intransitive imperatives emphasises the command by placing the imperative action into the recent past, indicating that something should have already happened.

- (13. 28) a. ?ika-ya pa?a?
 descend-IMP.VI PFV
 'descend/come down already!' (G-RHG)
 b. <ka'ta?yΛ ya'ba>
 kata-ya ya ba
 lie down-IMP.VI Sp:already PFV
 'lie already down!'
 OT: "¡acuéstate ya!" (Ch-MQb)

Just like the unmarked imperative is also attested with intransitive roots (see § 13.1.1), the suffix *-ya* can mark imperative on inherently transitive verbs. Since most of these verbs are also attested in the unmarked imperative form of transitive verbs, it may be suggested that these verbs function as ambitransitives that can occur in transitive as well as intransitive predicate function. All the activities indicated by these verbs are inherently transitive but can occur in non-object oriented contexts.

- (13. 29) a. <mueszaya> cf. <muesza>
mša-ya **mša-Ø**
 bury-IMP.VI bury-IMP.VT
 'bury!' 'bury (it)!'
 OT: "enterrar (imperativo)" (2712.) OT: "enterrar (imperativo)" (2711.)
 b. <úisziya> cf. <úiszi>
?uyši-ya **?uyši-Ø**
 hear-IMP.VI hear-IMP.VT
 'hear!' 'hear (it)!'
 OT: "oir (imperativo)" (2404.) OT: "oir (imperativo)" (2403.)

c. <etcaya> ʔetka-ya harvest-IMP.VI 'harvest!' OT: "tapiscar (imperativo)" (2283.)	cf. <etca> ʔetka-Ø harvest-IMP.VT 'harvest (it)!' OT: "tapiscar (imperativo)" (2282.)

13.1.3 Imperative marked with cross-referencing affixes

Commands can also be expressed with regular predicates that are marked with cross-referencing affixes for the second or third person. While the examples from the ALS seem to suggest that the imperative meaning may be carried by the verbal root, examples in the comparative data show that this form is an alternative way for marking imperative on verb roots that are otherwise attested in the unmarked imperative form (transitives), or with the imperative suffix *-ya* (intransitives). It is possible that regular verb form may express a polite request rather than a direct command.

CROSS-REFERENCING PREFIXES are attested in the ALS as well as in the comparative data with intransitive verbs. All examples in the ALS are given with one-syllabic intransitive roots that carry an accent sign on the vowel, which possibly suggests the presence of a glottal stop in final position (13. 30). In X_G regular intransitive verbs are attested in this context (13. 31).

(13. 30) a. <cà tà> ka-taʔ 2sS-come 'you come = come!' OT: "¡ven tú!" (1434.)	b. <cà nà> ka-naʔ 2sS-say 'you say = say!' OT: "¡dice tú!" (1867.)
c. <cà nà ay> ka-naʔ ʔay 2pS-say 2PL 'you (pl.) say = say you (pl.)!' OT: "¡decidle vosotros!" (1868.)	
(13. 31) ka-ti:ki naka 2sS-sleep PN:2s 'you sleep!' (G-SH)	

In X_{Ch} and X_Y cross-referencing prefixes in the second person only occur with intransitive verbs that also take the imperative suffix *-ya*.

(13. 32) a. <muy huastaya> muy-wasta-ya 2sS-enter-IMP.VI 'enter!' OT: "¡entra!" (Ch-C)	b. <muy tupaya nō> miy-tupa-ya n[aʔ] 2sS-stay-IMP.VI LOC:here 'stay here!' OT: "¡quédate!" (Y-C)

Maldonado de Matos also indicates an imperative (or jussive) of the third person, which is marked with intransitive cross-referencing prefixes of the third person.

(13. 33) a. <a tà> ʔa-taʔ 3sS-come 'may he come!' OT: "¡venga aquel!" (1436.)	b. <a acù Lic> ʔa-ʔakuʔ ʔik 3pS-go PL 'may they go!' OT: "¡vayan aquellos!" (1439.)

CROSS-REFERENCING SUFFIXES of the second person are attested in the ALS as well as in the comparative data with predicates expressing command. In the ALS, the second person suffix *-ka(ʔ)* occurs with the intransitive root *taʔ* 'come, arrive' (13. 34); in the second person plural the plural clitic simply follows the marked imperative verb. The same pattern is attested in X_G with the motion verb *peʔ* functioning as a directional (§ 13.1.5.1) (13. 35). It needs to be pointed out that on intransitive verbs cross-referencing suffixes mark person only in subordinate syntactic contexts.

- (13. 34) a. <tà ca>
 ta:-ka
 come-2s_{DEP}
 '(that) you come!'
 OT: "¡ven tú!" (1435.)
- b. <tà cà ay>
 ta:-kaʔ **ʔay**
 come-2p_{DEP} 2PL
 '(that) you (pl.) come!'
 OT: "¡venid vosotros!" (1438.)
- (13. 35) a. <rúka peká>
 ruka pe-kaʔ
 eat come/CENT-2s_{DEP}
 'come and eat!'
 OT: "¡come, coman!" (G-S)
- b. ʔuwe pe-kaʔ
 call come/CENT-2s_{DEP}
 'come and call (him)!' (G-SH)

The pattern is also attested in X_{Ch} and X_Y with intransitive motion verbs. In X_{Ch} the suffix *-k* is used. Since the variety of X_{Ch} employs *-ka* as well as *-k* to mark the second person singular, we may interpret these imperative forms as simple cases of cross-referencing.

- (13. 36) a. <rhaguck>
 ragu-k'
 sit down-2sS
 'sit down!'
 OT: "¡sentate!" (Ch-JC)
- b. <guashta'ck>
 wašta-k
 enter-2sS
 'enter!'
 OT: "¡entra!" (Ch-JC)
- c. <curuca muca aktü>
 kuru-ka muka ʔaki
 run-2sS work ADV:a bit
 'run and work a bit!'
 OT: "¡anda a trabajar un poco!" (Y-C)

In the comparative data imperative predicate marked with cross-referencing suffixes in the second person singular (13. 37) and plural (13. 38) occur only with transitive verbs.

- (13. 37) a. weske-ka muškarawa
 throw-2sA rubbish
 'throw (away) the rubbish!' (G-RHG)
- b. <cüric>
 kiri-k
 pick/harvest-2sA
 'pick/harvest!'
 OT: "¡arráncame ésto!" (Ch-F), (Ch-C)
- c. <nucak>
 nuka-k
 give-2sA
 'give (it)!'
 OT: "¡regálame!" (Jum-E)
- (13. 38) a. <pulajlic>
 pula-4ik
 make-2pA
 'you (pl.) make it!'
 OT: "¡haced vosotros!" (Ch-C)
- b. <uculica nalica>
 ʔuku-lika nalika
 make-2pA PN:2p
 'you (pl.) make it!'
 OT: "¡haced vosotros!" (Y-C)

Imperative transitive verbs are also found with the cross-referencing suffix *-y* that can be identified as the second person formal in most varieties.

- (13. 39) a. $\epsilon^h\text{?re-y}$?an-muti? b. <nucay na mu tutuc>
cut-3sA/2sf? 1sP-hair nuka-y na mu-tutuk
'(that he) cut my hair!' (G-SH) give-2sA DET 2sP-breast
'give him your breast!'
OT: "¡dale la chiche!" (Ch-JC)
- c. <japay> d. <n'gua-i-naj nu gona>
hapa-y nwa-y nah-nu gona
pass sth.-2sA close?-2sA DEM-DET hole
'pass (it)!' 'close that hole!'
OT: "¡pásame algo!" (Jum-E) OT: "¡tapa tú un hoyo!" (Y-C)

In X_G and X_{Ch} we find intransitive and transitive verbs marked with second person suffixes which co-occur with the directional *pe?* that can mark imperative contexts (see § 13.1.5).

- (13. 40) a. <yiwáka peká> b. <tupacapé>
yiwa-ka pe =ka? tupa-ka pe?
enter-2sS CENT/IMP =EXO let/leave-2sA CENT/IMP
'enter!' 'let/leave it!'
OT: "¡entra!" (G-S) OT: "¡anda déjalo!" (Ch-C)
- c. <a cuc' pejá> =ha
?aku-k pe go-2sS CENT/IMP =PREP
'go/come here!'
OT: "¡venite!" (Ch-JC)

In X_{Ch} there are a few examples where the second person singular cross-referencing suffix *-k* seems to be attested with intransitive imperative forms marked with the imperative suffix *-ya*. In these cases it is not entirely clear whether *-k* is indeed a person-marker or whether the prephonemic source represents *-ʔ* with the grapheme <c>.

- (13. 41) a. <acuyac puec> b. <laní-yac>
?aku-ya-k lani-ya-k
go-IMP.VI-2sS? ?-IMP.VI-2sS?
'go!' 'endure'
OT: "¡andate!" (Ch-P) OT: "aguantar" (Ch-P)

13.1.4 Exhortative-cohortative

There are different strategies in Xinka to mark an exhortative or cohortative mood that provides a command for the first person plural.

In the ALS the exhortative is expressed by the form *ʔantamaʔ*, which could be an assimilated form of the Spanish "andamos". The form would also be morphologically transparent in Xinka, where it may combine the suffix *-maʔ* with the form *ʔanta*, which is attested on its own as an exhortative-marker ('let's go' = "vamos") that might consist of the first person singular cross-referencing prefix *ʔan-* and the directional/motion verb *taʔ*.

- (13. 42) <an da màʔ>
ʔanta-maʔ
IMP:go-EXH
'let's go'
OT: "¡vámonos nosotros!" (1826.)

The exhortative form is attested in X_G where it occurs before verbs and prepositional phrases.

- (13. 43) a. <ánta maʔʔ>
 ʔanta-maʔ
 IMP:go-EXH
 'let's go'
 OT: "¡vámonos!" (G-S)
- b. ʔanta-mah ša ʔaʔtepet c. ʔanta-mah šawaʔ'a
 IMP:go-EXH PREP town IMP:go-EXH sow
 'let's go into town' (G-JS) 'let's sow/plant' (G-RHG)

In Maldonado-Xinka the exhortative *ʔantamaʔ* may be followed by the directional *taʔ* (13. 44). In X_G TAM-adverbials are attested in the same position (13. 45b).

- (13. 44) <andamaʔtə>
ʔanta-maʔ taʔ
 IMP:go-EXH DIR
 'let's go'
 OT: "¡vámonos! (defectivo)" (2066.)
- (13. 45) a. ʔanta-maʔ taʔ ʔa ti:ki hiʔ
 IMP:go-EXH DIR Sp:PREP sleep PROG+3s_{DEP}
 'let's go to sleep!' (G-JS)
- b. ʔanta-maʔ paʔaʔ
 IMP:go-EXH PFV
 'let's go already!' (G-JAP)

The suffix *-maʔ* is attested in X_G with other intransitive and transitive verb roots. Schumann gives the form as *-maʔʔ* (1967:45), whereas the primary data from X_G indicate *-maʔ* or *-mah*. In X_{Ch} *-muy* is attested in a similar context.

- (13. 46) a. <rúka máʔʔ>
 ruka-maʔʔ
 eat-EXH
 'let's eat!'
 OT: "¡comamos!" (G-S)
- b. <yiwa máʔʔ>
 yiwa-maʔʔ
 enter-EXH
 'let's enter!'
 OT: "¡entremos!" (G-S)
- c. ti:ki-mah
 sleep-EXH
 'let's sleep!' (G-JS)
- d. <acugüí muy ho>
 ʔaku-wi-muy ho
 go-?-EXH EXCL
 'so, let's go!'
 OT: "¡vamos pue ho!" (Ch-JC)

In X_{Ch} and X_Y , we also find the verb form *nta* [nʔda] alone as a marker of the exhortative. In X_{Ch} the form can be abbreviated to *da*.

- (13. 47) a. <n'dajan rájá macu>
 nta han rahaʔ-maku
 IMP:go/EXH PREP mouth-house
 'let's go to the corridor'
 OT: "¡vamos al corredor!" (Ch-C)
- b. <n'da jamacá>
 nta ha makaʔ
 IMP:go/EXH PREP work
 'let's work'
 OT: "¡vamos a trabajar!" (Y-C)
- (13. 48) a. <da>
 da
 IMP:go/EXH
 'let's go!'
 OT: "¡vamos!" (Ch-F)
- b. <da kayí>
 da kayiʔ
 IMP:go/EXH sell
 'let's sell!'
 OT: "¡vendamos!" (Ch-F)

- c. <da ta>
 da ta(?)
 IMP:go/EXH DIR/come
 'let's go/come'
 OT: "¡vámonos!" (Ch-F)
- d. <data tik>
 da ta(?) tik
 IMP:go/EXH DIR sleep
 'let's go to sleep!'
 OT: "¡vamos a dormir!" (Ch-F);
 "dormir" (Ch-P)

In X_G and X_{Ch} the exhortative can also be expressed by the verb (*ʔa*)*ku* 'go', which is marked with the first person plural. The form is a direct translation of the Spanish form "vamos".

- (13. 49) a. muh-ku ša merkado
 1pS-go PREP Sp:market
 'let's go to the market!' (G-SH)
- b. <múhku>
 muh-ku
 1pS-go
 'let's go'
 OT: "¡vámonos!" (G-S)
- c. <milkiakú>
 miʔki-ʔaku
 1pS-go
 'let's go (and meet)!'
 OT: "vamos a juntarnos" (Ch-F)

In some contexts in the comparative data the exhortative is marked with *kan*, which occurs in most cases in initial position preceding the verb. The etymology of this exhortative form is not known. It could either be related to the exocentric directional form *kan* that indicates past-time reference with temporal adverbs, or it could have grammaticalised from the existential verb *ʔuka* 'have, do' that is marked with the subjunctive/irrealis (§ 13.3). It may also be in some way related to the likewise not understood imperative phrase *wi mukan* 'let it be' (see § 14.1.3.1).

- (13. 50) a. <can tamiki>
 kan *ta wiriki
 EXH? go talk
 'let's talk'
 OT: "¡hablemos, pues!" (Ch-C)
- b. <can pata>
 kan pata
 EXH bath
 'let's bath!'
 OT: "¡bañémos nos!" (Y-C)

In X_G there are other contexts of the first person singular cross-referencing suffix *-n* being used to indicate the first person plural in exhortative context.

- (13. 51) ku=ya-n na nin ša ʔaʔtepet
 go=PROG-1sS_{DEP} DET PN:1s PREP town
 'we are going to town' (G-PE)

13.1.5 Directionals accompanying imperative predicates

Imperative and exhortative verb forms can be accompanied by the centric directionals *pe* ʔ 'come (towards the speaker)' and *ta* ʔ 'come, arrive (elsewhere)', expressing the command 'come here/there and do X'. In the Schumann-data from X_G , the marker *we* occurs in similar contexts, although its exact function is unclear (see § 14.1.3.1).

13.1.5.1 Imperatives with directional *pe?*

The centric directional *pe?* 'come' that is otherwise used as a TAM-adverbial expressing future events, is attested in the ALS and the comparative data with imperative and nominal predicates indicating obligation or a coercive mood. Schumann defines *pe?* as an imperative marker with the meaning "andar/venir". There are only a few examples in the ALS where the directional occurs in syntactic context. In X_G and X_{Ch} *pe?* is attested with transitive (13. 52) and intransitive imperative predicates (13. 53).

(13. 52)	a. <rúka <i>pe?</i> > ruka <i>pe?</i> eat CENT/IMP 'come eat = eat it!' OT: "¡que coma! (él, ella)" (G-S)	b. <tura <i>pe?</i> na mapu> tura <i>pe?</i> na mapu take CENT/IMP DET tortilla 'come take the tortille = bring the tortilla!' OT: "¡trae la tortilla!" (Ch-F)
(13. 53)	a. kuri-ya <i>pe?</i> run-IMP.VI CENT/IMP 'come run = run here!' (G-RHG)	b. <sulluya <i>pe?</i> hay> suyu-ya <i>pe?</i> ?ay return-IMP.VI CENT/IMP 2PL 'you (pl.) come return = return here!' OT: "¡volved!" (Ch-Z)

The directional is attested in the ALS with unmarked intransitive verbs expressing command (13. 54), which seems to indicate that *pe?* itself functions as an imperative marker. This functional context is confirmed by the comparative data from X_G and X_{Ch} (13. 55).

(13. 54)	a. <màrapè> ma:ra pe? *hurry CENT/IMP 'hurry up!' OT: "darse priesa" (1848.), "¡ven tú de priesa!" (1849.)	b. <màra pè Lic> ma:ra pe? tik *hurry CENT/IMP 3PL '(may) they hurry up!' OT: "¡vengan aquellos de priesa!" (1851.)
(13. 55)	a. <yiwá <i>pe?</i> > yiwa <i>pe?</i> enter/descend CENT/IMP 'enter!' OT: "¡entre!" (G-S)	b. <mare po yu> mare * <i>pe?</i> yu hurry CENT/IMP VOC/man 'hurry up!' OT: "¡apúrate!" (Ch-F)

The imperative or deontic function of the directional is attested in the ALS in another example where *pe?* follows a transitive verb that marks person (i.e. the addressee of the command) with a regular cross-referencing prefix (13. 56). In X_{Ch} a similar pattern is attested, with the transitive predicate marking person by means of cross-referencing suffixes (13. 59). In this example *pe?* seems to indicate the direction of the imperative movement, whereas the translation context from the Maldonado-grammar seems to suggest that the directional itself has deontic function.

(13. 56)	<ca-pajata pè qui> ka-pahata pe? ki? 2sA-pay IMP/FUT INTENS/OBJ 'you must pay it!' OT: "lo has de pagar" (1876.)

- (13. 57) <tupakape>
 tupa-ka pe(?)
 let/leave-2sA CENT/IMP
 'come, leave it!'
 OT: "¡anda déjalo!" (Ch-C)

The ALS also indicates the directional *pe?* following intransitive verbs that are marked with the subjunctive *-n*, which occurs on subordinate predicates. Translation contexts and construction suggest an imperative function of the directional, although the syntactic position of *pe?* following the predicate might suggest that it rather specifies the direction of the command.

- (13. 58) a. <curànbè>
 kura-n **pe?**
 run-SUBJ CENT/IMP
 'come (to) run!'
 OT: "venir" (1838.), "¡ven tú!" (1839.)
- b. <curànbè ay>
 kura-n **pe?** **?ay**
 run-SUBJ CENT/IMP 2PL
 'come (to) run you (pl.)'
 OT: "¡venid vosotros!" (1840.)

In X_G the directional *pe?* can take the suffix *-ka?*, which is likely the second person singular cross-referencing suffix (see also Schumann 1967:41) that is also attested in the ALS with imperative forms of the motion verb *ta?* 'come' (§ 13.1.3). The inflectional pattern underlines that directionals are actually verbs in Xinka. However, we can also not exclude that *-ka?* is in fact not a pronominal marker but the exocentric directional *ka?* that may cliticise to the centric directional, specifying the direction of command 'come away!'.

- (13. 59) a. <rúka peká>
 ruka pe-ka?
 eat come/CENT-2sS_{DEP}
 'come and eat!'
 OT: "¡come, coman!" (G-S)
- b. <yiwáka peká>
 yiwa-ka pe-ka?
 descend-2sA come/CENT-2sS_{DEP}
 'come and enter!'
 OT: "¡entra!" (G-S)
- c. ?uwe pe-ka?
 call come/CENT-2sS_{DEP}
 'come and call (him)!' (G-SH)
- d. ?ipala pe-ka?
 bath come/CENT-2sS_{DEP}
 'come and bath!' (G-SH)

In X_{Ch} the *pe(?)* in imperative function can be followed by *-h* or *-ha*. The exact function of the suffix is unclear, but it may be related to the suffix *-ʔ* attested with other TAM-adverbials (§ 12.5).

- (13. 60) a. <peej>
 pe-h
 CENT/IMP-?
 'come!'
 OT: "¡vente!" (Ch-F)
- b. <pejá>
 pe-ha
 CENT/IMP-?
 'come!'
 OT: "¡venite!" (Ch-JC)

In the ALS the directional seems to mark deontic mode on nominal predicates including Spanish loans (13. 61a) and agentive nominalisations (b-d).

- (13. 61) a. <temprano pè acùg>
 temprano **pe?** **?aku-h**
 Sp:early CENT/DEON go-3sP
 'early must be his going = early he must go'
 OT: "ha de venir temprano" (1964.)
- b. <màrà Là pè>
 ma:ra-ʔa? **pe?**
 rest-AGT CENT/DEON
 '(the one) who must rest'
 OT: "el que ha, tiene de descansar" (1557.)
- c. <pulaqui Là pè>
 pula-ki-ʔa **pe?**
 make-AP-AGT CENT/DEON
 '(the one) who must make (it)'
 OT: "el que ha, tiene de hacer" (481.)
- d. <pata Là szàma pè>
 pata-ʔa? **šama** **pe?**
 *accomplish-AGT PREP CENT/DEON
 '(the one) who must remember'
 OT: "el que ha, tiene de acordarse" (1638.)

Schumann notes that in X_G nominal roots in predicate function can be marked with *pe?* (1967:41). The translation contexts indicate that the directional has two semantic connotations: it expresses a deontic mode or even command and describes that something or somebody turns into the state denoted by the nominal root.

- (13. 62) a. <wári pe>
 wari pe(?)
 rain CENT/DEON
 'come rain = may it rain!'
 OT: "que llueva" (G-S)
- b. <peló? pe>
 pe:lo? pe(?)
 Sp:dog CENT/DEON
 'come dog = may he (turn into) dog!'
 OT: "que se haga perro" (G-S)
- c. kayaya? pe?
 heat CENT/DEON
 'come heat = may it be hot!' (G-SH)

The translation contexts from the ALS suggest that in combination with the locative adverb *na?* 'here' the directional *pe?* 'come' assumes a verbal function (13. 63). Example (b) shows that the combination of locative and directional precedes the verbal predicate of the clause.

- (13. 63) a. <nà pè>
 na? **pe?**
 LOC:here CENT/IMP
 'come here'
 OT: "¡ven acá tú!" (1842.)
- b. <guenaqui nà pè agi aLa>
 wena=ki **na?** **pe?** **?ahi** **?a+a**
 INT:who=INTENS LOC CENT/DEON be+3s_{DEP} tomorrow
 '(the one) who has to be here tomorrow'
 OT: "el que ha de estar mañana" (1964.)

In X_Y the combination of the locative *na?* and the directional verb *pe?* is likewise attested to have predicative function preceding nonfinite subordinate verbs with a purposive meaning.

- (13. 64) a. <na pe ratz'a sama>
 na pe(?) raç'a sama
 LOC:here CENT/come throw up
 'come here to throw up'
 OT: "para arrojar" (Y-C)
- b. <nape yack>
 na pe(?) ya-k
 LOC:here CENT/come be-?
 '*come here to be'
 OT: "ya vengo" (Ch-P)

In X_G the pattern is extended by the demonstrative *na*, i.e. *na? pe? na(?)*. The translation contexts indicate that the second *na* either marks the third person singular pronoun or functions as a determiner of another noun phrase (b). The locative adverb can also follow the imperative predicate and determiner (c).

- (13. 65) a. na? pe? na
 LOC:here CENT DEM
 'come, hurry up!' (G-RHG), (G-SH)
- b. na? pe? na naka
 LOC:here CENT DET PN:2s
 'you, come (there)!' (G-SH)
- c. <pe naná>
 pe(?) na na?
 CENT/IMP DET LOC:here
 'come (there)!'
 OT: "¡ven acá!" (G-S)

In X_{Ch} a similar construction indicates future tense, i.e. temporal deixis. Here, the element in initial position can be identified as an independent pronoun.

- (13. 66) <nac pe na tiki ajlahuac>
 nak pe(?) na ti(:)ki ʔaʔa=wak
 PN:2s CENT LOC:here? sleep tomorrow=DIR
 'tomorrow you (have to) come'
 OT: "mañana dormirás" (Ch-C)

13.1.5.2 Imperatives with directional *taʔ*:

The directional *taʔ* specifies a location away from the deictic centre, i.e. 'come towards there and do X' (cf. § 14.1). It occurs in the ALS in two types of speech acts expressing command: (a) with simple imperative forms, and (b) in exhortative-cohortative contexts.

In analogy to the imperative predicates attested with the directional *peʔ* (see above), the imperative expression <cun dà> [kundaʔ] may be analysed as combining the motion verb *ku* and the imperative form *anda* that seems to have been borrowed from Spanish. Examples (13. 67b-c) show that this complex imperative form *kuntaʔ* can be accompanied by another form of the directional *taʔ*.

- (13. 67) a. <cun dà>
ku=ntaʔ
 go=IMP:go
 'go (with god)'
 OT: "¡ve, anda tú con dios!" (1821.)
 "¡id vosotros con dios!" (1822.)
- b. <cun dà tá>
ku=nta taʔ
 go=IMP:go DIR
 'you (sg.) go (with god)'
 OT: "¡ve, anda tú con dios!" (1823.)
- c. <cun dàtà ay>
ku=ntaʔ taʔ ʔay
 go=IMP:go DIR 2PL
 'you (pl.) go (with god)'
 OT: "¡id vosotros con dios!" (1824.)

The functional context is confirmed by the comparative data. In X_G *taʔ* occurs with intransitive and transitive imperative verbs.

- (13. 68) a. kuri-ʔa taʔ
 run-IMP.VI DIR
 'run!' (G-PE)
- b. nuka-Ø taʔ naʔ
 give-IMP.VT DIR DEM
 'give him/them' (G-JAP)

The directional *taʔ* also occurs with the exhortative *ʔanta-maʔ* (see § 13.1.4). This context is attested in the ALS as well as in the comparative data.

- (13. 69) <andamaLtà>
ʔanta-maʔ taʔ
 IMP:go-EXH DIR
 'let's go!'
 OT: "¡vamonos! (defectivo)" (1827.)
- (13. 70) a. ʔanta-maʔ=taʔ
 IMP:go-EXH=DIR
 'let's go!' (G-JAP)
- b. <da ta>
 da ta(?)
 IMP:go/EXH DIR
 'let's go!'
 OT: "¡vámonos!" (Ch-F)
- c. <da ta nama>
 da ta(?) nima
 IMP:go/EXH DIR eat
 'let's (go and) eat'
 OT: "¡comamos!, vamos a comer" (Ch-F)

13.2 Interrogatives

Interrogative clauses in Xinka can be distinguished into polar questions (yes/no questions) (§ 13.2.2) and content questions (§ 13.2.3), which are expressed by different interrogative markers or question words (§ 13.2.1). Content questions can occur as direct and indirect (dependent) interrogative clauses. Most interrogative clauses are clefted constructions where the verb has subordinate predicate status that is reflected in the verbal morphology. In intransitive interrogative clauses verbs generally take subordinate marking, while in transitive interrogative clauses where the question word fills the slot of the O argument, regular main clause cross-referencing morphology is employed.

13.2.1 Question words

Table 13. 1 provides an overview of the question words found in Maldonado-Xinka. Most of these forms are combinations of interrogatives and other deictic markers including directionals (*ta?*, *ka?*, *pe?*) and demonstratives (*na?*, *š?*). The question words *šan* 'what?', *wena* 'who', *ka pe?* 'where?' and the polar question marker *ʔn* are attested in syntactic context. All other interrogative forms are given as lexical entries in the ALS-vocabulary; their function can only be reconstructed from the translation context and etymologically related question words in the comparative data.

Table 13. 1: Interrogative bases in the ALS

QUESTION WORD		ORIGINAL GLOSS
<szán>	ša:n	"¿qué? para interrogaciones" (4433.)
<szan szueue>	šan ši:	"¿qué?" (4449.)
<szaan paraqui>	ša:n para ki	"¿porqué?" (4439.)
<szaani>	ša:ni	"¿cómo? para interrogaciones" (4438.)
<szandaa>	šan=ta:	"¿*qué?" (4434.)
<szanda szue aLi>	šan=ta ši ʔaʔi	"¿y porqué?" (4435.)
<szanda szue paraqui>	šan=ta ši paraki	"¿y para qué?" (4436.)
<szanda szue na mán>	šan=ta ši na man	"¿y qué es eso?" (4437.)
<cáca>	ka=ka?	"¿dónde?" (3679.)
<capè>	ka=pe?	"¿de dónde?" (3708.)
<guanin>	wanin	"¿quién?" (3837.)
<gua>	wa	"que; partícula para tiempos de que" (3832.)
<guéna>	wena	"quien, el que" (3856.)
<guen>	wen	"partícula interrogativa" (2345.)
<yguaL>	ʔiwaʔ	"¿cuánto?" (4749.)
<apa>	ʔapa	"¿cómo?" (3640.)
<Łuécú>	*ʔiki	"cuándo; interrogación para futuro" (4034.)
<in>	ʔin	"partícula interrogativa" (3900.)

Most question words/interrogative markers indicated by Maldonado de Matos are attested in the comparative data. The question word for non-human objects 'what?' is given in X_G and X_{Ch} as **ʔnti*. In the ALS we only find *šan*, which is realised as *han(i)* in X_G and X_{Ch} reflecting the change *š* > *h* in initial consonants (see § 4.5.1). The comparative data also include the interrogative for location *man=ta* or *mun=ta* that is not attested in the ALS and functions mostly as a relativiser.

Table 13. 2: Comparative chart of question words

	X _M	X _G	X _{Ch}	X _Y	ORIGINAL GLOSS
yes/no question	ʔin				partícula int.
what?		ʔin=ti [indi]	(ʔi)nti, ti		"¿qué?"
	ša:n	han	han		"¿qué?"
	ša:ni			šani (han)	"¿qué?", "¿cómo?"
			hani, hay		"¿qué?", "¿dónde?"
why?	šan=ta	han=ta		šin=ti	"¿qué?", "porque?"
where?	ka=kaʔ	ka (ta)	ka=kaʔ	kaʔ	"¿dónde?"
			ka=wak		
	ka=peʔ		ka=piʔ		"¿de dónde?"
		man=ta	man=ta		"¿dónde?"
			mun=ta		
how many/much?	ʔiwaʔ	ʔiwaʔ	ʔiwa(ʔ)	ʔiwalar	"¿cuánto?"
how? how many?	ʔapa				"¿cómo?"
				ʔapa	"¿cuánto?"
who?	wena				"quien"
		wena-ta		wenin	"¿quién?"
			wanin	wanin	
when?	ʔiki, ʔika-n	kihki	lik=wak (peʔ)		"¿cuándo?"

The basic interrogative roots that can be reconstructed from the comparative chart are indicated in Table 13. 3. The interrogative marker *ʔn* is used in yes/no questions where it follows its referent as a tag question marker. Some of the question words for content questions that are morphologically complex seem to include this morpheme (e.g. *šan* = **ša* + *in*; *wanin* = **wan* + *in*; *ʔkan* = **ʔk* + *in*). It seems plausible that the interrogative clitic *ʔn* is the source of the subjunctive/irrealis marker (§ 13.3) that is also used with free negators (§ 13.4.1). The question word *šan* is used in direct as well indirect interrogative contexts; it occurs regularly in X_G with the negator *hin* indicating a negative existential, i.e. *hin šan* [NEG + INT] = 'not what' = 'nothing, there is nothing' ("no hay"). There are two question words for humans/person depending on whether the interrogative is used in a direct or indirect context, i.e. *wena* (indirect interrogative clause) and *wanin* (direct question). Questions for time are marked with the interrogative form **ʔk*, which can be otherwise identified to have indirect/adverbial function, when marked with the suffix *-an*. The semantic reference of the interrogative *ʔapa* is not entirely clear. Maldonado de Matos translates the form as 'how?' ("cómo?"), whereas in X_Y it refers to 'how much?' ("cuánto?"). Quantity is marked in the ALS with the form *ʔiwaʔ*, in X_Y this question word can take a numeral classifier as a suffix. Etymological origin and morphology of the form cannot be determined. Interrogation for space is realised in the ALS with the directional or deixis clitic *kaʔ* (see § 14.1.1). In the comparative data we find the demonstrative *man* to function as an interrogative in indirect contexts as well as a relativiser.

The basic question words can combine with other deictic markers, i.e. directionals and demonstratives, to derive more specific interrogatives. The directional *ta* is attested with the interrogative roots *šan* (or *han*) 'what?', *wena* 'who' (X_G) and *man* 'where?' (only in X_G, X_{Ch}). The translation contexts of the complex forms *šan=ta*, *wena=ta* and *man=ta* do rarely reflect the directional meaning of *ta*

and do not differ from the translation of the basic question words. We will therefore simply gloss *ta* as an interrogative marker.

Table 13. 3: Interrogative roots and their contexts

	FORM	CONTEXTS	SPANISH GLOSS
Basic QM	ʔin	ʔin ʔin=ti [ʔindi]	yes/no question marker "¿qué?"
		wan=in	"¿quién?"
		ʔi=waʔ	"¿cuánto?"
what?	šan	šan (han) šani (hani, hay) šan=ta (han=ta) šan ši šan=ta ši	"¿qué?" "¿qué?/ ¿cómo?/ ¿dónde?" "¿qué?/ ¿por qué?" "¿y qué?" "¿y por qué?"
who?	wena	wena	"quien"
	wan	wan=in	"¿quién?"
when?	ʔik-	ʔiki ʔika-n lik=wak	"¿cuándo?" (futuro) "cuándo" (indirect) "cuándo"
how?	ʔapa	ʔapa	"¿cómo?/ ¿cuánto?"
where?	ka	ka=ka? ka=pe?	"*¿a dónde?" "¿de dónde?"

In X_Y the form *šan=ta* is realised as *šin=ti*, suggesting that *ti* corresponds with *ta* in the ALS. However, *ti* is also attested in the non-human question word **ʔinti* 'what?' that is attested in X_G and X_{Ch} . In X_{Ch} *ti* also combines with negative markers. In X_G *han=ta* and **ʔn=ti* can co-occur in the same clause, suggesting that the function of both markers must be different.

In Maldonado-Xinka the non-human interrogative *šan* combines with the marker *šɛ* that is indicated in the ALS-vocabulary as a conjunction 'and'; the translation context of the lexical entry is given by Maldonado de Matos as 'and what?' (¿y qué?). It is not clear whether *šɛ* could be etymologically related to the proximal demonstrative *ʔašɛ* (§ 8.5).

The marker *-i* only occurs on the non-human marker *šan* and does basically not change the meaning of the interrogative root. Its exact function is not understood, but the form is attested in the ALS as well as in X_{Ch} and X_Y .

Table 13. 4: Deictic markers combining with interrogatives

	X_M	X_G	X_{Ch}	X_Y	SPANISH GLOSS
ta	šan=ta wena=ta	han=ta			"¿qué, cómo?" "¿quién?" "¿dónde?"
		man=ta			"¿para qué?"
ti		n=ti in=ti		šin=ti	"¿como qué?" "¿por qué?" "¿qué?"
ši	šan=ta ši				"¿cómo, qué?"
i	šan-i			šan-i (han)	"¿dónde, qué?"
			han-i		

Question words occur in main as well as in subordinate clauses. The word order is the same as in declarative clauses, i.e. VO. Content questions indicate the S/A constituent in final position.

- (13. 71) a. <¿szàn paracà nem?>
 šan **para-ka?** **nem**
 INT search-2sA PN:1s
 'what have you searched me for?'
 OT: "¿para qué me quieres?" (1870.)
- b. <¿cà pè taguà na aszue?>
 ka **pe?** **ta-wa?** **na** **ʔaʃ**
 INT CENT come-ANT DET DEM
 'where did this come from?'
 OT: "¿de dónde vino ésto?" (2010.)

13.2.2 Polar questions

Polar questions are also termed yes/no questions since these interrogative clauses call for a response of either 'yes' or 'no' (Payne 1997:295). In the ALS, these yes/no questions are either attested as unmarked clauses that preserve basic word order (VO), or as clefted constructions with changed word order where the interrogative marker *ʔin* follows the nominal referent of the question with the predicate specifying the action/event following as a relativised subordinate form.

Unmarked yes/no questions can be assumed to exhibit a distinct intonation pattern from declarative clauses (see Payne 1997:295). In the semi speaker data, unmarked yes/no questions have a rising intonation pattern.

- (13. 72) <¿uisziy pa ayù misza?>
 ʔuyʃi-y **pa(?)** **ʔayu?** **miša**
 hear-3sA PFV AUX Sp:mass
 'would he have heard mass?'
 OT: "¿habrá oído misa?" (2023.)

If the question regards the agent of an action and not the action itself polar questions are realised as cleft-constructions (§ 16.2.5.3). The pronoun referencing the agent is placed in the initial, focused position of the clause, where it functions a nominal predicate that is followed by the interrogative marker *ʔin*. The verbal predicate specifying the action is relativised by subordinate inflectional marking, i.e. dependent cross-referencing suffixes to mark person agreement and the anterior/perfect suffix *-wa* to indicate past-time reference. Clefted yes/no questions are a cross-linguistically well attested feature (Givón 2001(II):298).

- (13. 73) a. <¿nem in pùlaguàn?>
 nem **ʔin** **pula-wa-n**
 PN:1s INT make-ANT-1sA
 '(is it) me that I have done it? = have I done it?'
 OT: "¿yo lo hice?" (4770.)
- b. <¿naca in szàcszàguacan na tumín?>
 naka **ʔin** **šakša-wa-kan** **na** **tumín**
 PN:2s INT steal-ANT-2sA_{DEP} DET Sp:money
 '(is it) you that you have stolen the money? = have you stolen the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)

- In the comparative data we find the question marker *hay*, which seems to function as the Spanish "¿qué?", although it is attested with several interrogative translation contexts.

- The combination of *šan* and the directional *taʔ* (§ 14.1.2) is used in the ALS to indicate a non-human referent; i.e. 'what?' ("¿qué?"). The interrogative *šan* as well as the complex form *šan-ta* can be followed by the marker *šɛ́*, which is given by Maldonado de Matos as a copula 'and' ("y"). The marker *šɛ́* may be related to the demonstrative *ʔašɛ́* 'this', although it is consistently translated as a copula in the ALS. The combination *šan-ta šɛ́* precedes demonstratives (c) and relational nouns (d).

- In X_G the question word *han=ta*, indicating 'what?' ("¿qué?") or 'how?' ("¿cómo?") always precedes the predicate of the clause. It occurs in direct and indirect context, introducing a dependent clause. Complex verbal predicates (progressive or future constructions) in interrogative clauses employ dependent cross-referencing suffixes.

¹⁷⁷ The translation is based on the original field translation of the phrase (see Appendix 6).

- (13. 80) a. <hánta>
han=ta
INT=DIR/INT
'what?, how?'
OT: "¿cómo?, ¿qué?" (G-S)
- b. ʔima-n nin han=ta ka-niʔwa
tell-1sA PN:1s INT=DIR/INT 2sA-ask/want
'I told/said what you want/ask for' (G-SH)
- c. han=ta kuy šuka-kan naka
INT=DIR/INT AUX.FUT eat-2sA_{DEP} PN:2s
'what are you going to eat?' (G-JAP)
- d. han=ta taʔma tura=ka-kan naka
INT=DIR/INT road take=PROG-2sA_{DEP} PN:2s
'which road are you taking? = which way do you go?' (G-JAP)

In X_Y the question word used to refer to non-human referents is realised as *šin*. It occurs in direct as well as indirect interrogative contexts (13. 81) and combines with the marker *ti* to indicate a question for reason, i.e. *šin=ti* 'why?' ("¿por qué?") (13. 82).

- (13. 81) a. <ketü jorón xin úca>
keti horo-n šin ʔuka
nowget-1sA INT do/put
'now I got (= have) something to do'
OT: "ahora tengo qué hacer" (Y-C)
- b. <xin iman nay>
šin ʔima-n nay
INT tell-1sA PN:2s
'what did I tell you?'
OT: "¿qué te dije?" (Y-C)
- (13. 82) <xintí (triste) sanjuratiy>
šin=ti triste san-hurati-y
INT=?/INT Sp:sad PREP-eyes-2sP
'why is your face sad?'
OT: "¿por qué está triste tu cara?" (Y-C)

The non-human interrogative **ʔin-ti* is only attested in the corpus data from X_G and X_{Ch} . It translates into Spanish as "¿qué?", indicating non-human reference as well as reason 'why?' ("¿por qué?") and manner 'how?' ("¿cómo?"). Schumann also renders it as "para" in X_G . The interrogative *ʔin-ti* occurs in the same functional contexts as *šan* in the ALS, including direct (13. 83) as well as indirect questions (13. 84). However, since *han-ta* and **ʔin-ti* co-occur in X_G within the same clause (13. 84b), they can be expected to be functionally different.

- (13. 83) a. <nti>
*in=ti
INT=?/INT
'what?, which?'
OT: "¿qué?" (Ch-S), "para" (G-S)
- b. <ndi taʔaʔ marák yaká?>
n=ti taʔaʔ mara-k ya-kaʔ
INT=?/INT ? angry-INCH be-2sA_{DEP}
'why are you getting angry?'
OT: "¿por qué enojas a ti?" (G-S)
- c. <indi tura cá>
ʔin=ti tura-kaʔ
INT=?/INT take/bring-2sA
'what did you take/bring?'
OT: "¿qué trajiste?" (Ch-JC)
- d. <ʔindišak>
ʔin=ti ša-k
INT=?/INT name-2sP
'what is your name?'
OT: "¿[qué es tu] nombre?" (Ch-MQB)
- (13. 84) a. <ʔandi ndi pulayán tiʔk>
ʔan=ti n=ti pula=ya-n tiʔ-k
NEG=? INT=?/INT make=PROG-1sA_{DEP} IO-2sP
'(it is) nothing what/that I am making for/to you'
OT: "nada qué hago a ti" (G-S)

- b. <hántah hin kuyáka kaʔakúki nti amuká>
 han=ta-h hin ku=ya-ka ka-ʔakuki n=ti ʔamuka
 INT=?-? NEG go=PROG-2sS_{DEP} 2sS-walk INT=?/INT work
 'why are you not going to work?'
 OT: "¿por qué no vas a trabajar?" (G-S)
- c. <lamo pa ta rama ndi macá>
 lamo pata rama n=ti ma-kaʔ
 NEG *accomplish PREP:inside INT=?/INT tell/say-2sA
 '(he) does not remember what you have said'
 OT: "acuérdate de lo que hablamos" (Ch-F)

Question words for reason and cause are expressed in the ALS by means of the complex form *šan=ta* that precedes the non-spatial preposition *ʔaʔi* (§ 9.2.3) or its Spanish equivalent *para ki* "para qué". The form *šɬ* is given by Maldonado de Matos as a coordinate conjunction 'and', which reflects in the translation context.

- (13. 85) a. <szanda szue aLi> b. <szanda szue paraqui?>
šan=ta šɬ ʔaʔi *šan=ta šɬ para ki*
 INT=DIR/INT EXTEN PREP.CAUS INT=DIR/INT EXTEN Sp:what for?
 'and why?' 'and what for?'
 OT: "¿y por qué? (interrogativo)" (4435.) OT: "¿y para qué? (interrog.)" (4436.)

The same pattern is found in the comparative data. In X_G the question word for 'why?' is given as *han=ta* preceding the causal preposition *ʔaʔi* (13. 86). In X_{Ch} the marker *ʔnti* is attested in the same context, where it may also combine with the directional *ta* (13. 87b).

- (13. 86) han=ta ʔaʔi tupa-wa-kaʔ
 INT=DIR/INT PREP.CAUS leave, let-ANT-2sA
 'why did you leave it?' (G-RHG)
- (13. 87) a. <n'diajli>, <indí alhí> b. <nti taʔaʔi>
 (ʔi)n=ti ʔaʔi n=ti ta ʔaʔi
 INT=?/INT PREP.CAUS INT=?/INT DIR PREP.CAUS
 'why?' 'why?'
 OT: "¿por qué?" (Ch-C), (Ch-F), (Ch-JC) OT: "¿por qué?" (Ch-S)
- c. <te-ali>
 *ti ʔali
 INT PREP.CAUS
 'why?'
 OT: "warum?" (Ch-L)

13.2.3.2 Human/person

The ALS gives two question words referring to a human core argument of the predicate: *wena* "quién, el que" and *wanin* "quién". While *wena* is attested in a several examples, the latter question word *wanin* does not occur in syntactic context. Both interrogatives are functionally distinct. From the given contexts we may conclude that *wena* is used indirectly, that is, as a relative pronoun that can also combine with other clitics to derive pronominal forms with assertative or negative meaning. The marker *wanin*, on the other hand, is used as a question word in direct interrogative clauses.

- (13. 88) a. <guanin> **wanin**
 INT
 'who?'
 OT: "¿quién?" (3837.)
- b. <guéna> **wena**
 INT
 'who'
 OT: "quien, el que" (186.)

The comparative data confirm the existence of both basic forms; in X_G only *wena* is found. In X_{Ch} the related *ʔena* occurs only in the earliest source, the Zeeje-ms., whereas in all later sources the human question marker is given as *wanin*. The majority of examples from X_Y indicate the form *wenin*, which seems to suggest a common etymological origin of both forms.

Table 13. 5: Comparison of human-subject question words in Xinka

Function	X_M	X_G	X_{Ch}	X_Y	ORIGINAL GLOSS
Interrogative	wan-in		wan-in	wan-in	"quién"
	wena	wena wena=ta	ʔena	wen-in	"quien, el que"
Assertive	wena ... ki		ʔena=ki		"el que"
	wena ... ʔayu ki				"si alguno"
Negative	ni wena		la wanin	na=wan	"ninguno"
			ʔanti wanin		

The etymological reconstruction of *wanin* is by no means clear, but it seems to it combine the question markers *wena* and *ʔin*, i.e. *wenin* / *wanin* = **wena-ʔin* [**INT:who-INT*]. The marker *wena* itself could be morphologically complex, combining an otherwise unidentified root *we* and the demonstrative *na(ʔ)* 'he' ('él').

Both human/person question markers indicate plural with the pronominal plural clitic *ʔik*. In the ALS, only *wena* is attested with plural marking, whereas *wanin* is found in X_{Ch} with plural referents.

- (13. 89) <guéna Lic>
wena ʔik
 INT:who PL
 'who (pl.)?'
 OT: "quien, el que (plural)" (196.)
- (13. 90) <huanin lic najlic>
 wanin lik naʔik
 INT:who? PL PN:2p
 'who are you?'
 OT: "¿quiénes son Uds.?" (Ch-C)

Both interrogative forms, **wena* and **wanin*, precede the predicate of the clause that may be verbal or nominal. The comparative data confirm that *wena* occurs in indirect interrogative contexts (13. 91), whereas *wanin* (or *wenin* in X_Y) occurs in initial position of a direct interrogative clause (13. 92).

- (13. 91) a. wena kuy ʔuka resar
 INT:who AUX.FUT do Sp:pray
 'who he will pray (to)' (G-SH)
- b. <piri ena naca mug huca engañar hay>
 piri-Ø ʔena naka_o muh-ʔuka engañar ʔayo_o
 see-IMP.VT INT:who PN:2s/p 3sA-do Sp:deceive 2PL
 'look who deceives you (pl.)'
 OT: "ved quien os engaña" (Ch-Z)

- (13. 92) a. <huanin teró ca>
 wanin tero-ka
 INT:who? kill-2sA
 'who did you kill?'
 OT: "¿a quién has matado?" (Ch-C)
- b. <la guaanín su caslá?>
 la wanin suka-4a?
 NEG? INT:who? eat-PAST.ACT
 'who did eat it?'
 OT: "¿quién lo comió?" (Ch-F)
- c. <huanin na frac na>
 wanin na frak na
 INT:who? DET man DEM
 'who is this man?'
 OT: "¿quién es aquel hombre?" (Ch-C)
- d. <huenin tatay>
 wenin tata-y
 INT:who? father-2sP
 'who is your father?'
 OT: "¿quién es tu padre?" (Y-C)
- e. <huenin nu cala tanay>
 wenin nuka-la ta nay
 INT:who? give-PAST.ACT DIR? PN:2s
 'who did give you (a blow, punch)?'
 OT: "¿con quién te has golpeado?" (Y-C)

Human/person question words occur with non-spatial prepositions. In the ALS, only the indirect question word *wena* is attested in this context, where it can precede free non-spatial prepositions as well as prepositional roots that take possessor-marking suffixes.

- (13. 93) a. <guèna aLi>
wena ʔaʔi
 INT:who PREP.CAUS
 'because of whom?'
 OT: "quien, el que (ablativo)" (191.)
- b. <guèna neLa>
wena neʔa
 INT:who BEN
 'whose, for whom?'
 OT: "quien, el que (genitivo)" (188.)
- c. <guèna tiyg>
wena ti:ʔ-h
 INT:who IO-3sP
 'to whom?'
 OT: "quien, el que (dativo)" (189.)

In X_{Ch} and X_Y non-spatial prepositions are only attested in interrogative main clauses with the question word *wanin*.

- (13. 94) a. <huanin li parvúki>
 wanin li par(a)-wriki
 INT:who? PREP:with argue, have a dispute
 'with who (did he) argue?'
 OT: "¿con quién te has peleado?" (Ch-C)
- b. <huanin nejlá na mácu ne>
 wanin neʔa na maku na
 INT:who? BEN DET house DEM
 'whose is this house?'
 OT: "¿de quién es esta casa?" (Ch-C)
- c. <huanin ti nu can>
 wanin ti(:ʔ) nuka-n
 INT:who? IO give-1sA
 'whom do/did I give it to?'
 OT: "¿a quién se lo debo dar?" (Ch-C)
- d. <huanin ajlinu acanay>
 wanin ʔaʔi nuka nay
 INT:who? PREP.CAUS give PN:2s
 'because of whom (does one) give you?'
 OT: "¿por quién te pegaron?" (Y-C)

In the ALS and in X_{Ch} , question words for human/person 'who?' are attested with independent pronouns. In example (13. 95b), *wena* functions as a direct question marker. The functional difference of *wanin* and *wena* in this case is not understood.

- (13. 95) a. <guéna na>
wena na
 INT:who DET/PN:3s
 'who, whom'
 OT: "quien, el que (acusativo)" (190.)
- b. <¿guena nàca?>
wena naka
 INT:who PN:2s
 'who are you?'
 OT: "¿quién sois vos?" (1872.)

The same pattern is attested in X_G and X_{Ch} . In X_{Ch} pronouns for the second person *nak* (singular), *lik naʔik* (plural) and the third person plural *lik* are attested following the question word *wanin* "quién?".

- (13. 96) a. *wena man Ø-wiriki-?* *hina naka*
 INT:who DEM 3sS-speak-STAT PREP PN:2s
 'who spoke with you?' (G-RHG)
- b. <junuy bal ena nag>
hunu-y bal ʔena nah
 know-3sA PFV INT:who PN:3s
 'he already knows who it is'
 OT: "sabe ya quien es" (Ch-Z)
- (13. 97) a. <huanin nac>
wanin nak
 INT:who? PN:2s
 'who are you?'
 OT: "¿quién eres tú?" (Ch-C)
- b. <huanin lic najlic>
wanin lik naʔik
 INT:who? PL PN:2p
 'who are you (pl.)?'
 OT: "¿quiénes son Uds.?" (Ch-C)

In X_G *wena* is attested as a nominal root that can take pronominal inflection in the form of the first person singular cross-referencing prefix *ʔan-*, indicating literally a nominal predicate. In this context, *wena* occurs in an indirect interrogative context.

- (13. 98) <anwéna>
ʔan-wena
 1sS-INT:who
 'I am who'
 OT: "estoy, tengo [sic]" (G-S)

In X_G *wena* furthermore co-occurs with the complex non-human interrogative *han=ta* "¿qué?".

- (13. 99) a. *han=ta wena tupa-wa-n na=hiʔ*
 INT=DIR/INT INT:who leave-ANT-SUBJ DET=DEM
 'what is who has left this? = who has left this?' (G-RHG)
- b. *ʔeʔa wena: han=ta kunu-kaʔ naka hinaʔ čutiʔ*
 new INT:who INT=DIR/INT buy-2sA PN:2s PREP:with merchant
 'it is new what you bought from a merchant' (G-SH)

Just like the non-human interrogative *šan*, the human/person question word *wena* can combine with the interrogative/directional *=ta*. All attested syntactic contexts of *wena=ta* indicate the form in indirect interrogative clauses (13. 100b).

- (13. 100) a. <wenatá>
wena=taʔ
 INT:who-DIR/INT
 'who?'
 OT: "quien" (G-S)

- b. hin niwa-n wena=ta? ?aku:-4a
 NEG ask/want-1sA INT:who=DIR/INT go-PAST.ACT
 'I did not ask who came' (G-SH)

The intensifier *ki* derives an indefinite pronoun from the question word *wena* (13. 101). Although *ki* is overtly similar to the Spanish relative pronoun "qué" ('what') that follows the interrogative pronoun in Spanish (i.e. *el que* 'he/the one who'), it can be identified here as the intensifier that occurs frequently in pronominal contexts (see § 7.2.2.1.3). The intensifier might have some distributive function in these contexts, thus *wena=ki* [who=INTENS/DISTR] 'who-self' may indicate 'who of those'. The pronominal form *wena ki* is functionally distinct from the indirect interrogative *wena* (see above). It precedes existentials (c) and can occur with non-spatial prepositions (d).

- (13. 101) a. <guena qui>
wena=ki
 INT:who=INTENS
 'who-self = (he/the one) who'
 OT:"el que" (199.)
- b. <nána guéna qui Lic>
nana wena=ki =4ik
 FOC INT:who=INTENS =3PL
 'whoselves = they who'
 OT:"el que (plural, nominativo)" (207.)
- c. <guena qui agi>
wena=ki ?ahi
 INT:who=INTENS be+3s_{DEP}
 '(he/the one) who is/was'
 OT:"el que está, estaba" (1962.)
- d. <aLi guéna qui>
?a?i wena=ki
 PREP.CAUS INT:who=INTENS
 'by/because of (he/the one) who ...'
 OT:"el que (ablativo)" (205.)

The same form is attested in the Zeeje-manuscript. Here, *?ena=ki* can function as relative pronoun in the third person singular and plural. It is also given with the translation 'some' ("algunos").

- (13. 102) a. <pero enaqui joroy honor>
pero ?ena=ki horo-y honor
 Sp:but INT:who=INTENS get-3sA Sp:honor
 'but (the one) who got (= has) honour...'
 OT:"pero el que tenga honor" (Ch-Z)
- b. <ena qui naca hucay alusinar hay>
?ena=ki naka_o ?uka-y alucinar ?ayu_o
 INT:who=INTENS PN:2s/p do-3sA Sp:hypnotize, seduce 2PL
 '(the one) who seduces you (pl.)'
 OT:"los que os han alucionado" (Ch-Z)
- c. <nelag enaqui eltepet>
nela-h ?ena=ki ?eltepet
 BEN-3sP INT:who=INTENS town
 'of/for some towns'
 OT:"de algunos pueblos" (Ch-Z)

Maldonado de Matos indicates a subjunctive form of the indefinite pronoun *wena=ki*. In these forms the auxiliary *?ayu* (§ 10.1.3.3) can precede or follow the question word *wena*; while the intensifier clitic *ki* always occurs in final position.

- (13. 103) a. <guéna ayuqui>
wena ?ayu =ki
 INT:who AUX =INTENS
 '(the one) who(self) would = if someone'
 OT:"si alguno" (214.)
- b. <ayuguenaki>
?ayu wena =ki
 AUX INT:who =INTENS
 '(the one) who(self) would = if someone'
 OT:"si alguno" (3674.)

centre (i.e. 'where to?'), while the centric directional *pe?* specifies a movement towards the deictic centre (i.e. 'where from?'). The stress pattern suggests that the directionals cliticise to the question word.

- (13. 108) a. <cáca>
 ka?=ka?
 INT:where?=EXO
 'whereto?'
 OT: "¿dónde?" (3679.)
- b. <capè>
 ka=pe?
 INT:where?=CENT
 'wherefrom?'
 OT: "¿de dónde?" (3708.)

The combination of the question word *ka* with directionals is also attested in the comparative data. In X_G the centric directional *ta?* (see § 14.1.2) occurs in the same context; this combination is not attested in the ALS. In X_{Ch} the directional *wa(k)* combines with *ka*, which is, however, not reflected in the translation context.

- (13. 109) a. <katá?>
 ka=ta?
 INT:where?=DIR
 'whereto?'
 OT: "¿a qué?" (G-S)
- b. <kapi>
 ka=pi
 INT:where?=CENT
 'wherefrom?'
 OT: "¿de dónde?" (Ch-C)
- c. <cauvac>
 ka=wa-k
 INT:where?=DIR-?
 'where?'
 OT: "wo?" (Ch-L)

In the comparative data the question word is also attested without directionals (13. 110). Here, the intransitive verbal predicate specifies the direction of movement.

- (13. 110) a. ka? ta:=ya-ka
 INT:where? come=PROG-2sS_{DEP}
 'where are you coming (= going)?' (G-RHG)
- b. <cayac>
 ka=ya-k
 INT:where?=be-2sS_{DEP}
 'where are you?'
 OT: "¿adónde?" (Ch-C)
- c. <ka a cugüi na'c>
 ka ?aku wi nak
 INT:where? go DIR? PN:2s
 'where did you go to?'
 "¿a dónde fuiste" (Ch-JC)

In X_Y the operator *ka* also combines with the locative adverb *na?* 'here'. The form *na ka* [here + EXO/INT] 'whereto?' indicates a direction towards the location referred to by the question word, i.e. away from the deictic centre. It is not entirely clear whether *ka* functions here as a question word or as an exocentric directional.

- (13. 111) a. <naca>
 na-ka
 *here-INT/EXO
 'whereto?'
 OT: "¿dónde, a dónde?" (Y-C)
- b. <naca curug>
 na-ka kuru-h
 *here-INT/EXO run-3s
 'whereto did he run?'
 OT: "¿a dónde huyó?" (Y-C)

In X_G and X_{Ch} , the form *man=ta* [manda] combines the distal demonstrative *man* (see § 8.5) and the directional/interrogative *ta* that seems to have interrogative function in most contexts. The form *man=ta* is not attested in the ALS. However, Schumann indicates it as "dónde" or "adónde", i.e. 'where' or 'whereto', which may illustrate the directional function of *ta*. In the Zeeje-ms. the form is used as a possessive relative pronoun 'whose, of which' ("cuyo") (13. 112). In all attested examples *man=ta* occurs in indirect interrogative contexts, introducing a relative clause (13. 113).

- (13. 112) a. <mánta>
man=ta
DEM=DIR/INT
'where, whereto'
OT: "dónde, donde", "adónde" (G-S)
- b. <manda>
man=ta
DEM=INT
'whose, of which'
OT: "cuyo, las que" (Ch-Z)
- (13. 113) a. na nin kiri-n man=ta tiŋa
DET PN:1s pull-1sA DEM=INT yucca
'I pulled/harvested what is yucca' (G-SH)
- b. hin hapa-wa-y man=ta k'u ʔima nin hi-naʔ
NEG wait-ANT-3sA DEM=INT MOD say PN:1s PREP-PN:3s/DEM
'he did not await what I (would) speak/say to/with him' (G-SH)
- c. <naj man aya munta tili nen>
nah man=ʔaya mun=ta tili nen
PN:3s/p DEM/PN:3s=PL DEM=INT see PN:1s
'these are they who see me'
OT: "ellos me ven" (Y-C)

The form *man=ta* also occurs in pronominal demonstrative function, substituting for a third person pronoun. In this function, *man=ta* can take the place of the nominal predicate of cleft-constructions (§ 8.5.2.2, § 16.2.5.3).

- (13. 114) a. man=ta ladron ture-y ʔikaʔ miya
DEM=INT thief take-3sA NUM:1 chicken
'that is the thief who took one chicken' (G-SH)
- b. man=ta wiriki hina naka
DEM=INT speak PREP:with PN:2s
'that is the one who speaks with you' (G-SH)
- c. man=ta tuʔu man ʔololoʔ
DEM=INT flower DEM white
'that (is the) flower (that) is white' (G-SH)
- d. <mug huca unbu resistir manduma>
muh-ʔuka =*ʔən =*pəʔ resistir man=tə ma
3sA-do =SUBJ =FUT Sp:resist DEM=INT DEM
'he will resist (who is) him'
OT: "resistirá a aquel" (Ch-Z)

13.2.3.5 Time

The question word for time *ʔikaʔ* 'when?' ("¿cuándo?") is not attested in syntactic context. It may be etymologically related to the verb *ʔikaʔ* 'find, meet'. In the ALS **ʔikaʔ* is explicitly defined as an interrogative for future events. The form *ʔikan* seems to be used in indirect contexts, as a conjunction for dependent clauses, i.e. 'when', 'then'. In this context, the form can co-occur with the directional *waʔ*.

- (13. 115) a. <Łuécú>
ʔika
INT:future
'when?'
OT: "cuándo (int. para futuro)" (4034.)
- b. <Łuécán>
ʔika-n
INT-?
'when'
OT: "cuando" (4032.)
- c. <Łuécán Vá>
ʔika-n waʔ
INT-? DIR
'then'
OT: "entonces" (4033.)

The comparative data confirm this pattern. The form **ʔiki* is attested in X_G and X_Y (13. 116a, c); in X_Y *ʔikan* is used as a direct question marker (d). In X_{Ch} the interrogative root **lik* combines with the directional *wa-k*, which also indicates future events (b) (see § 14.1.1.3). Schumann indicates another form, *kʔiki* (e), for X_G . Morphology and function of this marker are not clear, as it seems to be only attested in Schumann (1967).

(13. 116) a. <liki> ʔiki INT 'when, when?' OT: "cuando, cuándo" (G-S)	b. <likuac>, <licuac?> lik-wa-k INT-DIR-? 'when?' OT: "¿cuándo?" (Ch-C), (Ch-F)
c. <lüöke ta> liki ta(?) INT come 'when does he come?' OT: "¿cuándo vendrá?" (Y-C)	d. <lüöcan mi japá> lika-n mu-hapa-? INT-? 3sA-pass-STAT 'when did he pass?' OT: "¿cuándo pasó?" (Y-C)
e. <kihki> kihki INT 'when, when?' OT: "cuando, cuándo" (G-S)	

13.2.3.6 Quantity

In the ALS and the comparative data from X_G and X_{Ch} , questions for quantity are expressed with the question word *ʔiwaʔ*. The interrogative form can co-occur with the adverb *ʔakaʔ* that is otherwise attested with the negative marker *ʔašin* (§ 13.4.1.1).

(13. 117) a. <yguaL> ʔiwaʔ INT 'how much?' OT: "¿cuánto? (interrogativo)" (4749.)	b. <yguáLacáL> ʔiwaʔ ʔakaʔ INT: how much? ADV: yet, still 'how much yet = how much is missing?' OT: "¿cuánto falta? (interrog.)" (4750.)

In X_G and X_{Ch} the question word for quantity combines with the nominal root *tuwa* 'cacao' = 'value' to indicate 'how much is it worth?' ("¿cuánto vale?"). In X_Y the interrogative form *ʔiwaʔ* occurs with the numeral classifier *-ar* (see § 8.6).

(13. 118) a. <iwáʔ tuwá>, <igualj tuhuá> ʔiwaʔ tuwa-? INT: how much cacao-STAT = worth 'how much is it worth?' OT: "¿cuánto vale?" (G-S), (Ch-C), (Ch-F)	b. <ihualár súyi> ʔiwaʔ-ar súyi INT: how many-CL time, turn 'how many times?' OT: "¿cuántas veces?" (Y-C)

In addition to *ʔiwaʔ* we find in X_Y the form *ʔapa* as a question word for quantity. However, the translation contexts may suggest that the question word rather indicates manner (see § 13.2.3.3).

13.3 Subjunctive/irrealis

An irrealis mode makes no assertion, on whether an event has actually happened and the term is often used for categories that mark non-actual events or unreal time (Bybee *et al.* 1994:236; Payne 1997:244). The term irrealis serves us here to cover all functional aspects of the enclitic =*ʔn*, or the suffix *-n*, which is attested in Maldonado-Xinka and the comparative data marking primarily subjunctive, but occurs also with imperative predicates and other irrealis categories such as temporal deixis. All of these categories refer to non-actual events (cf. Payne 1997:225).

Etymologically, the subjunctive marker =*ʔn* may be related to the interrogative marker *ʔn* that is attested in the ALS and the comparative data as a relativiser and componential part of question words (see § 13.2). In clefted yes/no questions the marker *ʔn* follows the nominal predicate; in these contexts the function of the marker seems to be ambivalent. It could either be interpreted as a tag question marker that refers to the nominal predicate or as a relativiser that precedes the subordinate predicate (see § 13.2.2).

- (13. 119) <*ʔ*naca in szàc szà guacàn na tumin?>

naka	ʔin	šakša-wa-kan	na	tumin
PN: 2s	INT	steal-ANT-2sA _{DEP}	DET	money

'(is it) you who you have stolen the money? = have you stolen the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)

Interrogative markers are a common source for relative clause markers and complementisers, which can develop further into subordinators of adverbial clauses (see Heine & Kuteva 2007:210-253). The syntactic position of the subjunctive/irrealis marker, which follows the subordinate predicate, seems to support the hypothesis that the enclitic derives from a postpositioned tag question marker, i.e. interrogative > subjunctive/irrealis.

This section describes the contexts where the subjunctive/irrealis marker =*ʔn* (or *-n*) is attested in the ALS and the comparative data. § 13.3.1 includes cases of subjunctive marking on predicates in subordinate and non-declarative clauses, while the § 13.3.2 deals with the irrealis function of the clitic/suffix as a marker for non-actual events on verb-derived directionals that are employed as temporal deixis markers as well as on pronominal forms.

13.3.1 Subjunctive in subordinate and non-declarative clauses

The term 'subjunctive' is usually given to verbal markers that occur in subordinate clauses (Bybee *et al.* 1994:212). It is pointed out in other sections that in Xinka subordinate clauses can be balanced or deranked. Deranked subordinate predicates are not introduced by subordinators and exhibit either special inflectional properties or are nonfinite (see § 17). Inflectional properties of deranked subordinate predicates include dependent-marking cross-referencing suffixes to mark person agreement (§ 6.2.2.3) and anterior-marking for past-time reference (§ 12.2.3). These two categories have been described elsewhere and are not the target of this section. However, it needs to be pointed out that the set of dependent-marking cross-referencing suffixes that marks A on subordinate transitive verbs, postpositioned auxiliaries and predicates in interrogative clauses is morphologically composed of pronominal suffixes and the subjunctive marker *-n*.

Attention needs to be paid to the fact that only transitive subordinate predicates are marked with the subjunctive clitic, and that only the dependent-marking suffixes of transitive verbs include the marker morphologically. The fact that *-n* only occurs with transitive predicates can probably be explained syntactically, in that *ñn* in its original function as a relativiser may have been referring to the O argument of the transitive predicate. Deranked intransitive predicates are instead marked as stative participles, unless they have an extended argument.

In the ALS, the subjunctive marker *ñn* or *-n* is attested with subordinate transitive predicates that reference the third person singular in relative and purposive clauses. In the first and second person dependent-marking suffixes are employed whereby the first person singular is marked with *-n* as well. In the comparative data the subjunctive marker occurs in general with subordinate predicates that are coreferential in subject with the main clause; subjects are not marked on the subordinate verb but by independent pronouns.

The subjunctive marker is attested with relativised, complement and purposive subordinate clauses, as well as with non-declarative imperative clauses.

13.3.1.1 Relative and complement clauses

In the ALS, *-n* is attested on relativised subordinate transitive predicates that are marked with the active past suffix *-ta* in affirmative and negative declarative contexts. The relativised predicate references the third person singular.

- (13. 120) a. <a señor naca qui púla Làn>
ʔa **señor** **naca** **ki** **[pula-ʔa-n]_{REL}**
 AFF Sp:Sir PN:2s INTENS make-PAST.ACT-INT/SUBJ
 '*yes sir, (it is) you yourself who made it! = yes sir, you made it!
 OT: "si señor, tú lo hiciste" (4771.)
- b. <a szin señor aszin nen szàc szà Làn>
ʔašin **señor** **ʔašin** **nen** **[šakša-ʔa-n]_{REL}**
 NEG Sp:Sir NEG PN:1s steal-PAST.ACT-INT/SUBJ
 '*no sir, (it is) not me who stole it! = no sir, I did not steal it!
 OT: "no señor, no lo hurté yo" (4775.)

The forms correspond with the second *pretérito* stem form of transitive verbs listed in the vocabulary of the colonial Xinka grammar. The examples from the comparative data further below show that present and past subjunctive forms in relative and complement clauses also match the first and third *pretérito* stems. It is argued in § 12.2 that Maldonado de Matos, following the Latin model of grammar writing, employs stem forms in the first person singular, i.e. *-n* would mark the first person singular, not the subjunctive.

In X_G the marker *-n* is attested on the relativised predicate of clefted interrogative constructions (13. 121) as well as on the subordinate predicate of complement clauses (13. 122). It occurs with transitive verbs that can be used intransitively without O argument. The fact that the predicate in these examples is subordinate to the interrogative pronoun functioning as the nominal predicate of the main clause is also indicated by the presence of the anterior suffix *-wa* (13. 121b) that marks past on subordinate predicates (§ 12.2.3).

- (13. 121) a. ka-ta? [sawača-n naka_{S/A}]_{REL}
 INT:where?-DIR sow-INT/SUBJ PN:2s
 'where is what you have sown?' (G-SH)
- b. hanta wena [tupa-wa-n na=hi?o]_{REL}
 INT:what INT:who leave-ANT-INT/SUBJ DET=DEM
 'what (is) who has left this?' (G-RHG)
- (13. 122) a. [hapa-n na temporals]_{COM}
 pass by-SUBJ DET Sp:rainy season
 '(that) the rainy season passed' (G-RHG)
- b. [ʔirɛ'i-n nin_O pe:lo?a]_{COM}
 bite-SUBJ PN:1s Sp:dog
 '(that) the dog bit me' (G-JAP)

13.3.1.2 Purposive clauses

In the ALS the subjunctive marker =*ʔin* occurs on subordinate predicates in purposive clauses that are coreferential with the third person subject of the main clause. Given that the subjunctive marker occurs only with predicates in the third person singular it cannot be ruled out that the form has assimilated the third person cross-referencing suffix -y, i.e. *-y + *in* = *ʔin*.

- (13. 123) <tai na maestro nari ʔa in na turi ʔi>
Ø-ta:-yi-ʔ **[na maestro]_S** **[nariʔa=ʔin]** **[na turi-ʔi]_O**_{SUB}
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 OT: "vino el maestro a enseñar a los niños" (2043.)

In the comparative data from X_G the subjunctive marker is attested with both, transitive and intransitive subordinate predicates that are coreferential in subject with the predicate of the main clause. Here, the pattern is not restricted to third person subjects, but also occurs with the first person.

- (13. 124) a. hapa-n tura-n nin naka
 pass by-1sA take-SUBJ PN:1s PN:2s
 'I passed by to take/bring you' (G-JAP)
- b. ku=y ʔipla=ʔin man
 go=PROG+3sS_{DEP} bath=SUBJ DEM
 'that one went to bath' (G-JS)
- c. ʔanta-mah=ta šawu-n man
 IMP:go-EXH=DIR sit down-SUBJ DEM/3s
 'let's go to sit down = let's enter' (G-JS)

In a similar construction, Maldonado de Matos uses a subordinate adverbial clause introduced by the verb *ʔuka* 'do' that is marked with the subjunctive *ʔin* to indicate the agent of a passive predicate, thus translating the form *ʔuka=ʔin* as a conjunction with the meaning 'by, because of' ("por") (cf. § 10.1.3.2). In fact, the form can be identified as a subordinate adverbial predicate that literally translates as 'what does' or 'to do'.

- (13. 125) <nana doctrina nari ʔa pè patai ucain maestro ...>
nana doctrina nariʔa pe? pata-y **[ʔuka=ʔin maestro...]_{SUB}**
 FOC Sp:creed teach CENT *accomplish-3sA have/do=SUBJ Sp:teacher
 'the creed will be taught by (= what does) the teacher'
 OT: "la doctrina será enseñada por el maestro ..." (2021.)

In the ALS-vocabulary, the form is also indicated as *ʔukayun* "por" (4667.). In the Zeeje-ms. the form *ka=yin* is used to express Spanish "por" (13. 126). The suffix *=yin* seems to be identical with the third person singular transitive progressive marker in X_{Ch} (see § 10.1.3.1, § 12.3.2).

- (13. 126) a. <kallin castianuli>
 ka-y=in kastiyanu-li
 do-LIG=SUBJ Sp:Spanish-PL
 'by the Spanish'
 OT:"por los españoles" (Ch-Z)
- b. <pulag kallin nanu juliqui>
 pula-h ka-y=in nanu hu=liki
 make-PART.ACT do-LIG=SUBJ DET DEM=PL
 'made by these'
 OT:"sancionada por éstas" (Ch-Z)

In the Zeeje-ms. there are several examples of *=yin* marking subordinate predicates; in some contexts the marker is also attested with the cliticised transitive progressive auxiliary (*ʔu*)*ka*.

- (13. 127) a. <pula-llin naca presentes>
 pula-y=in naka *presentes*
 make-LIG=SUBJ PN:2s Sp:present
 'to make you present (= not absent)'
 OT:"al haceros presentes" (Ch-Z)
- b. <hucallin naca asegurar hay>
 ʔuka-y=in naka *asegurar* ʔay
 do-LIG=SUBJ PN:2s Sp:assure 2PL
 'assuring/to assure you (pl.)'
 OT:"asegurando os" (Ch-Z)
- (13. 128) <sagulla callin>
 sawu-ya=ka-y=in
 sit down-TRANS=PROG-LIG=SUBJ
 'he is putting sth. down'
 OT:"poniendo" (Ch-Z)

In the Zeeje-ms. we furthermore find light verb constructions with future reference in subordinate contexts where the light verb *ʔuka* is followed by the form <un> or <guin> that may be identical with the clitic = *ʔn* in the ALS (indicating that the marker seems to be realised with a neutral vowel *ə* or a central high vowel *ɨ* in X_{Ch}). The semantic connotation with future reference may indicate that **ʔn* marks subjunctive/irrealis in these contexts. The form **win* seems to include a ligature *w*, which indicates that the form cliticises to the light verb.

- (13. 129) a. <ca-uca guin bu concebir hay>
 ka-ʔuka-w=in =pəʔ *concebir* ʔay
 2pA-do-LIG=SUBJ =FUT Sp:conceive 2PL
 'you (pl.) will conceive'
 OT:"concebiréis" (Ch-Z)
- b. <ka-huca unbú entender hay>
 ka-ʔuka =ʔun =pəʔ *entender* ʔay
 2pA-do =SUBJ? =FUT Sp:understand 2PL
 'you (pl.) will understand'
 OT:"habéis de entender" (Ch-Z)

Maldonado de Matos defines a specific type of construction consisting of the motion verb *wa* 'go' and a subordinate intransitive or transitive verb to express commands in the third person. The literal translation of the construction is 'go to do X'. In these constructions subordinate transitive verbs are marked with subjunctive *ʔn* (13. 130), while intransitive verbs take the suffix *-kin* that appears to combine

the intransitive suffix *-ki* and the subjunctive (13. 131). In all examples from the ALS, the vowel *i* is preserved. The suffix *-ki* is otherwise attested as a derivation for antipassive and inchoative intransitive verbs, but it is not clear whether it has the same function in these contexts.

- (13. 130) a. <guà puláin>
wa? **pula=7in**
 go make=SUBJ
 'go to make = may he make it!'
 OT: "haga aquel" (430.)
- b. <gua sàmu in Lic>
wa **samu=7in** **7ik**
 go catch=SUBJ 3PL
 'go to catch = may they catch it!'
 OT: "cojan aquellos" (1109.)
- (13. 131) a. <guà màràquiiin>
wa? **ma:ra:-ki=(i)n**
 go rest-REFL?=SUBJ
 'go to rest = may he rest'
 OT: "descanse aquel" (1514.)
- b. <guàLic tonéquèn>
wa? **7ik** **tone:-ke=(e)n**
 go 3PL *be silent-INCH=SUBJ
 'go to be silent = may they be quiet'
 OT: "callense aquellos" (1859.)

In X_{Ch} and X_Y we find examples of imperative predicates in the third person that are likewise marked with *-ki-n*. They are not preceded by the auxiliary *wa* as in Maldonado-Xinka, but the directional *pe?* is attested in the same context (13. 132).

- (13. 132) a. <pe-kukin>
pe(7) **ku-ki=(i)n**
 come go-REFL?=SUBJ
 'come to go = (may) he go/come'
 OT: "que venga" (Ch-F)
- b. <nco ixkin>
n-ko **7isk'i=(i)n**
 1sS-go untie=SUBJ
 'go and untie!'
 OT: "anda a desatar" (Y-C)

13.3.1.3 Imperatives

The subjunctive marker *-n* is attested in imperative or rogative contexts in the ALS as well as in the comparative data. In these contexts, the subjunctive occurs in main and subordinate clauses.

In the ALS, *-n* occurs in imperative contexts only with intransitive verbs that are followed by the directional *pe?* that either specifies the direction of the command or functions as a deontic marker. Although the initial consonant of the directional has become assimilated to the preceding nasal, the accent pattern of the verb form suggests that the directional does not cliticise to the verb.

- (13. 133) a. <curànbè>
kura-n **=pe?**
 run-SUBJ =CENT/IMP
 'run!'
 OT: "¡ven tú!" (1839.)
- b. <curànbè ay>
kura-n **=pe?** **7ay**
 run-SUBJ =CENT/IMP 2PL
 'run you (pl.)'
 OT: "¡venía vosotros!" (1840.)

Schumann (1967) indicates for X_G a similar form, which combines an intransitive motion verb marked with *-n* and the directional *we* (see § 14.1.3.1). The translation context provided by Schumann indicates a subordinate predicate with purposive semantics, i.e. 'so that he may enter' or 'in order for him to enter' (13. 134). Thus, the subjunctive marker *-n* functions here in the same way as in other purposive clauses.

- (13. 134) <yiwán we>
 yiwa-n we
 descend/enter-SUBJ DIR?
 'that he may enter'
 OT: "para que entre" (G-S)

In the comparative corpus *-n* is attested on intransitive (13. 135) and transitive verbs (13. 136) with imperative translation contexts. The literal translation of these forms would, however, correspond with the Schumann examples, which is why these forms may be identified as subjunctives that are used to express what seems to be a polite command.

- (13. 135) a. <rhagun>
 šagu-n
 sit-SUBJ
 'sit!'
 OT: "¡sentáte!" (Ch-JC)
- b. <cuyan-xugüik>
 ku=ya-n šuwik(i)
 go=PROG-SUBJ sweep
 'go sweeping!'
 OT: "¡haz escobe, barre!" (Ch-F)
- c. <ixkimpá>
 ʔisk'i-n =paʔ
 untie-SUBJ =PFV
 'untie it already!'
 OT: "¡desata tú!" (Y-C)
- (13. 136) a. ʔima-n nin hanta ka-niʔwa
 tell-SUBJ PN:1s INT:what 2sA-want
 'tell me what you want' (G-SH)
- b. tura-n ču pewek ʔay
 take-SUBJ DIM gourd LOC:there
 'bring (me) the little gourd!' (G-RHG)

The subjunctive marker is also used in exhortative contexts in X_G , i.e. expressing a command for the first person plural.

- (13. 137) a. šuka-n
 eat-SUBJ/EXH
 'let's eat!' (G-RHG)
- b. taʔa-n muškarawa
 burn-SUBJ rubbish
 'let's burn rubbish!' (G-RHG)

Examples from X_{Ch} and X_Y show that the exhortative can be expressed with the form *kan* that precedes the verb. Although the morphology of the form is not entirely clear, comparison with the subjunctive contexts with imperative translation above suggest that *kan* may be combining the exocentric directional or the existential (*ʔu*)*ka* 'have, do' and the subjunctive marker *-n*.

- (13. 138) a. <can tamiki>
 ka-n *ta wiriki
 do/EXO?-SUBJ go talk
 'let's talk'
 OT: "¡hablemos, pues!" (Ch-C)
- b. <can pata>
 ka-n pata
 do/EXO?-SUBJ bath
 'let's bath!'
 OT: "¡bañemos nos!" (Y-C)

In X_{Ch} *kan* is also attested as an ending on transitive verbs with imperative translation contexts. Again, the morphology of the form is unclear. Since the second person is addressed and both predicates are transitive, *-kan* might also be identified here as the dependent-marking cross-referencing suffix of the second person singular that is here employed to mark imperative.

- (13. 139) a. <tupacan>
 tupa=ka-n
 let/leave=do/EXO-SUBJ
 'leave it there!'
 OT: "¡déjalo ahí!" (Ch-C)
- b. <ipajlá can (caballo)>
 ʔipaʔa=ka-n caballo
 bath=do/EXO-SUBJ Sp:horse
 'go and bath the horse!'
 OT: "¡anda a bañar el caballo!" (Ch-C)

The imperative (or prohibitive) form *wi mukan* 'let/leave' that is attested in the Maldonado-data also appears to involve the subjunctive marker *-n*. However, the

morphology of *mukan* is not understood, and it remains unresolved whether it consists of a verbal root **muka* and the suffix *-n*, or whether it combines a verbal form **mu* and the exocentric directional *ka* that takes the subjunctive/irrealis marker.

- (13. 140) a. <guimucán>, <guimucàn>
 wi muka-n
 DIR? ?-SUBJ/IRR?
 'leave it!'
 OT: "¡déjalo tú!" (1845.)
- b. <gui Lic mucàn>
 wi tik muka-n
 DIR? 3PL ?-SUBJ/IRR?
 'they may leave it!'
 OT: "¡déjenlo aquellos!" (1847.)

13.3.2 Reference to non-actual/unreal events

The subjunctive/irrealis *-n* marks contexts referring to non-actual or unreal events. It is attested with directionals that follow temporal adverbs, indicating time reference to the 'non-present'. In X_Y the marker occurs on finite verbs with future reference. The marker that indicates unreal or unspecified notion on pronouns and quantifiers seems to be identical with the subjunctive/irrealis clitic.

IRREALIS MARKER WITH DIRECTIONALS: The marker *-n* occurs with directionals specifying the temporal direction in combination with temporal adverbs (§ 14.3.2). In these contexts, the subjunctive clitic can be shown to function as an irrealis, indicating nonpresent, remote or hypothetical events in past and future.

In the majority of attested cases, *-n* occurs with the exocentric directional *ka* indicating a relation to past events, i.e. *ka-n* 'ago'. The form follows temporal adverbs ('today', 'distance of a year') (13. 141a-b) and numerals specifying the distance in days (c). In this context it can combine with the centric directional *pe?*, which may indicate that the time is moving towards the speaker (see § 14.1.2.1; § 14.3).

- (13. 141) a. <aLmucán>
 ?a?mu=ka-n
 today=EXO-SUBJ/IRR
 'yesterday'
 OT: "ayer" (3611.)
- b. <ayapacan pè>
 ?ayapa=ka-n pe?
 year=EXO-SUBJ/IRR CENT
 'last year'
 OT: "el año pasado" (2037.)
- c. <piican>
 pi:=ka-n
 NUM: '2'=EXO-SUBJ/IRR
 'two (days) ago'
 OT: "anteayer" (4288.)

The same contexts of past-time reference are attested in the comparative data (13. 142), where we also find *-n* with the directional *wa* in the same structural pattern with a numeral indicating the number of days into the future (c).

- (13. 142) a. <ahmukán>
 ?a?mu=ka-n
 today=EXO-SUBJ/IRR
 'yesterday'
 OT: "ayer" (G-S)
- b. <ahujlacan>, <?a?la'kan>
 ?aw?ta=ka-n
 today=EXO-SUBJ/IRR
 'yesterday'
 OT: "ayer" (Ch-C), (Ch-MQ)
- c. **?a?ta pe? pi-wa-n**
 tomorrow CENT NUM: '2'-DIR-SUBJ/IRR
 'the day after tomorrow' (G-SH)

There are cases in the ALS where the form *kan* is followed by the directional *wi* (§ 14.1.3.1). The translation contexts do not indicate any function of *kan* or *wi*. In the examples given below *kan* is following adverbials (or defective verbs that might have adverbial function), which may suggest that the form is identical with the irrealis exocentric directional that marks past-time reference, i.e. 'ago' (see above). In the following examples *kan* seems to occur in the context of declarative present-time reference (13. 143a), past-time reference (b) and hypothetical state (c).

- (13. 143) a. <acan cangui>
ʔakan ka-n wiʔ
 ADV:like EXO?-SUBJ/IRR DIR?
 'it is like this'
 OT: "así es" (3583.)
- b. <gi cangui>
hi ka-n wiʔ
 speak? EXO?-SUBJ/IRR DIR?
 'he spoke'
 OT: "aquel dijo" (1831.)
- c. <szâŁ cangui szâma gracia ayaac asüec muc terò>
šaʔ ka-n wi šama gracia ʔaya:-k [ʔasik muk-tero-ʔ]_{ADV}
 good EXO?-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP} CONJ 1pS-die-STAT
 'it is good that we are in grace when we die'
 OT: "bueno es que estemos en gracia, cuando nos muramos" (1953.)

IRREALIS MARKER WITH FINITE VERBS: The subjunctive/irrealis function of *-n* is furthermore illustrated by the following two examples from X_Y. Both examples are structurally identical with the exception of the final suffix of the subordinate predicate that is marked with *-ʔ* to signal past-time reference (13. 144a) and marked with *-n* to signal future/ potential action (b). It needs to be noted that in the example below the interrogative *ʔin* functions as a subordinator.

- (13. 144) a. <inaj man aya inauki>
ʔi nah man=ʔaya ʔin ʔa-ʔuki-ʔ
 ? PN:3s DEM=PL INT/REL 3sA-do-STAT
 'those are the ones that did'
 OT: "ellos hicieron" (Y-C)
- b. <inaj man aya inaukin>
ʔi nah man=ʔaya ʔin ʔa-ʔuki-n
 ? PN:3s DEM=PL INT/REL 3sA-do-SUBJ
 'those are the ones that will do'
 OT: "ellos harán" (Y-C)

IRREALIS MARKER WITH PRONOMINAL CATEGORIES: In the Zeeje-ms., there is an example where the irrealis/subjunctive marker *-n* occurs on the independent pronoun of the third person plural, and thus on a nominal form (13. 145b). The translation context indicates an irrealis/subjunctive function and it can therefore be ruled out that <nagquin> may simply be a misspelling of the form.

- (13. 145) a. <nagqui>
 nahki
 PN:3p
 'they, those'
 OT: "esos" (Ch-Z)
- b. <nagquinqi>
 nahki-n ki
 PN:3p-SUBJ INTENS
 'they were/would be (themselves)'
 OT: "sean" (Ch-Z)

- IRREALIS MARKER WITH OPTATIVE: The subjunctive/irrealis marker constitutes furthermore part of the optative marker *ʔan* that is only attested in the Maldonado data and can be shown to derive from the verb *ʔuʔa* 'want, wish' (see § 10.1.3.5).

- ## 13.4 Negation

The same negative marker can be used to express different types of negative operations. These include the negation of affirmative and interrogative predicates (§ 13.4.2), the negation of nominal predicates (§ 13.4.5), derivational negation of adjectives (antonym formation) (§ 13.4.5), the negative of existence (in combination with other clitics/markers) (§ 13.4.4) and negative quantifiers or negative pronouns (§ 13.4.6). Although we find the same marking strategies and operations for expressing the negative value of an utterance, the different Xinka varieties employ different operators to mark negation. In prohibitive or negated imperative clauses negation is realised with a marker that seems to be etymologically related to the directional verb *wa* 'go away'. Such an interdependency of negative marking and TAM-categories is attested in other Mesoamerican languages (Suárez 1983:74-75).

13.4.1 Negative markers

Table 13. 6 summarises the negative markers attested in the ALS and their basic glosses. The only negative operator that occurs in a syntactic context is *ʔašin*. Function and morphology of the other forms needs to be concluded from comparison with negative operations in the other Xinka varieties.

Table 13. 6: Negative markers in the ALS

FORM	ORIGINAL GLOSS	CATEGORY	
<aszin>	ʔašin	"no"	general negation
<ʔan>	ʔan	"no"	?
<aguán>	ʔawan	"no (oraciones imperativas negativas)"	prohibitive
<eyeʔ>	ʔeyeʔ	"no (adverbio, <i>sum est fui</i>)"	negative existential
<ni...>	ni-	(negation of indefinite pronoun)	negative quantifier

The negative operator *ʒašin* occurs in all Xinka varieties. In X_G, X_{Ch} and X_S it has lost the initial vowel and is realised as *šin* or *hin*. Although *hin* is attested in the data, the basic negative operators in X_{Ch} and X_Y are *ʔa(n)* and *na(n)*.

Table 13. 7: Comparative chart of basic negative markers in Xinkan

	X _M	X _G	X _{Ch}	X _S	X _{Jun}	X _Y
no	ʔašin	hin, him šin	hen, hin	him		ʔašin
NEG						ʔin
no/OPT	ʔan		ʔa, ʔan ʔa-mu(k/y)	ʔa		ʔa-mu
no	-	na-	na-n na-l			na-

Comparison of negative operators in all Xinka varieties indicates that these forms may be morphologically complex. The basic negative roots are **ʔaši-* / **hi-*, *ʔa-* and *na-* / *ni-*, which seem to combine with the operator *-n* when occurring as free forms. The root **ʔaši-* / **hi-* might be identical with the affirmative marker *ʔahʔʔʔyesʔ* (§ 13.5), suggesting that *-n* marks negation or irrealis. It is not uncommon for languages to treat negative clauses as irrealis (Payne 1997:244). The etymology of the roots *ʔa-* and *ʔawa-* is not entirely clear, but they may be of verbal origin (see below).

- (13. 148)
- a. <aszin>
*ʔaši-n
*AFF?-NEG/IRR
'no'
OT: "no" (3654.)
- b. <Łán>
*ʔa-n
*wish?-NEG/IRR
'no'
OT: "no" (4008.)
- c. <aguán>
ʔawa-n
*go?-NEG/IRR
'no'
OT: "no; para oraciones de imperativo negativas" (3603.)
- (13. 149)
- <nan>
*na-n
*ʔ-NEG/IRR
'no'
OT: "*no" (Ch-C)

In X_Y the form *ʔn* is attested as a negative marker. In this case, it is not clear whether *ʔn* occurs in interrogative function (§ 13.2.1) or whether we are dealing with an abbreviated form of *ʔašin* (or *hin*). The negator *ʔašin* (or *hin*) seems to be used only as a free form – in most cases retaining the final *-n*, although in X_G the form *hiʔ* is also found. The negative markers *ʔa-* and *na-* can also be prefixed to interrogative pronouns, in which case *-n* is lost.

There are two forms that employ the suffix *-t* in the context of negative operations. The negative existential *ʔeye-t* from the ALS and the negative marker *na-t* attested in X_{Ch} (see below). According to the ALS gloss, the form *ʔeye-t* marks negation on the Latin *sum est fui*, or existential verbs. Since the marker is not found in the comparative data, we cannot reconstruct whether it simply precedes marked existential verbs, or whether it fully replaces the existential *ʔaya* when this is used as a negative predicate.

The basic negative operators co-occur with interrogatives and other deictic markers to indicate specific negative operations. The interrogatives attested in the ALS are the non-human question word *šan* 'what?' ("¿qué?") and the indirect human/person interrogative *wena* 'who' ("¿quién?") (see § 13.2.1). These negated question words are also attested in the comparative data. In X_G and X_{Ch} , negators also combine with the interrogative marker *ti* (see § 13.2.1).

13.4.1.1 Negative marker *ʔašin*

The negative marker *ʔašin* occurs in various clause types in the Maldonado-data. It always precedes the negated phrase or constituent. In the ALS, the negator *ʔašin* is attested in syntactic context preceding verbal predicates.

- (13. 150) a. <a szin ca ʔuèèue na perdon>
ʔašin ka-tikí na perdón
 NEG 2sA-find DET Sp:forgiveness
 'you do not find forgiveness'
 OT: "no conseguiréis el perdón" (2033.)
- b. <a szin ui szicà nà miszà>
ʔašin ʔuyši-ka? na miša
 NEG hear, listen-2sA DET Sp:mass
 'you did not hear the mass'
 OT: "no oíste misa" (1958.)

Furthermore, the negative marker *ʔašin* can precede adjectives or adverbs deriving antonyms.

- (13. 151) <aszin szał>
ʔašin šał
 NEG good
 'not good = bad'
 OT: "malo, no está bueno" (3658.)

The negator *ʔašin* is also attested in predicative function, preceding the question word *šan* that functions as a relativiser in cleft-constructions (cf. § 16.2.5.3). In the ALS, this construction is indicated as a response to a question; the negation is thus the focussed element of the clause.

- (13. 152) <a szin szàn paraan nàca>
ʔašin [šan para-n naka_O]_{REL}
 NEG INT:what search-1sA PN:2s
 'not(hing) that I have searched you (for) = I have not searched you for anything'
 OT: "no te quiero para nada" (1871.)

In the comparative data we find etymologically related operators of *ʔašin*, which occur in the same functional contexts. In X_Y , X_G and X_S the form *ʔašin* or *šin* is preserved, while speakers of X_G predominantly use *hin* or *hi?*, which is also attested

in X_{Ch} . The form $\mathcal{Z}ashin$ found in the ALS appears to be the original form of the marker (cf. § 4.5.1). It needs to be pointed out that there are only very few cases of hin in the corpus data from X_{Ch} ; otherwise the variety uses $\mathcal{Z}a(n)$ to express negation.

13.4.1.2 Negative marker $\mathcal{Z}an$

Maldonado de Matos indicates a negative marker $\mathcal{Z}an$ that is not otherwise attested in the ALS. However, the form $\mathcal{Z}an$ is employed by Maldonado de Matos as an optative marker (13. 154), which derives from the verb $\mathcal{Z}u\mathcal{Z}a$ 'wish' (see § 10.1.3.5).

(13. 153)	a. <Lán> $\mathcal{Z}an$ NEG 'no' OT: "no" (4008.)	b. <Lán> $\mathcal{Z}an$ OPT '*may' OT: "partícula verbal optativa" (4009.)
(13. 154)	a. <a màra Lán> $\mathcal{Z}a$-ma:ra $\mathcal{Z}an$ 3sA-rest OPT 'he may rest' OT: "aquel descansa" (1519.)	b. <muc-pùla Lán na penitencia> muk-pula $\mathcal{Z}an$ na penitencia 1pA-make OPT DET Sp:penitence 'they say we (may) do penitence' OT: "dicen que hagamos penitencia" (2029.)

In most other Xinka varieties $\mathcal{Z}an$ or $\mathcal{Z}a$ is attested in the function of a negative marker. In X_{Ch} $\mathcal{Z}a(n)$ largely occurs in the same functional contexts in which $\mathcal{Z}ashin$ or hin occur in the ALS and X_G . The fact that the ALS lists both forms, $\mathcal{Z}ashin$ and $\mathcal{Z}an$, suggests that the regional variation arises from functional difference. Given that Maldonado de Matos uses $\mathcal{Z}an$ as an optative marker, the negator may originally have expressed an irrealis concept, or simply translates as to 'not want'. In X_G $\mathcal{Z}an$ is attested as a negative marker only in the Schumann-data.

(13. 155)	a. <la> *$\mathcal{Z}a$ NEG 'no' OT: "partícula negativa, no" (Ch-C), (Ch-F)	b. <lan>, <lan>, <lan> $\mathcal{Z}a$-n *wish?-NEG/INT= NEG 'no' OT: "no, partícula negativa" (Ch-C)
	c. <langú> $\mathcal{Z}an$-ku NEG-go 'no go' OT: "no" (Ch-F)	d. < $\mathcal{Z}anti$ [$\mathcal{Z}andi$]> $\mathcal{Z}an$-ti NEG-INT 'nothing' OT: "no hay" (Ch-S); "nada" (Ch-C/F)

The negative root $\mathcal{Z}a$ also occurs in the form $\mathcal{Z}a$ -mu(k) that is only attested in very few cases where it does not seem to be morphologically transparent.

(13. 156)	a. <lamu cú> $\mathcal{Z}a$-mu ku NEG-? go 'you do not go' OT: "no vayas" (Ch-C), (Ch-F)	b. <hlamú píríca> $\mathcal{Z}a$-mu piri-ka NEG-? see-2sA 'you did not see' OT: "no viste" (Ch-JC)
	c. <lamu'c uríca ná> $\mathcal{Z}a$-muk wri-ka ná? NEG-? speak-2sA DEM 'you did not speak it' OT: "no oíste lo que hablaron" (Ch-JC)	

13.4.1.4 Negation marked with *wa

The morpheme/root *wa* occurs in the ALS and the comparative data in several contexts where it seems to function as a negative operator.

According to the gloss in the ALS vocabulary, the negative marker *ʔawan* is used in non-declarative clauses, where it seems to be a sort of prohibitive or vetative marker that marks negation of imperative predicates. This prohibitive is not attested in syntactic context. Whether the form *wa* is in any way etymologically related to the motion verb or directional *waʔ* 'go away' (see § 14.1.1.3), is not understood.

- (13. 162) <aguán>
ʔawa-n
 *goʔ-NEG
 'no'
 OT: "no (oraciones imperativas negativas)" (3603.)

The marker *wa* occurs in other examples in which the translation contexts suggest a negative function. However, since the other elements of the form cannot be clearly identified, and since it is not clear whether the translation of the following examples is literal, the negative function of *wa* in these contexts is only tentative.

(13. 163)	a.	<guataqui>	b.	<huáki>
		wa=ta=ki		wa=k'i
		NEG=come?=INTENS?		NEG=INTENS?
		'it is not important'		'not (good)'
		OT: "no importa" (3845.)		OT: "no (bueno)" (Y-C)

13.4.2 Negation of affirmative predicates

The negation of affirmative predicates is always realised by a negative operator preceding the predicate in initial position. In the ALS negations of affirmative predicates are attested in various types of constructions, including declarative and conditional clauses. The marking of negation is identical for cross-referenced verbs and periphrastic constructions; in all cases the negative marker precedes the negated constituent or clause. In the ALS we find the negative marker *ʔašin* before verbal predicates marked with cross-referencing prefixes and suffixes.

(13. 164)	a.	<a szin ca pùla na jamaà>	b.	<a szin uy szin nà mísica>
		ʔašin ka-pula na hama		ʔašin ʔuyši-n na miša
		NEG 2sA-make DET sin		NEG hear-1sA DET Sp:mass
		'you do not make sin = you do not sin'		'you did not hear the mass'
		OT: "no pecas" (2044.)		OT: "me quedara sin misa" (1954.)

In X_G and X_{Ch} *hin* occurs in the same contexts (13. 165). Verbal predicates in negative clauses exhibit the same inflectional morphology as predicates in pragmatically unmarked clauses; i.e. in dependent negative clauses predicates exhibit dependent cross-referencing suffixes to mark person agreement (13. 165c). Intransitive predicates can take the past suffix *-ʔa* in negative clauses; there are no examples of this pattern in the ALS.

(13. 165)	a.	šin ka-niwa naka mas kaldo
		NEG 2sA-want PN:2s Sp:more Sp:soup
		'you do not want more soup' (G-JAP)
	b.	hin Ø-hapa-ʔ naha?
		NEG 3sS-pass by-STAT LOC:aquí
		'he did not pass here' (G-SH)

- c. hin hini-kan naka
NEG know-2sA_{DEP} PN:2s
'(that) you do not know' (G-JAP)
- d. hin Ø-ku-ŋa ša krawa
NEG 3sS-go-PAST.ACT PREP forest, shrubs
'he did not go into the forest' (G-RHG)
- e. <gen hizapiy mas>
hen ʔisapi-y más
NEG remove-3sA Sp:more
'he did not remove more'
OT: "no han sacado más" (Ch-Z)
- f. <...jín catá luego>
hin ka-taʔ luego
NEG 2sS-come/arrive Sp:soon
'you did not arrive soon (= in time)?'
OT: "tardaste" (Ch-P)

The negative marker *ʔašin* precedes periphrastic and auxiliary constructions that are treated the same way as simple predicates.

- (13. 166) <á szin ca szàta pùla>
ʔašin ka-šata pula
NEG 2sA-return make
'you do not return to make it'
OT: "no lo vuelvas a decir" (1887.)
- (13. 167) a. hin te:ro šuka naka
NEG want eat PN:2s
'you do not want to eat' (G-PE)
- b. hin kuy laɣ'a-y naka
NEG AUX.FUT bite-3sA PN:2s
'he will not bite you' (G-SH)
- c. hin ku=ya-kan naka ša ʔuy
NEG go=PROG-2sA_{DEP} PN:2s PREP water
'you are not going to the river' (G-JAP)
- d. hin mu-ʔuka debilber
NEG 3sA-do Sp:return
'he does not return it' (G-SH)

Maldonado de Matos indicates cases of word order change in negative clauses. In negative clauses where *ʔašin* occurs in initial position TAM-adverbials, which usually follow the cross-referenced verb, may precede the predicate.

- (13. 168) a. <aszin pà pè ca acù misza aŋa>
ʔašin paʔ peʔ ka-ʔakuʔ miša ʔaŋa
NEG PFV CENT 2sS-go Sp:mass tomorrow
'(if) you would not go to mass tomorrow'
OT: "si no fueréis a oír misa mañana" (2040.)
- b. <á szin pa ayù juenuei na doctrina.>
ʔašin paʔ ʔayuʔ hini-y na doctrina
NEG PFV AUX know-3sA DET Sp:creed
'he would not have known the creed'
OT: "no habrá sabido la doctrina" (2022.)

The negative marker *ʔa-* is attested in X_{Ch} in the same functional contexts. The functional difference of *hin* and *ʔan* in X_{Ch} is not entirely clear (see above). Several Spanish translation contexts indicate a subjunctive verb, which would correspond with the use of the optative marker *ʔan* in the ALS (see above and § 10.1.3.5).

- (13. 169) a. <la mucú>
 la mu(k)-ku
 NEG 2sS-go
 'you do not go'
 OT: "no vayas" (Ch-C), (Ch-F)
- b. <ʔa awusíki>
 ʔa ʔawusi-ki
 NEG hear-AP
 'does not hear = deaf'
 OT: "sordo" (Ch-S)
- c. <guanín lanjonó>
 wanin lan *hini-ʔ
 INT:who? NEG know-STAT
 'who does not know'
 OT: "no sé quién" (Ch-F)
- d. <lan, guahtá, na tagú>
 ʔan wahta-ʔ na taw
 NEG enter-STAT DET viento
 'the wind is/has not entered'
 OT: "no entra la brisa" (Ch-JC)

The negative marker *ʔamu-(k)* occurs in X_{Ch} in the same contexts as **ʔan*. It is not clear whether there is a functional difference between both negative forms.

- (13. 170) a. <lamo pa ta rama ndi macá>
 lamo pata rama-Ø nti (i)ma-ka
 NEG remember-IMP.VT INT say-2sA
 'remember what you said'
 OT: "¡acuérdate de lo que hablamos!" (Ch-F)
- b. <ʔlhamúc acugúí nac>
 ʔamuk ʔaku-wi? nak
 NEG go-? PN:2s
 'you do not go'
 OT: "no vas ir vos" (Ch-JC)
- c. <ʔlhamú cuay pocó>
 ʔamu kway poko-ʔ
 NEG FUT break-STAT
 'it will not be broken'
 OT: "no lo vayas a quebrar" (Ch-JC)

Another way of negating verbal predicates in X_{Ch} is by means of the negative marker *nan* or *nal*. The pattern is not attested in the ALS.

- (13. 171) a. <guanín naljonó>
 wanin nal hini
 INT:who? NEG know
 '(he does) not know who'
 OT: "no sé quién" (Ch-F)
- b. <namburi-jama>
 nan *bəri hama
 NEG PFV ripe
 'it is not ripe yet'
 OT: "no se ha madurado,
 no está maduro" (Ch-F)

Likewise not attested in the ALS is the formation of verbal antonyms by means of negative markers preceding unmarked verbs that are often marked with the antipassive suffix *-ki*. In X_{Ch} we find the negative marker *hin* to occur in these lexical contexts.

- (13. 172) a. hin ʔiwiši-ki
 NEG hear-AP
 'does not hear = deaf' (G-RHG)
- b. <hin iwrikʰ>
 hin ʔiwri-k(i)
 NEG speak-AP
 'does not speak = dumb'
 OT: "mudo" (Ch-MQa)

In X_G negation of affirmative predicates is also attested in interrogative clauses.

- (13. 173) <hántah hin kuyáka kaʔakúki nti amuká>
 han-ta-h hin ku=ya-ka ka-ʔakuki n-ti ʔamuka
 INT:what?-INT-? NEG go=PROG-2sS_{DEP} 2sS-walk INT-INT work
 'why are you not working?'
 OT: "¿por qué no vas a trabajar?" (G-S)

13.4.3 Prohibitive negation

Maldonado de Matos gives the form *ṽawan* "no (oraciones imperativas negativas)" as a marker for the negative imperative, or prohibitive. The form is not attested in syntactic context. Etymologically, it likely derives from the directional root *wa* 'go away', which it may also be functionally related to (see § 14.1.1). There are other contexts in the ALS where Maldonado de Matos employs the directional verb *wa* followed by a subordinate predicate to express commands, i.e. 'go to do X' (see § 13.3.1.2).

In the comparative data there is no indication that the vetative or prohibitive would be marked by a separate morpheme. In X_G the negative operator *hin* simply precedes the imperative predicate that can be intransitive and marked with *-ya* (§ 13.1.2) or transitive and marked with *-Ø* (§ 13.1.1). In some contexts regularly marked predicates are used to express the negative imperative (13. 174b).

- (13. 174) a. <hin ruka we pe>
 hin ruka-Ø we pe(?)
 NEG eat-IMP.VT ? CENT/IMP
 '(that) he may not eat!
 OT: "¡que no coma!" (G-S)
- b. hin ka-weške muškarawa
 NEG 2sA-throw rubbish
 'do not throw away rubbish' (G-RHG)

In X_{Ch} the negative marker *hin* can be followed by the conditional adverbial *ma* (§ 12.5.4) when expressing a prohibitive.

- (13. 175) <para quejin marrucka mura na picke>
 para que hin ma ruka mura na pik'i
 Sp:in order to NEG COND eat ear of corn DET bird
 'so that the birds would not eat the ears of corn'
 OT: "que no se la coman los pájaros" (Ch-P)

13.4.4 Negation of existence

Negatives of existence are complex forms that combine a negative operator and an interrogative marker or existential verb.

Table 13. 8: Comparative chart of negative existentials

	X_M	X_G	X_{Ch}	X_Y	SPANISH GLOSS
there is no(thing)	ṽašin šan	hin šan			"no hay"
nothing		ṽan-ti	ṽan-ti		"nada"
there is no(thing)			nan-ti	nan-ya	"no hay"
nothing		na hanta na hay			"nada"

There is only one attested case of a negative existential in the ALS that consists of the negative marker *ṽašin* preceding the non-human interrogative marker *šan* 'what?' ("¿qué?") (see § 13.2.3.1), indicating 'not that' ("no qué") or 'nothing' ("nada") (13. 176b). The function and meaning of the marker *šan* that follows the negative marker can be derived from its general context. Maldonado de Matos gives the phrase as a response to an interrogative phrase in which the interrogative pronoun *šan* is used (a).

- (13. 176) a. <ṽszàn para cà nem?>
 ṽan para-ka? nem
 INT:what? search-2sA PN:1s
 'what have you searched me for?'
 OT: "¿para qué me quieres?" (1870.)
- b. <a szin szàn paraan nàca>
 ṽašin šan para-n naka
 NEG INT search-1sA PN:2s
 'I have not searched you for anything'
 OT: "no te quiero para nada" (1871.)

The combination of negative marker and interrogative pronoun *šan* 'what?' is widely attested in X_G and X_{Ch} where it is likewise used to indicate the negative quantifier 'nothing' ("nada") or the Spanish phrase "no hay" = 'there is nothing'. The combination *hin šan* can be followed by a verb phrase (13. 177a) as much as by a noun phrase (b-c). Negative and interrogative marker can occur in a discontinuous pattern (d), which is attested in the data from Schumann (1967:46) as well as in the field data of Campbell and Kaufman.

- (13. 177) a. *hin šan ʔan-tura nin* b. *hin šan ʔayma*
 NEG INT 1sA-take/bring PN:1s NEG INT:what corn
 'I take/bring nothing' (G-SH) 'there is no corn' (G-JAP)
- c. *šin šan šinak'* d. <*hin tíʔla šan*>
 NEG INT:what beans *hin tíʔla šan*
 'there are no beans' (G-PE) NEG salt INT:what
 'there is no salt'
 OT: "no hay sal" (G-S)

The negative of existence can occur in predicate function and host the perfective marker *pa ʔaʔ*.

- (13. 178) *hin šan paʔaʔ*
 NEG INT:what PFV
 'there is already nothing' (G-SH)

Schumann records one example of a negative existential translated into Spanish as "nada", which combines the negative marker *na* and the non-human interrogative *han-ta*; the form is not attested in syntactic context.

- (13. 179) <*nahánda*>
na han-ta
 NEG INT:what-INT
 'nothing'
 OT: "nada" (G-S)

In X_{Ch} the negative of existence combines the negative marker *nan* and the clitic *ti* that is most likely identified as the same interrogative marker that combines with question words (see § 13.2.1).

- (13. 180) a. <*nandi*> b. <*nandi rakʔ*>
nan-ti *nan-ti ra-k*
 NEG-INT NEG-INT name-2sP
 'there is nothing' 'there is not your name'
 = do you not have a name?
 OT: "no hay" (Ch-F) OT: "¿cómo te llamas?" (Ch-F)

In X_G and X_{Ch} there are several examples a similar negative of existence that combines the interrogative clitic *ti* with the negator *ʔan* (13. 181a). In X_G *ʔan-ti* co-occurs with the non-human interrogative **ʔin-ti* 'what?, which?' (d). In X_{Ch} the form can precede nouns (b) and adverbs (c).

- (13. 181) a. <*ʔandí*>, <*landi*>, <*landiʔ*> b. <*landi malh ramacú*>
ʔan-ti *lan-ti maʔ ra makuʔ*
 NEG-INT NEG-INT firewood PREP house
 'there is nothing' 'there is no firewood in the house'
 OT: "nada, no hay" (Ch-C), (Ch-S), OT: "no hay leña en la casa" (Ch-JC)
 "not" (Ch-MA)

- c. <landú acú>
lan-ti ?aki?
NEG-INT now
'not now'
OT: "no ahora" (Ch-F)
- d. <?andi ndi pulayán ti?k>
?an-ti n-ti pula=ya-n ti:?-k
NEG-INT INT-INT make=PROG-1sS_{DEP} IO-2sP
'nothing that I am making for you'
OT: "nada qué hago a ti" (G-S)

The negative of existence can also be expressed by a negative marker and an existential verb. In X_G the auxiliary verb *?uka* 'have' is attested in this context (13. 182a); in other Xinka varieties we find negative operators to precede the existential verb *?aya* 'be in a place' (b-c).

- (13. 182) a. hin ?uka
NEG have
'there is nothing' (G-RHG), (G-SH)
- b. <laya mán>
la-ya man
NEG-be DEM/PN:3s
'it/he/one is not'
OT: "no tiene un" (Jum-G)
- c. <nañá mapu>
nan-ya mapu
NEG-be tortilla
'there is no tortillas'
OT: "no hay tortillas" (Y-C)

In X_Y the negative of existence seems to be expressed by a construction that combines the interrogative marker for yes/no questions *?in* and the negative operator *?ašin*.

- (13. 183) a. <?naxin>
*?in? ašin
INT? NEG
'nothing'
OT: "nada" (Y-C)
- b. <in axin jorí>
?in ?ašin hor-i
INT? NEG have-3sA
'he does not have anything'
OT: "él no tiene nada" (Y-C)

13.4.5 Negation of nominal predicates and antonyms

Negative markers are used to form antonymic expressions. In the ALS most antonyms are formed with nominal or adjectival stems that are preceded by the negator *?ašin*.

- (13. 184) a. <aszin szaŁ>
?ašin šaŁ
NEG good
'not good = bad'
OT: "malo, no está bueno" (3658.)
- b. <aszin saŁca>
?ašin saŁka
NEG distant
'not distant = near'
OT: "cerca" (3656.)
- c. <aszintveszeve>
?ašin tišk'í
NEG distant
'not distant = near'
OT: "no lejos" (3657.)

The pattern is confirmed by the comparative data. While in X_G and in the Zeeje-ms. the negative marker *hin* or *hen* is used in this functional context (13. 185a-b), X_{Ch} employs the marker *?an* (c-d) and X_Y the marker *na* (e).

- (13. 185) a. hin ɕ'ama
NEG good
'not good = useless' (G-RHG)
- b. <gen-junu>
hen hunu
NEG know
'not known = unknown'
OT: "desconocido" (Ch-Z)
- c. <landajá>
ɬan taha?
NEG much
'not much = little, few'
OT: "poco" (Ch-F)
- d. <laxanti>
la šan ti
NEG good INT?
'not good = useless'
OT: "no sirve" (Jum-E)
- e. <nasan>
na san
NEG good/well
'not good/well'
OT: "no ... bien" (Y-C)

Combined with the adverb that expresses the concept 'yet' ("todavía"), negative markers derive the adverbial antonym 'not yet' ("todavía no"). Maldonado de Matos indicates the adverbial *ʔak'aʔ* that is related to the form *kar* attested in X_{Ch} . In X_Y the root *wak* is used to express the same temporal concept.

- (13. 186) <aszinaeál>
ʔašin **ʔak'aʔ**
NEG ADV:yet, still
'not yet'
OT: "todavía no" (3655.)
- (13. 187) a. <langar atá>
ɬan-kar ʔa-ta?
NEG-yet 3sS-come
'he does not come yet'
OT: "todavía no viene" (Ch-F)
- b. <navuac tayá>
na-wak ta-ya?
NEG-yet come-STAT
'he has not come yet'
OT: "todavía no ha venido" (Y-C)

Structurally, these antonyms and the negation of nominal predicates are identical. There are no attested cases of negated nominal predicates in the ALS; all examples are found in X_G and X_{Ch} .

- (13. 188) a. natiya hin ninguno ʔakuki
LOC:there NEG Sp:nobody walk
'there is nobody (who) walks' (G-SH)
- b. <lan rak ixi>
ɬan rak ʔiši
NEG man good
'no good man = bad man'
OT: "malo (no buen hombre)" (Ch-F)
- c. <lham muc nejlha>
ɬan muk-neɬa
NEG 2sP-BEN
'(it is) not yours'
OT: "no son tuyos" (Ch-JC)

In the ALS the basic negative marker *ʔašin* always precedes the negated constituent or clause. In X_G the marker *hin* is frequently found in final position when negating temporal adverbs (13. 189a), adjectival (b) or nominal forms (c).

- (13. 189) a. ʔaɬa peʔ hin
tomorrow CENT NEG
'not tomorrow' (G-SH)
- b. ʔiraʔ hin
big NEG
'(it is) not big' (G-SH)
- c. na nin hin
DET PN:1s NEG
'not me/I' (G-SH)

In X_G the basic negative marker *hin* co-occurs with the causal non-spatial preposition *ʔaʔi* 'by, because of' ("por") to indicate "negative causation".

- (13. 190) a. *hin ʔaʔi ʃuka-n nak'i* b. *hin ʔaʔi hin*
 NEG PREP.CAUS eat-1sA chilli NEG PREP.CAUS NEG
 'because I did not eat chilli' (G-SH) 'because of what not? = why not?' (G-JAP)

13.4.6 Negative quantifiers

Negative quantifiers combine a negative marker and the human/person question word 'who?'. In the ALS as well as in the comparative data, the negative operators seem to cliticise to the interrogative or indefinite pronoun. The negative marker used in this context is *ni-*, which is not otherwise attested in the data and could be a Spanish loan (see above). It precedes the human interrogative *wena* (see § 7.3).

- (13. 191) a. <niguena> b. <ni guéna maquí>
ni=wena ma ki
 NEG=INT:who COND INTENS
 'nobody' 'nobody'
 OT: "ninguno" (4176.) OT: "ninguno" (228.)

In X_{Ch} the negative quantifier combines the question word *wanin* 'who?' and the negative prefix *ʔa-* (13. 192a) or the free negative existential *ʔan-ti* (b). In X_Y the negative marker employed in this context is *na-*, which precedes the human/person interrogative *wan* 'who?' (c).

- (13. 192) a. <ʔawanin> b. <landí huanin pulajlá>
ʔa=wanin ʔan=ti wanin pula-ʔaʔ
 NEG=INT:who? NEG=INT INT:who? make-PAST.ACT
 'no who = no one, nobody' 'nothing = no one who did make it'
 OT: "nadie, no está" (Ch-S) OT: "ninguno lo hizo" (Ch-C)
- c. <navuan ucalá>
na=wan ʔuka-laʔ
 NEG=INT:who? do/put-PAST.ACT
 'no one, nobody did/put it'
 OT: "ninguno lo hizo" (Y-C)

13.5 Affirmation

There are two strategies for marking affirmation in Xinka: affirmative clitics that precede the affirmed constituent or clause, and inherently affirmative lexemes.

The affirmative markers attested in the ALS are *ʔahi* or *ʔa:*. The comparative data indicate similar forms, suggesting that the main affirmative marker is *ʔahi*. The form is widely diffused (e.g. pMZ **hiʔ* [W-95]; KCH *heʔ* [E-65]).

Table 13. 9: Comparison of affirmative markers

	FORM	ORIGINAL GLOSS
X_M	<ague> ʔahi ʔa	"si"
X_G	<áhi> ʔáhi ʔahi, ʔahe	"si" (G-S) (G-SH)
X_{Ch}	<a ^h > <uj> <ɨ>	"si" (Ch-MQ) (Ch-F) (Ch-S)
X_S	<jaa> ha	"si" (S-Gav)

Affirmative markers occur in initial position of declarative clauses, preceding the subject of the predicate; normally, the subject follows the predicate. In the ALS, only the affirmative marker *ʔa* is attested in syntactic context.

- (13. 193) <a señor, naca qui púlaLàn>
ʔa **señor** **naka** **ki** **pula-ʔa-n**
 AFF Sp:sir, mister PN:2s INTENS make-PAST.ACT-SUBJ
 'yes Sir, (it was) you (who) did make it'
 OT: "sí señor, tú lo hiciste" (4771.)

There are inherently affirmative adjectives that show the same morphosyntactic properties as other modifiers inasmuch as they can precede nominal referents or occur as nominal predicates. The Mayan loan *ɕ'ama* (13. 194b) is in addition also used as an augmentative modifier (§ 8.7.3.1).

- (13. 194) a. <szal> b. <txáma>
ʃaʔ **ɕ'ama**
 ADJ:good ADJ:good
 'good, perfect' 'good, well'
 OT: "bueno, perfecto" (4428.) OT: "bueno, bien" (4637.)

Function and meaning of the affirmative adjective roots are confirmed by the comparative data.

- (13. 195) a. <ɕáma> b. <tzama ná>
ɕ'ama **ɕ'ama** **naʔ**
 ADJ ADJ DEM
 'good, well' 'it/he is good'
 OT: "bueno" (G-S) OT: "bueno" (Ch-F)
- c. <sal parri>
***saʔ** **pari**
 good day
 'good day'
 OT: "¡buenos días!" (Ch-C), (Y-C)

In X_G and X_{Ch} the adjective **saʔ* 'good' occurs with the suffix *-ki* (13. 196). Maldonado de Matos lists a postpositional affirmative marker *ki* in his vocabulary that may be identical with the suffix attested in the context of affirmative adjectives. The morpheme *ki* has been identified in Maldonado-Xinka as an intensifier or even distributive marker (13. 197b). It is, however, unclear whether we are dealing in both cases with the same morpheme.

- (13. 196) a. <šáhki> b. <sajki ti>
šah=ki ***sah-ki** **ti**
 ADJ:good=INTENS ? ADJ:good-INTENS? ?
 'good' 'good'
 OT: "bien" (G-S) OT: "estoy bueno, estás bueno" (Ch-F)
- (13. 197) a. <qui> d. <guena qui>
ki **wena** **=ki**
 INTENS INT:who =INTENS/DISTR
 '?' '*whoself = (he/the one) who'
 OT: "partícula conclusiva, afirmativa" (4366.) OT: "el que" (199.)

13.6 Modal adverbials

There are a number of adverbials in Xinka that express modality. Some of these forms are complex or have become grammaticalised from other sources. Modal adverbials express concepts such as manner, quality, restriction/extension, intensity and comparison etc.

ADVERBIALS OF MANNER: In the ALS there are two attested adverbials indicating the manner with which an action is carried out: *ʔakani* 'so, like' and *ʔayak* or *ʔayan* 'like, such as'. The morphological composition of the adverb *ʔakani* is unclear. The other adverbials seem to be identified as forms of the existential verb *ʔaya-* 'be in a place' that is marked with the nominaliser *-k* or the subjunctive suffix *-n*.

- (13. 198) a. <acani>
ʔakani
 ADV:so, like
 'so, like this'
 OT:"así" (3582.)
- (13. 199) a. <ayác>
ʔaya-k
 be-VN
 'being= like'
 OT:"como, así como, parece" (3660.)
- b. <ayán nau>
ʔaya-n **naʔuʔ**
 be=SUBJ/IRR son
 'he would be son = like (a) son'
 OT:"como hermano [sic]" (3664.)

ADVERBIAL OF RESTRICTION: The adverbial form *ʔakaʔ* indicates restriction. It always occurs with other elements in initial position of the compound such as negators, numerals or other adverbs. Morphologically, the form is identical with TAM-adverbials in that it may derive from the exocentric directional *ka* that is marked with the verbal suffix *-ʔ* (cf. § 12.5). The adverb *ʔakaʔ* 'yet, still' is also attested in X_{Ch} and X_Y .

- (13. 200) a. <aszinaeal>
ʔašin **ʔakaʔ**
 NEG ADV:yet, still
 'not yet'
 OT:"todavía no" (3655.)
- b. <yeaLaeal>
ʔikaʔ **ʔakaʔ**
 NUM:'1' ADV:yet, still
 'one is missing'
 OT:"una falta" (4748.)
- (13. 201) a. <lankar>
 †an *kaʔ
 NEG ADV:yet, still
 'not yet'
 OT:"todavía no" (Ch-F)
- b. <nawak>
 naw ak
 NEG ADV:yet, still
 'not yet'
 OT:"todavía no" (Y-C)

ADVERBIAL OF EXTENSION: The morpheme *ki* occurs in several contexts where it seems to indicate extension, i.e. 'as well, also, in addition'. In all of these contexts, *ki* always occurs in combination with other roots/clitics. The suggested semantic value might explain the use of *ki* as a plural clitic of the third person plural (§ 6.3).

In Maldonado-Xinka the concept of 'as well, also' is expressed by the adverbial form *šʔki*. The vowel pattern *i ~ i*, which does not follow vowel harmonic rules (§ 4.4.2), might be an indication that the form is morphologically complex. The meaning of *šʔi* is not attested in the corpus of data, although it is possible that there is an etymological relation to the demonstrative *ʔašʔi* 'this' (§ 8.5.2), i.e. *šʔki* as 'this as well, in addition to this'. However, it needs to be pointed out that the adverbial is rather similar to the K'iche'an **čuquxeʔ* 'also, as well' (see Kaufman 2003:1528), which could indicate that the Xinka adverbial may be a loan.

- (13. 202) a. <nagsziɛi>, <nagszuequi>
nah **ʃi-ki**
 PN:3s ?DEM-EXTEN
 'he also/as well'
 OT: "también" (2049.),
 "él es, y también" (4147.)
- b. <Liná szuequi>
ti-na? **ʃi-ki**
 PREP-DEM ?DEM-EXTEN
 'as well, also'
 OT: "también, y" (4028.)
- c. <acàn szuequi>
ʔakan **ʃi-ki**
 ADV:like ?DEM-EXTEN
 'like (this) as well'
 OT: "asi también" (3584.)

In X_G we find the same form that is attested in Maldonado-Xinka (13. 203), while in X_{Ch} the adverb 'also' is expressed by the form *ki-la(k)* (13. 204). If *ki* is identical with the extension clitic, it occurs here as the host. The respective function of *-ʔa(k)* is not understood.

- (13. 203) <ʃiki>
ʃi-ki
 ?DEM-EXTEN
 'also, as well'
 OT: "también" (G-S)
- (13. 204) a. <n'frac kilac ni...>
 n-frac ki-lak ni
 1sS-man EXTEN-? PN:1s
 'I am a man as well'
 OT: "soy también un hombre..." (Ch-C)
- b. <cú kila ni ya>
 ku ki-la ni ya
 go EXTENS-? PN:1s be/PROG?
 'I go as well'
 OT: "yo también voy" (Ch-C)

Campbell and Kaufman give the forms X_{Ch} *k'aawa?* and X_{Jum} *k'wa?* with the meaning 'also', which may be related to the form *k'iwí(?)* that is attested in the X_{Ch} -data with the two distinct lexical meanings: 'all' and 'like'. With respect to a relation with the abovementioned form *ki* 'also' it needs to be pointed out that the following examples seem to be glottalised, just like the forms in the field notes by Campbell and Kaufman. The function of *-wa?* or *-wí?* is unclear (cf. intensifier-reflexive *ki-wa-* § 7.2).

- (13. 205) a. <ki-güi>
 k'i-wi
 EXTEN-?
 'all'
 OT: "todo" (Ch-F)
- b. <juuxi ki güi na palé>
 hu:ʃi k'i-wi na pale
 head EXTEN-? DET Sp:priest
 'head (of) all the priests = bishop'
 OT: "jefe de los padres, obispo" (Ch-F)
- c. <lan ay kihui ti>
 lan ʔay k'i-wi ti:ʔ
 NEG be EXTEN-? IO
 'it is not like him'
 OT: "ya no es él como era" (Ch-C)

In X_Y *ki-* may be part of a verb that is translated as 'get together'. The form is not morphologically understood, but may be seen as a confirmation of the semantic interpretation of *k'i*.

- (13. 206) <mulcu kicúhui>
 muʔ-ku k'i-ku-wi
 1pS-go EXTEN-?-?
 'let's go together'
 OT: "los dos nos juntamos" (Y-C)

INTENSIFIER: The form *ki* functions in most Xinka varieties also as an intensifier with the meaning 'much, a lot, very' that precedes adjectives (13. 207) and nouns (13. 208). In this context, the form could also be a loan from either Mayan (see e.g. KCH *k'i* 'much, many' [E-65]) or Spanish (e.g. *qué galan* 'how elegant = very elegant'). This function of *ki* is not attested in the ALS.

- (13. 207) a. <na máku ki hololó?> b. <ki tzamá>
 na maku ki ʔololoʔ ki ɕ'ama-ʔ
 DET house ADV white ADV dark-STAT
 'the house (is) very white' '(it is) very dark'
 OT: "la casa es muy blanca" (G-S) OT: "muy obscuro" (Ch-F)
- c. <ki galan>
 ki *galan*
 ADV Sp: elegant
 'very elegant'
 OT: "hermoso, admirable" (Y-C)
- (13. 208) a. <kikašʌ> b. <kimaša>
 ki kaša ki maša
 INTENS mosquito INTENS mud
 'much/a lot of mosquitos' 'much/a lot of mud'
 OT: "mucho zancudo" (Ch-MQb) OT: "mucho lodo" (Ch-MQb)

In X_G and X_{Ch} *ki* also occurs in adverbial function, preceding verbal predicates.

- (13. 209) a. <na ulsíh ki maráy ki hiʔ>
 na ʔulsi-h ki mara-y ki hiʔ
 DET mother-in-law-3sP ADV get angry-3sA ADV be+3sS_{DEP}
 'his mother-in-law was very angry'
 OT: "la suegra se enojó mucho" (G-S)
- b. <kipateronna>
 ki pa(ʔ) te:ro *nima
 ADV PFV want eat
 'I already very much want to eat'
 OT: "tengo hambre" (Ch-F)

14 Deixis

This chapter deals with adverbial categories of spatial and temporal deixis in Maldonado-Xinka; it does not contain a treatment of Xinka deixis in general. Other deictic expressions, such as demonstratives (§ 8.5), adpositions (§ 9), personal deixis (§ 6, § 7) and tense (§ 12) are described in the relevant sections.

Spatial and temporal reference are to some extent realised by the same operators, which shows that Xinka conceptualises certain dimensions of time in spatial terms. Two categories of deictic marking strategies need to be distinguished:

- Directionals that specify the direction of movement
- Deictic roots functioning as adverbs that specify the position in space/time based on a distance-oriented deictic system

Both categories may co-occur, expressing specific types of movement towards/from the point (in space or time) that is indicated by the deictic root. Some directionals and deictic roots are used as TAM-adverbials (§ 12.5).

Deictic roots functioning as demonstratives form a three-way distance-oriented deictic system (see § 8.5). This system also reflects in markers of spatial and temporal deixis. Locative adverbs are largely parallel to the demonstrative adjectives. In temporal deixis the same deictic roots occur in adverbial function.

Table 14. 1: Deictic roots in different functions

	demonstrative		locative deixis		temporal deixis	
immedial	naʔ	"el"	naʔ	"aquí"	naʔ-ʔ	impf
proximal	ʔaši, ʔahi	"este"	*ʔi, ʔiš	"allí"	ʔaši-k	"cuándo"
					ʔaši-ša	"ahora"
distal	man	"ese"	*ma	"ahí"	ma(ʔ)	subj

14.1 Directional markers

Directional markers occur in various functional contexts. They are used in spatial and temporal deixis, combining with locative and temporal adverbs to indicate specific spatial and temporal relations. Furthermore, directionals co-occur with interrogative markers (§ 13.2), imperatives (§ 13.1.5) and tense/aspect-categories (§ 12.5).

Table 14. 2: Directional markers (ALS)

FORM	ORIGINAL GLOSS	FUNCTION
<pè> peʔ	"venir" (2848.)	centric (come towards DC)
<taà> *taʔ	"venir" (3198.) "partícula concursiva" (3197.)	centric (come towards but away from DC)
<cà> kaʔ	"ir, llevar" (2088.)	exocentric (go away from DC)
<gi> *hiʔ	*"allí" (4291.)	exocentric? (be away / future)
<gua> *waʔ	"partícula para tiempos" (3832.)	exocentric? (go away from somewhere)

The two main directionals attested in the ALS are the exocentric marker *ka ʔ'go*, 'take', which indicates a 'motion away from the deictic centre', and the centric marker *pe ʔ'come*, which indicates a 'motion towards the deictic centre' – the deictic centre

being the speaker (cf. Payne 1997:249; Levinson 1999:135). The directionals *taʔ* and *hiʔ* are only attested in singular contexts; their exact function needs to be reconstructed from the comparative data. The directional *waʔ* occurs in the ALS only as a lexical entry and seems to be attested exclusively in the comparative data.

Xinka directionals seem to have grammaticalised from motion verbs. The accent marking on most forms seems to indicate that the directionals end in a glottal stop; it is not fully understood whether the final consonant may have been originally a morphological marker. The directionals *ka* and *wa* can take the subjunctive/irrealis marker *-n* (see § 13.3.2). Table 14. 3 provides an overview of the functional and meaning of directionals in temporal and spatial contexts, and indicates which of the directional are also used as markers for imperative command or interrogative contexts.

Table 14. 3: Verbal origin and functional contexts of directionals in the ALS

DIRECTIONAL	VERBAL ORIGIN		TEMPORAL	SPATIAL	Imp	Int
peʔ	< pe	'come'	future	'come here'	+	+
*taʔ	< ta	'arrive there'	future	'come there'	+	+
waʔ	< *wa	'go away'	*past / future	'go from there'	-	-
kaʔ	< ?	-	past	'go from here'		+
hiʔ	< ?	-	future	'there'	-	-

The centric directionals *peʔ* and *taʔ* are diffused verbal roots of Mayan origin ('come' = pM **tya*, Kp **peht*, [K-03]). The directional *waʔ* seems to derive from the motion verb *wa* 'go' that is likewise a root with wide diffusion in Central American languages; e.g. Cacaopera *wa-la* 'he went' (Campbell 1975:51). It is not clear whether the exocentric markers *kaʔ* and *hiʔ* are also diffused motion verbs.¹⁷⁸ The marker *hiʔ* is attested in the comparative data as a locative adverb with the basic meaning 'there' and may therefore be related to the proximal demonstrative marker *ʔaš* 'this' attested in Maldonado-Xinka (see § 8.5).¹⁷⁹

Based on their Spanish translation and functional contexts, directionals are distinguished here into exocentric and centric operators. Centric markers seem to refer to future concepts, while exocentric directionals occur in contexts in which they point to the past. Although the exocentric directional *waʔ* is also attested in temporal contexts referring to the future, the directional/motion verb *waʔ* may be the source from which the suffixes marking the perfect participle (§ 11.1.2.2) and the anterior/perfect (§ 12.2.3) may have been grammaticalised. The pattern might reflect emic conceptions of time, where future is seen as 'coming towards' the deictic centre, while past is reached by active movement 'from the deictic centre'.

¹⁷⁸ Pipil, for instance, has a locative and preposition *ka* or *kan* which corresponds with the morphosyntactic contexts of the deictic marker in the ALS (cf. Campbell 1985:60).

¹⁷⁹ Both directional forms *kaʔ* and *hiʔ* could also have been grammaticalised from third person singular forms of the existential verbs *ʔuka* 'have, get' and *ayaʔ* 'be'. In this case they would literally translate as *ʔukaʔ* 'there is/was' ("había") and *ʔahiʔ* 'it is' indicating temporal states rather than direction.

14.1.1 Exocentric directionals

Directionals indicating a movement away from the deictic centre include the markers *kaʔ*, *hiʔ* and *waʔ*. The forms *kaʔ* and *waʔ* occur in spatial and temporal function, while *hiʔ* is only attested as a temporal marker. With respect to the dimension of time, *kaʔ* references temporal concepts in the past, while *hiʔ* and *waʔ* can be shown to refer to the future. The distinction of the markers in spatial dimension cannot be determined based on the translation contexts, although they can be assumed to correspond to the temporal function.

14.1.1.1 Directional *kaʔ*

The directional *kaʔ* is defined by Maldonado de Matos as a "partícula significativa para ir, ó llevar" (2088.). This semantic context indicates the exocentric function of the directional. It occurs in combination with locative adverbs marking spatial deixis (14. 1); in this context *kaʔ* always follows the adverb. The stress pattern in example (a) seems to suggest that *kaʔ* cliticises to the adverb. Example (c) shows that the operator is not a bound form; with the centric directional *peʔ* occurring between the locative adverb and the directional *kaʔ*. It is not clear whether example (d) really includes the exocentric directional, or whether the morpheme *ka* is actually identical with the operator that derives positional adjectives (see § 8.7.2.2).

(14. 1)	a. <natuéca> natí=kaʔ LOC:there=EXO 'over there' OT:"allá" (4167.)	b. <uesztú cá> ʔíštu=kaʔ LOC:there=EXO 'over there' OT:"allá" (4745.)
	c. <natuepècà> natí peʔ kaʔ LOC:there CENT EXO 'from/through over there' OT:"por allá" (4168.)	d. <saLca> *saʔ=ka LOC=EXO? 'distant, far' OT:"distante, lejos" (4369.)

In temporal deixis, the directional *kaʔ* is used to indicate past events. In this function it occurs in most contexts with the subjunctive/irrealis-marker *-n* that indicates the non-actuality of the event (14. 3).

(14. 2)	a. <æʋeeca ayac yeál ayapa> ʔak'í-ka ʔaya-k ʔik'aʔ ʔayapa *now-EXO be-VN? NUM:'1' year 'one year from now' OT:"ahora un año" (3594.)				
(14. 3)	<table border="0"> <tr> <td style="vertical-align: top;"> a. <piican> pi:=ka-n NUM:'2'=EXO-SUBJ/IRR 'the day before yesterday' OT:"anteayer" (4288.) </td> <td style="vertical-align: top;"> b. <aLmucán> ʔaʔmu=ka-n today=EXO-SUBJ/IRR 'yesterday' OT:"ayer" (3611.) </td> </tr> <tr> <td style="vertical-align: top;"> c. <ayapacan pè> ʔayapa=ka-n peʔ year=EXO-SUBJ/IRR CENT 'last year' OT:"el año pasado" (2037.) </td> <td></td> </tr> </table>	a. <piican> pi:=ka-n NUM:'2'=EXO-SUBJ/IRR 'the day before yesterday' OT:"anteayer" (4288.)	b. <aLmucán> ʔaʔmu=ka-n today=EXO-SUBJ/IRR 'yesterday' OT:"ayer" (3611.)	c. <ayapacan pè> ʔayapa=ka-n peʔ year=EXO-SUBJ/IRR CENT 'last year' OT:"el año pasado" (2037.)	
a. <piican> pi:=ka-n NUM:'2'=EXO-SUBJ/IRR 'the day before yesterday' OT:"anteayer" (4288.)	b. <aLmucán> ʔaʔmu=ka-n today=EXO-SUBJ/IRR 'yesterday' OT:"ayer" (3611.)				
c. <ayapacan pè> ʔayapa=ka-n peʔ year=EXO-SUBJ/IRR CENT 'last year' OT:"el año pasado" (2037.)					

The question word for location *ka?* 'where?', which could be etymologically related to the exocentric directional, can combine with directionals to specify the direction of movement (14. 4). With the exocentric directional *ka?* the question word indicates the concept 'where to?', with the centric directional *pe?* the concept 'where from?'.
 (14. 4) a. <cá cá>
 ka? **ka?**
 INT:where? EXO
 'where to?'
 OT: "¿dónde?" (3679.)

b. <capè>
 ka **pe?**
 INT:where? CENT
 'where from?'
 OT: "¿de dónde?" (3708.)

In the comparative data from X_G , there are a few examples of exocentric directionals accompanying verbal predicates. In both cases the forms *ka* or *kan* accompany a predicate form of the transitive verb *tura* 'take'.

- (14. 5) a. hin ka tura-ka? naka maʔik
 NEG EXO? carry-2sA PN:2s firewood
 '... (that) you did not carry firewood' (G-JAP)
- b. tur-ey kan neʔa para nin
 take-3sA DIR/EXO BEN Sp:for PN:1s
 '(she) took/brought it there for me' (G-SH)

14.1.1.2 Directional *hi?*

The directional *hi?* is attested only in a few selected contexts of temporal deixis where it occurs with numerals indicating the distance in days into the future. As pointed out above, the directional seems to be etymologically related to the locative adverb *ʔh*, *hi* 'there' ('alli') that is attested in X_G , which may, again, be related to the demonstrative *ʔašʔ* 'this' that is attested in the ALS.

- (14. 6) <pi gi>
 pi **hi(?)**
 NUM:'2' DIR
 'the day after tomorrow'
 OT: "pasado mañana" (4291.)

- (14. 7) <pihi->
 pi hi
 NUM:'2' DIR
 'the day after tomorrow'
 OT: "pasado mañana" (G-S), (Ch-C), (Y-C)

14.1.1.3 Directional *wa?*

The directional *wa?* seems to derive from the intransitive motion verb *wa* 'go (away)' and has probably an exocentric meaning. In the ALS, the directional is only attested in as a lexical entry <gua>. In X_G *wa* is occurs in the same context as the directional *hi?*, i.e. with numerals indicating a distance in days. The following example may suggest that *wa(?)* indicates temporal distance into the future (14. 8). There is no indication that *wa?* refers to a movement with respect to the deictic centre as does the directional *ka?*. In X_Y *ka* and *wa* can co-occur in the same functional context (b).

- (14. 8) a. ʔaʔa peʔ pi=wa-n
tomorrow CENT NUM: '2'=DIR-SUBJ/IRR
'the day after tomorrow' (G-SH)
- b. <pijɕavuac>
pi=ka=wa=k
NUM: '2'=DIR=DIR=?
'the day after tomorrow'
OT: "pasado mañana" (Y-L)

The directional function of *waʔ* seems to be confirmed by similar contexts in X_{Ch} where the forms *waʔ* and *wak* can combine with locative adverbs, indicating more specific concepts of spatial deixis.

- (14. 9)
- | | | | |
|----|---|----|---|
| a. | <haŋ 'gwa>
han wa?
PREP DIR
'over there'
OT:"allá" (Ch-MQb) | b. | <(cerca) huac>
cerca wak
LOC DIR?
'here'
OT:"aquí" (Ch-C) |
| c. | <taijva>
Ø-ta-yi-? wa
3sS-arrive-LIG-STAT DIR
'he arrived/came here'
OT:"venir, venida" (Ch-F) | | |

14.1.2 Centric directionals

Directionals indicating centric movement include the markers *peʔ* and *taʔ* of which the latter is attested in the ALS only as a lexical entry. The basic meaning of the motion verbs from which the directionals derive suggest that *peʔ* may refer to a movement 'towards the deictic centre/speaker', while *taʔ* may indicate a movement 'towards somewhere away from the deictic centre/speaker'. The contexts where these centric directionals are attested do not signal the semantic distinction in all cases.

14.1.2.1 Directional *pe*?

The directional *peʔ* is used in the ALS to indicate (a) direction towards the deictic centre on locative (14. 10) and temporal adverbs (14. 11), (b) future (see § 12.5.1) and (c) deontic mood (see § 13.1.5). In all contexts *peʔ* follows behind its referent form. In example (14. 10) *peʔ* adds a directional meaning to the locative reference. It occurs between the locative adverb and the directional *kaʔ*, which together form the basic locative adverbial; i.e. *natʔ + kaʔ* ('there' + exocentric directional) = 'over there' (Sp. "allá"). Co-occurring with temporal adverbs, *peʔ* indicates distance to a future event (14. 11a). It may combine with numerals to refer to a point in time expressed by the number of days in the future (b).

- (14. 10) <natuepècà>
 natì **pe?** **ka?**
 there CENT EXO
 'from/through over there'
 OT: "por allá" (4168.)

- (14. 11) a. <æʋepè ayac yeál agua>
ʔak'i peʔ ʔaya-k ʔik'aʔ ʔawa
 *now CENT be-VN? NUM:'1' month
 'one month from now'
 OT: "de aquí a un mês" (3597.)
- b. <gualipè>
waʔ-i pe(?)
 NUM:'3' CENT
 'three days from now'
 OT: "de aquí a tres días" (3838.)

Campbell and Kaufman give an example in their field notes that shows the directional *peʔ* following a locative phrase, thus, specifying the direction of the movement 'to leave' expressed by the verbal predicate.

- (14. 12) <Watemala peʔ ʔiʃpaʔ Hwan>
 Watemala peʔ Ø-ʔiʃpa-ʔ Hwan
 TOPN CENT 3sS-leave-STAT Juan
 'Juan (has) left from Guatemala'
 OT: "Juan viene de Guatemala" (G-C&K)

The directional *peʔ* is also used to mark future tense on predicates. In this context, Maldonado de Matos combines it with the TAM adverbials *paʔ* and *naʔ* (see § 12.5.2, § 12.5.3) and the auxiliary *ʔayu* (§ 10.1.3.3) to form the tense categories of *futuro imperfecto*, *futuro perfecto*, *futuro subjuntivo* and *participio de futuro en dus/en rus* of the Latin grammatical paradigm. In all these contexts, *peʔ* indicates a future event. The basic meaning of the marker as a centric directional implies that the future is conceptualised as an event moving towards the speaker.

- (14. 13) a. <an pùla pè>
ʔan-pula peʔ
 1sA-make CENT/FUT
 'I will make (it)'
 OT: "yo haré" (417.)
- b. <ormoon pè ayù>
ʔormo-n peʔ ʔayuʔ
 pick up-1sA CENT/FUT AUX
 'I will have picked it up'
 OT: "yo habré recogido" (936.)
- c. <an acù pà pè>
ʔan-ʔakuʔ paʔ peʔ
 1sS-go PFV CENT/FUT
 'I would have gone'
 OT: "yo fuere o hubiere ido" (1706.)
- d. <a pùla nàL pè>
ʔa-pula naʔ peʔ
 3sA-make IMPFV CENT/FUT
 'to have to make'
 OT: "haber de hacer" (471.)

There are other semantically related contexts in the ALS where *peʔ* seems to mark deontic mood (cf. § 12.5.1, § 13.1.5.1). It can occur with verbal (14. 14a) and nominal predicates (b). The semantics of the directional marker define this as an imperative form that expresses motion, i.e. 'come and do sth.!'; this kind of imperative form is attested in other Mesoamerican languages (Suárez 1983:73).

- (14. 14) a. <capajata pè qui>
ka-pahata peʔ kiʔ
 2sA-pay CENT/DEON INTENS
 'you yourself will have to pay (it)'
 OT: "lo has de pagar" (1876.)
- b. <pulaquiLa pè>
pula-ki-ʔa peʔ
 make-AP-AGT CENT/DEON
 '(the one) who will have to make (it)'
 OT: "el que ha, tiene de hacer" (481.)
- c. <temprano pè acù>
temprano peʔ ʔaku-h
 Sp:early CENT/DEON go-3sP
 'early will/has to be his going = he has to go early'
 OT: "ha de venir temprano" (1964.)

In Maldonado-Xinka *peʔ* always indicates either future or deontic mood when occurring with verbal predicates. In X_{Ch} it also occurs with verbal predicates, indicating primarily movement and direction (14. 15). In combination with the verb *tura* which expresses the exocentric movement of transporting an object, i.e. 'take away' ('llevar'), the directional *peʔ* indicates movement into the opposite direction, i.e. 'bring' ('traer'). The same kind of pattern is known from Mayan languages, e.g. K'iche' *k'am* + *ʔub'ik* [receive + EXO] = 'take (away)'; *k'am* + *ʔuloq* [receive + CENT] = 'bring (here)'. The function of the marker *-k* that occurs in both examples is not understood.

(14. 15)	a.	<turack-pe>		b.	<piric bej>
		tura-k	pe(ʔ)		piri-k
		bring-ʔ	CENT		beh
		'take to = bring'			see-ʔ
		OT: "traer" (Ch-P)			CENT
					'see *towards'
					OT: "to see" (Ch-MA)

14.1.2.2 Directional *taʔ*

The directional *taʔ* 'arrive somewhere away from the deictic centre' is attested in the ALS with imperative predicates (§ 13.1.5.2). In both contexts, the function and meaning of the form have not been clarified. The motion verb *taʔ* that given by Maldonado de Matos as a lexical entry <taà> with the meaning 'come' ("venir") (3198.) is attested in the function of a directional marker in X_{Ch} and X_Y . In X_Y *ta* occurs in the same context as *peʔ* in X_{Ch} , i.e. indicating centric movement on the verb *tura* 'take'.

- (14. 16)
- | |
|-----------------------------------|
| <neu turra ta> |
| nen tura ta |
| PN:1s take DIR |
| 'I take (it) here = I bring (it)' |
| OT: "yo traigo" (Y-C) |

The directional *taʔ* occurs in the ALS with the imperative form *kunta* 'go!' and with the exhortative *ʔantamaʔ* (see § 13.1.4). In both cases the translation contexts do not indicate whether *taʔ* specifies the direction of the imperative action.

(14. 17)	a.	<cun dà tá>		b.	<andamaLtà>
		ku=nta taʔ			ʔanta-maʔ taʔ
		go-IMP:go DIR			IMP:go-EXH DIR
		'you go (with god)'			'let's go!'
		OT: "ve o anda tú con dios" (1823.)			OT: "vámonos (defectivo)" (1827.)

In X_G and X_{Ch} the directional *taʔ* is attested with regular imperative (14. 18) and exhortative predicates (14. 19), but the translation contexts do not provide any indication which direction may be encoded by the marker. In the exhortative examples from X_G , word stress seems to suggest that the directional is cliticised.

(14. 18)	a.	kuri-ʔa	taʔ		b.	nuka-Ø	taʔ	naʔ
		run-IMP.VI	DIR			give-IMP.VT	DIR	DEM
		'run!' (G-PE)				'give him' (G-JAP)		
	c.	<acuy-ta>						
		ʔaku-y	ta(ʔ)					
		go-IMP.VI	DIR					
		'go!'						
		OT: "ádate, vete" (Ch-F)						

- (14. 19) a. ʔanta-maʔ=ta
IMP:go-EXH=DIR
'let's go!' (G-JAP)
- b. <da ta nama>
da ta nima
IMP:go/EXH DIR eat
'let's (go and) eat'
OT:"comamos, vamos a comer" (Ch-F)

In X_G the directional *taʔ* can co-occur with the question word for location *kaʔ* 'where?'. In this context it can indicate movement towards the location referred to by the interrogative (14. 20a), although this does not necessarily reflect in the semantic context (b).

- (14. 20) a. <katáʔ>
ka taʔ
INT:where? DIR
'whereto?'
OT:"¿a qué?" (G-S)
- b. kaʔ ta hiʔ ka-mačite
INT:where? DIR be+3sS_{DEP} 2sP-machete
'where is your machete?' (G-SH)

In X_Y the same markers appear to be used in temporal function, indicating an event in the remote past.

- (14. 21) <may cataj>
may ka ta-h
DEM? INT:where? DIR-?
'anciently, before'
OT:"antiguamente, antes, en otro tiempo" (Y-C)

14.1.3 Other directionals

14.1.3.1 Directional *wi*

The function of the particle *wi* is not well understood. It occurs in the ALS and in the comparative data in various contexts, including imperative and subordinate clauses, which suggests that it may be a directional or has some other kind of deictic function. It is not clear whether all forms of *wi* described below actually refer to the same operator, or whether polysemic or homonymic forms are involved.

Maldonado de Matos indicates the form *wi mukan* 'let/leave' with a prohibitive or imperative meaning. The insertion of the plural clitic *ʔik* between *wi* and *mukan* (b) indicates that *wi* is a free morpheme and not part of the verbal stem. The morphology of *mukan* is not understood. That the form occurs in the third person suggests that *-kan* does not function as the second person dependent-marking cross-referencing suffix. But whether *kan* can be identified as an exocentric directional or whether the form consists of a verbal root and the subjunctive/irrealis suffix *-n* is unresolved. The verb *muka* is only attested with the meaning 'work, toil', which does not seem to be reflected in the translation. If *mukan* was indeed a subordinate form this would imply that *wi* must function as a nominal predicate.

- (14. 22) a. <guimucán>, <guimucàn>
wi muka-n
DIR? ?-SUBJ/IRR
'leave it!'
OT:"¡déjalo tú!" (1845.)
- b. <gui ʔic mucàn>
wi ʔik muka-n
DIR? 3PL ?-SUBJ/IRR
'they may leave it!'
OT:"¡déjenlo aquellos!" (1847.)

This pattern from the ALS is not attested elsewhere in the corpus data. However, there is an example of an imperative construction in X_{Ch} that shows *wi* following the motion verb *ʔaku* and preceding the form *muk*.

- (14. 23) <acugüi, muc nac>
 ʔaku wi muk nak
 go DIR? ? PN:2s
 'go then!'
 OT: "¡andate pues!" (Ch-JC)

Other examples in X_{Ch} and X_G suggest that *wi* always follows motion verbs, which underlines the possibility that the form is a directional marker. The marker is attested in exhortative (14. 24a), negative (b), interrogative (c) and locative clauses (d) with future and past time-reference.

- (14. 24) a. <acugüi rhagona>
 ʔaku wi ra wona
 go DIR? PREP north
 'we go/let's go north'
 OT: "vamos a tierra fría" (Ch-JC)
- b. <jlhamúc acugüi nac>
 ʔamuk ʔaku wi nak
 NEG go DIR? PN:2s
 'you will/do not go'
 OT: "no vas ir vos" (Ch-JC)
- c. <ka a cugüi na'c>
 ka ʔaku wi nak
 INT:dónde go DIR? PN:2s
 'where did you go?'
 OT: "¿a dónde fuiste?" (Ch-JC)
- d. ka? wa? wi? ʔipla=ka-y
 DIR/2sS? go DIR bath=PROG-3sA
 'he was going there to bath' (G-JS)

Schumann (1967) indicates a kind of adverbial *we* that occurs with imperative and subordinate predicates. The form may be identical with the directional *wi*.

- (14. 25) a. <yiwán we>
 yiwa-n we
 descend/enter-SUBJ DIR?
 'that he may enter'
 OT: "para que entre" (G-S)
- b. <yiwán we pa>
 yiwa-n we pa(?)
 descend/enter-1sS_{DEP} DIR? PFV
 'that I may enter'
 OT: "para que yo entrara" (G-S)
- c. <hin rúka we pe>
 hin ruka-Ø we pe(?)
 NEG eat-IMP.VT DIR? IMP
 'that he may not eat'
 OT: "¡que no coma!" (G-S)

There are several cases in the ALS where the marker *wi* (or in final position *wiʔ*) occurs with the form *kan*, which could be identical with the exocentric directional in its function as a marker of temporal deixis that follows adverbs (§ 14.3.2). In this context with temporal adverbs, *kan* can also be followed by other directionals or adverbials (14. 48b), which suggests yet again that *wi* may have a directional/ adverbial function.

- (14. 26) a. <acan canguí>
 ʔakan ka-n wi?
 ADV:like EXO-SUBJ/IRR DIR?
 'it is like this'
 OT: "asi es" (3583.)
- b. <gi canguí>
 hi ka-n wi?
 speak? EXO-SUBJ/IRR DIR?
 'he spoke'
 OT: "aquel dijo" (1831.)
- c. <szâŁ canguí szâma gracia ayaác asUec muc terò>
 šaŁ ka-n wi šama gracia ʔaya:-k [ʔasŁk muk-tero-ʔ]_{ADV}
 good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP} CONJ 1pS-die-STAT
 'it is good that we are in grace when we die'
 OT: "bueno es que estemos en gracia, cuando nos muramos" (1953.)

In Maldonado-Xinka the directional *wi* is furthermore attested in relative clauses that are introduced by the interrogative *šan*. The precise function of *wi* in this context is unclear.

- (14. 27) <maŁca ueaca mà restituir szan gui szac szacà ...>
 [maŁ=ka ʔuka-ka maʔ restituir [šan wi šakša-kaʔ]_{REL/O-COM}]_{AD}
 COND do-2sA COND Sp:replace INT DIR? steal-2sA
 'even if you should have replaced what ? you have stolen, ...'
 OT: "aunque hayáis restituido lo que hurtasteis" (2035.)

14.2 Spatial deixis

14.2.1 Locative adverbs

Spatial deixis is indicated by locative adverbs. The adverbs attested in the ALS suggest the existence of at least a three-way distinction of spatial relations, i.e. local/immedial 'here' (Sp: "aquí"), proximal 'there' (Sp: "allí") and distal 'over there' (Sp: "allá"). It has to be taken into account that the semantic analysis of these spatial concepts is determined by the Spanish translation contexts (cf. § 8.5).

Table 14. 4: Locative adverbs indicating spatial regions (ALS)

FORM			ORIGINAL GLOSS
<naā>	na:(ʔ)	[here]	"aquí" (4134.)
<natuē>	na-ti	[here-DISTANCE]	"allí" (4166.)
<uesztú>	ʔiš-tu	[there-DISTANCE]	"allí" (4744.)

The translation contexts of the locative adverbs in the ALS indicate the deictic categories of 'here'; i.e. *naʔ*, and 'there', i.e. *natʔ* and *ʔštuʔ*. Both translated as "allí" by Maldonado de Matos, the morphological analysis of **na-ti* [*here-DISTANCE] and **ʔš-ti* [*there-DISTANCE] indicates that they refer to different deictic regions. The marker **ti* is not semantically transparent, but could be etymologically related to the root **tšʔ* 'far' (Sp: "lejos"), thus, indicating some concept of "distance". In the comparative data it also occurs in temporal function (§ 14.3.1)

The locative adverbs *naʔ* 'here' and **š* 'there' are parallel to the demonstrative roots *na(ʔ)* 'he, this one' ("él, éste") and *ʔašʔ* 'this' ("éste"). The deictic root *ma-* is attested in locative adverbial function only in X_{Ch} and X_Y (14. 41).

The locative adverb *naʔ* is used as a demonstrative and definite determiner (see § 8.5). The focus-determiner *nana* that is employed by Maldonado de Matos to mark the nominative case may be a combination of the determiner *na* and the locative adverb *naʔ*. In X_G this form is attested in a continuous and discontinuous pattern.

- (14. 28) a. <nana>; <na ... ná>
 na naʔ
 DET LOC:here
 'here'
 OT: "aquí, acá" (G-S)
- b. <na ruka-ka-y na>
 na ruka=ka-y naʔ
 PN:3s eat=PROG-3sA LOC:here
 'he is eating here'
 OT: "él está comiendo aquí" (G-S)
- c. <ruka-ká-y nana>
 ruka=ka-y na naʔ
 eat=PROG-3sA DET LOC
 'he is eating here'
 OT: "él está comiendo aquí" (G-S)
- d. na naʔ na nin hapa=ka-n
 DET LOC DET PN:1s wait=PROG-1sA
 'here I was waiting' (G-JAP)

In X_G the locative adverb 'here' is also attested as *naha?*, which may involve the preposition *ha* (= *ša*) or may be etymologically related to the TAM-adverbial *na?* that is attested in the ALS and X_G (see § 12.5.3).

- (14. 29) a. *na-ha?*
LOC:here-PREP?
'here, now' (G-JS)
- b. *šawu na-ha?*
sit LOC:here-PREP?
'sit here' (G-SH)
- c. *na-ha? tupa-n*
LOC:here-PREP? leave, let-1sA
'I left it here' (G-RHG)

The locative adverb *na-ti* 'there' is realised in the semi-speaker data from X_G mostly as [nati]. It occurs exclusively with the marker *-ya*, which seems to be identified as the existential verb *šaya* 'be in a place'. The form is variously translated as "allí", "allá" or "dónde"; literally, *na-ti-ya* means 'there it is'. The existential marker does not indicate direction but state. It functions as an enclitic, as most attested cases exhibit a stress pattern in which V_2 carries the word accent (14. 30a-c). In clause-final position, however, we find the form *nati=ya-?* (d).

- (14. 30) a. *šawu-ya nati=ya ka-wapa†*
sit-IMP.VI LOC:there-EXIS 2sP-bench
'here is your bench' (G-SH)
- b. *nati=ya mu-†ara man=ta pari*
LOC:there-EXIS 3sS/A-rise DEM=INT sun
'here rises the sun' (G-SH)
- c. *nati=ya ti:ki hi?*
LOC:there-EXIS sleep be+3sS_{DEP}
'here he is sleeping' (G-SH)
- d. *hin ka-hapa-ya nati=ya-?*
NEG 2sS-pass-IMP LOC:there-EXIS-STAT
'do not pass there!' (G-SH)

In X_{Ch} the adverbial form *nati* is attested following the verbal predicate. In the Zeeje-ms. it occurs with the exocentric directional *ka* (14. 31b).

- (14. 31) a. <ta ibar na te Juan?>
Ø-ta:-yi-? bar nati Juan
3sS-come-LIG-STAT PFV LOC Juan
'Juan already came here'
OT: "vino ya el señor Juan?" (Ch-F)
- b. <jai natuca tumuqui>
hay natu ka tumu-ki
PREP LOC EXO QUANT-DISTR
'(here) to all'
OT: "a que todos" (Ch-Z)

In the comparative data we find further locative adverbs that include the locative root *ti* and refer to the concept of 'distance' (see above). It is not entirely clear whether the form *šati#kal* (14. 32a) indicated by Schumann corresponds in any way with **nati*, as no examples are given. The morpheme **-ka†* seems to be identified as the adverbial of restriction 'yet, still' (see § 13.6). In Calderón's data from X_{Ch} and X_Y , the form **šati* combines with the spatial preposition *ha(n)* (= **ša(n)*). Fernández also indicates **kati* instead of **šati*. While *šati-ha?* is given with the meaning 'here' (Sp: "aquí") (b), *šati-han* (respectively *kati-han*) refers to a distal locative 'over there' (Sp: "ahí", "allá") (c-d). Here, locative distance seems to be indicated by the different prepositional forms *ha?* and *han* (see § 9.1.1).

- (14. 32) a. <atikál>
 ʔati=kál
 LOC=ADV:yet, still?
 'there yet = over there'
 OT:"allá" (G-S)
- b. <atijá>
 ʔati-haʔ
 LOC-PREP
 'here'
 OT:"aquí" (Ch-C, Ch-F), "aquí" (Y-C)
- c. <atijan>
 ʔati-han
 LOC-PREP
 'there'
 OT:"ahí" (Ch-C), "allí" (Ch-F); "ahí" (Y-C)
- d. <katiján>
 kati-han
 LOC-PREP
 'there'
 OT:"allí, allá" (Ch-F)

The first element of the locative adverb *ʔš-tu* 'there' could be etymologically related to the demonstrative *ʔašʔ* 'this' that indicates proximal distance. In X_G the deictic clitic *ʔ* or *ʔh* is attested with the meaning 'here' or 'there'. In X_{Ch} the deictic root *ʔš* occurs with the exocentric directional marker *kaʔ*.

- (14. 33) a. ʔih ʔuka-ʔ paʔaʔ
 LOC:here have-STAT PFV
 'there it/he already had' (G-JAP)
- b. ʔi peʔ maʔ k'uʔ paʔaʔ
 LOC:there come DEM/3s MOD PFV
 'there he will already come' (G-JAP)
- c. <ʔiš'kaʔ>, <ʔišaʔ>
 ʔiš kaʔ
 LOC:here EXO
 'there-to'
 OT:"bajó", "abajo" (Ch-MQa)

The distal demonstrative *man* is paralleled by the locative adverb *ma* "allí está" that is only attested in X_{Ch} and X_Y . It co-occurs with the exocentric directional *ka* and the prepositional root *han*, variously translated as "allí" or "allá" (see (14. 41)).

14.2.2 Combinations of locative adverbs and directionals

The basic locative adverbs combine with the directionals *kaʔ* and *peʔ* that always follow the adverb and specify the direction of action.

Table 14. 5: Combination of locative adverbs and directionals (ALS)

FORM	ORIGINAL GLOSS
<naa pè> naʔ peʔ [here + CENT]	"por aquí" (4152.)
<natué ca> natiʔ ka(ʔ) [there + EXO]	"allá" (4167.)
<natué pè ca> natiʔ peʔ ka(ʔ) [there + CENT + EXO]	"por allá" (4168.)
<vesztú cá> ʔištuʔ ka(ʔ) [over there + EXO]	"allá" (4745.)

The locative adverb *natiʔ* combines with the directionals *kaʔ* and *peʔ* to specify movement towards or from the deictic centre that is indicated by the adverb; i.e. *natiʔ ka* 'there to', *natiʔ peʔ ka* 'there from'. It needs to be noted that in the second example (14. 34b) the directional follows immediately behind the adverb, although it refers to the complex form *natiʔ kaʔ* 'over there' and not *natiʔ* 'there' alone. None of these forms is attested in the ALS in syntactic context.

- (14. 34) a. <natuéca>
natiʔ ka(ʔ)
 LOC:there EXO
 'there'
 OT:"allá" (4167.)
- b. <natuepècà>
natiʔ(ʔ) peʔ kaʔ
 LOC:there CENT EXO
 'over there'
 OT:"por allá" (4168.)

semantics of the form are not reflected in the translation context in the Zeeje-ms.

- OT: "a que todos los Españoles" (Ch-Z)

direction.

- LOC:here come/CEN I LOC:here come/CEN I
- to come from here* *to come from here*

locative adverbial *na* / that follows *pe* /.

- 'come here! / hurry up!' (G-RHG), (G-SH)

and X_Y (14.39).

- (14. 38) a. <merè nàL pè>
mere-? **naʔ** **pe?**
 break-STAT IMPFV CENT/IMP
 'to have to break'
 OT: "haber de romper" (646.)
- b. <a pùla nàL pè>
ʔa-pula **naʔ** **pe?**
 3sS-make IMPFV CENT/IMP
 'to have to make'
 OT: "haber de hacer" (471.)
- (14. 39) a. <nape yack>
 na(?) pe(?) yak
 LOC:here come/CENT Sp:already
 '(to) come here already'
 OT: "ya vengo" (Ch-P)
- b. <na pe ratz'a sama>
 na(?) pe(?) raʕ'a-sama
 LOC come/CENT ?-PREP=throw up
 '(to) come to throw up'
 OT: "para arrojar" (Y-C)

In X_Y the locative adverb *naʔ* co-occurs with the exocentric directional *kaʔ* to indicate the locative interrogative 'whereto?' (= "¿a dónde?").

- (14. 40) a. <naca>
 na(?) ka(?)
 LOC:here EXO
 'where(to)?'
 OT: "¿dónde, a dónde?" (Y-C)
- b. <naca curug>
 na(?) ka(?) kuru-h
 LOC:here EXO run-3sP
 'whereto is his running?'
 = 'where did he run to?'
 OT: "¿a dónde huyó?" (Y-C)

The locative adverb *ma* 'there' is only attested in the comparative data, where it co-occurs in most cases with the exocentric directional *ka* and is translated as "allí", "ahí" or "allá".

- (14. 41) a. <majcaján>
 mah ka han
 LOC:there EXO PREP
 'there'
 OT: "allá, ahí" (Ch-C),
 "ahí, allí, allá, ése, ésos" (Y-C)
- b. <maj catá yahui>
 mah ka ta=ya-wi
 LOC:there EXO come=PROG-DIR?
 'he comes there'
 OT: "allá viene" (Y-C)

14.3 Temporal deixis

Temporal deixis is indicated by temporal adverbs which can co-occur with directionals. The use of directional markers that indicate an immediate or just completed action is known from other Mesoamerican languages; in many languages, such directionals are realised as verbal affixes or verbal incorporation (see e.g. Kaufman 1990a:81-82).

14.3.1 Temporal adverbs

Temporal adverbs indicate events at a specific location/point in time. The locative concepts of 'here' and 'there' are paralleled (almost universally) by temporal adverbs expressing the notions of 'now' and 'then' (cf. Anderson & Keenan 1985:297). In Xinka only some of the deictic roots that function as demonstrative adjectives and locative adverbs are also used in the temporal domain.

The temporal adverb **ʔakʔ* occurs in the ALS only in combination with directionals, while *ʔampʔ*, *ʔanik* and *ʔasʔ* are attested independently. One feature of temporal adverbs documented in the ALS is that they all share the initial vowel *a*. It is not entirely clear whether this may be an indication of former morphology, although the last two examples in Table 14. 6 may suggest a prepositional origin of the initial syllable (i.e. *ʔaʔ*).

Ta

FORM		ORIGINAL GLOSS
<ambuè>	ʔampi	"ahora" (3631.)
<aɛue->	*ʔaki-	"ahora" (3593. – 3598.)
<anic>	ʔanik	"hoy" (3632.)
<asuec>	ʔasik	"cuando" (3675.)
<Łuecán>	ʔikan	"cuando" (4032.)
<aŁmúu>	ʔaŁmu	"hoy" (3610.)
<aŁa>	ʔaŁa	"mañana" (1990.)

Comparing the adverbial forms from the ALS with the forms attested in the comparative data (Table 14. 7), the concepts are found to be largely corresponding.

Xinka distinguishes the concepts of 'then-past' and 'then-future' by different roots. The deictic root *ʔaʂi*, which functions as a proximal demonstrative (§ 8.5.2), occurs with the suffix marker *-k* to reference 'then-past'. In X_G the root combines with the marker *-ša* to express the concept of 'now'. The temporal form *ʔka-n* 'then-future' derives from the interrogative marker for future events *ʔki* 'when?' (see § 13.2.1). The suffix *-n* is likely identified as the subjunctive/irrealis marker that indicates non-actual events (see § 13.3).

Ta

	X _M	X _G	X _{Ch}	X _Y
now	ʔampi *ʔak'i		pi-k (luego)	ʔakuʔ ke-ti
when	ʔasi-k			
right now		ʔaši-ša kihki (G-S)	ʔitik	
later, next	ʔika-n			ta-k
always			hay	
today	ʔanik	ʔanik ʔahkwan (G-S)	ʔanik	
	ʔaʔmu: ʔaʔa	ʔaʔa=wa		
tomorrow				
yesterday	ʔaʔmu=ka-n	ʔaʔmu=ka-n	ʔawʔa=ka-n	ʔawaʔa
day before yesterday	pi=ka-n			
day after tomorrow	pi=hi			

The marker *-k* occurs in the ALS also in the form *ʔani-k* 'today', in X_{Ch} with the root **pɪ* 'now' and in X_Y with the motion verb *ta-* 'come' as *ta-k* 'later, then'. It is also attested with markers in interrogative function, i.e. X_{Ch} *lik-wa-k* [when-DIR-?] 'when?' ('¿cuándo?'). The exact function of the suffix is unclear.

The root or marker *tʃ* that seems to denote 'distance' and occurs in Maldonado-Xinka only with locative adverbs (§ 14.2.1) is attested in the comparative data in temporal function.

- (14. 42) a. <hay 'tʰʌ?>
 hay tʰ?
ADV:always DISTANCE
'never'
OT: "nunca" (Ch-MQ)
- b. <keti>
 (ʔa)ke ti
ADV:a bit DISTANCE
'now, today'
OT: "ahora, hoy, este momento" (Y-C)

14.3.2 Combinations of temporal adverbs and directionals

Directional markers co-occur with temporal adverbs and numerals to indicate specific locations in time. In the ALS only the directionals *pe?*, *ka(?)* and *hi?* are attested in this context; in the comparative data we also find *ta?* and *wa?*. The centric directional *pe?* indicates locations in the future time, whereas the exocentric marker *ka(n)* occurs with references to past time.

14.3.2.1 Temporal adverbs and directionals

The directionals *pe?* and *ka(?)* combine with temporal adverbs to indicate the time span that links the past or future with the time of utterance.

The adverb **ʔaki* 'now' is only attested in combination with directional markers. It refers to an event which recurs, or has recurred, after a specified time period (i.e. year, month, week). Marked with the centric directional *pe?* the adverb indicates events in the future relative to the time of utterance, i.e. *ʔaki=pe?* [now=CENT] *'until, in' (*"hasta"), whereas the exocentric directional *ka?* indicates an event that occurred a specified time period ago, i.e. *ʔaki=ka* [now=EXO] *'before/since' (*"hace").

- (14. 43) a. <æʊepè ayac yeál pari>
ʔak'i=pe? **ʔaya-k** **ʔik'aʔ** **pari**
 *now=CENT be-VN? NUM:'1' day
 'eight days ago'
 OT: "de aquí a ocho días" (3596.)
- b. <æʊepè ayac yeál ayapà>
ʔak'i=pe? **ʔaya-k** **ʔik'aʔ** **ʔayapa**
 *now=CENT be-VN? NUM:'1' year
 'a year ago'
 OT: "de aquí a un año" (3598.)
- (14. 44) a. <æʊeca ayac anic>
ʔak'i=ka **ʔaya-k** **ʔanik**
 *now=EXO be-VN? today
 'eight days from now'
 OT: "ahora ocho días" (3593.)
- b. <æʊeca yeal agua>
ʔak'i=ka **ʔik'aʔ** **ʔawa**
 *now=EXO NUM:'1' month
 'a month from now'
 OT: "ahora un mes" (3595.)

In X_G and X_{Ch} the directionals *pe?* and *wa(?)* combine with the temporal noun *ʔaʔa* 'tomorrow', referencing the time period ahead. Schumann indicates the existence of both forms, *ʔaʔa pe?* and *ʔaʔa=wa-k pe?* in X_G . The function of the suffix *-k* is unclear.

- (14. 45) a. *ʔaʔa* *pe?*
 ADV:tomorrow CENT
 '(until) tomorrow' (G-RHG), (G-SH)
- b. <ála peká>
ʔaʔa *pe(?)* *ka?*
 ADV:tomorrow come/CENT EXO
 'tomorrow (they) will come'
 OT: "mañana ven" (G-S)
- c. <álawak petá?>
ʔaʔa=wa-k *pe(?)* *ta?*
 ADV:tomorrow=DIR-? CENT come/DIR
 'tomorrow (you) will come'
 OT: "mañana vienes" (G-S)
- d. <ajlahuac>; <ʔahla'wA?>
ʔaʔa=wa-k/?
 ADV:tomorrow=DIR-?
 'tomorrow'
 OT: "mañana" (Ch-C), (Ch-MQ)

The exocentric marker *ka(?)* indicates a relation to past or completed events. In most of these contexts, it is marked with the subjunctive/irrealis enclitic.

- (14. 46) a. <aŁmucán>
ʔaʔmu=ka-n
 today=EXO-SUBJ/IRR
 'yesterday'
 OT: "ayer" (3611.)
- b. <Łuecán>
ʔi=ka-n
 ?=EXO-SUBJ/IRR
 'when, then (future)'
 OT: "cuando" (4032.)
- (14. 47) a. <ahmukán>
ʔaʔmu=ka-n
 today=EXO-SUBJ/IRR
 'yesterday'
 OT: "ayer" (G-S)
- b. <ahujlaca>, <ʔaβla'kaŋ>
ʔawʔa=ka-n
 today=EXO-SUBJ/IRR
 'yesterday'
 OT: "ayer" (Ch-C), (Ch-MQ)

The centric directional *pe?* co-occurs with the form *ʔayapa* 'year' indicating the semantic context 'last year/ a year ago' ("año pasado") (14. 48a). In this context, the temporal referent *ʔayapa* may also be followed by the exocentric directional form =*ka-n* (b). The centric directional *pe?* is therefore used here to refer to an event that precedes the time of utterance. We can rule out the possibility that Maldonado de Matos may have mistranslated the concept, since Fernández (1938:365) gives the phrase *ʔayapa pe?* in X_{Ch} as "ya ajustó el año", indicating the point in time when a year is completed. This underlines that the function of the marker *pe?* is primarily deictic and not tense-based. The morphology of the temporal referent *ʔayapa* is not entirely clear.

- (14. 48) a. <ayapa pè>
ʔayapa **pe?**
 year CENT
 'last year'
 OT: "el año pasado" (2036.)
- b. <ayapacan pè>
ʔayapa=ka-n **pe?**
 year=EXO-SUBJ/IRR CENT
 'last year'
 OT: "el año pasado" (2037.)

The directional form *kan* is also attested with other adverbials, where it does not indicate a temporal concept (see § 14.1.3).

14.3.2.2 Numeral indicating "distance in days"

Besides temporal adverbs, numerals larger than 'one' can combine with directionals to indicate the temporal distance in days. The directional *pe?* indicates a number of days ahead into the future (14. 49a) (e.g. 'three [days] ahead', 'in three [days]', while the directional *ka* marks the number of days that have passed (b) (e.g. 'two [days] ago'). The exocentric directional takes the subjunctive/irrealis enclitic (see above).

- (14. 49) a. <gualı pe>
waʔ-i **pe(?)**
 NUM: '3' CENT
 'three days from now'
 OT: "de aquí a tres días" (3838.)
- b. <piican>
pi: =**ka-n**
 NUM: '2'=EXO-SUBJ/IRR
 'two (days) ago = day before yesterday'
 OT: "anteayer" (4288.)

The deictic term for the 'day after tomorrow' combines the numeral *pi* 'two', which indicates the distance in days, and the directional clitic *hi(?)*. In X_Y we also find a combination of the directional clitics *hi* and *kan* (14. 50c), which is, however, only attested in the Lehmann/Sapper-data.

- (14. 50) a. <pi gi>
pi=hi(?)
 NUM:'2'=LOC:there
 'two (days) there = day after tomorrow'
 OT:"pasado mañana" (4291.)
- b. <pihi->
 pi=hi
 NUM:'2'=LOC:there
 'two (days) there = day after tomorrow'
 OT:"pasado mañana" (G-S), (Ch-C), (Y-C)
- c. <pihi-can>
 pi=hi=ka-n
 NUM:'2'=LOC:there-EXO-SUBJ/IRR
 'two (days) there ago = the day before yesterday'
 OT:"anteayer" (Y-L)

In the semi-speaker data, the term 'day after tomorrow' is also attested as a compound that combines the temporal adverb *ʔaʔa peʔ* 'tomorrow' and the term *pi-wan*, which consists of the numeral *pi* 'two', the directional *wa* and the suffix *-n*. The context confirms that the directional *waʔ* functions as an indicator of future events (see § 14.1.1).

- (14. 51) ʔaʔa peʔ pi=wa-n
 tomorrow CENT NUM:'2'=DIR-SUBJ/IRR
 'the day after tomorrow' (G-SH)

14.3.3 Temporal compounds

Temporal deixis is furthermore expressed by nominal compounds that consist of a temporal noun and a modifying temporal adverb that may be followed by a directional marker. The only nouns attested in this context are *pari* 'day' and *siʔma* 'night'. The modifying temporal adverb always precedes the temporal head noun.

- (14. 52) a. <anic pari>
ʔanik pari
 now/today day
 'today'
 OT:"en este día" (3633.)
- b. <aʔmucansuema>
ʔaʔmu =ka-n siʔma
 today =EXO-SUBJ/IRR night
 'tonight'
 OT:"anoche" (3612.)
- c. <pi cán suema>
pi =ka-n siʔma
 NUM:'2'=EXO-SUBJ/IRR night
 'last/yesterday night'
 OT:"antenoche" (4289.)

In X_{Ch} temporal compounds can also consist of a temporal noun and a modifying numeral in initial position.

- (14. 53) a. <tacaz pari>
 takas pari
 NUM:'6' day
 'six days (ago) = last week'
 OT:"semana pasada" (Ch-F)
- b. <'kaʔ 'pari>
 kaʔ pari
 NUM:'1' day
 'one/first day = early'
 OT:"temprano" (Ch-MQ)

Other types of temporal reference are expressed by nominal compounds that combine a moderative modifier (*puy-* or *ʕ'k'-* 'half') and a temporal noun. The difference of the two moderative concepts cannot be concluded from the given contexts.

- (14. 54) a. <puy pari>
puy-pari
 *half/mid?-day
 'midday'
 OT:"medio día" (4365.)
- b. <txuʔesʔema>
ʕ'ik'-siʔma
 half/mid-night
 'midnight'
 OT:"media noche" (4655.)

- (14. 55) a. <puy pari>
 puy pari
 *half/mid? day
 'midday' (G-RHG)
- b. <tzucu-tzuma>
 č'uku-č'uma
 half/mid-night
 'midnight'
 OT:"media noche" (Y-L)

Another category of lexical temporal deixis are compounds that combine a prepositional form and a temporal noun (*sɨʔma* or *pari*) to reference a specific temporal position in the day or night. The concept of referring to the early morning as "in the night" is known from other Mesoamerican languages. In X_{Ch} the reference to the early morning can also be indicated by a prepositional compound that involves the head noun *pari* 'day' (14. 57b).

- (14. 56) <szamac sɨema>
 šama-k sɨma
 PREP-? night
 'in the night = in the morning'
 OT:"de mañana" (4430.)
- (14. 57) a. <jansúma>
 han suʔma
 PREP night
 'in the night = early in the morning'
 OT:"temprano de la mañana" (Ch-C)
- b. <xambari>
 šam pari
 PREP day
 'in the day = early in the morning'
 OT:"temprano en la mañana" (Ch-F)

14.4 Directionals in interrogative clause

The question word for location *kaʔ* 'where?' may combine with other deictic clitics. It is possible that the question word and the exocentric directional *kaʔ* are related forms.

In the ALS we find the interrogative *kaʔ* attested with both directionals. With the exocentric directional *kaʔ* it indicates direction of movement to the location ('where to?'), while the centric directional *peʔ* indicates the opposite direction, i.e. movement from the location ('where from?').

- (14. 58) a. <cáca>
 kaʔ =kaʔ
 INT:where?=EXO
 'where(to)'
 OT:"¿dónde?" (3679.)
- b. <capè>
 kaʔ(ʔ)=peʔ
 INT:where?=CENT
 'wherefrom?'
 OT:"¿de dónde?" (3708.)

The interrogative function of *kaʔ* is confirmed in the comparative data. The examples attested in X_G and X_{Ch} correspond with the forms in the ALS. It is not entirely clear whether the form *ʔakaʔ* that occurs in X_G (14. 59b) corresponds etymologically to the exocentric marker or whether it is a Spanish loan ("acá"). In X_{Ch} *kaʔ* is also attested as a question word for time (d); i.e. *hasta kaʔ* = *'where to in time?' (*"hasta dónde?") = 'when?' ("cuándo?").

- (14. 59) a. *kaʔ* *ta:=ya-ka*
 INT come=PROG-2sS_{DEP}
 'where are you going/coming?' (G-RHG)
- b. *hay* *ʔaka* *pula-kaʔ* *naka*
 PREP INT/LOC make-2sA PN:2s
 'whereto do you make it?' (G-JS)

- c. <ka a cugüi na'c>
 ka(?) ʔaku-*wa nak
 INT go-ANT PN:2s
 'where did you go to?'
 OT: "¿a dónde fuiste?" (Ch-JC)
- d. <hasta cá cuay ta' na'c>
 hasta ka? kway ta nak
 Sp:until when FUT come PN:2s
 'until when are you going to come?'
 OT: "¿hasta cuándo vas a venir?" (Ch-JC)

The question marker in X_Y combines the exocentric marker $ka(?)$ with the preceding locative adverb $na(?)$ 'here', rendering $na? + ka?$ [here + EXO/INT] 'whereto?'.
 (14. 60)

a. <naca> na=ka LOC:here=EXO 'where?' OT: "¿dónde, a dónde?" (Y-C)	b. <naca curug> na=ka kuru-h LOC:here=EXO run-3sP 'whereto is his running = where did he run to?' OT: "¿a dónde huyó?" (Y-C)

The combination of $ka?$ and the directional $pe?$ is also attested in X_G and X_{Ch} (14. 61). In X_G the interrogative marker can furthermore combine with the directional $ta?$ (14. 62); this form is not attested in the ALS.

- (14. 61) <kapi>
 ka=pi(?)
 INT=CENT
 'wherefrom?'
 OT: "de dónde? (interrogativo)" (Ch-C)
- | | |
|--|---|
| <p>(14. 62) a. <katá?>
 ka=ta?
 INT:where?=DIR:come
 'whereto?'
 OT: "¿a qué?" (G-S)</p> | <p>b. ka?ta? hi? ka-mačíte
 INT=DIR be+3sS_{DEP} 2sP-machete
 'where is your machete?' (G-SH)</p> |
|--|---|

15 Grammatical relations

The subject-matter of this chapter are the characteristics of grammatical relations in Maldonado-Xinka. In § 15.1 we will define the coding properties of grammatical roles of core arguments of the predicate based on the SAO-model. § 15.2 will discuss the syntactic functions of these core arguments and the types of syntactic alignment in Xinka, including splits and indications regarding the historical development of the system.

Since grammatical relations in Xinka are neither an exclusively morphological nor a purely syntactic phenomenon, they are treated here in a separate chapter – even if that leads to some repetition of previous and following chapters.

15.1 Predicate arguments

Grammatical roles are defined here on the basis of the SAO-model as developed and extended by Dixon and other scholars (cf. Dixon 1994; Dixon & Aikhenvald 2000; Comrie 1981; see Zuñiga 2006:5). Xinka exhibits a split in the marking and treatment of intransitive and transitive subjects, which is best represented and described on the bases of this model.

According to Dixon's model there are two universal clause types: intransitive clauses and transitive clauses. A clause consists of a predicate and a number of predicate arguments which are determined by the predicate type. Core arguments are essential and need to accompany the predicate. Peripheral non-core arguments, or adjuncts, can be omitted without the predicate losing its meaning or grammatical acceptance (see Dixon & Aikhenvald 2000:2; Dixon 2006:7; Zuñiga 2006:5).

An intransitive predicate has one core argument (i.e. the intransitive subject), whereas a transitive predicate has two core arguments (i.e. the transitive subject and object). Some verbs require another argument that extends the core; such clauses are called ditransitive or extended intransitive. The core arguments of intransitive and transitive clauses function in terms of grammatical roles which are defined as S, A, O and E (see Dixon & Aikhenvald 2000:3; Dixon 2006:7):

- S the single core argument and sole actant of an intransitive predicate
- A the core argument or actant which "initiates or controls the activity" expressed by the transitive predicate
- O the core argument or actant which "is affected by the activity" expressed by the transitive predicate
- E the extended argument which states the recipient, beneficiary or stimulus of an activity expressed by the ditransitive predicate

It needs to be noted that in Dixon's model A and O are not identical with the semantic roles of 'agent' and 'patient' (see e.g. Dixon 2006:7; Zuñiga 2006:6).

The valency of a predicate is determined by the number of core arguments. Intransitive clauses are monovalent (S), transitive clauses bivalent (A, O) and ditransitive clauses are trivalent (A, O, E) (Dixon & Aikhenvald 2000:3).

15.1.1 Coding properties of grammatical roles

Grammatical roles in Xinka are primarily coded by verb agreement, i.e. by anaphoric reference on the verb. Constituent order encodes grammatical roles where participant reference does not specify S/A on the verb.

VERB AGREEMENT: Person agreement is marked with different sets of cross-referencing affixes depending on transitivity, tense/aspect and syntactic hierarchy (main clause/dependent clause) of verbs. Only S and A are cross-referenced on the verb.

Table 15. 1: Cross-referencing affixes marking S and A core arguments on verbs (ALS)

	SNPAST	SPAST	S _{DEP}	ANPAST	APAST	A _{DEP}
1s	ʔan-	ʔan-	-n	ʔan-	-n	-n
2s	ka-	ka-	-kaʔ	ka-	-kaʔ	-kan
3s	ʔa-	Ø-	-(ʔ)	mu-	-y	-y
1p	muk-	muk-	-k	muk-	-k	-k
2p	ka-... ʔay	ka-... ʔay	-ka ʔay	ka-... ʔay	-ka ʔay	-
3p	ʔa-... (ki)ʔik	Ø-... (ki)ʔik	-y (ki)ʔik	mu-... (ki)ʔik	-y (ki)ʔik	-

Table 15. 1 illustrates that S in main clauses is exclusively marked with cross-referencing prefixes, while A is marked by a prefix in the nonpast/imperfective and by a cross-referencing suffix in the past/perfective. In dependent clauses all predicates take cross-referencing suffixes. However, there are examples of regular prefix-marking on dependent predicates in the Maldonado-data. These are not confirmed anywhere in the comparative material.

While the cross-referencing prefixes and suffixes of the first and second are the same in the different functional contexts, the S and A roles of the third person in nonpast/past and in main/dependent clause are marked with distinct cross-referencing affixes.

As pointed out in § 6, the affixes employed to cross-reference A on the verb are by and large the same sets used to mark the possessor on nouns. The A role in a nonpast context is cross-referenced by the same prefixes that are used to mark alienably possessed nouns. The set of cross-referencing suffixes employed to mark A in contexts with past-time reference is – with exception of the third person – identical with the set used to mark inalienable possession.

The same set of suffixes used to mark A in past contexts is also used on intransitive verbs to mark S in certain subordinate clauses. In these dependent contexts, A is marked with a special set of suffixes that seems to morphologically integrate the set of verbal cross-referencing suffixes and the subjunctive marker *-n* (see § 6.2.2.3). The distribution of anaphoric person markers shows that S and A are encoded identically in nonpast main clauses in the first and second person (accusative alignment) and marked distinctly in the past, on subordinate predicates, as well as in the third person in past and nonpast contexts (tripartite alignment).

Anaphoric participant reference can be accompanied by coreferential independent pronouns. The same pronouns that are used to mark S and A also occur in O function. Although Schumann indicates the existence of a separate set of

object-pronouns, it has been shown in the relevant section that these forms can be identified as intensifier-reflexive pronouns instead (see § 7.2.2.3).

CONSTITUENT ORDER: The role of noun phrases is also determined by their position within the clause. Constituent order never has the O argument preceding the predicate; in reverse logic, noun phrases preceding the predicate can be identified as constituents in S function.

As there is no case marking in Xinka, Maldonado de Matos had to employ other categories to fill the slots for cases in the Latin model of grammar. To mark the semantic roles of the core arguments S and O he used different determiners, defining that noun phrases in S function (i.e. nominative case) are preceded by the focus determiner *nana*, while noun phrases in O function (i.e. accusative case) are preceded by the definite determiner *na* (see § 8.5.1). It is argued in § 8.5.1 that the ALS and the comparative data provide sufficient examples to suggest that the usage of the different types of determiners in Xinka depends on pragmatic aspects rather than on the grammatical role of the noun phrase.

15.1.2 Subjects

The main device for coding S and A core arguments in Xinka is by means of anaphoric reference on the verb. As indicated in the preceding § 15.1.1, S and A are marked with different sets of cross-referencing affixes depending on tense/aspect. While A on predicates with past-time reference is marked with cross-referencing suffixes, predicates with a nonpast/imperfective focus employ prefixes to cross-reference the transitive subject. S is generally marked with cross-referencing prefixes. The different sets of S/A prefixes only differ in the third person.

15.1.2.1 S arguments

Participant reference of S arguments on the verb is different in main and dependent clauses. In main clauses, cross-referencing prefixes are employed, while S in dependent clauses is cross-referenced with suffixes.

There are several examples in the ALS where cross-referencing prefixes mark S on subordinate predicates; i.e. the marking of the predicate in main and dependent clause is the same. This marking pattern is not confirmed in the comparative data and it is therefore suggested to be an influence from Spanish, if not simply the result of Maldonado de Matos' translation of the Spanish sample sentences.

In nonpast/imperfective main clauses S is marked with cross-referencing prefixes; the third person is marked with the prefix *ʔa-*. This pattern is attested in the ALS and in the comparative data.

(15.1)	a. <an màra> ʔan-ma:ra 1sS-rest 'I rest' OT: "yo descanso" (1471.) c. <a màra> ʔa-ma:ra 3sS-rest 'he/she rests OT: "aquel descansa" (1473.)	b. <cà acù> ka-ʔakuʔ 2sS-go 'you go' OT: "tú vas" (1643.)

- (15. 2) a. na nin_s ʔan-ti:ki
DET PN:1s 1sS-sleep
'I sleep' (G-SH)
- b. <a kagui>
ʔa-k'awi
3sS-cry
'he/she cries'
OT:"llora" (Ch-Z)
- c. <nay micó>
nay_s *mí(k)-ko
PN:2s 2sS-go
'you go'
OT:"tú vas" (Y-C)

In past/perfective main clauses S is marked with the same cross-referencing prefixes used on intransitive nonpast predicates; however, the third person is unmarked. All past/perfective predicates take the resultative-stative suffix -ʔ (§ 12.2.1.2). The pattern is attested in the ALS and the comparative data.

- (15. 3) a. <an mārà>
ʔan-ma:ra-ʔ
1sS-rest-STAT
'I rested'
OT:"yo descansé" (1483.)
- b. <ca guacà>
ka-waka-ʔ
2sS-go away-STAT
'you went away'
OT:"tú te fuistes, has ido" (1740.)
- c. <guasztà>
Ø-wašta-ʔ
3sS-enter-STAT
'he entered'
OT:"aquel entró" (1976.)
- (15. 4) a. ʔan-ʔu+u-ʔ
1sS-fall-STAT
'I fell' (G-RHG)
- b. na naka ka-ʔaku-ʔ
DET PN:2s 2sS-go-STAT
'you went' (G-SH)
- c. <tu'pΛʔ>
Ø-tupa-ʔ
3sS-stay-STAT
'it/he stayed'
OT:"se quedó" (Ch-MQ)

In dependent clauses different forms of person-marking are attested on the subordinate predicate. In the ALS most attested cases of intransitive verbs in subordinate contexts involve the existential verb *ʔaya-*, which only takes dependent-marking cross-referencing suffixes. The form is attested in complement (15. 5a) and adverbial clauses (b).

- (15. 5) a. <guenaqui nà pè agi aLa temprano pè acùg>
wena=ki naʔ peʔ ʔahi ʔaʔa temprano peʔ ʔaku-h
INT:who=INTENS LOC come be+3sS_{DEP} tomorrow Sp:early FUT/IMP go-3sP
'(the one) who has to be here tomorrow, has to go early (= early must be his-going)'
OT:"el que ha de estar mañana aquí, ha de venir temprano" (1964.)
- b. <tu εaL paraqui upu ayacà Linà nà ayàLa>
tuk'aʔ para ki ʔupu ʔaya-kaʔ ʔinaʔ na ʔayaʔa man
CONJ CONJ stand be-2sS_{DEP} PREP DET woman DEM
'because if you are standing with that woman'
OT:"si por haber de estar con esa mujer..." (1955.)

Other examples from the ALS suggest that subordinate intransitive predicates in adverbial clauses exhibit the same inflectional properties as intransitive predicates in main clauses, i.e. they are marked with cross-referencing prefixes, or when referring to past-time events also take the stative suffix -ʔ.

- (15. 6) a. <asɔec uLù na macu tiusz>
ʔasik Ø-ʔuʔu-ʔ maku tyuš
 CONJ 3sS-fall-STAT house Sp:god
 'when the church fell (= collapsed)'
 OT: "... cuando cayó la iglesia" (2018.)
- b. <asɔec muc terò>
ʔasik muk-tero
 CONJ 1pS-die
 'when we die'
 OT: "...cuando nos muramos" (1953.)

In contrast, the comparative data indicate that S in subordinate clauses is marked with dependent cross-referencing suffixes in nonpast and past. Cross-referencing prefixes are not attested on subordinate predicates in the comparative data.

- (15. 7) a. <yiwán we>
 yiwa-n we
 descend/enter-1sS_{DEP} COND?
 '(that) I would enter'
 OT: "para que entre" (G-S)
- b. <wašatay sima>
 wašata-y sima
 enter-3sS_{DEP} night
 '(... that) it became evening'
 OT: "ya entró la noche" (Ch-F)

Basic word order in Xinka has S constituents following the predicate, i.e. VS. This pattern is attested in the ALS in main (15. 8a) as well as in dependent clauses (b). The pattern is confirmed in the comparative data, where we also find examples of the oblique constituent being inserted between the verbal predicate and the S constituent (b).

- (15. 8) a. <taí na maestro...>
Ø-ta:-yi-ʔ [na maestro]_s
 3sS-come-LIG-STAT DET Sp:teacher
 'the teacher came'
 OT: "vino el maestro" (2043.)
- b. <... asɔec uLù na macu tiusz>
[ʔasik Ø-ʔuʔu-ʔ [maku tyuš]_s]
 CONJ 3sS-fall-STAT house Sp:god
 'when the church fell (= collapsed)'
 OT: "... cuando cayó la iglesia" (2018.)
- (15. 9) a. Ø-ti(:)ki-ʔa [naka]_s
 3sS-sleep-PAST.ACT PN:2s
 'you slept' (G-SH)
- b. mu-wiriki [hina ʔayaʔa]_{OBL} [pari]_{S/A}
 3sS-speak PREP moon sun
 'the sun speaks with the moon' (G-SH)

Whenever the S constituent is focused it can also precede the predicate. In the comparative data this word order pattern is mostly attested with main clauses that are not preceded or followed by adverbial clauses (15. 10). In X_G S arguments in initial position are usually preceded by a determiner; this is not confirmed in X_Y where we find unmarked pronouns preceding the predicate (b).

- (15. 10) a. [na naka]_s ka-ʔaku-ʔ
 DET PN:2s 2sS-go-STAT
 'you went' (G-SH)
- b. <nec muc saprikilá>
 [nek]_s muk-sapriki-laʔ
 PN:1p 1pS-degrain-PAST.ACT
 'we degraigned'
 OT: "desgranemos la mazorca" (Y-C)

15.1.2.2 *A arguments*

In the ALS (15. 11) as well as in the comparative data (15. 12), anaphoric marking of A differs in past and nonpast contexts.

On nonpast/imperfective transitive main predicates A is marked with cross-referencing prefixes that are identical with the prefixes used to mark the possessor on alienably possessed nouns. This set of cross-referencing prefixes differs from the prefixes used to mark S on intransitive verbs only in the third person that is marked with the prefix *mu-* when referencing A.

- (15. 11) a. <an nariLa>
ʔan-nariʔa
 1sA-teach
 'I teach'
 OT: "yo enseño" (1977.)
- b. <cà mere>
ka-mere
 2sA-break
 'you break it'
 OT: "tú rompes" (575.)
- c. <mu piri>
mu-piri
 3sA-see
 'he/she sees it'
 OT: "aquel ve" (739.)
- (15. 12) a. ʔan-ʔiki naka
 1sA-find PN:2s
 'I find you' (G-SH)
- b. <n'di mac nihuá>
 nti *mik-niwa
 INT:what? 2sA-want
 'what do you want?'
 OT: "¿qué quieres?" (Ch-C)
- c. <mu suca nay pelu>
 mu-sukanay pe:lu(?)
 3sA-bite PN:2s Sp:dog
 'the dog bites you'
 OT: "el perro te muerde" (Y-C)

Impersonal marking with third person prefix *ʔa-* on transitive verbs; in the comparative data also with transitive predicates where it seems to mark an impersonal subject in most cases.

- (15. 13) a. <na šuunik apuʔa? hina? wati>
 na šu:nik ʔa-puʔa-? hina? wati
 DET pot 3sS-make-STAT PREP clay
 'the pot is made with clay'
 OT: "las ollas se hacen de barro" (G-C&K)
- b. <inaj man aulí>
 ʔi-nah man ʔa-ʔuli:
 ?-PN:3s DEM 3sA-want
 'he wants (it)'
 OT: "él quiere" (Y-C)

Maldonado de Matos also employs the form to indicate infinitives and gerunds.

- (15. 14) a. <a oròmo>
ʔa-ʔoromo
 3sS-pick up
 'one picks up = to pick up'
 OT: "recoger" (976.)
- b. <aLi a óròmo>
ʔaʔi ʔa-ʔoromo
 PREP.CAUS 3sS-pick up
 'by/because of picking up'
 OT: "por recoger" (983.)

On past/perfective transitive main predicates, A is marked with cross-referencing suffixes. In the first and second person the suffixes employed to mark A in the past are the same that mark the possessor on inalienably possessed nouns. In the third

person different markers are used, i.e. A is marked with the suffix *-y*, while the possessor is indicated with *-h*. This pattern is attested in the ALS (15. 15) and the comparative data (15. 16).

- (15. 15) a. <piriyn>
piri:-n
 see-1sA
 'I saw (it)'
 OT: "yo vi, he visto" (749.)
- b. <mere cà>
mere-ka?
 break-2sA
 'you broke (it)'
 OT: "tú rompistes" (587.)
- c. <ormo i>
?or(o)mo-y
 pick up-3sA
 'he picked it up'
 OT: "aquel recogió..." (920.)
- (15. 16) a. kiri-n nin_A ti_Ao
 pull-1sA PN:1s yucca
 'I harvested yucca' (G-SH)
- b. tero-y kah miyao
 kill-3sA INDEF chicken
 'he/she killed a chicken' (G-SH)
- c. <inay avuájla culay>
 ?inay_A ?awa?ta kula-y
 PN:2s yesterday want-2sf
 'you wanted (it) yesterday'
 OT: "ayer quisite tú" (Y-C)

In dependent transitive clauses, there are different patterns of marking A on the subordinate predicate. In the ALS, we find transitive predicates with prefixes cross-referencing A in complement clauses with S function (15. 17) as well as in adverbial clauses with coreferential subject to the main clause (15. 18); in both examples the context is habitual/nonpast.

- (15. 17) <szàŁ Łan muc pùla na oracion>
šaŁ ?an muk-pula na oración
 good OPT 1pA-make DET Sp:prayer
 'they say, it is good (that) we make (= say) our prayer'
 OT: "dicen que es bueno que hagamos oración" (2028.)
- (15. 18) <aŁi ca yguitzi na misza [...]a szin ca pùla na jamaà>
?aŁi ka-?iwi?i? na miša ?ašin ka-pula na hama?
 because 2sA-hear DET Sp:mass NEG 2sA-make DET pecado
 'because you hear the mass ... you do not make (= commit) sin'
 OT: "por oir misa [...] no pecas" (2044.)

Other examples in the ALS, show that A on subordinate transitive predicates in adverbial clauses can be marked with dependent-marking cross-referencing suffixes; in the given examples the predicates indicate past- or future-time reference.

- (15. 19) a. <yguitzi nàŁ u ea can naca na misza>
?iwi?i?i na?Ł ?uka-kan naka na miša
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)
- b. <ca tà pè aŁa uea can confesar>
ka-ta? pe? ?aŁa ?uka-kan confesar
 2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

A arguments are marked with the same cross-referencing affixes as the possessor on nouns. It has been pointed out in § 15.1.1 that nonpast/imperfective A and alienably possessed nouns employ the same set of prefixes, while past/perfective A and inalienably possessed nouns are marked with suffixes (with the exception of the third person). It is not uncommon for Amerindian languages to employ the same set of pronominal affixes to mark agent and possessor. What is, however, striking is that the tense/aspect-based split of A marking reflects in the alienable/inalienable contrast of noun inflection. We will touch upon the possible semantic ties of this pattern with respect to splits and the historical development of the alignment system in § 15.2.1.

Basic word order is VOA. There are few examples of this constituent order in the ALS. Transitive clauses where the A argument follows the O constituent in final position are more regularly attested in the comparative data.

- (15. 20) <capa uisziçà paŁ naŁ na misza nana naca ay ...>
ka=pa **?uyši-ka?** **paŁ** **na(?)†** **[na** **miša]**_O **[nana naka ?ay]**_A
 EXO=PFV hear-2sA PFV IMPFV DET Sp:mass FOC PN:2p 2PL
 'you (pl.) had already heard the mass.'
 OT: "ya habíais oído misa vosotros..." (2018.)
- (15. 21) a. **†ika-ka?** **[nin]**_O **[naka]**_A b. <sukí nay pelu>
 find-2sA PN:1s PN:2s suk-i **[nay]**_O **[pe:lu(?)]**_A
 'you found me' (G-SH) bite-3sA PN:2s Sp:dog
 'the dog bit you'
 OT: "el perro te mordió" (Y-C)

The majority of declarative transitive main clauses in the ALS follow the word order pattern AVO. Nouns are preceded by the focus determiner *nana* (15. 22a), while pronouns in clause-initial position occur without any pragmatic marker (b).

- (15. 22) a. <nana Pedro púlai (na) macùg aŁ mucàn>
[nana Pedro]_A **pula-y** **[(na) maku-h]**_O **[?a†mukan]**_{ADV}
 FOC Pedro make-3sA DET house-3sP yesterday
 '(the) Pedro made (=built) his house yesterday'
 OT: "Pedro hizo su casa ayer" (2017.)
- b. <nem an nariŁa naturiŁi>
[nem]_A **?an-nariŁa** **[na turi-†i]**_O
 PN:1s 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1978.)

In X_G pronouns preceding the transitive predicate are attested with the definite determiner *na*, while in X_Y clause-initial pronouns in A function are never indicated with any determiners (15. 23c). Transitive clauses in which the O argument is not expressed (b) follow the same pattern, i.e. the A constituent precedes the predicate.

- (15. 23) a. **[na nin]**_A **hapa=ka-n** **[tero-wa?-†a]**_O
 DET PN:1s wait=PROG-1sA_{DEP} die-ANT-AGT
 'I was awaiting the dead' (G-JAP)
- b. **[na nin]**_{S/A} **šuka-n** **pa?a?**
 DET PN:1s eat-1sA PFV
 'I have already eaten' (G-JAP)

- c. <nen nitz'api elay>
 [nen]_A n-7iɕ'api [ʔelay]_O
 PN:1s 1sA-stick out tongue
 'I stick out (my) tongue'
 OT: "saco (afuera) la lengua" (Y-C)

The word order VAO is rare in ALS, but more commonly attested in independent declarative clauses in the comparative data.

- (15. 24) <yguitzi nàl u ɛa can naca na misza>
 ʔiwiɕ'i naʔt ʔuka-kan [naka]_A [na miša]_O
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)
- (15. 25) a. kiri-n [nin]_A [tiʔa]_O b. <n'dala ni pumu>
 pick/pull-1sA PN:1s yucca n-tala [ni]_A [pumu]_O
 'I harvested yucca' (G-SH) 1sA-burn PN:1s incense
 'I burn copal'
 OT: "quemó copal" (Ch-C)

In dependent transitive clauses, the A argument is omitted if it is coreferential with the subject of the main clause. Coreferential A arguments are only expressed in subordinate clauses, when the predicate is nonfinite and does not carry anaphoric person-marking.

- (15. 26) hapa-n [tura-n [nin]_A [naka]_O]_{ADV}
 pass by-1sA take-SUBJ PN:1s PN:2s
 'I passed by to take/bring you' (G-JAP)

15.1.3 Objects and obliques

Xinka objects and peripheral or oblique arguments have in common that they do not show verb agreement and can either be coded by constituent order or as noun phrases that are introduced by non-spatial prepositions. The coding of O arguments is quite straightforward. Extended arguments are treated differently than O arguments, but some types of E arguments are encoded the same way as peripheral or oblique arguments, i.e. arguments that do not have a grammatical relation to the predicate.

15.1.3.1 O arguments

The O argument is defined as the actant that is affected by the activity expressed by a transitive verb. In Maldonado-Xinka as well as in the comparative data, O arguments that are attested in main and dependent clauses can exhibit the following formal properties.

Most O arguments are complex noun phrases consisting of the determiner *na* and a noun (15. 27). In the ALS, the focus determiner *nana* does not occur with noun phrases in O function. In the comparative data most noun phrases attested in O function are unmarked (15. 28).

- (15. 27) <an ima naL na misza>
ʔan-ima naʔt [na miša]_o
 1sA-say IMPFV DET Sp:mass
 'I said/spoke the mass'
 OT: "yo decía misa" (1982.)
- (15. 28) a. mu-kunu [mapu]_o
 3sA-buy tortilla
 'he buys tortillas' (G-SH)
- b. <pirín nak>
 piri-n [nak]_o
 see-1sA PN:2s
 'I saw you'
 OT: "desde que te vi" (Ch-F)

An O argument can be expressed by a possessive noun phrase, which can either be regularly marked with possessor-marking affixes (15. 29a) or can consist of an independent pronoun in possessor-marking function preceding a Spanish noun (b).

- (15. 29) a. <neŁa ca pùla ca cumbision...>
[neŁa ka-pula [ka-kumbisyon]_o **l**_{Adv}
 BEN 2sA-make 2sP-Sp:confession
 'in order to make your confession'
 OT: "para confesarte ..." (2042.)
- b. <ca ùea condenar naca anima ...>
ka-ʔuka condenar [naka anima]_o
 2sA-do Sp:condemn PN:2s Sp:soul
 'you condemn your soul'
 OT: "... te has de condenar..." (1955.)

In the ALS as well as in the comparative data we find that independent pronouns in O function are never preceded by a determiner. They are thus formally identical with pronouns in S/A function (see preceding § 15.1.2).

- (15. 30) <... an uea naŁqui absolver naca ...>
ʔan-ʔuka na(ʔ)t ki absolver [naka]_o
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I (myself) absolved you'
 OT: "... te absolviera yo ..." (2036.)
- (15. 31) <pirín nak>
 piri-n [nak]_o
 see-1sA PN:2s
 'I saw you'
 OT: "desde que te vi" (Ch-F)

In the comparative data O arguments can also consist in a simple unmarked noun (15. 32) or in a complement clause (15. 33).

- (15. 32) mu-kunu [mapu]_o
 3sA-buy tortilla
 'he buys tortillas' (G-SH)
- (15. 33) ʔime-y [nankun paʔaʔ]_o
 tell-3sA late/afternoon PFV
 'he said (that it is) already afternoon/late' (G-SH)

With respect to the constituent order, O arguments always follow the predicate; if the A argument is present in form of a separate constituent (and not just by anaphoric marking) it can follow (VOA), precede (AVO) or be inserted in between the other constituents (VAO).

- (15. 34) a. <mu uea can pè qui confesar naca na palè ca nuca pà pè tiyg na doctrina>
mu-ʔuka ka-n peʔ ki confesar [naka]_o [na pale]_A
 3sA-do EXO-SUBJ/IRR FUT INTENS Sp:confess PN:2s DET Sp:priest
 'the priest (himself) will confess you'
 OT: "te confesará el padre..." (2038.)
- b. <nem an nariŁa naturiŁi>
[nem]_A ʔan-nariŁa [na turi-Łi]_o
 PN:1s 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1978.)
- c. <yguitzĩ nàŁ u ea can naca na misza>
ʔiwiŁ'i naʔ ʔuka-kan [naka]_A [na miša]_o
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)

The different patterns of constituent order (VOA, AVO and VAO) are confirmed in the comparative data (15. 35).

- (15. 35) a. <sukĩ nay pelu>
 suk-i [nay]_o [pe:lu(ʔ)]_A
 bite-3sA PN:2s Sp:dog
 'the dog bit you'
 OT: "el perro te mordió" (Y-C)
- b. <n'dala ni pumu>
 n-tala [ni]_A [pumu]_o
 1sA-burn PN:1s incense
 'I burn copal'
 OT: "quemó copal" (Ch-C)
- c. [na naka]_A simi-kaʔ [ʔuraya]_o
 DET PN:2s put out-2sA fire
 'you put out the fire' (G-SH)

With respect to grammatical roles and relations it is important to note that the neutral third person singular participant 'it' in O function can be omitted. Examples of this pattern are found in the comparative data. These clauses are not less transitive than clauses where the O argument is represented by a constituent.

- (15. 36) a. [na nin]_A šuka-n paʔaʔ
 DET PN:1s eat-1sA PFV
 'I have already eaten' (G-JAP)
- b. <najli pulay>
 [naŁi]_A pula-y
 PN:3p make-3s/pA
 'they made (it)'
 OT: "ellos hacen" (Ch-C)

15.1.3.2 E arguments

Extended arguments can occur with (di)transitive and with intransitive verbs. Ditransitive predicates distinguish direct object and an indirect object. Which of the two is indicated by the extended argument depends on the type of verb.

Constituent order has the indirect object never preceding the predicate; in clauses with extended arguments, the E argument always follows the predicate. Most examples of ditransitive clause follow the word order pattern VOE, but the pattern VEO is also attested.

Coding strategies for indirect objects are described in § 10.1.1.6; they include:

- IO introduced by the non-spatial preposition *ti: ʔ* which is classified by Maldonado de Matos as a dative case marker (§ 9.2.2)
- representation by pronoun preceded by the determiner *na*
- unmarked noun phrases that follow the direct object (DO) in a pattern VOE

The preposition *ti: ʔ* that is classified by Maldonado de Matos as a dative case marker is attested to mark IO in main and dependent clauses. It can either precede a NP as a free preposition (15. 37a), or occur in pronominal function with a possessor-marking suffix (b). In subordinate clauses, the E argument can be inserted between the other constituents, i.e. VEO. This is the only case where this word order is attested, in all other contexts, the E arguments follows, i.e. VOE.

- (15. 37) a. <nana maestro mu nariLa pè na doctrina tiy turiLi>
[nana maestro]_A mu-nariLa peʔ [na doctrina]_O ti:ʔ turi-ti]_E
 FOC Sp:teacher 3sA-teach CENT DET Sp:creed IO child-PL
 'the teacher will teach the children the creed'
 OT: "el maestro enseñará la doctrina a los niños" (2020.)
- b. <... ca nuca pà pè tiyg na doctrina>
ka-nuka paʔ peʔ [ti:ʔ-h]_E [na doctrina]_O
 2sA-give PFV FUT IO-3sP DET Sp:creed
 '(if) you gave (= told) him the creed'
 OT: "... si le dieras la doctrina" (2038.)

In the comparative data pronouns representing the IO are preceded by the determiner *na*, while pronouns in O function (see preceding section) are unmarked.

- (15. 38) a. nuk-ey [na ku=\$unik]_O [na nin]_E
 give-3sA DET MOD=pot DET PN:1s
 '... (that) he/you gave me the pot' (G-JS)
- b. nuka-kaʔ [mapu]_O [na man]_E
 give-2sA tortilla DET DEM
 'you gave him (a) tortilla' (G-RHG)

There are examples of ditransitive constructions in X_G , where the 'thing given/asked' functions as the IO and the pronoun representing the 'recipient' follows the verb as a DO. The pronouns in DO function are not preceded by *na* as pronouns in IO function are (see above). In the following examples, the noun phrase functioning as the extended argument is unmarked and follows the other constituents in the regular ditransitive order VOE.

- (15. 39) a. nuka-n naka_O [kah mapu]_E
 give-1sA PN:2s INDEF tortilla
 'I gave you a tortilla' (G-RHG)
- b. [na hura-ʔe]_A kiʔ šə mu-niwa nin_O waruʔ_E
 DET man-PL INTENS Sp:REFL? 3pA-ask PN:1s matate
 'the men ask me a lot of/for nets' (G-JAP)

There are examples of relative clauses in the ALS and the comparative data, where semantically ditransitive verbs occur in the function of a subordinate predicate that is only accompanied by the DO, while the constituent referencing the IO of the underlying ditransitive verb functions as the head of the relative clause.

- (15. 40) <pulacà ma ayù na penitencia nucai naca na palè>
pula-kaʔ ma ʔayuʔ [na penitencia [nuka-y [naka]_O [na pale]_A]_{REL}_O
 make-2sA COND AUX DET Sp:penitence give-3sA PN:2s DET Sp:priest
 '(if) you should have made the penitence (that) the priest gave you last year'
 OT: "si hubieras hecho la penitencia que te dio el padre el año pasado" (2036.)
- (15. 41) [man=ta ʔima-kaʔ [nin]_O]_{REL}
 DEM=INT tell-2sA PN:1s
 'that what you told me' (G-SH)

Extended arguments can also occur with intransitive predicates. In the following example of an intransitive relative clause the unmarked intransitive verb is followed by an E argument in form of prepositional phrase.

- (15. 42) [man=ta wiriki [hina naka]_E]_{REL}
 DEM=INT speak PREP PN:2s
 'that what he speaks (with/to) you' (G-SH)

15.1.3.3 Oblique arguments

Oblique or peripheral arguments (also called adjuncts) are noun phrases that lack a grammatical relation to the predicate (see Payne 1997:129). Thus, by definition they can never exhibit verb agreement. In Xinka, non-core or oblique arguments are generally introduced by prepositions. Non-spatial prepositions introduce the causee (*ʔaʔi*, § 9.2.3), instrument/ company (*ʔi-*, § 9.2.4) and maybe even the beneficiary (*neʔa*; § 9.2.1), while spatial prepositions (§ 9.1) specify the location of the event. Constituent order shows oblique arguments always in position following the predicate of the clause.

Noun phrases introduced by the preposition *ʔaʔi*, which specify the causee of an action, are attested in the ALS with the auxiliary verb construction with *pata-* (§ 10.1.3.6) that is classified by Maldonado de Matos as a passive (15. 43). In the comparative data we find this oblique argument following stative participles (15. 44).

- (15. 43) <nana macu pulà pataguàg aLi Pedro>
nana maku pula pata-wa-h **[ʔaʔi** **Pedro]_{OBL}**
 FOC house make *accomplish-ANT-3sP PREP.CAUS Pedro
 'this is the house (that) was made by Pedro'
 OT: "la casa fue hecha por Pedro" (4775.)

- (15. 44) kawi-ʔ [ʔaʔi šuraya]_{OBL}
 cry-STAT PREP.CAUS girl
 '(I) cried because of the girl' (G-SH)

Noun phrases specifying that the action is carried out together with another subject are introduced by the comitative or instrumental preposition *ʔina(ʔ)*. In the ALS as well as in the comparative data, the preposition can function pronominally as an oblique argument on its own. The argument always follows the predicate.

- (15. 45) a. <... paraqui upu ayacà Linà nà ayàLa man>
para ki ʔupu ʔaya-kaʔ [ʔi-naʔ na ʔayaʔa man]_{OBL}
 Sp:for stand be-2s_{DEP} PREP-DEM DET woman DEM
 'because you are standing with this woman'
 OT: "...por haber de estar con esa mujer" (1955.)
- b. <ca- puriqui Linà>
ka-puriki [ʔi-naʔ]_{OBL}
 2sS-get married PREP-DEM/PN:3s
 'you get married with him/her'
 OT: "...te casas con élla" (1955.)

The comparative data show that the S/A argument can precede (S/A V OBL) or follow (V S/A OBL) the predicate or be entirely omitted (V OBL); the oblique argument can also be inserted between the two constituents (V OBL S/A).

- (15. 46) a. [na nin]_{S/A} wirki-4a [hi-naʔ]_{OBL}
 DET PN:1s speak-PAST.ACT PREP-DEM/PN:3s
 'I spoke with him/her' (G-SH)
- c. mu-weriki [hi-na ʔaya4a]_{OBL} pari_{S/A}
 3sA-speak PREP-DEM moon sun
 'the sun speaks with the moon' (G-SH)
- d. šuka-n nin_{S/A} [hi-na naʔ]_{OBL}
 eat-1sA PN:1s PREP-DEM PN:3s
 'I ate with him/her' (G-JAP)
- b. <acuy-li na frac>
 ʔaku-y [li-na frac]_{OBL}
 go-IMP.VI PREP-DEM man
 'go with the man'
 OT: "vete con el hombre" (Ch-F)

15.2 Alignment patterns

The term 'alignment' is used here to refer to the distributional pattern of the morphological and syntactic coding devices for grammatical roles, including nominative-accusative, ergative-absolutive, active-stative and tripartite alignments (see Harris & Campbell 1995:240; see also Zuñiga 2006:7). A language can show distinct alignment patterns depending on functional context such as person, tense, syntactic hierarchy etc. (cf. Payne 1997:144f.; Zuñiga 2006:12-13). Such different patterns are labelled as split systems (Dixon 1994, Payne 1997) or polynomy (Zuñiga 2006:12).

As described in the previous section, verb agreement and word order are the primary devices in Xinka for marking core roles, hence morphologically realising alignment (cf. Givón 2001:175). S/A arguments are anaphorically marked on the verb. S/A constituents can be focused and precede the predicate, while O arguments, which do not show any verb agreement, stay unmarked and always follow the predicate. Extended and oblique arguments regularly follow the predicate and the direct object constituent; obliques are generally introduced by non-spatial prepositions.

Based on these coding principles, we can identify different patterns of alignment in Xinka. The O argument is always marked separately, which suggests that Xinka has accusative alignment. With respect to subject marking we can say that S and A are marked by the same set of cross-referencing affixes in the nonpast/imperfective and by separate sets (S = prefixes; A = suffixes) in past/perfective contexts. Xinka therefore has a split system of grammatical relations, in which nonpast predicates in main clauses exhibit accusative alignment, while past predicates manifest a tripartite system, in which S, A and O are marked distinctly. This pattern is attested in all Xinka varieties for basic anaphoric person markers as well as for cross-referencing affixes of the structural type 2 (see § 6.1.1, § 6.2.1). It needs to be mentioned that the third person is marked differently in all three contexts where prefixes are employed; i.e. the prefix sets A₁, A₂ and A₃ differ in the third person (see Table 6. 1; § 6). This means that third person predicates in the nonpast/imperfective also show tripartite alignment.

Table 15. 2: Distribution of affix types with subject roles in main clauses (ALS)

	S	A	O	
Nonpast/imperfective	prefix-A ₂	prefix-A ₁	free NP	nominative/accusative tripartite (in third person)
Past/perfective	prefix-A ₃	suffix-B ₂	free NP	tripartite

Alignment patterns *can* also differ between main and subordinate clauses. While the above Table 15. 2 indicates the alignment in independent and main clauses, the following Table 15. 3 illustrates the cross-referencing employed in some purposive, relative/interrogative and complement clauses (in subordinate clauses that are introduced by subordinators/conjunctions the same anaphoric person-markers are used as in main clauses). On subordinate predicates S and A are both cross-referenced with suffixes. However, this does not indicate accusative alignment, as the suffix-set B₃ that is employed to mark A on subordinate transitive verbs differs from the set B₂, which is used to mark A in past/perfective main clauses and S in subordinate contexts. The origin of the set of dependent-marking suffixes is discussed in § 6.2.2.3.

Table 15. 3: Distribution of affix types with subject roles in subordinate clauses (ALS)

	S	A	O	
Nonpast/imperfective	suffix-B ₂	suffix-B ₃	free NP	tripartite/accusative?
Past/perfective	suffix-B ₂	suffix-B ₃	free NP	tripartite/accusative?

It needs to be mentioned that on the syntactic level, the different core roles and grammatical functions; i.e. S, A, O, possessor and antecedent control of intensifier-reflexives, are all marked by the same form of the independent pronoun. When occurring in the function of extended arguments, the comparative data indicate that independent pronouns are preceded by *na* (see § 15.1.3.2).

In the following section we will look at the different alignment patterns in more detail, focussing primarily on the parameters that condition the splits (§ 15.2.1) and on the properties of the system of grammatical relations resulting from these patterns (§ 15.2.2).

15.2.1 Splits

It is not uncommon for split-systems to be based on tense/aspect, third person distinction or syntactic hierarchy (see e.g. Dixon 1994:84-94). In this section, we will analyse the patterns of accusative and tripartite alignment in Xinka and discuss indications as to which of the two patterns may be the innovative one.

15.2.1.1 Tense/aspect

The tense/aspect-based split of the Xinka system of grammatical relations is interesting for several reasons, as it may provide clues about (former) ergative tendencies of the language.

In the first and second person, alignment in nonpast/imperfective main clauses is fully nominative-accusative with S and A both being marked by the same prefixes and the O argument being represented by a separate constituent, e.g. an unmarked

independent pronoun or a noun phrase preceded by the determiner *na*. In the third person different prefixes are used by Maldonado de Matos to mark S and A.

Table 15. 4: Alignment in nonpast/imperfective main clauses (ALS)

	S	A	O	
1s	an-	an-	nin	accusative
2s	ka-	ka-	naka	accusative
3s	ʔa-	mu-	nah	tripartite

In past/perfective main clauses, S is anaphorically marked with prefixes, while A is cross-referenced on the verb with suffixes. In the third person, S is unmarked and A likewise represented by a suffix.

Table 15. 5: Alignment in past/perfective main clauses (ALS)

	S	A	O	
1s	an-	-n	nin	tripartite
2s	ka-	-ka	naka	tripartite
3s	Ø-	-y	nah	tripartite

To find out which of the patterns may be the innovative one – the tripartite past/perfective or the accusative nonpast/imperfective – one needs to look at possible scenarios of development. In languages that show a tense/aspect-based split between a nominative/accusative and an ergative/ absolutive system, the ergative occurs in the past/perfective and the accusative in the nonpast/ imperfective (see Payne 1997:158). According to DeLancey, past/perfective predicates indicate completed events, which are the endpoints of an action that are encoded in the semantic role of a patient. Past/perfectives are patient-oriented, while nonpast/imperfectives are agent-oriented. Patient-oriented grammatical relations are organised in an ergative/absolutive pattern, while agent-oriented ones tend to be expressed as nominative/accusative systems (DeLancey 1982, 1990 *apud* Payne 1997:159).

It is certainly not permitted to simply reverse the argument here and say that the separate marking of S and A in the past/perfective indicates an ergative/absolutive system. Alignment in Xinka is not ergative-absolutive, but tripartite. There is no case in which S and O would be identically marked, nor are there any indications for syntactic ergativity, which would not occur without ergative alignment on the morphological level (see Dixon 1994:158). However, the marking pattern in the past/perfective (as well as in the third person) shows that S and A are treated differently in these contexts, as they would be in ergative languages. Thus, the overdistinction of the three core arguments could hypothetically be the result of a former ergative system of person-marking on the verb that could have changed into an accusative system in nonpast contexts, with formerly identical treatment of S and O being lost.

It has been previously mentioned that one property of the system of person-marking in Xinka requires closer attention. The possessor of inalienably possessed nouns is marked by the same set of cross-referencing prefixes as A in past/perfective main clauses or S in dependent clauses. In the third person nominal and verbal markers differ, however, with the third person possessor being marked by *-h* (set B₁), while the verbal S/A is expressed by *-y* (set B₂).

Table 15. 6: Cross-referencing affixes in the third person-marking possessor and A

	A	Possessor
mu-	nonpast/imperfective	alienably possessed
-y	past/perfective	inalienably possessed
-h		

It is a familiar feature in Amerindian languages to have a morphological correspondence in the anaphoric markers of transitive participant reference and possessor-marking (e.g. Mayan, Arawak). In the neighbouring Western Mayan languages that have split-ergative alignment, identical marking of A and possessor is only given in the completive aspect.¹⁸⁰ The Xinka system exhibits correspondence of alienable possession and transitive nonpast/imperfective marking on the one hand, and inalienable possession and transitive past/perfective on the other.

Semantically, the past/perfective subject and the inalienable possessor may share the notion of "intimate belonging", i.e. the agent of a past-time event could be seen as the "possessor" of the action that was carried out. Such a semantic interpretation could indicate that verbal marking of A in past main clauses and of S in dependent clauses may be of nominal origin (see also § 15.2.1.2). With regard to the diachronic development of the system of person-marking in Xinka, there are indications that seem to suggest that person-marking suffixes are morphologically older than prefixes. Possessor-marking suffixes occur in several functional contexts and are employed in independent pronominal forms, prepositions and in X_{Ch} , X_{Jum} and X_Y with cross-referencing prefixes of the structural type 2 (see § 6.1.1). This seems to support the idea that inalienable possessor-marking may be an earlier coding device than prefix-marking for alienable possession. With respect to alignment patterns, priority of the set of person-marking suffixes may confirm the nominal origin of A-marking in past/perfective, but does not clarify whether S and A were treated differently at an earlier stage of language development.

15.2.1.2 Main clause/subordinate clause

The majority of examples of subordinate clauses in the ALS and the comparative data indicate the predicate of the subordinate clause as a balanced form that takes the same affixes to cross-reference S/A as predicates in independent or main clauses. However, there are certain contexts in which subordinate predicates are deranked and marked with cross-referencing suffixes including: (1) purposive clauses with predicates that are coreferential with the predicate of the main clause (§ 17.2.3); (2) complement clauses that originate from embedded relative clauses (§ 17.1); (3) interrogative clauses that follow the same syntactic pattern as cleft-constructions (§ 16.2.4); (4) subordinate negative clauses (§ 10.1.1.5; § 10.1.2.6); (5) auxiliaries in AVCs in which the auxiliary follows the lexical verb (§ 10.1.3) and (6) future

¹⁸⁰ It may seem in some way tempting to regard tense/aspect-based tripartite alignment in Xinka as an influence from Western Mayan split-ergative languages. However, there is little evidence for such a scenario given that in WM languages it is the absolutive pronoun marking S and O that takes the suffix position. It needs to be mentioned that the neighbouring WM language Ch'orti' also exhibits tripartite alignment (see e.g. Dixon 1994:100); an influence from Xinka may, however, be doubted for the same reason.

constructions with grammaticalised auxiliary *kuya-* that employ dependent-marking suffixes on the auxiliary or in the short form with *kuy* on the lexical verb (see § 12.4.1). One feature all these contexts have in common is that the subordinate clause is not introduced by a subordinator or conjunction. Coreferentiality does not seem to be a factor as dependent-marking suffixes are attested on subordinate predicates that share the subject of the main clause as well as on those whose subjects differ.

The following table only indicates the anaphoric reference suffixes that are confirmed in the ALS in the abovementioned contexts (not all of these markers are attested in all contexts).

Table 15. 7: Alignment of subordinate predicates (ALS)

	S	A	O	
1s	-n	-n	nin	tripartite/accusative?
2s	-ka?	-kan	naka, nay	tripartite/accusative?
3s	-y, (-ʔ)	-y	nah, na?	tripartite

There is no tense/aspect distinction for anaphoric person-marking on subordinate predicates, i.e. the same suffixes are used with present- and past-time reference. However, the suffixes employed to reference subordinate S and A differ. While subordinate S is marked with the same cross-referencing suffixes (set B₂) as past/perfective A, subordinate predicates reference A with suffixes of set B₃. It has been shown in § 6.2.1 that these transitive dependent-marking suffixes seem to morphologically combine the pronominal marker and the subjunctive suffix *-n* (§ 13.3) that may have grammaticalised from the interrogative marker *ʔn*, functioning as a subordinator following unmarked coreferential transitive predicates in purposive clauses (§ 17.2.3). In the first person singular the subordinate roles of S and A are both marked with the same pronominal suffix, suggesting accusative alignment. However, it needs to be taken into account that the suffix for A may – in analogy to the morphology of other transitive dependent-marking suffixes – include the subjunctive *-n* that may have become assimilated to the first person suffix.

Alignment in subordinate clauses is thus tripartite with S, A and O all being marked by different forms. That subordinate predicates are coded differently from predicates in main clauses can be seen as a form of deranking. The question that poses itself here is that of the relation of subordinate S/A marking (set B₂ and B₃) with past/perfective A marking (set B₂) on the one hand, and inalienable possessor-marking (set B₁) on the other.

There are certain contexts in which verbs tend to be treated morphosyntactically as nouns including subordination, auxiliation and negation (Heine & Kuteva 2007:100). These are precisely the contexts where in Xinka dependent-marking cross-referencing suffixes are used. It is cross-linguistically attested that subordinate clauses can diachronically develop either via expansion from nouns, or via integration from another independent clause (Heine & Kuteva 2007:214).

The mechanism of expansion from nouns works the same way in complement and adverbial clauses (Heine & Kuteva 2007:216). In Carib languages, for instance, subordinate clauses generally have the status of nominalisations and show an ergative pattern (Dixon 1994:192). It was hypothesised in the previous section that the marking of A in past/perfective could have a nominal origin (see § 15.2.1.1).

Participant reference on subordinate predicates in Xinka could therefore also have developed from inalienable possessor-marking.

The core roles of past/perfective A and subordinate S are treated the same way, as they are both marked with set B₂ of cross-referencing suffixes. It is cross-linguistically not uncommon for subordinate predicates to exhibit the same morphology as predicates with past-time reference in main clauses. Dixon has shown that splits conditioned by different morphological marking in main and subordinate clauses are related to tense/aspect-based and semantically conditioned splits. He argues that there is a tendency for purposive clauses with coreferential subject that indicate intent, and therefore a future/imperfective event, to require accusative marking; while relativised clauses by majority resemble past tense/perfective and might exhibit ergative characteristics (Dixon 1994:101-102).¹⁸¹ It is not fully understood whether Xinka cross-referencing suffixes are the traces of former ergativity or the result of ergative tendencies acquired through a nominal channel of subordination.

15.2.1.3 Third person

In the third person, verb agreement of S and A is expressed by different anaphoric markers. To mark S agreement in the nonpast/imperfective Maldonado de Matos employs the cross-referencing prefix *ʔa-*; in the comparative data that same prefix is also attested in the function of an impersonal marker that occurs also with transitive verbs. In the past/perfective, S agreement in the third person is zero-marked. With respect to A agreement the ALS and comparative data confirm that A is marked in nonpast/imperfective contexts with the prefix *mu-* that is also attested in nominal context as the marker for the alienable possessor. In the past/perfective A is marked with the suffix *-y*, which is not identical with the nominal suffix for inalienable possession that is used in the first and second person. The third person inalienable possessor is instead marked with *-h* that is also attested with deictic categories such as independent and intensifier-reflexive pronouns as well as prepositions. The transitive cross-referencing suffix *-y* also marks S/A on subordinate predicates.

The following chart includes the basic third person markers attested in all Xinka varieties. The markers of the structural type 2 that is attested in X_{Ch}, X_{Jum} and X_Y are not included.

Table 15. 8: Alignment in the third person (ALS)

	S	A	O	
nonpast	ʔa-	mu-	nah	tripartite
past	Ø-	-y	nah	tripartite
dependent	-y / (-ʔ)	-y	nah, naʔ	tripartite

The third person is the pronominal category that shows most differentiation. Parameters that may lead to the diversification of third person categories in

¹⁸¹ "An ergative system is less likely to be employed when the clause refers to something that has not yet happened (in future tense), or is not complete (imperfective aspect) or did not happen (negative polarity), or where the emphasis is on the agent's role (imperative mood)" (Dixon 1994:101)

languages include among many others gender, impersonal, formal/deferential address, same subject/different subject (= switch-reference), reflexive/ non-reflexive etc. Some of these parameters may have contributed to the development of diversified third person-marking in Xinka.

The nonpast/imperfective S role is marked with the prefix *ʔa-*, which is also employed by Maldonado de Matos to mark infinitive and gerunds, and is attested in the comparative data as an impersonal prefix that can occur with transitive verbs and signal a detransitive predicate (§ 10.1.2.2). It is not clear whether the impersonal may originally have been a fourth person that grammaticalised as a general third person prefix in the given context, or whether the general S non-past marker became employed as an impersonal prefix.

The prefix *mu-* is employed as a marker for A in the nonpast/imperfective and alienable possessor-marking. The prefix is only attested in transitive and possessive contexts. Intransitive verbs marked with *mu-* can be identified as forms with an extended argument. It is possible that the marker is related to the morpheme **mɨ*, which combines with the set of possessor-marking suffixes to form the structural type 2 of cross-referencing prefixes that is attested in X_{Ch} , X_{Jum} and X_Y (see § 6.1.1).

Zero-marking of the third person is cross-linguistically well attested. It is common in Mesoamerican languages, but occurs also in South American languages where we often find only one third person category to be zero-marked (see Siewierska 2008). Non-overtness of the third person is often explained either as the result of economising, i.e. the loss of a form due to frequency, or by the fact that the third person is often treated as a non-person and therefore lower on the iconicity scale (Siewierska 2008:6-7). In Xinka the S role in the past/perfective is unmarked, which affects singular and plural forms. It has been mentioned that the third person past/perfective is structurally identical with the stative-resultative participle, suggesting a nominal origin of the form (see § 15.2.1.1).

Past/perfective A and subordinate S/A roles are marked with the suffix **-y*. In X_{Ch} and X_{Jum} , transitive subordinate verbs employ *-yin* (see Campbell & Kaufman: field notes), which illustrates that subordinate A marking has grammaticalised from pronominal suffixes and the subjunctive marker *-n* or *=in* (see § 6.2.2.3, § 15.2.1.2). It has been argued in the previous sections that subordinate and past/perfective A marking could be of nominal origin. With respect to this it needs to be mentioned that nouns ending in a consonant mark the inalienable possessor with *-i* (see § 6.2.2.1).

In X_{Ch} and X_{Jum} Campbell and Kaufman have documented a formal person in singular and plural which employs the anaphoric person marker *-y* that occurs in form of a cross-referencing suffix (§ 6.2.1) and as part of complex structural type 2-prefixes (§ 6.1.1) and independent pronouns (§ 7.1.1). In the nominal categories the formal person suffix *-y* contrasts with the nominal third person suffix *-h*; as a cross-referencing suffix on verbal predicates *-y* marks third and formal person. It has been argued before that persistent influence of local Spanish may have led to the use of the third person marker in formal contexts.

The processes that have given rise to these different types of third person markers and subsequently to third person tripartite alignment may be different from the ones that cause the splits with respect to tense/aspect and syntactic hierarchy. Cross-linguistic studies on alignment typology have shown that semantic properties of nominals can have an impact on verb agreement. On the resulting 'indexability

hierarchy', third persons are outranked by other speech act participants, which reflects for example in split-ergativity patterns that exhibit accusative alignment for first and second persons, while third persons are marked ergatively (see Zuñiga 2006:20-22). According to DeLancey's theory, third persons are 'natural endpoints' of an action and therefore more likely to be recorded in the semantic role of the patient (id:21). Third persons are therefore more likely to show ergative alignment than first and second persons.

Whether the split in third person grammatical relations in Xinka has to be interpreted accordingly is unclear. In such a scenario the third person A markers *mu-* and *-y* would function as ergative markers that would contrast with *ʔa-* and the zero-marked S categories. It seems plausible that the same markers that express agency would also function as possessors. However, the identical treatment of S and O that is basic for the definition of ergative alignment is not confirmed. The ALS and the comparative data furthermore indicate that imperative predicates can be marked with the impersonal or nonpast/imperfective S prefix *ʔa-* as well as with the cross-referencing suffix *-y*, depending on the transitivity status of the verb (§ 13.1.3), which would likewise not coincide with an ergative pattern.

In another scenario of development the different markers for the third person could also have developed from a system of switch-reference in which inflectional markers on the verbal predicate indicate whether the subjects of main and subordinate clause are coreferential or not (see Payne 1997:322). It has been shown that the anterior-marker *-wa* is a switch-reference sensitive operator that occurs only in subordinate clauses in which the subject is different from the subject of the main clause (see § 12.2.3).¹⁸² Nevertheless, the use of dependent-marking suffixes does not seem to be determined by the coreferentiality status of the subject, but depends on whether the subordinate clause developed from a nominal pattern via expansion or from an independent clause that has been integrated (see previous section).

15.2.2 *Properties of grammatical relations*

Some of the properties of morphological and syntactic alignment in Xinka can contribute to understand the function and origin of the splits in Xinka grammatical relations. In this section we will look at pivot constraints and the patterns of omission of coreferential S/A and O arguments in linked clauses (§ 15.2.2.1). § 15.2.2.2 will deal with grammatical relations of core arguments that manifest in the targets of valency-changing operations. Both sections will show that Xinka has the properties of an accusative alignment system.

15.2.2.1 *Pivot-restrictions and coreferential deletion of core-arguments*

The term 'pivot' is used to describe syntactic equivalence (of S and A, or of S and O) in clause-linking operations (Dixon 1994:11). Languages that treat S and A the same way are said to have an 'S/A pivot' and indicate a system of accusative syntax. Same treatment of S and A is seen in the deletion of coreferential subjects in the

¹⁸² Languages with switch-reference typically do not have passives or antipassives (Dixon 1994:153-4) and exhibit AOV basic word order. This would imply that if Xinka had a full switch-reference system at an earlier stage of its development, it would also have had no passive/antipassive and AOV word order.

second linked (coordinate or subordinate) clause; the omission of a coreferential O argument in the second clause indicates ergative syntax (Dixon 1994:11).

In Xinka coreferential argument omission only seems to affect the S/A argument, i.e. Xinka has a S/A pivot constraint. Examples are attested in the ALS and the comparative data with coordinate clauses as well as with subordinate clauses. Arguments shared by both clauses are only expressed in the main clause.

There are cases of clause linking in the ALS, which involve the omission of the subordinate subject constituent in cases where the S of the intransitive main clause is coreferential with the subject of the subordinate clause that can either be transitive ($S_1 = A_1$) (15. 47a) or intransitive ($S_1 = S_2$) (b). In both examples below, the subordinate predicate is deranked and takes either dependent-marking cross-referencing suffixes (b) or the subjunctive marker = *ʔn* (a), which might assimilate the third person singular cross-referencing suffix -y (see § 10.1.1.2).

- (15. 47) a. <taɪ na maestro nari ʔa in na turi ʔi>
Ø-ta:-yi-ʔ [na *maestro*]_S [nariʔa=*ʔin* [na *turi-ʔi*]_O]_{SUB}
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 OT: "vino el maestro a enseñar a los niños" (2043.)
- b. <ca tà pè aʔa uɛa can confesar>
ka-taʔ peʔ ʔaʔa [ʔuka-kan *confesar*]_{SUB}
 2sS-come FUT ADV:tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

There are cases of O argument deletion in Xinka, although they only affect second clauses in which the O argument would be expressed in form of a third person pronoun (see § 15.1.3.1) and are not restricted to coreferential arguments. In the following example of a coordinate construction from the ALS the O argument of the second transitive predicate is omitted (15. 48). The translation context indicates that O would be referencing the third person singular, which in the wider context of the sentence refers to the extended argument of the conditional clause that is preceding this coordinate main clause construction (see Appendix 3:1955.).

- (15. 48) <... ca uɛa condenar naca anima ó catupa ...>
ka-ʔuka *condenar* [naka *anima*]_O o ka-tupa
 2sA-do Sp:condemn PN:2s Sp:soul Sp:or 2sA-leave
 'you condemn your soul, or you leave (her)...'
 OT: "..., te has de condenar, o la dejas..." (1955.)

As this omission of the third person singular pronoun is not restricted to coreferential O arguments, it does not contradict accusative syntax as S and O are not treated the same way. However, if the semantic patient of the clause is not co-referenced by a pronoun, the clause can be seen as semantically transitive, but is grammatically intransitive.

While the deletion of coreferential S/A arguments in second clauses suggests a S/A pivot, there seem to be no restrictions to relativisation and complementation in Xinka. Both, S/A and O arguments, can stand as heads of relative clauses (§ 17.3) or function as syntactic complements (§ 17.1).

15.2.2.2 Valency changes

Valency-changing actually refers to operations that alter the grammatical intransitivity or transitivity of a verb. We distinguish valency-reducing operations that reduce the number of core-arguments, e.g. passive (O > S) or antipassive (A > S), and valency-increasing operations that increase the number of core-arguments, e.g. causative (S > O) or applicative (S > A) (see e.g. Dixon & Aikhenvald 2000:3). In Xinka valency-changing operations are either inflectional or derivational. The verbal derivations known to affect the predicate arguments are valency-reducing antipassive verb derivations which may have developed from reflexives (§ 11.3.1) and causative verbs that increase the valency of the verb without actually expressing the causee (see § 11.2.2). Antipassive and causative verb stems exhibit the same inflectional properties as underived forms with respect to anaphoric person-marking.

Intransitive predicates that have an extended or oblique argument employ the same cross-referencing affixes as transitive predicates (see § 10.1.2.7). The pattern is not attested in the ALS. It shows that Xinka anaphoric S/A marking can be determined by the number of arguments in the clause. The extension of the predicate with one core argument leads to the transitivity of the intransitive predicate.

- (15. 49) a. natiya mu-ti:ki [ša ʔo:tek]_{E/OBL}
 LOC 3sA-sleep PREP bed
 'there he sleeps in the bed' (G-SH)
- b. na nin wirki-n [hina naʔ]_{OBL}
 DET PN:1s talk-1sA PREP PN:3s
 'I spoke with her' (G-SH)

There are examples of transitive verbs with intransitive anaphoric marking, such as impersonal verbs forms. Impersonals are marked with the prefix *ʔa-* that cross-references the third person singular on intransitive verbs in the nonpast/imperfective and with the stative-resultative suffix *-ʔ*. In the ALS there is only one example of such a form in syntactic contexts that is translated by Maldonado de Matos as an infinitive. The colonial author employs the prefix *ʔa-* regularly to mark infinitives and gerunds; as pointed out in the relevant section, impersonals and infinitives are functionally related (see § 10.1.2.2).

- (15. 50) <aLi aguiszù na turiLi a erLèque>
[ʔaʔi ʔa-wišu-ʔ [na turi-ti]_o ʔa-erʔeke]
 PREP.CAUS 3sS-beat-STAT DET child-PL 3pS-get frightened
 'because of beating (= one beats) the children, they get frightened'
 OT: "de azotar a los niños se espantan" (2041.)
- (15. 51) ʔa-piri-ʔ hina naka ʔakuki hiʔ
 3sS-see-STAT PREP PN:2s walk PROG+3sS_{DEP}
 'one/they see(s) (that) he/she is walking with you' (G-SH)

The targets of valency change in Xinka reflect in the system of person-marking and do not seem to manifest cases of systematic non-canonical marking of S/A and O.

16 Clause structure and constituent order

This chapter gives an overview of the elements of a Xinka clause and their respective order. At first we will look at the structure and internal order of the phrase types that function as constituents of clauses (§ 16.1). Then declarative and pragmatically marked main clauses (i.e. negative, imperative and interrogative clauses) will be described (§ 16.2). Xinka distinguishes independent declarative main clauses (with finite predicates) from certain types of dependent and pragmatically marked clauses by different forms of inflectional marking. Dependent-marking cross-referencing suffixes occur with clause subordination. The anterior marker *-wa* is attested in subordinate/dependent as well as in interrogative clauses, all of which exhibit divergent, or marked, constituent order (§ 12.2.3).

Pragmatically neutral clauses indicate that Xinka can be classified as a verb-initial language. Although Maldonado de Matos places the S constituent preferably in clause-initial position, the comparative data suggest that this position is pragmatically marked and that any S constituent in initial position is focused.

According to Campbell, Xinka has acquired VOS (i.e. VOA) order from Mayan languages (Campbell 1978a; Campbell, Kaufman & Smith-Start 1986:547). Xinka exhibits syntactic properties that are typical of VO-languages, i.e. it has prepositions, in genitive phrases, the possessor follows the possessed noun phrase, light verbs precede their complements, incorporated nouns follow verbs as complement clauses and relative clauses follow the head noun. There are auxiliary verb constructions (AVC) in Xinka in which auxiliaries take dependent-marking morphology and follow the lexical main verb. Such a pattern does not need to be seen as unusual for VO-languages (see Schachter 1985:43). As was discussed in § 10.1.3, Xinka AVCs with the auxiliary verb following the lexical main verb seem to be derived from a pattern of verb subordination.

As in Mayan languages, Xinka adjectives and other modifiers precede the head noun, which is a feature that is not typical for VO languages. In this point, Xinka (just like Mayan) is similar to SOV (AOV) languages, although other features such as postpositions or possessor-possessum order are not attested.

16.1 Phrase structure

This section deals with the structure of the different types of nominal, verbal and adverbial phrases that make up a clause in Xinka. The structure of these phrases has in part already been discussed in the relevant chapters and sections above. Here we will summarise syntactic aspects and issues of phrase types found in Maldonado-Xinka and the comparative data.

16.1.1 Noun phrase

Noun phrases can function as core arguments (S/A, O) or adjuncts (E) of the predicate (see § 15) or they can have predicative function themselves (§ 10.2). The

head of a Xinka noun phrase is a nominal root or stem that can occur on its own or can be extended (or modified) by determiners, modifiers (including adjectives, quantifiers, numerals and attributive nouns), genitives (i.e. possessor-constructions) or relative clauses. For a schematic illustration of the order of elements in a noun phrase see § 8.

HEAD NOUN: Nominal roots, derived nominal stems and pronouns can function as heads of noun phrases.

- (16. 1) a. <jútu>
[hutu]_{NP}
N:tree/trunk
'tree'
OT:"el palo" (24.)
- b. <neLec>
[ne:tek]_{NP}
PN:1p
'we'
OT:"nos" (65.)
- c. <iszcaŁa>
[ʔiš(a)ka-Ła]_{NP}
drink-AGT
'(the one) who drinks = drinker'
OT:"bebedor, bebedora" (3909.)

Nominal roots and stems can take inflectional morphology, i.e. possessive and plural marking.

- (16. 2) a. <ca jaszu>
[ka-hašu]_{NP}
2sP-pig
'your pig'
OT:"tu marrano" (351.)
- b. <jujuLi>
[huhu-Łi]_{NP}
honey-comb-PL
'honey-combs'
OT:"el panal (plural)" (3966.)

Plural pronouns in the second and third person consist of a singular pronoun and a pronominal plural clitic. These complex plural pronouns can occur in a discontinuous pattern, which means that the noun phrase is discontinuous.

- (16. 3) <mu uea pè castigar naca Dios ay>
[mu-ʔuka pe? castigar]_{VP} [naka]_{NP1} [dios]_{NP2} [ʔay]_{NP1}
3sA-do FUT Sp:punish (V) PN:2p (O) Sp:god (S) 2PL (O)
'god will punish you (pl.)'
OT:"os ha de castigar dios" (2040.)

DETERMINER-NOUN PHRASE: Determiners precede the head noun; demonstratives generally follow the head noun but can combine with definite determiners, in which case they occur in a discontinuous pattern.

- (16. 4) a. <uiszica nà miszà>
ʔuyši-ka [na miša]_{NP}
hear-2sA DET Sp:mass, service
'you heard the mass'
OT:"(oiste) misa" (1958.)
- b. <nana turi-Łi>
[nana turi-Łi]_{NP}
FOC child-PL
'the children'
OT:"los muchachos" (1979.)
- c. <nana jautuma axOe>
[nana haw-tuma ʔahŁ]_{NP}
FOC skin-deer DEM
'this deerskin = this whip'
OT:"este azote" (1.)
- d. <tumuqui na jama-ca ay>
[tumu=ki na hama-ka ʔay]_{NP}
QUANT=DISTR DET sin-2pP 2PL
'all your (pl.) sins'
OT:"todos vuestros pecados" (2033.)

MODIFIER-NOUN PHRASES: Noun phrase heads can be extended by modifiers preceding the head noun. Modifying elements may be nouns in attributive function (16. 5a), adjectives (b), quantifiers (c) or numerals (d).

- (16. 5) a. <tuma ambuqui>
[tuma ʔampuki]_{NP}
 N:deer snake
 'deer snake = boa constrictor'
 OT: "la masacúa; culebra" (4609.)
- b. <Łómehui>
[tome ʔuy]_{NP}
 ADJ:tepid water
 'tepid water'
 OT: "agua tibia" (4029.)
- c. <tenan jutu>
[te(:)na-n hutu]_{NP}
 QUANT-IRR? pole, tree
 'poles, trees'
 OT: "palo (plural)" (3991.)
- d. <ieal santo>
[ʔikal santo]_{NP}
 NUM:1'/INDEF Sp:saint
 'one/a saint'
 OT: "un santo" (2031.)

GENITIVE-CONSTRUCTIONS: There are different coding strategies for genitive constructions in Xinka. Possessor constructions that are expressed by a prepositional phrase are described in § 16.1.3.

In the ALS, there are nominal compounds that can be identified as genitive constructions. In these constructions the head noun in the function of the possessum (Pd) is followed by the noun expressing the possessor (Px); there is no overt marker on either of the nouns that would specify the syntactic relationship. One could argue that these forms are distinct from genitive phrases in that the possessive relation is not marked. It is true that in the ALS the pattern is only attested with nominal compounds (mostly with body part terms), i.e. the genitive construction forms an idiomatic expression and functions as a single noun.

- (16. 6) a. <macu uguaŁ>
[maku ʔuwaŁ]_{NP-GEN}
 house (Pd) ant (Px)
 'house of ant = ant house/hill'
 OT: "el hormiguero" (4050.)
- b. <jarari uelueg>
[harari ʔhi-h]_{NP-GEN}
 bone (Pd) back-3sP (Px)
 'bone of his back = his backbone'
 OT: "hueso del espinazo" (3937.)
- c. <ueluemacu>
[ʔhi maku]_{NP-GEN}
 back (Pd) house (Px)
 'back of the house = behind the house'
 OT: "lo de detrás de la casa" (4735.)
- d. <uruŁ miya>
[ʔuruŁ miya]_{NP-GEN}
 egg (Pd) chicken (Px)
 'egg of the chicken = chicken egg'
 OT: "huevo de gallina" (4695.)

In the comparative data the same kind of genitive constructions is attested. All examples listed below designate body part terms (of human or objects) as the forms in Maldonado-Xinka. However, diminutive modifiers and determiners extending the noun phrase seem to indicate that these complex noun phrases do not function as nominal compounds.

- (16. 7) a. mirki-n [[ču=koreʔo]_{NP} [ʔən-ču=wapik]_{NP-GEN}
 break-1sA DIM=Sp:strap? (Pd) 1sP-DIM=sandal (Px)
 'I broke the strap of my sandal' (G-RHG)
- b. [harari]_{NP} [ču=pu-n]_{NP-GEN}
 flesh (Pd) DIM=hand-1sP (Px)
 'flesh of my hand = fist' (G-PE)
- c. <maj pamac naj lamuc>
 [[mah pamak]_{NP} [nah lamuk]_{NP-GEN}
 DEM arm/claw (Pd) DET/PN:3s shrimp (Px)
 'claws of the shrimp'
 OT: "tenazas del camarón" (Ch-C)

In X_G and X_Y there are examples of head-marking genitive constructions where possession is marked anaphorically in the third person singular on the possessum preceding an unmarked possessor: 3sP-Pd Px. In X_Y the pattern seems to be attested also with suffixes (16. 8d).

- (16. 8) a. [[mu-*techo*] 3sP-Sp:roof (Pd) [ʔən-ču=maku]_{NP}NP-GEN 1sP-DIM=house (Px)
'the roof of my house' (G-RHG)
- b. man=ta [[mu-mak'u man]_{NP} [naʔu-n]_{NP}NP-GEN DEM=INT 3sP-house DEM (Pd) son/daughter-1sP (Px)
'that (what) is the house of my son/daughter' (G-SH)
- c. <mu macu na man>
[[mu-maku]_{NP} [na man]_{NP}NP-GEN 3sP-house (Pd) DET DEM (Px)
'(it is) the house of him = (it is) his house'
OT: "esta casa es suya" (Y-C)
- d. <nu macuj, naj man>
[[nu maku-h]_{NP} [nah man]_{NP}NP-GEN DET house-3sP (Pd) DET DEM (Px)
'the house of him/that one = his/that one's house'
OT: "su casa" (Y-C)

NOUN PHRASE WITH RELATIVE CLAUSE: The head noun can be modified by a relative clause. The relative clause always follows the head noun; word order correlates with the word order in declarative main clauses (see § 17.3).

- (16. 9) <... na penitencia nucai naca na palè...>
na **penitencia** **[nuka-y** **[naka]_O** **[na** **pale]_A]_{REL}
DET Sp:penitence give-3sA PN:2s DET Sp:priest
'... the penitence (that) the priest gave you, ...'
OT: "... la penitencia que te dio el padre" (2036.)**
- (16. 10) ladron [ture-y [ʔikaʔ miya]_O]_{REL}
Sp:thief take-3sA INDEF/NUM: '1' chicken
'the thief (who) took a/one chicken' (G-SH)

PREDICATIVE NOUN PHRASE: Noun phrases can function as predicates. There are different types of predicative noun phrases depending on whether the relation between the subject and the nominal predicate is marked by a copula or not. In the case of zero-copula encoded nominal predicates the noun phrase in predicate function is followed by subject (16. 11).

- (16. 11) <¿guena nâcâ?>
wena_{NP} **naka_S**
INT:who PN:2s
'who are you?'
OT: "¿quién sois vos?" (1872.)

In nominal predicates that mark the relation to the subject with a copula, the copula follows the noun phrase.

- (16. 12) a. <jarana ayacâ> **harana_{NP}** **ʔaya-ka_{COP}**
ill COP:be-2s_{DEP}
'you were ill'
OT: "estuvistes enfermo" (1958.)
- b. <guena qui agi> **[wena=ki]_{NP}** **ʔahi_{COP}**
INT:who=INTENS COP:be+3s_{DEP}
'(the one) who is'
OT: "el que está, estaba" (1962.)

Only attested in the comparative data are nominal predicates with inflectional copula. Here the subject constituent precedes the noun phrase.

- (16. 13) [na nin]_S ʔan-pobre_{NP}
 DET PN:1s 1sS-poor
 'I am poor' (G-SH)

Noun phrases that function as predicates can host TAM-adverbials in the same manner as verbal predicates do. In the ALS, examples of this pattern are a bit limited and most attested cases occur with adjective predicates or prepositional noun phrases (16. 14). In the comparative data TAM-adverbials are more regularly attested with noun phrases (16. 15).

- (16. 14) a. <màràLà pè>
 [ma:ra:-ʔaʔ]_{NP} peʔ
 rest-AGT FUT/DEON
 '(the one) who must rest'
 OT:"el que ha o tiene de descansar" (1557.)
- b. <szam pari paL>
 [šam pari]_{PP} paʔ
 PREP day PFV
 '(it is) already in the day'
 OT:"ya es de día" (4440.)
- (16. 15) a. nankun_{NP} paʔaʔ
 afternoon PFV
 '(it is) already afternoon' (G-JAP)
 '(he is) already raccoon
 = he turned into a raccoon'
 OT:"se convirtió en mapache" (G-S)
- b. <pokóko paʔáʔ>
 pokoko_{NP} paʔaʔ
 raccoon PFV

16.1.2 Verb phrase

Verb phrases can function as main or subordinate predicates. The minimum verb phrase includes a verbal predicate. In Xinka we find transitive and intransitive single verbal predicates and complex verbal predicates including auxiliary/copula constructions (AVCs), light verb constructions (LVCs) (§ 10.1.4.1), phrasal verbs (§ 10.1.4.2) and noun-incorporating verbal compounds (§ 10.1.4.3). Complex predicates can be transitive or intransitive.

The S/A argument of the verbal predicate is cross-referenced on the verb in form of pronominal affixes; person-marking is anaphoric. Cross-referencing is dependent on transitivity status, tense/aspect and syntactic hierarchy (see § 6).

Verbal predicates can host TAM-adverbials. For an illustration of the order of elements in the verb phrase see § 10.1.1 for transitive and § 10.1.2 for intransitive predicates.

INTRANSITIVE VERB PHRASE: The minimal intransitive verb phrase consists of an intransitive verb with inflectional affixes, including person-marking and TAM-suffixes. TAM-adverbials follow the inflected verb.

- (16. 16) a. <an guaszata>
 [ʔan-wašata]_{VP}
 1sS-enter
 'I enter'
 OT:"yo entro" (1971.)
- b. <guasztà>
 [Ø-waš(a)ta-ʔ]_{VP}
 3sS-enter-STAT
 'he entered'
 OT:"aquel entró" (1976.)
- c. <an acù Lə>
 [ʔan-ʔaku-ʔa]_{VP}
 1sS-go-PAST.ACT
 'I went'
 OT:"yo fui, he ido" (1654.)
- d. <a acù pè>
 [ʔa-ʔakuʔ_V peʔ_{ADV}]_{VP}
 3sS-go FUT
 'he will go'
 OT:"aquel irá" (1667.)

TRANSITIVE VERB PHRASE: The minimal transitive verb phrase consists of a transitive verb with personal cross-referencing affixes and TAM-inflection. The inflected transitive verb can host TAM-adverbials.

- (16. 17) a. <an nariŁa naturiŁi>
[?an-nariŁa]_{VP} **[na** **turi-Łi]**_{NP}
 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1977.)
- b. <mere cá>
[mere-ka?]_{VP}
 break-2sA
 'you broke (it)'
 OT: "tú rompistes" (587.)
- c. <ca pùla pè>
[ka-pula_v pe?]_{ADVVP}
 2sA-make FUT
 'you will make it'
 OT: "tú harás" (418.)
- d. <...naca qui pùla Łàn>
[naka ki]_{NP} **[pu:la-Ła-n]**_{VP-SUB}
 PN:2s INTENS make-PAST.ACT-SUBJ
 'you yourself did it'
 OT: "... tú lo hiciste" (4771.)

SUBORDINATE VERB PHRASE: Verbal predicates in subordinate clauses can be deranked or nonfinite, i.e. they either employ different markers for person agreement and TAM distinctions than predicates in independent clauses do, or they drop inflectional morphology. That means that in subordinate clauses, verb phrases can consist of a simple verb root that may be marked with the interrogative/subjunctive *ŋn*.

- (16. 18) <taí ... nari Ła in na turi Łi>
[Ø-ta:-yi-?]_{VP} ... **[nariŁa=?in]**_{VP-SUB} **[na** **turi-Łi]**_{NP}
 3s_{COM}-come-LIG-STAT teach=SUBJ DET child-PL
 '[he] came to teach the children'
 OT: "vino ... a enseñar a los niños" (2043.)

LIGHT VERB CONSTRUCTION: In LVCs the verb phrase includes the semantically bleached light verb that carries the inflectional information in initial position and the lexical main verb in second position. TAM-adverbials follow the light verb.

- (16. 19) a. <ca ùea condenar naca anima>
[ka-?uka **condenar]**_{VP} **[naka** **anima]**_{NP}
 2sA-do Sp:condemn PN:2s/POSS Sp:soul
 'you condemn your soul'
 OT: "te has de condenar" (1955.)
- b. <mu uea pè castigar naca Dios ay>
[mu-?uka **pe?** **castigar]**_{VP} **naka**_{NP1} **dios**_{NP2} **?ay**_{NP1}
 3sA-do FUT Sp:punish PN:2p Sp:god 2PL
 'god will punish you (pl.)'
 OT: "os ha de castigar dios" (2040.)
- c. <ca tà pè aŁa uea can confesar>
[ka-ta? **pe?]**_{VP} **?aŁa** **[?uka-kan** **confesar]**_{VP-SUB}
 2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

AUXILIARY VERB CONSTRUCTION: AVCs consist of an auxiliary verb that carries the inflectional information and an unmarked lexical main verb. There are different structural types of AVCs in Xinka, depending on whether the auxiliary is preceding or following the lexical main verb.

In AVCs where the auxiliary is following the lexical main verb, TAM adverbials occur between lexical main verb and auxiliary. The auxiliary takes dependent-marking cross-referencing suffixes.

- (16. 20) a. <tà ayacà>
[taʔ ʔaya-kaʔ]_{VP}
 come AUX/PROG.VI-2sS_{DEP}
 'you are coming'
 OT: "estás viniendo" (1969.)
- b. <yguitzi nàL u ɛa can naca ...>
[ʔiwiɛ'i naʔʔ ʔuka-kan]_{VP} **naka**_{NP}
 hear IMPFV AUX/PROG.VT-2sA_{DEF} PN:2s
 'you were hearing [the mass]'
 OT: "tú estabas oyendo [misa]" (1989.)

In AVCs where the auxiliary is preceding the lexical main verb, TAM adverbials also occur between the two verb forms.

- (16. 21) a. <á szin ca szàta pùla>
ʔašin [ka-šata pùla]_{VP}
 NEG 2sA-return make
 'you do not return to make it'
 OT: "no lo vuelvas a decir" (1887.)
- b. <patà nàL sàmu>
[pata-ʔ naʔʔ samu]_{VP}
 *accomplish-STAT IMPFV catch
 'would have been caught'
 OT: "que fuera o hubiera de haber sido cogido" (1226.)

PHRASAL VERBS: In Xinka there are a few phrasal verbs which consist of a lexical main verb that carries the inflectional information followed by the preposition *šama* or *ša* 'in, inside'. In all cases where inflectional morphology is attested, person is marked by means of cross-referencing suffixes.

- (16. 22) a. <pata cà szàma> b. <niguaŁaanszaa>
[pata-kaʔ šama]_{VP} **[niwa-Ła-n ša]**_{VP}
 *accomplish-2sA PREP:inside wish-PAST.ACT-1sA PREP:inside
 'I could inside = I remembered' 'I did wish/ask inside = I wanted'
 OT: "tú te acordaste, te has acordado" (1572.) OT: "querer (anómalo, pret.)" (2753.)

In the only example where a phrasal verb occurs in a subordinate clause it is nonfinite and marked with the interrogative/subjunctive marker *ʔin*.

- (16. 23) <guapatain szàma>
wā_{VP} **[pata=ʔin šama]**_{VP-SUB}
 go/IMP *accomplish=SUBJ PREP
 'go to accomplish inside = may he remember!'
 OT: "¡acuértese aquel!" (1596.)

NOUN INCORPORATION: In Xinka we also find complex verb phrases that consist of a verb and an incorporated noun. Structurally, these verb phrases are identical with phrasal verbs inasmuch as the noun follows the verb that carries all the inflectional information.

- (16. 24) <paraŁan guiriqui>
[para-Ła-n wiriki]_{VP}
 search-PAST.ACT-1sA word
 'I searched word = I quarreled/argued'
 OT: "pleitar (pretérito)" (2828.)

16.1.3 Prepositional phrases and other adjuncts

In Xinka prepositional phrases function as adjuncts (or oblique arguments) of a clause, i.e. they indicate peripheral arguments of the clause including the syntactic functions of indirect object and genitive (possessor-constructions), cause/reason, comitative/instrumental as well as locative. Xinka prepositional phrases consist of a preposition in initial position that is followed by a noun phrase (see § 9). Prepositions preceding verb phrases function as subordinators of dependent adverbial clauses (see § 17.2).

- (16. 25) <szamà na pari axvè>
[šama [na pari ʔahi]_{NP}]_{PP}
 PREP DET day DEM
 'on this day = now'
 OT: "ahora" (2037.)

In the ALS prepositional phrases introduced by the preposition *šama* 'in(side)' occur in predicative function with copula verbs. These prepositional phrases basically indicate location.

- (16. 26) a. <sí szàma macutiusz naŁ ayacà>
si [šama maku tyuš]_{PP} naʔ ʔaya-kaʔ
 Sp:if PREP house god IMPFV be-2s_{DEP}
 'if you were/had been in the church'
 OT: "si hubieras estado en la iglesia" (1959.)
- b. <guenaqui szamà pecado mortal agi>
wena=ki [šama pecado mortal]_{PP} ʔahi
 INT:who=INTENS PREP Sp:mortal sin COP:be+3s
 '(the one) who is in mortal sin'
 OT: "el que está en pecado mortal" (1963.)

INDIRECT OBJECT: The non-spatial preposition *ti:ʔ* introduces prepositional phrases that indicate the indirect object of a clause (see § 9.2.2). There are not many examples of this phrase type in syntactic context in the ALS.

- (16. 27) a. <nana maestro mu nariŁa pè na doctrina tiy turiŁi>
[nana maestro]_A mu-nariŁa peʔ [na doctrina]_O [ti:ʔ turi-Łi]_{PP}
 FOC Sp:teacher 3sA-teach FUT DET Sp:creed IO child-PL
 'the teacher will teach the creed to the children'
 OT: "el maestro enseñará la doctrina a los niños" (2020.)
- b. <tiy jútu>
[ti:ʔ hutu]_{PP}
 IO tree
 'to/for the tree'
 OT: "al palo" (27.)

GENITIVE/POSSESSOR-CONSTRUCTION: One way of expressing genitive relations is by means of prepositional phrases introduced by the benefactive/possessive preposition *neŁa* (see § 9.2.1). In the second example the prepositional phrase has predicative function (16. 28b).

- (16. 28) a. <neŁa mácu>
[neŁa maku]_{PP}
 BEN/POSS house
 'of the house / the house's...'
 OT: "de la casa" (42.)

- b. <nana jau-tuma axÙe neLa turiLi>
[nana haw-tuma ʔahi]_s **[neʔa turi-ti]**_{pp}
 FOC skin-deer DEM BEN child-PL
 'this deerskin (= whip) is of/for the children'
 OT: "este azote o cuero es para los muchachos." (1.)

There is one single example of a possessive construction in the ALS where the benefactive preposition is marked with the possessor cross-referencing prefix of the third person singular. The preposition is preceded by the noun phrase functioning as the possessum and followed by the noun phrase that indicates the possessor.

- (16. 29) a. <yueguaLi y na gracia muneLa dios>
ywaʔi-y **[na gracia]**_{NP} **[mu-neʔa dios]**_{pp-GEN}
 lose-3sA DET Sp:grace (Pd) 3sP-BEN Sp:god (Px)
 'lost the grace of god'
 OT: "ha perdido la gracia de dios" (1963.)

In other genitive constructions the possessum in initial position is unmarked and followed by the possessor-constituent that is introduced by the benefactive non-spatial preposition *neʔa* (some of the semi-speakers from X_G mark the possessor with the diminutive marker *ču*).

- (16. 30) a. **[ʔan-neʔa makuʔ]**_{pp} **[nin]**_{NP}
 1sP-BEN house (Pd) PN: 1s (Px)
 'my house' (G-SH)
 b. **[mu-ču-ʔayaʔa]**_{NP} **[neʔa naʔu-n]**_{pp}
 3sP-DIM-wife (Pd) BEN/POSS son-1sP (Px)
 'the wife of my son' (G-RHG)
 c. <naj na macu na maki nejla>
 nah **[na maku na]** **[maki-neʔa]**_{pp}
 PN:3s DET house DEM (Pd) 1pP-BEN (Px)
 'it/this is the house that is ours'
 OT: "esta casa es nuestra" (Ch-C)

CAUSAL PREPOSITIONAL PHRASE: The non-spatial preposition *ʔaʔi* introduces prepositional phrases that are oblique arguments indicating a participant of the predicate.

- (16. 31) a. <nana macu pulà pataguàg aLi Pedro>
[nana maku]_{NP} **pula pata-wa-h** **[ʔaʔi Pedro]**_{pp}
 FOC house make *accomplish-ANT-3sP PREP.CAUS Pedro
 'this is the house (that) was made by Pedro'
 OT: "la casa fue hecha por Pedro" (4775.)
 b. <aLi náca>
[ʔaʔi naka]_{pp}
 PREP.CAUS PN:2s
 'by/because of you'
 OT: "por ti" (83.)
 c. <aLi na axué>
[ʔaʔi na ʔah]_{pp}
 PREP.CAUS DET DEM
 'by/because of this'
 OT: "por éste" (121.)

16.2 Clause types

Xinka clause types can be systematised into declarative clauses that are unmarked and pragmatically marked clauses, including negative, imperative and interrogative as well as focus clauses. Declarative, negative, imperative and interrogative clauses occur as independent/main clauses and in dependent context.

16.2.1 Declarative clauses

Predicates in declarative clauses can be nominal, transitive or intransitive. Clauses with primary and with complex verbal predicates do not exhibit different types of word order. S/A is marked anaphorically on the verbal predicate. The S constituent is optional with all types of predicates; in transitive clauses the O constituent is obligatory.

16.2.1.1 Clause with nominal predicate

The minimal nominal predicate in declarative main clauses consists of a noun phrase (or a prepositional phrase) that can be accompanied by a copula verb, though in many cases the zero-copula is used (see § 10.2). Depending on pragmatic status, the subject constituent can precede or follow the predicative noun phrases.

The basic pattern of word order in declarative clauses with nominal predicate is NP S. The S constituent can consist in a noun phrase (16. 32a) or in a complement clause (b-c).

- (16. 32) a. <¿guena nàca?>
 [wena]_{NP} **[naka]_S**
 INT:who? PN:2s
 'who (are) you?'
 OT: "¿quién sois vos?" (1872.)
- b. <szàŁ Łan muc pùla na oracion>
 [ša† †an]_{NP} **[muk-pula na oración]_{S-COM}**
 good OPT 1pA-make DET Sp:prayer
 'they say, it is good (that) we make (= say) our prayer'
 OT: "dicen que es bueno que hagamos oración" (2028.)
- c. <szàŁ cangui szàma gracia ayaàc ...>
 [ša† ka-n wi]_{NP} **[šama gracia ʔaya:-k]_{S-COM}**
 good EXO-SUBJ/IRR DIR? PREP Sp:grace COP:be-1pS_{DEP}
 'it is good [ʔ] (that) we are in grace'
 OT: "bueno es que estemos en gracia, ..." (1953.)

This basic constituent order of clauses with nominal predicates is attested in the comparative data.

- (16. 33) a. [na nin ʔan-ne†a]_{NP} [wapa† man]_S
 DET PN:1s 1sP-BEN bench DEM
 'it is mine that bench = that bench is mine' (G-SH)
- b. [hin ka-ne†a]_{NP} [nana senyorita man]_S
 NEG 2sP-BEN FOC Sp:girl DEM
 '(she) is not yours, that girl' (G-SH)
- c. <chihiuc ti na maj atulí na jarána>
 [čiwik ti(?)]_{NP} [na mah ʔatuli na harana]_S
 weak IO? DET DEM corn guel (Pd) DET sick (Px)
 'the corn gruel of the sick one is weak'
 OT: "el atole del enfermo está malo" (Ch-C)

Adjuncts in the form of adverbial phrases and TAM-adverbials always follow the nominal predicate, i.e. NP ADV.

- (16. 34) <szam pari paŁ>
[šam pari] paŁ
 PREP day PFV
 '(it is) already (in/at) day'
 OT: "ya es de día" (4440.)

In the ALS we find a number of cases where nominal predicates with copula verb *ʔaya* function as complement clauses (see § 17.1). In all given examples the copula follows a prepositional or locative phrase in adverbial function, i.e. the internal order of the complement clause is subject – adverb – copula.

- (16. 35) a. <niguan nāŁqui szā Łinā juicio ayacā>
niwa-n naʔ ki ša [[tinaʔ juicio]ADV ʔaya-kaʔ]O-COM
 ask-1sA IMPFV INTENS PREP PREP Sp:judgement COP:be-2sS_{DEP}
 'I wished myself that you were sober'
 OT: "quisiera yo que estuvieras ... en juicio" (1957.)
- b. <guenaqui szamā pecado mortal agi yueguaLi y na gracia...>
[[wena=ki]s [šama pecado mortal]ADV ʔahi]s-COM ywaʔi-y [na gracia]o
 INT:who=INTENS PREP Sp:deadly sin COP:be+3s lose-3sA DET Sp:grace
 '(the one) who is in deadly sin lost the grace of god'
 OT: "el que está en pecado mortal ha perdido la gracia..." (1963.)
- c. <guenaqui nā pē agi aŁa temprano pē acūg>
[[wena=ki]s [naʔ peʔ]ADV ʔahi ʔaʔaADV]s-COM
 INT:who=INTENS LOC DIR COP:be+3s tomorrow
 '(the one) who has to be here tomorrow,'
[temprano peʔ]ADV ʔaku-h
 Sp:early IMP go-3sP
 'early must be his going (= has to go early)'
 OT: "el que ha de estar mañana aquí, ha de venir temprano" (1963.)

16.2.1.2 Intransitive clauses

The core element of an intransitive clause is the intransitive predicate. The S constituent is optional. The basic word order of the declarative intransitive clause is VS. Clauses with primary and complex intransitive predicates exhibit the same constituent order. With complex predicates, the S argument can also precede, i.e. SV. Oblique arguments follow in final position. Adverbial adjuncts can also precede the predicate.

- (16. 36) a. <... ca taana nāŁ ical santo>
[ka-tana na(ʔ)]VP [ʔikal santo]s
 2sS-be IMPFV INDEF Sp:saint
 'you were a saint'
 OT: "... fueras un santo" (2031.)
- b. <taí na maestro nari Ła in na turi Łi>
[Ø-ta:-yi-ʔ]VP [na maestro]s [nariʔa=ʔin na turi-ʔi]ADV
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 OT: "vino el maestro a enseñar a los niños" (2043.)

The comparative data confirm the constituent order VS for declarative intransitive clauses. The S constituent can consist in a noun phrase or a clausal complement. All examples below are from X_G .

- (16. 37)
- a. [ti:ki-ʔa]_{VP} [naka]_S
sleep-PAST.ACT PN:2s
'you slept' (G-SH)
 - b. [kuy puriki]_{VP} [ʃuraya man]_S
AUX.FUT get married girl DEM
'that girl will get married' (G-SH)
 - c. [Ø-tero-ʔ]_{VP} [hurak man [ʔan-besino nin]_{REL}]_S
3sS-die/kill-STAT man DEM 1sP-Sp:neighbour PN:1s
'that man who is my neighbour died' (G-SH)
 - d. [ʔuka teher]_{VP} [ʔayaʔa man]_S
do Sp:weave woman DEM
'that woman weaves' (G-SH)

Adverbial clauses mostly follow the intransitive predicate as is illustrated by the two examples from the ALS indicating purposive and locative adverbial clauses.

- (16. 38)
- a. <ca tà pè aLa uea can confesar>
[ka-taʔ peʔ]_{VP} [aʔa]_{ADV} [ʔuka-kan confesar]_{ADV}
2sS-come FUT tomorrow do-2sS_{DEP} Sp:confess
'you will come tomorrow to confess'
OT: "te vendrás a confesar mañana" (1990.)
 - b. <acù ayaan Guathemala>
[ʔakuʔ ʔaya:-n]_{VP} [Guatemala]_{ADV}
go be-1sS_{DEP} Guatemala
'I am going (to) Guatemala'
OT: "me voy a estar a Guatemala" (1961.)
 - c. <... ca puriqui Linà>
ka-puriki [ʔi-naʔ]_{ADV}
2sS-marry/get married PREP:with-PN:3s
'you get married (with) her'
OT: "... te casas con élla" (1955.)

In X_G and X_{Ch} , adverbial clauses likewise mostly follow the intransitive predicate (16. 39). If the S constituent is present, it precedes the predicate in the pattern SV ADV (16. 40).

- (16. 39)
- a. hin [Ø-ti:ki-ʔaʔ]_{VP} [siʔma]_{ADV}
NEG 3sS-sleep-PAST.ACT night
'he did not sleep (last) night' (G-SH)
 - b. ʔan-muču paʔaʔ_{ADV} [wiriki]_{SUB}
1sS-get tired PFV speak
'I already get tired of speaking' (G-RHG)
 - c. <un xayé ra maku>
[ʔən-ʃaye-ʔ]_{VP} [ra maku]_{ADV}
1sS-return-STAT PREP house
'I returned home'
OT: "y regresé a casa" (Ch-F)
 - d. <n'gu ni linac>
[n-ku]_{VP} [ni]_S [li=nak]_{ADV}
1sS-go PN:1s PREP:with=PN:2s
'I go with you'
OT: "yo voy contigo" (Ch-C)

- (16. 40) a. [na nin]_S [wirki-ʔa]_{VP} [hi-naʔ]_{ADV}
 DET PN:1s speak-PAST.ACT PREP-DEM/PN:3s
 'I spoke with him/her' (G-SH)
- b. [huraʔ]_S [Ø-ʔaku-ʔa]_{VP} [ša sawaʕ'a]_{ADV}
 man 3sS-go-PAST.ACT PREP sow
 'the man went to sow his milpa' (G-JAP)
- c. <naj man tiki avuajla>
 [nah man]_S [ti(:)ki-ʔ]_{VP} [ʔawaʔa]_{ADV}
 PN:3s DEM sleep-STAT yesterday
 'he slept yesterday'
 OT: "ni ayer dormió él" (Y-C)
- d. <naj man ti lina nec>
 [nah man]_S [*ta]_{VP} [lina nek]_{ADV}
 PN:3s DEM come PREP PN:1p
 'he comes with us'
 OT: "él viene con nosotros" (Y-C)

There are several cases in the ALS where subordinate (adverbial) clauses occur to the left of the intransitive main clauses.

- (16. 41) a. <a sʉec naL pùla uean na an oracion ca guaszatà>
 [ʔasik na(ʔ)ʔ pula ʔuka-n [na ʔan-oración]_OADV [ka-waʕata-ʔ]_{VP}
 CONJ IMPFV make PROG-1sA_{DEF} DET 1sP-Sp:prayer 2sS-enter-STAT
 'when I was making my prayer, you entered'
 OT: "cuando yo estaba haciendo mi oración, entrastes" (1992.)
- b. <aLi aguizù na turiLi a erLèque>
 [ʔaʔi ʔa-wišu-ʔ [na turi-ti]_OADV [ʔa-ʔerteke]_{VP}
 PREP.CAUS 3sS-beat-STAT DET child-PL 3pS-get frightened
 'because of beating (= one beats) the children, they get frightened'
 OT: "de azotar a los niños se espantan" (2041.)

In the comparative data adverbs are attested following and preceding the verb; in all cases the S constituent always follows in final position.

- (16. 42) a. mu-wiriki [hina ʔayaʔa]_{ADV} [pari]_{S/A}
 3sA-speak PREP moon sun
 'the sun speaks with the moon' (G-SH)
- b. <ajla muj tiki nec>
 [ʔaʔa]_{ADV} muh-ti:ki [nek]_S
 tomorrow 1pS-sleep PN:1p
 'tomorrow we sleep'
 OT: "mañana dormiremos" (Y-C)

In the comparative data the pattern SV is also attested in main clauses that are not preceded or followed by adverbial or subordinate clauses. In these clauses, the S constituent may be pragmatically marked and focused by its positioning to the left of the verb phrase.

- (16. 43) a. [na naka]_S [ka-ʔaku-ʔ]_{VP}
 DET PN:2s 2sS-go-STAT
 'you went' (G-SH)
- b. [na nin]_S [ʔan-ti:ki-ʔaʔ]_{VP}
 DET PN:1s 1sS-sleep-PAST.ACT
 'I slept' (G-SH)
- c. <nec muc saprikilá>
 [nek]_S [muk-sapriki-laʔ]_{VP}
 PN:1p 1pS-degrain-PAST.ACT
 'we degained'
 OT: "desgranemos la mazorca" (Y-C)
- d. <man aya curúki>
 [man=ʔaya]_S [kuru-ki]_{VP}
 DEM/3s=PL run-REFL?
 'he runs'
 OT: "él corre" (Y-C)

Both constituent orders, i.e. VS and SV, are attested with Maldonado de Matos' passive constructions that involve complex predicates with the auxiliary *patai*. In all attested cases the S constituent is marked with the focus determiner *nana* that is employed by Maldonado de Matos to mark the nominative case, irrespective of its position in the clause

- (16. 44) a. <nariŁa patai Łic nana turiŁi aŁ.paraquiguan>
[nariŁa pata-y ƒik]VP [nana turi-ƒi]S [ʔaŁ-para kiwa-n]OBL
 teach *accomplish-3pA 3PL FOC child-PL PREP.CAUS-? INTENS/REFL-1sP
 'they are taught, the children, by myself'
 OT: "los muchachos son enseñados por mí" (1979.)
- b. <nana turiŁi nariŁa Łic patai aŁ.paraquiguan>
[nana turi-ƒi]S [nariŁa ƒik pata-y]VP [ʔaŁ-para kiwa-n]OBL
 FOC child-PL teach 3PL *accomplish-3pA PREP.CAUS-? INTENS/REFL-1sP
 'the children are taught by me'
 OT: "los muchachos son enseñados por mí" (1980.)

DEPENDENT INTRANSITIVE CLAUSES: In the ALS, intransitive clauses in subordinate context, exhibit the same constituent order as independent intransitive clauses, i.e. VS. Adverbs that modify the subordinate intransitive verb phrase follow the subordinate S constituent. Intransitive predicates in subordinate clauses are deranked verb forms, either in form of a stative participle or an unmarked verb root.

- (16. 45) a. <... asƒec uŁù na macu tiusz>
[ʔasƒk ʔuŁu-ʔ [maku tyuŁ]S]
 CONJ fall-STAT house Sp:god
 'when the church fell (= collapsed)'
 OT: "... cuando cayó la iglesia" (2018.)
- b. <si yguitzi ma naŁ patai na misza tumun pariqui ...>
[si [ʔiwiŁ'i ma na(ʔ)Ł pata-y]VP [na miŁa]S
 Sp:if hear COND IMPFV *accomplish-3sA DET Sp:mass
 'if the mass should have been heard'
[tumu-n pari-ki]ADV]ADV
 QUANT-IRR? day-DISTR
 'every day ...'
 OT: "si la misa fuese oída [por ti] todos los días..." (2032.)

Deranked subordinate predicates in adverbial clauses are confirmed in the comparative corpus. Coreferential subordinate intransitive verbs are unmarked for person or TAM distinctions.

- (16. 46) a. ʔan-muču paʔa? wiriki
 1sS-get tired PFV speak
 'I have got tired speaking' (G-RHG)
- b. <curú a cuc na'c>
 kuru ʔakuk(i) nak
 run walk PN:2s
 'you run walking'
 OT: "te vas corriendo" (Ch-JC)

In purposive clauses intransitive subordinate predicates that are coreferential with the predicate of the main clause are also attested with the subjunctive marker =*in* that occurs more regularly with transitive subordinate verbs.

- (16. 47) kuy ʔipla=ʔin man
 go+3sS_{DEP} bath=SUBJ DEM
 'that one went to bath' (G-JS)

There are no examples of intransitive complement clauses in the ALS. In the comparative data subordinate intransitive predicates in complement clauses are either regularly marked for person or occur in form of a stative participle.

- (16. 48) a. [man=ta ka-piri [hapa-ʔ [ʃan-tiwina]_{OBL}]_{O-COM}]_{REL}
 DEM=INT 2sA-see pass-STAT PREP-sky
 'that what you see passing by in the sky' (G-SH)
- b. hin ʔan-niwa [ʔakuki hiʔ [hina nin]_{OBL}]_{O-COM}
 NEG 1sA-want walk PROG+3sS_{DEP} PREP PN:1s
 'I do not want that he walks with me' (G-SH)

16.2.1.3 Transitive clauses

The minimal transitive clause consists in a predicative transitive verb and a noun phrase in the function of an O argument. A third person singular pronoun functioning as O argument does not have to be present as a constituent. The S constituent is optional as the participant is cross-referenced on the verb; the O argument is not cross-referenced on the verb.

Basic word order in a declarative transitive clause is VO. The O constituent follows the verbal predicate and TAM-adverbials. In most cases Maldonado de Matos marks noun phrases in O function with the definite determiner *na* (16. 49). Where pronouns occur as O constituents there are no determiners preceding (16. 50).

- (16. 49) a. <an ima naŁ na misza>
 [ʔan-ima naʔʔ]_{VP} [na miša]_O
 1sA-say IMPFV DET Sp:mass
 'I said/spoke the mass'
 OT: "yo decía misa" (1982.)
- b. <muc pùla Łan na penitencia>
 [muk-pula ʔan]_{VP} [na penitencia]_O
 1pA-make OPT DET Sp:penitence
 'they say, we (should) make penitence'
 OT: "dicen que hagamos penitencia" (2029.)
- (16. 50) a. <ca ùea condenar naca anima ...>
 [ka-ʔuka condenar]_{VP} [naka anima]_O
 2sA-do Sp:condemn PN:2s Sp:soul
 'you condemn your soul'
 OT: "... te has de condenar..." (1955.)
- b. <... an uea naŁqui absolver naca ...>
 [ʔan-ʔuka na(ʔ)ʔ ki]_{VP} [naka]_O
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I (myself) absolved you'
 OT: "... te absolviera yo ..." (2036.)

The same word order is attested in the comparative data; all types of O constituents, i.e. nouns, pronouns, or complex noun phrases including genitive constructions follow the verb.

- (16. 51) a. mu-kunu [mapu]_O
 3sA-buy tortilla
 'he buys tortillas' (G-SH)
- b. yuwa-n [ʔən-ču=tumin]_O
 lose-1sA 1sP-DIM=money
 'I lost my money' (G-RHG)

- c. <jajpuy icalj (peso)>
 haypu-y [ʔikaʔ peso]_O
 receive-3sA NUM:'1' Sp:peso (currency)
 'he received one peso'
 OT: "recibió un peso" (Ch-C)
- d. <pirin nak>
 piri-n [nak]_O
 see-1sA PN:2s
 'I saw you'
 OT: "desde que te vi" (Ch-F)
- e. <nkichi ical taju mun úvui>
 n-k'iči [ʔikal tahu mun ʔuwi]_O
 1sS-fry NUM:'1' piece (Pd) DEM meat (Px)
 'I will fry a piece of that meat'
 OT: "voy a asar un pedazo de carne" (Y-C)

The constituent order VO is also attested with complement clauses that function as direct objects.

- (16. 52) a. ʔime-y [nankun paʔaʔ]_O
 tell-3sA afternoon PFV
 'he said (that it is) already late' (G-SH)
- b. <yamun ca guáru>
 yamu-n [ka-waru]_O
 know/learn-1sA make-hammock
 'I know (to) make hammock(s)'
 OT: "sé hacer hamacas" (Y-C)

Adverbs and adverbial clauses can follow (16. 53) or precede (16. 54) the VO-cluster.

- (16. 53) a. ʔiki-kaʔ [weyša]_O paʔaʔ
 find-2sA iguana PFV
 'you already found an iguana' (G-SH)
- b. tur-ey [nin]_O [ša makuʔ]_{ADV}
 bring-3sA PN:1s PREP house-3sP
 'he took me to (his) house' (G-JAP)
- (16. 54) [ʔahmukan]_{ADV} kunu-n [haraku]_O
 yesterday buy-1sA chipilin
 'yesterday I bought *chipilin* (= type of spinach)' (G-SH)

The basic order of the verb and the direct object constituents is not changed by the presence of the subject constituent, which can occur in the following patterns: VOA, AVO and VAO.

VOA-ORDER: There are not many examples of the pattern VOA in the ALS. In the first two given examples it is not entirely clear whether the verb phrases are independent or dependent forms. In example (16. 55b) Maldonado de Matos employs the focus marker *nana* to mark the nominative case of the subject, while in example (a) the A argument is just preceded by the definite determiner *na* that according to Maldonado de Matos' grammatical description only marks accusative case, i.e. O constituents. It is therefore not clear whether the sample clause in (b) may be an artificial construct.

In the last sample (c) the second person plural pronoun in O function occurs in a discontinuous pattern that is not attested elsewhere.

- (16. 55) a. <mu uea can pè qui confesar naca na palè ca nuca pà pè tiyg na doctrina>
 [mu-ʔuka ka-n peʔ ki confesar]_{VP} [naka]_O [na pale]_A
 3sA-do EXO-SUBJ/IRR FUT INTENS Sp:confess PN:2s DET Sp:priest
 'the priest (himself) will confess you'
 OT: "te confesará el padre..." (2038.)
- b. <capa uiszicà paŁ. naŁ. na misza nana naca ay ...>
 [ka=pa ʔuyši-kaʔ paʔ na(ʔ)ʔ]_{VP} [na miša]_O [nana naka ʔay]_A
 EXO=PFV hear-2sA PFV IMPFV DET Sp:mass FOC PN:2p 2PL
 'you (pl.) had already heard the mass'
 OT: "ya habíais oído misa vosotros..." (2018.)

- c. <... mu uea pè castigar naca dios ay>
mu-ʔuka peʔ castigar [naka]_o [dios]_A [ʔay]_o
 3sA-do FUT Sp:punish PN:2p Sp:god 2PL
 'god will punish us'
 OT: "... os ha de castigar dios" (2040.)

In the comparative data the constituent order VOA is attested more frequently than in the Maldonado-data. The A constituent can consist in pronouns (16. 56a) and simple (b, d) or complex noun phrases (c). The O constituent can also be realised in form of a complement clause (16. 57).

- (16. 56) a. **ʔika-kaʔ [nin]_o [naka]_A** b. **tup-ey [ʔuruʔ]_o [miya]_A**
 find-2sA PN:1s PN:2s leave-3sA egg hen
 'you found me' (G-SH) 'the hen left (an) egg' (G-SH)
 c. **šamu-y [nin]_o [ku ʔampuki]_A** d. **<sukí nay pelu>**
 catch-3sA PN:1s MOD snake suk-i [nay]_o [pe:lu(ʔ)]_A
 'the snake caught me' (G-RHG) bite-3sA PN:2s Sp:dog
 'the dog bit you'
 OT: "el perro te mordió" (Y-C)
 (16. 57) **kuy tumu-y [šuka]_o [e'oko]_A**
 AUX.FUT end-3sA eat grackle
 'the grackle is going to finish eating' (G-JAP)

AVO-ORDER: The majority of declarative transitive main clauses in the ALS follow the word order pattern AVO, i.e. the A argument precedes the predicate. Simple nouns are preceded by the focus determiner *nana* for nominative (16. 58); while pronouns in S/A function are used by Maldonado de Matos in clause-initial position without any pragmatic marker (16. 59). It is not clear whether this word order needs to be considered as pragmatically determined (focus-dependent), or whether Maldonado de Matos was influenced by Spanish syntax.

- (16. 58) <nana Pedro púlai (na) macùg aŁ mucàn>
[nana Pedro]_A [pula-y]_v [(na) maku-h]_o [ʔaʔmukan]_{ADV}
 FOC Pedro make-3sA DET house-3sP yesterday
 '(the) Pedro made (=built) his house yesterday'
 OT: "Pedro hizo su casa ayer" (2017.)
 (16. 59) a. <nem an nariŁa naturiŁi>
[nem]_A [ʔan-nariŁa]_v [na turi-Łi]_o
 PN:1s 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1978.)
 b. <nen an ima naŁ na misza.>
[nen]_A [ʔan-ʔima na(ʔ)Ł]_v [na miša]_o
 PN:1s 1sA-say IMPFV DET Sp:mass
 'I said/spoke the mass'
 OT: "yo decía misa" (1983.)

The A constituent in initial position can also be a complement clause (see § 17.1).

- (16. 60) <guenaqui szamà pecado mortal agi yueguaŁiy na gracia ...>
[wena=ki šama pecado mortal ʔahi]_{A-COM} [yŁwaŁi-y]_v [na gracia]_o
 INT:who=INTENS PREP Sp:deadly sin COP:be+3s lose-3sA DET Sp:grace
 '(the one) who is in deadly sin lost the grace ...'
 OT: "el que está en pecado mortal ha perdido la gracia ..." (1963.)

The comparative data confirm that noun phrases in A function that precede the verb phrase can occur with and without definite articles.

- (16. 61) a. <na tumá-ti horo-tik tímá-ti šan hawí-ti paʔá-t>
 [na tuma-ti]_A horo =tik [tíma-ti]_O [šan hawi-ti paʔa-t]_{ADV}
 DET deer-PL get =3PL lice-PL PREP skin/fur-PL PFV
 'the deer (pl.) got lice in their fur'
 OT: "los venados tenían piojos en sus pieles" (G-S)
- b. <xuxo murruca naljki>
 [šušo]_A mu-ruka [naʔki]_O
 dog 3sA-bite PN:1p
 'the dog bites us'
 OT: "el perro nos muerde" (Ch-C)

In X_G pronouns preceding the transitive predicate are attested with the definite determiner *na*, while in X_Y clause-initial pronouns in A function are never indicated with any determiners.

- (16. 62) a. [na naka]_A simi-kaʔ [ʔuraya]_O
 DET PN:2s put out-2sA fire
 'you put out the fire' (G-SH)
- b. [na nin]_A hapa=ka-n [tero-waʔ-ta]_O
 DET PN:1s wait=PROG-1sA_{DEP} die-ANT-AGT
 'I was awaiting the dead' (G-JAP)
- c. [na nin]_A ʔan-ʔima [naka]_O
 DET PN:1s 1sA- tell PN:2s
 'I tell you' (G-SH)
- d. [nahi]_A ʔim-ey [nin]_O
 PN:3s tell-3sA PN:1s
 'he told me' (G-RHG)
- e. <nen nitz'api elay>
 [nen]_A n-ʔiʔ'api [ʔelay]_O
 PN:1s 1sA-stick out tongue
 'I stick out (my) tongue'
 OT: "saco (afuera) la lengua" (Y-C)
- f. <man aya tili naj man>
 [man=ʔaya]_A tili [nah man]_O
 DEM=PL see PN:3s DEM
 'he sees him'
 OT: "él le ve" (Y-C)

Neither from the ALS-data nor from the comparative example it can be concluded whether clauses that place the S/A constituent in initial position to the left of the predicate are pragmatically marked or not. In the following example of a main clause, the auxiliary *ʔayuʔ* and the TAM-adverbial *paʔ* precede the verb; here we might suggest that the position of the A argument and the order of elements in the clause may be interrelated (16. 63a). A similar pattern is attested in X_Y with an auxiliary verb construction (b).

- (16. 63) a. <naca ayù pà guiszacà na Juan ...>
 [naka]_A ʔayu paʔ wišu-kaʔ [na Juan]_O
 PN:2s AUX PFV beat-2sA DET Juan
 'you will have beaten Juan, ...'
 OT: "tú habrás azotado a Juan..." (2022.)

- b. <nen yuntili man aya>
 [nen]_A [yu-n tili]_V [man=?aya]_O
 PN:1s be-1s_{DEP} see DEM=PL
 'I am seeing them'
 OT: "yo los veo" (Y-C)

In the following example the A constituent consists of a pronoun and an intensifier (see § 7.2); in (16. 64) the intensifier is repeated following the transitive verb. The presence of the intensifier seems to indicate that the subject is focused, which may suggest that all S/A constituents in initial position serve a pragmatic function and could be identified as cases of fronting (see § 16.2.5.1).

- (16. 64) <òro naca eica capa jata pè qui>
 [ʔoro naka ki-ka]_A ka-pahata pe? ki?
 Sp:only PN:2s INTENS/REFL-2sP 2sA-pay IMP/FUT INTENS/OBJ
 'only you yourself will pay itself'
 OT: "tú mismo serás quien solo lo has de pagar" (1876.)

In X_G we also find the direct object to be expressed by the intensifier-reflexive pronoun *ki-* (see § 7.2)

- (16. 65) a. <nanin imán ki?áka>
 na nin_A ʔima-n ki?-aka_O
 DET PN:1s tell-1sA INTENS/OBJ-2s
 'I told (it to) you(rself)'
 OT: "yo te digo" (G-S)
- b. na nin_A ʔan-tuya? ke?_O
 DET PN:1s 1sA-scold INTENS/OBJ+3s
 'I scold him(self)' (G-SH)

VAO-ORDER: There are also examples of transitive clauses with complex predicate in the ALS that exhibit the word order VAO. Maldonado de Matos gives three versions of the same expressions where the A argument is either not expressed at all (16. 66a) or occurs in form of a pronoun in variant position between V and O (b-c). The pattern in (b) is VAO, while in (c) the subject constituent is inserted between the lexical main verb and the auxiliary of the periphrastic transitive progressive construction (§ 12.3.2).

- (16. 66) a. <yguitzi nàL u ea can na misza>
 [ʔiwic'i naʔʔ ʔuka-kan]_{VP} [na miša]_O
 hear IMPFV PROG-2sA_{DEP} DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1987.)
- b. <yguitzi nàL u ea can naca na misza>
 [ʔiwic'i naʔʔ ʔuka-kan]_{VP} [naka]_A [na miša]_O
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1989.)
- c. <yguitzi nàL naca u ea can na misza>
 [ʔiwic'i naʔʔ]_{VP} [naka]_A [ʔuka-kan]_{VP-SUB} [na miša]_O
 hear IMPFV PN:2s PROG-2sA_{DEP} DET Sp:mass
 'you were hearing the mass'
 OT: "tú estabas oyendo misa" (1988.)

In the ALS, the order VAO is not employed in many contexts. In the comparative data, however, it is more commonly attested in independent declarative clauses. In all given examples the subject constituent is present in form of a pronoun that shows agreement with the participant reference on the transitive verb. Other noun phrases in A function are not found inserted between V and O.

- (16. 67)
- | | |
|---|---|
| <p>a. kiri-n [nin]_A [tiʔa]_O
 pick/pull-1sA PN:1s yucca
 'I harvested yucca' (G-SH)</p> <p>c. <pirinick ey>
 piri [ni]_A [k'e-y]_O
 see PN:1s OBJ-2sf
 'I saw you'
 OT: "yo te ví" (Ch-P)</p> <p>e. kuy samu-n [nin]_A [miya man]_O
 AUX.FUT catch-1sA PN:1s chicken DEM
 'I will catch the chicken' (G-JAP)</p> | <p>b. tupa-kaʔ [naka]_A [mura]_O
 leave-2sA PN:2s cob of corn
 'you left (a) cob of corn' (G-SH)</p> <p>d. <n'dala ni pumu>
 n-tala [ni]_A [pumu]_O
 1sA-burn PN:1s incense
 'I burn copal'
 OT: "quemó copal" (Ch-C)</p> |
|---|---|

TAM-adverbials can occur between the A and O constituents, which resembles the pattern in example (16. 66c).

- (16. 68)
- | |
|---|
| <p>pula-n [nin]_A paʔaʔ [waruʔ]_O
 make-1sA PN:1s PFV net
 'I already made the net' (G-JAP)</p> |
|---|

There are several examples in the ALS as well as in the comparative data where the O argument of a transitive verb is not expressed as a separate constituent. In all attested cases the verbal predicate takes transitive person-marking and is therefore identified as transitive. The translation contexts of the examples suggest that these predicates do not have an O argument. However, it may be plausible that the O argument is the neutral third person singular participant 'it' that is not expressed. It is not entirely clear whether these predicates occur in subordinate syntactic context, as may be suggested by the word order pattern that resembles cleft-constructions (§ 16.2.5.3). In this case, the predicate would be intransitive.

- (16. 69)
- | | |
|--|--|
| <p>a. [na nin]_{S/A} šuka-n paʔaʔ
 DET PN:1s eat-1sA PFV
 'I have already eaten' (G-JAP)</p> <p>c. <najli pulay>
 [naʔi]_{S/A} pula-y
 PN:3p make-3s/pA
 'they made'
 OT: "ellos hacen" (Ch-C)</p> | <p>b. [na nin]_{S/A} šawaʔ'a-n [ʔahmukan]_{ADV}
 DET PN:1s sow-1sA yesterday
 'I sowed yesterday' (G-RHG)</p> <p>d. <inay avuájla culay>
 [ʔinay]_{S/A} [ʔawata]_{ADV} kula-y
 PN:2s yesterday want-2sfA
 'you wanted yesterday'
 T: "ayer quisite tú" (Y-C)</p> |
|--|--|

Schumann indicates a similar pattern to express habitual activity; in his example, the transitive verb is unmarked (nonfinite).

- (16. 70)
- | |
|---|
| <p><namán rúka>
 na man ruka
 DET DEM eat
 'he (= that one) eats'
 OT: "él come (habitual)" (G-S)</p> |
|---|

DEPENDENT TRANSITIVE CLAUSES: The basic argument order in dependent transitive clauses is VO. In the ALS, the pattern VO is attested in complement clauses that occur in S function (16. 71a). In the given example person agreement is cross-referenced on the subordinate predicate with the same prefixes used in independent clauses. Subordinate clauses with transitive predicates also exhibit the word order pattern VO (b). Here, the subordinate verb is deranked, taking the anterior/perfect suffix *-wa* that is used with non-coreferential subjects (§ 12.2.3).

- (16. 71) a. <szàŁ Łan muc pùla na oracion>
ša† †an [muk-pula [na oración]o]s-com
 good OPT 1pA-make DET Sp:prayer
 'they say, it is good (that) we make (= say) our prayer'
 OT: "dicen que es bueno que hagamos oración" (2028.)
- b. <... asuèc imaguà na miszà ...>
[ʔasik ʔima-wa? [na miša]o]sub
 CONJ speak-ANT DET Sp:mass
 '...when one spoke (= as spoken?) the mass'
 OT: "...cuando se dijo la misa" (1959.)

In the comparative data transitive complement clauses likewise exhibit VO-order. The transitive predicate takes dependent cross-referencing suffixes to mark person agreement. In complement clauses with intransitive predicate the verb is either unmarked (16. 73a) or given in the form of a stative participle (b).

- (16. 72) a. [ke sə nama-n [wapili-n]o]o-com
 Sp:that Sp:REFL hurt-1sA_{DEP} foot/leg-1sP
 '... that I have hurt my foot' (G-JAP)
- b. <hucay despreciado pulacan burla ti libertad>
ʔuka-y despreciado [pula-kan [burla]o [ti(:ʔ) libertad]ADV]o-com
 do-3sA Sp:depreciated make-2sA_{DEP} Sp:joke PREP Sp:liberty
 'he has depreciated/despised that you make a joke of liberty'
 OT: "haber despreciado el burlarte de la libertad" (Ch-Z)
- (16. 73) a. [na nin]A piri-n [wiriki [hina ʔaya†a]ADV]o-com
 DET PN:1s see-1sA speak PREP woman
 'I saw him speaking with a woman' (G-SH)
- b. <lugnuy tumú nanu conquista>
luhnu-y [tumu-ʔ [nanu conquista]s]o-com
 believe-3sA end-STAT DET Sp:conquest
 'he believed that the conquest was over'
 OT: "creyó acabada la conquista" (Ch-Z)

The basic argument order in transitive adverbial clauses is VO. In all attested examples of adverbial clauses in the ALS the subject constituent is omitted; the participant is anaphorically marked on the transitive verb with the same person-marking affixes that are used in independent/main clauses. The following examples of adverbial clauses from the ALS all occur to the left, i.e. preceding the main clause.

- (16. 74) a. <neŁa ca pùla ca cumbision...>
[ne†a ka-pula [ka-kumbisyon]o]adv
 BEN 2sA-make 2sP-Sp:confession
 'in order to make your confession'
 OT: "para confesarte ..." (2042.)

- b. <aLi ca yguitzí na misza ...>
 [ʔaʔi ka-ʔiwiç'i [na miša]o]ADV
 because 2sA-hear DET Sp:mass
 'because you hear the mass ...'
 OT: "por oír misa ..." (2044.)
- c. <a sűec naL pűla uezan na an oracion ca guaszatà>
 [ʔasik na(?)ʔ [pula ʔuka-n]VP [na ʔan-oración]o]ADV
 CONJ:when IMPFV make PROG-1sADEP DET 1sP-Sp:prayer
 'when I was making my prayer, you entered'
 OT: "cuando yo estaba haciendo mi oración, entrastes" (1992.)

Conditional clauses in the ALS show auxiliaries, TAM-adverbials and other adverbs being inserted between subordinate predicate and O constituent. Adverbial clauses that modify the subordinate predicate follow the O constituent or the predicate.

- (16. 75) a. <uisziy ayù pa qui na misza>
 [ʔuyši-y ʔayu-ʔ paʔ ki [na miša]o]ADV
 hear-3sA AUX PFV INTENS DET Sp:mass
 'he would have heard (himself/it) the mass'
 OT: "si habrá oído misa" (2024.)
- b. <maLca ormocà ma szaL tumuqui na jamaca ay ...>
 [maʔ=ka ʔormo-kaʔ ma šaʔ [tumu=ki na hama-ka ʔay]o]ADV
 CONJ gather-2sA COND good QUANT-DISTR DET sin-2pP 2PL
 'although you should have gathered well all your (pl.) sin(s), ...'
 OT: "aunque hayáis vosotros recogido bien todos vuestros pecados" (2033.)
- c. <ca yguitzi ma nàL na misza tumuqui pari, ...>
 [ka-ʔiwiç'i ma naʔʔ [na miša]o [tumu=ki pari]ADV]ADV
 2sA-hear COND IMPFV DET Sp:mass QUANT=DISTR day
 'if you had heard the mass every day, ...'
 OT: "si oyeras misa todos los días, ..." (2031.)

In purposive adverbial clauses the subordinate predicate is coreferential with the intransitive predicate of the main clause and marks person agreement with dependent cross-referencing suffixes (16. 76b). If the subject is the third person singular, the subordinate verb is nonfinite and marked with subjunctive clitic = ʔin (§ 13.3). Constituent order in the subordinate clause is VO.

- (16. 76) a. <taí na maestro nari Ła in na turi Łi>
 [Ø-ta:-yi-ʔ]V [na maestro]s [nariʔa=ʔin [na turi-ʔi]o]ADV
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 OT: "vino el maestro a enseñar a los niños" (2043.)
- b. <ca tà pè aŁa uezan can confesar>
 [ka-taʔ peʔ]V [ʔaʔa]ADV [ʔuka-kan confesar]SUB
 2sS-come FUT tomorrow do-2sSDEP Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

The pattern with the subjunctive marking coreferential dependent predicates is also attested in the comparative data. The subordinate verb is nonfinite and does not mark person or TAM-distinctions at all (16. 77). Constituent order in the subordinate clause is VAO.

- (16. 77) a. hapa-n [tura-n [nin]A [naka]o]ADV
 pass by-1sA take-SUBJ PN:1s PN:2s
 'I passed by to take you' (G-JAP)

- b. ʔanta-maʔ=ta [ʃawu-n man]_{ADV}
 IMP:go-EXH=DIR sit down-SUBJ DEM/3s
 'let's go (to) sit down' (G-JS)

There are a few selected cases in the Calderón-data from X_Y that exhibit OV-constituent order in relative clauses with nonfinite predicates. We do not have enough data from X_Y to establish whether this has to be regarded as a regular syntactic pattern.

- (16. 78) a. <naj man aya munta nay tili>
 nah man=ʔaya [mun=ta [nay]_O tili]_{REL}
 PN:3s DEM=PL DEM=INT PN:2s see
 'they are those who see you'
 OT: "ellos te ven" (Y-C)
- b. <munta nay tili naj man>
 [mun=ta [nay]_O tili [nah man]_A]_{REL}
 DEM=INT PN:2s see PN:3s DEM
 'that what/who sees you'
 OT: "él te ve" (Y-C)

Other examples of that same conjugational paradigm in Calderón's grammatical description can actually be identified as cleft-constructions where the relativised constituent exhibits regular constituent order VO(A).

- (16. 79) a. <munta tili nalica naj man>
 [mun=ta]_{NP} [tili [nalika]_O [nah man]_A]_{Srel}
 DEM=INT see PN:2p PN:3s DEM
 'that is what he sees you (pl.)'
 OT: "él vos ve" (Y-C)
- b. <naj man aya munta tili nen>
 [nah]_{NP} [man=ʔaya [mun=ta tili [nen]_O]_{REL}]_S
 PN:3s DEM=PL DEM=INT see PN:1s
 'they are those who see me'
 OT: "ellos me ven" (Y-C)

16.2.1.4 Ditransitive clauses

Ditransitive clauses include an additional constituent representing the indirect object (E) of the action/event indicated by the predicate. The indirect object constituent is either unmarked or it is introduced by the non-spatial preposition *ti*: ʔ (§ 9.2.2); it never precedes the predicate. In most declarative ditransitive main clauses, the indirect object follows the O constituent, i.e. the constituent order is VOE. In the following example from the ALS all arguments of the ditransitive predicate are expressed, with the subject constituent preceding in initial position, i.e. in the order AVOE.

- (16. 80) <nana maestro mu nariʔa pè na doctrina tiy turiʔi>
 [nana maestro]_A [mu-nariʔa peʔ]_V [na doctrina]_O [ti:ʔ turi-ʔi]_E
 FOC Sp:teacher 3sA-teach CENT DET Sp:creed IO child-PL
 'the teacher will teach the children the creed'
 OT: "el maestro enseñará la doctrina a los niños" (2020.)

The pattern VEO is also attested in the comparative data from X_G. In both examples the pronoun functioning as the indirect object is marked with the determiner/demonstrative *na*.

- (16. 81) a. nuk-ey [na ku=šunik]_O [na nin]_E
 give-3sA DET MOD=pot DET PN:1s
 '... (that) he/you gave me the pot' (G-JS)
- b. nuka-ka? [mapu]_O [na man]_E
 give-2sA tortilla DET DEM
 'you gave him (a) tortilla'
 OT: "vos le distes una tortilla a él" (G-RHG)

In the ALS and the comparative data, there are examples that confirm the pattern VEO where the E argument is inserted between the predicate and the O constituent. In the following example from the ALS, the E argument is expressed by the preposition *ti:ʔ* that takes the third person singular possessor-marking suffix *-h* (16. 82). In the examples from X_G, the indirect object is expressed as a pronoun that is not distinctively marked (16. 83).

- (16. 82) <... ca nuca pà pè tiyng na doctrina>
ka-nuka pa? pe? [ti:ʔ-h]_E [na doctrina]_O
 2sA-give PFV FUT IO-3sP DET Sp:creed
 '(if) you will have given (= told) him the creed'
 OT: "... si le dieras la doctrina" (2038.)
- (16. 83) a. [na hura-ʔe]_A ki? šə mu-niwa [nin]_O [waru?]_E
 DET man-PL ADV:a lot Sp:REFL? 3pA-ask PN:1s matate
 'the men ask me a lot for (= to make them) nets' (G-JAP)
- b. nuka-n [naka]_O [kah mapu]_E
 give-1sA PN:2s INDEF tortilla
 'I gave you a tortilla' (G-RHG)

In an example similar to (16. 80) the predicate with the transitive verb 'teach' occurs only with its core object argument. Here, the recipient of the 'teaching', i.e. 'the children' functions as the O argument.

- (16. 84) <an nariLa naturiLi>
ʔan-nariʔa [na turi-ʔi]_O
 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1977.)

DEPENDENT CLAUSE WITH DITRANSITIVE VERB: There is only one example of a dependent clause with a ditransitive verb in the ALS, which consists of the usually trivalent verb *nuka* 'give' in a relative clause that is modifying the O constituent of the main clause. In the relative clause the direct object follows the subordinate verb.

- (16. 85) <pulacà ma ayù na penitencia nucai naca na palè aya pàpè>
pula-ka ma ʔayu? [na penitencia [nuka-y [naka]_O [na pale]_AREL]_O
 make-2sA COND AUX DET Sp:penitence give-3sA PN:2s DET Sp:priest
 '(if) you should have made the penitence (that) the priest gave you last year'
 OT: "si hubieras hecho la penitencia que te dio el padre el año pasado" (2036.)

Relative clauses with ditransitive verbs are also attested in X_G. In most cases the verbs have the meaning 'say' or 'tell'. As in the ALS, the subordinate predicate is only followed by a direct object (16. 86a) or by an adjunct (b).

- (16. 86) a. [man=ta ʔima-kaʔ [nin]_O]_{REL}
 DEM=INT tell-2sA PN:1s
 'that what you told me' (G-SH)
- b. [man=ta ka-piri-n [hapa-ʔ šan-tiwina]_{ADV}]_{REL}
 DEM=INT 2sA-see-SUBJ pass-STAT PREP-sky
 'that what you see passing in the sky' (G-SH)

16.2.2 Negative clauses

Negative clauses are attested with intransitive, transitive and nominal predicates. The negator always occurs in clause-initial position (§ 13.4.1). The basic word order in negative clauses is NEG + VAO. Predicates in negative clauses exhibit the same inflectional morphology as predicates in declarative main clauses; predicates in negative subordinate clauses also take dependent-marking suffixes.

In intransitive negative main clauses in the ALS adjuncts follow the predicate. In the following example of the intransitive verb *šata* 'return' the purposive adverbial clause consists in a nonfinite subordinate verb that is coreferential with the subject of the main clause. There are no examples of independent intransitive clauses with expressed S constituent in the ALS.

- (16. 87) <á szin ca szàta pùla>
ʔašin ka-šata [pula]_{ADV}
 NEG 2sS-return make
 'you do not return to make (it)'
 OT: "no lo [vuelvas] a decir" (1887.)

In the comparative data the subject constituent in independent negative clauses follows the intransitive predicate, if it is expressed at all.

- (16. 88) a. hin ʔan-ʔišapa [nin]_S
 NEG 1sS-leave PN:1s
 'I do not leave' (G-SH)
- b. <gen atupa>
 hen ʔa-tupa
 NEG 3sS-stay
 'he does not stay'
 OT: "no queda" (Ch-Z)

Transitive predicates in negative clauses employ the same cross-referencing affixes as transitive verbs in neutral declarative clauses. The predicate is followed by the obligatory O constituent; the subject constituent is not expressed in the given examples.

- (16. 89) a. <a szin ca ʔuèue na perdon>
ʔašin ka-ʔíkí [na perdón]_O
 NEG 2sA-find DET Sp:forgiveness
 'you do not find forgiveness'
 OT: "no conseguiréis el perdón" (2033.)
- b. <a szin ui szicà nà miszà>
ʔašin ʔuyši-kaʔ [na miša]_O
 NEG hear-2sA DET Sp:mass
 'you did not hear the mass'
 OT: "no oíste misa" (1958.)

The basic pattern of cross-referencing and word order is confirmed by the comparative data. In a few examples where the subject constituent is expressed, it is inserted between the verb and the object, i.e. the constituent order is VAO.

- (16. 90) a. hin ʔan-ʔušiki [nay]_o
 NEG 1sA-hear PN:2sf
 'I do not hear you' (G-SH)
- b. hin ka tura-kaʔ [naka]_A [maʔik]_o
 NEG EXO take-2sA PN:2s firewood
 'you did not bring firewood' (G-JAP)
- c. <jlhan mujnicua tajá>
 ʔan muh-nikwa [tahaʔ]_o
 NEG 3sA-ask all, much
 'he does not want much'
 OT: "no quiero [sic] bastante" (Ch-JC)

There are few attested cases of negative nominal predicates in syntactic context in the ALS, most examples are lexical entries from the vocabulary that can be understood to occur in predicate function.

- (16. 91) <aszin szał>
 ʔašin ʃaʔ
 NEG good
 'not good = bad'
 OT: "malo, no está bueno" (3658.)

In the following examples, a negated personal pronoun functions as the head of the nominal predicate of a cleft-construction. The predicate is followed by a nonfinite transitive verb that is marked with the subjunctive marker *-n* (see § 13.3). The functional difference of the two examples in (16. 92), of which (b) employs the past suffix *-ʔa*, is not understood.

- (16. 92) a. <a szin señor aszin nen szac szaan>
 ʔašin señor ʔašin [nen]_{NP} [ʃakʃa:-n]_{REL}
 NEG Sp:sir NEG PN:1s steal-SUBJ
 'no sir, it was not me (who) stole it = no sir, I did not steal it'
 OT: "no señor, no lo hurté yo" (4773.)
- b. <a szin señor aszin nen szac szà Làn>
 ʔašin señor ʔašin [nen]_{NP} [ʃakʃa-ʔa:-n]_{REL}
 NEG Sp:sir NEG PN:1s steal-PAST.ACT-SUBJ
 'no sir, it was not me (who) stole it = no sir, I did not steal it'
 OT: "no señor, no lo hurté yo" (4775.)

A similar construction is attested in an affirmative context. Here the subject in the second person singular (16. 93) confirms that the suffix *-n* cannot cross-reference a first person singular subject and is therefore probably correctly identified as a subordinate marker (16. 92). One could again argue that the following example is actually a cleft-construction, i.e. the intensified second person pronoun is focused and could be functioning like a nominal predicate that is followed by a relativised clause, which in this case may be marked for subordination with the suffix *-n*.

- (16. 93) <a señor naca qui púla Làn>
 ʔa señor [naka =ki]_{NP?} [pula-ʔa:-n]_{REL}
 AFF Sp:sir PN:2s =INTENS make-PAST.ACT-SUBJ
 'yes sir, you yourself did it'
 OT: "si señor, tú lo hiciste" (4771.)

DEPENDENT NEGATIVE CLAUSES: In the ALS transitive predicates in subordinate negative clauses take the same cross-referencing affixes as in declarative clauses. In the following examples (16. 94), the constituent order in the dependent negative clause is regular inasmuch as O constituent and other adjuncts follow the inflected verb. However, TAM-adverbials and auxiliaries that follow the verb in regular order, are attested here in position preceding the verb.

- (16. 94) a. <aŁparaquiguà á szin pa ayù juenuēi na doctrina>
 [ʔaʔ-para kiwa-ʔ ʔašin pa(?) ʔayuʔ hini-y [na doctrina]o]ADV
 PREP.CAUS-? INTENS/REFL-? NEG PFV AUX know-3sA DET Sp:creed
 'because he would not have known the creed'
 OT: "...porque no habrá sabido la doctrina" (2022.)
- b. <... aszinvaà ca ima tumuqui ... >
 [ʔašin paʔ ka-ʔima [tumu=ki]o]ADV
 NEG PFV 2sA-say QUANT=DISTR
 'if you do not say all ...'
 OT: "... si no los decís todos ..." (2033.)
- c. <aszin pà pè ca acù misza aŁa ...>
 [ʔašin paʔ peʔ ka-ʔakuʔ [miša]ADV [ʔaʔa]ADV]ADV
 NEG PFV FUT 2sS-go Sp:mass tomorrow
 '(if) you will not have gone (to) mass tomorrow...'
 OT: "si no fueréis a oír misa mañana, ..." (2040.)

There are no attested cases of TAM-adverbials preceding the verbal predicate in dependent negative clauses in the comparative data. In X_G subordinate transitive predicates in negative clauses are attested with dependent-marking cross-referencing suffixes (16. 95a) and dependent TAM-inflection (b). The constituent order in both cases is NEG V S/A and NEG VO.

- (16. 95) a. hin hini-kan [naka]S/A
 NEG know-2sA_{DEP} PN:2s
 'you do/did not know' (G-JAP)
- b. hin hapa-wa-y [man=ta k'u ʔima [nin]S/A [hi-naʔ]OBL]REL/O-COM
 NEG wait-ANT-3sA_{DEP} DEM=INT MOD tell PN:1s PREP-DEM/PN:3s
 'he did not await that what I (would) speak with him' (G-SH)

The following example of an intransitive verb in a dependent negative clause from X_{Ch} shows that subordinate intransitive predicates use regular cross-referencing prefixes as it is attested in the ALS.

- (16. 96) <jam bulá cacán quejín catá luego>
 han pula=ka-kan [que hin ka-taʔ luego]ADV
 INT make=PROG-2sA_{DEP} Sp:that NEG 2sS-come Sp:soon
 'what is it that you were doing that you did not arrive soon (= in time)?'
 OT: "¿por qué te tardaste tanto?" (Ch-P)

16.2.3 Imperative clauses

In Xinka we find imperative clauses with intransitive, transitive and nominal predicates. Imperative predicates always occur in initial position of the clause. In negative imperative clauses the predicate is preceded by a negative marker.

In the ALS all examples of intransitive imperative clauses include only the imperative predicate that is marked with -ya (see § 13.1.2), but no arguments.

- (16. 97) a. <acùya>
ʔaku-ya
 go-IMP.VI
 'go!'
 OT: "¡vaya tú!" (2053.), "¡ve tú!" (1678.)
- b. <guasztáya>
wašta-ya
 enter-IMP.VI
 'enter!'
 OT: "entrar (imperativo)" (2328.)

In the comparative data we find examples which illustrate that in intransitive imperative clauses subject and adjuncts follow the imperative predicate.

- (16. 98) a. kata-ya [naka]_s
 lie down-IMP.VI PN:2s
 'lie down!' (G-JAP), (G-PE)
- b. <toney na'c>
 tone-y [nak]_s
 be silent-IMP.VI PN:2s
 'be quiet / be silent!'
 OT: "cállate" (Ch-JC)
- (16. 99) a. ʔara-ya [hutu man]_{ADV}
 ascend/climb-IMP.VI tree DEM
 'climb (up) that tree!' (G-RHG)
- b. <curuca muca akü>
 kuru-ka [muka ʔaki]_{ADV}
 run-2s_{DEP} work ADV:little
 'you run and/to work a little!'
 OT: "anda a trabajar un poco" (Y-C)

In transitive imperative clauses the predicate is unmarked (16. 100). In all examples of transitive imperative clauses in the ALS the O argument occurs in clause-final position. The A argument, if represented, follows right behind the imperative predicate, as it is the case in intransitive imperative clauses (b). Adverbs also occur between the imperative predicate and the O constituent (c).

- (16. 100) a. <pùla penitencia>
pula-Ø [penitencia]_o
 make/do-IMP.VT Sp:penitence
 'do penitence!'
 OT: "haz penitencia" (2026.)
- b. <pùla naca penitencia>
pula-Ø [naka]_A [penitencia]_o
 make-IMP.VT PN:2s Sp:penitence
 'make penitence!'
 OT: "haz tu penitencia" (2027.)
- c. <neŁa ca pùla ca cumbision pata szàma szàŁ na jamàca>
[neŁa ka-pula ka-kumbisyon]_{ADV}
 BEN 2sA-make 2sP-Sp:confession
 'in order to make your confession,'
pata-Ø šama šaŁ [na hama-ka]_o
 *accomplish-IMP.VT PREP ADV:good DET sin-2sP
 'remember well your sin(s)'
 OT: "para confesarte pensad bien tus pecados" (2042.)

In the comparative data the same pattern is attested. The O argument follows the imperative predicate in clause-final position and the A argument (or reflexive) can be inserted in between the two constituents (16. 101). The same pattern is attested if the imperative predicate is marked with cross-referencing suffixes of the second person singular (16. 102) or with the TAM-adverbial *peʔ* (16. 103).

- (16. 101) a. tura-Ø [naka]_A [ka-tamaç'iʔ]_o
 take-IMP.VT PN:2s 2sP-lasso
 'take your lasso!' (G-JAP)

- b. <guasti qui na mú camisa>
 wasti-Ø ki [na mu-camisa]_o
 dress-IMP.VT INTENS DET 2sP-Sp:shirt
 'put on *self your shirt!'
 OT: "ponéte tu camisa" (Ch-JC)
- (16. 102) a. weske-ka [muškarawa]_o b. <nucay na mu tutuc>
 throw-2sA rubbish nuka-y [na mu-tutuk]_o
 'throw (away) the rubbish!' (G-RHG) give-2sA DET 2sP-breast
 'give him your breast!
 OT: "¡dale la chiche!" (Ch-JC)
- (16. 103) tura pe? [ʔan-pewek]_o
 take IMP/CENT 1sP-gourd
 'bring (me) my gourd' (G-RHG)

In X_Y there is an example that shows the O constituent preceding the imperative predicate.

- (16. 104) <nen lájta nay akü>
 [nen]_o lahta-Ø [nay]_A [ʔaki]_{ADV}
 PN:1s push-IMP.VT PN:2s ADV:little
 'push me a little'
 OT: "¡empújame un poco!" (Y-C)

With ditransitive verbs the E-argument occurs in position immediately behind the imperative predicate.

- (16. 105) a. kisima-Ø [nin]_o [ka-šinak]_E b. <nuka'nik>
 give-IMP.VT PN:1s 2sP-bean nuka-Ø [nik]_o
 'give (as present) me your beans!' (G-JAP) give-IMP.VT PN:1s
 'give (it to) me!
 OT: "¡dème la mano!" (Ch-MQa)

Adjuncts like locative adverbials follow the imperative predicate.

- (16. 106) a. tupa-Ø [natiya]_{ADV} b. <tupanan>
 let/leave-IMP.VT LOC:here tupa-Ø [nan]_{ADV}
 'let it here!' (G-SH), (G-JAP) let/leave-IMP.VT LOC
 'let/leave it there!'
 OT: "¡déjalo ahí!" (Y-C)

In the ALS we find one example of an imperative nominal predicate. In this case the imperative adverbial *pe?* follows the Spanish adverb *temprano* 'early' functioning as a predicate, i.e. 'it must be early'. The S argument follows in form of a nominalised verb.

- (16. 107) <temprano pè acù-g>
 [temprano pe?]_{NP} [ʔaku-h]_s
 Sp:early CENT/IMP go-3sP
 'early must be his going = he must go early'
 OT: "¡ha de venir temprano!" (1964.)

16.2.4 Interrogative clauses

Interrogative clauses fall into polar or yes/no questions and content questions. In both types of interrogative clauses, the word order is VO.

Polar questions in Xinka can be realised by intonation or as cleft-constructions that are marked with the interrogative clitic *ʔn*. There is only one example of a yes/no question in the ALS that does not exhibit any specific interrogative marking (16. 108); in the comparative data the same type of question clause is found (16. 109). In both cases it can be assumed that the intonation pattern of the yes/no question differs from that of a declarative clause.

- (16. 108) <ʔuisziy pa ayù misza?>
ʔuyši-y pa(?) ʔayu? **[miša]_o**
 hear-3sA PFV AUX Sp:mass
 'will he have heard mass?'
 OT: "¿habrá oído misa?" (2023.)

- (16. 109) <hīniy namán na>
hīni-y [na man]_A [na]_o
 know-3sA DET DEM DEM
 'does he know it?'
 OT: "¿lo sabe él?" (G-S)

If the agent of the action is the subject of the interrogation, the subject constituent is placed to the left of the clause where it functions as a nominal predicate and is followed by the interrogative marker. As in regular cleft-constructions, the verb form is relativised and subordinate to the nominal predicate; it therefore takes subordinate inflectional morphology including dependent-marking cross-referencing suffixes and the anterior/perfect suffix to mark past-time reference.

- (16. 110) a. <ʔnem in púlaguàn?>
[nem]_{NP} [ʔin pula-wa-n]_{REL}
 PN:1s INT make-ANT-1sA
 '(is it) me what/who I have made it? = have I done it?'
 OT: "¿yo lo hice?" (4770.)
- b. <ʔnaca in szácszàguacan na tumin?>
[naka]_{NP} [ʔin šakša-wa-kan [na tumin]_o]_{REL}
 PN:2s INT steal-ANT-2sA_{DEP} DET Sp:money
 '(is it) you what/who you have stolen the money? = have you stolen the money?'
 OT: "¿tú hurtaste el dinero?" (4772.)

In X_G we find subordinate predicates marked with the subjunctive *-n*. In the following examples the imperative translation context may be misleading, as *-n* seems to work here in its interrogative function (which pragmatically seems to work as a request/order). It needs to be pointed out that in the ALS the interrogative marker follows noun phrases and verbs in subordinate contexts.

- (16. 111) a. tura-n [ču pewek]_o [ʔay]_{ADV}
 take-INT/SUBJ DIM gourd LOC:there
 'will he bring the little gourd there?' (G-RHG)
- b. tura-n [muyi?]_o kunu-Ø [nin]_o
 take-INT/SUBJ chicozapote buy-IMP.VT PN:1s
 'will he bring chicozapote?, buy (for) me!' (G-JAP)

Content questions are introduced by question words that occur in sentence-initial position and indicate what type of information is requested. The word order of all content questions is question word - predicate - (subject) - object. Content question markers can also function in indirect context, introducing a dependent clause.

There is only one example of an intransitive interrogative clause in the ALS where the past/perfective intransitive predicate is marked with the anterior/perfect suffix *-wa?* (see above). The construction could also be analysed as a cleft-construction with the question word functioning as the nominal predicate and the intransitive subordinate predicate being nonfinite.

- (16. 112) <¿cà pè taguà na aszue?>
[ka? **pe?**]_{NP} **[ta-wa?** **[na** **ʔaš]**]_{REL}
 INT:where? CENT come-ANT DET DEM
 'where (is it that) this (one) came from?'
 OT: "¿de dónde vino ésto?" (2010.)

This basic pattern of word order is confirmed by the comparative data. The subject-position can be filled by a noun phrase or left empty. The following examples from X_{Ch} illustrate that intransitive predicates in interrogative clauses take dependent-marking suffixes to reference the subject.

- (16. 113) a. <capi ixcacá> b. <indí patacá na'c>
 ka pi ʔiš(a)pa-ka? ʔinti pata-ka? [nak]_A
 INT:where? CENT emerge-2s_{DEP} INT *accomplish-2sA PN:2s
 'from where did you leave?' 'what can you do?'
 OT: "¿de dónde vienes?" (Ch-C) OT: "¿y que tienes vos?" (Ch-JC)

In Maldonado-Xinka transitive predicates in direct (16. 115a) and subordinate interrogative clauses (b) take transitive cross-referencing suffixes. Although the translation context is nonpast/imperfective, the predicate may in fact be a past form.

- (16. 114) a. <¿szàn para cà nem?> b. <a szìn szàn paraan nàca>
 šan para-ka? [nem]_O ašin šan para-n [naka]_O
 INT search-2sA PN:1s NEG INT search-1sA PN:2s
 'what have you searched me for?' 'I have not searched you for anything'
 OT: "¿para qué me quieres?" (1870.) OT: "no te quiero para nada" (1871.)

In X_G and X_{Ch} we find both, regular and dependent cross-referencing affixes that mark person agreement on transitive predicates in content questions.

- (16. 115) a. hanta ʔima-ka? [naka]_A b. <hándah maráka káka>
 INT:what? say/tell-2sA PN:2s hanta mara-ka k-a-ka
 'what did you say?' (G-SH) INT get angry-2sA REFL-?-2sP
 'why are you angry at yourself?'
 OT: "¿por qué enojas a ti?" (G-S)
 c. <huanín teró ca> d. <ndí mok ni guá?>
 wanin tero:-ka nti mĩk-niwa
 INT:who? kill-2sA INT:what? 2sA-want
 'who did you kill?' 'what do you want?'
 OT: "¿a quién has matado?" (Ch-C) OT: "¿qué quieres?" (Ch-F)

The comparative data furthermore indicate that transitive predicates with the anterior/perfect suffix *-wa* (16. 116) and transitive progressive predicates (16. 117) take dependent-marking suffixes, which may suggest that both TAM-suffixes derive from AVCs. The functional difference between the transitive verbs marked with *-wa* (16. 116) and those that take regular cross-referencing suffixes (16. 115) is not

entirely clear. With respect to this it needs to be noted that in example (16. 116a) the interrogative clause *wena tupawan* is subordinate to the interrogative nominal predicate *hanta*; the subordinate status of the predicate is indicated by the subjunctive marker *-n*.

- (16. 116) a. *hanta* [wena]_s *tupa-wa-n* [na=hu?]_o
 INT:what? INT:who leave-ANT-SUBJ DET=DEM
 'what is who left this?' (G-RHG)
- b. <ca tupagua kan?>
ka *tupa-wa-kan*
 INT:where? leave-ANT-2sA_{DEP}
 'where did you leave it?'
 OT: "¿dónde lo dejaste?" (Ch-F)
- (16. 117) a. *hanta* [ta?ma]_o *tura=ka-kan* [naka]_{s/A}
 INT road take=PROG-2sA_{DEP} PN:2s
 'which road/path are you taking?' (G-JAP)
- b. <jam bulá cacán quejín catá luego>
han *pula=ka-kan* [que hin ka-ta? luego]_{SUB}
 INT:what? make=PROG-2sA_{DEP} Sp:that NEG 2sA-arrive Sp:soon
 'what is it that you were doing that you did not arrive soon (= in time)?'
 OT: "¿por qué te tardaste tanto?" (Ch-P)

In the ALS, content questions are also attested with nominal predicates. In the following example the question word functions as the predicate preceding the subject of the clause (16. 118). In the comparative data we find interrogative clauses in form of cleft-constructions in which the nominal predicate consists of a question word plus pronoun/demonstrative that is followed by a relative clause (16. 119).

- (16. 118) <¿guena nàca?>
wena [naka]_s
 INT:who? PN:2s
 'who (are) you?'
 OT: "¿quién sois vos?" (1872.)
- (16. 119) a. *wena* [man]_{s/A} [Ø-wiriki-? [hina naka]_{ADV}]_{REL}
 INT:who DEM 3sS-speak-STAT PREP PN:2s
 'who is that (who) spoke with you?' (G-RHG)
- b. <guanin namá japá>
wanin [na ma?]_s [Ø-hapa-?]_{REL}
 INT:who? DET DEM 3sS-pass-STAT
 'who is that one (who) passed by?'
 OT: "¿quién fue él que pasó?" (Ch-JC)

In X_Y another form of interrogative clause with nominal predicate is attested. In the following example the question words seem to precede a nominalised verb form with possessor-marking in the third person (it needs to be kept in mind that it is not entirely clear whether *-h* functions in X_Y the same way as it does in X_G or X_{Ch}).

- (16. 120) a. <naca curug>
na ka kuru-h
 LOC INT:where? run-3sP
 'whereto is his running?'
 = where did he run to?
 OT: "¿a dónde huyó?" (Y-C)
- b. <xin ucaj man tojloni>
šin ʔuka-h [man toʔoni]_s
 INT do-3s DEM child
 'what is the doing of that child?'
 = what did the child do?
 OT: "¿qué hacen los niños?" (Y-C)

16.2.5 Focus clauses

This section subsumes all clause types that mark focus. Xinka employs various morphosyntactic devices to code and adjust pragmatic status, including constituent order, morphosyntactic operators, left-dislocation and cleft-constructions (cf. Payne 1997:271ff.). Only some of these devices are attested in the ALS.

16.2.5.1 Fronting

In clauses with intransitive, transitive and nominal predicates the focused constituent is fronted. In initial position it can be further pragmatically marked with the focus determiner *nana*. Most fronted constituents are subjects. There are some examples of fronted O constituents in the comparative data, although it is not clear whether these patterns have been analysed correctly.

INTRANSITIVE CLAUSE: Cases of S constituents preceding intransitive predicates are attested in the ALS only with passive clauses; the fact that the S constituent is marked with *nana* is not significant as Maldonado de Matos employs it to mark nominative case.

- (16. 121) <nana macu pulà pataguàg aLi Pedro>
[nana maku]_s [pula-? pata-wa-h]_{vp} [ʔaʔi Pedro]_{adv}
 FOC house make-STAT *accomplish-ANT-3sP by Pedro
 'the house was made (= built) by Pedro'
 OT: "la casa fue hecha por Pedro" (4775.)

In the comparative data we find initial S constituents marked with the focus determiner *nana* (16. 122) and others that use a definite determiner *na* or are unmarked (16. 123).

- (16. 122) a. [nana nin]_s [harana ya-n]_v
 FOC PN:1s ill PROG-1sS_{DEP}
 'I am being ill' (G-RHG)
 b. [nana man hurak]_s [ʔaku]_v [domingo]_{adv}
 FOC DEM man go Sp:sunday
 'that man goes [to mass] on sunday' (G-SH)
- (16. 123) a. [na naka]_s [ka-ʔaku-ʔ]_{vp}
 DET PN:2s 2sS-go-STAT
 'you went' (G-SH)
 b. <man aya curúki>
 [man=ʔaya]_s [kuru-ki]_{vp}
 DEM/3s=PL run-REFL?
 'he runs'
 OT: "él corre" (Y-C)

TRANSITIVE CLAUSE: In most transitive clauses in the ALS, the S constituent precedes the predicate. The S constituents can be preceded by *nana* or be unmarked (16. 124a-b). Examples where intensifiers follow a pronoun in clause-initial position suggest that this element is the focused constituent (c).

- (16. 124) a. <nana Pedro púlai (na) macùg aL mucàn>
[nana Pedro]_A [pula-y]_v [(na) maku-h]_o [ʔaʔmukan]_{adv}
 FOC Pedro make-3sA DET house-3sP yesterday
 '(the) Pedro made (=built) his house yesterday'
 OT: "Pedro hizo su casa ayer" (2017.)

- b. <nem an nariŁa naturiŁi>
[nem]_A [ʔan-nariŁa]_V [na turi-Łi]_O
 PN:1s 1sA-teach DET child-PL
 'I teach the children'
 OT: "yo enseño a los muchachos" (1978.)
- c. <naca qui púla Łàn>
[naka=ki]_{S/A} [pula-Ła:-n]_V
 PN:2s=INTENS make-PAST.ACT-SUBJ
 'you yourself (are who) made it'
 OT: "tú lo hiciste" (4771.)

The comparative data attest that, as with intransitive clauses, S/A constituents in initial position of the transitive clause can either be marked with the focus determiner *nana* (16. 125) or remain unmarked (16. 126).

- (16. 125) a. [nana man]_{S/A} ture-y
 FOC DEM take-3sA
 'that one took (it)' (G-SH)
- b. [nana na man]_{S/A} [kuy ʔuka šuwik']_V
 FOC DET DEM AUX.FUT do sweep
 'that one will sweep' (G-SH)
- (16. 126) a. [na naka]_A simi-kaʔ [ʔuraya]_O
 DET PN:2s put out-2sA fire
 'you put out the fire' (G-SH)
- b. <xuxo murruca naljki>
 [šušo]_A mu-ruka [naŁki]_O
 dog 3sA-bite PN:1p
 'the dog bites us'
 OT: "el perro nos muerde" (Ch-C)
- c. <nen nitz'api elay>
 [nen]_A n-ʔiŁ'api [ʔelay]_O
 PN:1s 1sA-stick out tongue
 'I stick out (my) tongue'
 OT: "saco (afuera) la lengua" (Y-C)

CLAUSE WITH NOMINAL PREDICATE: Focused S constituents also precede predicative noun phrases. There is only one example of this pattern of constituent order in the ALS. The pragmatic status of the subject constituent as being focussed is marked by the focus determiner *nana* (see § 8.5.1.2).

- (16. 127) <nana jautuma axŮe neŁa turiŁi>
[nana haw-tuma ʔahŁ]_S [neŁa turi-Łi]_{NP}
 FOC skin-deer=whip DEM BEN child-PL
 'this whip is for the children'
 OT: "este azote o cuero es para los muchachos" (1.)

There are many examples of pragmatically motivated fronting in verb-free clauses in the comparative data. In the majority of cases the fronted S constituent is a demonstrative

- (16. 128) a. [na man]_S [ʔən-čũ-ʔermano]_{NP} b. <manchitz'üōma>
 DET DEM 1sP-DIM-Sp:brother [man]_S čĩ ʔ'ĩʔma_{NP}
 'that one is my little brother' (G-RHG) DEM ? black
 'that one is black'
 OT: "aquel es negro" (Y-C)

- (16. 129) a. [nah]_S [na man]_{NP}
 PN:3s DET DEM
 '(it is) him that = he, who'
 "él" (G-SH), "quién" (G-S)
- b. <nagqui nanu gran potencia>
 [nah=ki]_S [nanu gran potencia]_{NP}
 PN:3s=INTENS DET/FOC Sp:great potential
 '*this itself (is) the great potential'
 OT:"aquella gran potencia" (Ch-Z)

There are several examples where the fronted demonstrative is marked with the focus determiner *nana*, as in the examples from the ALS.

- (16. 130) a. [nana hi?]_S [ʔan-neʔa]_{NP}
 FOC DEM 1sP-BEN
 'this is mine' (G-RHG)
- b. <nanu jú ical elag>
 [nanu hu?]_S [ʔikal ʔelah]_{NP}
 FOC DEM INDEF new
 'this is a new one'
 OT:"a ésta una nueva" (Ch-Z)

- (16. 131) a. [nana man]_S [ʔan-nwera]_{NP}
 FOC DEM 1sP-Sp:daughter-in-law
 'that one is my daughter-in-law' (G-SH)
- b. [nana ʔuy man]_S [klara hi?]_{NP}
 FOC water DEM Sp:clear be+3sS_{DEP}
 'that water is clear' (G-SH)

In the following example the fronted S constituent consists in an unmarked genitive construction (see § 16.1.1).

- (16. 132) <pu naj mau chiri ti>
 [pu nah man]_S čiri(-ʔ) ti:ʔ_{NP}
 arm PN:3s DEM twist(-STAT) IO
 'the arm of him is twisted'
 OT:"el brazo de él está torcido" (Y-C)

If nominal predicates occur in relative clauses of cleft-constructions, the constituent order in the relative clause is S NP (16. 133a-b), or in the case of predicative nominals with prepositional phrases, it is S PP+COP (c).

- (16. 133) a. [man=ta]_{NP} [[tuʔu man]_S [ʔololoʔ]_{NP}]_{Srel}
 DEM=INT flower DEM white
 'that is that flower that is white' (G-SH)
- b. <naj na macu na möc nejla>
 [nah]_{NP} [[na maku na]_S [mik-neʔa]_{NP}]_{Srel}
 DEM/PN:3s DET casa DET 2sP-BEN
 'it is this house (what is) his = this is his house'
 OT:"esta casa es suya" (Ch-C)
- c. [man=ta]_{NP} [[šunik']_S [[ša ʔuraya]_{ADV} heʔ_{COP}]_{PP}]_{Srel}
 DEM=INT pot PREP fire COP:be+3sS_{DEP}
 'that what is the pot (that) is on the fire' (G-SH)

FRONTING OF O CONSTITUENTS: In the comparative data we find examples of O constituents preceding the verb in clause-initial position. It is not entirely clear whether these are simply cases of fronting or left-dislocation.

- (16. 134) a. [mura man]_O kuy šuka-n [nin]_{S/A}
 elote DEM AUX.FUT eat-1sA_{DEP} PN:1s
 'that elote, I will eat (it)' (G-JS)
 b. <man musuca pelu>
 [man]_O mu-suka [pe:lu(?)]_{S/A}
 DEM/3s 3sA-bite Sp:dog
 'that one/he, the dog bites (him)'
 OT: "el perro le muerde" (Y-C)

In X_Y there are a few examples of transitive clauses that exhibit the constituent order SOV. The pattern is rare and its pragmatic status is not understood.

- (16. 135) <nelec lijiu man aya tili>
 [ne:lek]_A lihu [man=?aya]_O tili
 PN:1p ? DEM=PL see
 'we see them'
 OT: "nosotros los vemos" (Y-C)

16.2.5.2 Left-dislocation

Left-dislocation is a common phenomenon in all languages and refers to the placing of a clause element outside the syntactic boundaries to the left of the clause; i.e. a noun phrase occurs in clause-initial position, adjoining a following clause that recapitulates the initial noun phrase in form of a free pronoun (Payne 1997:273-275). Left-dislocation is not easily distinguished from fronting or cleft-constructions. If the initial noun phrase is not recapitulated by a free form but only in form of grammatical agreement, it is more likely a case of fronting (Payne 1997:275).

Left-dislocation is only attested in the comparative corpus. In the following examples the initial noun phrase is recapitulated in the S constituent in form of a free pronoun.

- (16. 136) a. [na nin]_{NP} [hapa-n [nin]_S [ša maku-ka]_{ADV}]_{LD}
 DET PN:1s VT:pass-1sA PN:1s PREP house-2sP
 'I/me, I passed by your house' (G-JAP)
 b. [na nin]_{NP} [ʔuka-y suku-y [nin]_{S/A} [wapili? [man=ta miya-ʔe man]_{REL}]_O]_{LD}
 DET PN:1s do-3sA tie-3sA PN:1s leg DEM=INT chicken-PL DEM
 'it is me who bound the legs of that what is chicken' (G-SH)
 c. [ne:ʔeke]_{NP} [kuy sawaɕ'a [nin]_S]_{LD}
 PN:1p AUX.FUT sow PN:1s
 'it is us, we are going to sow' (G-SH)

16.2.5.3 Cleft-constructions

Cleft-constructions are defined as predicate nominals that consist of an initial noun phrase (clefted constituent) and a relative clause; the relativised noun phrase is coreferential with the clefted constituent (Payne 1997:278-280).

There are not many examples of cleft-constructions in the ALS. In all attested cases, the relative clause consists of a subordinate predicate with subjunctive marking. The relativised NP, or cleft, consists in a pronoun that can be negated or intensified.

- (16. 137) a. <...aszin nen szac szaa>
 [ʔašin nen]_{NP} [šakša:-n]_{REL}
 NEG PN:1s steal-SUBJ
 '...it was not I/me (who) stole it = I did not steal it'
 OT: "no lo hurté yo" (4773.)
- b. <naca qui púla Làn>
 [naka ki]_{NP} [pula-ʔa:-n]_{REL}
 PN:2s INTENS make-PAST.ACT-SUBJ
 '(it is) you yourself (who) made it'
 OT: "tú lo hiciste" (4771.)

In the comparative corpus, personal pronouns, demonstratives, noun phrases preceded by focus determiner *nana* or noun phrases that combine a demonstrative and an interrogative (e.g. *man=ta*, *wena na man*) are attested as clefted constituents.

There are different types of cleft-constructions. The most basic pattern is attested in cleft-constructions where the noun phrase precedes a headless relative clause. In the following examples the relative clause is not marked by relativisers, but the relativised predicate is marked with the third person singular cross-referencing suffix. In contrast, in a fronted construction the subject constituent would have to show verb agreement.

- (16. 138) a. [nana nin]_{NP} [nuk-ey [na naka]_O]_{Srel}
 FOC PN:1s give-3sA DET PN:2s
 '(it is) me (who) gives (it) to you' (G-JS)
- b. <ni nac iriyiy>
 [ni]_{NP} [[nak]_O ʔiri-y]_{Srel}
 PN:1s PN:2s see-3sA
 'it is me who sees you'
 OT: "yo lo veo" (Ch-C)
- c. <neu teroy ical jurra>
 [nen]_{NP} [tero-y [ʔikal hura(ʔ)]_O]_{Srel}
 PN:1s kill-3sA INDEF man
 '(it is) me (who) killed a man'
 OT: "mato un hombre" (Y-C)

Most cleft-constructions attested in the comparative corpus are what is often also referred to as pseudo-clefts since the relative clause functioning as the S constituent does refer to a head noun in S function (cf. Payne 1997:280). The constituent order of these (pseudo-)clefts is NP S REL. The relative clause is in most attested cases unmarked, i.e. there is no overt relativiser. In the following examples a free pronoun occurs in the function of the clefted constituent.

- (16. 139) a. [naʔ]_{NP} [hurah man [hin ʔapata-ʔ ʔuka benir]_{REL}]_S
 PN:3s man DEM NEG *accomplish-STAT do Sp:come
 'he is that man (who) could not come' (G-SH)
- b. <najlij na ma tikijlá ahujlaca>
 [naʔi]_{NP} [na ma [ti(:)ki-ʔaʔ ʔawaʔakan]_{REL}]_S
 PN:3p DET DEM sleep-PAST.ACT yesterday
 'they are those (who) slept yesterday'
 OT: "ni ayer dormieron ellos" (Ch-C)
- c. <naj man aya munta tili nen>
 [nah]_{NP} [man=ʔaya]_A [mun=ta tili [nen]_O]_{REL}]_S
 PN:3s/p DEM=PL DEM=INT see PN:1s
 'they are those who see me'
 OT: "ellos me ven" (Y-C)

Question words can also occur as initial noun phrases of cleft-constructions.

- (16. 140) a. [wena]_{NP} [man [Ø-wiriki-? [hina naka]_{OBL}]_{REL}]_S
 INT:who DEM 3sS-speak-STAT PREP PN:2s
 'who (is it) that one (that) spoke with you?' (G-RHG)
- b. <guanin namá japá>
 [wanin]_{NP} [na ma? [Ø-hapa-?]_{REL}]_S
 INT:who? DET DEM 3sS-pass-STAT
 'who (is) that one (who) passed by?'
 OT: "¿quién fue él que pasó?" (Ch-JC)

As initial noun phrases we also find focused forms such as noun phrases with the focus determiner *nana* (§ 8.5.1.2).

- (16. 141) [nana man]_{NP} [tayuk [tura-n [nin]_O]_{REL}]_S
 FOC DEM hat bring-1sA PN:1s
 'that is the hat (that) I brought' (G-SH)

In rare cases the clefted constituent consists of a non-pronominal simple noun phrase.

- (16. 142) [ʔeʔa?]_{NP} [nana man [tura-ka? [nin]_O]_{REL}]_S
 new FOC DEM take-2sA PN:1s
 'it is new that what you brought me' (G-SH)

The form *man=ta* occurs otherwise in the function of a relativiser. It can function as the clefted constituent. The relativised predicate can be balanced or deranked. Cleft-constructions with the relativiser in the function of the initial noun phrase are also attested in X_Y .

- (16. 143) a. [man=ta]_{NP} [ladron [ture-y [ʔikaʔ miya]_O]_{REL}]_S
 DEM=INT Sp:thief take-3s A INDEF/NUM:'1' chicken
 'that is the thief (who) took a/one chicken' (G-SH)
- b. [man=ta]_{NP} [wiriki [hina naka]_{OBL}]_{Srel}
 DEM=INT speak PREP:with PN:2s
 'that what/who speaks with you' (G-SH)
- c. <munta tili nalica naj man>
 [mun=ta]_{NP} [tili [nalika]_O [nah man]_A]_{Srel}
 DEM=INT see PN:2p PN:3s DEM
 'that what he sees you (pl.)'
 OT: "él vos ve" (Y-C)

17 Complex clauses

This chapter deals with different types of clause linking in Xinka. Systematically, we need to distinguish between (1) coordinate constructions, i.e. the linking of two or more independent main clauses that can stand on their own, and (2) subordinate constructions, i.e. the linking of two clauses of which only the main clause can stand on its own while the other clause depends on the main clause (Payne 1997:306). Dependent clauses fall into the different morphosyntactic types of:

- complement clauses; i.e. embedded subordinate clauses that function as core arguments of a higher predicate (see Dixon 2006:4)
- adverbial or adjunct clauses; i.e. clauses that modify a verb phrase, or function as an adverb to the main predicate of the clause (cf. Payne 1997:316-317; Cristofaro 2003:155)
- relative clauses; i.e. clauses that function as nominal modifiers (Payne 1997:325)

Following Payne (1997:307) clause types are here described according to the degree of grammatical integration they exhibit, starting with the clause combination that shows the highest degree of grammatical integration: complement clauses (§ 17.1), adverbial clauses (§ 17.2), relative clauses (§ 17.3) and coordinate constructions (§ 17.4).

Coding strategies of subordinate predicates in the different types of dependent clauses include balanced and deranked verb forms (see Stassen 1985; Cristofaro 2003). The distinction of 'balanced' and 'deranked' verb forms was first introduced by Stassen (1985). In balanced dependent clauses the subordinate predicate is expressed the same way as in independent clauses, while in deranked dependent clauses the subordinate predicate is structurally different from that used in independent clauses. In Xinka these differences are coded in marking patterns for person agreement and TAM distinctions that are exclusively found in dependent clauses or in clauses with marked constituent order.

S/A arguments that are shared by main and dependent clause are often only expressed in the main clause. The comparative data suggest a tendency for VAO word order in subordinate clauses.

17.1 Complement clauses

Complement clauses function as core arguments (S, A or O) of a main clause (Noonan 1985:43; Payne 1997:313; Cristofaro 2003:95; Dixon 2006:1ff.). Typically, complement clauses occur with a restricted set of verbs that express concepts of perception ('see', 'hear'), desire ('want'), mode ('must', 'can'), phase ('begin'), manipulations ('make', 'order'), knowledge ('know', 'believe') and utterance ('say', 'tell') (see Noonan 1985; Cristofaro 2003:99). Dixon labels verbs that require a complement clause as 'secondary verbs' (Dixon 1994:134; 2006:8).

Based on the morphology of the predicate and its syntactic relations we can distinguish different types of complementation in Xinka, including the following coding strategies:

- complement clauses with no overt complementiser and main clause cross-referencing affixes on subordinate predicate in S/A and O function
- complement clauses with no overt complementiser and dependent cross-referencing suffixes on subordinate predicate in O function
- complement clauses with no overt complementiser and a stative participle as subordinate predicate in O function
- relative/interrogative clauses with verbal or nominal predicate and declarative cross-referencing affixes on subordinate predicate in S/A and O function
- infinitives or verbal nouns in O function

Following Dixon the latter three complement types can be identified as 'complementation strategies' rather than complement clauses, i.e. as deranked predicates and other types of grammatical constructions that are employed in a given language in the function of predicate complements (see Dixon 2006:6, 33ff.). ALS and comparative data show that there are no specific complementisers in Xinka. We can see that complements in O function (with the exception of relative clauses) all employ deranked predicates, i.e. finite predicates with dependent-marking cross-referencing suffixes or nonfinite verb forms such as infinitives/verbal nouns or participles. It is not clear whether this is a regular pattern or whether it needs to be attributed to the small sample of examples.

COMPLEMENT CLAUSE IN S/A FUNCTION: In the ALS we find transitive and intransitive complement clauses functioning as subject arguments of either nominal or transitive predicates. In example (17. 1a) the transitive complement predicate is finite, marking person agreement with the same cross-referencing prefixes that would be used in declarative main clauses. In all other examples the complement clause is a nominal predicate including the copula verb *ʔaya* that generally takes dependent-marking cross-referencing suffixes.

- (17. 1) a. <szàŁ Łan muc pùla na oracion>
 šaŁ **Łan** **[muk-pula na oración]**_{S-COM}
 good OPT 1pA-make DET Sp:prayer
 'they say, it is good that we make our prayer'
 OT:"dicen que es bueno que hagamos oración" (2028.)
- b. <szàŁ cangui szàma gracia ayaàc asùec muc terò>
 šaŁ **ka-n** **wi** **[šama gracia ʔaya:-k]**_{S-COM}
 good EXO-SUBJ/IRR DIR? PREP Sp:grace COP:be-1pS_{DEP}
 'it is good that we are in grace'
 OT:"bueno es que estemos en gracia" (1953.)

COMPLEMENT CLAUSE IN O FUNCTION: Most attested examples of complement clauses in the comparative data function as O arguments to transitive predicates including the verbs 'see', 'want', 'believe'.

The majority of attested cases of complementation in the comparative data are complement clauses that exhibit no overt marking of subordination; i.e. the non-coreferential intransitive and transitive subordinate predicates take the same cross-

referencing affixes as they would in an independent clause. If the complement clause consists of a transitive predicate with an O argument, the constituent order of the complement clause corresponds with the basic constituent order in main clauses, i.e. VO.

- (17. 2) a. hin ʔan-piri [ka-ʔuʃakiʔ]_{O-COM}
 NEG 1sA-see 2sA-smoke
 'I do not see/like that you smoke' (G-SH)
- b. ʔakani ka-piri [mu-pula [buya]_O]_{O-COM}
 ADV:like 2sA-see 3s/pA-make Sp:noise
 'as/like you see that they make noise' (G-SH)

If the subject of a subordinate intransitive predicate in O function is the third person singular, the subordinate predicate can be expressed by a stative participle (see § 11.1.2.1).

- (17. 3) a. [man=ta ka-piri [hapa-ʔ [ʃan-tiwina]_{OBL}]_{O-COM}]_{REL}
 DEM=INT 2sA-see pass-STAT PREP-sky
 'that what you see passing by in the sky' (G-SH)
- b. <lugnuy tumú nanu conquista>
 luhnu-y [tumu-ʔ [nanu *conquista*]_s]_{O-COM}
 believe-3sA end-STAT DET Sp:conquest
 'he believed that the conquest was over'
 OT: "creyó acabada la conquista" (Ch-Z)

Complement clauses can also consist of complex verbs, such as the intransitive progressive constructions in the following examples.

- (17. 4) a. piri-n [nin]_A [maraʔya hiʔ]_{O-COM}
 see-1sA PN:1s rest PROG+3sS_{DEP}
 'I saw that he is/was resting' (G-SH)
- b. hin ʔan-niwa [ʔakuki hiʔ [hina nin]_{OBL}]_{O-COM}
 NEG 1sA-want walk PROG+3sS_{DEP} PREP PN:1s
 'I do not want that he walks with me' (G-SH)

There are many other attested cases of deranked subordinate transitive verbs that take dependent cross-referencing suffixes to mark person agreement.

- (17. 5) a. <hucay despreciado pulacan burla ti libertad>
 ʔuka-y *despreciado* [pula-kan [burla]_O [ti:(ʔ) *libertad*]_{OBL}]_{O-COM}
 do-3sA Sp:depreciated make-2sA_{DEP} Sp:joke PREP Sp:liberty
 'he has depreciated/despised that you make a joke of liberty'
 OT: "haber despreciado el burlarte de la libertad" (Ch-Z)
- b. <lugnuy nucay nelag nanu felicidad>
 luhnu-y [nuka-y nela-k nanu *felicidad*]_{O-COM}
 believe-3sA give-3sA_{DEP} BEN-1p DET Sp:happiness
 'he believed he gave happiness to us'
 OT: "creyó darnos la felicidad" (Ch-Z)

Semi-speakers from Guazacapán also make use of the Spanish complementiser "que". The subordinate predicates can be fully marked for person agreement, or it can be nonfinite as in example (17. 6a). In example (b), a complement clause with a nominal predicate functions as the O argument of another subordinate clause.

- (17. 6) a. ʔime-y [na ku senyorita]_A [ʔaʔ naka]_E [ki ku]_{O-COM}
 say-1sA DET MOD Sp:miss PREP PN:2s Sp:that go
 'the young lady said to you that you (should) go' (G-JS)

- b. [porke piri=ka-kan [naka]_A [ke nankun paʔaʔ]_{O-COM}]_{ADV}
 Sp:because see=PROG-2sA_{DEP} PN:2s Sp:that afternoon PFV
 'because you are seeing that it is already afternoon' (G-JAP)

Besides complement clauses, there are other types of complementation strategies in O function attested in the ALS and the comparative corpus.

In the ALS, there is an example of an embedded interrogative clause that is introduced by the question word *šan* and functions as an O argument. The role of the directional *wi* is not understood, although it may be related to the syntactic function of the clause (§ 14.1.3.1). The interrogative clause functions as a complement to a complex transitive predicate in another subordinate conditional clause.

- (17. 7) <maŁca ueaca mà restituir szan gui szac szacà ...>
 [maŁ=ka ʔuka-ka maʔ restituir [šan wi šakša-kaʔ]_{REL/O-COM}]_{ADV}
 COND=have do-2sA COND Sp:replace INT DIR? steal-2sA
 'even if you should have replaced what ? you have stolen, ...'
 OT: "aunque hayáis restituído lo que hurtasteis" (2035.)

Embedded interrogative clauses function syntactically like relative clauses. In the comparative corpus, there is evidence of relative clauses functioning as O arguments; the subordinate predicate can be transitive or nominal (17. 8). In the case of subordinate nominal predicates, the noun phrase can be omitted and the relativiser functions pronominally in final position as a headless relative clause (17. 9).

- (17. 8) a. hin hapa-wa-y [man=ta kuy ʔima [nin]_A [hi-naʔ]_{OBL}]_{REL/O-COM}
 NEG wait-ANT-3sA_{DEP} DEM=INT AUX.FUT say PN:1s PREP-DEM/PN:3s
 'he did not await that what I wanted to tell him' (G-SH)
- b. [na nin]_A kiri-n [man=ta tiʔa]_{REL/O-COM}
 DET PN:1s pull-1sA DEM=INT yucca
 'I pulled that what is yucca' (G-SH)
- c. <mug huca unbu resistir manduma>
 muh-ʔuka =*ʔən =*pəʔ resistir [man=tə ma]_{REL/O-COM}
 3sA-do =SUBJ? =FUT Sp:resist DEM=INT DEM/3s
 'he will resist that what/who is that one = he will resist him'
 OT: "resistirá a aquel" (Ch-Z)
- (17. 9) kaye [nin]_A [man=ta]_{REL/O-COM}
 buy PN:1s DEM=INT
 'I bought what is that = I bought that (one)' (G-SH)

Another complementation strategy attested in the comparative data are nonfinite verbs that are completely unmarked and could be identified as infinitives or verbal nouns (see § 11.1.2.4). The pattern occurs when the main and subordinate predicate are coreferential.

- (17. 10) a. kuy tumu-y [šuka]_O [eʔoko]_{S/A}
 AUX.FUT end-3sA eat bird:zanate
 'the zanate is going to finish (it) eating' (G-JAP)
- b. [na nin]_{S/A} piri-n [wiriki [hina ʔayaʔa]_{OBL}]_{O-COM}
 DET PN:1s see-1sA speak PREP woman
 'I saw that him speaking with (a) woman' (G-SH)

17.2 Adverbial clauses

Adverbial clauses (or adjunct clauses) function as modifiers of the main predicate (cf. Payne 1997:316-317; Cristofaro 2003:155). The set of sample sentences in the ALS includes temporal, causal/reason, purposive, conditional/concessive and locative adverbial clauses, all of which exhibit different coding strategies for the subordinate predicate.

The coding strategies for adverbial clauses in Xinka include (a) deranking of subordinate predicate and (b) subordinators (i.e. conjunctions).

DERANKED SUBORDINATE PREDICATES: There are different forms of deranked subordinate predicates in Xinka. Subordination strategies of predicates whose subjects are not coreferential with the subject of the main clause include:

- person agreement with dependent-marking cross-referencing suffixes
- TAM distinctions with separate markers, i.e. *-wa* (§ 12.2.3) and *-ʔa* (§ 12.2.2)

Subordinate predicates whose subjects are coreferential with the subject of the main clause usually do not express person agreement and TAM distinctions at all. Subordinate predicates that share the subject with the main predicate are either unmarked or take the subjunctive marker *ʔin* (§ 13.3).

SUBORDINATORS link main clauses to non-embedded adverbial (subordinate) clauses (see Dixon 2006:2-3). In the ALS we can identify temporal, causal, conditional and purposive subordinators. The predicates of subordinate clauses that are introduced by a subordinator are marked for person agreement with the same sets of cross-referencing affixes that are employed in independent and main clauses.

Like all the coordinating conjunctions (§ 17.4), several subordinators employed by Maldonado de Matos have been borrowed from Spanish. All subordinators are used in the same positions as Spanish conjunctions, and accordingly it needs to be taken into account that constituent order may be influenced by Spanish syntax (cf. Suárez 1983:135-137).

Table 17. 1: Forms used as conjunctions in the ALS

CONJUNCTION			ORIGINAL GLOSS	GLOSS
<asUec>	ʔasi-k	[DEM?-ʔ]	"cuando" (3675.)	when
<ayác>	ʔaya-k	[be-VNʔ]	"(asi) como, parece" (3660.)	'being' = like
<tueaL>	tu=k'aʔ	[ʔ=ADV]	"si" (1955.)	if yet
<aszin vaà>	ʔašin=paʔ	[NEG=PFVʔ]	"sino" (2033.)	if not (= not yet)
<si>	si	Sp. <i>si</i>	"si" (1959.)	if
<maLca>	maʔ=ka	Sp. <i>mas que?</i>	"aunque, mas que" (4053.)	although
<neLa>	neʔa	[PREP.BEN]	"para" (2042., 4169.)	for
<aLi>	ʔaʔi	[PREP.CAUS]	"por" (3606.)	by
<aLparaquiguà>	ʔaʔ-para kiwa-	[PREP.CAUS-ʔ + INTENS/REFL]	"por" (3615.)	because, by
<paraquiy>	para ki	Sp. <i>porque</i>	"por" (4245.)	because, by

The other subordinators in Xinka can be identified as adverbial forms and non-spatial prepositions. The temporal conjunction *ʔasʔ* and the conjunction of manner *ʔayak* (which is not attested in syntactic context) both seem to be morphologically

complex. It could not be determined whether the function of the suffix *-k* in both forms is functionally related; in *ʔayak* the marker may be identified as a derivation of verbal nouns (§ 11.1.1). The conditional conjunction *tu=kaʔ* seems to combine the conditional marker *tu* and the adverbial of restriction *ʔak'aʔ* (see § 13.6). The conjunction for the negative conditional combines the negator *ʔašin* and the form <*váa*>, which may be a representation of the perfective adverbial *paʔ* (§ 12.5.2) that may have been assimilated as *ba:* in this particular context. The perfective adverbial *ba:* is attested as a regular form in *X_{Ch}*.

17.2.1 Temporal clauses

All temporal adverbial clauses attested in the ALS are introduced by the conjunction *ʔasik* 'when', indicating temporal overlap, i.e. the event/action expressed by the dependent clause is simultaneous with that of the main clause. The conjunction is not attested elsewhere in the comparative corpus, but may be related to the form *ʔasiša* 'now' ("ahorita") that is attested in *X_G*. The form *ʔasik* may be morphologically complex, perhaps consisting of the demonstrative *ʔaši* 'this' (§ 8.5.2) and the functionally not identified suffix *-k*.

In the ALS predicates in temporal clauses are finite and their inflectional properties do not differ from those of predicates in declarative independent clauses. All attested examples are intransitive predicates. The constituent order in the temporal clause is VS.

- (17. 11) a. <capa uiszicà paL naL na misza nana naca ay asUec uLù na macu tiusz>
ka=pa ʔuyši-kaʔ paʔ na(ʔ)ʔ na miša nana naka ʔay
 EXO=PFV hear-2sA PFV IMPFV DET Sp:mass FOC PN:2p 2PL
 'you (pl.) had already heard the mass,'
[ʔasik Ø-ʔuʔu-ʔ [maku tyuʃ]s]_{ADV}
 CONJ 3sS-fall-STAT house Sp:god
 'when the church fell (= collapsed)'
 OT: "ya habíais oído misa vosotros, cuando cayó la iglesia" (2018.)
- b. <... asUec uLù pataguà nana macu tiusz>
[ʔasik Ø-ʔuʔu-ʔ pata-waʔ [nana maku tyuʃ]s]_{ADV}
 CONJ 3sS-fall-STAT *accomplish-ANT FOC house Sp:god
 'when the church had been accomplished fallen = was collapsed'
 OT: "... cuando fue caída la iglesia" (2019.)
- c. <szàL cangui szàma gracia ayaàc asUec muc terò>
šaʔ ka-n wi šama gracia ʔaya:-k
 good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP}
 'it is good ? (that) we are in grace'
[ʔasik muk-tero-ʔ]_{ADV}
 CONJ 1pS-die-STAT
 'when we die'
 OT: "bueno es que estemos en gracia, cuando nos muramos" (1953.)

In the following two examples of temporal clauses from the ALS, the subordinate predicate can be identified as a transitive root that takes the suffix *-waʔ*. The suffix seems to be identified as the anterior/perfect marker that occurs on subordinate predicates with a subject different from the subject of the main clause and in pragmatically marked clauses with divergent constituent order (see § 12.2.3).

The translation contexts may suggest that the nonfinite verb form could also function here as a passive (see § 12.2.3), which is, however, otherwise not well attested as a functional category in the data.

- (17. 12) a. <niguan nàLqui szà Lìnà juicio ayacà asùec pulaguà nà sermon>
niwa-n naʔt ki ša ʔinaʔ juicio ʔaya-ka ʔ
 ask-1sA IMPFV INTENS PREP PREP:with Sp:judgement be-2sS_{DEP}
 'I myself asked (that) you would be sober'
[ʔasik pula-waʔ [na sermon]o]ADV
 CONJ make-ANT DET Sp:sermon
 'when one made (= was made?) the sermon'
 OT: "quisiera yo que estuvieras o hubieras de haber estado en juicio al tiempo del sermón" (1957.)
- b. <sí szàma macutiusz naL ayacà asùec imaguà na miszà ... >
si šama maku tyuš na(ʔ)t ʔaya-kaʔ
 Sp:if PREP house Sp:god IMPFV be-2sS_{DEP}
 'if you had been in the church'
[ʔasik ʔima-waʔ [na miša]o]ADV
 CONJ speak-ANT DET Sp:mass
 'when one spoke (= was spoken?) the mass ...'
 OT: "si hubieras estado en la iglesia, cuando se dijo la misa, ..." (1959.)

In the majority of examples in the ALS the temporal clause follows the main clause. There are, however, also examples where the order is reversed. In the following example the subordinate predicate is a transitive progressive construction that is preceded by the associated TAM-adverbial *naʔt* (see § 12.5.3); the intransitive main predicate follows after the adverbial clause.

- (17. 13) <a sùec naL pùla uean na an oracion ca guaszatà>
[ʔasik na(ʔ)t pula ʔuka-n [na ʔan-oración]o]ADV ka-waşata-ʔ
 CONJ IMPFV make PROG-1sA_{DEP} DET 1sP-Sp:prayer 2sS-enter-STAT
 'when I was making my prayer, you entered'
 OT: "cuando yo estaba haciendo mi oración, entrastes" (1992.)

17.2.2 Causal clauses

Causal adverbial clauses indicate the reason of the event/action described by the main predicate. In the ALS all causal clauses are introduced by the preposition *ʔaʔi* or the complex form including the non-spatial preposition and the intensifier-reflexive pronoun, i.e. *ʔaʔi-para-kiwa-* (see § 9.2.3). Maldonado de Matos also employs the conjunction *para ki* that seems to be borrowed from Spanish "porque" or "para que", rather than being Xinka in origin.

The causal clause can precede or follow the main clause. In the majority of examples from the ALS the adverbial clause precedes, while in the comparative data it is mostly attested in position following the main clause.

Verbal predicates in causal clauses take the same cross-referencing affixes to mark person agreement as verbal predicates in independent clauses. In both of the following examples the subordinate predicate is transitive and followed by the O argument; in example (17. 14b) the verb form is impersonal.

- (17. 14) a. <aLi ca yguitzi na misza [...] a szin ca pùla na jamaà>
[ʔaʔi ka-ʔiwiʔ'i-ʔ [na miša]o]ADV ʔašin ka-pula na hamaʔ
 PREP.CAUS 2sA-hear-STAT DET Sp:mass NEG 2sA-make DET sin
 'because you hear the mass ... you do not make (= commit) sin'
 OT: "por oír misa [...] no pecas" (2044.)
- b. <aLi aguiszù na turiLi a erLèque>
[ʔaʔi ʔa-wišu-ʔ [na turi-ti]o]ADV ʔa-ʔerteke
 PREP.CAUS 3sS-beat-STAT DET child-PL 3pS-get frightened
 'because of beating (= one beats) the children, they get frightened'
 OT: "de azotar a los niños se espantan" (2041.)

The next two examples from the ALS are identical constructions that only differ in person agreement of the main predicate and the conjunction used in the adverbial clause. It is not clear whether the conjunction *para ki* is a Spanish loan (see above) or whether it is a shortened version of the complex prepositional form *ʔaʔ-para kiwa-ʔ* (see § 9.2.3).

- (17. 15) a. <paraqui jarana ayaàn a szin uy szin nà misza>
[para ki harana ʔaya:-n]ADV ʔašin ʔuyši-n [na miša]o
 PREP.CAUS Sp.:sick be-1sS_{DEP} NEG hear-1sA DET Sp:mass
 'because I am/was sick, I did not hear the mass'
 OT: "el haber estado enfermo fue causa de que me quedara sin misa" (1954.)
- b. <aLparaquiguà jarana ayacà a szin ui szicà nà miszà>
[ʔaʔ-para kiwa-ʔ harana ʔaya-kaʔ]ADV
 PREP.CAUS-? INTENS/REFL-? sick COP:be-2sS_{DEP}
 'because you are/were sick,
ʔašin ʔuyši-ka-ʔ [na miša]o
 NEG hear-2sA DET Sp:mass
 you did not hear the mass'
 OT: "de estar enfermo te provino el quedarte sin misa / porque estuvistes enfermo no oíste misa" (1958.)

In the following example the adverbial clause following the main clause is negative.

- (17. 16) <naca ayù pà guiszucà na Juan aLparaquiguà á szin pa ayù jüenüei na doctrina>
naka ʔayuʔ paʔ wišu-kaʔ na Juan
 PN:2s AUX PFV beat-2sA DET Juan
 'you will have beaten Juan,'
[ʔaʔ-para kiwa-ʔ ʔašin pa(?) ʔayuʔ hñi-y [na doctrina]o]ADV
 PREP.CAUS-? INTENS/REFL-? NEG PFV AUX know-3sA DET Sp:creed
 'because he will not have known the creed'
 OT: "tú habrás azotado a Juan, porque no habrá sabido la doctrina" (2022.)

In X_G causal clauses are introduced by the subordinator *ʔaʔi* (see § 9.2.3). In the first example, the function of the suffix *-(e)y* on the predicate in the main clause is not understood. The subordinate predicate of the causal clause is either balanced and marked for person agreement with regular cross-referencing suffixes, or deranked as in example (c).

- (17. 17) a. ʔan-pul-ey mal [nin]_A [ʔaʔiʔ šuka-n mučo]_{ADV}
 1sA-make-? Sp:sick PN:1s PREP.CAUS eat-1sA Sp:a lot
 'it made me? sick, because I ate a lot' (G-SH)

- b. na nin te:ro wiriki
 DET PN:1s want speak
 'I want to talk.'
- [ʔaʔi horo-n [nin]_A [kaʔ problema [hina nin]_{OBL}]_O]_{ADV}
 PREP.CAUS get-1sA PN:1s INDEF Sp:problem PREP PN:1s
 'because I got (= have) a problem with myself' (G-SH)
- c. [muka-n [ʔaʔi horo=ka-ʔ [nin]_A [kaʔ turi man]_O]_{ADV}]_{SUB}
 work-1sA PREP.CAUS get=PROG-STAT PN:1s INDEF child DEM
 'I worked, because I am having a child' (G-JS)

All examples in X_G where the causal clause precedes the main clause can be identified as prepositional phrases consisting of the preposition *ʔaʔi* and a noun phrase. These patterns correspond with the use of the preposition "por" in Spanish.

- (17. 18) [ʔaʔi wari]_{ADV} hin ka-ta:-yi-ʔ naka
 PREP.CAUS rain NEG 2sS-come-LIG-STAT PN:2s
 'because of the rain you did not come' (G-SH)

In X_G we find frequent examples of causal clauses introduced by *ʔaʔi* following a nominal predicate that consists in the demonstrative *man* 'that'. These constructions that are also attested in X_{Ch} can follow a main clause or can occur on their own. Structurally, the pattern is a cleft-construction, with the causal conjunction functioning as a relativiser. Intransitive (17. 19a,c), transitive (b) and nominal predicates (c) are attested in these causal clauses; including predicates that are modified by another subordinate clause (d).

- (17. 19) a. nama heʔ hu:ši-n man
 hurt PROG+3s_{DEP} head-1sP DEM
 'my head is hurting,'
- [ʔaʔi hin ʔan-ʔišapa [ša pari]_{OBL}]_{ADV}
 PREP.CAUS NEG 1sS-leave PREP sun
 'that is because I do not leave/go out into the sun' (G-SH)
- b. k'aʔu=(u)k'-ey šinak man [ʔaʔi tur-ey [maʔik]_O]_{ADV}
 cook=PROG-3s_{DEP} beans DEM PREP.CAUS bring firewood
 '(she) is cooking beans, that is because she brought firewood' (G-SH)
- c. man [ʔaʔi šin šan [mura]_S]_{ADV}
 DEM PREP.CAUS NEG INT ear of corn
 'that is because there were no corn cobs' (G-JAP)
- d. man [ʔaʔi hapa-n [tura-n [nin]_A [naka]_O]_{ADV}]_{ADV}
 DEM PREP.CAUS pass-1sA take-SUBJ PN:1s PN:2s
 'that is because I passed by to take/bring you' (G-JAP)
- e. <jarána ya ma ájli lan puri tá>
 harana ya ma [ʔaʔi lan puri taʔ]
 ill PROG+3s DEM PREP.CAUS NEG ? come
 'he is ill, that is why he he did not come'
 OT: 'por mi enfermedad, porque estuve enfermo no he venido' (Ch-C)

A similar pattern is attested with the negator *hin* in position of the demonstrative *man*; this construction was used by only one speaker in X_G .

- (17. 20) hin [ʔaʔi hin kuy sawaʕ'a-ʔ nin]_{ADV}
 NEG PREP.CAUS NEG AUX.FUT sow-STAT PN:1s
 'not, because I will not sow' (G-JAP)

17.2.3 Purposive clauses

Adverbial clauses indicating the purpose of action are cross-linguistically often related to causal clauses, but in Xinka both types of clauses are coded differently. The ALS attests distinct ways of realising purposive subordination, including strategies with

- deranked subordinate predicates; i.e. the subordinate predicate marks person agreement with dependent-marking cross-referencing suffixes; subordinate predicates in the third person singular are marked with the subjunctive = *ʔin*
- balanced subordinate predicates; i.e. purposive clauses that are introduced with the benefactive preposition *ne ʔa* functioning as a subordinator and mark person agreement the same way as predicates in independent clauses

Deranked subordinate predicates only occur in constructions where the subjects of main and purposive clause are coreferential. In all ALS-examples of purposive constructions with deranked predicates the main predication is intransitive (with the subject = S) and the subordinate predicate transitive (with the subject = A). In the comparative data transitive and intransitive verbs are attested in the purposive clause.

PURPOSIVE CLAUSE WITH DERANKED PREDICATES: Most examples of adverbial purpose relations in the ALS are expressed by means of subordinate-marking on the predicate. In the first given example, the subject of the subordinate complex predicate (in form of a light verb construction) is coreferential with the subject of the main clause and marked for person agreement with dependent-marking cross-referencing suffixes in the second person singular.

- (17. 21) <ca tà pè aLa uea can confesar>
ka-taʔ peʔ ʔaʔa [ʔuka-kan confesar]_{ADV}
 2sS-come FUT tomorrow do-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 OT: "te vendrás a confesar mañana" (1990.)

There are two sample sentences where main and subordinate predicate are coreferential. In both cases the transitive subordinate predicate is marked with the subjunctive *ʔin*, which derives from the interrogative marker of yes/no questions (§ 13.2.2). Thus, A is not cross-referenced on the subordinate predicate; unless the third person singular cross-referencing suffix -y has become assimilated to =*in*. The O or E argument of the subordinate predicate follows in final position.

- (17. 22) a. <taí na maestro nari Ła in na turi Łi>
Ø-ta:-yi-ʔ [na maestro]_S [nariʔa=ʔin [na turi-ʔi]_O]_{ADV}
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 OT: "vino el maestro a enseñar a los niños" (2043.)
- b. <nana doctrina nariŁa pè patai ucain maestro tiy turiŁi>
[nana doctrina]_S nariʔa peʔ pata-y
 FOC Sp:creed teach CENT *accomplish-3sA
 'the creed will be taught to the children'
[ʔuka=ʔin [maestro]_S [ti:ʔ turi-ʔi]_E]_{ADV}
 do=SUBJ Sp:teacher IO child-PL
 'by the teacher'
 OT: "la doctrina será enseñada por el maestro ..." (2021.)

The same kind of pattern seems to be attested in X_G , where the subjunctive marker ʔn (or $-n$) occurs with intransitive subordinate predicates. It is possible that the subordinate predicates in the following examples are used transitively, i.e. 'to bathe sth.', 'to sit on sth.'. It has been pointed out in § 10.1.2.7 that in X_G intransitive roots with extended arguments can take transitive person-marking.

- (17. 23) a. ku-y [ʔipla=ʔin]_{ADV} man
go-3s_{DEP} bath=SUBJ DEM/3s
'that one went to bath' (G-JS)
- b. ʔanta-maʔ=ta [ʃawu-n]_{ADV} man
IMP:go-EXH=DIR sit down-SUBJ DEM/3s
'let's go (to) sit down' (G-JS)

The differentiation of the subjunctive marker $-n$ from the cross-referencing suffix of the first person singular is not in all cases clear. As a matter of fact, in the following examples subordination might not be marked on the subordinate predicate at all. The constituent order in the subordinate clause, however, is VAO.

- (17. 24) a. hapa-n [tura-n [nin]_A [naka]_O]_{ADV}
pass by-1sA take-SUBJ PN:1s PN:2s
'I passed by to take/bring (to) you' (G-JAP)
- b. <cuni ay ascan pulan taljma>
ku ni ʔay [ʔaska-n pula-n [taʔma]_O]_{ADV}
go PN:1s PROG+3sS open-1sA/SUBJ? make-SUBJ path
'I am going to make open (the) path'
OT: "yo abro, hago un camino" (Ch-C)

PURPOSIVE CLAUSE WITH SUBORDINATOR AND BALANCED PREDICATE: The non-spatial benefactive preposition *neʔa* functions as a conjunction of adverbial clauses indicating purpose of action. The pattern that oblique markers of benefactive/possessive become grammaticalised as subordinate conjunctions is attested in other Mesoamerican languages where it is attributed to the influence of Spanish *para* 'in order to...' (e.g. Pipil where the relational noun *pal* 'in order to' functions as a subordinator, see Campbell & Muntzel 1989:195).

Purposive clauses with subordinator *neʔa* are used when the predicate of the main clause is transitive; with intransitive main predicates the deranking strategy is employed.

- (17. 25) <neʔa ca pùla ca cumbision pata szàma szàʔ na jamàca>
[neʔa ka-pula [ka-kumbisyon]_O]_{ADV}
BEN 2sA-make 2sP-Sp:confession
'in order to make your confession,'
- pata-Ø šama šaʔ [na hama-ka]_O
*accomplish-IMP.VT PREP good DET sin-2sP
'remember well you sin(s)'
OT: "para confesarte pensad bien tus pecados" (2042.)

The comparative data confirm that predicates in purposive clauses introduced by the benefactive *neʔa* mark person agreement with the same cross-referencing affixes that are used in independent clauses; i.e. the subordinate verb is balanced. The purposive clause can precede or follow the main clause. In example (b) the main predicate takes a complement clause; it is not clear whether the adverbial clause precedes the main predicate because of this syntactic constraint. In example (c) the

main clause exhibits the constituent order VAO. In the example from the Zeeje-ms. we find a relativiser *ki* borrowed from Spanish *qué* 'that' inserted following the benefactive preposition (d).

- (17. 26)
- a. ka-ʔiki šuraya [neʔa ka-ʔawaro]_{ADV}
 2sA-find girl BEN 2sS-dance
 'you find (a) girl for you to dance' (G-SH)
- b. [neʔa mu-šuka]_{ADV} mu-ʔima [ʔuta]_o [kiʕ'i-ʔ]_{o-COM}
 BEN 3sA-eat 3sA-say mother fry-STAT
 'in order to eat, he tells the mother to fry (it)' (G-SH)
- c. kawu-n [na nin]_A [kaʔ libra de ʔaʔu]_o
 cook-1sA DET PN:1s NUM:'1' Sp:pound Sp:of corn
 'I cooked one pound of corn'
 [neʔa pula-n [man=ta nixtamal]_{REL}]_{ADV}
 BEN make-1sA DEM=INT nixtamal
 'in order to make that what is nixtamal' (G-SH)
- d. <nelag qui huca hig aljurai [...] ka huca desengañar>
 [nela-h ki ʔuka hiʔ ʔaʔ huray]_{ADV} ka-ʔuka *desengañar*
 BEN-ʔ Sp:that have PROG+3sS_{DEP} PREP eyes 2sA-do Sp:betray
 'in order to having [it] in sight [...], you (pl.) betray ...'
 OT: "para que teniendo a la vista [...], os desengañaréis" (Ch-Z)

17.2.4 Circumstantial clause

Adverbial clauses indicating circumstance are not attested in the ALS, but only in the comparative data. In all cases we find the subordinate predicate to be coreferential in subject with the predicate of the main clause. The subordinate predicate is nonfinite, i.e. person agreement and TAM distinctions are not marked on the verb.

- (17. 27)
- a. ʔan-muču paʔaʔ [wiriki]_{ADV}
 1sS-get tired PFV speak
 'I have got tired of speaking' (G-RHG)
- b. waštaʔ-ya [ʔakuki hiʔ]_{ADV} naka
 enter-IMP.VI walk PROG+3sS_{DEP} PN:2s
 'enter (by) walking, you! = come in, you!' (G-SH)
- c. <curú a cuc na'c>
 kuru [ʔakuk(i)]_{ADV} [nak]_s
 run walk PN:2s
 'you run (by) walking'
 OT: "te vas corriendo" (Ch-JC)

It seems that the same pattern is attested in X_G also with a construction where the subordinate predicate appears to express a purposive relation to the main predicate.

- (17. 28)
- man=ta ʔayaʔa [ʔaku [ša motor]_{ADV-LOC}
 DEM=INT woman go PREP Sp:engine=mill
 'that is the woman that went to the mill'
 [paʕ'i-kiʔ pula-ʔ man]_{ADV}]_{REL}
 grind-ʔ make-STAT DEM
 'to grind that' (G-SH)

In the Zeeje-ms. circumstantial adverbial relations are simply indicated by the use of dependent-marking cross-referencing suffixes to mark person agreement on the subordinate predicate.

- (17. 29) <ka huca desengañar naca hay hupú ka-can manga hay>
 ka-ʔuka desengañar naka ʔay [ʔupu=ka-kan [man-ka ʔay]o]ADV
 2sA-do Sp:betray PN:2p 2PL close?=PROG-2pADEP ear-2pP 2PL
 'you (pl.) betray (by) closing your ears'
 OT: "os desengañaréis cerrando vuestros oídos" (Ch-Z)

17.2.5 Conditional clauses

A conditional clause is a dependent clause that functions as an antecedent to the main clause, i.e. it expresses a condition for the occurrence of the event described in the main clause (see Cristofaro 2003:160). Depending on the semantic function, conditional clauses can be subclassified into hypothetical conditional, counterfactual conditional, concessive conditional and negative conditional (see Payne 1997:319). In the ALS, the predicates in conditional clauses take the same cross-referencing affixes as predicates in declarative main clauses; irrespective of the type of conditional clause. Conditional clauses in Xinka are either unmarked or employ subordinating conjunctions. The unmarked conditional clause could be another influence from Spanish, where the conjunction can be omitted when subjunctive mode is used. Besides zero-marking or the Spanish conjunction *si* 'if', Maldonado de Matos indicates the following forms functioning as conjunctions:

- *si* 'if': The subordinator is borrowed from Spanish and used in the same syntactic contexts as the Spanish form.
- *tu=kaʔ* 'if': The form could be a combination of a conditional subordinator **tu* and the adverbial of restriction *ʔakaʔ* 'still, yet' (§ 13.6), i.e. *tu=kaʔ* [if=yet]. The form is not attested elsewhere in the corpus.
- *ʔašin=paʔ* 'if not': This complex subordinator seems to combine the negator *ʔašin* and the perfective adverbial *paʔ* (§ 12.5.2). The form is also attested in the corpus as <aszinváa>, suggesting that the perfective adverbial is assimilated as *ba:*. Together both forms 'not' and 'already, yet' are employed by Maldonado de Matos as a conditional subordinator with the meaning 'if not'.

The following sample sentence in the ALS indicates a hypothetical conditional. The main clause that expresses the hypothesis with a future verb form is followed by the subordinate conditional clause. The condition is not introduced by a subordinator, but only indicated with a nonpast/imperfective verb form followed by the TAM-adverbials *paʔ* (§ 12.5.2) and *peʔ* (§ 12.5.1) that are used by Maldonado de Matos to mark the grammatical category of *futuro imperfecto subjunctivo*. These verb category is reflected in the Spanish translation of the clause.

- (17. 30) <mu uea can pè qui confesar naca na palè ca nuca pà pè tiyg na doctrina.>
 mu-ʔuka ka-n peʔ ki confesar [naka]o [na pale]s
 3sA-do EXO-SUBJ/IRR FUT INTENS Sp:confess PN:2s DET Sp:priest
 'the priest (himself) will confess you'
 [ka-nuka paʔ peʔ [ti:ʔ-h]E [na doctrina]o]ADV
 2sA-give PFV FUT IO-3sP DET Sp:creed
 '(if) you gave (= told) him the creed'
 OT: "te confesará el padre, si le dieras la doctrina" (2038.)

Most examples of conditional clauses in the ALS are counterfactual conditional clauses, that is, they indicate a past condition that cannot be altered anymore. The conditional clause may be marked by the Spanish subordinator conjunction *si* (17.31b), but otherwise Maldonado de Matos employs combinations of verb forms and TAM-adverbials that he categorises within the Latin model of grammar as subjunctive predicates. In all given examples the predicate in the main clause combines a verb form and the imperfective/durative adverbial *naʔʔ* (§ 12.5.3). Condition is expressed in different ways with combinations of verb forms and adverbials that either include *naʔʔ* or the conditional adverbial *ma* (see § 12.5.4). However, the use of the adverbials seems to correspond with Maldonado de Matos' defined tense categories, which obviously reflect in the Spanish translations. It is not entirely clear whether the adverbial *naʔʔ* has a conditional function in these contexts, or whether it simply expresses a form of past-time reference.

- (17.31) a. <ca yguitzi ma nàL na misza..., ca taana nàL ical santo>
[ka-ʔiwig'i ma naʔʔ [na miša]o ...]_{ADV}
 2sA-hear COND IMPFV DET Sp:mass
 'if you heard the mass ...'
ka-tana na(ʔ)ʔ [ʔikaʔ santo]_s
 2sS-be IMPFV INDEF Sp:saint
 'you were a saint'
 OT: "si oyeras misa ..., fueras un santo " (2031.)
- b. <śi szàma macutiusz nàL ayacà [...] ui szicà nàLqui na doctrina.>
[si [šama maku tyuš] naʔʔ ʔaya-kaʔ...]_{ADV}
 Sp:if PREP house Sp:god IMPFV be-2sS_{DEP}
 'if you had been in the church [...]'
ʔuyši-kaʔ naʔʔ ki [na doctrina]_o
 hear-2sA IMPFV INTENS DET Sp:creed
 'you would have heard the creed'
 OT: "si hubieras estado en la iglesia [...], hubieras oído la doctrina" (1959.)
- c. <pulacà ma ayù na penitencia [...] an uea nàLqui absolver naca...>
[pula-kaʔ ma ʔayuʔ [na penitencia]o ...]_{ADV}
 make-2sA COND AUX DET Sp:penitence
 '(if) you had made the penitence [...]'
ʔan-ʔuka na(ʔ)ʔ ki absolver [naka]_o
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I would absolve you'
 OT: "si hubieras hecho la penitencia [...] te absolviera yo" (2036.)

The subordinating conjunction *tu=kaʔ* 'if yet/still' is attested in the ALS only once in a clause where it is followed by the borrowed conjunction *para ki* 'porque', expressing a causal condition 'because if'. The context of the clause may support the analysis of *=kaʔ* as the adverbial of restriction as it seems to indicate the meaning 'if you keep/continue standing with that woman ...', implying that it is not too late to stop. Although the sample sentence seems rather artificial in its subject and construction, the combination of the subordinator *tu* and the adverbial of restriction *(a)kaʔ* seems to be coherent in this context.

- (17.32) <tu eaL paraqui upu ayacà Linà nà ayàLa man ca ùea condenar naca anima ...>
[tu=kaʔ para ki ʔupu ʔaya-kaʔ]
 CONJ:if=yet CONJ:because stand be-2sS_{DEP}
 'because if you are standing'

[tina? na ʔayaʔa man]_{OBL|ADV}
 PREP DET woman DEM
 'with that woman'

ka-ʔuka condenar [naka anima]_o
 2sA-do Sp:condemn PN:2s Sp:soul
 'you condemn your soul'

OT: "si por haber de estar con esa mujer te has de condenar" (1955.)

There are two examples of clauses in the ALS that express a negative conditional ('unless', 'if not'). In both examples the condition is not especially marked, although the combination of the negator *ʔašin* and the TAM adverbial *paʔ* seems to function as a subordinator. In example (17. 33b) we find a case of double negation in the sentence; i.e. the construction corresponds with the pattern 'if not X, then not Y'.

(17. 33) a. <aszin pà pè ca acù misza aLa>

[ʔašin paʔ peʔ ka-ʔakuʔ miša ʔaʔa]_{ADV}
 NEG PFV FUT 2sS-go Sp:mass tomorrow
 '(if) you will not have gone (to) mass tomorrow'
 OT: "si no fueréis a oír misa mañana..." (2040.)

b. <.... aszinvaà ca ima tumuqui szamà na ca confesion a szin ca Łuèèue na perdon>

[ʔašin paʔ ka-ʔima tumu=ki šamaʔ na ka-confesion]_{ADV}
 NEG *PFV 2sA-say QUANT=DISTR PREP DET 2sP-Sp:confession
 'if you do not say all in your confession,'
ʔašin ka-ʔikʔ na perdón
 NEG 2sA-find DET Sp:forgiveness
 'you do not find forgiveness'

OT: "si no los decís todos en tu confesión, no conseguiréis el perdón" (2033.)

17.2.6 Concessive clauses

There are examples of concessive clauses among the sample sentences in the ALS; there are no examples of concessive clauses in the comparative corpus. Concessive clauses are contrasted against the statement in the main clause, which follows the adverbial clause in both examples below. The subordinator *maʔka* that is employed by Maldonado de Matos to mark the concessive clause may have been borrowed from Spanish *mas que* 'although', if it does not combine the conditional adverb *ma(ʔ)* (§ 12.5.3) and the cliticised verb *ʔuka* 'have', i.e. **maʔ=ka* '[COND=have] (there) would be'.

In the second example below (b) the concessive clause precedes a conditional clause, both of which are subordinate to the main clause they are contrasted with.

(17. 34) a. <maŁca ueaca mà restituir [...] ca jama Łà>

[maʔ=ka ʔuka-ka maʔ restituir]_{ADV} **ka-hama-ʔaʔ**
 CONJ do-2sA COND Sp:replace 2sA-sin-PAST.ACT
 'although/even if you have replaced [it], you (have) sinned'
 OT: "aunque hayáis restituído [...], pecasteis" (2035.)

b. <maŁca ormocà ma szaŁ tumuqui na jamaca ay aszinvaà ca ima tumuqui szamà na ca confesion a szin ca Łuèèue na perdon>

[maʔ=ka ʔormo-kaʔ ma šaʔ [tumu-ki na hama-ka ʔay]_{o|ADV}
 CONJ gather-2sA COND good QUANT-DISTR DET sin-2p 2PL
 'even if you have gathered well all your (pl.) sin(s), [...]'

[ʔašin =waʔ ka-ʔima [tumu-ki]_o [šamaʔ na ka-confesión]_{OBL}ADV
 NEG COND 2sA-say QUANT-DISTR PREP DET 2sP-Sp:confession
 'if you do not say all in your confession,'

ʔašin ka-ʔikʔ [na perdón]_o
 NEG 2sA-find DET Sp:forgiveness
 'you do not find forgiveness'

OT: "aunque hayáis vosotros recogido bien todos vuestros pecados, si no los decís todos en tu confesión, no conseguiréis el perdón " (2033.)

In the comparative data concessive clauses as such are not attested. The Zeeje-ms. includes a clause that is introduced by the subordinator *ʔama-ki* that may also derive from Spanish *más que* 'although' and is used in the text to translate the Spanish conjunction *aun* 'even, yet'.

- (17. 35) <que mug tura consigo nanu nuruqui [...], amaqui entre nagqui nanu mas mug huca amar quiqui>
qué *muh-tura* *consigo* *nanu* *nuruqi*
 Sp:that 3sA-take Sp:with him DET hatred
 'that he takes with him the hatred,'
 [ama-ki *entre* *nah=ki* *nanu* *más* *muh-ʔuka* *amar* *kiki*
 CONJ Sp:among PN:3s=INTENS DET Sp:most 3sA-do Sp:love REFL+3p
 'even/yet among those who love each other most'
 OT: "que lleva consigo el odio [...], aun entre los que más se aman" (Ch-Z)

17.2.7 Locative clauses

Locative adverbial clauses specify the predicate by indicating the location where the event/action is taking place.

Examples from the ALS show that noun phrases can function adverbially indicating location and direction without including a preposition. In these cases, the directional specification 'towards' may already be inherent in the motion verb *ʔaku* 'to go'.

- (17. 36) a. <acù ayaan Guatemala>
ʔakuʔ ʔaya-an [Guatemala]_{ADV}
 go be-1s_{DEP} TOPN:Guatemala
 'I go to be (= I am going) to Guatemala'
 OT: "me voy a estar a Guatemala" (1961.)
 b. <pà pè ca acù misza>
paʔ peʔ ka-ʔakuʔ [miša]_{ADV}
 PFV FUT 2sS-go Sp:mass
 'you (pl.) would go to mass'
 OT: "fuereís a oir misa" (2040.)

The same pattern is attested in the comparative data; in the given example the preposition *šan* does not have syntactic function, but is part of the toponymic compound (17. 37). With verbs other than *ʔaku* 'to go' a full prepositional phrase is used (17. 38).

- (17. 37) [na nin]_s ku=ya-n šan-e'ehe
 DET PN:1s go=PROG-1s_{DEP} PREP-?
 'I am going [to] Chiquimulilla' (G-JAP)

- (17. 38) a. ʔuk-ey [naʔ]_O [ša naru]_{ADV}
 put/throw-3sA DEM/PN:3s PREP earth/ground
 'he put him [the dead one] into the earth' (G-JS)
- b. <da xa graua>
 ta ša krawa
 IMP:go/EXH PREP woods/forest
 'let's go to the forest'
 OT: "vayamos al monte" (Ch-F)

In the following examples the locative clause follows intransitive imperative predicates. In some cases the noun specifying the location is preceded by a definite determiner (a). In other examples the specifier is missing so that one could argue that these patterns are structurally identical to verbal compounds with noun incorporation (§ 10.1.4.3).

- (17. 39) a. <a-cuy na maku>
 ʔaku-y [na maku]_{ADV}
 go-IMP.VI DET house
 'go to the house/home!'
 OT: "¡anda a mi casa!" (Ch-F)
- b. <xagúí ma xirá>
 šawu-y [mašira]_{ADV}
 sit down-IMP.VI root
 'sit down on the root!'
 OT: "¡siéntate sobre las raíces!" (Ch-F)
- c. <curuy kihui>
 kuru-y [kiwi]_{ADV}
 run-IMP.VI yard
 'run into (the) yard = run outside!'
 OT: "¡vas afuera!" (Y-C)

In X_G relative and interrogative clauses are used as locative clauses.

- (17. 40) a. hin kuya-ka desbarankar [man=ta natiyaʔ]_{ADV}
 NEG go to-2s_{DEP} Sp:slip DEM=INT LOC
 '(that) you are not going to slip over there' (G-SH)
- b. <hántah hin kuyáka kaʔakúki nti amuká>
 han=ta hin ku=ya-ka ka-akuki [nti ʔamuka]_{REL}
 INT=INT NEG go=PROG-2s_{DEP} 2sS-walk INT:what? work
 'why are you not going to go to work'
 OT: "¿por qué no vas a trabajar?" (G-S)

All examples of locative clauses illustrated above are nominal. Locative clause with a subordinate predicate are only attested in the comparative data. In the following example from the Zeeje-ms. the locative clause is introduced by the question word for location (§ 13.2.1) functioning as a subordinator. The subordinate intransitive predicate makes use of the past marker *-wa* that only occurs in dependent and pragmatically marked clauses with divergent constituent order; it is followed by another subordinate predicate that is coreferential in subject and expresses a purpose relation.

- (17. 41) <ical aldea [...] kaca asullugua para gruiqui ...>
 ʔikaʔ aldea [kaka ʔa-suyu-wa [para-w(i)riki]_{ADV}]_{ADV}
 INDEF Sp:village INT:where? 3sS-return-ANT search-word?=fight
 'a village whereto he has returned to fight'
 OT: "una aldea [...] donde se volvía a pelear ..." (Ch-Z)

17.3 Relative clauses

A relative clause functions as a nominal modifier of the head of a noun phrase that fills an argument slot in a clause (Payne 1997:325; Dixon 2006:4). There are not many examples of relative clauses in the ALS. From the comparative corpus, where the majority of attested relative clauses are found in cleft-constructions (see § 16.2.5.3), we can reconstruct the typological parameters of relative clauses in Xinka. In all cases the relative clause follows the head noun, i.e. is postnominal. In the comparative data there are also attested cases of headless relative clauses. The grammatical relations that can be relativised are direct object and subject; there are no attested cases of relativisation of indirect objects, obliques or possessors (cf. Payne 1997:335).

The following coding strategies for relative relations are found in the corpus of data:

- zero-marking; i.e. no overt markers of relativisation, predicate deranking or marked constituent order.
- third person-marking of relativised subordinate predicates; i.e. the subordinate predicate is marked for person with the cross-referencing suffix of third person singular -y
- interrogative clauses; i.e. relativisation is achieved by interrogative clauses that function as modifiers to the head noun. These interrogative clauses are introduced by a question word functioning as a relativiser and can have transitive, intransitive or nominal predicates; subordinate predicates introduced by interrogative relativisers can be balanced and deranked verb forms

No patterns of specific relativising strategies for relative relations of the different types of predicate arguments (subject, object, indirect object) can be identified in the corpus.

ZERO-MARKING: Relative clauses with no overt markers of relativisation, predicate deranking or marked constituent order are attested in the ALS as well as in the comparative corpus. This relativising strategy has been labelled 'paratactic relative clause' (Comrie & Kuteva 2008:6). It occurs with head nouns functioning as subjects and direct objects.

In the following example (17. 42) a zero-marked relative clause modifies the noun phrase that functions as the O argument of the transitive predicate. The internal constituent order of the relative clause is VOA. As the subordinate predicate is given in the third person singular it cannot be verified whether the subordinate predicate of the relative clauses in Maldonado-Xinka is balanced or deranked, i.e. whether they mark person agreement with dependent-marking cross-referencing suffixes.

- (17. 42) <pulacà ma ayù na penitencia nucai naca na palè...>
pula-ka? **ma** **?ayu?** **[na** **penitencia**
 make-2sA COND AUX DET Sp:penitence
 '(if) you had made the penitence'
[nuka-y **[naka]o** **[na** **pale]**_{A|REL}**]o**
 give-3sA PN:2s DET Sp:priest
 '(that) the priest gave you, ...'
 OT: "si hubieras hecho la penitencia que te dio el padre" (2036.)

In the comparative data relative clauses without any overt marker of relativisation and balanced predicates are found in cleft-constructions. The relativised subordinate predicate and the predicate of the nominal main clause are coreferential in subject. The relativised clause can be negative and preceded by the negator *hin* (17. 43a). In the examples below the relative clause modifies the head noun that is functioning as the subject of the nominal predicate.

- (17. 43) a. [naʔ]_{NP} [hurah man [hin ʔapatá-ʔ ʔuka benir]_{REL}]_S
 PN:3s man DEM NEG *accomplish-STAT do Sp:come
 'he is that man (who) could not come' (G-SH)
- b. [man=ta]_{NP} [ladron [ture-y [ʔikaʔ miya]_O]_{REL}]_S
 DEM=INT Sp:thief take-3sA INDEF/NUM:'1' chicken
 'that is the thief (who) took a/one chicken' (G-SH)
- c. [man=ta]_{NP} [ʔayaʔa man [ʔakuki hiʔ [hina šurumu]_{OBL}]_{REL}]_S
 DEM=INT woman DEM walk PROG+3sS_{DEP} PREP boy
 'that is that woman who is walking with the boy' (G-SH)
- d. na nin [hapa-n [nin]_{S/A} [ša maku-ka]_{ADV}]_{REL}
 DET PN:1s VT:pass-1sA PN:1s PREP house-2sP
 'it is/was me (that) passed by your house = I passed by your house' (G-JAP)

Relativised intransitive predicates are attested in cleft-constructions, where the nominal predicate either consists of an interrogative pronoun and the demonstrative *man*, or of a pronoun in predicate function. In the following examples, the relativised intransitive predicate is given in the third person singular past/perfective that is formally identical with the stative participle.

- (17. 44) a. [wena]_{NP} [man [Ø-wiriki-ʔ [hina naka]_{OBL}]_{REL}]_S
 INT:who DEM 3sS-speak-STAT PREP PN:2s
 'who (is it) that one (that) spoke with you?' (G-RHG)
- b. <guanin namá japá>
 [wanin]_{NP} [na maʔ [Ø-hapa-ʔ]_{REL}]_S
 INT:who? DET DEM 3sS-pass-STAT
 'who (is) that one (who) passed by?'
 OT: "¿quién fue él que pasó?" (Ch-JC)
- c. <najlij na ma tikijlá ahujlaca>
 [naʔi]_{NP} [na ma [ti(:)ki-ʔaʔ ʔawaʔakan]_{REL}]_S
 PN:3p DET DEM sleep-PAST.ACT yesterday
 'they are those (who) slept yesterday'
 OT: "ni [sic] ayer dormieron ellos" (Ch-C)

THIRD PERSON-MARKING OF RELATIVISED PREDICATE: There are many attested cases of cleft-constructions in the comparative corpus where, the relativised predicate is marked in the third person singular. This pattern is not attested in Maldonado-Xinka, but since it occurs in X_G , X_{Ch} and X_Y we may assume it to be a general strategy in Xinkan. There are no examples of relativised intransitive predicates in this syntactic context.

- (17. 45) a. nana nin [nuk-ey [na naka]_O]_{REL}
 FOC PN:1s give-3sA DET PN:2s
 '(it is) me (who) gives (it) to you' (G-JS)
- b. na nin [ʔuka-y suku-y nin [wapiliʔ [man=ta miya-ʔe man]_{REL}]_O]_{REL}
 DET PN:1s do-3sA tie-3sA PN:1s leg DEM=INT chicken-PL DEM
 '(it is) me (who) has bound the legs of that (what is) chicken' (G-SH)

- c. <ni nac iriyiy>
 ni [[nak]_O ?iri-y]_{REL}
 PN:1s PN:2s see-3sA
 'it is me who sees you'
 OT: "yo lo veo" (Ch-C)
- d. <neu teroy ical jurra>
 nen [tero-y [?ikal hura(?)]_O]_{REL}
 PN:1s kill-3sA INDEF man
 '(it is) me (who) killed a man'
 OT: "mato un hombre" (Y-C)

INTERROGATIVE CLAUSES: The most common strategy for coding relative relations in Xinka is the use of interrogative clauses, or clause types that seem to derive from interrogative clauses. The same types of interrogative clauses that serve as relative clauses can also be embedded as core arguments of the main clause (see § 17.1). Cross-linguistically, relative and interrogative clauses are both common complementation strategies that are not rarely coded the same way (Dixon 2006; Cristofaro 2003:196). In the Xinka data the distinction of relative clauses and embedded interrogative clauses is not in all cases clear; and we could argue that the embedded interrogative clauses are in fact headless relative clauses (cf. Payne 1997:329).

A) *Interrogative/relative clause with šan*: In the ALS the interrogative clause strategy is only attested in form of an embedded interrogative clause that functions as an O argument to the transitive main predicate (17. 46). The question word employed in this context is *šan*, the function of the following directional *wi* is unclear (see § 14.1.3.1). In the second example (b), the main clause can consist in a headless noun phrase. The same pattern of interrogative clause embedding (however, lacking the form *wi*) is attested in X_G and X_Y (17. 47).

- (17. 46) a. <maŁca ueaca mà restituir szan gui szac szacà...>
 [maŁka ?uka-ka(?) ma? restituir [šan wi šakša-ka?]_{REL/O-COM}]_{ADV}
 CONJ do-2sA COND Sp:replace INT DIR? steal-2s A
 'even if you should have replaced what you have stolen, ...'
 OT: "aunque hayáis restituído lo que hurtasteis ..." (2035.)
- b. <a szin szàn paraan nàca>
 ?aşin [šan para-n [naka]_O]_{REL/O-COM}
 NEG INT:what search-1sA PN:2s
 'I have not searched you for anything'
 OT: "no te quiero para nada" (1871.)
- (17. 47) a. <junún san juraty>
 hunu-n [san hurati]_{REL/O-COM}
 know-1sA INT eyes
 'I know what (is his) eyes/face'
 OT: "conozco su cara" (Y-C)
- b. yuwa-n [šan may su semiya]_{REL/O-COM}
 lose-1sA INT ? ? Sp:seed/planting
 'I lost what is ? the seed/planting' (G-RHG)

The following examples from the Zeeje-ms. illustrate that interrogative clauses can also occur in the function of relative clauses rather than complements. In (17. 48a), the interrogative clause, that is introduced by the question word *hay*, modifies

the head noun of a prepositional phrase that functions as an adverbial clause to the main clause, which is not reproduced here. As the syntax in the Zeeje-ms. is heavily influenced by the Spanish matrix text, it would be an overstatement to deduce from this example that Xinka can relativise oblique arguments, as other cases are not attested. The relativised interrogative clause exhibits changed word order, which reflects in the use of the anterior/perfect marker *-wa* (see § 12.2.3) that is, however, also attested in example (b), where there is no adverbial constituent preceding the verb.

- (17. 48) a. <jama nanu reunion [...] jai natuca tumuqui [...] há uhuigua>
 hama nanu reunion [hay¹⁸³ natu-ka [tumuqi]_{S/A} ʔa-ʔuwi-wa]_{REL}
 PREP FOC Sp:assembly INT LOC QUANT 3sS-call-ANT
 'in the assembly whereto all are/were called'
 OT: "en la reunion [...], a que todos ... son ... llamados" (Ch-Z)
- b. <tenan contribuciones jan ha-ucagua abrumar>
 tenan contribuciones [han ʔa-ʔuka-wa abrumar]_{REL/O-COM}
 QUANT Sp:taxes INT 3sS-do-ANT charge
 'so many taxes that is/was he charged with'
 OT: "tantas contribuciones con que se le abrumaba" (Ch-Z)

B) Relative clauses with the question word for human/person: In the ALS we find two examples of headless relative clauses that are introduced with the human question word *wena* and function as S-complements of the predicate. These constructions seem to be literal translations of the Spanish sample sentences. In both cases the question word *wena* is marked with the intensifier *ki* (see § 7.2.2.1.3), i.e. *wena=ki* 'who-(him)self'.

- (17. 49) a. <guenaqui nà pè agi aLa temprano pè acùg.>
 [wena=ki_S [naʔ peʔ]_{ADV} ʔahi ʔaʔa]_{S-COM}
 INT:who-INTENS LOC DIR COP:be+3sS_{DEP} ADV:tomorrow
 '(the one) who has to be here tomorrow,'
 [temprano peʔ]_{ADV} ʔaku-h
 Sp:early IMP/FUT go-3sP
 'early must be his going (= has to go early)'
 OT: "el que ha de estar mañana aquí, ha de venir temprano" (1964.)
- b. <guenaqui szamà pecado mortal agi yueguaLi y na gracia...>
 [wena=ki_S [šama pecado mortal]_{ADV} ʔahi]_{S-COM} yiwati-y [na gracia]_O
 INT:who=INTENS PREP Sp:mortal sin COP:be+3s lose-3sA DET Sp:grace
 '(the one) who is in mortal sin lost the grace of god'
 OT: "el que está en pecado mortal ha perdido la gracia..." (1963.)

In X_G there are examples of relative clauses that are introduced by the form *wena=ta* and function as O complements of the transitive predicate. The relativiser *wena=ta* combines the question word for human/person *wena* 'who?' and the interrogative marker *ta* (see § 13.2.1). The form is structurally analogical to the relativiser *man=ta* (see below).

¹⁸³ In the Zeeje-ms. the question word *hay* is used in the same functional context as *han*. The final consonant *y* does not seem to be determined by the phonetic context, since *hay* also occurs before consonants other than *n*.

- (17. 50) a. hin niwa-n [wena=ta ʔaku-ta]_{REL/O-COM}
 NEG ask-1sA INT:who=INT go-PAST.ACT
 'I did not ask who went' (G-SH)
- b. kuy kayi-n [wena=ta mu-kunu [kwerno man]_O]_{REL/O-COM}
 AUX.FUT sell-1s_{DEP} INT:who=INT 3sA-buy Sp:leather DEM
 'I am selling (to), who buys that leather' (G-SH)

C) *Relative clauses with man=ta*: Another relativising strategy that is not attested in the ALS, but is the most common form of relativisation in the X_G-data are relative clauses introduced by the relativiser *man=ta*, which seems to combine the demonstrative *man* (§ 8.5.2) and the bound interrogative clitic *ta* (§ 13.2.1). Relative clauses with *man=ta* are not really interrogative clauses, as the relativiser *man=ta* is not attested as a question word in independent interrogative clauses. However, since the form is structurally analogical to the relativiser *wena=ta* [who=INT] that does occur as a question word (see below), relative clauses with *man=ta* are treated here under the same subject heading.

In most attested cases, the demonstrative-interrogative relativiser occurs with balanced subordinate predicates, i.e. transitive and intransitive subordinate predicates occur in the same form as in independent clauses.

- (17. 51) na nin pula-n [trabaxo [man=ta ʔima-kaʔ [nin]_O]_{REL}]_O
 DET PN:1s make-1sA Sp:work DEM=INT tell-2sA PN:1s
 'I made the work that (what) you told me' (G-SH)

The demonstrative-interrogative relativiser can also introduce a relative clause with a deranked subordinate predicate at its core: In the Calderón-data from X_Y relative clauses are attested that employ the relativiser *mun=ta* and leave the transitive subordinate predicate unmarked. These forms are given by Calderón as part of a conjugational paradigm, but not within any wider syntactic context. In a few cases these relative clauses exhibit the constituent order OV. There are not enough data from X_Y to establish whether this is a regular syntactic pattern. All other examples of that conjugational paradigm follow the regular pattern VOA (see Calderón 1908).

- (17. 52) a. <naj man aya munta tili nen>
 [nah [man=ʔaya [mun=ta tili [nen]_O]_{REL}]_S
 PN:3s/p DEM=PL DEM=INT see PN:1s
 'they are those who see me'
 OT:"ellos me ven" (Y-C)
- b. <naj man aya munta nay tili>
 nah [man=ʔaya [mun=ta [nay]_O tili]_{REL}]_S
 PN:3s DEM=PL DEM=INT PN:2s see
 'they are those who see you'
 OT:"ellos te ven" (Y-C)

In X_G and X_Y the relativiser *man=ta* also seems to function as as a nominal predicate of a cleft-construction that includes a deranked relativised predicate. Again, in the examples from X_Y, the O constituent can precede or follow the verb.

- (17. 53) a. man=ta [wiriki [hina naka]_{OBL}]_{REL}
 DEM=INT speak PREP:with PN:2s
 'that what/who speaks with you' (G-SH)

- b. <munta tili nalica naj man>
 mun=ta [tili [nalika]_O [nah man]_S]_{REL}
 DEM=INT see PN:2p PN:3s DEM
 'that what he sees you (pl.)'
 OT: "él vos ve" (Y-C)
- c. <munta nay tili naj man>
 [mun=ta [nay]_O tili [nah man]_S]_{REL}
 DEM=INT PN:2s see PN:3s DEM
 'that what/who sees you'
 OT: "él te ve" (Y-C)

The demonstrative-interrogative relativiser *man=ta* occurs frequently with nominal predicates.

- (17. 54) [man=ta man naʔu-n]_{REL}
 DEM=INT DEM son-1sP
 'that what is that (one) my son = that one is my son' (G-SH)

Relative clauses introduced with *man=ta* can become embedded as complements of the main predicate. They are attested in both syntactic roles as O arguments (17. 55a-b) and S arguments (c). The relative clause complement usually follows the main predicate (a, c), but can also precede for pragmatic reasons (b).

- (17. 55) a. hin hapa-wa-y
 NEG VT:await-ANT-3sA_{DEP}
 'he did not await'
 [man=ta kuy ʔima [nin]_A [hi-naʔ]_{OBL}]_{REL/O-COM}
 DEM=INT AUX.FUT say PN:1s PREP-DEM/PN:3s
 'that what I wanted to tell him' (G-SH)
- b. [man=ta [ka-mapu]_S]_{REL/O-COM} hin ka-nuka [nin]_O
 DEM=INT 2sP-tortilla NEG 2sA-give PN:1s
 'you do not give me, that what is your tortilla' (G-SH)
- c. hin ʔa-pata [man=ta ʔa-tero-ʔ čirikiʔ]_{REL/S-COM}
 NEG 3sS-*accomplish DEM-INT 3sS-/diekill-STAT ADV:small
 'the one does not accomplish, who dies/is killed small/young' (G-SH)

In the majority of attested cases the subordinate predicate is nominal, consisting of a simple (17. 56a, c) or complex noun phrase (b).

- (17. 56) a. [na [nin]_A kiri-n [man=ta tiʔa]_{REL/O-COM}
 DET PN:1s pull-1sA DEM=INT yucca
 'I pulled that what is yucca' (G-SH)
- b. waka-ʔ [man=ta miya man]_{REL/S-COM}
 run away-STAT DEM=INT chicken DEM
 'it ran away that what is that chicken = that chicken ran away' (G-SH)
- c. <mug huca unbu resistir manduma>
 muh-ʔuka =*ʔən =*pəʔ resistir [man=tə ma]_{REL/O-COM}
 3sA-do =SUBJ? =FUT Sp:resist DEM=INT DEM/3s
 'he will resist that what/who is that one = he will resist him'
 OT: "resistirá a aquel" (Ch-Z)

The noun phrase can also be omitted resulting in a headless relative clause.

- (17. 57) kaye [nin]_A [man=ta]_{REL/O-COM}
 buy PN:1s DEM=INT
 'I bought what is that = I bought that (one)' (G-SH)

17.4 Coordinate clauses

Coordinate constructions link two clauses of equal grammatical status (Payne 1997:336). In the ALS there is only one example of a coordinate construction; so strategies for conjoining clauses need to be reconstructed from the comparative data. In Xinka, the strategies for conjoining clauses and noun phrases are the same.

In the ALS vocabulary we find coordinating conjunctions that are all borrowed from Spanish and can be assumed to occur in the same syntactic position as their Spanish counterparts, i.e. between the clauses that are linked.

Table 17. 2: Coordinating conjunctions in the ALS

FORM	ORIGINAL GLOSS	ENGLISH GLOSS
<máca> maka Sp. mas que	"y" (4041.)	<i>and</i>
<póre> pore Sp. pero	"pero" (4316.)	<i>but</i>
<o> o Sp. o	"o" (1955.)	<i>or</i>

Of these conjunctions only the last one is attested in syntactic context. In the following example the syntactic construction fully parallels the Spanish translation context.

- (17. 58) <... ca ùea condenar naca anima ó catupa ó ca puriqui Linà>
ka-7uka **condenar** **naka** **anima**
 2sA-do Sp:condemn PN:2s Sp:soul
 'you condemn your soul,'
o **ka-tupa** **o** **ka-puriki** **ti-na?**
 Sp:or 2sA-leave Sp:or 2sA-marry PREP-PN:3s
 'or you leave (her/it), or you marry (with) her'
 OT: "..., te has de condenar, o la dejas, o te casas con élla" (1955.)

In the comparative data the regular Spanish conjunctions *y* 'and', *o* 'or' and *pero* 'but' are employed and used in the same way as they would occur in Spanish syntax, as the following examples may illustrate.

- (17. 59) a. na nin horo-n ka? besino
 DET PN:1s get-1sA INDEF Sp:neighbour
 'I got (= have) a neighbour'
 ʔi ne:ʔeke komo ʔenemigo
 Sp:and PN:1p Sp:like Sp:enemy
 and we (are) like enemies' (G-SH)
 b. pero hin mu-7uka deklarar si na nin ʔo wena=ta?
 Sp:but NEG 3sA-do Sp:declare Sp:whether DET PN:1s Sp:or INT:who=INT
 'but he does not declare whether me or who(m)' (G-SH)
 c. na nin hapa-n nin ša maku-ka pero hin ʔiki-n naka
 DET PN:1s pass-1sA PN:1s PREP house-2sP Sp:but NEG find-1sA PN:2s
 'I passed by your house, but I did not find you' (G-JAP)

Maldonado de Matos indicates various conjunctions that include the adverbial of extension *šʔi* 'as well' (see § 13.6), i.e. *ʔakan šʔi* 'like this as well' (2048.), *ʔama šʔi* '(more) as well' (2047.), *ʔina(ʔ) šʔi* 'with as well' (4028.), all of which are probably used to indicate coordination, while none of them is actually attested in syntactic context in the ALS or elsewhere.

Other strategies to indicate coordination involve a zero-strategy, i.e. the clauses are just juxtaposed (see Payne 1997:337). The form is attested in the semi-speaker data from X_G.

- (17. 60) k'oʔlo hiʔ ʔišapa heʔ mu-kwero takwasin
 peelPROG+3sS_{DEP} remove PROG+3sS_{DEP} 3sP-Sp:leather Sp:possum
 'he is peeling (and) he is removing the skin/leather of the opossum' (G-SH)

In the comparative corpus comitative non-spatial prepositions are employed for conjoining noun phrases that share the same semantic role.

- (17. 61) <náka anmóka kayák šan šanʕʔéhe>
 naka ʔan-moka kaya-k šan šan-ʕ'ehe
 PN:2s 1sP-COMIT sell-1sA PREP PREP-?
 'you and I sold in Chiquimulilla'
 OT: "tú y yo vendemos en Chiquimulilla" (G-S)

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Appendices

1. Systematic outline of Latin categories in the ALS

Descriptive order¹⁸⁴

Chapter 1	letras características	(fol. 1r-13r)
Chapter 2	nombre y pronombre	(fol. 13r-35v)
Chapter 3	verbo	(fol. 36r-79v)
Chapter 4	sum est fui	(fol. 80r-85v)
Chapter 5	partículas posesivas	(fol. 85v-89r)
Chapter 6	partículas verbales	(fol. 89r-105v)
Chapter 7	participio, preposicion, adverbio, interjecion y conjuncion	(fol. 80r-85v)

Descriptive categories

Capitulo 2 de el nombre y pronombre (fol. 13r ff.)

Declinaciones (14v-16r; 18v-19r)

Nominativo	nana	(voluntario)	(14v-15r; 18v-19r)
Genitivo	neŁa, -neŁa	"de"	(14v-15r; 18v-19r)
Dativo	tiý, tiý-	"a, para"	(14v; 15v-16r; 18v-19r)
Acusativo	ná	"a"	(14v-15r; 18v-19r)
Vocativo	-	-	(14v; 16r)
Ablativo	aŁi, aŁparaquiguá	"por"	(14v; 16r; 18v-19r)

Plural (17r-18r)

1. declinacion (18v-19r)	-Łi		(17r)
	-Łe	"nombres acabados en e o ec"	
	-caŁi	kinship terms	
2. declinacion (19r)	teenan	"muchos"	(17v)
	tumuqui	"todos"	

Pronombres primitivos (19v-20r)

1s	nen	ego	(19v)
1p	neŁec	nosotros	(19v)
2s	náca	tu	(19v)
2p	náca áy	vosotros	(20r)
3s	mu	sui, sibi, se	(20r)
	nag	ille, illa, illud	(20r-20v)
	axúé	hic, haec, hoc	(20v)
	mán	ese, esa, eso	(21r)
3p	nagŁic	pl: ille, illa, illud	(20v)
	axúéŁic	pl: hic, haec, hoc	(20v-21r)
	manŁic	pl: ese, esa, eso	(21r)

¹⁸⁴ The mode of representation of the colonial categories is derived from Dedenbach-Salazar Sáenz (1993).

Pronombres primitivos – mismo (21r-22r)

1s	əiguán	"yo mismo"	(21r-21v)
2s	əiguaca, əica	"tu mismo"	(21v)
3s	əiguág, əiquig qui	"aquel mismo"	(22r)
1p	əiguác	"nosotros mismos"	(21v)
2p	əiguáca ay, əica ay	"vosotros mismos"	(21v)
3p	Łic əiguág	"aquellos mismos"	(22r)

Declinacion de quis vel qui (22r-23v)

"quien, el que"	guén, guén Łic	(22r-22v)
"el que"	guéna qui, guéna quiŁic	(22v-23r)
"si alguno"	guéna ayu qui, guána ayu quiŁic	(23r)
"ninguno"	ni guéna ma qui, ni guéna ma quiŁic	(23r-23v)

Partículas posesivas (23v-34r)

	Antepuesta	Pospuesta	
1s	an-	-an, -en, -in, -on, -un, -ŭen	(28r-30r)
2s	ca-	-ca	(30r-30v)
3s	mu-	-ag, -eg, -ig, -og, -ug, -ŭeg	(30v-31r)
1p	muc-	-ac, -ec, -ic, -oc, -uc, -ŭec	(31r-31v)
2p	ca- ... -ay	-ca ay	(32r)
3p	mu- ... + <i>plural</i> primera especie	-ag, -eg, -ig, -og, -ug, -ŭeg + <i>plural</i> segunda especie	(32r-32v)

Capítulo 3 de el verbo (fol. 36r ff.)

Conjugaciones

1. conjugacion: pula	(fol. 42v-46v)
2. conjugacion: mere	(fol. 47r-51r)
3. conjugacion: piri	(fol. 51r-55r)
4. conjugacion: oromo	(fol. 55r-59v)
5. conjugacion: samu	(fol. 59v-63v)
6. conjugacion: əŭetŭe	(fol. 63v-67v)
conjugacion de verbos comunes anomalos	(fol. 67v-69v)
conjugacion de verbos comunes regulares	(fol. 69v-71v)
conjugacion de verbos anomalos	(fol. 71v-74r)
conjugacion del verbo "acu"	(fol. 74r-76r)
otra conjugacion	(fol. 76r-77v)
verbos defectivos	(fol. 77v-79v)

Tiempos y modos

presente

indicativo	activa	S/A-	VI/VT			
subjuntivo	activa	S/A-	VI/VT	+ Łan		
indicativo	pasiva		VT		+ pata-	-S
subjuntivo	pasiva		VT	+ Łan	+ pata-	-S

pretérito imperfecto

indicativo	activa	S/A-	VI/VT		+ náŁ	
subjuntivo	activa	S/A-	VI/VT	+ mà	+ náŁ	
indicativo	pasiva		VT		+ náŁ	+ pata- -S
subjuntivo	pasiva		VT	+ mà	+ náŁ	+ pata- -S

gerundios

genitivo

activa	(a) +		VI/VT
pasiva		<i>pata-an</i> +	VT

dativo

activa	neŁa +	á +		VI/VT
pasiva	neŁa +	á +	pata- +	VT

acusativo

activa				VI/VT
pasiva	(a) +		pata- +	VT

ablativo

activa	aŁi / aŁparaquiguà +	(a) +		VI/VT
pasiva	aŁi / aŁparaquiguà +		<i>pata- Łà</i> +	VT

participios

presente y pretérito imperfecto

	-VL
VI/VT	-Ła(Ł)
	-quiŁa / -eŁa

pretérito perfecto y plusquamperfecto

VI/VT	-gua

de futuro en -rus

	-Ła + (quiŁa)
VI/VT	-Ła + (pè)
	-quiŁa + (pè)

de futuro en -dus

VT	-gua + pè +	pata-í

Capítulo 4 de *Él sum est fui* (fol. 80r ff.)

Voces del 'sumestfui':

pata	"ser"
taana	"ser"
szàta	"estar"
ayà	"estar"
ucà	"tener, haber"
unà	"tener, haber"
ayù	"tener, haber"

Capítulo 5 en que se explican las partículas posesivas correspondientes a las conjugaciones de los verbos

Partículas para verbos activos (fol. 86r-86v):

	Antepuesta	Pospuesta
1s	an-	-an, -en, -in, -on, -un, -uēn
2s	ca-	-ca
3s	mu-	-ag, -eg, -ig, -og, -ug, -ueg
1p	muc-	-ac, -ec, -ic, -oc, -uc, -uec
2p	ca- ... -ay	-ca ay
3p	mu- ... + Lic, quiŁic	-ag, -eg, -ig, -og, -ug, -ueg + Lic, quiŁic
	presentes	pretéritos perfectos
	pretéritos imperfectos	pretéritos plusquamperfectos
	futuro imperfecto	futuro perfecto
	futuro subjuntivo	

Partículas para verbos pasivos (fol. 88r):

	Pospuesta	Pospuesta
1s	-an	-an
2s	-ca	-ca
3s	-y	-ag
1p	-ac	-ac
2p	-ca ay	-ca ay
3p	-y + Lic, quiLic	-ag + Lic, quiLic
	presentes	pretéritos perfectos
	pretéritos imperfectos	pretéritos plusquamperfectos
	futuro imperfecto	futuro perfecto
	futuro subjuntivo	

Partículas para verbos comunes (fol. 88v-89r):

	Antepuesta	Pospuesta
1s	an-	-an, -en, -in, -on, -un, -uen
2s	ca-	-ca
3s	a-	-Ø
1p	muc-	-ac, -ec, -ic, -oc, -uc, -uec
2p	ca- ... -ay	-ca ay
3p	a- ... + Lic, quiLic	- Ø + Lic, quiLic
	presentes	pretéritos perfectos
	pretéritos imperfectos	pretéritos plusquamperfectos
	futuro imperfecto	futuro perfecto
	futuro subjuntivo	

Capítulo 6 de las partículas verbales (fol. 89r ff.):

Nota	Categoría	Partícula	
1	presente de indicativo	posesiva, antepuesta	(90r)
2	pretérito imperfecto	naL	(91r)
3	pretérito perfecto	posesiva, pospuesta	(94r)
4	pretérito plusquamperfecto	capa, paL, naL	(98r)
5	futuro imperfecto	pè	(99v)
6	futuro perfecto	pa, ayù	(100r)
7	imperativo	-	(101r)
8	presente de subjuntivo	Lan	(101v)
9	pretérito imperfecto de subjuntivo	ma, naL	(102r)
10	pretérito perfecto de subjuntivo	ma	(102v)
11	pretérito plusquamperfecto de subjuntivo	ma, ayù	(103v)
12	futuro de subjuntivo	pa, pè	(104r)
13	-	-	(104v)
14	infinitivo	-	(105r)

Capítulo 7 de el participio, preposicion, adverbio, interjeccion y conjuncion (fol. 105v)

[This chapter does not contain any further descriptive categories.]

2. Concordance of ALS-forms

1.	(see Appendix 3)		61.	tiŷn	a mi, ó para mi
2.	szurumo	el muchacho	62.	na nem	a mi
3.	szurumaLi	los muchachos	63.	aLi nem	por mi
4.	tata	el padre	64.	aŁparaquiguàn	por mi
5.	uta	la madre	65.	neLec	<i>nos</i>
6.	tata caLi	padres	66.	nána neLéc	nosotros
7.	uta caLi	madres	67.	neŁa neLéc	de nosotros, ó nuestro
8.	paŁe	padre	68.	muc neŁa	de nosotros, ó nuestro
9.	paleŁe	padres	69.	tiŷ neLéc	a, ó para nosotros
10.	cosec	grande	70.	tiŷe	a, ó para nosotros
11.	cosecŁe	grandes	71.	na neLéc	á nosotros
12.	pelo	perro	72.	aLi neLéc	por nosotros
13.	peloŁe	perros	73.	aŁparaquiguàc	por nosotros
14.	tènan	muchos	74.	náca	<i>tu</i>
15.	tumuqui	todos	75.	náca	tu
16.	giru	el mo[n]o	76.	nána náca	tu
17.	tènan giru	monos, ó muchos monos	77.	cá neŁa	tuyo, ó de ti
18.	teenan	mucho	78.	neŁa náca	tuyo, ó de ti
19.	tumuqui	todos	79.	tiŷca	a ti, ó para ti
20.	jamaguaŁa	el pecador	80.	tiŷnáca	a ti, ó para ti
21.	teenan jamaguaŁa	los pecadores	81.	na náca	a ti
22.	tumuqui na jamaguaŁa	todos los pecadores	82.	náca	ó tu
23.	jutu	el palo	83.	aLi náca	por tí
24.	jútu	el palo	84.	aŁparaquiguáca	por tí
25.	nana jutú	el palo	85.	náca Áy	<i>vos</i>
26.	neŁa jútu	del palo	86.	nána náca ay	vosotros
27.	tiŷ jútu	al palo	87.	neŁa náca ay	de vosotros
28.	na jútu	al palo	88.	ca neŁa ay	de vosotros
29.	jútu	palo	89.	tiŷca ay	á, ó para vosotros
30.	aLi [jútu]	por el palo	90.	na náca ay	a vosotros
31.	aŁparaquiguà jútu	por el palo	91.	náca ay	ó vosotros
32.	jutúLi	los palos	92.	aLi náca ay	por vosotros
33.	nana jutúLi	los palos	93.	aŁparaquiguàca ay	por vosotros
34.	neŁa jutúLi	de los palos	94.	mu	<i>sui, sibi, se</i>
35.	tiŷ jutúLi	á, ó para los palos	95.	mu neŁa	suyo
36.	na jutúLi	a los palos	96.	tiŷg qui	a si, ó para si
37.	jutúLi	ó los palos	97.	neŁa tiŷg	a si, ó para si
38.	aLi [jutúLi]	por los palos	98.	na mu	a si
39.	aŁparaquiguà jutúLi	por los palos	99.	na –Vg	a si
40.	mácu	la casa	100.	aŁparaquiguag	por si
41.	nana mácu	la casa	101.	nag	<i>ille, illa, illud</i> el
42.	neŁa mácu	de la casa	102.	nag	el, ó aquel
43.	tiŷ mácu	á, ó para la casa	103.	nana nag	el, ó aquel
44.	nà mácu	á la casa	104.	neŁa nag	de aquel
45.	mácu	ó cassa	105.	mu neŁa	de aquel
46.	aLi [mácu]	por la casa	106.	tiŷg	á, ó para aquel
47.	aŁparaquiguà mácu	por la casa	107.	neŁa tiŷg	á, ó para aquel
48.	mácu	la cassa	108.	na nag	á aquel, ó a el
49.	nána teènan mácu	las casas	109.	aŁparaquiguag	por aquel
50.	neŁa teènan mácu	de las casas	110.	nana nagŁic	aquellos
51.	tiŷ teènan mácu	á, ó p[ar]a las casas	111.	neŁa Łic	de aquellos
52.	nà teènan mácu	á las casas	112.	mu neŁa Łic	de aquellos
53.	teènan mácu	ó casas	113.	tiŷg Łic	á, ó para aquellos
54.	aLi [teènan mácu]	por las casas	114.	na naggŁic	á aquellos
55.	aŁparaquiguà teènan mácu	por las casas	115.	aŁparaquiguaŁic	por aquellos
56.	nen	<i>ego</i>	116.	axve	<i>hic, h[ae]c, hoc</i> esta
57.	náná nen	yo	117.	nána axvé	este
58.	neŁa nen	mío, ó de mí	118.	neŁa axvé	de este
59.	an neŁa	mío, ó de mí	119.	tiŷ na axvé	á, ó para este
60.	tiŷ nen	a mi, ó para mi	120.	na axvé	a este
			121.	aLi na axvé	por este
			122.	aŁparaquiguà na	por este

	axuè			181.	nag qui Lic eiguàg	aquel mismo pl nom
123.	nana axuè Lic	estos		182.	munéLa Lic eiguàg	aquel mismo pl gen
124.	neLa axuè Lic	de estos				
125.	tiy axuè Lic	a esto, ó para etc.		183.	tiyg Lic eiguàg	aquel mismo pl dat
126.	na axuè Lic	a estos		184.	na nag Lic eiguàg	aquel mismo pl acc
127.	aLi na axuèLic	por estos		185.	aLparaquiguà Lic eiguàg	aquel mismo pl abl
128.	aLparaquiguà na axuèLic	por estos		186.	guèna	quien, ó el que
129.	man	ese		187.	guèna	quien, ó el que nom
130.	nána mán	ese ó eso		188.	guèna neLa	quien, ó el que gen
131.	néLa na mán	de esse		189.	guèna tiyg	quien, ó el que dat
132.	tiyg na mán	á esse, ó para ese		190.	guèna na	quien, ó el que acc
133.	na mán	a esse		191.	guèna aLi	quien, ó el que abl
134.	aLi na mán	por ese		192.	nána guèna Lic	quien, ó el que nom
135.	aLparaquiguà na mán	por ese		193.	néLa	quien, ó el que gen
136.	nana mán Lic	esos		194.	guèna neLa Lic	quien, ó el que gen
137.	neLa Lic na mán	de esos		195.	guèna Lic tiy	quien, ó el que dat
138.	neLa mánLic	de esos		196.	guèna Lic	quien, ó el que acc
139.	tiyg Lic na man	á, ó para esos		197.	aLi guèna Lic	quien, ó el que abl
140.	namán Lic	á esos		198.	aLparaquiguà guèna Lic	quien, ó el que abl
141.	aLi na mán Lic	por esos		199.	guena qui	el que
142.	eiguan	yo mismo		200.	nána guèna qui	el que nom
143.	nen eiguán	yo mismo		201.	néLa guèna qui	el que gen
144.	an neLa eiguán	de mi mismo		202.	guèna qui	el que gen
145.	tiyñ eiguán	á mi mismo				
146.	nen eiguán	a mi mismo		203.	tiyg guèna qui	el que dat
147.	aLparaquiguà nen eiguán	por mi mismo		204.	na guèna qui	el que acc
				205.	aLi guèna qui	el que abl
148.	neLec eiguác	nosotros mismos		206.	aLparaquiguà guèna qui	el que abl
149.	muc neLa eiguác	de nosotros mismos				
150.	tiyg eiguác	á, ó para nosotros mismos		207.	nána guèna qui Lic	el que pl nom
151.	na neLec eiguác	á nosotros mismos		208.	néLa guèna qui Lic	el que pl gen
152.	aLparaquiguác eiguác	por nosotros mismos		209.	tiyg guèna qui Lic	el que pl dat
153.	naca eiguac	tu mismo		210.	tiyg Lic guèna qui	el que pl dat
154.	naca eica	tu mismo		211.	na guèna qui Lic	el que pl acc
155.	náca eica	tu mismo nom		212.	aLi Lic guèna qui	el que pl abl
156.	naca eiguac	tu mismo nom		213.	aLparaquiguà Lic guèna qui	el que pl abl
157.	ca neLa eica	tu mismo gen				
158.	ca neLa eiguáca	tu mismo gen		214.	guena ayuqui	si alguno
159.	tiyca eica	tu mismo dat		215.	nána guèna ayuqui	si alguno nom
160.	tiyca eiguáca	tu mismo dat		216.	néLa guèna ayuqui	si alguno gen
161.	na náca eica	tu mismo acc		217.	guena ayuqui munéLa	si alguno gen
162.	náca eiguáca	tu mismo acc		218.	tiyg ayu guèna qui	si alguno dat
163.	aLparaquiguáca eica	tu mismo abl		219.	na guèna ayuqui	si alguno acc
164.	náca eica ay	tu mismo plural nom		220.	aLi guèna ayuqui	si alguno abl
165.	náca eiguáca ay	tu mismo plural nom		221.	aLparaquiguà guèna ayuqui	si alguno abl
166.	ca néLa eica ay	tu mismo plural gen		222.	nána guèna ayuquiLic	si alguno nom
167.	ca neLa eiguáca ay	tu mismo plural gen		223.	néLa ayuLic	si alguno gen
168.	tiyca eica ay	tu mismo plural dat		224.	guèna qui tiyg ayu guèna qui Lic	si alguno dat
169.	tiyca eiguáca ay	tu mismo plural dat		225.	na guèna ayuquiLic	si alguno acc
170.	na náca eica ay	tu mismo plural acc		226.	aLi ayu guèna qui Lic	si alguno abl
171.	náca eiguáca ay	tu mismo plural acc		227.	aLparaquiguà ayu guèna qui Lic	si alguno abl
172.	aLi náca eica ay	tu mismo plural abl		228.	ni guèna maquí	ninguno
173.	aLparaquiguà náca eica ay	tu mismo plural abl		229.	ni guèna maquí	ninguno nom
174.	nag eiguag	aquel mismo				
175.	nána nag eiguág	aquel mismo nom				
176.	nána nag eiquíg qui	aquel mismo nom				
177.	munéLa eiguág	aquel mismo gen				
178.	tiyg eiguág	aquel mismo dat				
179.	na nag eiguág	aquel mismo acc				
180.	aLparaquiguà eiguág	aquel mismo abl				

230.	ni guéna maquí muneLa	ninguno gen	285.	na Vc	nuestro acc
231.	ni guéna maquí tiýg	ninguno dat	286.	aLi muc	nuestro abl
232.	ni guéna maquí na	ninguno acc	287.	aLparaquiguà muc	nuestro abl
233.	ni guéna maquí aLi	ninguno abl	288.	aLi Vc	nuestro abl
234.	ni guéna maquí aLparaquiguà	ninguno abl	289.	ca ay	<i>vester, tra, trím</i>
235.	ni guéna maquí Lic	ninguno pl nom	290.	nána ca ay	vuestro nom
236.	ni guéna maquí Lic muneLa	ninguno pl gen	291.	ca neLa ay	vuestro gen
237.	ni guéna maquí Lic tiýg	ninguno pl dat	292.	neLa ca ay	vuestro gen
238.	ni guéna maquí Lic ná	ninguno pl acc	293.	tiý cá ay	vuestro dat
239.	ni guéna maquí Lic aLi	ninguno pl abl	294.	na cá ay	vuestro acc
240.	ni guéna maquí Lic aLparaquiguà	ninguno pl abl	295.	aLi cá ày	vuestro abl
241.	an	mi	296.	aLparaquiguà cá ày	vuestro abl
242.	Vn	mi nom	297.	guapíc	
243.	Vn neLa	mi gen	298.	poóc	
244.	neLa Vn	mi gen	299.	tanic	
245.	tiýn	mi dat	300.	puéeve	
246.	tiý Vn	mi dat	301.	anima	el corazon
247.	na Vn	mi acc	302.	an anima	mi corazon
248.	aLi Vn	mi abl	303.	ucszáya	la muger, consorte
249.	aLparaquiguà Vn	mi abl	304.	an ucszáya	mi muger
250.	ca	<i>tuus, tua, tuum</i>	305.	ca ucszáya	tu muger
251.	nana ca	tu nom	306.	mu ucszáya	su muger
252.	ca neLa	tu gen	307.	muc ucszayáLi	nuestras mugeres
253.	neLa ca	tu gen	308.	ca ucszaya Li ay	vuestras mugeres
254.	tiý ca	tu dat	309.	mu ucszáya Li quiLic	sus mugeres
255.	na ca	tu acc	310.	nána an ucszáya	mi muger
256.	aLi cá	tu abl	311.	neLa an ucszáya	de mi muger
257.	aLparaquiguà cá	tu abl	312.	tiý an ucszáya	á, ó p[ar]a mi muger
258.	mu	<i>suus, sua, suum</i>	313.	na an ucszáya	a mi muger
259.	nana mu	el nom	314.	an ucszáya	mi muger
260.	nana Vg	el nom	315.	aLi an ucszáya	por mi muger
261.	neLa mu	el gen	316.	aLparaquiguà an ucszáya	por mi muger
262.	neLa Vg	el gen	317.	an ucszayáLi	mis mugeres
263.	tiý mu	el dat	318.	neLa an ucszayáLi	de mis mugeres
264.	tiý Vg	el dat	319.	tiy an ucszayáLi	á, ó p[ar]a mis mugeres
265.	na Vg	el acc	320.	na an ucszayáLi	a mis mugeres
266.	na mu	el acc	321.	an ucszayáLi	mis mugeres
267.	aLi Vg	el abl	322.	aLi an uszayáLi	por mis mugeres
268.	aLparaquiguà mu	el abl	323.	aLparaquiguàan uszayáLi	por mis mugeres
269.	Lic	plural	324.	szaja	la voca
270.	quigLic	plural	325.	szaja an	mi voca
271.	mu túa	su cacaguatal	326.	szeque	la costilla
272.	mutúa Lic	sus cacaguatales	327.	szeque en	mi costilla
273.	mutúa quiLic	sus cacaguatales	328.	juszi	la cabeza
274.	mujaszúLi	sus marranos	329.	jusziin	mi cabeza
275.	tumuquí mu guayà	sus milpas o todas sus milpas	330.	zómo,	la rodilla
276.	muc	<i>noster, nostra, nostrum</i>	331.	zomoón	mi rodilla
277.	nana muc	nuestro nom	332.	pu	la mano
278.	nana Vc	nuestro nom	333.	puún	mi mano
279.	muc neLa	nuestro gen	334.	evervé	el hermano menor
280.	neLa muc	nuestro gen	335.	evervén	mi hermano menor
281.	neLa Vc	nuestro gen	336.	guápi	el pie
282.	tiý muc	nuestro dat	337.	táLi	la garganta
283.	tiý Vc	nuestro dat	338.	mámi	la oreja
284.	na muc	nuestro acc	339.	guapan	mi pie
			340.	talán	mi garganta
			341.	maman	mi oreja
			342.	tita	la pierna
			343.	titán	mi pierna
			344.	náu	el hijo
			345.	naún	mi hijo
			346.	nari	la naris

347.	narica	tu naris.			
348.	oszo	la tripa			
349.	oszôca	tu tripa			
350.	jászu	el marrano			
351.	ca jaszu	tu marrano	409.	pulacà ay	hecho vosotros hizisteis, ó haveis
352.	tàta	el padre			hecho
353.	tatà ag	su padre	410.	pulái quiLic	aquellos hicieron, ó han
354.	jurây	la cara			hecho
355.	juraig	su cara	411.	capa pulân paL	yo havia hecho
356.	eLaja	la lengua		nâL, <i>ve/</i> nâL qui	
357.	eLajaâc	nuestra lengua	412.	capa pulacà paL	tu havias hecho
358.	amù	el abuelo		nâL, <i>ve/</i> nâL qui	
359.	amuüc	n[uest]ro abuelo	413.	capa pulâi paL	aquel havia hecho
360.	utâ	la madre		nâL, <i>ve/</i> nâL qui	
361.	utâc	nuestra madre	414.	capa pulâc paL	nosotros haviamos hecho
362.	aguâ	la abuela		nâL, <i>ve/</i> nâL qui	
363.	aguacaay	vuestra abuela.	415.	capa pulacà paL	vosotros haviâis hecho
364.	szamali	la frente		nâL ay,	
365.	szamalicaay	vuestra frente		<i>ve/</i> nâL qui ay	
366.	muti	el cabello	416.	capa pulây Lic	aquellos havian hecho
367.	mutiig quiLic	sus cabellos		paL nâL,	
368.	Łapâ	el nieto, ó nieta		<i>ve/</i> nâL qui	yo harè
369.	Łapaag Lic	sus nietos	417.	an pûla pè	tu harás
370.	jurây	la cara		ca pûla pè	aquel harà
371.	jurain	mi cara	418.	mù pûla pè	nosotros haremos
372.	juraica	tu cara		muc pûla pè	vosotros hareis
373.	jurai ig	su cara	419.	câ pûla pè ay	aquellos haran
374.	jurai ic	nuestra cara		mu pûla pè Lic	yo avrè hecho
375.	juraica ay	vuestra cara	420.	pulân ayù pè	tu avras hecho
376.	jurai ig qui Lic	sus caras		pulacà ayù pè	aquel avra hecho
377.	nana jurai ic	nuestra cara	421.	pulâi ayù pè	nosotros avremos hecho
378.	neŁa jurai ic	de nuestra cara		pulâc ayù pè	vosotros avreis hecho
379.	tiy jurai ic	a, ó para nuestra cara	422.	pulacà ayù pè ay	aquellos avran hecho
380.	na jurai ic	a nuestra cara		pulâi pè ayù Lic	has tu
381.	jurai ic	nuestra cara	423.	pûla	haga aquel
382.	aŁi jurai ic	por nuestra cara		guâ pulain	hazed vosotros
383.	aŁparaquiguâ jurai ic	por nuestra cara	430.	pûla ay	hagan aquellos
			431.	gua pulâin Lic	yo haga
384.	nana teënan	nuestras caras		an pûla Łan	tu hagas
	jurai ic		432.	câ pûla Łan	aquel haga
385.	neŁa teënan	de nuestras caras		mù pûla Łan	nosotros hagamos
	jurai ic		433.	muc pûla Łan	vosotros hagais
386.	tiy teënan jurai ic	a, ó para nuestras caras		câ pûla Łan ay	aquellos hagan
387.	na teënan jurai ic	a nuestras caras	434.	mu pûla Łan qui	
388.	teënan jurai ic	nuestras caras		Lic	yo hiciera, haria, y hiciese
389.	aŁi teënan jurai ic	por n[uest]ras caras	435.	an pûla mã nâL	tu hicieras, harias, y
390.	aŁparaquiguâ	por n[uest]ras caras		ca pûla mã nâL	hicieses
	teënan jurai ic		436.	mù pûla mã nâL	aquel hiciera, haria, y
391.	pûla			hiciese	nosotros hicieramos,
392.	pulân	yo hago	437.	muc pûla mã nâL	hariosmos, y hiciesemos
393.	an pûla	tu hazes			vosotros hicierâis, hariais,
394.	câ pûla	aquel haze	438.	ca pûla mã nâL ay	y hicieeis
395.	mù pûla	aquel haze			aquellos hicieran, harian, y
396.	muc pûla	nosotros hazemos	439.	mu pûla mã nâL	hiciesen
397.	câ pûla ay	vosotros hazeis		qui Lic	yo haya hecho
398.	mù pûla quiLic	aquellos hazen	440.	pulân mã	tu hayas hecho
399.	an pûla nâL	yo hazia		pulâc mã	aquel haya hecho
400.	câ pûla nâL	tu hazias	441.	pulâi mã	nosotros hayamos hecho
401.	mù pûla nâL	aquel hazia		pulâc mã	vosotros hayais hecho
402.	muc pûla nâL	nosotros haciamos	442.	pulâc mã ay	aquellos hayan hecho
403.	câ pûla nâL ay	vosotros haciais		pulâi mã Lic	yo huviera, avria, y
404.	mù pûla nâL	aquellos hazian		pulân mã ayù	huviese hecho
	quiLic		443.	pulân naL qui	yo huviera, avria, y
405.	pulân	yo hize, ò hè hecho			huviese hecho
406.	pulâcâ	tu hizistes, ó has hecho	444.	pulacà mã ayù	tu huvieras, avrias, y
407.	pulâi	aquel hizo, ó ha hecho			huvieses hecho
408.	pulâc	nosotros hizimos, ó hemos	445.	pulacà naL qui	tu huvieras, avrias, y
					huvieses hecho

455.	pulài mà ayù	aquel huviera, avria, y huviese hecho	502.	pulà Lic pataguà	aquellos fueron, ò han sido hechos
456.	pulài naL qui	aquel huviera, avria, y huviese hecho	503.	capa pulà paL. nàL. pataguàn	yo havia sido hecho
457.	pulàc mà ayù	nosotros huvieramos, avriamos, y huviesemos hecho	504.	capa pulà paL. naL. pataguàc	tu havias sido hecho
458.	pulàc naL qui	nosotros huvieramos, avriamos, y huviesemos hecho	505.	capa pulà paL. naL. pataguà	aquel havia sido hecho
459.	pulacà mà ayù ay	vosotros huverais, avriais, y huvieseis hecho	506.	capa pulà paL. naL. pataguàc	nosotros haviamos sido hechos
460.	pulacà naL. qui ay	vosotros huverais, avriais, y huvieseis hecho	507.	capa pulà paL. naL. pataguacà ay	Vosotros haviais sido hechos
461.	pulài mà ayù Lic	aquellos huvieran, avrian, y huviesen hecho	508.	capa pulà paL. naL. Lic patai	aquellos havian sido hechos
462.	pulài naL. qui Lic	aquellos huvieran, avrian, y huviesen hecho	509.	pùla pe patàn	yo serè hecho
463.	an pulà pà pè	yo hiciere, ò huviere hecho	510.	pùla pe patacà	tu seras hecho
464.	cà pulà pà pè	tu hicieres, o huvieres hecho	511.	pùla pe patài	aquel sera hecho
465.	mu pulà pà pè	aquel hiciere, ò huviere hecho	512.	pùla pe patàc	nosotros seremos hechos
466.	muc pula pà pè	nosotros hiciéremos, o huvieremos hecho	513.	pùla pe patacà ay	Vosotros sereis hechos
467.	cà pula pà pè ay	vosotros hiciereis, ò huviereis hecho	514.	pùla pe Lic patài	aquellos seran hechos
468.	mu pula pà pè Lic	aquellos hicieren, ò huvieren hecho	515.	pùla pe ayù pataguàn	yo avrè sido hecho
469.	á pùla	hazer	516.	pùla pe ayù pataguàc	tu avras sido hecho
470.	pulà guà	haver hecho	517.	pùla pe ayù pataguacàn	tu avras sido hecho
471.	a pùla nàL. pè	haver de hazer	518.	pùla pe ayu pataguà	aquel avrà sido hecho
472.	pùla nàL.	que hiciera, ò huviera de aver hecho	519.	pùla pe ayu pataguay	aquel avrà sido hecho
473.	pùla	de hazer	520.	pùla pe ayù pataguàc	nosotros avremos sido hechos
474.	neLa à pulà	para hazer	521.	pùla pe ayù pataguacà ay	vosotros avreis sido hechos
475.	pulà	à hazer	522.	pùla pe ayu Lic pataguà	aquellos avran sido hechos
476.	aLi à pulà	por hazer	523.	pùla patacà	sed tu hecho
477.	pulàqui	a hazer	524.	pùla patai	sea hecho àquel
478.	pulàL	el que haze, ò hazia	525.	pùla patacà ay	sea vosotros hechos
479.	pulaLa	el que haze, ò hazia	526.	pùla Lic patai	sean hechos aquellos
480.	pula quiLa	el que haze, ò hazia	527.	pùla Làn patàn	yo sea hecho
481.	pulaquiLa pè	el que ha, ò tiene de hazer	528.	pùla Làn patacà	tu seas hecho
482.	pùla patàn	yo soy hecho	529.	pùla Làn patai	aquel sea hecho
483.	pùla pata cà	tu eres hecho	530.	pùla Làn pataàc	nosotros seamos hechos
484.	pùla patài	aquel es hecho	531.	pùla Làn patacà ay	vosotros seais hechos
485.	pùla patàc	nosotros somos hechos	532.	pùla Làn Lic patai	aquellos sean hechos
486.	pùla patacà ay	vosotros sois hechos	533.	pùla nàL. patàn	yo fuera, seria, y fuese hecho
487.	pùla Lic patai	aquellos son hechos	534.	pùla nàL. patacà	tu fueras, serias, y fueses hecho
488.	pùla naL. patàn	yo era hecho	535.	pùla nàL. patai	aquel fuera, seria, y fuese hecho
489.	pùla naL. patacà	tu eras hecho	536.	pùla nàL. patàc	nosotros fuéramos, seriamos, y fuésemos nhechos
490.	pùla naL. patai	aquel era hecho	537.	pùla nàL. patacà ay	vosotros fuerais, seriais, y fueseis hechos
491.	pùla naL. pataàc	nosotros eramos hechos	538.	pùla nàL. Lic patai	aquellos fueran, serian, y fuesen hechos
492.	pùla naL. patacà ay	vosotros erais hechos	539.	pùla mà pataguàn	yo haya sido hecho
493.	pùla naL. patai Lic	aquellos eran hechos	540.	pùla mà pataguacà	tu hayas sido hecho
494.	pulà pataguàn	yo fui, ò he sido hecho	541.	pùla mà patagùà	aquel haya sido hecho
495.	pulà pataguacàn	tu fuistes, ò has sido hecho	542.	pùla mà pataguàc	nosotros hayamos sido hechos
496.	pulà pataguaca	tu fuistes, ò has sido hecho	543.	pulà mà	Vosotros hayais sido
497.	pulà patai	aquel fuè, ò hà sido hecho			
498.	pulà pataguài	aquel fuè, ò hà sido hecho			
499.	pulà patac	nosotros fuimos, ò hemos sido hechos			
500.	pulà pataguàc	nosotros fuimos, ò hemos sido hechos			
501.	pulà pataguàc ay	vosotros fuisteis, o huvisteis sido hechos			

544.	patagúacà ay	hechos	588.	merèi	aquel rompiò
545.	pulà mà Lic patai	aquellos hayan sido hechos	589.	mereèc	nosotros rompimos
	pulà mà ayù	yo hubiera, avria, y	590.	merecà ay	Vosotros rompisteis
	pataguàn	hubiese sido hecho	591.	merèi quiLic	aquellos rompieron
546.	pulà mà ayù	tu huvieras, avrias, y	592.	capa mereèn paL	yo havia rompido
	pataguàca	hubieses sido hecho		naL	
547.	pulà mà ayù	aquel huviera, avria, y	593.	capa mere ca paL	tu havias rompido
	pataguà	hubiese sido hecho		naL	
548.	pulà mà ayù	nosotros huvieramos	594.	capa merèi paL naL	aquel havia rompido
	pataguàc	avriamos, y huviesemos	595.	capa mereèc paL	nosotros haviamos
		sido hechos		naL	rompido
549.	pulà mà ayù	vosotros huvierais, avriais,	596.	capa merè cà paL	vosotros haviais rompido
	pataguàca ay	y huvieseis sido hechos		naL ay	
550.	pulà mà ayù Lic	aquellos huvieran, avrian,	597.	capa merèi Lic paL	aquellos havian rompido
	pataguà	y huviesen sido hechos		naL	
551.	an pula pa pè	yo fuere, ó huviere sido	598.	an mere pè	yo romperè
	patàn	hecho	599.	cà mere pè	tu romperas
552.	cà pula pa pè	tu fueres, ó huvieres sido	600.	mu mere pè	aquel romperà
	pataca	hecho	601.	muc mere pè	nosotros romperemos
553.	mu pula pa pè	aquel fuere, ó huviere sido	602.	cà merè pè ay	vosotros rompereis
	patai	hecho	603.	mu merè pè quiLic	aquellos romperan
554.	muc pula pa pè	nosotros fueremos, ó	604.	merèn ayù pè	yo avrè rompido
	patàc	huvieremos sido hechos	605.	mere cà ayù pè	tu avras rompido
555.	cà pulà pa pè	vosotros fuereis, ó	606.	merèi ayù pè	aquel avrà rompido
	patacà ay	huvieréis sido hechos	607.	mereèc ayù pè	nosotros avremos rompido
556.	mu pula pa pè Lic	aquellos fueron, ó huvieren	608.	mere cà ayù pè ay	vosotros avreis rompido
	patai	sido hechos	609.	merèi ayù pè quiLic	aquellos avran rompido
557.	pùla patai	ser hecho	610.	mere	Rompe tu
558.	pulà pataguàag	haver sido hecho	611.	guà merein	Rompa àquel
559.	pulà naL pè patai	haver de ser hecho	612.	mere ay	Rompèd vosotros
560.	patà naL pulà	que fuera, ó huviera de	613.	guà merein Lic	Rompan aquellos
		aver sido hecho	614.	an mere Lan	yo rompa
		de ser hecho	615.	cà mere Lan	tu rompas
561.	patàn pula	para ser hecho	616.	mu mere Lan	aquel rompa
562.	neLa á patà pula	a sér hecho	617.	muc mere Lan	nosotros rompamos
563.	pata pula	por ser hecho	618.	cà mere Lan ay	vosotros rompais
564.	aLi patàLà pula	cosa hecha	619.	mu mere Lan quiLic	aquellos rompan
565.	pulàgua	cosa que hà ó tiene de ser	620.	an mere mà naL	yo rompiera, romperia, y
566.	pulàgua pè patai	hecha			rompiese
567.	pùla patai	es hecho por mi	621.	cà mere mà naL	tu rompieras, romperias, y
	aL.paraquiguàn				rompieses
568.	pùla naL patai	era hecho por ti	622.	mu mere mà naL	aquel rompiera, romperia,
	aL.paraquiguàca				y rompiese
569.	pulà pataguà	fuè hecho por aquel	623.	muc mere mà naL	nosotros rompiaramos,
	aL.paraquiguàg				romperiamos, y
570.	capa pulà paL naL	havia sido hecho por			rompiesemos
	pataguà	nosotros	624.	cà mere mà naL ay	vosotros rompierais,
	aL.paraquiguac				romperiais, y rompieseis
571.	pùla pe patai	serà hecho por vosotros	625.	mu mere mà naL	aquellos rompiaran,
	aL.paraquiguàca ay			qui Lic	romperian, y rompiesen
572.	pulà ayù pe patai	avrà sido hecho por	626.	merèn mà	yo haya rompido
	aL.paraquiguà Lic	aquellos	627.	mere cà mà	tu hayas rompido
573.	mere	romper	628.	merèi mà	aquel haya rompido
574.	an mere	yo rompo	629.	mereèc mà	nosotros hayamos rompido
575.	cà mere	tu rompes	630.	mere cà mà ay	vosotros hayais rompido
576.	mù mere	aquel rompe	631.	merèi mà qui Lic	aquellos hayan rompido
577.	muc mere	nosotros rompemos	632.	merèn mà ayù	yo huviera, avria, y
578.	cà mere ay	vosotros rompeis			hubiese rompido
579.	mu mere quiLic	aquellos rompen	633.	mere cà mà ayù	tu huvieras, avrias, y
580.	an mere naL	yo rompia			hubieses rompido
581.	cà mere naL	tu rompias	634.	merèi mà ayù	aquel huviera, avria, y
582.	mu mere naL	aquel rompía			hubiese rompido
583.	muc mere naL	nosotros rompíamos	635.	mereèc mà ayù	nosotros huvieramos,
584.	cà mere naL ay	vosotros rompiais			avriamos, y huviesemos
585.	mu mere naL quiLic	aquellos rompián			rompido
586.	merèn	yo rompí ó hè rompido	636.	merecà mà ayu ay	vosotros huvierais, avriais,
587.	mere cà	tu rompistes			y huvieseis rompido

637. merei mà ayù Lic aquellos huvieran, avrian,
y huviesen rompido
638. an mere pa pè yo rompiere, ó huviere
rompido
639. cà mere pa pè tu rompieres, ó huvieres
rompido
640. mu mere pa pè aquel rompiere, ó huviere
rompido
641. muc mere pa pè nosotros rompiéremos, ó
huvieremos rompido
642. cà mere pa pè ay vosotros rompiereis, ó
huvieréis rompido
643. mu mere pa pè Lic aquellos rompiéren, ó
huvieren rompido
644. a mere romper
645. mere guà haver rompido
646. merè nàL pè haver de romper
647. merè nàL que rompiera ó huviera de
haver rompido
648. mere de romper
649. neLa á mere para romper
650. merè á romper
651. aL.paraquíguà merè por romper
652. merèque a romper
653. merèL, *vel* mere Là el que rompe, ó rompià
654. merèLa qui Là el que hà ó tiene de romper
655. mère patàn yo soy roto
656. mère patacà tu eres roto
657. mère pataí aquel es roto
658. mère patàc nosotros somos rotos
659. mère patacà ay vosotros sois rotos
660. mère Lic pataí aquellos son rotos
661. mère nàL patàn yo era roto
662. mère nàL patacà tu eras roto
663. mère nàL pataí aquel era roto
664. mère nàL patàc nosotros eramos rotos
665. mère nàL patacà ay vosotros erais rotos
666. mère nàL pataí Lic aquellos eran rotos
667. mère patàn yo fui, o hè sido roto
668. mère pataguàn yo fui, o hè sido roto
669. mère patacà tu fuistes, ó has sido roto
670. merè pataí aquel fue, ó ha sido roto
671. merè patàc nosotros fuimos, ó hemos
sido rotos
672. merè patacà ay vosotros fuisteis, ó haveis
sido rotos
673. merè Lic pataguà aquellos fueron, ó han sido
rotos
674. capa merè paL nàL yo havia sido roto
675. capa merè paL nàL tu havias sido roto
676. capa merè paL nàL aquel havia sido roto
677. capa merè paL nàL nosotros haviamos sido
rotos
678. capa merè paL nàL vosotros haviais sido rotos
679. capa merè Lic paL aquellos havían sido rotos
680. mère pè patàn yo serè roto
681. mère pè patacà tu seras roto
682. mère pè pataí aquel serà roto
683. mère pè patàc nosotros seremos rotos
684. mère pè patacà ay vosotros sereis rotos
685. mère Lic pè pataí aquellos seran rotos
686. merè pè ayù yo avrè sido roto
687. pataguaan merè pè ayù tu avras sido roto
688. pataguàca merè pè ayù aquel avra sido roto
689. pataguàg merè pè ayù nosotros avremos sido
rotos
690. pataguàc merè pè ayù vosotros avreis sido rotos
691. pataguà merè pè ayù Lic aquellos avran sido rotos
692. mère patacà sed tu roto
693. mère pataí sea aquel roto
694. mère patacà ay sed vosot[ro]s rotos
695. mère Lic pataí sean aquellos rotos
696. mère Làn patàn yo sea roto
697. mère Làn patacà tu seas roto
698. mère Làn pataí aquel sea roto
699. mère Làn pataàc nosotros seamos rotos
700. mère Làn patacà ay vosotros seais rotos
701. mère Làn pataí Lic aquellos sean rotos
702. mère nàL pataan yo fuera, seria, y fuese roto
703. mère nàL patacà tu fueras, serias, y fueses
roto
704. mère nàL pataí aquel fuera, seria, y fuese
roto
705. mère nàL pataàc nosotros fuéramos,
ser[ia]mos, y fuésemos
rotos
706. mère nàL patacà ay vosotros fuerais, seriais, y
fueseis rotos
707. mère nàL Lic pataí aquellos fueran, serian, y
fuesen rotos
708. merè mà pataguàn yo haya sido roto
709. merè mà pataguacà tu hayas sido roto
710. merè mà pataguàg aquel haya sido roto
711. merè mà pataguaac nosotros hayamos sido
rotos
712. merè mà pataguàca vosotros hayais sido rotos
713. ay merè mà Lic aquellos hayan sido rotos
714. pataguag merè mà ayù yo huviera, avria, y
huviese sido roto
715. pataguàn merè mà ayù tu huvieras, avrias, y
huvieses sido roto
716. pataguacà merè mà ayù aquel huviera, avria, y
huviese sido roto
717. pataguag merè mà ayù nosotros huvieramos,
avriamos, y huviesemos
rotos
718. pataguaàc merè mà ayù vosotros huvierais, avriais,
y huvieseis sido rotos
719. pataguàca ay merè mà ayù Lic aquellos huvieran, avrian,
y huviesen sido rotos
720. pataguag merè papè patàn yo fuere, ó huviere sido
roto
721. merè pa pè patacà tu fueres, ó huvieres sido
roto
722. merè pa pè pataí aquel fuere, ó huviere sido
roto
723. merè pa pè pataac nosotros fueremos, ó
huvieremos sido rotos
724. merè pa pè patacà vosotros fuereis, ó
huvieréis sido rotos
725. merè pa pè Lic pataí aquellos fueren, ó huvieren
sido rotos

726.	mère patai	ser roto	784.	mu piri Làn	aquel vea
727.	merè pataguàg	haver sido roto	785.	muc piri Làn	nosotros veamos
728.	mère naL. pè patai	haver de sèr roto	786.	ca piri Làn ay	vosotros veais
729.	patà naL. merè	que fuera, ó huviera de	787.	mu piri Làn qui Lic	aquellos vean
		aver sido roto	788.	an piri mà nàL	yo viera, veria, y viesse
730.	patàn mere	de ser roto	789.	cà piri mà nàL	tu vieras, verias, y vieses
731.	neLa patà mère	para ser roto	790.	mu piri mà nàL	aquel viera, veria, y viesse
732.	patà mere	á ser roto	791.	muc piri mà nàL	nosotros vieramos,
733.	aL.paraquiguà	por ser roto			veriamos, y viesemos
	pataLà mere		792.	ca piri mà nàL ay	vosotros vierais, veriais, y
734.	merè gua	cosa rota			vieseis
735.	merègua pè patàí	cosa que hà, ó tiene de ser	793.	mu piri mà nàL. qui	aquellos vieran, verian, y
		roto		Lic	viesen
736.	piri	vèr	794.	piriin mà	yo haya visto
737.	an piri	yo veo	795.	piricà mà	tu hayas visto
738.	cà piri	tu vès	796.	piriay mà	aquel haya visto
739.	mu piri	aquel vè	797.	piri ic mà	nosotros hayamos visto
740.	muc piri	nosotros vemos	798.	piricà mà ay	Vosto[ro]s hayais visto
741.	ca piri ay	vosotros veis	799.	piriay mà qui Lic	aquellos hayan visto
742.	mu piri qui Lic	aquellos vèn	800.	piriin mà ayù	yo huviera, avria, y
743.	an piri nàL	yo veia			huviese visto
744.	ca piri nàL	tu veias	801.	piri cà mà ayù	tu huvieras, avrias, y
745.	mu piri nàL	aquel veia			huvieses visto
746.	muc piri nàL	nosotros veiamos	802.	piriay mà ayù	aquel huviera, avria, y
747.	ca piri nàL ay	vosotros veiais			huviese visto
748.	mu piri nàL. qui Lic	aquellos veian	803.	piriic mà ayù	nosotros huvieramos,
749.	piriyn	yo vi, ó hè visto			avriamos, y huviesemos
750.	piriLa	yo vi, ó hè visto			visto
751.	piriguàn	yo vi, ó hè visto	804.	piri cà mà ayù ay	vosotros huvierais, avriais,
752.	piricà	tu vistes, ó has visto			y huvieses visto
753.	piriguacàn	tu vistes, ó has visto	805.	piriay mà ayù qui	aquellos huvieran, avrian,
754.	piriay	aquel vio, ó hà visto		Lic	y huviesen visto
755.	piriic	nosotros vimos, ó hemos	806.	an piri pa pè	yo viere, ó huviere visto
		visto	807.	ca piri pa pè	tu vieres, ó huvieres visto
756.	piriguaac	nosotros vimos, ó hemos	808.	mu piri pa pè	aquel viere, ó huviere visto
		visto	809.	muc piri pa pè	nosotros vieremos, ó
757.	piricà ay	vosotros visteis, ó haveis			huvieremos visto
		visto	810.	ca piri pa pè ay	vosotros viereis, ó
758.	piriguacàn ay	vosotros visteis, ó haveis			huvieréis visto
		visto	811.	mu piri pa pè qui	aquellos vierón, ó huvierén
759.	piriay qui Lic	aquellos vieron, ó han		Lic	visto
		visto	812.	á piri	Vèr
760.	capa pirin paL. nàL	yo havia visto	813.	piriguà	haver visto
761.	capa piricà paL. nàL	tu havias visto	814.	piri nàL.pè	haver de vèr
762.	capa piriay paL. nàL	aquel havia visto	815.	piri nàL	que viera, ó huviera de
763.	capa piriic pàL. nàL	nosotros haviamos visto			aver visto
764.	capa piriicà pàL. nàL	vosotros haviais visto			de vèr
	ay		816.	piri	para vèr
765.	capa piriay pàL. nàL	aquellos havian visto	817.	neLa á piri	a vèr
766.	an piri pè	yo verè	818.	piri	por vèr
767.	cà piri pè	tu veras	819.	aL.paraquiguà piri	a vèr
768.	mu piri pè	aquel verà	820.	piri qui	a vèr
769.	muc piri pè	nosotros veremos	821.	piriL	el que vè, ó veia
770.	ca piri pè ay	vosotros veréis	822.	piriLa	el que vè, ó veia
771.	mu piri pè qui Lic	aquellos veràn	823.	piriquiLa	el que vè, ó veia
772.	pirin pè ayù	yo avrè visto	824.	piriquiLa	el que hà, ó tiene de vèr
773.	piricà pè ayu	tu avras visto	825.	piri pataan	yo soi visto
774.	piriay pè ayù	aquel avrà visto	826.	piri patacà	tu eres visto
775.	piriic pè ayù	nosotros avremos visto	827.	piri patai	aquel es visto
776.	piricà pè ayù ay	vosotros avreis visto	828.	piri pataac	nosotros somos vistos
777.	piriay ayupè qui Lic	aquellos avran visto	829.	piri patacà ay	vosotros sois vistos
778.	piri	mira tu	830.	piri Lic patai	aquellos son vistos
779.	guà piri in	mire aquel	831.	piri nàL. patàn	yo era visto
780.	piri ay	mirad vosot[ro]s	832.	piri nàL. patacà	tu eras visto
781.	guà Lic piri in	miren áquellos	833.	piri nàL. patai	aquel era visto
782.	an piri Làn	yo vea	834.	piri nàL. pataac	nosotros eramos vistos
783.	ca piri Làn	tu veas	835.	piri nàL. patacà ay	vosotros erais vistos
			836.	piri nàL. Lic patai	aquellos eran vistos

837.	pirii pataguàn	yo fui, ó hè sido visto	881.	pirii mà pataguacà	vosotros hayais sido vistos
838.	pirii pataguàca	tu fuistes, ó has sido visto		ay	
839.	pirii pataguàg	aquel fuè, ó ha sido visto	882.	pirii Lic mà	aquellos hayan sido vistos
840.	pirii pataguàc	nosotros fuimos, ó		pataguaag	
		huvimos sido vistos	883.	pirii mà ayù	yo huviera, avria, y
841.	pirii pataguaca ay	vosotros fuisteis, ó		pataguaan	huviese sido visto
		huvisteis sido vistos	884.	pirii mà ayù	tu huvieras, avrias, y
842.	pirii Lic pataguàg	aquellos fueron, ó		pataguacà	huvieses sido visto
		huvieron sido vistos	885.	pirii mà ayù	aquel huviera, avria, y
843.	capa pirii paL nàL	yo havia sido visto		pataguaag	huviese sido visto
844.	capa pirii paL nàL	tu havias sido visto	886.	pirii mà ayù	nosotros huvieramos,
	pataguacà			pataguaàc	avriamos, y huviesemos
845.	capa pirii pàL nàL	aquel havia sido visto			sido vistos
	pataguaag		887.	pirii mà ayù	vosotros huvierais, avriais,
846.	capa pirii pàL nàL	nosotros haviamos sido		pataguàca ay	y huvieseis sido vistos
	pataguaac	vistos	888.	pirii mà ayù Lic	aquellos huvieran, avrian,
847.	capa pirii paL nàL	vosotros haviais sido		pataguaag	y huviesen sido vistos
	pataguaca ay	vistos	889.	pirii pa pè pataan	yo fuere, ó huviere sido
848.	capa pirii paL nàL	aquellos havian sido vistos			visto
	Lic pataguaag		890.	pirii pa pè patacà	tu fueres, ó huvieres sido
849.	pirii pè patàn	yo serè visto			visto
850.	pirii pè pataca	tu seras visto	891.	pirii pa pè pataí	aquel fuere, ó huviere sido
851.	pirii pè pataí	aquel serà visto			visto
852.	pirii pè pataàc	nosotros seremos vistos	892.	pirii pa pè pataàc	nosotros fuéremos, ó
853.	pirii pè patacà ay	vosotros sereis vistos			huvieremos sido vistos
854.	pirii pè Lic pataí	aquellos seràn vistos	893.	pirii pa pè patacà ay	vosotros fuereis, ó
855.	pirii pè ayù	yo avrè sido visto			huviereis sido vistos
	pataguaan		894.	pirii pa pè Lic pataí	aquellos fueren, ó huvieran
856.	pirii pè ayù	tu avras sido visto			sido vistos
	pataguacà		895.	pirii pataí	ser visto
857.	pirii pè ayù	aquel avrà sido visto	896.	pirii pataguaag	haver sido visto
	pataguaag		897.	pirii nàL pè pataí	haver de ser visto
858.	pirii pè ayù	nosotros avremos sido	898.	paatà nàL pirii	que fuera, ó huviera de
	pataguaac	vistos			aver sido visto
859.	pirii pè ayù	vosotros avreis sido vistos	899.	patàn pirii	de ser visto
	pataguaca ay		900.	neL à a patà pirii	para ser visto
860.	pirii pè ayù Lic	aquellos avran sido vistos	901.	patà pirii	á sèr visto
	pataguaag		902.	aL paraquiguà	por ser visto
861.	pirii patacà	sed tu visto		pataL à pirii	
862.	pirii pataí	sea visto aquel	903.	piriigua	cosa vista
863.	pirii patacà ay	sed vosotros vistos	904.	pirigua pè pataí	cosa que ha, ó tiene de ser
864.	pirii Lic pataí	sean vistos aquellos			vista
865.	pirii Lan pataan	yo sea visto	905.	òròmo	recoger
866.	pirii Lan patacà	tu seas visto	906.	an oròmo	yo recojo
867.	pirii Lan pataí	aquel sea visto	907.	cà oròmo	tu recoges
868.	pirii Lan pataàc	nosotros seamos vistos	908.	mu oròmo	aquel recoje
869.	pirii Lan patacà ay	vosotros seais vistos	909.	muc oròmo	nosotros recojemos
870.	pirii Lan Lic pataí	aquellos sean vistos	910.	cà oròmo ay	vosotros recojeis
871.	pirii nàL pataan	yo fuera, sería, y fuese	911.	mu oròmo qui Lic	aquellos recojen
		visto	912.	an oròmo nàL	yo recogía
872.	pirii nàL patacà	tu fueras, serias, y fueses	913.	cà oròmo nàL	tu recogias
		visto	914.	mu oròmo nàL	aquel recogia
873.	pirii nàL pataí	aquel fuera, seria, y fueses	915.	muc oròmo nàL	nosotros recogiamos
		visto	916.	cà oròmo nàL ay	vosotros recogiais
874.	pirii nàL pataàc	nosotros fuéramos,	917.	mu oròmo nàL qui	aquellos recogian
		seríamos, y fuesemos		Lic	
		vistos	918.	òrmoon	yo recogí, ó hè recogido
875.	pirii nàL patacà ay	vosotros fuerais, seriais, y	919.	ormo cà	tu recogistes, ó has
		fueseis vistos			recogido
876.	pirii nàL Lic pataí	aquellos fueran, serian, y	920.	ormo i	aquel recogió, ó hà
		fuesen vistos			recogido
877.	pirii mà pataguaan	yo haya sido visto	921.	ormo òc	nosotros recogimos, ó
878.	pirii mà pataguacà	tu hayas sido visto			hemos recogido
879.	pirii mà pataguaag	aquel haya sido visto	922.	òrmo cà ay	vosotros recogisteis, ó
880.	pirii mà pataguaàc	nosotros hayamos sido	923.	ormoi qui Lic	haveis recogido
		vistos			aquellos recogieron, ó han
					recogido

924.	capa ormoon paŁ. nàŁ.	yo havia recogido	970.	an oròmo pa pè	y huviesen recogido yo recogiere, ó huviere recogido
925.	capa ormo cà paŁ. nàŁ.	tu havias recogido	971.	cà oròmo pa pè	tu recogieres, ó huvieres recogido
926.	capa ormo i paŁ. nàŁ.	aquel havia recogido	972.	mu oròmo pa pè	aquel recogiere, ó huviere recogido
927.	capa ormo oc paŁ. nàŁ.	nosotros haviamos recogido	973.	mùc oròmo pa pè	nosotros recogeremos, ó huvieremos recogido
928.	capa ormo cà paŁ. nàŁ. ay	vosotros haviais recogido	974.	ca oròmo pa pè ay	vosotros recogeréis, ó huvieréis recogido
929.	capa ormoí paŁ. nàŁ. qui Lic	aquellos havian recogido	975.	mu oròmo pa pè Lic	aquellos recogieren, ó huvieren recogido
930.	an oromo pè	yo recogerè	976.	a oròmo	Recoger
931.	cà oròmo pè	tu recogeràs	977.	ormo guà	haver recogido
932.	mu oròmo pè	aquel recogerà	978.	a oròmo nàŁ. pè	haver de recoger
933.	muc oròmo pè	nosotros recogeremos	979.	a oròmo nàŁ.	que recogiera, ó huviera de aver recogido
934.	cà oromo pè ay	Vosotros recogeréis	980.	òròmo	de recoger
935.	mù oromo pè Lic	aquellos recogeràn	981.	neŁa a oròmo	para recoger
936.	ormoon pè ayù	yo avrè recogido	982.	òròmo	á recoger
937.	ormocà pè ayù	tu avras recogido	983.	aŁi a oròmo	por recoger
938.	ormoi pè ayù	aquel avrà recogido	984.	ormòque	a recoger
939.	ormooc pè ayù	nosotros avremos recogido	985.	ormòŁ.	el que recoge, ó recogía
940.	ormocà pè ayù ay	vosotros avreis recogido	986.	ormòŁà	el que recoge, ó recogía
941.	ormoi pè ayù Lic	aquellos avran recogido	987.	ormo eēŁa	el que recoge, ó recogía
942.	ormo	Recoge tu	988.	òrmo eēŁa	el que hà, o tiene de recoger
943.	guà ormoín	Recoja aquel	989.	oròmo pataan	yo soi recogido
944.	ormo ay	Recoged vosotros	990.	oròmo patacà	tu eres recogido
945.	guà Lic ormoín	Recojan aquellos	991.	oromo patai	aquel es recogido
946.	an oròmo Łàn	yo recoja	992.	oromo pataac	nosotros somos recogidos
947.	cà oròmo Łàn	tu recojas	993.	oromo patacà ay	vosotros sois recogidos
948.	mu oròmo Łàn	aquel recoja	994.	oromo Lic patai	aquellos son recogidos
949.	muc oròmo Łàn	nosotros recojamos	995.	oromo nàŁ. pataan	yo era recogido
950.	cà oròmo Łàn ay	vosotros recojais	996.	oromo nàŁ. patacà	tu eras recogido
951.	mu oròmo Łàn qui Lic	aquellos recojan	997.	oromo nàŁ. patai	aquel era recogido
952.	an oròmo mà nàŁ.	yo recogiera, recogeria, y recogiese	998.	oromo nàŁ. pataac	nosotros eramos recogidos
953.	cà oròmo mà nàŁ.	tu recogieras, recogerias, y recogieses	999.	oromo nàŁ. pataca ay	vosotros erais recogidos
954.	mu oròmo mà nàŁ.	aquel recogiera, recogeria, y recogiese	1000.	oromo nàŁ. Lic patai	aquellos eran recogidos
955.	muc oròmo mà nàŁ.	nosotros recogeríamos, recojeríamos, y recogiesemos	1001.	oromo pataguaan	yo fui, ó he sido recogido
956.	cà oròmo mà nàŁ. ay	vosotros recogeriais, recogeriais, y recogieseis	1002.	oromo pataguaca	tu fuistes, ó has sido recogido
957.	mu oròmo mà nàŁ. qui Lic	aquellos recogieran, recogerian, y recogiesen	1003.	oromo pataguaag	aquel fue, ó ha sido recogido
958.	ormoon mà	yo haya recogido	1004.	oromo pataguaac	nosotros fuimos, ó hemos sido recogidos
959.	ormocà mà	tu hayas recogido	1005.	oromo pataguaca ay	vosotros fuiste[i]s, ó haveis sido recogidos
960.	ormoi mà	aquel haya recogido	1006.	oromo Lic	aquellos fueron, ó han sido recogidos
961.	ormooc mà	nosotros hayamos recogido	1007.	capa oromo paŁ. nàŁ. pataguaan	yo havia sido recogido
962.	ormocà mà ay	vosotros hayais recogido	1008.	capa oromo paŁ. nàŁ. pataguaca	tu havias sido recogido
963.	ormoi mà Lic	aquellos hayan recogido	1009.	capa oromo paŁ. nàŁ. pataguaag	aquel havia sido recogido
964.	ormoon mà ayù	yo huviera, avría, y huviese recogido	1010.	capa oromo paŁ. nàŁ. pataguaac	nosotros haviamos sido recogidos
965.	ormocà mà ayù	tu huvieras, avrias, y huvieses recogido	1011.	capa oròmo paŁ. nàŁ. pataguaca ay	vosotros haviais sido recogidos
966.	ormoi mà ayù	aquel huviera, avria, y huviese recogido	1012.	capa oròmo paŁ. nàŁ. Lic pataguaag	aquellos havian sido recogidos
967.	ormooc mà ayù	nosotros huvieramos, avriamos, y huviesemos recogido	1013.	oròmo pè pataan	yo serè recogido
968.	ormocà mà ayù ay	vosotòs huvierais, avriai, y huvieseis recogido	1014.	oròmo pè patacà	tu seràs recogido
969.	ormoi mà ayù Lic	aquellos huvieran, avrian,	1015.	oròmo pè patai	aquel serà recogido

1016.	oròmo pè pataac	nosotros seremos recogidos	1054.	oròmo pa pè patacà	tu fueres, ó huvieres sido recogido
1017.	oròmo pè patacà ay	vosotros sereis recogidos	1055.	oròmo pa pè patai	aquel fuere, ó huviere sido recogido
1018.	oròmo pè Lic patai	aquellos serán recogidos	1056.	oròmo pa pè pata ac	nosotros fueremos, ó huvieremos sido recogidos
1019.	oròmo pà ayù pataguaan	yo avré sido recogido	1057.	oròmo pa pè patacà ay	vosotros fuereis, ó huviereis sido recogidos
1020.	oròmo pa ayù pataguaca	tu avras sido recogido	1058.	oròmo pa pè Lic pataguaag	aquellos fuesen, ó huvieren sido recogidos
1021.	oròmo pa ayù pataguaac	aquel avra sido recogido	1059.	oròmo patai	ser recogido
1022.	oròmo pa ayù pataguac	nosotros avremos sido recogidos	1060.	oròmo pataguaag	haver sido recogido
1023.	oròmo pa ayù pataguaca ay	vosotros avreis sido recogidos	1061.	oròmo nàL pe patai	haver de ser recogido
1024.	oròmo pa ayù Lic pataguaag	aquellos avran sido recogidos	1062.	oròmo nàL patai	que fuera, ó huviera de aver sido recogido
1025.	oròmo patacà	sed tu recogido	1063.	oròmo patai	de ser recogido
1026.	oròmo patai	sea aquel recogido	1064.	neLa á patà oròmo	para ser recogido
1027.	oròmo patacà ay	sed vosotros recogidos	1065.	a patà oròmo	a ser recogido
1028.	oròmo Lic patai	sean aquellos recogidos	1066.	aLi pataLa oròmo	por ser recogido
1029.	oròmo Lan pataan	yo sea recogido	1067.	ormògua	cosa recogido
1030.	oròmo Lan patacà	tu seas recogido	1068.	ormògua pè patai	cosa que hà, ó tiene de ser recógida
1031.	oròmo Lan patai	aquel sea recogido	1069.	samu	coger
1032.	oròmo Lan pataac	nosotros seamos recogidos	1070.	an sàmu	yo cojo
1033.	oròmo Lan patacà ay	vosotros seais recogidos	1071.	cà sàmu	tu coges
1034.	oròmo Lan Lic patai	aquellos sean recogidos	1072.	mu sàmu	aquel coge
1035.	oròmo mà nàL pataan	yo fuera, sería, y fuese recogido	1073.	muc sàmu	nosotros cogemos
1036.	oròmo mà nàL patacà	tu fueras, serías, y fueses recogido	1074.	cà sàmu ay	vosotros cogeis
1037.	oròmo mà nàL patai	aquel fuera, seria, y fuese recogido	1075.	mu sàmu qui Lic	aquellos cogen
1038.	oròmo mà nàL pataac	nosotros fuéramos, seríamos, y fuesemos recogidos	1076.	an sàmu nàL	yo cogía
1039.	oròmo mà nàL patacà ay	Vosotros fuerais, seriais, y fueseis recogidos	1077.	cà samu nàL	tu cogías
1040.	oròmo mà nàL Lic patai	aquellos fueran, serian, y fuesen recogidos	1078.	mu sàmu nàL	aquel cogía
1041.	oròmo mà pataguaan	yo haya sido recogido	1079.	muc sàmu nàL	nosotros cogíamos
1042.	oròmo mà pataguaca	tu hayas sido recogido	1080.	cà sàmu nàL ay	vosotros cogiais
1043.	oròmo mà pataguaag	aquel haya sido recogido	1081.	mu sàmu nàL qui Lic	aquellos cogian
1044.	oròmo mà pataguaac	nosotros hayamos sido recogidos	1082.	sàmuun	yo cogi, ó hè cogido
1045.	oròmo mà pataguaca ay	vosotros hayais sido recogidos	1083.	sàmu cà	tu cogistes, ó has cogido
1046.	oròmo mà Lic pataguaag	aquellos hayan sido recogidos	1084.	sàmui	aquel cogió, ó hà cogido
1047.	oròmo mà ayù pataguaan	yo huviera, avria, y huviese sido recogido	1085.	sàmuuc	nosotros cogimos, ó hemos cogido
1048.	oròmo mà ayù pataguaca	tu huvieras, avrias, y huvieses sido recogido	1086.	sàmuca ay	vosotros cogisteis, ó haveis cogido
1049.	oròmo mà ayù pataguaag	aquel huviera, avria, y huviese sido recogido	1087.	sàmui qui Lic	aquellos cogieron, ó han cogido
1050.	oròmo mà ayù pataguac	nosotros huvieramos, avriamos, y huviesemos sido recogidos	1088.	capa sàmuun paL nàL	yo había cogido
1051.	oròmo mà ayù pataguaca ay	vosotros huvierais, avriais y huvieseis sido recogidos	1089.	capa sàmuca paL nàL	tu havias cogido
1052.	oròmo mà ayù Lic pataguag	aquellos huvieran, avrian, y huviesen sido recogidos	1090.	capa sàmui paL nàL	aquel havia cogido
1053.	oròmo pa pè pataan	yo fuere, ó huvièrè sido recogido	1091.	capa sàmuuc paL nàL	nosotros haviamos cogido
			1092.	capa sàmuca paL nàL ay	vosotros haviais cogido
			1093.	capa sàmui paL nàL Lic	aquellos havian cogido
			1094.	an sàmu pè	yo cogerè
			1095.	cà sàmu pè	tu cogeràs
			1096.	mu sàmu pè	aquel cogerà
			1097.	muc sàmu pè	nosotros cogerèmos
			1098.	cà sàmu pè ay	vosotros cogereis
			1099.	mu sàmu pè qui Lic	aquellos cogeràn
			1100.	sàmuun pà ayù	yo avre cogido
			1101.	sàmuca pa ayù	tu avras cogido
			1102.	sàmui pa ayù	aquel avrà cogido
			1103.	sàmuuc pa ayù	nosotros avremos cogido
			1104.	sàmuca pa ayù ay	vosotros avreis cogido

1105.	sàmui Lic pà ayù	aquellos avran cogido	1152.	sàmuquiLa	el que hà, ó tiene de coger
1106.	sàmu	coge tu	1153.	sàmu pataan	yo soi cogido
1107.	gua sàmu in	coja aquel	1154.	sàmu patacà	tu eres cogido
1108.	sàmu ay	coged vosotros	1155.	sàmu patai	aquel es cogido
1109.	gua sàmu in Lic	cojan aquellos	1156.	sàmu pata ac	nosotros somos cogidos
1110.	an sàmu Làn	yo coja	1157.	sàmu patacà ay	vosotros sois cogidos
1111.	cà sàmu Làn	tu cojas	1158.	sàmu Lic patai	aquellos son cogidos
1112.	mu sàmu Làn	aquel coja	1159.	sàmu nàL pataan	yo era cogido
1113.	muc sàmu Làn	nosotros cojamos	1160.	sàmu nàL patacà	tu eras cogido
1114.	ca sàmu Làn ay	vosotros cojais	1161.	sàmu nàL patai	aquel era cogido
1115.	mu sàmu Làn Lic	aquellos cojan	1162.	sàmu nàL pata ac	nosotros eramos cogidos
1116.	an sàmu mà nàL	yo cogiera, cogeria, y cogiese	1163.	sàmu nàL patacà ay	vosotros erais cogidos
1117.	cà sàmu mà nàL	tu cogieras, cogeria, y cogieses	1164.	sàmu nàL Lic patai	aquellos eran cogidos
1118.	mu sàmu mà nàL	aquel cogiera, cogeria, y cogiese	1165.	sàmù pataguaan	yo fui, ó he sido cogido
1119.	muc sàmu mà nàL	nosotros cogieramos, cogieramos, y cogiesemos	1166.	sàmù pataguacà	tu fuistes, ó has sido cogido
1120.	cà sàmu mà nàL ay	vosotros cogierais, cogierais, y cogieseis	1167.	samù pataguaag	aquel fuè, ó ha sido cogido
1121.	mu sàmu mà nàL qui Lic	aquellos cogieran, cogieran, y cogiesen	1168.	sàmù pataguaac	nosotros fuimos, ó hemos sido cogidos
1122.	sàmuun mà	yo haya cogido	1169.	samù pataguaca ay	vosotros fuisteis, ó haveis sido cogidos
1123.	sàmuçà mà	tu hayas cogido	1170.	samù Lic pataguaag	aquellos fueron, ó han sido cogidos
1124.	sàmui mà	aquel haya cogido	1171.	capà samù pàL nàL pataguaan	yo havia sido cogido
1125.	sàmuuc mà	nosotros hayamos cogido	1172.	capa samù pàL nàL pataguaca	tu havias sido cogido
1126.	sàmuçà mà ay	Vosotros hayais cogido	1173.	capa sàmù pàL nàL pataguaag	aquel havia sido cogido
1127.	sàmui Lic mà	aquellos hayan cogido	1174.	capa sàmù pàL nàL pataguaac	nosotros haviamos sido cogidos
1128.	sàmuun mà ayù	yo huviera, avria, y huviese cogido	1175.	capa sàmù pàL nàL pataguaca ay	vosotros haviais sido cogidos
1129.	sàmuçà mà ayù	tu huvieras, avrias, y huvieses cogido	1176.	capa sàmù pàL nàL Lic pataguaag	aquellos havian sido cogidos
1130.	sàmuí mà ayù	aquel huviera, avria, y huviese cogido	1177.	sàmu pè pataan	yo serè cogido
1131.	sàmuuc mà ayù	nosotros huvieramos, avriamos, y huviesemos cogido	1178.	sàmu pè patacà	tu seras cogido
1132.	sàmuçà mà ayù ay	Vosot[ro]s huvierais, avriais, y huvieseis cogido	1179.	sàmu pè patai	aquel sera cogido
1133.	sàmui Lic mà ayù	aquellos huvieran, avrian, y huviesen cogido	1180.	sàmu pè pataac	nosotros seremos cogidos
1134.	an sàmu pà pè	yo cogiere, ó huviere cogido	1181.	sàmu pè patacà ay	vosotros sereis cogidos
1135.	cà sàmu pà pè	tu cogieres, ó huvieres cogido	1182.	sàmui Lic pè patai	aquellos seran cogidos
1136.	mu sàmu pà pè	aquel cogiere, ó huviere cogido	1183.	samù pa ayù pataguaan	yo aver sido cogido
1137.	muc sàmu pà pè	nosotros cogieremos, y huvieremos cogido	1184.	samù pa ayù pataguacà	tu avras sido cogido
1138.	cà sàmu pà pè ay	vosotros cogiereis, ó huviereis cogido	1185.	samù pa ayù pataguaag	aquel avrà sido cogido
1139.	mu sàmu pà pè qui Lic	aquellos cogieren, ó huvieren cogido	1186.	samù pa ayù pataguaac	nosotros avremos sido cogidos
1140.	a sàmu	coger	1187.	samù pa ayù pataguaca ay	vosotros avreis sido cogidos
1141.	sàmuguà	haver cogido	1188.	samù pa ayù Lic pataguaag	aquellos avran sido cogidos
1142.	sàmu nàL pè	haver de coger	1189.	sàmu patacà	sed tu cogido
1143.	sàmu nàL	que cogiera, ó huviera de aver cogido	1190.	sàmu patai	sea aquel cogido
1144.	sàmu	de coger	1191.	sàmu patacà ay	sed vosot[ro]s cogidos
1145.	neLa à sàmu	para coger	1192.	sàmu Lic patai	seàn aquellos cogidos
1146.	sàmu	a coger	1193.	sàmu Lan pataan	yo sea cogido
1147.	aLi à sàmu	por coger	1194.	sàmu Lan patacà	tu seas cogido
1148.	sàmùqui	a coger	1195.	sàmu Lan patai	aquel sea cogido
1149.	sàmùL	el que coge, o cogía	1196.	sàmu Lan pata ac	nosotros seamos cogidos
1150.	sàmùLà	el que coge, o cogía	1197.	sàmu Lan patacà ay	vosotros seais cogidos
1151.	sàmu quiLa	el que coge, o cogía	1198.	sàmu Lan Lic patai	aquellos sean cogidos
			1199.	sàmu mà nàL pata an	yo fuera, seria, y fuese cogido
			1200.	sàmu mà nàL pata cà	tu fueras, serias, y fueses cogido

1201.	sàmu mà nàL patai	aquel fuera, seria, y fuese cogido	1245.	mu evètue nàL qui Lic	aquellos median
1202.	sàmu mà nàL pata ac	nosotros fuéramos, seríamos, y fuésemos cogidos	1246.	evètue ven	yo medi, ó hè medido
1203.	sàmu mà nàL patacà ay	vosotros fuerais, serais, y fuéseis cogidos	1247.	evètue cà	tu medistes, ó has medido
1204.	sàmu mà nàL Lic patai	aquellos fueran, serian, y fuesen cogidos	1248.	evètue i	aquel midió, ó hà medido
1205.	samù mà pataguaan	yo haya sido cogido	1249.	evètue vèc	nosotros medimos, ó hemos medido
1206.	samù mà pataguaca	tu hayas sido cogido	1250.	evetuecà ay	vosotros medisteis, ó haveis medido
1207.	samù mà pataguaag	aquel haya sido cogido	1251.	evetuei qui Lic	aquellos midieron, ó han medido
1208.	samù mà pataguaac	nosotros hayamos sido cogidos	1252.	capa evetueven paL nàL	yo havia medido
1209.	samù mà pataguaca ay	vosotros hayais sido cogidos	1253.	capa evetuecà paL nàL	tu havias medido
1210.	samù mà Lic pataguaag	aquellos hayan sido cogidos	1254.	capa evetuei paL nàL	aquel havia medido
1211.	samù mà ayù pataguaan	yo huviera, avria, y huviese sido cogido	1255.	capa evetuevec paL nàL	nosotros haviamos medido
1212.	samù mà ayù pataguaca	tu huvieras, avrias, y huvieses sido cogido	1256.	capa evetuecà paL nàL ay	vosotros haviais medido
1213.	samù mà ayù pataguaag	aquel huviera, avria, y huviese sido cogido	1257.	capa evetuei Lic paL nàL	aquellos havian medido
1214.	samù mà ayù pataguaac	nosotros huvieramos, avriamos, y huviesemos sido cogidos	1258.	an evètue pè	yo medirè
1215.	samù mà ayù pataguaca ay	vosotros huvierais, avriais y huvieseis sido cogidos	1259.	cà evètue pè	tu mediras
1216.	samù mà ayù Lic pataguaag	aquellos huvieran, avrian, y huviesen sido cogidos	1260.	mu evètue pè	aquel medirà
1217.	sàmu pa pè pataan	yo fuere, ó huviere sido cogido	1261.	muc evètue pè	nosotros mediremos
1218.	sàmu pa pè patacà	tu fueres, ó huvieres sido cogido	1262.	cà evètue pè ay	vosotros medireis
1219.	sàmu pa pè patai	aquel fuere, ó huviere sido cogido	1263.	mu evètue pè Lic	aquellos mediràn
1220.	sàmu pa pè pataac	nosotros fueremos, ó huvieremos sido cogidos	1264.	evètueven pà ayù	yo avrè medido
1221.	sàmu pa pè pataca ay	vosotros fuereis, ó huviereis sido cogidos	1265.	evetuecà pà ayù	tu avras medido
1222.	sàmu pa pè Lic patai	aquellos fueron, ó huvieren sido cogidos	1266.	evetuei pà ayù	aquel avrà medido
1223.	sàmu patai	ser cogido	1267.	evètuevec pà ayù	nosotros avremos medido
1224.	samù pataguà	haver sido cogido	1268.	evetuecà pà ayù ay	vosotros avreis medido
1225.	sàmu nàL pè patai	haver de ser cogido	1269.	evetuei pà ayù Lic	aquellos avran medido
1226.	patà nàL sàmu	que fuera, ó huviera de aver sido cogido	1270.	evètue	mide tu
1227.	patàn sàmu	de ser cogido	1271.	guà evetvèin	mida aquel
1228.	neLa a patà sàmu	para ser cogido	1272.	evètue ay	medid vosot[ro]s
1229.	patà sàmu	á ser cogido	1273.	guà Lic evetvein	midan aquellos
1230.	aLi pataLa sàmu	por ser cogido	1274.	an evètue Làn	yo mida
1231.	samùgua	cosa cogido	1275.	cà evètue Làn	tu midas
1232.	samùgua pè patai	cosa que hà, ò tiene de ser cogida	1276.	mu evètue Làn	aquel mida
1233.	evetue	medir	1277.	muc evètue Làn	nosotros midamos
1234.	an evètue	yo mido	1278.	cà evètue Làn ay	vosotros midais
1235.	cà evètue	tu mides	1279.	mu evètue Làn Lic	aquellos midan
1236.	mu evètue	aquel mide	1280.	an evètue mà nàL	yo midiera, mediria, y midiese
1237.	muc evètue	nosotros medimos	1281.	ca evètue mà nàL	tu midieras, medirias, y midieses
1238.	cà evetue ay	vosotros medis	1282.	mu evètue mà nàL	aquel midiera, mediria, y midiese
1239.	mu evetue quiLic	aquellos miden	1283.	muc evètue mà nàL	nosotros midieramos, mediriamos, y midiesemos
1240.	an evetue nàL	yo media	1284.	ca evètue mà nàL ay	vosotros midierais, mediriais, y midieseis
1241.	cà evetue nàL	tu medias	1285.	mu evètue mà nàL qui Lic	aquellos midieran, medirian, y midiesen
1242.	mu evetue nàL	aquel media	1286.	evetueven mà	yo haya medido
1243.	muc evètue nàL	nosotros mediamos	1287.	evètue cà mà	tu haya medido
1244.	cà evètue nàL ay	vosotros mediais	1288.	evetuei mà	aquel haya medido
			1289.	evetuevec mà	nosotros hayamos medido
			1290.	evetuecà mà ay	vosotros hayais medido
			1291.	evetuei Lic mà	aquellos hayan medido
			1292.	evètueven mà ayù	yo huviera, avria, y huviese medido
			1293.	evètuecà mà ayù	tu huvieras, avrias, y huvieses medido

1294. evèttei mà ayù aquel huviera, avria, y
huviese medido
1295. evetuevèc mà ayù nosotros huvieramos,
avriamos, y huviesemos
medido
1296. evetuecà mà ayù ay vosotros huvierais, avriais,
y huvieseis medido
1297. evetuei Lic mà ayù aquellos huvieran, avrian,
y huviesen medido
1298. an evètte pàpè yo midiere, ó huviere
medido
1299. cà evètte pà pè tu midieres, ó huvieres
medido
1300. mu evètte pà pè aquel midiere, ó huviere
medido
1301. muc evètte pà pè nosotros midieremos, ó
huvieremos medido
1302. cà evètte pá pè ay vosotros midiereis, ó
huviereis medido
1303. mu evètte pá pè Lic aquellos midieren, ó
huvieren medido
1304. a evetue medir
1305. evetueguà haver medido
1306. a evetue nàL pè haver de medir
1307. evètte nàL que midiera, ó huviera de
aver medido
1308. a evètte de medir
1309. neLa a evetue para medir
1310. evètte á medir
1311. aLi a evètte por medir
1312. evetuequi a medir
1313. evetueL el que mide, ó medía
1314. evetueLà el que mide, ó medía
1315. evetuequiLa el que mide, ó medía
1316. evètte qui La pè el que hà, ó tiene de medir
1317. evètte pata an yo soi medido
1318. evètte pata cà tu eres medido
1319. evètte patai aquel es medido
1320. evètte pataac nosotros somos medidos
1321. evètte patacà ay vosotros sois medidos
1322. evètte Lic patai aquellos son medidos
1323. evètte nàL pataan yo era medido
1324. evètte nàL patacà tu eras medido
1325. evètte nàL patai aquel era medido
1326. evètte nàL pata ac nosotros eramos medidos
1327. evètte nàL patacà ay vosotros erais medidos
1328. evètte nàL Lic patai aquellos eran medidos
1329. evètte pataguaan yo fui, ó he sido medido
1330. evètte patacà tu fuistes, ó has sido
medido
1331. evètte pataguaag aquel fuè, ó ha sido
medido
1332. evetue pataguaac nosotros fuimos, ó hemos
sido medidos
1333. evetue pataguaca ay vosotros fuisteis, ò haveis
sido medidos
1334. evetue Lic pataguaag aquellos fueron, ó han sido
medidos
1335. capa evètte paL nàL yo havia sido medido
1336. capa evètte paL nàL pataguaan tu havias sido medido
1337. capa evètte paL nàL pataguacà aquel havia sido medido
1338. capa evètte paL nàL pataguaag nosotros haviamos
medidos
1339. capa evètte paL nàL pataguaca ay vosotros haviais sido
medidos
1340. capa evètte paL nàL Lic pataguaag aquellos havian sido
medidos
1341. evètte pè pataan yo serè medido
1342. evètte pè patacà tu seras medido
1343. evètte pè patai aquel serà medido
1344. evètte pè pataac nosotros seremos medidos
1345. evètte pè patacà ay Vosotros sereis medidos
1346. evètte pè Lic patai aquellos seran medidos
1347. evetue pa ayù yo avrè sido medido
1348. evetue pa ayù pataguàca tu avras sido medido
1349. evetue pa ayù pataguaag aquel avrà sido medido
1350. evetue pa ayù pataguàac nosotros avremos sido
medidos
1351. evetue pa ayù pataguaca ay Vosotros avreis sido
medidos
1352. evetue pa ayù Lic aquellos avran sido
medidos
1353. evètte patacà sed tu medido
1354. evètte patai sea aquel medido
1355. evètte patacà ay sed vosotros medidos
1356. evetue Lic sean aquellos medidos
1357. evètte Lan pataan yo sea medido
1358. evètte Lan patacà tu seas medido
1359. evètte Lan patai aquel sea medido
1360. evètte Lan pata àc nosotros seamos medidos
1361. evètte Lan patacà ay vosotros seais medidos
1362. evètte Lan Lic patai aquellos sean medidos
1363. evètte mà nàL yo fuera, seria, y fuese
medido
1364. evètte mà nàL patacà tu fueras, serias, y fueses
medido
1365. evètte mà nàL patai aquel fuera, seria, y fuese
medido
1366. evètte mà nàL pataac nosotros fuéramos,
seríamos, y fueseamos
medidos
1367. evètte mà nàL pataca ay vosotros fuerais, seriais, y
fueseis medidos
1368. evètte mà nàL Lic aquellos fueran, serían, y
fuesen medidos
1369. evètte mà pataguaan yo haya sido medido
1370. evètte mà pataguàca tu hayas sido medido
1371. evètte mà pataguaag aquel haya sido medido
1372. evètte mà pataguaac nosotros hayamos sido
medidos
1373. evètte mà pataguaca ay vosotros hayais sido
medidos
1374. evètte mà Lic pataguaag aquellos hayan sido
medidos
1375. evètte mà ayù yo huviera, avria, y
huviese sido medido
1376. evètte mà ayù pataguàca tu huvieras, avrias, y
huvieses sido medido
1377. evètte mà ayù pataguaag aquel huviera, avria, y
huviese sido medido
1378. evètte mà ayù pataguaac nosotros huvieramos
avriamos, y huviesemos

1379.	evètue mà ayù pataguaca ay	sido medidos vosotros huvierais, avriais, y huvieseis sido medidos	1427.	a tá pè qui Lic	aquellos vendran
1380.	evètue mà ayù Lic pataguaag	aquellos huvieran, avrian, y huviesen sido medidos	1428.	an tá ý pà ayù	yo avrè venido
1381.	evètue pà pè pataan	yo fuere, ó huviere sido medido	1429.	cà tá ý pa ayù	tu avras venido
1382.	evètue pà pè patacà	tu fueres, ó huvieres sido medido	1430.	tá ý pa ayù	aquel avra venido
1383.	evètue pà pè patai	aquel fuere, ó huviére sido medido	1431.	muc ta ý pa ayù	nosotros avremos venido
1384.	evètue pà pè pataac	nosotros fuereamos, ó huvieremos sido medidos	1432.	ca ta ý pà ayù ay	vosotros avreis venido
1385.	evètue pà pè patacà ay	vosotros fuereis, ó huviereis sido medidos	1433.	ta ý Lic pa ayù	aquellos avran venido
1386.	evètue pà pè Lic patai	aquellos fueren, ó huvieren sido medidos	1434.	cà tà	Ven tu
1387.	evètue patai	ser medido	1435.	tà ca	Ven tu
1388.	evètue pataguaag	haver sido medido	1436.	a tà	Venga aquel
1389.	evètue nàL pè pataí	haver de ser medido	1437.	cà tà ay	Venid vosotros
1390.	patà nàL evètue	que fuera, ó huviera de aver sido medido	1438.	tà cà ay	Venid vosotros
1391.	patàn evètue	de ser medido	1439.	a tà Lic	Vengan aquellos
1392.	neLà á patà evètue	para ser medido	1440.	an tà Làn	yo venga
1393.	patà evètue	á ser medido	1441.	cà tà Làn	tu vengas
1394.	aLi patalà evètue	por ser medido	1442.	a tà Làn	aquel venga
1395.	evetuegua	cosa medida	1443.	muc tà Làn	nosotros vengamos
1396.	evetuegua pè pataí	cosa que há ó tiene de ser medido	1444.	cà tà Làn ay	vosotros vengais
1397.	tà	venir	1445.	a tà Làn Lic	aquellos vengán
1398.	an tá	yo vengo	1446.	an tà mà nàL	yo viniera, vendria, y viniese
1399.	cà tà	tu vienes	1447.	cà tà mà nàL	tu vinieras, vendrias, y vinieses
1400.	a tá	aquel viene	1448.	a tà mà nàL	aquel viniera, vendria, y viniese
1401.	muc tá	nosotros venimos	1449.	muc tà mà nàL	nosotros vinieramos, vendriamos, y viniesemos
1402.	cà tà ay	vosotros venis	1450.	cà tà mà nàL ay	vosotros vinierais, vendriais, y vinieseis
1403.	a tá qui Lic	aquellos vienen	1451.	a tà mà nàL qui Lic	aquellos vinieran, vendrian, y viniesen
1404.	an tá nàL	yo venia	1452.	an tà i mà	yo haya venido
1405.	cà tà nàL	tu venias	1453.	cà tà i mà	tu hayas venido
1406.	a tà nàL	aquel venia	1454.	tá i mà	aquel haya venido
1407.	muc tà nàL	nosotros veniamos	1455.	muc tà i mà	nosotros hayamos venido
1408.	cà tà nàL ay	vosotros veniais	1456.	cà tà i mà ay	vosotros hayais venido
1409.	a tà nàL qui Lic	aquellos venían	1457.	tà i mà qui Lic	aquellos hayan venido
1410.	an tá ý	yo vine, ò hè venido	1458.	an tà i mà ayù	yo huviera, avría, y huviese venido
1411.	cà tà ý	tu venistes, ò has venido	1459.	cà tà i mà ayù	tu huvieras, avrias, y huvieses venido
1412.	tá ý	aquel vino, ò hà venido	1460.	tà i mà ayù	aquel huviera, avria, y huviese venido
1413.	muc tá ý	nosotros venimos, ó hemos venido	1461.	muc tà i mà ayù	nosotros huvieramos, avriamos y huviesemos venido
1414.	cà tà ý ay	vosotros venisteis, ó haveis venido	1462.	cà tà i mà ayù ay	vosotros huvierais, avriais, y huvieseis venido
1415.	tá ý qui Lic	aquellos vinieron, ó han venido	1463.	tà i Lic mà ayù	aquellos huvieran, avrian, y huviesen venido
1416.	capa an tá ý paL nàL	yo havia venido	1464.	an tà pà pè	yo viniere, ó huviere venido
1417.	capa ca tá ý paL nàL	tu havias venido	1465.	cà tà pà pè	tu vinieres, ó huvieres venido
1418.	capa tá ý paL nàL	aquel havia venido	1466.	a tà pà pè	aquel viniere, ó huviere venido
1419.	capa mu tá ý paL nàL	nosotros haviamos venido	1467.	muc tà pà pè	nosotros vinieremos, ó huvieremos venido
1420.	capa ca tá ý paL nàL ay	vosotros haviais venido	1468.	cà tà pà pè ay	vosotros viniereis, ó huviereis venido
1421.	capa tá ý Lic paL nàL	aquellos havian venido	1469.	a tà pà pè Lic	aquellos vinieren, ó huvieren venido
1422.	an tá pè	yo vendrè	1470.	mara	descansar
1423.	cà tá pè	tu vendras	1471.	an màra	yo decanso
1424.	a tá pè	aquel vendrà	1472.	cà màra	tu decansas
1425.	muc tá pè	nosotros vendremos	1473.	a màra	aquel descansa
1426.	cà tà pè ay	vosotros vendreis	1474.	muc màra	nosotros descansamos

1475.	cà màra ay	vosotros descansais	1524.	cà màra mà nàL	tu descansaras,
1476.	a màra qui Lic	aquellos descansan			descansarias, y
1477.	an màra nàL	yo descansaba			descansases
1478.	cà màra nàL	tu descansabas	1525.	a màra mà nàL	aquel descansara,
1479.	a màra nàL	aquel descansaba			descansaria, y descansase
1480.	muc màra nàL	nosotros descansabamos	1526.	muc màra mà nàL	nosotros descansaramos
1481.	ca màra nàL ay	vosotros descansabais			descansariamos, y
1482.	a màra nàL qui Lic	aquellos descansaban			descansasemos
1483.	an màrà	yo descansè, ó hè	1527.	cà màra mà nàL ay	vosotros descansarais,
		descansado			descansariais, y
1484.	an màra Là	yo descansè, ó hè			descansaseis
		descansado	1528.	a màrà mà nàL qui	aquellos descansaran,
1485.	cà màrà	tu descansastes, ó has		Lic	descansarian, y
		descansado			descansasen
1486.	cà màra Là	tu descansastes, ó has	1529.	an màrà mà	yo haya descansado
		descansado	1530.	cà màrà mà	tu hayas descansado
1487.	màrà	aquel descansó, ó ha	1531.	màrà mà	aquel haya descansado
		descansado	1532.	muc màrà mà	nosotros hayamos
1488.	màra Là	aquel descansó, ó ha			descansado
		descansado	1533.	cà màrà mà ay	vosotros hayais
1489.	muc màrà	nosotros descansamos, ó			descansado
		hemos descansado	1534.	màrà Lic mà	aquellos hayan descansado
1490.	muc màra Là	nosotros descansamos, ó	1535.	an màrà mà ayù	yo huviera, avria, y
		hemos descansado			huviese descansado
1491.	cà màrà ay	vosotros descansasteis, ó	1536.	cà màrà mà ayù	tu huvieras, avrias, y
		haveis descansado			huvieses descansado
1492.	màra qui Lic	aq[uellos] descansaron, ó	1537.	màrà mà ayù	aquel huviera, avría, y
		han descansado			huviese descansado
1493.	màra Là qui Lic	aq[uellos] descansaron, ó	1538.	muc màrà mà ayù	nosotros huvieramos
		han descansado			avriamos, y huviesemos
1494.	capa an màrà paL	yo havia descansado			descansado
	nàL		1539.	cà màrà mà ayù ay	vosotros huvierais, avriais,
1495.	capa cà màrà paL	tu havias descansado			y huvieseis descansado
	nàL		1540.	màra Lic mà ayù	aquellos huvieran, avrian,
1496.	capa màrà paL nàL	aquel havia descansado			y huviesen descansado
1497.	capa muc màrà paL	nosotros haviamos	1541.	an màra pàpè	yo descansare, ó huviere
	nàL	descansado			descansado
1498.	capa cà màrà paL	vosotros haviais	1542.	cà màra pà pè	tu descansares, ó huvieres
	nàL ay	descansado			descansado
1499.	capa màrà Lic paL	aquellos havian	1543.	a màra pàpè	aquel descansare, ó
	nàL	descansado			huviere descansado
1500.	an màra pè	yo descansarè	1544.	muc màra pà pè	nosotros descansaremos, ó
1501.	cà màra pè	tu descansaras			huvieremos descansado
1502.	a màra pè	aquel descansarà	1545.	cà màra pà pè ay	vosotros descansareis, ó
1503.	muc màra pè	nosotros descansaremos			huviereis descansado
1504.	cà màra pè ay	vosotros descansareis	1546.	a màra pà pè Lic	aquellos descansaren, ó
1505.	a màra pè Lic	aquellos descansarán			huvieren descansado
1506.	an màrà pàpè	yo avrè descansado	1547.	a màra	Descansar
1507.	cà màrà pà pè	tu avras descansado	1548.	màraguà	haver descansado
1508.	màrà pà pè	aquel avrà descansado	1549.	a màra nàL pè	haver de descansar
1509.	muc màrà pà pè	nosotros avremos	1550.	màra nàL	que descansara, ó huviera
		descansado			de haver descansado
1510.	cà màrà pà pè ay	vosotros avreis descansado	1551.	màra	de descansar
1511.	màra Lic pàpè	aquellos avran descansado	1552.	neL a á màra	para descansar
1512.	màrà	Descansa tu	1553.	màra	á descansar
1513.	màràya	Descansa tu	1554.	aLi màra	por descansar
1514.	guà màrà quiin	Descanse aquel	1555.	màrà qui	a descansar
1515.	màràya ay	Descansen vosotros	1556.	màrà Là	el que descansa, ó
1516.	guaLic màra quin	Descansen aquellos			descansaba
1517.	an màra Làn	yo descanse	1557.	màrà Là pè	el que hà, ó tiene de
1518.	cà màrà Làn	tu descansas			descansar
1519.	a màra Làn	aquel descanse	1558.	pataszàma	acordarse
1520.	muc màra Làn	nosotros descansemos	1559.	an pataszàma	yo me acuerdo
1521.	cà màra Làn ay	vosotros descanseis	1560.	cà pataszàma	tu te acuerdas
1522.	a màra Làn qui Lic	aquellos descansen	1561.	mu pataszàma	aquel se acuerda
1523.	an màra mà nàL	yo descansara, descansaria,	1562.	muc pataszàma	nosotros nos acordamos
		y descansase	1563.	cà pata szàma ay	vosotros os acordais

1564. mu pata Lic szàma aquellos se acuerdan
 1565. an pata nàL szàma yo me acordaba
 1566. cà pata nàL szàma tu te acordabas
 1567. mu pata nàL szàma aquel se acordaba
 1568. muc pata nàL szàma nosotros nos acordabamos
 1569. cà pata nàL szàma vosotros os acordabais
 ay
 1570. mu pata nàL Lic aquellos se acordaban
 szàma
 1571. pataan szàma yo me acordè, ó me hè
 acordado
 1572. pata cà szàma tu te acordaste, ó te has
 acordado
 1573. patai szàma aquel se acordò, ó se ha
 acordado
 1574. pataac szàma nosotros nos acordamos, ó
 nos hemos acordado
 1575. patacà szàma ay vosotros os acordasteis, ó
 os haveis acordado
 1576. patai Lic szàma aquellos se acordaron, ó se
 han acordado
 1577. capa pataan paL yo me havia ácordado
 nàL szàma
 1578. capa patacà paL nàL tu te havias ácordado
 szàma
 1579. capa patai paL nàL aquel se havia ácordado
 szàma
 1580. capa pataac paL nàL nosotros nos haviamos
 szàma acordado
 1581. capa patacà paL nàL vosotros os haviais
 szàma ay acordado
 1582. capa patai Lic paL aquellos se havian
 nàL szàma acordado
 1583. an pata pè szàma yo me acordarè
 1584. cà pata pè szàma tu te acordaràs
 1585. mu pata pè szàma aquel se acordarà
 1586. muc pata pè szàma nosotros nos acordaremos
 1587. ca pata pè szàma ay vosotros os acordareis
 1588. mu pata pè Lic aquellos se acordaran
 szàma
 1589. pataan pa ayù szàma yo me avrè acordado
 1590. pataca pa ayù szàma tu te avras acordado
 1591. patai pa ayù szàma aquel se avrà acordado
 1592. pataac pa ayù szàma nosotros nos avremos
 acordado
 1593. patacà pa ayù szàma vosotros os avreis
 ay acordado
 1594. patai pa ayùLic aquellos se avran acordado
 szàma
 1595. pata szàma acuerdate tu
 1596. guapatain szàma acuerdese aquel
 1597. pata szàma ay acordaos vosotros
 1598. guaLic patain szàma acuerdense aquellos
 1599. an pata Lan szàma yo me acuerde
 1600. cà pata Lan szàma tu te acuerdes
 1601. mu pata Lan szàma aquel se acuerde
 1602. muc pata Lan szàma nosotros nos acordemos
 1603. ca pata Lan szàma vosotros os acordeis
 ay
 1604. mu pata Lan szàma aquellos se acuerden
 Lic
 1605. an pata mà naL yo me acordara, acordaria,
 szàma y acordase
 1606. cà pata mà nàL tu te acordaras, acordarias,
 szàma y acordases
 1607. mu pata mà nàL aquel se acordara,
 szàma acordaria, y acordase
1608. muc pata mà naL no[sotro]s nos acordamos,
 szàma acordariamos, y
 acordasemos
 1609. cà pata mà naL Vo[sotro]s os acordarais,
 szàma ay acordarais, y acordaseis
 1610. mu pata mà nàL aquellos se acordaran,
 szama Lic acordarian, y acordasen
 1611. pata an mà szàma yo me haya acordado
 1612. pata ca mà szàma tu te hayas acordado
 1613. patai mà szàma a[quel] se haya acordado
 1614. pataac mà szàma no[sotro]s nos hayamos
 acordado
 1615. pata cà mà szàma ay Vo[sotro]s os hayais
 acordado
 1616. patai ma szàma Lic aquellos se hayan
 acordado
 1617. pataan mà ayù yo me huviera, avria, y
 szàma huviese acordado
 1618. pata cà mà ayù tu te huvieras, avrias, y
 szàma huvieses acordado
 1619. patai mà ayù szàma aquel se huviera, avria, y
 huviese acordado
 1620. pataac mà ayù no[sotro]s nos huvieramos
 szàma avriamos, y huviesemos
 acordado
 1621. patacà mà ayù Vos[otro]s os huvierais,
 szàma ay avriais, y huvieseis
 acordado
 1622. patai Lic mà ayù aquellos se huvieran,
 szàma avrian, y huviesen
 acordado
 1623. an pata pa pè szàma yo me acordare, ó me
 huvire acordado
 1624. cà pata pa pè szàma tu te acordares, ó te
 huvieres acordado
 1625. mu pata pa pè aquel se acordare, ó se
 szàma huviere acordado
 1626. muc pata pa pè no[sotro]s nos
 szàma acordaremos, ó nos
 huvieremos acordado
 1627. cà pata pa pè szàma Vo[sotro]s os acordareis, ú
 ay os huviereis acordado
 1628. mu pata papè szàma aquellos se acordaren, ó se
 Lic huvieren acordado
 1629. a pata szama acordarse
 1630. patàguà szàma haver se acordado
 1631. a pata nàL pè szàma haver de acordarse
 1632. pata nàL szàma que se acordara, ó se
 huviera de aver acordado
 1633. pata szàma de acordarse
 1634. neLa à pata szàma para acordarse
 1635. pata szàma à acordarse
 1636. aLi à patà szàma por acordarse
 1637. patàL szàma el que se acuerda, ó se
 acordaba
 1638. pata Là szàma pè el que hà, ó tiene de
 acordarse
 1639. yueguasàma
 1640. pacu szaja
 1641. nigua szà
 1642. an acù yo voy
 1643. cà acù tu vàs
 1644. a acù aquel và
 1645. muc acù nosotros vamos
 1646. cà acù ay vosotros vais
 1647. a acù qui Lic aquellos van
 1648. an acù nàL yo iba

1649.	cà acù nàL	tu ibas			
1650.	a acù nàL	aquel iba			
1651.	muc acù nàL	nosotros ibamos			
1652.	ca acù nàL ay	vosotros ibais			
1653.	a acù nàL qui Lic	aquellos iban			
1654.	an acù La	yo fui, ó hè ido			
1655.	ca acù La	tu fuistes, ó has ido			
1656.	a acù La	aquel fuè, ó ha ido			
1657.	muc acù La	nosotros fuimos, ó hemos ido			
1658.	cà acù La ay	Voso[tr]os fuisteis, ó haveis ido			
1659.	a acùLa qui Lic	aquellos fueron, ó han ido			
1660.	capa an acùLa paL nàL	yo havia ido			
1661.	capa ca acùLa paL nàL	tu havias ido			
1662.	capa a acùLa paL nàL	aquel havia ido			
1663.	capa muc acùLa paL nàL	no[sotro]s haviamos ido			
1664.	capa ca acùLa paL nàL ay	Vos[otro]s haviais ido			
1665.	capa a acùLa paL nàL qui Lic	aquellos havian ido			
1666.	an acù pè	yo irè			
1667.	ca acù pè	tu iras			
1668.	a acù pè	aquel irà			
1669.	muc acù pè	nosotros iremos			
1670.	ca acù pè ay	vosotros ireis			
1671.	a acù pè Lic	aquellos iràn			
1672.	an acùLa pa ayù	yo avrè ido			
1673.	cà acùLa pa ayù	tu avras ido			
1674.	a acùLa pa ayù	aquel avrà ido			
1675.	muc acùLa pa ayù	nos[otro]s avremos ido			
1676.	ca acùLa pa ayù ay	Vos[otro]s avreis ido			
1677.	a acùLa pa ayù Lic	aquellos avran ido			
1678.	acù ya	Ve tù			
1679.	a acù	Vaya aquel			
1680.	acùya ay	Ved vosotros			
1681.	a acù Lic	Vayan aquellos			
1682.	an acù Lan	yo vaya			
1683.	cà acù Lan	tu vayas			
1684.	a acù Lan	aquel vaya			
1685.	muc acù Lan	nosotros vayamos			
1686.	cà acù Lan ay	vosotros vayais			
1687.	a acù Lan Lic	aquellos vayan			
1688.	an acù mà nàL	yo fuera, iria y fuese			
1689.	cà acù mà nàL	tu fueras, irias, y fueses			
1690.	a acù mà nàL	aquel fuera, iría, y fuese			
1691.	muc acù mà nàL	nosotros fuéramos, iríamos, y fuésemos			
1692.	cà acù mà nàL ay	vosotros fuerais, iriais, y fuieseis			
1693.	a acù mà nàL qui Lic	aquellos fueran, irian, y fuesen			
1694.	an acùLa mà	yo haya ido			
1695.	cà acùLa mà	tu hayas ido			
1696.	a acùLa mà	aquel haya ido			
1697.	muc acùLa mà	nosotros hayamos ido			
1698.	ca acùLa mà ay	vosotros hayais ido			
1699.	a acùLa mà Lic	aquellos hayan ido			
1700.	an acùLa mà ayù	yo huviera, avria, y huviese ido			
1701.	cà acùLa mà ayù	tu huvieras, avrias, y huvieses ido			
1702.	a acùLa mà ayù	aquel huviera, avria, y huviese ido			
1703.	muc acùLa mà ayù	nosotros huvieramos, avriamos, y huviesemos ido			
1704.	ca acùLa mà ayù ay	vosotros huvierais, avriais, y huvieseis ido			
1705.	a acùLa mà ayù Lic	aquellos huvieran, avrian, y huviesen ido			
1706.	an acù pà pè	yo fuere, ó huviere ido			
1707.	ca acù pà pè	tu fueres, ó huvieres ido			
1708.	a acù pàpè	aquel fuere, ó huviere ido			
1709.	muc acù pàpè	nosotros fuéremos, ó huvieremos ido			
1710.	ca acù pà pè ay	vosotros fuereis, ó huviereis ido			
1711.	a acù pà pè Lic	aquellos fueren, ó huvieren ido			
1712.	a acù	ir			
1713.	acùguà	haver ido			
1714.	a acù nàL pè	haver de ir			
1715.	a acùLa nàL	que fuera, ó huviera de aver ido			
1716.	acù	de ir			
1717.	neLa a acù	para ir			
1718.	acù	a ir			
1719.	aLparaquiguà a acù	por ir			
1720.	acù qui	a ir			
1721.	acùLa	el que và, ó iba			
1722.	acùLaL	el que và, ó iba			
1723.	acùLa pè	el que hà, ó tiene de ir			
1724.	guacà	irse			
1725.	guaLa	irse			
1726.	an guacà nàL	yo me iba			
1727.	anguaLa nàL	yo me iba			
1728.	cà guacà nàL	tu te ibas			
1729.	cà guaLa nàL	tu te ibas			
1730.	guacà nàL	aquel se iba			
1731.	guaLa nàL	aquel se iba			
1732.	muc guacà nàL	nosotros nos ibamos			
1733.	muc guaLa nàL	nosotros nos ibamos			
1734.	ca guacà nàL ay	vosotros os ibais			
1735.	ca guaLa nàL ay	vosotros os ibais			
1736.	guacà nàL qui Lic	aquellos se iban			
1737.	guaLa nàL qui Lic	aquellos se iban			
1738.	an guacà	yo me fui, ó me hè ido			
1739.	anguaLa	yo me fui, ó me hè ido			
1740.	ca guacà	tu te fuistes, ó has ido			
1741.	caguaLa	tu te fuistes, ó has ido			
1742.	guacà	aquel se fuè, ó ha ido			
1743.	guaLa	aquel se fuè, ó ha ido			
1744.	muc guacà	nosotros nos fuimos, ó hemos ido			
1745.	muc guaLa	nosotros nos fuimos, ó hemos ido			
1746.	ca guacà ay	vosotros os fuisteis, ó haveis ido			
1747.	ca guaLa ay	vosotros os fuisteis, ó haveis ido			
1748.	guacà qui Lic	aquellos se fueron, ó han ido			
1749.	guaLa qui Lic	aquellos se fueron, ó han ido			
1750.	capa an guacà paL nàL	yo me havia ido			
1751.	capa cà guacà paL nàL	tu te havias ido			
1752.	capa guacà paL nàL	aquel se havia ido			

1753.	capa muc guacà paŁ nàŁ	nosotros nos haviamos ido	1795.	an guŁa	yo fui, ó hè ido
1754.	capà cā guacà paŁ nàŁ ay	vosotros os haviais ido	1796.	capa an guŁa paŁ nàŁ	yo havia ido
1755.	capa guaca Łic paŁ nàŁ	aquellos se havian ido	1797.	an guŁ pè	yo irè
1756.	an guacà pà ayù	yo me avrè ido	1798.	an guŁa pà ayù	yo avrè ido
1757.	ca guacà pà ayù	tu te avras ido	1799.	an guŁān	yo vaya
1758.	guacà pà ayù	aquel se avrà ido	1800.	an guŁ mà nàŁ	yo fuera, iria, y fuese
1759.	muc guacà pà ayù	nosotros nos avremos ido	1801.	an guŁa ma	yo haya ido
1760.	ca guacà pà ayù ay	vosotros os avreis ido	1802.	an guŁa mà ayù	yo huviera, avria, y huviese ido
1761.	guacà pa ayù Łic	aquellos se avran ido	1803.	an guŁ pà pè	yo fuere, ó huviere ido
1762.	an guacà mà nàŁ	yo me fuera, iria, y fuese	1804.	ucà	haver, tener
1763.	ca guacà mà nàŁ	tu te fueras, irias, y fueses	1805.	ucà	hay
1764.	guacà mà nàŁ	aquel se fuera, iria, y fuese	1806.	ucà nàŁ	havia
1765.	muc guacà mà nàŁ	nos[otro]s nos fuéramos, iríamos, y fuésemos	1807.	ucà pè	havrà
1766.	ca guacà mà nàŁ ay	vosotros os fuerais, iriais, y fueseis	1808.	ucà pàpè	huviese, ó huviere havido
1767.	guacaŁic mà nàŁ	aquellos se fueran, irian, y fuesen	1809.	unà	haver, ó tener
1768.	an guacà mà	yo me haya ido	1810.	unà	hay
1769.	ca guacà mà	tu te hayas ido	1811.	unà nàŁ	havia, ó tenía
1770.	guacà mà	aquel se haya ido	1812.	unà pè	havrà, ó tendria
1771.	muc guacà mà	nosotros nos hayamos ido	1813.	unà pàpè	huviere, ó huviere havido
1772.	ca guacà mà ay	vosotros os hayais ido	1814.	ayù	haver, ó tener
1773.	guaca Łic mà	aquellos se hayan ido	1815.	ayù	hay, ó tiene
1774.	an guacà mà ayù	yo me huviera, avria, y huviese ido	1816.	ayù nàŁ	havia, ó tenía
1775.	ca guacà mà ayù	tu te huvieras, avrias, y huvieses ido	1817.	ayù pè	havrà, ó tendrà
1776.	guacà mà ayù	aquel se huviera, avria, y huviese ido	1818.	ayù pàpè	huviere, ó huviere havido
1777.	muc guacà mà ayù	nosotros nos huvieramos, avriamos, y huviesemos ido	1819.	ayù, unà, ucà mà	huviera, avria, y huviese havido
1778.	ca guacà mà ayù ay	Vos[otro]s os huvierais, avriais, y huvieseis ido	1820.	tà	ir, y venir
1779.	guaca Łic mà ayù	aquellos se huvieran, avrian, y huviesen ido	1821.	cun dà	Ve, ó anda tu con dios
1780.	an guacà pàpè	yo me fuere, ó me huviere ido	1822.	cun dà	id vosotros con dios
1781.	an guaŁa pàpè	yo me fuere, ó me huviere ido	1823.	cun dà tá	Ve, ó anda tu con dios
1782.	ca guacà pà pè	tu te fueres, ó te huvieres ido	1824.	cun dàtā ay	id vosotros con dios
1783.	guacà pà pè	aquel se fuere, ó huviere ido	1825.	an dà	Vamos
1784.	muc guacà pàpè	nosotros nos fueremos, ó huvieremos ido	1826.	an dà maŁ	Vamonos nosotros
1785.	cā guaŁa pàpè ay	vosotros os fuereis, ó huviereis ido	1827.	andamaŁ. tà	Vamonos nosotros
1786.	guaŁa pà pè Łic	aquellos se fueren, ó huvieren ido	1828.	gi	decir
1787.	ca guaŁa pà pè	tu te fueres, ó te huvieres ido	1829.	gi	aquel dice
1788.	guaŁa pà pè	aquel se fuere, ó huviere ido	1830.	gi nàŁ	aquel decia
1789.	muc guaŁa pàpè	nosotros nos fueremos, ó huvieremos ido	1831.	gi cangui	aquel dixo
1790.	cā guaŁa pàpè ay	vosotros os fuereis, ó huviereis ido	1832.	gi Łān	aquel diga
1791.	guaŁa pà pè Łic	aquellos se fueren, ó huvieren ido	1833.	mi	decir
1792.	gù	ir	1834.	mi	aquel dice
1793.	an gù	yo voi	1835.	mi nàŁ	aquel decia
1794.	an gù nàŁ	yo iba	1836.	mi cangui	aquel dixo
			1837.	mi Łan	aquel diga
			1838.	curānbè	venir
			1839.	cūrānbè	Ven tu
			1840.	curānbè ay	Venia vosotros
			1841.	nàpè	venir
			1842.	nà pè	Ven acā tu
			1843.	nà pè ay	Venia acā vosotros
			1844.	guimucān	dejar
			1845.	guimucān ay	Dejalo tu
			1846.	gui Łic mucān	Dejenlo vosotros
			1847.	gui Łic mucān	Dejenlo aquellos
			1848.	mārapè	darse priesa
			1849.	mārapè	Ven tu de priesa
			1850.	mārapè ay	Venid vosot[ro]s de priesa
			1851.	māra pè Łic	Vengan aquellos de priesa
			1852.	ziruya	darse priesa, ó abreviar
			1853.	ziruya	abrevia tu
			1854.	ziruya ay	abreviad vosotros
			1855.	guà ziruin	abrevien aquellos
			1856.	tonè	callar
			1857.	tonèya	callate tu
			1858.	tonèya ay	callaos vosotros

1859.	guàLic tonéquèn	callense aquellos	1920.	guà szàguquin	estese aquel
1860.	zèLè	torcerse, ó cantearse	1921.	szàgùya ay	estad vosotros
1861.	zèLèya eica	tuerse tu	1922.	gua Lic szàguquin	estense aquellos
1862.	zèLè ya eica ay	torceos vosotros	1923.	Lan ayaan	yo estè
1863.	muè	tomar	1924.	Lan ayacà	tu estès
1864.	muè	toma tu	1925.	Lan agi	aquel estè
1865.	mù ay	tomad vosotros	1926.	Lan ayaac	nosotros estèmos
1866.	nà	decir	1927.	Lan ayacà ay	vosotros esteis
1867.	cà nà	Dice tu	1928.	Lan Lic agi	aquellos estèn
1868.	cà nà ay	Decidle vosotros	1929.	mà nàL ayaan	yo estubiera, estaría, y
1869.	pàra	querer			estubiese
1870.	(see Appendix 3)		1930.	mà nàL ayacà	tu estubieras, estarias, y
1871.	(see Appendix 3)				estubieses
1872.	(see Appendix 3)		1931.	mà nàL agi	aquel estubiera, estaría, y
1873.	nèn	yo soy			estubiese
1874.	[ç]guena nàca	[ç]quien?	1932.	mà nàL ayaac	nosotros estubieramos,
1875.	nèn	yo			estariamos, y estubiesemos
1876.	(see Appendix 3)		1933.	mà nàL ayacà ay	vosotros estubierais,
1877.	patà	sér			estariais, y estubieseis
1878.	taana	ser	1934.	mà nàL agi qui Lic	aquellos estubieran,
1879.	ayà	estar			estarian y estubiesen
1880.	szàta	estar	1935.	mà ayaan	yo haya estado
1881.	ucà	tener, ó haver; defectivo	1936.	mà ayacà	tu hayas estado
1882.	unà	tener, ó haver; defectivo	1937.	mà agi	aquel haya estado
1883.	ayù	tener, ó haver; defectivo	1938.	mà ayaac	nosotros hayamos estado
1884.	taana	el verdadero <i>sum est fui</i> , que tambien significa sèr	1939.	mà ayacà ay	vosotros hayais estado
		estar	1940.	mà agi qui Lic	aquellos hayan estado
1885.	szàta	estar	1941.	mà ayu ayaan	yo huviera, avria, y
1886.	ayà	estar			huviese estado
1887.	(see Appendix 3)		1942.	mà ayù ayacà	tu huvieras, avrias, y
1888.	ayaan	yo estoi, ó estube			huvieses estado
1889.	ayacà	tu estas, ó estubistes	1943.	mà ayu agi	aquel huviera, avria, y
1890.	agi	aquel està, ó estubo			huviese estado
1891.	ayaac	nosotros estamos, ó	1944.	mà ayù ayaac	nosotros huvieramos,
		estubimos			avriamos, y huviesemos
1892.	ayacà ay	vosotros estabais, ó			estado
		estubisteis	1945.	mà ayu ayacà ay	vosotros huvierais, avriais,
1893.	agi qui Lic	aquellos estan, ó			y huvieseis estado
		estubieron	1946.	mà ayu qui agi Lic	aquellos huvieran, avrian,
1894.	nàL ayaan	yo estaba			y huviesen estado
1895.	nàL ayacà	tu estabas	1947.	pàpè ayaan	yo estuviere, ó huviere
1896.	nàL agi	aquel estaba			estado
1897.	nàL ayaac	nosotros estabamos	1948.	pà pè ayacà	tu estubieres, ó huvieres
1898.	nàL ayacà ay	vosotros [es]tabais			estado
1899.	nàL agi Lic	aquellos estaban	1949.	pà pè agi	aquel estubiere, ó huviere
1900.	capa paL nàL ayaan	yo havia estado			estado
1901.	capa paL nàL ayacà	tu havias estado	1950.	pàpè ayaac	nosotros estubieremos, ó
1902.	capa paL nàL agi	aquel havia estado			huvieremos estado
1903.	capa paL nàL ayaac	nosotros haviamos estado	1951.	pa pè ayacà ay	vosotros estubiereis, ó
1904.	capa paL nàL ayacà	vosotros haviais estado			huviereis estado
	ay		1952.	pà pè Lic agi	aquellos estubieren, ó
1905.	capa paL nàL qui	aquellos havian estado			huvieren estado
	agi Lic		1953.	(see Appendix 3)	
1906.	pè ayaan	yo estarè	1954.	(see Appendix 3)	
1907.	pè ayacà	tu estaras	1955.	(see Appendix 3)	
1908.	pè agi	aquel estarà	1956.	upù	pararse
1909.	pè ayaac	nosotros estaremos	1957.	(see Appendix 3)	
1910.	pè ayacà ay	vosotros estareis	1958.	(see Appendix 3)	
1911.	pè agi Lic	aquellos estaran	1959.	(see Appendix 3)	
1912.	pa ayù ayaan	yo avrè estado	1960.	ayaan	a estar
1913.	pa ayù ayacà	tu avras estado	1961.	(see Appendix 3)	
1914.	pa ayù agi	aquel [a]vrà estado	1962.	guena qui agi	el que està, ó estaba
1915.	pà ayù ayaac	nosotros avremos estado	1963.	(see Appendix 3)	
1916.	pà ayù ayacà ay	vosotros avreis estado	1964.	(see Appendix 3)	
1917.	pa ayu agi qui Lic	aquellos avran estado	1965.	guasàta	entrar
1918.	szàgù	estar sentado	1966.	tà	venir
1919.	szàgùya	estate	1967.	yszàpa	salir

1968.	(see Appendix 3)		
1969.	(see Appendix 3)		
1970.	(see Appendix 3)		
1971.	an guaszata	yo entro	
1972.	ca guaszata	tu entras	
1973.	a guaszata	aquel entra	
1974.	an guaszta	yo entré	
1975.	ca guaszta	tu entraste	
1976.	guaszta	aquel entró	
1977.	(see Appendix 3)		
1978.	(see Appendix 3)		
1979.	(see Appendix 3)		
1980.	(see Appendix 3)		
1981.	(see Appendix 3)		
1982.	(see Appendix 3)		
1983.	(see Appendix 3)		
1984.	(see Appendix 3)		
1985.	uea	estar executando, ó haciendo aquello oir	
1986.	yguitzí		
1987.	(see Appendix 3)		
1988.	(see Appendix 3)		
1989.	(see Appendix 3)		
1990.	(see Appendix 3)		
1991.	(see Appendix 3)		
1992.	(see Appendix 3)		
1993.	tuya		
1994.	tuyàn		
1995.	ima		
1996.	ymàn		
1997.	pulàn		
1998.	choò		
1999.	choon		
2000.	eaù		
2001.	eaùn		
2002.	szvèrue		
2003.	szurven		
2004.	piri		
2005.	piriin		
2006.	pulaguàn		
2007.	pùla Lan		
2008.	màra	descansar	
2009.	ygui	ahogarse	
2010.	(see Appendix 3)		
2011.	tai,		
2012.	yszàca,	beber	
2013.	yszçàn		
2014.	ormòn		
2015.	jayàpu		
2016.	jaypun		
2017.	(see Appendix 3)		
2018.	(see Appendix 3)		
2019.	(see Appendix 3)		
2020.	(see Appendix 3)		
2021.	(see Appendix 3)		
2022.	(see Appendix 3)		
2023.	(see Appendix 3)		
2024.	(see Appendix 3)		
2025.	(see Appendix 3)		
2026.	(see Appendix 3)		
2027.	(see Appendix 3)		
2028.	(see Appendix 3)		
2029.	(see Appendix 3)		
2030.	(see Appendix 3)		
2031.	(see Appendix 3)		
2032.	(see Appendix 3)		
2033.	(see Appendix 3)		
2034.	(see Appendix 3)		
2035.	(see Appendix 3)		
2036.	(see Appendix 3)		
2037.	(see Appendix 3)		
2038.	(see Appendix 3)		
2039.	(see Appendix 3)		
2040.	(see Appendix 3)		
2041.	(see Appendix 3)		
2042.	(see Appendix 3)		
2043.	(see Appendix 3)		
2044.	(see Appendix 3)		
2045.	ayà	-	
2046.	(see Appendix 3)		
2047.	amaszuequi	también	
2048.	acanszuequi	también	
2049.	nagszuequi	también	
2050.	acù	i r	
2051.	acuLa	ir preterito	
2052.	acuguà	ir preterito	
2053.	acùya	ir imperativo	
2054.	acùqui	ir supino	
2055.	acuqui	andar, ó pasear	
2056.	acuquiLa,	preterito andar	
2057.	acuquigua	preterito andar	
2058.	acuquiya	imperativo andar	
2059.	aliya	manifestar, demostrar, ó enseñar	
2060.	aliyan	preterito manifestar, demostrar, ó enseñar	
2061.	aliyaLan	preterito manifestar, demostrar, ó enseñar	
2062.	aliyaguàn	preterito manifestar, demostrar, ó enseñar	
2063.	aliya	imperativo manifestar, demostrar, ó enseñar	
2064.	aliyáqui	supino manifestar, demostrar, ó enseñar	
2065.	andà	vamos; defectivo	
2066.	andamaLtà	vamos; defectivo	
2067.	apàla	abrir	
2068.	aplàn	preterito abrir	
2069.	aplaLan	preterito abrir	
2070.	aplaguàn	preterito abrir	
2071.	apla	imperativo abrir	
2072.	apláqui	supino abrir	
2073.	apatà	poder; defectivo	
2074.	ara	embiar	
2075.	aràn	preterito embiar	
2076.	araLan	preterito embiar	
2077.	araguàn	preterito embiar	
2078.	ara	imperativo embiar	
2079.	aráqui	supino embiar	
2080.	araqui	mirar	
2081.	araquin	preterito mirar	
2082.	araquiLan	preterito mirar	
2083.	araquiguan	preterito mirar	
2084.	araquiya	imperativo mirar	
2085.	araqui	supino mirar	
2086.	ayà	estar; anomaló	
2087.	ayù	tener, haver; defectivo	
2088.	cà	partícula significativa para ir, ó llevar	
2089.	eaataa	acostarse	
2090.	eaataLá	preterito acostarse	
2091.	eaataguàn	preterito acostarse	
2092.	eatáya	imperativo acostarse	
2093.	cka éara	ponerse en quatro pies	

2094.	cka erán	preterito ponerse en quatro pies	2142.	cayín	preterito vender
2095.	cka eraLá	preterito ponerse en quatro pies	2143.	cayiLan,	preterito vender
2096.	cka eraguan	preterito ponerse en quatro pies	2144.	cayiguán	preterito vender
2097.	an cka erá	preterito ponerse en quatro pies	2145.	cayi	imperativo vender
2098.	cka eráya	imperativo ponerse en quatro pies	2146.	cayiqui	supino vender
2099.	cáma	abrazar, ó cargar en brazos	2147.	ckirgui	escoger
2100.	camaan	preterito abrazar, ó cargar en brazos	2148.	ckirguín	preterito escoger
2101.	camaLan	preterito abrazar, ó cargar en brazos	2149.	ckirguiLan,	preterito escoger
2102.	camaguán	preterito abrazar, ó cargar en brazos	2150.	ckirguiguán	preterito escoger
2103.	cáma	imperativo abrazar, ó cargar en brazos	2151.	ckirgui	imperativo escoger
2104.	camáqui	supino abrazar, ó cargar en brazos	2152.	ckirguíqui	supino escoger
2105.	cáma	apadrinar bautismo	2153.	ckis eu	sacar niguas
2106.	camaan	preterito apadrinar bautismo	2154.	ckis euun	preterito sacar niguas
2107.	camaLan	preterito apadrinar bautismo	2155.	ckis euLan	preterito sacar niguas
2108.	camaguán	preterito apadrinar bautismo	2156.	ckis euguan	preterito sacar niguas
2109.	cáma	imperativo apadrinar bautismo	2157.	ckis eu	imperativo sacar niguas
2110.	camáqui	supino apadrinar bautismo	2158.	ckis euqui	supino sacar niguas
2111.	æata	poner	2159.	æocama	hincarse
2112.	æataan	preterito poner	2160.	æocmà	preterito hincarse
2113.	æataLán	preterito poner	2161.	æocmaLa	preterito hincarse
2114.	æataguán	preterito poner	2162.	æocmaya	imperativo hincarse
2115.	æata	imperativo poner	2163.	æoLco	desocupar
2116.	æataqui	supino poner	2164.	æoLcón	preterito desocupar
2117.	cagui	llorar	2165.	æoLco	imperativo desocupar
2118.	caguín	preterito llorar	2166.	æólo	desollar, ó quitar el vestido
2119.	caguíLan	preterito llorar	2167.	æolon	preterito desollar, ó quitar el vestido
2120.	caguiguán	preterito llorar	2168.	æoloLán	preterito desollar, ó quitar el vestido
2121.	cagui	imperativo llorar	2169.	æologuán	preterito desollar, ó quitar el vestido
2122.	caguíqui	supino llorar	2170.	æolo	imperativo desollar, ó quitar el vestido
2123.	caguíci	gritar	2171.	æoloqui	supino desollar, ó quitar el vestido
2124.	caguiçin	preterito gritar	2172.	coye	visitar
2125.	cagui eiLan	preterito gritar	2173.	coyèn	preterito visitar
2126.	cagui eiguan	preterito gritar	2174.	coyeLán	preterito visitar
2127.	cagui eiya	imperativo gritar	2175.	coyeguán	preterito visitar
2128.	cagui ei	supino gritar	2176.	coye	imperativo visitar
2129.	ckáu	coser cosas de comer	2177.	coyeque	supino visitar
2130.	ckáun	preterito coser cosas de comer	2178.	cúnú	comprar
2131.	ckauLán	preterito coser cosas de comer	2179.	cunún	preterito comprar
2132.	ckauguan	preterito coser cosas de comer	2180.	cunuLá	preterito comprar
2133.	ckáu	imperativo coser cosas de comer	2181.	cunuguán	preterito comprar
2134.	ckauqui	supino coser cosas de comer	2182.	cunu	imperativo comprar
2135.	æagui	lazar, ó enredar	2183.	cunúqui	supino comprar
2136.	æaguín	preterito lazar, ó enredar	2184.	cuurù	juir
2137.	æaguíLán	preterito lazar, ó enredar	2185.	cuurù	preterito juir
2138.	æaguiguán	preterito lazar, ó enredar	2186.	curuLá	preterito juir
2139.	æagui	imperativo lazar, ó enredar	2187.	curuguà	preterito juir
2140.	æaguiqui	supino lazar, ó enredar	2188.	cùrùya	imperativo juir
2141.	cayi	vender	2189.	cùrùya	andar de priesa, ó correr; defectivo
			2190.	chèLna	desbaratar
			2191.	chèLnaan	preterito desbaratar
			2192.	chèLnaLan	preterito desbaratar
			2193.	chèLnaguán	preterito desbaratar
			2194.	chèLna	imperativo desbaratar
			2195.	chichí	exonerar el vientre
			2196.	chichiLá	preterito exonerar el vientre
			2197.	chichíguan	preterito exonerar el vientre
			2198.	chichiyá	imperativo exonerar el vientre
			2199.	chichiqui	supino exonerar el vientre

2200.	choo	batir chocolate	2260.	ema	imperativo coser cosas de costuras
2201.	choón	preterito batir chocolate	2261.	emáya	imperativo coser cosas de costuras
2202.	choóŁan	preterito batir chocolate	2262.	emaqui	supino coser cosas de costuras
2203.	chooguán	preterito batir chocolate	2263.	epeŁe	temer
2204.	choo	imperativo batir chocolate	2264.	epeŁa	preterito temer
2205.	choóqué	supino batir chocolate	2265.	epleguán	preterito temer
2206.	chua júcu	golpear, aporrear	2266.	eple	imperativo temer
2207.	evenevqui	alegrarse	2267.	epleya	imperativo temer
2208.	evenvequiŁa	preterito alegrarse	2268.	eréŁa	espantar
2209.	evenvequiguan	preterito alegrarse	2269.	ereŁán	preterito espantar
2210.	evenvequiya	imperativo alegrarse	2270.	ereŁaŁan	preterito espantar
2211.	evenvequi	supino alegrarse	2271.	ereŁaguan	preterito espantar
2212.	ckversza	peynar	2272.	ereŁa	imperativo espantar
2213.	ckverszán	preterito peynar	2273.	erŁeque	supino espantar
2214.	ckverszaŁan	preterito peynar	2274.	erŁeque	espantarse
2215.	ckverszaguan	preterito peynar	2275.	erŁequeŁa	preterito espantarse
2216.	ckverszá	imperativo peynar	2276.	erŁequè	preterito espantarse
2217.	ckverszaya	imperativo peynar	2277.	erŁequéya	imperativo espantarse
2218.	ckverszaqui	supino peynar	2278.	etaca	tapiscar
2219.	ckveri	arrancar	2279.	etcán	preterito tapiscar
2220.	ckverin	preterito arrancar	2280.	etcaŁan	preterito tapiscar
2221.	ckveriŁán	preterito arrancar	2281.	etcaguán	preterito tapiscar
2222.	ckveriguan	preterito arrancar	2282.	etca	imperativo tapiscar
2223.	ckveri	imperativo arrancar	2283.	etcaya	imperativo tapiscar
2224.	ckveriquí	supino arrancar	2284.	etcaqui	supino tapiscar
2225.	cuegua	prestar	2285.	dí	haver; defectivo
2226.	cueguaan	preterito prestar	2286.	gi	decir; defectivo
2227.	cueguaŁaan	preterito prestar	2287.	giŁán	preterito decir; defectivo
2228.	cueguaguaan	preterito prestar	2288.	giri	amolar, ó raspar
2229.	cuegua	imperativo prestar	2289.	giriin	preterito amolar, ó raspar
2230.	ckueguya	secar	2290.	giriŁan	preterito amolar, ó raspar
2231.	ckueguyaan	preterito secar	2291.	giriguan	preterito amolar, ó raspar
2232.	ckueguyaŁan	preterito secar	2292.	giri	imperativo amolar, ó raspar
2233.	ckueguyaguan	preterito secar	2293.	giriqi	supino amolar, ó raspar
2234.	ckueguya	imperativo secar	2294.	girqí	menear cosas de comida, ó revolver algunas cosas
2235.	everve	ajustar, completar	2295.	girquin	preterito menear cosas de comida
2236.	evervén	preterito ajustar, completar	2296.	girqiŁán	preterito menear cosas de comida
2237.	everveŁan	preterito ajustar, completar	2297.	girqiguuan	preterito menear cosas de comida
2238.	everveguán	preterito ajustar, completar	2298.	girqi	imperativo menear cosas de comida
2239.	everve	imperativo ajustar, completar	2299.	giru	lamer
2240.	evetve	medir	2300.	giruún	preterito lamer
2241.	evetvén	preterito medir	2301.	giruŁán	preterito lamer
2242.	evetveŁan	preterito medir	2302.	giruguaan	preterito lamer
2243.	evetveguán	preterito medir	2303.	giru	imperativo lamer
2244.	evetve	imperativo medir	2304.	gú	ir; defectivo
2245.	evetvequi	supino medir	2305.	an guŁa	preterito ir; defectivo
2246.	eveya	pepenar	2306.	guaca	irse; anomalo
2247.	eveyaan	preterito pepenar	2307.	guacá	preterito irse; anomalo
2248.	eveyáŁan	preterito pepenar	2308.	guaŁa	irse; anomalo
2249.	eveyaguaan	preterito pepenar	2309.	guaŁa	irse; anomalo
2250.	eveya	imperativo pepenar	2310.	guaaqui	jugar
2251.	eŁama	prestar la persona como apoderado para alguna diligencia	2311.	guaquiŁa	preterito jugar
2252.	eŁmán	preterito prestar la persona	2312.	guaquiya	imperativo jugar
2253.	eŁma Łán	preterito prestar la persona	2313.	guaszaeo	tirar con piedras
2254.	eŁmaguan	preterito prestar la persona	2314.	guaszcun	preterito tirar con piedras
2255.	eŁgua	imperativo prestar la persona	2315.	guaszcuaŁan	preterito tirar con piedras
2256.	ema	coser cosas de costuras	2316.	guaszcuguan	preterito tirar con piedras
2257.	emaan	preterito coser cosas de costuras	2317.	guaszcú	imperativo tirar con
2258.	emaŁa,	preterito coser cosas de costuras			
2259.	emaguán	preterito coser cosas de costuras			

2318.	guaszcucui	piedras	2374.	guitxu	imperativo azotar
2319.	guaszaLi	supino tirar con piedras	2375.	guiszu	azotar
2320.	guaszaLin	meter, ó ponerse el vestido	2376.	guiszuun	preterito azotar
2321.	guaszaLiLán	preterito meter, ó ponerse el vestido	2377.	guiszuLán	preterito azotar
2322.	guaszaLiguaan	preterito meter, ó ponerse el vestido	2378.	guiszuguaan	preterito azotar
2323.	guaszaLi	imperativo meter, ó ponerse el vestido	2379.	guiszu	imperativo azotar
2324.	guaszaLiqui	supino meter, ó ponerse el vestido	2380.	gueverue	enbolver
2325.	guaszata	entrar	2381.	gueveuen	preterito enbolver
2326.	guasztá	preterito entrar	2382.	gueveLán	preterito enbolver
2327.	guasztaguá	preterito entrar	2383.	gueveguaan	preterito enbolver
2328.	guasztáya	imperativo entrar	2384.	gueverue	imperativo enbolver
2329.	guara	enroayar	2385.	ygua	tortear
2330.	guaraan	preterito enroayar	2386.	iguaan	preterito
2331.	guaraLán	preterito enroayar	2387.	iguaLán	preterito
2332.	guaraguaan	preterito enroayar	2388.	iguaguaan	preterito
2333.	guara	imperativo enroayar	2389.	igua	imperativo
2334.	guaya	deservar	2390.	iguaya	imperativo
2335.	guayaan	preterito deservar	2391.	Íguatxa	hilar
2336.	guayaLán	preterito deservar	2392.	úiszaan	preterito hilar
2337.	guayaguaan	preterito deservar	2393.	úiszaLán	preterito hilar
2338.	guaya	imperativo deservar	2394.	úiszaguaan	preterito hilar
2339.	guayáqui	supino deservar	2395.	úiszaya	imperativo hilar
2340.	guesque	botar, ó despreciar	2396.	Ígui	ahogarse en el agua
2341.	guésquén	preterito botar, ó despreciar	2397.	igui	preterito ahogarse en el agua
2342.	guesqueLán	preterito botar, ó despreciar	2398.	iguíya	imperativo ahogarse en el agua
2343.	guesqueguaan	preterito botar, ó despreciar	2399.	iguitxi	oir
2344.	guesque	imperativo botar, ó despreciar	2400.	úiszin	preterito oir
2345.	guen	particula interrogativa	2401.	úisziLán	preterito oir
2346.	guilica	desnudar	2402.	úisziguaan	preterito oir
2347.	guilican	preterito desnudar	2403.	úiszi	imperativo oir
2348.	guilicaLán	preterito desnudar	2404.	úisziya	imperativo oir
2349.	guilicaguaan	preterito desnudar	2405.	úisziqui	supino oir
2350.	guilica	imperativo desnudar	2406.	imá	decir
2351.	guilicaqui	supino desnudar	2407.	imaan	preterito decir
2352.	guimucán	dejar; defectivo	2408.	imaLán	preterito decir
2353.	guiri ei	hablar	2409.	imaguaan	preterito decir
2354.	guiricin	preterito hablar	2410.	ima	imperativo decir
2355.	guiriciLán	preterito hablar	2411.	ipala	bañar
2356.	guiriciguaan	preterito hablar	2412.	iplaan	preterito bañar
2357.	guirici	imperativo hablar	2413.	iplaguaán	preterito bañar
2358.	guiri eiya	supino hablar	2414.	iplaLán	preterito bañar
2359.	guiri eiqui	tender al sol	2415.	ipla	imperativo bañar
2360.	guíta	preterito tender al sol	2416.	ipala	bañarse
2361.	guítaan	preterito tender al sol	2417.	iplaLá	preterito bañarse
2362.	guítaLán	preterito tender al sol	2418.	iplaguá	preterito bañarse
2363.	guítaguaan	imperativo tender al sol	2419.	iplaya	imperativo bañarse
2364.	guíta	cazar, tirar con escopeta, ó flecha	2420.	iszaca	beber
2365.	guíta	preterito cazar	2421.	iszcaan	preterito beber
2366.	guítaan	preterito cazar	2422.	iszcaLán	preterito beber
2367.	guítaLán	preterito cazar	2423.	iszcaguaan	preterito beber
2368.	guítaguaan	imperativo cazar	2424.	iszcaya	imperativo beber
2369.	guíta	azotar	2425.	iszapa	salir de un lugar á otro
2370.	guitxu	preterito azotar	2426.	iszpaan	preterito salir de un lugar á otro
2371.	guitxuun	preterito azotar	2427.	iszpáLá	preterito salir de un lugar á otro
2372.	guitxuLán	preterito azotar	2428.	iszpagaú	preterito salir de un lugar á otro
2373.	guitxuguaan	preterito azotar	2429.	iszpaya	imperativo salir de un lugar á otro
			2430.	iszapi	sacar, ó quitar alguna cosa de un lugar
			2431.	iszapiin	preterito sacar, ó quitar
			2432.	iszapiLán	preterito sacar, ó quitar
			2433.	iszapiguaan	preterito sacar, ó quitar

2434.	iszapi	imperativo sacar, ó quitar	2481.	jariin	preterito hechar afuera á alguno
2435.	isziy	estar despierto, ó vivo	2482.	jariLan	preterito hechar afuera á alguno
2436.	isziy	preterito estar despierto, ó vivo	2483.	jariguán	preterito hechar afuera á alguno
2437.	isziyaLán	preterito estar despierto, ó vivo	2484.	jari	imperativo hechar afuera á alguno
2438.	isziyaguaan	preterito estar despierto, ó vivo	2485.	jariqui	supino hechar afuera á alguno
2439.	isziya	imperativo estar despierto, ó vivo	2486.	jaúea	vaciar
2440.	jachue	rascar	2487.	jaucán	preterito vaciar
2441.	jachueven	preterito rascar	2488.	jaueaLan	preterito vaciar
2442.	jachveLán	preterito rascar	2489.	jaueaguaan	preterito vaciar
2443.	jachveguaan	imperativo rascar	2490.	jauea	imperativo vaciar
2444.	jachue	pepenar, ó recojer tierra ó basura	2491.	jayápu	recibir
2445.	jachve	preterito pepenar, ó recojer tierra ó basura	2492.	jaypún	preterito recibir
2446.	jachueven	preterito pepenar, ó recojer tierra ó basura	2493.	jaypuLan	preterito recibir
2447.	jachveLán	preterito pepenar, ó recojer tierra ó basura	2494.	jaypuguan	preterito recibir
2448.	jachveguaan	preterito pepenar, ó recojer tierra ó basura	2495.	jaypu	imperativo recibir
2449.	jachue	imperativo pepenar, ó recojer tierra ó basura	2496.	jayu	limpiar, fregar, ó enjugar
2450.	jamaya	madurar, dar cocimiento y sazonar la comida	2497.	jayuun	preterito limpiar, fregar, ó enjugar
2451.	jamayaan	preterito madurar, dar cocimiento	2498.	jayuLaan	preterito limpiar, fregar, ó enjugar
2452.	jamayaLán	preterito madurar, dar cocimiento	2499.	jayuguaan	preterito limpiar, fregar, ó enjugar
2453.	jamayaguaan	preterito madurar, dar cocimiento	2500.	jayu	imperativo limpiar, fregar, ó enjugar
2454.	jamáya	imperativo madurar, dar cocimiento	2501.	jonóa	cuidar, ó guardar
2455.	japa	esperar	2502.	jonoaan	preterito cuidar, ó guardar
2456.	japaan	preterito esperar	2503.	jonóaLan	preterito cuidar, ó guardar
2457.	japaLan	preterito esperar	2504.	jonoaguaan	preterito cuidar, ó guardar
2458.	japaguán	preterito esperar	2505.	jonóa	imperativo cuidar, ó guardar
2459.	japa	imperativo esperar	2506.	jonoo	embriagarse
2460.	japaya	ir delante de otro, ó pasar adelante	2507.	jonòLaa	preterito embriagarse
2461.	japayaan	preterito ir delante de otro, ó pasar adelante	2508.	jonoguaan	preterito embriagarse
2462.	japayaLan	preterito ir delante de otro, ó pasar adelante	2509.	jonóya	imperativo embriagarse
2463.	japayaguaan	preterito ir delante de otro, ó pasar adelante	2510.	jóro	cuidar, ó tener
2464.	japaya	imperativo ir delante de otro, ó pasar adelante	2511.	joróon	preterito cuidar, ó tener
2465.	jarana	enfermarse	2512.	joroLán	preterito cuidar, ó tener
2466.	jaraLá	preterito enfermarse	2513.	joroguaan	preterito cuidar, ó tener
2467.	jarnaguan	preterito enfermarse	2514.	jóro	imperativo cuidar, ó tener
2468.	jaraLa	tostar	2515.	juLi	resurar
2469.	jaraLán	preterito tostar	2516.	juLin	preterito resurar
2470.	jaraLaLan	preterito tostar	2517.	juLiLan	preterito resurar
2471.	jaraLaguan	preterito tostar	2518.	juLiguaaan	preterito resurar
2472.	jaraLa	imperativo tostar	2519.	juLi	imperativo resurar
2473.	jaraLaqui	supino tostar	2520.	juLiqui	supino resurar
2474.	jargüi	rascar la tierra, ó escarbar	2521.	jumúea	resistir, esforzarse, ó aguantar
2475.	jargüin	preterito rascar la tierra	2522.	jumuean	preterito resistir, esforzarse, ó aguantar
2476.	jargüiLan	preterito rascar la tierra	2523.	jumueaLan	preterito resistir, esforzarse, ó aguantar
2477.	jarguiguan	preterito rascar la tierra	2524.	jumueaguaan	preterito resistir, esforzarse, ó aguantar
2478.	jargüi	imperativo rascar la tierra	2525.	jumuea	imperativo resistir, esforzarse, ó aguantar
2479.	jargui ei	supino rascar la tierra	2526.	juraei	parir
2480.	jari	hechar afuera á alguno, ó correrlo de un lugar a otro	2527.	jura ein	preterito parir
			2528.	jura eiLan	preterito parir
			2529.	juraeiguan	preterito parir
			2530.	juraei	imperativo parir
			2531.	juraeiya	imperativo parir
			2532.	jurta	desocar, ó dislocar

2533.	jurtaan	preterito desocar, ó dislocar	2584.	Łapi ei	hombro
2534.	jurtaŁan	preterito desocar, ó dislocar	2585.	Łaarà	supino cargar al hombro
2535.	jurtaguaan	preterito desocar, ó dislocar	2586.	Łaaràn	subir personalmente
2536.	jurta	imperativo desocar, ó dislocar	2587.	Łaraguaan	preterito subir personalmente
2537.	júta	soplar	2588.	Łaráya	preterito subir personalmente
2538.	jutaan,	preterito soplar	2589.	Łaráya	imperativo subir
2539.	jutaŁan	preterito soplar	2590.	Łarayaan	subir algo de abajo a arriba
2540.	jutaguaan	preterito soplar	2591.	ŁarayaŁaan	preterito subir algo de abajo a arriba
2541.	juta	imperativo soplar	2592.	Łarayaguaan	preterito subir algo de abajo a arriba
2542.	juecka	teger	2593.	Łara	imperativo subir algo de abajo a arriba
2543.	jueckaan	preterito teger	2594.	Łaraya	imperativo subir algo de abajo a arriba
2544.	jueckaŁan	preterito teger	2595.	Łiea	vajarse personalmente
2545.	jueckaguaan	preterito teger	2596.	Łiea	preterito vajarse personalmente
2546.	juecka	imperativo teger	2597.	ŁieaŁaa	preterito vajarse personalmente
2547.	jueckaya	imperativo teger	2598.	Łieaguaan	preterito vajarse personalmente
2548.	juela	vaciar agua del cantaro	2599.	Łieáyaya	imperativo vajarse personalmente
2549.	juelaan	preterito vaciar agua del cantaro	2600.	Łieaya	vajar otra cosa de arriba abajo
2550.	juelaŁan	preterito vaciar agua del cantaro	2601.	Łicayaan	preterito vajar otra cosa
2551.	juelaguaan	preterito vaciar agua del cantaro	2602.	ŁicayaŁaan	preterito vajar otra cosa
2552.	juela	imperativo vaciar agua del cantaro	2603.	Łicayaguaan	preterito vajar otra cosa
2553.	juemue	remedar	2604.	Łicaya	imperativo vajar otra cosa
2554.	juemueven	preterito remedar	2605.	Łocama	hervir el agua
2555.	juemueŁan	preterito remedar	2606.	Łocmaan	preterito hervir el agua
2556.	juemueguaan	preterito remedar	2607.	Łocmajaan	preterito hervir el agua
2557.	juemue	imperativo remedar	2608.	Łocmaguaan	preterito hervir el agua
2558.	juenue	saber	2609.	Łócma	imperativo hervir el agua
2559.	juenueven	preterito saber	2610.	Łocáma	supino hervir el agua
2560.	juenueŁan	preterito saber	2611.	Łomeeca	entibiar
2561.	juenueguaan	preterito saber	2612.	Łomecaan	preterito entibiar
2562.	juenue	imperativo saber	2613.	Łomecaguaan	preterito entibiar
2563.	juenueca	probar, hacer experiencia, ó analysys de alguna cosa	2614.	ŁomecaŁaan	preterito entibiar
2564.	juenuecaan	preterito probar, hacer experiencia	2615.	Łomeeca	imperativo entibiar
2565.	juenuecaŁan	preterito probar, hacer experiencia	2616.	Łueeue	alcanzar
2566.	juenuecaguaan	preterito probar, hacer experiencia	2617.	Łueeueven	preterito alcanzar
2567.	juenueca	imperativo probar, hacer experiencia	2618.	ŁueeueŁaan	preterito alcanzar
2568.	jueya	jachear	2619.	Łueeueguaan	preterito alcanzar
2569.	juéyaan	preterito jachear	2620.	Łueeue	imperativo alcanzar
2570.	jueyaŁaan	preterito jachear	2621.	Łueeue	hallar lo perdido, ó lo que se busca
2571.	jueyaguaan	preterito jachear	2622.	Łueeueven	preterito hallar lo perdido
2572.	jueya	imperativo jachear	2623.	ŁueeueŁaan	preterito hallar lo perdido
2573.	Łapa	ir en por de otro, como siguiendolo de cerca	2624.	Łueeueguaan	preterito hallar lo perdido
2574.	Łapaan	preterito ir en por de otro	2625.	Łueeue	imperativo hallar lo perdido
2575.	ŁapaŁán	preterito ir en por de otro	2626.	Łueeueue	creer, ó entender
2576.	Łapaguaan	preterito ir en por de otro	2627.	Łueeueven	preterito creer, ó entender
2577.	Łapa	imperativo ir en por de otro	2628.	ŁueeueŁaan	preterito creer, ó entender
2578.	Łapaya	imperativo ir en por de otro	2629.	Łueeueguaan	preterito creer, ó entender
2579.	Łapi	cargar al hombro	2630.	Łueeue	imperativo creer, ó entender
2580.	Łapini	preterito cargar al hombro	2631.	Łuepue	cargar por detras
2581.	ŁapiŁan	preterito cargar al hombro	2632.	Łuepueven	preterito cargar por detras
2582.	Łapiguaan	preterito cargar al hombro	2633.	ŁuepueŁaan	preterito cargar por detras
2583.	Łapi	imperativo cargar al			

2634.	Łuepueguaan	preterito cargar por detras	2697.	muemueŁaà	preterito cantar
2635.	Łuepue	imperativo cargar por detras	2698.	muemueguaan	preterito cantar
2636.	Łuepuéqui	supino cargar por detras	2699.	muemueya	imperativo cantar
2637.	Łuéta	arrimar	2700.	muemuequi	supino cantar
2638.	Łuetaan	preterito arrimar	2701.	muetxa	enterrar
2639.	ŁuetaŁaan	preterito arrimar	2702.	muetxaan	preterito enterrar
2640.	Łuetaguaan	preterito arrimar	2703.	muetxaŁaan	preterito enterrar
2641.	Łueta	imperativo arrimar	2704.	muetxaguaan	preterito enterrar
2642.	máa	su; partícula posesiva	2705.	muetxa	imperativo enterrar
2643.	mára	descansar	2706.	muetxáqui	supino enterrar
2644.	maarà	preterito descansar	2707.	muesza	enterrar
2645.	maráŁaa	preterito descansar	2708.	mueszaan	preterito enterrar
2646.	maraguaa	preterito descansar	2709.	mueszaŁaan	preterito enterrar
2647.	maara	imperativo descansar	2710.	mueszaguaan	preterito enterrar
2648.	maaraya	imperativo descansar	2711.	muesza	imperativo enterrar
2649.	maaráqui	supino descansar	2712.	mueszaya	imperativo enterrar
2650.	mára	abreviar, ó darse prisa; defectivo	2713.	mueszáqui	supino enterrar
2651.	matxà	pegar	2714.	muetaŁcki	soñar
2652.	matxaan	preterito pegar	2715.	muetaŁckin	preterito soñar
2653.	matxaŁaan	preterito pegar	2716.	muetaŁckiŁaan	preterito soñar
2654.	matxáguaan	preterito pegar	2717.	muetaŁcki	imperativo soñar
2655.	matxà	imperativo pegar	2718.	muetaŁckiya	imperativo soñar
2656.	matxi	freir	2719.	mueya	ayudar
2657.	matxiin	preterito freir	2720.	mueyaan	preterito ayudar
2658.	matxiŁaan	preterito freir	2721.	mueyaŁaan	preterito ayudar
2659.	matxiguaan	preterito freir	2722.	mueyaguaan	preterito ayudar
2660.	matxi	imperativo freir	2723.	mueya	imperativo ayudar
2661.	matxiqui	supino freir	2724.	nama	dolerse, ó sentir; defectivo
2662.	maszi	freir	2725.	namaŁaa	preterito dolerse, ó sentir; defectivo
2663.	masziin	preterito freir	2726.	nani	soltar
2664.	masziŁaan	preterito freir	2727.	naniin	preterito soltar
2665.	masziguaan	preterito freir	2728.	naniŁaan	preterito soltar
2666.	maszi	imperativo freir	2729.	naniguaan	preterito soltar
2667.	masziya	imperativo freir	2730.	nani	imperativo soltar
2668.	mére	romper	2731.	naapè	venir; defectivo
2669.	mereen	preterito romper	2732.	nariŁa	enseñar
2670.	mereŁaan	preterito romper	2733.	nariŁaan	preterito enseñar
2671.	mereguaan	preterito romper	2734.	nariŁaguaan	preterito enseñar
2672.	mére	imperativo romper	2735.	nariŁaŁaan	preterito enseñar
2673.	meereque	supino romper	2736.	nariŁa	imperativo enseñar
2674.	móro	mojar	2737.	nariŁqui	aprehender
2675.	moroon	preterito mojar	2738.	nariŁquiŁaà	preterito aprehender
2676.	moroŁaan	preterito mojar	2739.	nariŁquiguaan	preterito aprehender
2677.	moroguaan	preterito mojar	2740.	nariŁquiya	imperativo aprehender
2678.	móro	imperativo mojar	2741.	netaca	rempujar
2679.	moróque	supino mojar	2742.	netcaan	preterito rempujar
2680.	mooroo	estar mojado	2743.	nétcaŁaan	preterito rempujar
2681.	moorò	preterito estar mojado	2744.	netcaguaan	preterito rempujar
2682.	mòroŁà	preterito estar mojado	2745.	nétca	imperativo rempujar
2683.	mooroguaà	preterito estar mojado	2746.	nigúá	pedir
2684.	muuchù	cansarse	2747.	niguaan	preterito pedir
2685.	muuchù	preterito cansarse	2748.	niguaŁaan	preterito pedir
2686.	muuchuguaan	preterito cansarse	2749.	niguaguaan	preterito pedir
2687.	muuchuya	imperativo cansarse	2750.	nigua	imperativo pedir
2688.	muuchuqui	supino cansarse	2751.	niguaszaà	querer; anómalo
2689.	muevè	tomar; defectivo	2752.	niguaanszaa	preterito querer; anómalo
2690.	mueea	trabajar, ó servir	2753.	niguaŁaanszaa	preterito querer; anómalo
2691.	mueeaan	preterito trabajar, ó servir	2754.	niguaguaanszaa	preterito querer; anómalo
2692.	mueeaguaan	preterito trabajar, ó servir	2755.	nuca	dar
2693.	mueea	imperativo trabajar, ó servir	2756.	nucaan	preterito dar
2694.	mueeaya	imperativo trabajar, ó servir	2757.	nucaŁaan	preterito dar
2695.	muemue	cantar	2758.	nucaguaan	preterito dar
2696.	muemueven	preterito cantar	2759.	nuca	imperativo dar
			2760.	níei	rempujar poco á poco
			2761.	nuszucu	ahumar
			2762.	nuszúcun	preterito ahumar

2763.	nuszcuaan	preterito ahumar			menester á otro;
2764.	nuszcuguaan	preterito ahumar			defectivo, buscar que no
2765.	núszcu	imperativo ahumar			tiene mas de las tres
2766.	nuszcucuí	supino ahumar			personas de singular del
2767.	nuema	comer			presente de indicativo
2768.	nuemaan	preterito comer	2821.	paríca	calentar
2769.	nuemaLaan	preterito comer	2822.	parícaan	preterito calentar
2770.	nuemaguaan	preterito comer	2823.	parícaLaan	preterito calentar
2771.	nuemaya	imperativo comer	2824.	parícaaguaan	preterito calentar
2772.	nuemaja	dar de comer	2825.	paríca	imperativo calentar
2773.	nuemajaan	preterito dar de comer	2826.	paraguiriqui	pleitar
2774.	nuemajaLaan	preterito dar de comer	2827.	paranguiriqui	preterito pleitar
2775.	nuemajaguaan	preterito dar de comer	2828.	paraLaan guiriqui	preterito pleitar
2776.	nuemaja	imperativo dar de comer	2829.	paraguaan guiriqui	preterito pleitar
2777.	nuemajaqui	supino dar de comer	2830.	paraguiriqui	imperativo pleitar
2778.	orómo	recoger, ó pepenar	2831.	paátaa	poder; anomaló ó
2779.	ormoon	preterito recoger, ó			defectivo
		pepenar	2832.	pataszáma	pensar, ó acordarse
2780.	ormoLaan	preterito recoger, ó	2833.	patanszáma	preterito pensar, ó
		pepenar			acordarse
2781.	ormoguaan	preterito recoger, ó	2834.	pataguánszáma	preterito pensar, ó
		pepenar			acordarse
2782.	ormo	imperativo recoger, ó	2835.	pataLaanszáma	preterito pensar, ó
		pepenar			acordarse
2783.	ormooque	supino recoger, ó pepenar	2836.	pataszáma	imperativo pensar, ó
2784.	óroóca	repicar las campanas			acordarse
2785.	orocaan	preterito repicar las	2837.	paaszí	moler
		campanas	2838.	paszin	preterito moler
2786.	orocaLaan	preterito repicar las	2839.	pasziLaan	preterito moler
		campanas	2840.	pasziguan	preterito moler
2787.	orocaguaan	preterito repicar las	2841.	paszi	imperativo moler
		campanas	2842.	pasziya	imperativo moler
2788.	oróca	imperativo repicar las	2843.	patxi	moler
		campanas	2844.	patxin	preterito moler
2789.	orocaqui	supino repicar las	2845.	patxiLaan	preterito moler
		campanas	2846.	patxiguaan	preterito moler
2790.	orója	fiar	2847.	patxi	imperativo moler
2791.	orojaan	preterito fiar	2848.	pè	partícula para futuro y
2792.	orojaLaan	preterito fiar			significativa de venir
2793.	orójaguaan	preterito fiar	2849.	peLaana	resbalar
2794.	orója	imperativo fiar	2850.	peLnaaan	preterito resbalar
2795.	orójaqui	supino fiar	2851.	peLnaLaan	preterito resbalar
2796.	Óto	serrar, ó tapar	2852.	peLnaguaan	preterito resbalar
2797.	otón	preterito serrar, ó tapar	2853.	peLna	imperativo resbalar
2798.	otoLaan	preterito serrar, ó tapar	2854.	peLnaya	imperativo resbalar
2799.	otoguaan	preterito serrar, ó tapar	2855.	pelo	descallar, ó descascarar
2800.	oto	imperativo serrar, ó tapar	2856.	peloon	preterito descallar, ó
2801.	packa	clavar			descascarar
2802.	packaan	preterito clavar	2857.	peloLaan	preterito descallar, ó
2803.	packaLaan	preterito clavar			descascarar
2804.	packaguaan	preterito clavar	2858.	peloguaan	preterito descallar, ó
2805.	packa	imperativo clavar			descascarar
2806.	paeuszaja	mentir	2859.	pelo	imperativo descallar, ó
2807.	paeuszaja	preterito mentir			descascarar
2808.	paeuguanzaja	preterito mentir	2860.	pelóque	supino descallar, ó
2809.	paeuszajaca	imperativo mentir			descascarar
2810.	pajata	pagar	2861.	peLteme	bolver, ó boltearse
2811.	pagtaan	preterito pagar	2862.	peLtemè	preterito bolver, ó
2812.	pagtaLaan	preterito pagar			boltearse
2813.	pagtaguaan	preterito pagar	2863.	peLtemeLa	preterito bolver, ó
2814.	pagta	imperativo pagar			boltearse
2815.	pára	buscar	2864.	peLtemeLaan	preterito bolver, ó
2816.	paraan	preterito buscar			boltearse
2817.	paraLaan	preterito buscar	2865.	peLtemeguaan	preterito bolver, ó
2818.	paraguaan	preterito buscar			boltearse
2819.	pára	imperativo buscar	2866.	peLteméya	imperativo bolver, ó
2820.	paraan	no querer, ó no haver			boltearse

2867.	piŁca	componer, adornar, ó remudar	2924.	posckoguan	engarzar
2868.	piŁcan	preterito componer, adornar, ó remudar	2925.	poscko	preterito ensartar, ó engarzar
2869.	piŁcaŁaan	preterito componer, adornar, ó remudar	2926.	posckóque	imperativo ensartar, ó engarzar
2870.	piŁcaguaan	preterito componer, adornar, ó remudar	2927.	posza	supino ensartar, ó engarzar
2871.	piŁca	imperativo componer, adornar, ó remudar	2928.	poszaan	labar
2872.	pipiri	preterito desmotar	2929.	poszaŁaan	preterito labar
2873.	piprin	preterito desmotar	2930.	poszaguaan	preterito labar
2874.	pipriŁán	preterito desmotar	2931.	posza	imperativo labar
2875.	pipriguaan	imperativo desmotar	2932.	poszaya	labar
2876.	pipriya	supino desmotar	2933.	potxa	preterito labar
2877.	pipríqui	vèr	2934.	potxaaan	preterito labar
2878.	piri	preterito vèr	2935.	potxaŁán	preterito labar
2879.	piriin	preterito vèr	2936.	potxaguaan	preterito labar
2880.	piriŁaan	preterito vèr	2937.	potxa	imperativo labar
2881.	piriguan	preterito vèr	2938.	poyoŁque	reconciliar
2882.	piri	imperativo vèr	2939.	poyol eè	preterito reconciliar
2883.	piríqui	supino vèr	2940.	poyol eèŁá	preterito reconciliar
2884.	pitxu	exprimir	2941.	poyol eeguán	preterito reconciliar
2885.	pitxún	preterito exprimir	2942.	poyol eéya	imperativo reconciliar
2886.	pitxuŁan	preterito exprimir	2943.	púla	hazer
2887.	pitxuguaan	preterito exprimir	2944.	pulaan	preterito hazer
2888.	pitxu	imperativo exprimir	2945.	pulaŁaan	preterito hazer
2889.	pitxúqui	supino exprimir	2946.	púlaguaan	preterito hazer
2890.	piszáeu	despicar, ó despuntar	2947.	pula	imperativo hazer
2891.	piszéun	preterito despicar, ó despuntar	2948.	puláqui	supino hazer
2892.	piszauŁaan	preterito despicar, ó despuntar	2949.	puŁi	limpiar, fregar etc.
2893.	piszeuguaan	preterito despicar, ó despuntar	2950.	puli	limpiar, fregar etc.
2894.	piszcu	imperativo despicar, ó despuntar	2951.	pulin	preterito limpiar, fregar etc.
2895.	pogmóque	cegar	2952.	puŁin	preterito limpiar, fregar etc.
2896.	pogmóquè	preterito cegar	2953.	puliŁan	preterito limpiar, fregar etc.
2897.	pogmoqueŁa	preterito cegar	2954.	puliguaan	preterito limpiar, fregar etc.
2898.	pogmoquéya	imperativo cegar	2955.	puŁi	imperativo limpiar, fregar etc.
2899.	poò	asombrar	2956.	puli	imperativo limpiar, fregar etc.
2900.	poon	preterito asombrar	2957.	puri	responder
2901.	poòŁaan	preterito asombrar	2958.	puriin	preterito responder
2902.	pooguaan	preterito asombrar	2959.	púriŁan	preterito responder
2903.	poò	imperativo asombrar	2960.	puriguaan	preterito responder
2904.	poòque	supino asombrar	2961.	puri	imperativo responder
2905.	poeo	quebrar	2962.	puriya	imperativo responder
2906.	poeon	preterito quebrar	2963.	puri	encontrar
2907.	poeoŁan	preterito quebrar	2964.	purín	preterito encontrar
2908.	poeoaguaan	preterito quebrar	2965.	puriŁán	preterito encontrar
2909.	póeo	imperativo quebrar	2966.	puriguaan	preterito encontrar
2910.	porána	rebentar	2967.	puri	imperativo encontrar
2911.	pornaan	preterito rebentar	2968.	puriya	soplar el fuego
2912.	pornaŁaan	preterito rebentar	2969.	puriyaan	preterito soplar el fuego
2913.	pornaguaan	preterito rebentar	2970.	puriyaŁán	preterito soplar el fuego
2914.	porna	imperativo rebentar	2971.	puriyaguaan	preterito soplar el fuego
2915.	posana	brincar, saltar	2972.	puriya	imperativo soplar el fuego
2916.	posnaan	preterito brincar, saltar	2973.	púriqui	casarse
2917.	posnaŁán	preterito brincar, saltar	2974.	púriqui	preterito casarse
2918.	posnaguaan	preterito brincar, saltar	2975.	puriquiŁá	preterito casarse
2919.	posnaya	imperativo brincar, saltar	2976.	puriquiguaan	preterito casarse
2920.	posnáqui	supino brincar, saltar	2977.	puriquíya	imperativo casarse
2921.	posócko	ensartar, ó engarzar	2978.	putxu	ordeñar, ó expremir
2922.	posckon	preterito ensartar, ó engarzar	2979.	putxún	preterito ordeñar, ó expremir
2923.	posckoŁan	preterito ensartar, ó engarzar	2980.	putxuŁán	preterito ordeñar, ó expremir

2981.	putxuguaan	expremir preterito ordeñar, ó expremir	3036.	samuun	preterito coger
2982.	putxu	imperativo ordeñar, ó expremir	3037.	samuŁán	preterito coger
2983.	pueckue	tentar	3038.	samuguaan	preterito coger
2984.	pueckueven	preterito tentar	3039.	samu	imperativo coger
2985.	pueckueŁán	preterito tentar	3040.	samuya	imperativo coger
2986.	pueckueguaan	preterito tentar	3041.	samúqui	supino coger
2987.	pueckue	imperativo tentar	3042.	saraŁei	enfriar
2988.	pueŁta	flechar, ó dar de estocadas, ó tastasos	3043.	saraŁquin	preterito enfriar
2989.	pueŁtán	preterito flechar, ó dar de estocadas	3044.	saraŁquiŁan	preterito enfriar
2990.	pueŁtaŁán	preterito flechar, ó dar de estocadas	3045.	saraŁquiguaan	preterito enfriar
2991.	pueŁtaguaan	preterito flechar, ó dar de estocadas	3046.	saraŁqui	imperativo enfriar
2992.	pueŁta	imperativo flechar, ó dar de estocadas	3047.	saraŁquiya	imperativo enfriar
2993.	pueŁtáya	imperativo flechar, ó dar de estocadas	3048.	saraŁquiqui	supino enfriar
2994.	pueŁtaqui	supino flechar, ó dar de estocadas	3049.	seŁè	cantearse, ó ponerse de lado; defectivo
2995.	puépue	llenar, ó inchar	3050.	seŁeya	imperativo cantearse
2996.	puépueven	preterito llenar, ó inchar	3051.	selica	comulgar
2997.	puépueŁan	preterito llenar, ó inchar	3052.	selicaŁá	preterito comulgar
2998.	puépueguaan	preterito llenar, ó inchar	3053.	selicaguán	preterito comulgar
2999.	puépue	imperativo llenar, ó inchar	3054.	selicáya	imperativo comulgar
3000.	pueŁána	brincar	3055.	simi	apagar
3001.	puérné	hartarse	3056.	simiin	preterito apagar
3002.	puervé	preterito hartarse	3057.	simiŁan	preterito apagar
3003.	puerveguan	preterito hartarse	3058.	simiguaan	preterito apagar
3004.	puervéya	imperativo hartarse	3059.	simi	imperativo apagar
3005.	puésza	heder; anomalo	3060.	simiya	imperativo apagar
3006.	pueszaŁá	preterito heder	3061.	siqui	principiar
3007.	pueszaguán	preterito heder	3062.	siqui	preterito principiar
3008.	puetxue	aumentar, ó hechar demas sobre otra cosa	3063.	siquiŁá	preterito principiar
3009.	puetxuén	preterito aumentar	3064.	siquiya	imperativo principiar
3010.	puetxueŁán	preterito aumentar	3065.	siraja	mofar, menospreciar
3011.	puetxueguán	preterito aumentar	3066.	siraján	preterito mofar, menospreciar
3012.	puetxue	imperativo aumentar	3067.	sirajaguaan	preterito mofar, menospreciar
3013.	quitxi	azár	3068.	siraja	imperativo mofar, menospreciar
3014.	eiszi	azár	3069.	sirajáqui	supino mofar, menospreciar
3015.	quitxiin	preterito azár	3070.	sirú	abreviar; defectivo
3016.	eisziŁán	preterito azár	3071.	siruya	imperativo abreviar
3017.	quitxiguaan	preterito azár	3072.	soyo	empezar
3018.	quitxi	imperativo azár	3073.	soyoon	preterito empezar
3019.	eiszi	imperativo azár	3074.	soyoguaan	preterito empezar
3020.	quitxu	trocar	3075.	soyo	imperativo empezar
3021.	quitxún	preterito trocar	3076.	soyóque	supino empezar
3022.	quitxuŁán	preterito trocar	3077.	suckù	atar
3023.	quitxuguaan	preterito trocar	3078.	suckún	preterito atar
3024.	quitxu	imperativo trocar	3079.	suckuŁan	preterito atar
3025.	sacáya	levantar	3080.	suckuguaan	preterito atar
3026.	sacayaan	preterito levantar	3081.	sucku	imperativo atar
3027.	sacayaŁán	preterito levantar	3082.	suckuqui	supino atar
3028.	sacayaguan	preterito levantar	3083.	szaea	apadrinar matrimonio, ó llevar por delante á otros
3029.	sacaya	imperativo levantar	3084.	szacaaan	preterito apadrinar matrimonio
3030.	saŁáca	alzár, guardar, o levantar para arriba	3085.	szaeaŁán	preterito apadrinar matrimonio
3031.	saŁeán	preterito alzár, guardar	3086.	szaeaguaan	preterito apadrinar matrimonio
3032.	saŁeaŁán	preterito alzár, guardar	3087.	szaea	imperativo apadrinar matrimonio
3033.	saŁeaguaan	preterito alzár, guardar	3088.	szacatxa	hurtar
3034.	saŁea	imperativo alzár, guardar	3089.	szacszaan	preterito hurtar
3035.	samu	coger	3090.	szacszaŁán	preterito hurtar
			3091.	szacsza	imperativo hurtar
			3092.	szacari	ahuyentar, espantar y

3093.	szaeariin	correr animales	3144.	szausza	imperativo sembrar
3094.	szaeariLaan	preterito ahuyentar, espantar	3145.	szauszaya	imperativo sembrar
3095.	szaeariguaan	preterito ahuyentar, espantar	3146.	szauszaqui	supino sembrar
3096.	szaeari	imperativo ahuyentar, espantar	3147.	szagüi	rascar
3097.	szaczi	colar, ó cerrir	3148.	szaguiin	preterito rascar
3098.	szaczin	preterito colar, ó cerrir	3149.	szaguiLaan	preterito rascar
3099.	szaczilAn	preterito colar, ó cerrir	3150.	szaguiguan	preterito rascar
3100.	szacziguaaan	preterito colar, ó cerrir	3151.	szagui	imperativo rascar
3101.	szaczi	imperativo colar, ó cerrir	3152.	szina	orinar
3102.	szacziya	imperativo colar, ó cerrir	3153.	szinaán	preterito orinar
3103.	szagú	sentarse	3154.	szinaLaan	preterito orinar
3104.	szagú	preterito sentarse	3155.	szinaguan	preterito orinar
3105.	szaguLa	preterito sentarse	3156.	szina	imperativo orinar
3106.	szaguguaan	preterito sentarse	3157.	szináya	imperativo orinar
3107.	szaguya	imperativo sentarse	3158.	szipi	cortar hariendo
3108.	szaguya	sentar otra cosa, ó ponerla en alguna parte	3159.	szipin	preterito cortar hariendo
3109.	szaguyaán	preterito sentar otra cosa	3160.	szipiLaan	preterito cortar hariendo
3110.	szaguyaLaan	preterito sentar otra cosa	3161.	szipiguan	preterito cortar hariendo
3111.	szaguyaguan	preterito sentar otra cosa	3162.	szipi	imperativo cortar hariendo
3112.	szaguya	imperativo sentar otra cosa	3163.	szipiqui	supino cortar hariendo
3113.	szaLaquiya	componer, ó aliar	3164.	sziri	esconder
3114.	szaLaiyaan	preterito componer, ó aliar	3165.	sziriin	preterito esconder
3115.	szaLaiyaLaan	preterito componer, ó aliar	3166.	sziriLaan	preterito esconder
3116.	szaLaiyaguaan	preterito componer, ó aliar	3167.	sziriguan	preterito esconder
3117.	szaLaiya	imperativo componer, ó aliar	3168.	sziri	imperativo esconder
3118.	szapári	desgranar	3169.	szúea	mascar, morder, ó comer
3119.	szapariin	preterito desgranar	3170.	szueaan	preterito mascar, morder, ó comer
3120.	szaprin	preterito desgranar	3171.	szuLaan	preterito mascar, morder, ó comer
3121.	szapariLaan	preterito desgranar	3172.	szucaguan	preterito mascar, morder, ó comer
3122.	szapriLaan	preterito desgranar	3173.	szúea	imperativo mascar, morder, ó comer
3123.	szapariguán	preterito desgranar	3174.	szünueà	alargar
3124.	szapriguaan	preterito desgranar	3175.	szunueán	preterito alargar
3125.	szapri	imperativo desgranar	3176.	szunueáLaan	preterito alargar
3126.	szapari	imperativo desgranar	3177.	szunueaguan	preterito alargar
3127.	szapriya	imperativo desgranar	3178.	szunuea	imperativo alargar
3128.	szapariya	imperativo desgranar	3179.	szugui	barrer
3129.	szárszi	regar, ó esparar el agua menudamente	3180.	szuguin	preterito barrer
3130.	szarszin	preterito regar, ó esparar	3181.	szuguiLaan	preterito barrer
3131.	szarsziLaan	preterito regar, ó esparar	3182.	szuguiguan	preterito barrer
3132.	szarsziguán	preterito regar, ó esparar	3183.	szugui	imperativo barrer
3133.	szarszi	imperativo regar, ó esparar	3184.	szuguiquiya	imperativo barrer
3134.	szarsziya	regar, ó esparar	3185.	szuguiqui	supino barrer
3135.	szata	estar haciendo, ó repitiendo una misma cosa	3186.	szúerve	golpear
3136.	szataán	preterito estar haciendo, ó repitiendo	3187.	szuerveven	preterito golpear
3137.	szataLaan	preterito estar haciendo, ó repitiendo	3188.	szuerveLaan	preterito golpear
3138.	szataguan	preterito estar haciendo, ó repitiendo	3189.	szuerveguan	preterito golpear
3139.	szata	imperativo estar haciendo, ó repitiendo	3190.	szúerve	imperativo golpear
3140.	szaguatxa	sembrar	3191.	szuervequi	supino golpear
3141.	szauszán	preterito sembrar	3192.	szueyve	bolver
3142.	szauszaLaan	preterito sembrar	3193.	szueyveven	preterito bolver
3143.	szauszaguán	preterito sembrar	3194.	szueveLaan	preterito bolver
			3195.	szueyveguan	preterito bolver
			3196.	szueyve	imperativo bolver
			3197.	taà	partícula concursiva
			3198.	taà	venir, anomaló
			3199.	taayí	preterito
			3200.	taani	imputar, ó achocar
			3201.	taaniin	preterito imputar, ó achocar
			3202.	taaniLaan	preterito imputar, ó achocar
			3203.	taaniguan	preterito imputar, ó achocar

3204.	tacani	imperativo imputar, ó achocar	3262.	táyu	ponerse el sombrero, ó qualquiera otra cosa en la cabeza
3205.	tajana	nacer	3263.	tayuun	preterito ponerse el sombrero
3206.	tajnà	preterito nacer	3264.	tayulaan	preterito ponerse el sombrero
3207.	tajnaLà	preterito nacer	3265.	tayuguan	preterito ponerse el sombrero
3208.	tajnaguà	preterito nacer	3266.	tayu	imperativo ponerse el sombrero
3209.	tajnaya	imperativo nacer	3267.	teLama	lamer
3210.	tàla	quemár, ó encender	3268.	teLmaan	preterito lamer
3211.	talaan	preterito quemár, ó encender	3269.	teLmaLan	preterito lamer
3212.	talaLan	preterito quemár, ó encender	3270.	teLmaguan	preterito lamer
3213.	talaguan	preterito quemár, ó encender	3271.	teLma	imperativo lamer
3214.	tala	imperativo quemár, ó encender	3272.	téno	meter
3215.	tamptxi	torzer	3273.	teenón	preterito meter
3216.	tamptxin	preterito torzer	3274.	tenoLán	preterito meter
3217.	tamptxiLán	preterito torzer	3275.	tenoguan	preterito meter
3218.	tamptxiguaan	preterito torzer	3276.	téno	imperativo meter
3219.	tamptxi	imperativo torzer	3277.	tero	matar
3220.	taana	sèr; anomalo	3278.	terón	preterito matar
3221.	taanà	preterito	3279.	teroLán	preterito matar
3222.	taari	deber	3280.	teroguan	preterito matar
3223.	taarin	preterito deber	3281.	téro	imperativo matar
3224.	tariLan	preterito deber	3282.	teróee	supino matar
3225.	tariguan	preterito deber	3283.	teerò	morirse
3226.	tari	imperativo deber	3284.	teerò	preterito morirse
3227.	taari	trabar	3285.	teroLá	preterito morirse
3228.	taarin	preterito trabar	3286.	teeroya	imperativo morirse
3229.	tariLan	preterito trabar	3287.	teeròque	pescar
3230.	tariguan	preterito trabar	3288.	teeròquè	preterito pescar
3231.	tári	imperativo trabar	3289.	teroqueLá	preterito pescar
3232.	tarisza	desviar	3290.	teroqueya	imperativo pescar
3233.	tariszán	preterito desviar	3291.	tiei	dormir
3234.	tariszaLan	preterito desviar	3292.	tieui	preterito dormir
3235.	tariszaguan	preterito desviar	3293.	tieiLá	preterito dormir
3236.	tarisza	imperativo desviar	3294.	tieiguaan	preterito dormir
3237.	taru	prometer	3295.	tieiya	imperativo dormir
3238.	taruun	preterito prometer	3296.	tiszata	ventosear
3239.	taruLan	preterito prometer	3297.	tisztá	preterito ventosear
3240.	taruguan	preterito prometer	3298.	tisztala	preterito ventosear
3241.	taru	imperativo prometer	3299.	tisztaguaan	preterito ventosear
3242.	tarsziqui	retirarse	3300.	tisztaya	imperativo ventosear
3243.	tarsziqui	preterito retirarse	3301.	tónója	engañar
3244.	tarsziquiLá	preterito retirarse	3302.	tonoján	preterito engañar
3245.	tarsziquiguan	preterito retirarse	3303.	tonojaguan	preterito engañar
3246.	tarsziquiya	imperativo retirarse	3304.	tonojaLán	preterito engañar
3247.	taguaLai	bendecir	3305.	tonoja	imperativo engañar
3248.	taguaLaiin	preterito bendecir	3306.	tonojáqui	supino engañar
3249.	taguaLaiLan	preterito bendecir	3307.	tujámi	escupir
3250.	taguaLaiiguan	preterito bendecir	3308.	tugmín	preterito escupir
3251.	taguaLai	imperativo bendecir	3309.	tugmiLán	preterito escupir
3252.	táya	pisar	3310.	tugmiguán	preterito escupir
3253.	tayaan	preterito pisar	3311.	tugmi	imperativo escupir
3254.	tayaLan	preterito pisar	3312.	tugmiqui	supino escupir
3255.	tayaguaan	preterito pisar	3313.	tuLtu	picar, ó dar estocadas
3256.	táya	imperativo pisar	3314.	tuLtuun	preterito picar, ó dar estocadas
3257.	táya	castrear los animales	3315.	tuLtuLan	preterito picar, ó dar estocadas
3258.	tayaan	preterito castrear los animales	3316.	tuLtuguaan	preterito picar, ó dar estocadas
3259.	tayaLan	preterito castrear los animales	3317.	tuLtu	imperativo picar, ó dar estocadas
3260.	tayaguan	preterito castrear los animales	3318.	tuLtuquí	supino picar, ó dar
3261.	taya	imperativo castrear los animales			

3319.	túmu	estocadas	3382.	tuemue	imperativo teñir
3320.	túmuun	acabar	3383.	tuemuequi	supino teñir
3321.	tumuLán	preterito acabar	3384.	txaca	<i>est verbum impurum et inhonestum et significat quod est fornicare</i>
3322.	tumuguan	preterito acabar			
3323.	túmu	imperativo acabar	3385.	txacaan	preterito <i>fornicare</i>
3324.	tumuqui	supino acabar	3386.	txacaLan	preterito <i>fornicare</i>
3325.	tunáti	tocar instrumento	3387.	txacaguaan	preterito <i>fornicare</i>
3326.	tuntín	preterito tocar instrumento	3388.	txaca	imperativo <i>fornicare</i>
3327.	tuntiLán	preterito tocar instrumento	3389.	txajama	espínarse, ó lastimarse
3328.	tunatiLan	preterito tocar instrumento			hiriendose con algo
3329.	tuntiguaan	preterito tocar instrumento	3390.	txajmaan	preterito espínarse
3330.	tunatiguaan	preterito tocar instrumento	3391.	txamaLan	preterito espínarse
3331.	tunti	imperativo tocar instrumento	3392.	txajmaguaan	preterito espínarse
		instrumento	3393.	txajma	imperativo espínarse
3332.	tuntiya	imperativo tocar instrumento	3394.	txagmaya	imperativo espínarse
		supino tocar instrumento	3395.	txajmaquí	supino espínarse
3333.	tuntiqui	dejar	3396.	txagui	pelliscar, ó arañar
3334.	túpa	preterito dejar	3397.	txaguín	preterito pelliscar, ó arañar
3335.	tupán	preterito dejar	3398.	txaguiLán	preterito pelliscar, ó arañar
3336.	tupaLan	preterito dejar	3399.	txaguiguaan	preterito pelliscar, ó arañar
3337.	tupaguaan	preterito dejar	3400.	txagui	imperativo pelliscar, ó arañar
3338.	tupa	imperativo dejar			
3339.	túra	traher, o llevar	3401.	txúma	besar
3340.	turaan	preterito traher, o llevar	3402.	txumaan	preterito besar
3341.	turalan	preterito traher, o llevar	3403.	txumaLán	preterito besar
3342.	turaguaan	preterito traher, o llevar	3404.	txumaguaan	preterito besar
3343.	tura	imperativo traher, o llevar	3405.	txúma	imperativo besar
3344.	tútu	mamar	3406.	txueme	regar todo genero de siembras
3345.	tutuun	preterito mamar	3407.	txuemeven	preterito regar
3346.	tutuLan	preterito mamar	3408.	txuemeLán	preterito regar
3347.	tutuguaan	preterito mamar	3409.	txuemeaguaan	preterito regar
3348.	tutu	imperativo mamar	3410.	txueme	imperativo regar
3349.	tutuya	supino mamar	3411.	txuemequí	supino regar
3350.	tutuqui	dar de mamar	3412.	txoeri	trozar
3351.	tutuja	preterito dar de mamar	3413.	txoerin	preterito trozar
3352.	tutujaan	preterito dar de mamar	3414.	txoeriLan	preterito trozar
3353.	tutujaLan	preterito dar de mamar	3415.	txoeriguaan	preterito trozar
3354.	tutujaguaan	preterito dar de mamar	3416.	txoeri	imperativo trozar
3355.	tutuja	imperativo dar de mamar	3417.	ucáa	tener, haver; defectivo
3356.	tutujaquí	supino dar de mamar	3418.	úea	poner, ó hechar alguna cosa en algun lugar
3357.	tuya	reñir			
3358.	tuyaán	preterito reñir	3419.	úeaan	preterito poner
3359.	tuyaLan	preterito reñir	3420.	úeaLan	preterito poner
3360.	tuyaguaan	preterito reñir	3421.	úeaguaan	preterito poner
3361.	tuya	imperativo reñir	3422.	úea	imperativo poner
3362.	tuyaquí	supino reñir	3423.	úgui	llamar
3363.	tuyáquí	pleitear	3424.	úguin	preterito llamar
3364.	tuyaquíLá	preterito pleitear	3425.	úguiLan	preterito llamar
3365.	tuyáquíaguaan	preterito pleitear	3426.	úguiguaan	preterito llamar
3366.	tuyaquíya	imperativo pleitear	3427.	úgui	imperativo llamar
3367.	tuyáquí	supino pleitear	3428.	úLaca	desear
3368.	túyu	comenzar	3429.	uLacán	preterito desear
3369.	tuyuun	preterito comenzar	3430.	uLcaLan	preterito desear
3370.	tuyuLán	preterito comenzar	3431.	uLcaguaan	preterito desear
3371.	tuyuguaan	preterito comenzar	3432.	uLca	imperativo desear
3372.	tuyu	imperativo comenzar	3433.	uLú	caer
3373.	túyúea	torear, ó provocar	3434.	uLú	preterito caer
3374.	tuyuein	preterito torear, ó provocar	3435.	uLuguaan	preterito caer
3375.	tuyueaLán	preterito torear, ó provocar	3436.	uLúya	imperativo caer
3376.	tuyu eaguaan	preterito torear, ó provocar	3437.	ulúya	derribar
3377.	tuyuea	imperativo torear, ó provocar	3438.	uluyaan	preterito derribar
		teñir	3439.	uluyaLán	preterito derribar
3378.	tuemue	preterito teñir	3440.	uluyaguaan	preterito derribar
3379.	tuemueven	preterito teñir	3441.	uluya	imperativo derribar
3380.	tuemueLán	preterito teñir	3442.	uma	curar
3381.	tuemueguaan	preterito teñir			

3443.	umaan	preterito curar	3510.	yánaLá	preterito avergonzarse
3444.	umaLán	preterito curar	3511.	yánaguán	preterito avergonzarse
3445.	umaguaan	preterito curar	3512.	yána	imperativo avergonzarse
3446.	uma	imperativo curar	3513.	yánaya	imperativo avergonzarse
3447.	umaya	imperativo curar	3514.	yáru	colgar
3448.	umaquí	supino curar	3515.	yáruun	preterito colgar
3449.	unáa	tener, ó haver; defectivo	3516.	yaruLan	preterito colgar
3450.	upúu	pararse	3517.	yaruguaan	preterito colgar
3451.	upúu	preterito pararse	3518.	yáru	imperativo colgar
3452.	upuguan	preterito pararse	3519.	yászi	estender
3453.	upuLan	preterito pararse	3520.	yászin	preterito estender
3454.	upuya	supino pararse	3521.	yasziLán	preterito estender
3455.	upuya	parar	3522.	yásziguaan	preterito estender
3456.	upuyaan	preterito parar	3523.	yaszi	imperativo estender
3457.	upuyaLán	preterito parar	3524.	yáyu	arroyar
3458.	upuyaguaan	preterito parar	3525.	yayuun	preterito arroyar
3459.	upúya	imperativo parar	3526.	yayuLán	preterito arroyar
3460.	uræu	tragar	3527.	yayuguaan	preterito arroyar
3461.	uræuun	preterito tragar	3528.	yáyu	imperativo arroyar
3462.	uræuLán	preterito tragar	3529.	yoLana	desbarrancarse
3463.	uræuguaan	preterito tragar	3530.	yoLnaa	preterito desbarrancarse
3464.	uræu	imperativo tragar	3531.	yoLnaLá	preterito desbarrancarse
3465.	uru	cortar fruta	3532.	yoLnaguaan	preterito desbarrancarse
3466.	uruun	preterito cortar fruta	3533.	yoLnáya	imperativo desbarrancarse
3467.	uruLan	preterito cortar fruta	3534.	yóLe	desparramar
3468.	uruguaan	preterito cortar fruta	3535.	yoLén	preterito desparramar
3469.	uru	imperativo cortar fruta	3536.	yoLeguaan	preterito desparramar
3470.	utúei	tardarse	3537.	yoLe	imperativo desparramar
3471.	utueí	preterito tardarse	3538.	yólu	alizar, pisar la masa para las tortillas, ó moler sutilmente alguna cosa; <i>et est verbum impurum ad coitum</i>
3472.	utueiLá	preterito tardarse			
3473.	utueiguaan	preterito tardarse	3539.	yuluun	preterito alizar, pisar
3474.	utueiya	imperativo tardarse	3540.	yuluLan	preterito alizar, pisar
3475.	uszaquí	chupar tabaco	3541.	yuluguaan	preterito alizar, pisar
3476.	uszeín	preterito chupar tabaco	3542.	yulu	imperativo alizar, pisar
3477.	uszeiLán	preterito chupar tabaco	3543.	yueckoesza	remecer
3478.	uszeiguaan	preterito chupar tabaco	3544.	yueckoeszaan	preterito remecer
3479.	uszeiya	imperativo chupar tabaco	3545.	yueckoeszaLán	preterito remecer
3480.	uszúmu	olér	3546.	yueckoeszaguaan	preterito remecer
3481.	uszmúun	preterito olér	3547.	yueckoesza	imperativo remecer
3482.	uszmúLan	preterito olér	3548.	yueckoeszaei	supino remecer
3483.	uszmuguaan	preterito olér	3549.	yuegua	perder
3484.	uszmu	imperativo olér	3550.	yueguaan	preterito perder
3485.	uszmuya	imperativo olér	3551.	yueguaLan	preterito perder
3486.	uszmúqui	supino olér	3552.	yueguaguan	preterito perder
3487.	uýsziei	oir	3553.	yuegua	imperativo perder
3488.	uyszieiLá	preterito oir	3554.	yueguaLi	perder
3489.	uyszieiaguán	preterito oir	3555.	yueguaLin	preterito perder
3490.	uyszieiya	imperativo oir	3556.	yueguaLiLan	preterito perder
3491.	uyúmu	lastimar	3557.	yueguaLiguaan	preterito perder
3492.	uymuun	preterito lastimar	3558.	yueguaLi	imperativo perder
3493.	uymuLan	preterito lastimar	3559.	yueguaszáma	olvidar
3494.	úymuguaan	preterito lastimar	3560.	yueguaan száma	preterito olvidar
3495.	úymu	imperativo lastimar	3561.	yueguaLán szama	preterito olvidar
3496.	uentue	espiar	3562.	yueguaguaan száma	preterito olvidar
3497.	vesueve	desatar	3563.	yuegua száma	imperativo olvidar
3498.	yaea	hacer	3564.	yueLveeve	acusar
3499.	yaeán	preterito hacer	3565.	yueLveeven	preterito acusar
3500.	yaeaLán	preterito hacer	3566.	yueLveeLan	preterito acusar
3501.	yaeaguaan	preterito hacer	3567.	yueLveeguaan	preterito acusar
3502.	yáea	imperativo hacer	3568.	yueLvee	imperativo acusar
3503.	yámi	murmurar	3569.	yuepue	vomitir
3504.	yámiin	preterito murmurar	3570.	yuepueven	preterito vomitar
3505.	yamiLán	preterito murmurar	3571.	yuepueLan	preterito vomitar
3506.	yámiguaan	preterito murmurar	3572.	yuepueguaan	preterito vomitar
3507.	yámi	imperativo murmurar			
3508.	yamiei	supino murmurar			
3509.	yána	avergonzarse			

3573.	yuepue	imperativo vomitar	3631.	ambué	ahora
3574.	yuepueya	imperativo vomitar	3632.	anic	oy
3575.	aa	si	3633.	anic pari	en este día
3576.	a	partícula verbal	3634.	anila	el anillo
3577.	ac	nuestro; partícula posesiva	3635.	anima	1. el corazón
3578.	aeaL	también, así	3636.	anima	1. el alma
3579.	aeaL	todavía	3637.	animasz	las animas
3580.	acha	1. la jacha	3638.	animasz	las ocho de la noche
3581.	achca	abierto de piernas	3639.	anú	2. la tía
3582.	acaní	así	3640.	apa	como; adv[erbi]o
3583.	acan canguí	así és			interrogativo
3584.	acán szoequi	también, así también	3641.	ara	1. la mosca
3585.	acuysz	refran, con lo que quieren	3642.	ara	1. el gusano
		significar, disque	3643.	araLa	el embiado, ó mensagero
		el eslabon, ó azero	3644.	araLaLi	el embiado, ó mensagero;
3586.	acero	el que se va huido			plural
3587.	acúLa	el que se va huido; plural	3645.	aranszasz	1. la naranja
3588.	aculaLi	vagamundo	3646.	araquiLa	1. mirón
3589.	acuquiLa	vagamundo; plural	3647.	araquiLaLi	1. mirón; plural
3590.	acuquilaLi	la abuja	3648.	aratac	1. el obillo, ó maguey
3591.	acúsza	la tristeza	3649.	aragua	cosa embiada
3592.	acuszáma	ahora ocho días	3650.	atác	1. el guepil
3593.	aevaca ayac anic	ahora un año	3651.	aù	1. el maíz
3594.	aevaca ayac yeál		3652.	aúc	1. el tizate
	ayapa		3653.	auLác	1. el comál
3595.	aevaca yeal agua	de aquí a ocho días	3654.	aszín	no
3596.	aevepè ayac yeál		3655.	aszinaeál	todavía no
	pari		3656.	aszinsaLa	cerca
3597.	aevepè ayac yeál	de aquí a un mes	3657.	aszintoeszève	no lejos
	agua		3658.	aszinszaL	malo, no está bueno
3598.	aevepè ayac yeál	de aquí a un año	3659.	aszue	este
	ayapà		3660.	ayác	como, así como, parece
3599.	agve	si	3661.	ayaLa	1. la muger
3600.	agua	1. la luna	3662.	ayaLaLi	1. la muger; plural
3601.	agua	1. el mes	3663.	ayaan	1. mi compañero ó amigo
3602.	aguà	2. la abuela	3664.	ayán nau	1. como hermano
3603.	aguán	no; para oraciones de	3665.	ayán uchi	2. mi consuegra
		imperativo negativas	3666.	ayán uchiLi	2. mi consuegra; plural
3604.	ag	sú; partícula posesiva	3667.	ayán pandú	2. mi concuño
3605.	agvé	este	3668.	ayán pandu cáLi	2. mi concuño; plural
3606.	aL vel aLi	por	3669.	ayapà	1. el año
3607.	aL vel aLi	ensima ó sobre	3670.	ayma	1. la masorca
3608.	alú	1. la guacamaya	3671.	ayú	partícula optativa
3609.	aLcalti	1. el alcalde	3672.	ayúna	1. el ayuno
3610.	aLmúu	óy	3673.	ayupè	particular verbal
3611.	aLmucán	ayér	3674.	ayuguenaquí	si alguno
3612.	aLmucansuema	anoche	3675.	asvec	quando
3613.	aLmuL	1. el almud	3676.	cá	tú; partícula que sirve de
3614.	aLpámag	los ombros			pronom[br]e primitivo
3615.	aLparaquiguá	por	3677.	cá	partícula para ir ó llevar
3616.	aLtè	<i>verbum impurum et</i>	3678.	ca ay	vosotros
		<i>significat membrum virile</i>	3679.	cácá	dónde; adverbio para
3617.	aLtèpét	1. el pueblo			interrogaciones
3618.	aLtepueszue	1. jicara peste	3680.	cachatché	refrán
3619.	aLguapi	el empeine del pie	3681.	caguayo	1. el caballo
3620.	amaeqùè	refran, con el que quieren	3682.	caguayuLi	1. el caballo; plural
		significar, oiga ó [¿]que	3683.	caguic	1. la araypa ó lazo
		dices?	3684.	eaguiciLa	1. el que pone la trampa
3621.	amaá	esta sobrada	3685.	eagui eilaLi	1. el que pone la trampa;
3622.	amaszán Ácá namán	refran			plural
3623.	amaszuequi	también, et, y	3686.	caguiquiLa	1. el griton
3624.	amú	2. el abuelo	3687.	caguiquiLaLi	1. el griton; plural
3625.	amú	1. la araña	3688.	chagui	cosa dura
3626.	ancumi	mi alma, ó mi vida	3689.	charrave naLtè	<i>verbum impurum et</i>
3627.	amùL	1. la ortiga, ó chichicastle			<i>significat pendiculus</i>
3628.	amuambuqui	1. el herpís, ó cancro	3690.	chegche	1. voca rota
3629.	an	mi; partícula posesiva	3691.	chichi	2. el excremento
3630.	ambuqui	1. la culebra			

3692.	chrizma	1. el bautismo	3752.	coszò	para hacer tapescos
3693.	chogmo	1. cara picada	3753.	coyaya	agua consumida
3694.	chooœc	el molinillo	3754.	coyo	1. el cacaste
3695.	chooœLa	1. el que bate			1. cierta varilla con que
3696.	chooœLaLi	1. el que bate; plural			se hacen tapescos, y
3697.	chuerueue	chico ó pequeño			vamadas
3698.	chuerueueLi	chico ó pequeño; plural	3755.	cozo	1. viruelas
3699.	churu chuerueue	mas chico	3756.	cuchilo	1. el cuchillo
3700.	chuerueue	de una vez: mui chico	3757.	cúcu	1. tasisco; pueblo
3701.	chvey	poco	3758.	cucúguaŁ	1. la tortola
3702.	caLi	1. el humo	3759.	œuŁami	1. la pitafloja
3703.	cáma	2. la sangre	3760.	cúŁcu	1. el cajete
3704.	cama	2. el semen	3761.	culúmac	1. el calzonte
3705.	cama eiŁa	1. el que apadrina, carga, ó abraza	3762.	culúmac	1. el bolillo, pálo de tejer
			3763.	cumbisziun	1. la confesion
3706.	cantoreŁé	1. los cantores	3764.	eúnú	1. las sombras
3707.	capa	particula verbal	3765.	cunueiŁa	1. comprador, ó
3708.	capè	de donde; adverbio para interrogacion			compradora
			3766.	cunu eiŁaLi	1. comprador, ó
3709.	capisayo	1. el chamarron			compradora; plural
3710.	capil tu	1. el cavildo	3767.	cúnu eigua	3. cosa comprada
3711.	capún	1. el capon	3768.	cunsi	cosa nesna, ó cenicienta
3712.	œara	cosa pesada	3769.	œupru szunic	oia honda
3713.	œaragua	1. el monte	3770.	cuurúc	1. cierta rueda, ó yagual
3714.	caragua	1. el sacate			de mecates
3715.	caragua jaszu	1. el marráno de monte	3771.	cuurúc szuema	1. el calambre, ó palo que
3716.	cargua	cosa separada			sirve de cumbreira á la casa
3717.	carguajumu	1. viudo	3772.	curugui	1. la tortolilla
3718.	carguajaya	1. viuda	3773.	curugui	1. las partes genitales de
3719.	œatacguieic	1. tapesco de moler, que llaman taszmata			las criaturas
			3774.	curnicapusz	1. el cabo de candela
3720.	œataŁa	1. acostado	3775.	curni puri	1. cabo de ocote
3721.	ckau	1. tamal blanco	3776.	curuyu	1. la tortilla gruesa, que
3722.	casza	1. la caja			llaman pisztón
3723.	casza	1. el sancudo, ó mosquito	3777.	cutumi	1. el calambre; enfermedad
3724.	caszczasz	1. la cotusa	3778.	cuszczuszipari	1. cierto árbol, que da una
3725.	caaszic	1. la caña de castilla			flor que llaman barbona
3726.	casztianú	1. el español	3779.	cusztarica	1. cierto cacao, que llaman
3727.	casztianuLi	1. el español; plural			costarrica
3728.	casztilamapue	1. el pan	3780.	ckœueguagua	1. cosa prestada
3729.	casztilán	1. la gallina ponedora	3781.	ckœueguœeiŁa	el que presta
3730.	cayieiŁa	1. el vendedor, ó vendèdora	3782.	ckœueguue	2. la espinilla
			3783.	ckœueguue	cosa seca
3731.	cayi eiŁaLi	1. el vendedor, ó vendèdora; plural	3784.	ckœuenue ei	la alegría, ó contento
			3785.	ckœuenue eiŁa	3. el que se alegra
3732.	ckeguesza	anona	3786.	ckœuenue eiŁaLi	3. el que se alegra; plural
3733.	œeneya	1. platano guíneo	3787.	ckœuerguue	1. cosa flaca
3734.	eigui	3. el patio	3788.	œuerszac	1. el peine
3735.	ckirguieiŁa	1. escogedor, ó escogedora	3789.	œuerszaŁa	1. el que peina
			3790.	œuersza eiŁa	1. el peinador, ó peinadora
3736.	ckirguieiŁaLi	1. escogedor, ó escogedora; plural	3791.	œuervé	2. el hermano menor
			3792.	œuerve	1. la danta
3737.	œiriguapatxi	1. el atole, ó chilate	3793.	œuetue eiŁa	1. el medidor
3738.	coca	el cacaste	3794.	œuetue eic	1. la medida, ó vara de
3739.	coséc	cosa grande			medir
3740.	coséc punic	1. el tambor de moros	3795.	œuesztamay	1. sinacantan; pueblo
3741.	coséc Ŭy	1. rio grande	3796.	œuesza	1. el morcielago
3742.	œoœchó	cosa sucia	3797.	œuesza	1. nancinta; pueblo
3743.	œomo	2. la rodilla	3798.	œuésza	1. la mitad, ó pedazo de
3744.	coo	refran, disque			alguna cosa
3745.	coorá	en fila, ó ringlera	3799.	ec	nuestro; particula posesiva
3746.	coorère	1. el idolo	3800.	eg	su; particula posesiva
3747.	cooròro	1. el bejuco	3801.	eŁa	cosa nueva
3748.	œosme	1. el camalote	3802.	eŁactuma	1. lengua de venado; yerva
3749.	ckotòro	1. el sompopo	3803.	eŁagua eiŁa	1. embarrador
3750.	coszco	1. el sópe	3804.	eŁagua eiŁaLi	1. embarrador; plural
3751.	œoszme	1. cierta caña, ó varilla	3805.	eŁaja	2. la lengua

3806.	eLmaLá	1. el que presta	3865.	gui	partícula conclusiva
3807.	eLmaLaLi	1. el que presta; plural	3866.	guiriquí	3. la palabra
3808.	emaeiLa	1. costurero que cose	3867.	guiriquiLa	1. hablador
3809.	emaeiLaLi	1. costurero que cose; plural	3868.	guiriquiLaLi	1. hablador; plural
3810.	en	mi; partícula posesiva	3869.	guirisz	1. travieso
3811.	epét	1. cacos; fruta del mar	3870.	guitágua	1. cosa tendida
3812.	eplec	cosa espantosa	3871.	guitá jugua	1. platano pasado
3813.	ereLaquiLa	1. espantador	3872.	guitaLa	1. el casador, ó tirador
3814.	ereLaquiLaLi	1. espantador; plural	3873.	guitaLaLi	1. el casador, ó tirador; plural
3815.	erve	1. cosa vieja	3874.	guitiLaya	1. la doncella
3816.	etacaeiLa	1. el tapiscador	3875.	guitiLayaLi	1. la doncella; plural
3817.	etacaeiLaLi	1. el tapiscador; plural	3876.	guitxuc	1. el azote
3818.	eyéL	no; adverbio para <i>sum est fui</i>	3877.	guitxuquiLa	1. el azotador
3819.	gini	2. la barriga	3878.	guitxuquiLaLi	1. el azotador; plural
3820.	girc	1. la piedra de amolar	3879.	guisztác	1. la trompeta, ó clarín
3821.	gir eLiLa	1. el amolador	3880.	guiszúc	1. el azote
3822.	gireiLaLi	1. el amolador; plural	3881.	guiszuquiLa	1. el azotador
3823.	giru	1. lo mico, ó mono	3882.	guiszuquiLaLi	1. el azotador; plural
3824.	giruLi	1. lo mico, ó mono; plural	3883.	guiszucnugui	1. sacudidor de algodon
3825.	ténan giru	1. lo mico, ó mono; plural	3884.	guiyán	1. la caña dulce
3826.	giruLa	1. el que lame	3885.	guocLac	1. el hoyo
3827.	giruLaLi	1. el que lame; plural	3886.	guvejúv	2. la hermana menor
3828.	giszi	3. la piedra	3887.	guvejúcaLi	2. la hermana menor; plural
3829.	gisziLi	3. la piedra; plural	3888.	guvenac	1. el brujo
3830.	gona	1. el cerro	3889.	guvenacLi	1. el brujo; plural
3831.	gonatau	1. el viento, ó norte	3890.	ic	nuestro; partícula posesiva
3832.	gua	que; partícula para tiempos de que	3891.	icál	uno
3833.	guaca	1. la chacha; ave	3892.	icalqui	solo uno
3834.	guacász	1. la carne de réz, y todo genero de ganado maior	3893.	igua	3. la maza para tortillas
3835.	guaczi	1. cierta ave parecida al sopilote, que canta á la salida, y puestas del sol	3894.	iguáLa	1. la torteadora
3836.	guacicszaja	1. el mal nombre	3895.	iguáLaLi	1. la torteadora; plural
3837.	guanin	quien	3896.	iguatxá	1. el hilo
3838.	gualipè	de aqui a tres dias	3897.	ig	su; partícula posesiva
3839.	guapáL	1. el banco	3898.	iliguís	cosa mala
3840.	guapi	3. el pie	3899.	iliguís jraac	el demonio
3841.	guapic	1. los caítes, zapatos de los yndios	3900.	in	partícula interrogativa
3842.	guapuéc	1. el horcon	3901.	in	mi; partícula posesiva
3843.	guaru	1. la hamaca	3902.	iplaLa	1. bañador, ó bañadora
3844.	guarúc	1. el matate ó red	3903.	iplaLaLi	1. bañador, ó bañadora; plural
3845.	guataqui	no importa	3904.	iti	1. el tomate
3846.	guatí	1. el barro	3905.	itúL	1. las pulgas, ó niguas
3847.	guaszác	1. la milpa de regadillo, que llaman apantes	3906.	iszaea	3. el chilate
3848.	guaszaLicic	1. el vestido, ó ropa	3907.	iszaea	3. la bebida
3849.	guaszcuaLi	1. el que tira piedras	3908.	iszcac	1. la jicara de beber
3850.	guaszcuaLiLi	1. el que tira piedras; plural	3909.	iszcaLa	1. bebedor, ó bebedora
3851.	guasztaguasvema	la entrada de la noche	3910.	iszcaLaLi	1. bebedor, ó bebedora; plural
3852.	guasztala	1. el que entra	3911.	iszpaguapari	la salida del sol
3853.	guasztalaLi	1. el que entra; plural	3912.	isztú	1. el gíote; enfermedad
3854.	guasztacarágua	1. la vispera	3913.	isztu	1. la señal
3855.	guayá	3. la milpa	3914.	isztu	1. el rebés de todas las cosas
3856.	guéna	quien	3915.	jachveckiLa	1. recogedor de basura
3857.	guénaqui	el qué	3916.	jajLa cuchilo	1. la cutachilla,
3858.	guéna ayuqui	si alguno	3917.	jági	instrumento con que
3859.	guerén	1. el zapo	3918.	jaguá	desiervan en lugar de
3860.	guesquégua	cosa botada	3919.	jagui	azadon
3861.	guesza	1. la yguana	3920.	jagui	1. el aguacate
3862.	guiiic	1. la piedra de moler	3921.	jaamáa	cosa que no esta madura
3863.	guiiLai	1. el tigre	3922.	jamá	2. el pellejo y piel
3864.	guina	1. la fiesta	3923.	jamaguáLa	2. la corteza, ó cascara de todo arbol y fruta
					cosa madura
					3. el pecado
					1. el pecador

3924.	jamue	cosa azéda				dicen les sale quando
3925.	japáayvepué	vomitos, y evacuaciones				padecen alguna verguenza
3926.	japáginíy	1. evacuaciones	3977.	jura ei		2. el parto
3927.	jaapaLa	1. pasajero, ó forastero	3978.	jura eiLa		1. la parida
3928.	jaapaLaLi	1. pasajero, ó forastero; plural	3979.	jurá eiLaLi		1. la parida; plural
			3980.	jurápi		untar, fletar, untara
3929.	jaraeu	1. el chipilin; yerva	3981.	juraý		2. los ojos
3930.	jaraLa mapue	1. tortilla, tostada, que llaman totopostle	3982.	juraý		2. la cara
			3983.	juray guapi		2. el hueso, que llaman ojo de pie
3931.	jarána	1. la enfermedad				2. el orificio
3932.	jarnaLa	1. el enfermo	3984.	jurí		1. el chumpipe, gallo de la tierra
3933.	jarnaLaLi	1. el enfermo; plural	3985.	júru		cosa calorosa
3934.	jararí	3. el hueso				lo mismo
3935.	jararickómo	3. el hueso de la rodilla	3986.	jururú pari		1. el orificio, y
3936.	jararickuguve	2. el hueso de la espinilla	3987.	jururú		propriam[en]te el culo
3937.	jarari velveg	2. el hueso del espinazo	3988.	jutác		1. el palo
3938.	jari eiLa	1. espantador, ó aventador				1. el palo; plural
3939.	jari eiLaLi	1. espantador, ó aventador; plural	3989.	jutu		1. el palo; plural
			3990.	jutuLi		1. el palo; plural
3940.	jaaruun	1. la garrapata	3991.	tenan jutu		1. el ollin, ó tizne
3941.	jaruun naru	1. el taláge	3992.	juutuc		3. el hueso del pescuezo
3942.	jaz	1. el tercio de sacate	3993.	jututaLi		2. la cabeza
3943.	jauszaja	2. los labios	3994.	juuszí		1. el palmito
3944.	jautuma	1. el cuero para azotar, ó piel de ganado	3995.	juszimapi		3. el tegido
			3996.	jueea		1. la tejendera; plural
3945.	jászu	3. el marrano	3997.	juveeaLa		1. la tejendera; plural
3946.	jaszuLi	3. el marrano; plural	3998.	juveeaLaLi		1. el perico, ó papagallo
3947.	tenan jaszú	3. el marrano; plural	3999.	juerve		1. el jacheador
3948.	jáya	1. hembra	4000.	jueyaeiLa		1. el jacheador; plural
3949.	jaya jaszu	1. la marrana	4001.	jueya eiLaLi		1. el que cuenta
3950.	jaya jaszuLi	1. la marrana; plural	4002.	ŁacmáLa		1. el contador
3951.	jaya jumu	1. amugerrado	4003.	Łacma eiLa		1. el contador; plural
3952.	jaya naci	3. la hija hembra	4004.	Łacma eiLaLi		2. el yerno
3953.	jayuc szaja	pañó de chocolate a modo de servilletas	4005.	Ła eugua		1. el camaron
			4006.	Łamuc		1. el limon
3954.	jósóguál	el doblador, ó cascara de la masorca	4007.	laamunisz		no
			4008.	Łán		particula verbal optativa
3955.	jógua	1. el leon	4009.	Łán		el nieto
3956.	jooroŁ	el cuidador	4010.	Łapà		1. el que va detras de otro como siguiendolo
3957.	jooroŁ caguayoy	1. guarda caballo, sirviente	4011.	ŁapaLa		1. el que va detras de otro como siguiendolo; plural
						1. el cargador
3958.	jooroŁ eēLa	1. el guardian, que tambien llaman tapián	4012.	ŁapáLaLi		1. el cargador; plural
						1. el barbaro
3959.	joroŁ eēLaLi	1. el guardian, que tambien llaman tapián, plural	4013.	ŁapieiLa		1. el que sube
			4014.	ŁapieiLaLi		1. el que sube; plural
3960.	joroŁ guáyá	2. guardian de milpa	4015.	Łara		1. cierta yerva que sirve a las yndias p[ar]a bañarse
3961.	jooroŁ macu	3. guardian, ó cuidador de la casa	4016.	ŁaraLa		1. la llave
			4017.	ŁaraLaLi		1. el bailador
3962.	joroso	1. el coroso; fruta a modo de coyól	4018.	Łaravemuéc		1. el bailador; plural
						1. el clavo
3963.	joroso	1. cierto genero de chile	4019.	lagui		1. el cacao pataste
3964.	jugúa	el platano	4020.	ŁaurúLa		1. el que vaja
3965.	jujúŁ	1. el panál	4021.	ŁauruLaLi		1. el que vaja; plural
3966.	jujuLi	1. el panál; plural	4022.	laúsz		1. el ocote
3967.	juŁic	1. la nabaja de resurar	4023.	Łenga		con
3968.	juLi eiLa	1. el barbéro	4024.	ŁicaLa		también, y
3969.	juŁicieLiLaLi	1. el barbéro; plural	4025.	ŁicaLaLi		1. agua tibia
3970.	jumu	1. varón	4026.	Łimic		1. manco
3971.	jumu nau	2. el hijo varon	4027.	Łiná		1. el conejo
3972.	jurjur	mui derecho, ó derecho derecho	4028.	Łiná szuequi		quando
			4029.	Łómehui		entonces
3973.	jurác	1. el hombre	4030.	lungú		quando; interrogación para futuro
3974.	juracLi	1. el hombre; plural	4031.	Łuri		
3975.	jueracŁuegueve	1. la miel blanca	4032.	Łuecán		
3976.	jurac puepue	1. cierta inflamación ó especie de abuso que tienen los yndios, que	4033.	Łuecán Vá		
			4034.	Łuécu		

4035. Łue eun náu	2. mi entenado ó entenada	4095. muŁ azúcar	1. la azucar
4036. Łueguve	1. el ayote	4096. mula	1. la palma
4037. Łuepuec	1. el instrumento, con que sirve para cargar	4097. muŁa may	1. medio maduro
4038. Łuepue ciŁa	1. el cargador	4098. muŁa húy	1. el rayo
4039. Łueseviegua	2. la cintura y hueso del espinaso	4099. múŁasziuc	1. la vivora de cascabel, culebra
4040. má	particula verbal subjuntiva y	4100. muŁckeguesza	1. la anona blanca
4041. máca	3. la cassa	4101. muŁ jutu	1. el palo que llaman volador
4042. macu	3. la cassa; plural	4102. muŁ náru	1. la tierra blanca
4043. macuŁa	3. la cassa; plural	4103. muŁpá amac	1. la paloma de monte
4044. tenan macu	1. el diseño de la cassa	4104. muŁ turi	1. criatura tierna
4045. macuŁa	1. el diseño de la cassa; plural	4105. múmuc	1. la posa de algun río
4046. macuŁaŁi	1. el gallinero	4106. múra	1. la masorca tierna, que llaman elóte
4047. macu mía	1. el chiquero, posilga de marranos	4107. murchaguiya	1. el algodón amarillo, que llaman cuyuscáte
4048. macu jaszu	1. la yglesia	4108. muti	2. el cabello
4049. matiusz	1. el hormiguero	4109. músz	1. la pluma
4050. macu uguaŁ	1. el machete	4110. musz aŁtè	1. <i>est verbum disolutum per quod significatur pilos continentes in partes genitales</i>
4051. máchiti	1. el señor, ó amo aunque, y más que	4111. muszcaragua	1. la basura
4052. mán pita	1. la ceniza	4112. muszi	1. las barbas, ó pelos del cuerpo
4053. maŁca	1. el tamal de frisol	4113. musz juraý	2. las pestañas
4054. maŁi	1. la leña	4114. muszta	1. la panza
4055. maŁiŁa	3. la oreja	4115. muyi	1. el chico, ó nispero
4056. maŁuec	ese, esa, ó eso	4116. mveea	2. el trabajo
4057. máni	1. el coyol	4117. mveea	2. el tributo
4058. mán	1. la tortilla	4118. mveeaŁa	1. el sirviente
4059. mapi	1. el descansadero, ó lo que lla[jma]n sesteadero	4119. mveeaŁaŁi	1. el sirviente; plural
4060. mapue	1. el que descansa	4120. mvemveŁa	1. el que canta
4061. maarác	1. la piña	4121. mvemveŁaŁi	1. el que canta; plural
4062. maraŁa	cosa pegada	4122. mverra	cosa amarga
4063. maraŁaŁi	pequinito, ó mui chico	4123. mvetaŁeigua	cosa soñada
4064. maza	mas grande	4124. mvetxaŁa	1. el que entierra
4065. maazaa	1. el lodo	4125. mvetxagua	1. la sepultura
4066. maschvervecue	1. la que frie	4126. mvessaŁa	1. el que entierra
4067. mas verrá	1. la que frie; plural	4127. muszaŁaŁi	1. el que entierra; plural
4068. másza	2. las venas, y nervios del cuerpo	4128. mvessagua	1. la sepultura
4069. masziŁa	1. las raíces de los arboles	4129. mvैयाŁa	1. el que ayuda
4070. masziŁaŁi	1. cosa frita	4130. mvैयाŁaŁi	1. el que ayuda; plural
4071. masziraa	lugar en que se frie algo	4131. mvैयाziŁa	1. el ayudante
4072. masziraa	cosa verde	4132. mvैयाziŁaŁi	1. el ayudante; plural
4073. masziguá	1. loco	4133. ná	al, la, ló
4074. mászigua	1. chile verde	4134. náá	aquí
4075. meé	1. medio real	4135. náca	tu; pronombre primitivo
4076. meme	1. la mesa	4136. naca ay	vosotros
4077. meenáqui	1. la gallina	4137. naca eica	tu mismo
4078. mério	la niña del ojo	4138. naca eiguaca ay	vosotros mismos
4079. mésza	la claridad	4139. naci	1. el chile
4080. miya	1. e gato	4140. naci chuculát	1. el chile de chocolate
4081. miya	1. la misa	4141. naguacu	1. las naguas
4082. mina	la luna, el mes	4142. nág	aquel
4083. mistún	su; particula posesiva	4143. nagqui	el és, ó aquel és
4084. misza	2. todo genero de comida	4144. nagquiŁic	ellos, ó aquellos son
4085. móla	cosa blanca	4145. nagquiguagŁic	ellos, ó aquellos mismos
4086. muu	nuestro; particula posesiva	4146. nag eiguag	aquel mismo
4087. muú	aquellos; particula posesiva	4147. nagsziei	el és, y tambien
4088. muú	2. cojo	4148. naŁ	particula verbal
4089. muc	1. cansado	4149. nama	1. el dolor
4090. muú quiŁic	1. cansado; plural	4150. nana	particula nominal, que quiere significar el, la, lo
4091. múchu	cosa blanca	4151. nangún	la tarde
4092. muchúŁa		4152. naapè	por aquí
4093. muchuŁaŁi			
4094. muŁ			

4153. nariy	2. la narís		
4154. nariy	3. la punta, ó extremo de las cosas	4213. pá	crispéla; enfermedad
4155. nariLaeiLa	1. el doctrinero, ó maestro	4214. páayú	partícula verbal
4156. nariLa eiLaLi	1. el doctrinero, ó maestro; plural	4215. pazajutu	partícula verbal
4157. nariLeiLa	1. el discípulo	4216. packá	1. los palos, que sirven de parales en el bajareque de la cassa
4158. nariLeiLaLi	1. el discípulo; plural	4217. packi	1. la cabeza de negro; fruta
4159. nari uray	1. el tizon	4218. packi	1. la pared
4160. náru	3. la tierra	4219. packuszája	1. la piñuela; fruta
4161. náu	2. el hijo, ó hija	4220. paaguác	1. la mentira
4162. nauguacász	1. el ternero	4221. paguác	1. la selva arbol
4163. nauguapi	2. los dedos de los pies	4222. pági	1. el ócóte
4164. naupu	2. los dedos de las manos	4223. pagníc	1. la barranca
4165. nauLa	1. la preñada		1. la estáca, ó barreta de palo, que sirve para escarbar la tierra
4166. natue	allí	4224. pagtáLa	1. el que paga
4167. natuéca	allá	4225. pagtaLáLi	1. el que paga; plural
4168. natuepècà	por allá	4226. pagtaeiLa	1. el que paga
4169. neLa	partícula nominal; de nosotros	4227. pagtaeiLaLi	1. el que paga; plural
4170. neLéc	nosotros	4228. pagtágua	1. cosa pagada
4171. neLéc eiguac	nosotros mismos	4229. pajáyu	1. el guapinol; fruta
4172. nèn	yo	4230. páju	1. la cera negra
4173. nen eiguán	yo mismo	4231. paL	ya
4174. niguaciLa	1. el que pide	4232. paLa	1. el tercio
4175. niguaciLaLi	1. el que pide; plural	4233. paLama	1. la tortuga marina
4176. niguena	ninguno	4234. paLamacu	1. la ramada, ó galéra
4177. nucagua	cosa dada	4235. paalé	1. el sacerdote, y todo genero de padres
4178. nucsuc	1. sahumador, ó incensario		1. el sacerdote, y todo genero de padres; plural
4179. nucsucséma	1. pescado azado	4236. paleLé	1. la paloma de castilla
4180. nuguí	1. la paja		2. los brazos
4181. núnú	1. el mudo	4237. paluumász	2. las alas de las aves
4182. núru	1. la materia, ó podre	4238. paamáa	2. el cuñado ó cuñada
4183. nuurú	1. las bubas; enfermedad	4239. paamáa	2. el cuñado ó cuñada; plural
4184. nuemác	1. la servilleta	4240. panduu	2. el tío
4185. nuemajaeiLa	1. el sirviente, que llaman tapian	4241. panducáLi	2. el tío; plural
4186. nuemaLa	1. el que come, ó comedor		1. el papél
4187. nuema szama	la tristeza, ó cuidados	4242. papáa	por
4188. óc	nuestro; partícula posesiva	4243. papacáLi	2. la planta del pie
4189. ój	su; partícula posesiva	4244. papúc	1. el rincon de la cassa
4190. ojo	1. la tóz	4245. paraquiy	2. los senos, ó sobacos de los brazos
4191. ojóte	1. cierto mecate que hazen de corteza de arbol	4246. paraguapi	2. el pescuezo
4192. on	mi; partícula posesiva	4247. parapaci	2. los cachetes
4193. òne	cosa tierna	4248. parapáamag	1. el arbol de madre de cacao
4194. onéLe	cosa tierna; plural		1. la bebida, batido, ó chocolate frio, que usan los yndios de cacáo
4195. ònéLe	1. los muchachos	4249. paratáLi	1. el sol
4196. óneszinác	1. el ejote, vayna de frisol tierno	4250. paraszaja	1. el día
4197. óra	1. las doze del día	4251. pargúa	1. la fortuna, ó suerte
4198. ormóLa	quien recoje		1. el verano
4199. ormoLáLi	quien recoje; plural	4252. pariguála	1. la calentura de tabardillo
4200. óro	solo		1. la agua caliente
4201. orojáqui	cosa fiada	4253. pari	1. el pañuelo, y la manta
4202. orojaeiLa	el que fia	4254. parí	1. el paño de cholate, a modo de servilleta
4203. orojaeiLaLi	el que fia; plural	4255. paríc	1. la masa para las tortillas
4204. ootéc	1. el tapesco para dormir	4256. paríci	1. la cozina
4205. óto	1. el talpetate	4257. pari ei	1. la molendera
4206. ótóc	1. la tapadera, ó tapon de las cosas	4258. paritili	1. la molendera; plural
4207. ótocszaja	1. la puerta hecha de tapesco	4259. parihúy	1. el coyote, ó lobo
4208. ótógua	cosa tapada	4260. pati	
4209. ószo	2. las tripas	4261. pati chuculá[-]	
4210. ószto	1. la ulcera, ó llaga	4262. patxi	
4211. ósztó	1. llaguiento, ó podrido	4263. paaszic	
4212. ószto ambuqui	1. los lamparones, y la	4264. pasziLa	
		4265. pasziLaLi	
		4266. payámu	

4267.	payi	3. la nuera	4314.	poch poch	1. los bofés
4268.	pè	particula verbal	4315.	pógmo	1. el ciego
4269.	pè ayù	particula verbal	4316.	póre	pero
4270.	pecotúma	1. el calambre; enfermedad	4317.	poscogua	1. cosa ensartada ó
4271.	peeguc	1. el tecomáte			engarzada
4272.	péle	1. patas, ó patójo	4318.	poté	el guepil
4273.	peeló	1. el perro	4319.	potxa	1. la ropa que esta pronta
4274.	pelógua	1. cosa pelada			para labar y está en jabon
4275.	peŁteméŁa	el que buelve, ó boltéa	4320.	potxaŁa	1. la labandera
		alguna cosa	4321.	potxaŁáŁi	1. la labandera; plural
4276.	peŁtemeŁaŁi	el que buelve, ó boltéa	4322.	poszaŁa	1. la labandera
		alguna cosa; plural	4323.	poszaŁaŁi	1. la labandera; plural
4277.	penéc	enfadoso, ó ridiculo	4324.	poszáguaŁ	1. la sobra del jabon
4278.	penecaragua	1. el órozus; yerva	4325.	poszágua	1. la ropa labada
4279.	penejurác	1. el tun instrumento de	4326.	pószo	1. la perdiz
		yndios, que es un palo	4327.	póy	la verdad
		hueco	4328.	poy poy	de verdad
4280.	pére	cosas menudas, ó chicas	4329.	poyoŁ æeŁa	1. el reconcilianse
4281.	peere jutú	1. la varilla para hazer	4330.	poyoŁ æeŁaŁi	1. el reconcilianse; pural
		cassas	4331.	pýu	2. la mano
4282.	peere miya	1. los pajarillos, y pollos	4332.	puguicie	1. la mano de la piedra de
4283.	pere piya	1. la oja de vijagua			moler
4284.	péyu	1. el sonzapote; fruta	4333.	pulagua	1. cosa hecha
4285.	péyu	1. la potra del quebrado;	4334.	puŁpu	1. el polvo de la tierra
		enfermedad	4335.	púmu	1. el copal que sirve para
4286.	péze	1. la lagartija			sahumerio aromatico
4287.	pi	1. dós	4336.	punpún	1. la vegíga
4288.	piican	anteayer	4337.	punpun Łuegueve	1. el tecolote; ave
4289.	picánsuema	antenoche	4338.	púpuc	1. el petate, ó estéra
4290.	picína	1. el capulín; arbol	4339.	puri	ha; advervio
4291.	pigi	pasado mañana	4340.	puríc	1. la caja velica;
4292.	pijúszić	1. culebra de dos cabezas			instrumento
4293.	piŁatili	1. la calamidad, ó	4341.	puric	1. la caja del cuerpo
		necesidad	4342.	púrici	1. el casamiento
4294.	pima	1. el amáte; arbol	4343.	puri eiŁa	1. los novios, ó casados
4295.	pipi	1. una flor aromatica a	4344.	purimapue	1. la comida
		modo de quiebra cajéte	4345.	purimúu	2. la comida
4296.	pipi	1. cierto bejuquillo que	4346.	putxu eiŁa	1. el que ordeña, ó
		comen las bestias y llaman			corralero
		flor amarilla	4347.	putxu eiŁaŁi	1. el que ordeña, ó
4297.	pipi	1. las partes genitales de			corralero; plural
		las criaturas	4348.	pueckue	1. el higado
4298.	pipriŁa	1. la que desmóta, ó	4349.	pueckue eiŁa	1. el que tienta
		escarmena el algodón	4350.	pueŁtae	1. la flecha
4299.	pipriŁaŁi	1. la que desmóta, ó	4351.	pueŁtaŁa	1. el flechador
		escarmena el algodón;	4352.	puŁtalaŁi	1. el flechador; plural
		plural	4353.	pueŁvé	aliviarse ó aliviado
4300.	pirieiŁa	1. el que mira	4354.	puepuéc	1. el pozo
4301.	pitxueiŁa	1. el que aprieta, ó exprime	4355.	puepue jaszu	1. el tamal de marrano
		la cosa	4356.	puepue miya	1. tamal de gallina, que
4302.	pitxueiŁaŁi	1. el que aprieta, ó exprime			llaman de pipián
		la cosa; plural	4357.	puemue	el mudo, ó muda
4303.	pizuctuma	1. cierto bejuco, que	4358.	puervéc	enfadoso, necia
		lla[ma]n en castellano tripa	4359.	puetxuegua	cosa que se hecha demas,
		de vieja			que llaman ipeguil
4304.	piya	1. todo genero de oja	4360.	puesza	cosa hedionda
4305.	piya ajaszu	1. la oja, que llaman de	4361.	pueszajaya	1. la chínche hedionda
		puerco de monte	4362.	pueszamaŁi	1. el azufre
4306.	piya szogue	1. la oja con que aforran la	4363.	puveszuec	1. la jicara peste
		sal	4364.	pueszuecszina	1. la jicara de orines
4307.	piyaguayá	1. la oja de milpa	4365.	puy pari	el medio dia
4308.	prima	1. el alva del día	4366.	quí	particula conclusiva, y
4309.	poóe	1. el ocote			afirmativa
4310.	pooeŁa	1. el que alumbra	4367.	ságuac	1. la campana
4311.	pooeŁaŁi	1. el que alumbra; plural	4368.	saaguác	1. todo genero de fiérro
4312.	pocóco	1. el mapache	4369.	saŁca	distante, ó lejos
4313.	poecogua	1. cosa quebrada	4370.	saŁcagua	cosa guardada

4371.	salvia	1. la salvia; yerva medicinal	4424.	szaguLaLi	1. el que está sentado, ú ocioso; plural
4372.	sáma	la obscuridad	4425.	szaja	2. la boca
4373.	saraL huy	1. la agua fría	4426.	szaja	2. la puerta de la cassa
4374.	sarárà	cosa elada	4427.	szaja	2. el filo de todo fierro cortante
4375.	sarárà táu	1. el frío	4428.	szaL	bueno, perfecto
4376.	sasépa	aparte	4429.	száma	dentro, en
4377.	seLè	delado, ó torcido	4430.	szamac svema	de mañana
4378.	seLè guapari	1. la tarde, ó caída del sol	4431.	számaliy	2. la frente
4379.	selicaLa	1. camulgantes	4432.	szamvepuey	1. atiquipaue; pueblo
4380.	seema	1. el pescado	4433.	szán	[¿]que?; para interrogaciones
4381.	sicar	1. el tabaco	4434.	szandaa	no se que, y quien sabe que
4382.	sieigua	cosa comenzada	4435.	szanda szve aLi	[¿]y porque?; interrogativo
4383.	sigua pati	1. el ciguapate; yerva medicinal	4436.	szanda szve paraqui?	[¿]y para que?; interrogativo
4384.	simigua	cosa apagada	4437.	szanda szve na mán	[¿]y que es eso?
4385.	simpóro	1. el maíz negro	4438.	szaani	[¿]como?; interrogativo
4386.	sipani	1. el ynfierno	4439.	szaan paraqui	[¿]porque?; interrogativo
4387.	siraja eiLa	1. el mofador, ó burlador	4440.	(see Appendix 3)	
4388.	siraja eiLaLi	1. el mofador, ó burlador; plural	4441.	szampiya	1. ysguatan; pueblo
4389.	sompe	1. el piñon; arbol	4442.	szantiguina	arriba, ó en el cielo
4390.	soyugua	1. cosa empezada	4443.	szanu	1. el cojinicuil fiesta
4391.	sueuckie	1. cosa con que se amarra, ó ata	4444.	szanszaja	2. los dientes
4392.	sueuckiLa	1. el que ata, ó amarra	4445.	szanszana	2. el vestido, ó ropa de ponerse
4393.	sueugua	cosa amarrada	4446.	szanszaru	abajo el mar, las lagunas, y esteros
4394.	sueuguaa	el lugar donde se amarra	4447.	szanszeeque	2. el pecho, y costillas
4395.	suesin	1. el jarro de agua caliente	4448.	szanszogue	pasaco; pueblo
4396.	suguinaqui	1. el chiltepe	4449.	szanszueve	[¿]que?; interrogativo
4397.	surumay	cierta flor nombrada, hilas, ó muñequilla	4450.	szaprieiLa	1. el que desgrana
4398.	surúru	el viento sur, ó remolino que haze el ayre	4451.	szaprieiLaLi	1. el que desgrana; plural
4399.	suy	1. la paba; ave	4452.	szaprigua	cosa desgranada
4400.	svema	1. la noche	4453.	szápu	1. el algodon
4401.	svema	cosa negra	4454.	szápu	el guisquil, ó chayote
4402.	svemaya	1. el cangrejo	4455.	szapún	1. el jabon
4403.	sven au	1. el maíz negro	4456.	szaru	1. el jarro
4404.	sven miya	1. el paugil; ave	4457.	szaru	abajo
4405.	svemp svemp	cosa tirante	4458.	szarumapi	1. el guiscoyol
4406.	sza	en	4459.	szaug	2. la uña
4407.	szaa	2. el nombre de cada uno	4460.	szauszagua	cosa sembrada
4408.	szaeackiLa	1. el que apadrina matrimonio	4461.	szauszaLa	1. el sembrador
4409.	szaeackiLaLi	1. el que apadrina matrimonio; plural	4462.	szauszaLaLi	1. el sembrador; plural
4410.	szaeLa	1. el que lleva por delante, á otro	4463.	szayá	cosa agria
4411.	szaealaguisz	1. los calzones blancos	4464.	száya naru	1. la tierra de caparrosa
4412.	sza earickiLa	1. el aventador, ó espantador	4465.	széé	1. la leña menuda, que llaman palitos
4413.	sza earickiLaLi	1. el aventador, ó espantador; plural	4466.	széeee	1. la lombris
4414.	sza eaayaL	1. la espina	4467.	szeete	1. el gabilán
4415.	sza eiLaya	1. buena moza, hermosa ó linda	4468.	szica	1. cierto yerva, que sirve a las yndias para labar y bañarse
4416.	sza eiLumu	1. buen mozo, visarro	4469.	sziguúguí	1. la silla de sentarse
4417.	szac szaLa	1. el ladron	4470.	szila	3. los orines
4418.	szacszaLaLi	1. el ladron; plural	4471.	szina	1. los frisoles
4419.	szagua	3. la sabana, colcha, ó cobija	4472.	szinác	1. el orinador
4420.	szagua	el brasil; arbol	4473.	szináLa	1. el orinador; plural
4421.	szagui	cosa dura	4474.	szináLaLi	1. la caña brava
4422.	szague	el asiento para sentarse	4475.	szinu	1. la señora
4423.	szaguLa	1. el que está sentado, ú ocioso	4476.	szinúla	1. la señora; plural
			4477.	szinuLaLi	1. cortador
			4478.	szipieLiLa	1. cortador; plural
			4479.	szipieLiLaLi	1. el escondedor
			4480.	sziriLa	

4481. sziriŁaLi	1. el escondedor; plural	4535. tagti caragua	1. sacate de sabána
4482. sziúc	1. el cascabel, y chinchin	4536. tagti szampiŁya	1. tepeaco; pueblo
4483. sziyácu	1. el mecate	4537. tagti naru	1. la tierra llana
4484. sziyácu	1. el ilicito, y torpe amigo, ó amiga	4538. tajá	muchas veses
4485. szoeyoy	1. la lechusa	4539. taŁa tili	1. la calentura
4486. szolco	1. sin dientes	4540. táLi	2. la garganta
4487. szoto	1. el tiesto	4541. tamatxi	1. la pita flora torcida
4488. szootóc	1. el tejon, y piedras del fuego, que llaman tenamastes	4542. taanic	1. la nuca, ó cerebro
4489. szueagua	1. el que tejon, y piedras del fuego, que llaman tenamastes	4543. tani eie	1. la cabeza, ó almoada
4490. szucaszamini	cosa comida, ó mascada, ó mordida	4544. tantxi	1. sordo
4491. szuca szan szaja	2. dolor de barriga	4545. táapa	1. el nanze; fruta
4492. szuckimaŁ	2. dolor de muelas	4546. táta	2. el padre
4493. szuguan	1. las brazas	4547. tatacaLi	2. el padre; plural
4494. szuguay	1. el palo de laurel <i>alias</i> suchicaguite	4548. tatacaLi	2. los viejos
4495. szuguay	1. el lagarto, ó caimán	4549. tatahipi	1. mozeon, ó mancebo
4496. szuguay Łamuc	1. todo genero de razimo	4550. tatamiya	1. el gallo
4497. szuguic	1. el peje armado	4551. táu	1. el viento
4498. szuguieiŁa	1. la escoba	4552. táuc	1. la tortuga
4499. szuguieiŁaLi	1. el que barre	4553. tautaŁatili	1. frios, y calenturas
4500. szule	1. el que barre; plural	4554. taszélász	1. las tixeras
4501. szuŁtera	cierto pesesio	4555. tayúc	1. el sombrero
4502. szuŁtérú	1. la muger soltera	4556. té	2. <i>es verbum impurum et significat illa pars mulieris, que constituit eam in suo femineo genere</i>
4503. szuŁteruLi	1. el hombre soltero	4557. téna	cosa colorada
4504. szúni	1. el hombre soltero; plural	4558. teená	bastante, mucho
4505. szúni	1. la estrella	4559. ten au	1. maiz cólorado
4506. szúni	1. la concha del mar	4560. ten alú	1. la guacamaya; ave
4507. szúníc	1. los jutes, y caracoles de rios de agua dulce	4561. tenész	1. la cál
4508. szúunú	1. la ólla	4562. tenguiŁay	1. el leon
4509. szúunú	cosa larga	4563. tenjúsic	1. el quebrantahueso
4510. szuunúc	la hondura de las pozas, y de toda agua	4564. ten naquí	1. el chile colorado <i>alias</i> chiliguaque
4511. szuunumpati	1. el ombligo	4565. tenturi	1. la criatura tierna
4512. szupímaŁ	1. la manta doble, que llaman del rey	4566. tenturiLi	1. la criatura tierna; plural
4513. szuraya	1. el yscanal, arbol de espina á a modo de cachos	4567. tenugua	1. el sapóte
4514. szurúc	1. la muchacha	4568. tero eŁa	1. el que mata
4515. szurúŁ	1. el bordon	4569. tero eŁaLi	1. el que mata; plural
4516. szurúLi	1. la ardilla	4570. teroguasaguac	1. los dobles de las campanas
4517. szurúmu	1. la ardilla; plural	4571. tézco	1. cierto pajaro, de que abusan los yndios
4518. szurumuLi	1. el muchacho	4572. teszcoy	1. traviezo, pernicioso
4519. szuti	1. el muchacho; plural	4573. ticiéguaru	1. la hamáca
4520. szuutúc	1. los jutes, a modo de caracoles de los rios	4574. tiyieŁa	1. dormilon
4521. szuszi	1. el tizne, hollin, y carbon	4575. tieiŁaLi	1. dormilon; plural
4522. szuszumí	1. las barbas	4576. tila	1. la sal
4523. szuyá	1. el pisote	4577. tila séma	1. pescado salado
4524. szúya	2. el hermano maior	4578. tiŁtick	1. el negro, ó negra
4525. szueevél	2. primero, ó antes	4579. tita	2. la pierna
4526. szveja	el ténpisque; arbol y su fruta	4580. titica tata	2. el padrino
4527. szvema	1. la arena	4581. titica tatacaLi	2. el padrino; plural
4528. szveruéc	1. el raton	4582. titica nau	2. el ayjado
4529. tá	1. el golpeador	4583. titica naucaLi	2. el ayjado; plural
4530. taguaŁ. eihúy	particula conclusiva	4584. titica utáa	2. el madrina
4531. taguaŁ. eigua	la agua bendita	4585. titica utacaLi	2. el madrina; plural
4532. tágnagua jumu	cosa bendita	4586. tiszi	1. el haragan
4533. tagnaguajaya	2. las partes genitales del hombre	4587. tisziLi	1. el haragan; plural
4534. tagti	2. las partes genitales de la muger	4588. tisztáŁa	1. el que ventoséa
	1. la sabána	4589. tisztáŁaLi	1. el que ventoséa; plural
		4590. toctoc	1. el sensonte de la tierra; ave
		4591. tolo	cosa amarilla
		4592. tolo	1. tamate, ó emboitorio de ropa
		4593. tolo	1. el quilate, pito, ó

4594.	toloau	dormilon, arbol	4649.	txoco	1. el sanate; ave
4595.	toloszaja	1. maiz amarillo	4650.	txuguinaqui	el chiltepe
		1. el cantil, culebra, ú otra	4651.	txumáLa	1. el que besa
		su semejante con la voca	4652.	txumaLaLi	1. el que besa; plural
		amarilla	4653.	txunic	1. la bolsa que usan las
4596.	tondón	1. la tortuga marina			yndias en sus naguas
4597.	tonoja eiLa	1. engañador, ó mentiroso	4654.	txoevesuema	la media noche
4598.	tonojaciLaLi	1. engañador, ó mentiroso;	4655.	txoesuema	la media noche
		plural	4656.	txeague	1. el maiz tierno, ó
4599.	túa	1. el cacao			camagua
4600.	tugcuguá	1. tecoaco; pueblo	4657.	txeague mapve	1. la tortilla de maiz tierno
4601.	túLu	1. todo genero de flor			que llaman elotászca
4602.	tuLu ambuqui	1. la suchicúa; culebra	4658.	txeague uyueu	1. el atole de maiz tierno
4603.	tuŁtuc	cosa con que se pica, como	4659.	txemue eiLa	1. el regador de siembras
		lanza, pica etc.	4660.	txemuegua	cosa regada
4604.	tuŁtueiLa	1. el que pica	4661.	txemuetueeue	1. cierto mecate de corteza
4605.	tuŁtueiLaLi	1. el que pica; plural	4662.	txoeri eiLa	1. el que trueza, ó corta
4606.	tuŁtuLa	1. el que pica	4663.	txoerickiLaLi	1. el que trueza, ó corta;
4607.	tuŁtuLaLi	1. el que pica; plural			plural
4608.	túma	1. el siervo, ó venado	4664.	txurigua	cosa trozada
4609.	tuma ambuqui	1. la masacúa; culebra	4665.	tzutzupari	1. el sarampon, ó
4610.	tumín	1. la moneda, y todo			sarpullido; enfermedad
		genero de dinero	4666.	uc	nuestro; particula posesiva
4611.	tumuqui	todo	4667.	ucayun	por
4612.	tumuguá	cosa acabada	4668.	uchún	la papaya; fruta
4613.	tuntiLa	1. el que toca instrumentos	4669.	Ueu	1. la elotesca, tortilla de
4614.	tuntiLaLi	1. el que toca			maiz tierno triangula
		instrumentos; plural	4670.	ucszaya	1. la vieja
4615.	tupágua	cosa dejada	4671.	ucszayaLi	1. la vieja; plural
4616.	tupaLa	1. el que deja	4672.	ucszaya	1. la muger, consorte
4617.	tupaLaLi	1. el que deja; plural	4673.	ucszayaLi	1. la muger, consorte;
4618.	tupilili	el calanhilla; yerba			plural
4619.	turagua	cosa traída	4674.	ucszumu	1. el viejo
4620.	turi	1. el niño	4675.	uszumuLi	1. el viejo; plural
4621.	turiLi	1. el niño; plural	4676.	ucszumu	1. el marido
4622.	turúy	1. la guayaba; fruta	4677.	ucszumuLi	1. el marido; plural
4623.	tutúc	1. los pechos de la muger	4678.	uguál	1. la ormiga
4624.	tutueiLa	1. la ama, ó chichigua	4679.	uguig	2. todo genero de carne
4625.	tutueiLaLi	1. la ama, ó chichigua;	4680.	ugui ei	1. el ynvierno
		plural	4681.	ugui zoómo	2. la carnaza de la
4626.	tusztun	1. el tostón			pastorrilla
4627.	tuya eiLa	1. regañon	4682.	ugui juurig	las nalgas
4628.	tuya eiLaLi	1. regañon; plural	4683.	ugui titag	2. los muzlos
4629.	tuyugua	cosa comenzada	4684.	ug	su; particula posesiva
4630.	tuyuja eiLa	1. toreador provocativo	4685.	UŁcaLa	1. el que desea
4631.	tuyujaciLaLi	1. toreador provocativo;	4686.	uŁcaLaLi	1. el que desea; plural
		plural	4687.	uŁugua	cosa caída
4632.	tuevemaL	1. piojo	4688.	umaLa	1. el medico, ó curandero
4633.	tuemue eiLa	1. el que tiñe, ó tintorero	4689.	un	mi; particula posesiva
4634.	tuesz eue	lejos, ó distante	4690.	upuguá	cosa particular
4635.	txaguiciLa	1. pelliscador	4691.	uray	el fuego
4636.	txaguiciLaLi	1. pelliscador; plural	4692.	urLú	entero
4637.	txáma	bueno, y bien	4693.	urúŁ	1. el huevo
4638.	txamaverrá	mui grande	4694.	urúŁ	1. tacuilula; pueblo
4639.	txamachuerueue	mui chico	4695.	uruŁ miya	1. el huevo de la gallina
4640.	txamue	cosa agria, ó amarga	4696.	uruŁta uc	1. el huevo de tortuga
4641.	txayá	cosa mojada	4697.	uruŁ tondon	1. el huevo de la tortuga
4642.	txaya sema	1. pescado fresco	4698.	uruLa	1. el que corta frutas
4643.	txege	1. chiquimula; pueblo	4699.	uruLi	1. los campanones
4644.	txegeŁé	1. chiquimula; pueblo;	4700.	utáa	2. la madre
		plural	4701.	utacaLi	2. la madre; plural
4645.	txímaja	1. guasacapan; pueblo	4702.	uta caguayo	1. la yegua
4646.	tximajaLi	1. guasacapan; pueblo;	4703.	utacaguayu Li	1. la yegua; plural
		plural	4704.	utacaLi	viejas, ó madres
4647.	txinána	1. el alacrán, sabandija	4705.	utackotoro	1. la culebra coral
4648.	txita	1. la petaquilla de caña, ó	4706.	uta guacatz	1. la baca
		sombrero de petate	4707.	uta húy	1. el rio

4708. uti	1. el pinol de maíz	4764. yueguaLiciLa	1. el que pierde
4709. uti	1. la harina	4765. yueguaLiciLaLi	1. el que pierde; plural
4710. utu ekiLa	1. el que se tarda	4766. yueLueeiLa	1. acusador
4711. utuymag	2. la cola, ó rabo	4767. yuema	los jocotes; fruta
4712. utxi	1. el maíz cosido para las tortillas que llaman nisztamal	4768. yuepuegua	cosa vomitada
	en medio	4769. yueguueL	1. el coachipilin; arbol
4713. utxué	1. humador de tabaco	4770. (see Appendix 3)	
4714. uszckiLa	2. la suegra	4771. (see Appendix 3)	
4715. usztiy	1. mal de pujido en las criaturas	4772. (see Appendix 3)	
4716. usztu	1. el mal de madre	4773. (see Appendix 3)	
4717. usztuambuqui	1. el mosquito, gegén	4774. (see Appendix 3)	
4718. uszu	1. el agua	4775. (see Appendix 3)	
4719. uy	1. el caldo	4776. (see Appendix 3)	
4720. uy gaaacasz	2. las lagrimas		
4721. uy juraý	1. la miel, y todo genero de dulce		
4722. uy Lueguve	1. la agua de lodo		
4723. uymasza	1. el caldo		
4724. uy naqui	2. los mocos		
4725. uy nariy	1. la leche		
4726. uy tutuc	1. el malacate		
4727. uyszác	2. la saliba		
4728. uy szajáa	1. la hilandera, ó hilador		
4729. uy szaLa	1. el atol		
4730. uyúcu	nuestro; particula posesiva		
4731. vec	el cantaro		
4732. vecLuec	su; particula posesiva		
4733. veg	la espalda		
4734. velueve	2. lo de detras de la casa		
4735. veluemacu	cosa olorosa		
4736. vemmemí	mi; particula posesiva		
4737. ven	3. el excremento		
4738. vena	2. los pujos de sangre, y la disintería		
4739. vena[---]ma	cosa sazona		
4740. veptxué	cosa crecida		
4741. veptxué	cosa grande		
4742. verrá	1. la sarna; enfermedad		
4743. vesza	alli		
4744. vesztú	allá		
4745. vesztúca	cosa sabrosa, y gustosa		
4746. veszueszvé	uno		
4747. yeaL	uno falta		
4748. yeaLacaL	quanto; interrogativo		
4749. yguaL	[¿]quanto falta?;		
4750. yguáLacáL	interrogativo		
4751. yaeie	1. la saguillas, y cuentas		
4752. yami La	1. murmurador		
4753. yami eiLa	1. el murmurador		
4754. yamieiLaLi	1. el murmurador; plural		
4755. yanác	cosa vergonzosa		
4756. yarúc	cosa colgada		
4757. yarugua	lo mismo		
4758. yaaszic	1. el ysote; arbol		
4759. yeeguász	1. la yegua		
4760. yoLeguá	cosa derramada		
4761. yú	hombre, nombre anomalo, que solo tiene el vocativo		
4762. yueguagua	cosa perdida		
4763. yueguaLigua	cosa perdida		

3. Analysis of phrases and clauses from the ALS

- (1.)¹⁸⁵ <nana jautuma axue neŁa turiŁi>
 nana haw-tuma ʔahi neŁa turi-ti
 FOC skin-deer=whip DEM BEN child-PL
 'this whip is for the children'
 "este azote o cuero es para los muchachos"
- (1870.) <ʔszàn para cà nem?>
 šan para-ka? nem
 INT search-2sA PN:1s
 'what have you searched me for?'
 "¿para qué me quieres?"
- (1871.) <a szin szàn paraan nàca>
 ʔašin šan para-n naka
 NEG INT search-1sA PN:2s
 'I have not searched you for anything'
 "no te quiero para nada"
- (1872.) <ʔguena nàca?>
 wena naka
 INT:who? PN:2s
 'who (are) you?'
 "¿quién sois vos?"
- (1876.) <ōro naca eica capa jata pè qui>
 ʔoro naka k'i-ka ka-pahata peʔ kiʔ
 Sp:only PN:2s INTENS/REFL-2sP 2sA-pay IMP/FUT INTENS
 'only you yourself will pay it'
 "tú mismo serás quien solo lo has de pagar"
- (1887.) <á szin ca szàta pùla>
 ʔašin ka-šata pula
 NEG 2sS-return make
 'you do not return (to) make (it)'
 "no lo vuelvas a decir"
- (1953.) <szàŁ cangui szàma gracia ayaàc asÙec muc terò>
 šaŁ ka-n wi šama *gracia* ʔaya:-k
 good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS_{DEP}
 'it is good (that) we are in grace'
 ʔasik muk-tero
 CONJ:when 1pS-die
 'when we die'
 "bueno es estar en gracia a la hora de la muerte / bueno es que estemos en gracia,
 cuando nos muramos"

¹⁸⁵ The numbering corresponds with the position of the phrase within the concordance of all ALS-entries (see Appendix 2).

- (1954.) <paraqui jarana ayaàn a szin uý szin nà mísza>
 para ki harana ʔaya:-n ʔašin ʔuyši-n na miša
 CONJ sick be-1s_{DEP} NEG hear-1sA DET Sp:mass
 'because I am/was sick, I did not hear the mass'
 "el haber estado enfermo fue causa de que me quedara sin misa"
- (1955.) <tu eaŁ paraqui upu ayacà Linà nà ayàŁa man ca ũea condenar naca anima ó catupa ó ca puriqui Linà>
 tuk'aŁ para ki ʔupu ʔaya-ka? ʔi-na? na ʔayaŁa man
 CONJ CONJ stand be-2s_{DEP} PREP-DEM/3s DET woman DEM
 'because if you are standing with that woman'
 ka-ʔuka *condenar* naka *anima*
 2sA-do Sp:condemn PN:2s Sp:soul
 'you condemn your soul,'
 o ka-tupa o ka-puriki ʔi-na?
 Sp:or 2sA-leave Sp:or 2sA-marry PREP-DEM/3s
 'or you leave (her/it), or you marry (with) her'
 "si por haber de estar con esa mujer, te has de condenar, o la dejas, o te casas con élla"
- (1957.) <niguan nàŁqui szà Linà juicio ayacà asuèc pulaguà nà sermon>
 niwa-n naʔŁ ki ša ʔi-na? *juicio* ʔaya-ka?
 ask-1sA IMPFV INTENS PREP PREP-DEM/3s Sp:juicio be-2s_{DEP}
 'I asked (for) it (that) you would be sober'
 ʔasik pula-wa? na *sermon*
 CONJ:when make-ANT DET Sp:sermon
 'when one made (= was made?) the sermon'
 "quisiera yo que estuvieras o hubieras de haber estado en juicio al tiempo del sermón"
- (1958.) <aŁparaquiguà jarana ayacà a szin ui szicà nà miszà.>
 ʔaŁ-para kiwa-? harana ʔaya-ka?
 PREP.CAUS-? INTENS/REFL-? sick be-2s_{DEP}
 'because you are/were sick'
 ʔašin ʔuyši-ka? na miša
 NEG hear-2sA DET Sp:mass
 'you did not hear the mass'
 "de estar enfermo te provino el quedarte sin misa / porque estuvistes enfermo no oíste misa"
- (1959.) <sí szàma macutiusz naŁ ayacà asuèc imaguà na miszà ui szicà nàŁqui na doctrina.>
 sí šama maku-tyuš na(ʔ)Ł ʔaya-ka?
 Sp:if PREP house-Sp:god IMPFV be-2s_{DEP}
 'if you had been in the church,'
 ʔasik ʔima-wa? na miša
 CONJ say-ANT DET Sp:mass
 'when one spoke (=was spoken?) the mass,'
 ʔuyši-ka? naʔŁ ki na *doctrina*
 hear-2sA IMPFV INTENS DET Sp:creed
 'you would have heard the creed'
 "a estar tú en la iglesia al tiempo de la misa, hubieras oído la doctrina / si hubieras estado en la iglesia, cuando se dijo la misa, hubieras oído la doctrina"

- (1961.) <acù ayaan Guathemala>
 ʔakuʔ ʔaya:-n *Guatemala*
 go be-1s_{DEP} Guatemala
 'I am going to Guatemala'
 "me voy a estar a Guatemala"
- (1963.) <guenaqui szamà pecado mortal agi yuegualiy na gracia muneLa dios>
 wena=ki šama *pecado mortal* ʔahi
 INT:who-INTENS PREP Sp:deadly sin be+3s_{DEP}
 '(the one) who is in deadly sin'
 yiwat̪i-y na *gracia* mu-neʔa *dios*
 lose-3sA DET Sp:grace 3sP-BEN Sp:god
 'lost the grace of god'
 "el que está en pecado mortal ha perdido la gracia de dios"
- (1964.) <guenaqui nà pè agi aLa temprano pè acùg.>
 wena=ki naʔ peʔ ʔahi ʔaʔa
 INT:who-INTENS LOC come be+3s tomorrow
 '(the one) who has to be here tomorrow'
temprano peʔ ʔaku-h
 Sp:early IMP/FUT go-3sP
 '(early must be his going =) has to go early'
 "el que ha de estar mañana aquí, ha de venir temprano"
- (1968.) <guasàta ayaan>
 wašata ʔaya:-n
 enter be-1s_{DEP}
 'I am entering'
 "estoy entrando"
- (1969.) <tà ayacà>
 taʔ ʔaya-kaʔ
 come be-2s_{DEP}
 'you are coming'
 "estás viniendo"
- (1970.) <yszàpa agi>
 ʔišapa ʔahi:ʔ
 emerge/leave be+3s_{DEP}
 'he/she is emerging/leaving'
 "está aquel saliendo"
- (1977.) <an nariLa naturiLi>
 ʔan-nariʔa na turi-ʔi
 1sA-teach DET child-PL
 'I teach the children'
 "yo enseño a los muchachos"
- (1978.) <nem an nariLa naturiLi>
 nem ʔan-nariʔa na turi-ʔi
 PN:1s 1sA-teach DET child-PL
 'I teach the children'
 "yo enseño a los muchachos"

- (1979.) <nariŁa patai Łic nana turiŁi aŁparaquiguan>
 nariŁa pata-y Łik nana turi-Łi
 teach *accomplish-3pA 3PL FOC child-PL
 'the children are taught'
 7aŁ-para kiwa-n
 PREP.CAUS-? INTENS/REFL-1sP
 'by me'
 "los muchachos son enseñados por mí"
- (1980.) <nana turiŁi nariŁa Łic patai aŁparaquiguan>
 nana turi-Łi nariŁa Łik pata-y
 FOC child-PL teach 3PL *accomplish-3pA
 'the children are taught'
 7aŁ-para kiwa-n
 PREP.CAUS-? INTENS/REFL-1sP
 'by me'
 "los muchachos son enseñados por mí"
- (1981.) <nana turiŁi nariŁa patai Łic aŁparaquiguan>
 nana turi-Łi nariŁa pata-y Łik
 FOC child-PL teach *accomplish-3pA 3PL
 'the children are taught'
 7aŁ-para kiwa-n
 PREP.CAUS-? INTENS/REFL-1sP
 'by me'
 "los muchachos son enseñados por mí"
- (1982.) <an ima naŁ na misza>
 7an-ima na(?)Ł na miša
 1sA-say/speak IMPFV DET Sp:mass
 'I said/spoke the mass'
 "yo decía misa"
- (1983.) <nen an ima naŁ na misza.>
 nen 7an-7ima na(?)Ł na miša
 PN:1s 1sA-say/speak IMPFV DET Sp:mass
 'I said/spoke the mass'
 "yo decía misa"
- (1984.) <ima naŁ patai nana misza aŁparaquiguan.>
 7ima na7Ł pata-y nana miša
 say/speak IMPFV *accomplish-3sA FOC Sp:mass
 'the mass was spoken'
 7aŁ-para kiwa-n
 PREP.CAUS-? INTENS/REFL-1sP
 'by me'
 "la misa era dicha por mí"
- (1987.) <yguitzi naŁ u ɛa can na misza>
 7iwiɛ'i na7Ł 7uk'a-kan na miša
 hear IMPFV PROG-2sA_{DEP} DET Sp:mass
 'you were hearing the mass'
 "tú estabas oyendo misa"

- (1988.) <yguitzi nàŁ naca u ea can na misza>
 ʔiwiç'i naʔ† naka ʔuk'a-kan na miša
 hear IMPFV PN:2s PROG-2sA_{DEP} DET Sp:mass
 'you were hearing the mass'
 "tú estabas oyendo misa"
- (1989.) <yguitzi nàŁ u ea can naca na misza>
 ʔiwiç'i naʔ† ʔuk'a-kan naka na miša
 hear IMPFV PROG-2sA_{DEP} PN:2s DET Sp:mass
 'you were hearing the mass'
 "tú estabas oyendo misa"
- (1990.) <ca tà pè aŁa uea can confesar>
 ka-taʔ peʔ ʔaʔa ʔuk'a-kan *confesar*
 2sS-come FUT tomorrow PROG-2sA_{DEP} Sp:confess
 'you will come tomorrow to confess'
 "te vendrás a confesar mañana"
- (1991.) <ca tà pè aŁa uea can confesion>
 ka-taʔ peʔ ʔaʔa ʔuk'a-kan *confesión*
 2sS-come FUT tomorrow PROG-2sA_{DEP} Sp:confession
 'you will come tomorrow to confess (= make confession)'
 "te vendrás a confesar mañana"
- (1992.) <a sUec naŁ pùla uean na an oracion ca guaszatà.>
 ʔasik na(ʔ)† pula ʔuk'a-n na ʔan-oración ka-waşata-ʔ
 CONJ:when IMPFV make PROG-1sA DET 1sP-Sp:prayer 2sS-enter-STAT
 'when I was making my prayer, you entered'
 "cuando yo estaba haciendo mi oración, entrastes"
- (2010.) <çcà pè taguà na aszUe?>
 kaʔ peʔ ta-waʔ na ʔaš†
 INT:where? CENT come-ANT DET DEM
 'from where did this (one) come?'
 "¿de dónde vino ésto?"
- (2017.) <nana Pedro pùlai (na) macùg aŁ mucàn>
 nana Pedro pula-y (na) maku-h ʔa†mu=kan
 FOC Pedro make-3sA DET house-3sP ADV:today=DIR:ago = yesterday
 '(the) Pedro made (=built) his house yesterday'
 "Pedro hizo su casa ayer"
- (2018.) <capa uisziçà paŁ naŁ na misza nana naca ay asUec uŁù na macu tiusz>
 ka=pa ʔuyši-kaʔ pa† na(ʔ)† na miša nana naka ʔay
 EXO=PFV hear-2sA PFV IMPFV DET Sp:mass FOC PN:2p 2PL
 'you (pl.) had already heard the mass,'
 ʔasik Ø-ʔu†u-ʔ maku tyuš
 CONJ:when 3sS-fall-STAT house Sp:god
 'when the church fell (= collapsed)'
 "ya habíais oído misa vosotros, cuando cayó la iglesia"
- (2019.) <capa yguitzi paŁ naŁ pataguà nana misza aŁparaquiguaca ay asUec uŁù pataguà nana macu tiusz>
 ka=pa ʔiwiç'i pa† na(ʔ)† pata-waʔ nana miša
 EXO=PFV hear PFV IMPFV *accomplish-ANT FOC Sp:mass
 'the mass was already heard'

- ʔaʔ-para kiwa-ka ʔay
 PREP.CAUS-? INTENS/REFL-2pP 2PL
 'by you (pl.)'
- ʔasik ʔuʔu-ʔ pata-waʔ nana maku tyuʃ
 CONJ:when fall-STAT *accomplish-ANT FOC house Sp:god
 'when was fallen (= collapsed) the church'
 "ya la misa había sido oída por vosotros, cuando fue caída la iglesia"
- (2020.) <nana maestro mu nariʔa pè na doctrina tiy turiʔi>
 nana *maestro* mu-nariʔa peʔ na *doctrina* ti:ʔ turi-ʔi
 FOC Sp:teacher 3sA-teach FUT DET Sp:creed IO child-PL
 'the teacher will teach the children the creed'
 "el maestro enseñará la doctrina a los niños"
- (2021.) <nana doctrina nariʔa pè patai ucain maestro tiy turiʔi>
 nana *doctrina* nariʔa peʔ pata-y
 FOC Sp:creed teach FUT *accomplish-3sA
 'the creed will be taught to the children'
 ʔuka=ʔin *maestro* ti:ʔ turi-ʔi
 do=SUBJ Sp:teacher IO child-PL
 'by the teacher'
 "la doctrina será enseñada por el maestro a los niños"
- (2022.) <naca ayù pà guiszucà na Juan aʔparaquiguà á szin pa ayù juenuei na doctrina>
 naka ʔayuʔ paʔ wiʃu-kaʔ na Juan
 PN:2s AUX PFV beat-2sA DET Juan
 'you will have beaten Juan,'
 ʔaʔ-para kiwa-ʔ
 PREP.CAUS-? INTENS/REFL-?
 'because'
 ʔašin pa(ʔ) ʔayuʔ hini-y na *doctrina*
 NEG PFV AUX know-3sA DET Sp:creed
 'he will not have known the creed'
 "tú habrás azotado a Juan, porque no habrá sabido la doctrina"
- (2023.) <ʔuisziy pa ayù misza?>
 ʔuyʃi-y pa(ʔ) ʔayuʔ miʃa
 hear-3sA PFV AUX Sp:mass
 'will he have heard the mass?'
 "¿habrá oído misa?"
- (2024.) <uisziy ayù pa qui na misza>
 ʔuyʃi-y ʔayuʔ pa(ʔ) ki na miʃa
 hear-3sA AUX PFV INTENS DET Sp:mass
 'he would himself have heard the mass'
 "si habrá oído misa"
- (2025.) <guiszùpe ayu patai nana Juan aʔparaquiguàca>
 wiʃu-ʔ peʔ ʔayuʔ pata-y nana Juan
 beat-STAT CENT AUX *accomplish-3sA FOC Juan
 '(the) Juan will have been beaten'
 ʔaʔ-para kiwa-ka
 PREP.CAUS-? INTENS/REFL-2sP
 'by you'
 "Juan habrá sido azotado por ti"

- (2026.) <pùla penitencia>
pula-Ø *penitencia*
make/do-IMP.VT Sp:penitence
'do penitence!'
"haz penitencia"
- (2027.) <pùla naca penitencia.>
pula-Ø naca *penitencia*
make/do-IMP.VT PN:2s Sp:penitence
'do (your) penitence!'
"haz tu penitencia"
- (2028.) <szàŁ Łan muc pùla na oracion.>
ša† †an muk-pula na *oración*
good OPT 1pA-make DET Sp:prayer
'they say, it is good (that) we make (= say) our prayer'
"dicen que es bueno que hagamos oración"
- (2029.) <muc pùla Łan na penitencia>
muk-pula †an na *penitencia*
1pA-make OPT DET Sp:penitence
'they say, we (should) make penitence'
"dicen que hagamos penitencia"
- (2030.) <pùla Łan patai na penitencia aŁparaquiguàc>
pula †an pata-y na *penitencia*
make OPT *accomplish-3sA DET Sp:penitence
'they say, the penitence should be made'
ʔa†-para kiwa-k
PREP.CAUS-? INTENS/REFL-1pP
'by us'
"dicen que la penitencia sea hecho por nosotros"
- (2031.) <ca yguitzi ma nàŁ na misza tumuqui pari, ca taana naŁ ical santo>
ka-ʔiwiç'i ma naʔ† na miša tumu-ki pari
2sA-hear COND IMPFV DET Sp:mass QUANT-DISTR day
'you should have heard the mass every day,'
ka-tana na(ʔ)† ʔik'al *santo*
2sS-be IMPFV INDEF Sp:saint
'you were a saint'
"si oyeras misa todos los días, fueras un santo "
- (2032.) <si yguitzi ma naŁ patai na misza tumun pari qui aŁparaquiguaca, catana naŁ ical santo>
si ʔiwiç'i ma na(ʔ)† pata-y na miša
Sp:if hear COND IMPFV *accomplish-3sA DET Sp:mass
'if the mass should have been heard'
tumu-n pari=ki ʔa†-para kiwa-ka
QUANT-IRR? day=DISTR PREP.CAUS-? INTENS/REFL-2sP
'every day by you'
ka-tana na(ʔ)† ʔik'a† *santo*
2sS-be IMPFV INDEF Sp:saint
'you were a saint'
"si la misa fuese oída por ti todos los días, serías un santo"

- (2033.) <maŁca ormocà ma szaŁ tumuqui na jamaca ay aszinvaà ca ima tumuqui szamà na ca confesion a szin ca Łuèèue na perdon>
 maŁka ʔormo-kaʔ ma šaŁ tumu=ki na hama-ka ʔay
 CONJ gather-2sA COND good QUANT=DISTR DET sin-2pP 2PL
 'although you should have gathered well all your (pl.) sin(s),'
 ʔašin paʔ ka-ʔima tumu=ki šamaʔ na ka-*confesión*
 NEG PFV 2sA-say QUANT=DISTR PREP DET 2sP-
 Sp:confession
 'if you do not say all in your confession,'
 ʔašin ka-Łik'i na *perdón*
 NEG 2sA-find DET Sp:forgiveness
 'you do not find forgiveness'
 "aunque hayáis vosotros recogido bien todos vuestros pecados, si no los decís todos en tu confesión, no conseguiréis el perdón"
- (2034.) <maŁca oromo ma pataguag aŁparaquiguaca ay tu muqui na jamaca a szinvaà ca ima tumu qui szamà naca confesión a szinca Łuecue na perdon>
 maŁka ka-ʔoromo ma pata-wa-h
 CONJ 2sA-gather COND *accomplish-ANT-3sP
 'although (they) should have been gathered'
 ʔaŁ-para kiwa-ka ʔay
 PREP.CAUS-? INTENS/REFL-2pP 2PL
 'by you (pl.)'
 tumu=ki na hama-ka
 QUANT=DISTR DET Sp:sin-2sP
 'all your sin(s)'
 ʔašin paʔ ka-ʔima tumu=ki šamaʔ naka *confesión*
 NEG PFV 2sA-say QUANT=DISTR PREP PN:2s Sp:confession
 'if you do not say all in your confession'
 ʔašin ka-Łik'i na *perdón*
 NEG 2sA-find DET Sp:forgiveness
 'you do not find forgiveness'
 "aunque vuestros pecados hayan sido bien recogidos por vosotros, si no los decís todos en tu confesión, no conseguiréis el perdón"
- (2035.) <maŁca ueaca mà restituir szan gui szac szacà ca jama Łà>
 maŁka ʔuk'a-ka maʔ *restituir* šan wi šakša-kaʔ
 CONJ do-2sA COND Sp:replace INT DIR? steal-2sA
 'even if you should have replaced what ? you have stolen,'
 ka-hama-Łaʔ
 2sA-sin-PAST.ACT
 'you (have) sinned.'
 "aunque hayáis restituído lo que hurtasteis, pecasteis"
- (2036.) <pulacà ma ayù na penitencia nucai naca na palè aya pàpè, an uea naŁqui absolver naca szamà na pari axuè>
 pula-kaʔ ma ayuʔ na *penitencia* nuka-y naka
 make-2sA COND AUX DET Sp:penitence give-3sA PN:2s
 '(if) you should have made the penitence (that he) gave'
 na pale ʔayapaʔ peʔ
 DET Sp:priest year CENT
 'the priest last year'

- (2037.)
- ʔan-ʔuk'a na(ʔ)ʔ ki *absolver* naka
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I would absolve you'
 šamaʔ na pari ʔašiʔ
 PREP DET day DEM
 'on this day (= now)'
 "si hubieras hecho la penitencia que te dio el padre el año pasado, te absolviera yo ahora
 <si pulà ma ayù pataguag aŁparaquiguàca na penitencia nucai naca na palè aya pà can
 pè an uea naŁqui absolver naca szamà na pari axue>
 si pula ma ʔayuʔ pata-wa-h
 Sp:if make COND AUX *accomplish-ANT-3sP
 'if (it) would have been made'
 ʔaʔ-para kiwa-ka na *penitencia*
 PREP.CAUS-ʔ INTENS/REFL-2sP DET Sp:penitence
 'the penitence by you'
 nuka-y naka na pale ʔayapaʔ ka-n peʔ
 give-3sA PN:2s DET Sp:priest year EXO-SUBJ/IRR CENT
 '(that) the priest gave you last year'
 ʔan-uk'a na(ʔ)ʔ ki *absolver* naka
 1sA-do IMPFV INTENS Sp:absolve PN:2s
 'I would absolve you'
 šamaʔ na pari ʔašiʔ
 PREP DET day DEM
 'on this day (= now)'
 "si la penitencia que te dio el padre el año pasado hubiese sido hecha por ti, te
 absolviera yo ahora"
 (2038.)
 <mu uea can pè qui confesar naca na palè ca nuca pà pè tiyg na doctrina.>
 mu-ʔuk'a ka-n peʔ ki *confesar* naka na pale
 3sA-do EXO-ʔ FUT INTENS Sp:confess PN:2s DET Sp:priest
 'the priest (himself) will confess you'
 ka-nuka paʔ peʔ ti:ʔ-h na *doctrina*
 2sA-give PFV FUT IO-3sP DET Sp:creed
 '(if) you gave (= told) him the creed'
 "te confesará el padre, si le dieres la doctrina"
 (2039.)
 <mu uea cambequi confesar naca na palè nucà pà pè patai tiyg aŁparaquiguaca na
 doctrina>
 mu-ʔuk'a ka-n peʔ ki *confesar* naka na pale
 3sS-do EXO-SUBJ/IRR FUT INTENS Sp:confess PN:2s DET Sp:priest
 'the priest (himself) will confess you'
 nuka paʔ peʔ pata-y ti:ʔ-h
 give PFV FUT *accomplish-3sA IO-3s
 '(if) were given (= told) to him'
 ʔaʔ-para kiwa-ka na *doctrina*
 PREP.CAUS-ʔ INTENS/REFL-2sP DET Sp:creed
 'the creed by you'
 "te confesará el padre, si la doctrina le fuere dada por ti"

- (2040.) <aszin pà pè ca acù misza aŁa mu uea pè castigar naca dios ay>
 ʔašin paʔ peʔ ka-ʔakuʔ miša ʔaʔa
 NEG PFV FUT 2sS-go Sp:mass tomorrow
 '(if) you will not have gone (to) mass tomorrow'
 mu-ʔuk'a peʔ castigar naka dios ʔay
 3sA-do FUT Sp:punish PN:2p Sp:god 2PL
 'god will punish you (pl.)'
 "si no fueréis a oir misa mañana, os ha de castigar dios"
- (2041.) <aŁi aguiszù na turiLi a erLèque>
 ʔaʔi ʔa-wišu-ʔ na turi-ʔi ʔa-ʔerteke
 PREP.CAUS 3sS-beat-STAT DET child-PL 3pS-get frightened
 'because of beating (= one beats) the children, they get frightened'
 "de azotar a los niños se espantan"
- (2042.) <neŁa ca pùla ca cumbision pata szàŁ szàŁ na jamàca>
 neʔa ka-pula ka-kumbisyon
 BEN 2sA-make 2sP-Sp:confession
 'in order to make your confession,'
 pata-Ø šama šaʔ na hama-ka
 *accomplish-IMP.VT PREP good DET sin-2sP
 'remember well your sin(s)'
 "para confesarte pensad bien tus pecados"
- (2043.) <taí na maestro nari Ła in na turi Li>
 Ø-ta:-yi-ʔ na maestro nariʔa=ʔin na turi-ʔi
 3sS-come-LIG-STAT DET Sp:teacher teach=SUBJ DET child-PL
 'the teacher came to teach the children'
 "vino el maestro a enseñar a los niños"
- (2044.) <aŁi ca yguitzi na misza szamà Li guína a szin ca pùla na jamaà>
 ʔaʔi ka-ʔiwig'i-ʔ na miša šama=ʔi wina
 PREP.CAUS 2sA-hear DET Sp:mass PREP=PL fiesta/holiday
 'because you hear the mass on holidays'
 ʔašin ka-pula na hama:
 NEG 2sA-make DET pecado
 'you do not make (= commit) sin'
 "por oir misa en los días festivos no pecas"
- (2045.) <a pobre nen.>
 ʔa pobre nen
 EXCL Sp:poor PN:1s
 'oh, me poor (thing)'
 "¡o me miserum!"
- (4440.) <szam pari paŁ.>
 šam pari paʔ
 PREP day PFV
 '(it is) already day'
 "ya es de día"

- (4770.) <¿nem in púlaguàn?>
 nem ʔin pula-wa-n
 PN:1s INT make-ANT-SUBJ
 '(is it) me what/who I have made it? = have I done it?'
 "¿yo lo hice?"
- (4771.) <a señor naca qui púla Làn.>
 ʔa señor naca ki pula-ʔa-n
 AFF Sp:sir PN:2s INTENS make-PAST.ACT-SUBJ
 'yes sir, (it is) you yourself (who) did it'
 "sí señor, tú lo hiciste"
- (4772.) <¿naca in szàc szà guacàn na tumin?>
 naca ʔin šakša-wa-kan na tumin
 PN: 2s INT steal-ANT-2sA_{DEP} DET money
 '(is it) you who/what you have stolen the money? = have you stolen the money?'
 "¿tú hurtaste el dinero?"
- (4773.) <a szin señor aszin nen szac szaan>
 ʔašin señor ʔašin nen šakša-n
 NEG Sp:sir NEG PN:1s steal-SUBJ
 'no sir, (it is) not me/I (who) stole it'
 "no señor, no lo hurté yo"
- (4775.) <a szin señor aszin nen szàc szà Làn>
 ʔašin señor ʔašin nen šakša-ʔa-n
 NEG Sp:sir NEG PN:1s steal-PAST.ACT-SUBJ
 'no sir, (it was) not me/I (who) did steal it'
 "no señor, no lo hurté yo"
- (4775.) <nana macu pulà pataguàg aL i Pedro>
 nana maku pula-ʔ pata-wa-h ʔaʔi Pedro
 FOC house make-STAT *accomplish-ANT-3sP PREP.CAUS Pedro
 'the house was made (= built) by Pedro'
 "la casa fue hecha por Pedro"
- (4776.) <nana macu pulà pataguàg aL paraquiguà Pedro>
 nana maku pula-ʔ pata-wa-h
 FOC house make-STAT *accomplish-ANT-3sP
 'the house was made (= built)'
 ʔaʔ-para kiwa-ʔ Pedro
 PREP.CAUS-? INTENS/REFL-? Pedro
 'by Pedro'
 "la casa fue hecha por Pedro"

4. ALS lexicon

The lexicon contains the lexical entries and contexts from the ALS; grammatical contexts have been eliminated. Entries that have been reconstructed based on the ALS-data alone are marked with *; entries that are reconstructed based on comparative lexical data that are not included in this lexicon are marked with **.

A

ʔa:

ʔa:. [ADV]. yes, *affirmative*: <aa> "sí"

ʔa

ʔa. [EXCL]. oh, ah; *exclamation*: <a> "o"

ʔača

ʔača. [N]. axe [L-S]: <acha> "hacha"

ʔačka

ʔačka. [VT?]. with open/spread legs: <achca> "abierto de piernas"

ʔahʔ

ʔahʔ. [ADV]. yes, *affirmative*: <agʊe> "sí"

ʔak(ʔ)aʔ

ʔak'aʔ [ADV]. still, yet: <aɛaʔ> "todavía", "también, así"

ʔašin=ʔak'aʔ [NEG=ADV]. not yet: <aszinaɛaʔ> "todavía no"

ʔikaʔ=ʔak'aʔ [NUM=ADV]. one yet = one is still missing: <yɛaʔ aɛaʔ> "uno falta"

ʔiwaʔ=ʔakaʔ [INT=ADV]. how many yet?: <yguáʔ acáʔ> "¿cuánto falta?"

ʔakaniʔ

ʔakaniʔ [ADV]. so, like this: <akani> "así"

ʔakan ka-n wi [ADV EXO=IRR? DIR?]. it is so/like this: <acan canguí> "así es"

ʔakan šiki [ADV EXTEN]. so/like this as well: <acán szuequi> "también, así también"

ʔaku

ʔakuʔ. [VI]. to go, walk: <acú> "ir, andar"

*ʔaku ʔantaʔ = [kundaʔ]. [VI=VI]. go!: <cun dâ> "ve o anda tú con dios", "id vosotros con dios"

*ʔaku ʔantaʔ taʔ = [kundaʔ taʔ]. [VI=VI DIR]. go away!: <cun dâ tá> "ve o anda tú con dios"
ʔaku=šama. [VI=PREP]. go inside = sadness: <acuszâma> "tristeza"

ʔaku-ʔa. [VI-AGT]. (the one) who goes/went: <acùʔa> "el que va o iba"

ʔaku-ʔa-ʔ. [VI-PAST-AGT]. (the one) who goes/went: <acùʔaʔ> "el que va o iba"

ʔaku-ki. [VI-REFL?]. go oneself? = walk, go for a walk: <acuqui> "andar o pasear"

ʔaku-ki-ʔa [VI-REFL?-AGT]. (the one) who walks/goes = vagabond: <acuquiʔa> "vagamundo"

ʔakuša

ʔakuša. [N]. needle [L-S]: <acúsza> "la aguja"

ʔakuyš

ʔakuyš. [?]. *expression* (meaning not understood): <acuysz> "refrán, con lo que quieren significar, disque"

*ʔak'ʔ

*ak'ʔ. [ADV]. now, *distance in time

*ʔak'ʔ=ka. [ADV=EXO]. until: <aɛʊeca>

ʔak'ʔ=ka ʔaya-k ʔanik. [ADV=EXO VI-VN? ADV]. until: <aɛʊeca ayac anic> "ahora ocho días"

ʔak'ʔ=ka ʔaya-k ʔik'aʔ ʔayapa. [ADV=EXO VI-VN? NUM N]. until: <aɛʊeca ayac yeál ayapa> "ahora un año"

ʔak'ʔ=ka ʔik'aʔ ʔawa. [ADV=EXO NUM N]. until: <aɛʊeca yeál agua> "ahora un mes"

*ʔak'ʔ=peʔ. [ADV=CENT]. since: <aɛʊepè>

ʔak'ʔ=peʔ ʔaya-k ʔik'aʔ pari. [ADV=CENT VI-VN? NUM N]. since: <aɛʊepè ayac yeál pari> "de aquí a ocho días"

ʔak'ʔ=peʔ ʔaya-k ʔik'aʔ ʔayapa. [ADV=CENT VI-VN? NUM N]. since: <aɛʊepè ayac yeál ayapa> "de aquí a un año"

ʔak'ʔ=peʔ ʔaya-k ʔik'aʔ ʔawa. [ADV=CENT VI-VN? NUM N]. since: <aɛʊepè ayac yeál agua> "de aquí a un mes"

ʔaɫ-

ʔaɫ-. [PREP]. on top of, over, by: <aɫ> "por, encima o sobre"

ʔaɫi. [PREP]. by, through, over: <aɫi> "por, encima, sobre"

šanta ši ʔaɫi. [INT EXTEN PREP]. and why?: <szanda szue aɫi> "¿y por qué?"

wena ʔaɫi. [INT PREP]. by/because of whom?: <guèna aɫi> "¿por quién?"

ʔaɫ-pama-h. [PREP-N-3sP]. on top of his arm = shoulder: <aɫpámag> "hombros"

ʔaɫ-para kiwa-X. [PREP-? REFL-1/2/3P]. by X-self: <aɫparaquiguá> "por"

ʔaɫ-te. [PREP-N]. *on top of/over female genitals = male genitals: <aɫtè> "*verbum impurum et significat membrum virile*"

ʔaɫte-piši. [PREP-N-N]. genital-cup = urinal?: <aɫte pueszue> "jícara peste"

čaraʔin-ʔaɫte. [N-N]. ?-genitals = *penis?: <čarraven aɫtè> "*verbum impurum et significat pendiculus*"

muš-ʔaɫte. [N-N]. hairs of genitals = pubic hair: <musz aɫtè> "est verbum disolutum per quod significatur pilos continentes in partes genitales"

ʔaɫ-wapi. [PREP-N]. over the foot = dorsum of the foot: <aɫguapi> "empeine del pie"

ʔaɫa

ʔaɫa. [ADV]. tomorrow: <aɫa> "mañana"

***ʔali-**

*ʔali. [VI/?ADJ?]. *to reveal itself / be manifest

ʔali-ya. [VI-TRANS]. to show, demonstrate, present: <aliya> "manifestar, demostrar o enseñar"

ʔaɫkalti

ʔaɫkalti. [N.]. mayor [L-S]: <aɫkalti> "alcalde"

ʔaɫmuʔ

ʔaɫmuʔ. [ADV]. today: <aɫmú> "hoy"

ʔaɫmu=ka-n. [ADV=EXO-IRR]. *today ago = yesterday: <aɫ mu cân> "ayer"

ʔaɫmu=ka-n siʔma. [ADV=EXO-IRR N]. *today ago night = yesterday night: <aɫ mu can svema> "anoche"

ʔaɫmuɫ

ʔaɫmuɫ. [N]. measure (unit for dry capacity) [L-S]: <aɫmuɫ> "almud"

ʔaɫtepet

ʔaɫtepet. [N]. town, village [L-N]: <aɫtèpét> "pueblo"

ʔaluʔ

ʔaluʔ. [N]. macaw [L-M]: <alú> "guacamaya"

ten-ʔaluʔ. [ADJ-N]. red-parrot = macaw: <ten alú> "guacamaya"

***ʔama**

ʔamaʔ. [ADJ?]. *extra, also: <amaá> "está sobrada"

ʔama=ʔeke [ADJ?=?]. *expression* = listen!, what do you say?: <amaeqè> "refrán, con el que quieren significar, oiga o ¿qué dices?"

ʔama=šan ʔaka naman [ADJ?=INT? ? ?].

expression (meaning not understood):

<amaszán áca namán> "refrán"

ʔama=šiki. [ADJ?=EXTEN]. as well, and:

<amaszuequi> "también, et, y"

ʔampi

ʔampi. [ADV]. now: <ambué> "ahora"

ʔampuki

ʔampuki [N]. snake, serpent: <ambuqui> "culebra"

ʔamu-ʔampuki. [N-N]. spider-serpent = cancer:

<amuambuqui> "el herpes o cancro"

ʔošto-ʔampuki. [N-N]. ulcer/rotten-serpent = king's evil, *streptothricosis* (illness): <ósztoambuqui> "los lamparones y la crisispela; enfermedad"

ʔuštu-ʔampuki. [N-N]. *groaning?-serpent = uterine bleeding (*metrorrhagia*): <usztuambuqui> "el mal de madre"

tuɫu-ʔampuki. [N-N]. flower-serpent = type of snake: <tuɫuambuqui> "suchicúa; culebra"

tuma-ʔampuki. [N-N]. deer-snake = boa constrictor, *mazacoatl*: <tumaambuqui> "masacúa; culebra"

ʔamuʔ (1)

ʔamuʔ. [N]. grandfather: <amú> "abuelo"

ʔamuʔ (2)

ʔamu. [N]. spider [L-M/MZ]: <amú> "araña"

ʔamu-ʔampuki. [N-N]. spider-serpent = cancer: <amuambuqui> "herpes o cancro"

ʔamuɫ

ʔamuɫ. [N]. nettles [L-M]: <amùɫ> "ortiga o chichicastle"

***ʔanta**

ʔanta. [VI/IMP]. let's go! [L-S]: <ʔandà> "vamos; defectivo"

ʔanta-maɫ=taʔ. [VI-EXH=DIR]. go away!:

<andamaɫtà> "vámonos; defectivo"

ʔanik

ʔanik. [ADV]. today, now [L-M]: <anic>
"hoy"

ʔanik=pari. [ADV=N] today day = today, now:
<anic pari> "en este día"

ʔaki-ka ʔaya-k ʔanik. [ADV-EXO VI-VN? ADV]. in eight days from now = in a week's time: <æʋeca ayac anic> "ahora ocho días"

ʔanila

ʔanila. [N]. ring [L-S]: <anila> "anillo"

ʔanima

ʔanima [N]. heart, soul [L-S]: <anima>
"corazón"

ʔanimaš

ʔanimaš. [N]. *hour of prayer [L-S]:
<animasz> "las ánimas, las ocho de la noche"

ʔanuʔ

ʔanuʔ. [N]. aunt: <anú> "tía"

ʔapa

ʔapa. [INT] how?, *question word*: <apa>
"¿cómo?, interrogativo"

ʔapala

ʔapala. [VT]. to open [L-S]: <apâla> "abrir"

ʔapata > pata**ʔara (1)**

ʔara. [N]. worm: <ara> "gusano"

ʔara. [N]. fly: <ara> "mosca"

ʔara (2)

ʔara. [VT]. to send: <ara> "enviar"

ʔara-wa. [VT-PART.PF]. sent thing: <aragua>
"cosa enviada"

ʔara-ʔa. [VT-AGT]. (the one) who is sent =
envoy, messenger: <araʔa> "enviado,
mensajero"

ʔara-ki. [VT-AP]. *to (generally) send = to
watch: <araqui> "mirar"

ʔara-ki-ʔa. [VT-AP-AGT]. (the one) who
watches: <araquiʔa> "mirón"

ʔaranšaš

ʔaranšaš. [N]. orange [L-S]: <aranszasz>
"naranja"

ʔaratak

ʔaratak. [N]. maguey: <aratac> "obillo,
maguey"

ʔasero

ʔasero. [N]. steel: <acero> "el eslabón o acero"

ʔasukar

muʔ-ʔasukar. [ADJ-N]. white-sugar [L-S]:
<muʔ. azúcar> "azucar"

ʔašin

ʔašin. [ADV]. no, not, *negative marker*:
<aszin> "no"

ʔašin=ʔak'aʔ. [NEG=ADV]. not yet:
<aszinaeál> "todavía no"

ʔašin=paʔ. [NEG=ADV.PFV]. *not yet = if
not: <aszin vaa> "sino"

ʔašin=šaʔ. [NEG=ADV]. not good = bad:
<aszin szaʔ> "malo, no está bueno"

ʔašin=satka. [NEG=ADV]. not distant = close:
<aszin saʔca> "cerca"

ʔašin=tišk'i. [NEG=ADV]. not far: <aszin
tueszeʋe> "no lejos"

ʔašin=ša.n. [NEG=INT]. not-what = (there is)
nothing: <aszin szân...> "nada"

ʔašiʔ ~ ʔahiʔ

ʔaši. [DEM]. this, *demonstrative*: <aszʋe> "este"

ʔahiʔ. [DEM]. this: <agʋé> "este"; <axʋe>;
<axʋé>; <axʋè> "hic, haec, hoc", "ésta"

ʔasik

ʔasik. [ADV]. when, temporal subordinator:
<asʋec> "cuando"

ʔatak

ʔata-k. [N-INSTR]. instrument of the back =
blouse: <atác> "el guepil"

ʔawa

ʔawa. [N]. moon, month, grandmother: <agua>
"luna, mes, abuela"

ʔawan

ʔawan. [NEG]. negative marker for
imperatives: <aguán> "no; para oraciones de
imperativo negativas"

ʔaya (1)

ʔaya. [VI]. be (in a place) [L-M?]: <ayà>
"estar; anómalo"

ʔaya-k. [VI-VN?]. being = like, as: <ayác>
"como, así como, parece"

ʔak'i-ka ʔaya-k ʔanik. [ADV-EXO VI-VN? ADV]. in eight days being now = in a week's time: <æʋeca ayac anic> "ahora ocho días"

ʔaya (2)

*ʔaya. [N]. brother, companion, friend

ʔaya-n pantu. [N-1sP N]. ʔ-1sP brother-in-law
= father-in-law of my son/daughter: <ayân
pandû> "mi concuño"

ʔaya-n ʔuči. [N-1sP N]. ʔ-1sP mother-in-law = mother-in-law of my son/daughter: <ayán uchi> "mi consuegra"

ʔaya-n naʔu. [N-1sP N]. ʔ-1sP son/child = *friend, companion: <ayán nau> "como hermano"

ʔayaʔa > haya

ʔayapa

ʔayapa. [N]. year [L-M?]: <ayapá> "año"

ʔaki-ka ʔayak ʔik'aʔ ʔayapa [ADV-EXO ADV NUM:1 N]. one year ago: <æveca ayac yeál ayapa> "ahora un año"

ʔaki-pe ʔayak ʔik'aʔ ʔayapa [ADV-CENT ADV NUM:1 N]. in a year from now: <ævepè ayac yeál ayapà> "de aquí a un año"

ʔayma

ʔayma. [N]. maize, corn (on the cob) [diff.]: <ayma> "mazorca"

ʔayuʔ

ʔayu. [VI]. *optative auxiliary*: <ayù> "partícula optativa"; "haber o tener; defectivo"

wena ʔayu=ki. [INT? VI=INTENS]. if someone: <guena ayuqui> "si alguno"

ʔayuna

ʔayuna. [N]. fasting, lent [L-S]: <ayúna> "ayuno"

ʔaʔu

ʔaʔu. [N]. maize, dehydrated corn (kernels) [L-M]: <aù> "maíz"

sin-ʔaʔu. [ADJ-N]. black-corn: <sven au> "maíz negro"

ten-ʔaʔu. [ADJ-N]. red-corn: <ten au> "maíz colorado"

tolo-ʔaʔu. [ADJ-N]. yellow-corn: <toloau> "maíz amarillo"

*ʔaʔu-ʔak = ʔawʔak. [N-N]. maize-plate (L-M) = tortilla griddle: <auʔ.ác> "comal"

ʔaʔu-k. [N-INSTR]. corn-instrument = calcium carbonate (used as fertilizer): <aúç> "tizate"

CH

čaraʔin

čaraʔin-ʔaʔte. [N-N]. ʔ-genitals = *penis?: <čarraven aʔtè> "*verbum impurum et significat pendiculus*"

****čawi**

čawi. [ADJ]. hard, stiff [L-M]: <chagui> "cosa dura"

šawi. [ADJ]. hard, stiff: <szagui> "cosa dura"

****čehē**

čehē. [N]. woodpecker (bird) [L-M]: <chegche> "boca rota"

čēʔna > seʔe

čiči

čiči. [VI]. defecate: <chichí> "exonerar el vientre"

čiči-Ø. [VI-NOM]. defecating = excrement: <chichi> "el excremento"

čō:

čō:. [VT]. beat chocolate [L-N]: <choo> "batir chocolate"

čō-k'e-ʔa. [VT-AP-AGT]. (the one) who beats chocolate: <chooéʔa> "el que bate"

čō-k'e-k. [VT-AP-INSTR]. chocolate beater: <chooēc> "el molinillo"

***čok(o)mo**

*čok(o)mo. [VT]. to grind, mince

čokmo-ʔ. [VT-STAT]. **minced (meat): <chogmo> "cara [sic: carne] picada"

čukulat

*čukulat. [N]. chocolate [L-N]

nak'i-čukulat. [N-N]. chilli (used) for chocolate: <naei chuculá> "chile de chocolate"

pati-čukula(t). [N-N]. cloth (used for) chocolate: <pati chuculá> "el paño de cholate, a modo de servilleta"

***čī-**

čīy. [ADJ]. small, little [diff.]: <chvey> "poco"

*čiri- [ADJ]. small

*čiri-haya. [ADJ-N]. small-female = girl, young woman: <szuraya> "muchacha"

*čiri-humu. [ADJ-N]. small-male = boy, young man: <szurúmu>, <szurumo> "muchacho"

čuru-čirik'i. [ADJ-ADJ]. small-small = smaller: <churu churveēve> "más chico"

čiri-k'i. [ADJ-ADJ.POS]. small, little: <churveēve> "chico, pequeño"

čuru-čirik'i. [ADJ-ADJ]. small-small = smaller: <churu churveēve> "más chico"

mas-čiriki. [ADJ/INTENS-ADJ]. more small = very small: <maschurveēve> "pequenito, muy chico"

č'ama-čiriki. [ADJ/INTENS-ADJ]. good/well-small = very small: <txamachuevue> "muy chico"

E

ʔeʔa (1)

ʔeʔa. [ADJ]. new: <eʔa> "cosa nueva"

*ʔeʔa- (2)

ʔeʔa-ha. [N-ʔ]. tongue: <eʔa> "lengua"

ʔeʔa-k-tuma. [N-ʔ-N]. tongue (of) deer = type of herb: <eʔa> "lengua de venado; hierba"

ʔeʔa-wa-ki-ʔa. [N-ʔ-INCHʔ-AGT]. *(the one) who becomes ʔ of tongue = liar: <eʔa> "embarrador"

ʔeʔama

ʔeʔama. [VT]. to lend sb.: <eʔama> "prestar la persona como apoderado para alguna diligencia"

ʔeʔma-ʔa. [VT-AGT]. (the one) who lends, lender: <eʔmaʔa> "el que presta"

ʔema

ʔema. [VT]. to sew, lace: <ema> "coser cosas de costuras"

ʔema-k'i-ʔa. [VT-AP-AGT]. (the one) sews = tailor: <emaʔiʔa> "costurero, que cose"

ʔepet

ʔepet. [N]. icaco (fruit): <epét> "cacos; fruta del mar"

ʔepeʔe

ʔepeʔe. [VI]. to fear: <epeʔe> "temer"

ʔereʔa

ʔere-ʔa. [*VI-CAUS]. to scare (away), frighten sb.: <eréʔa> "espantar"

ʔerʔe-ke. [VT-AP/INCH]. become scared, frightened: <erʔeque> "espantarse"

ʔereʔa-ki-ʔa. [VT-AP-AGT]. (the one) who scares/frightens: <ereʔaquiʔa> "espantador"

ʔetaka

ʔeta-ka. [*VI-CAUS]. to harvest: <etaca> "tapiscar"

etak'a-k'i-ʔa. [VT-AP-AGT]. (the one) who harvests, harvester: <etaʔaʔiʔa> "tapiscador"

ʔewe

ʔewe. [ADJ]. old: <ewe> "cosa vieja"

ʔeyet

ʔeyet. [ADV]. *there is no(thing); *negative existential*: <eyet> "no; adverbio para *sum est fui*"

H

hači

hači. [VT]. to pick up, gather, collect [L-M]: <jachue> "pepenar o recoger tierra o basura"

hači-k'i-ʔa. [VT-AP-AGT]. (the one) who collects rubbish: <juehuekiʔa> "recogedor de basura"

hač(')i

hač'i. VT. to scrape, scratch [L-M]: <jachue> "rascar"

hahi

hahi. N. avocado: <jági> "aguacate"

ha:ma:

ha:ma:ʔ. [ADJ]. ripe (thing): <jaamáa> "cosa madura"

hama-ya. [ADJ-TRANS]. to make ripe = to cook: <jamaya> "madurar, dar cocimiento y sazonar la comida"

muʔ-(h)ama-y. [ADJ-ADJ-ʔ]. white-ripe = half-ripe: <muʔa may> "medio maduro"

hama > yanaʔ

*hama

hama. [VI]. to sin.

ka-hama-ʔa. [2pS-VI-PAST.ACT]. you have sinned: <ca jamaʔa> "hurtasteis, pecasteis"

hama-ʔ. [VI-STAT/NOM]. sin, perversity: <jamaʔ>, <jamá> "pecado"

hama-wa-ʔa. [VI-ANT-AGT]. sinner: <jamaguáʔa> "pecador"

hami > č'ami

hapa (1)

hapa. [VI]. pass by

hapa-ʔ hini. [VI-STAT N]. passed-stomach = diarrhea: <japá giníy> "evacuaciones"

hapa-ʔ yipi. [VI-STAT N]. passed-vomit = vomit: <japáa yuepué> "vómitos y evacuaciones"

hapa-ʔa. [VI-AGT]. (the one) who passes by = passenger, outsider: <jaapaʔa> "pasajero, forastero"

hapa-ya. [VI-TRANS]. to pass sb.: <japaya> "ir delante de otro, pasar adelante"

hapa (2)

hapa. [VT]. wait [L-M]: <japa> "esperar"

harana

harana. [N]. illness: <jarána> "enfermedad"

harana. [VI]. get ill, sick: <jarana> "enfermarse"

harn-ʔa. [VI-AGT]. (the one) who is ill:

<jarnaʔa> "el enfermo"

harawi > šawi

harawi. [VT]. to scratch up the ground:
 <jargüi> "rascar la tierra o escarbar"

***hara**

*hara. [N]. heat

hara-ŋa. [N-CAUS]. to toast: <jaraŋa> "tostar"

hara-ŋa mapi. [N-CAUS N]. toast-tortilla =
 toasted tortilla: <jaraŋa mapue> "tortilla,
 tostada, que llaman totopostle"

harari

harari. [N]. bone, flesh: <jarari> "hueso"

harari-k'omo. [N-N]. bone of knee: <jarari
 ckómo> "hueso de la rodilla"

harari-k'iwí. [N-N]. bone of leg = shinbone:
 <jararickuguve> "hueso de la espinilla"

harari-ŋilih. [N-N]. bone of spine = backbone:
 <jarari uelueg> "hueso del espinazo"

harak'u

harak'u. [N]. chipilin (spinach-like herb):
 <jaraeu> "el chipilín; hierba"

hari

hari. [VT]. to throw sb. out: <jari> "echar
 afuera a alguno, correrlo de un lugar a otro"

hari-k'i-ŋa. [VT-AP-AGT]. (the one) who
 scares away, winnower: <jariëiŋa>
 "espantador, aventador"

haru:n

haru:n. [N]. tick: <jaaruun> "garrapata"

haru:n-naru. [N-N]. tick of earth = chinche,
 bedbug: <jaruun naru> "el talaje"

has

has [N]. bundle of grass: <jaz> "el tercio de
 sacate"

hašu

hašu. [N]. pig/pork: <jászu> "marrano"

haya-hašu. [N-N]. female-pig = sow: <jaya
 jaszu> "marrana"

karawa-hašu. [N-N]. wild/bush-pig = wild
 pig/boar: <caragua jaszu> "marrano de monte"

maku-hašu. [N-N]. house (of) pig = pig shed:
 <macu jaszu> "chiquero, posilga de marranos"

pi:ya-hašu. [N-N]. leaf (of) pig = pig leaf
 (plant species): <piyaa jaszu> "hoja que llaman
 de puerco de monte"

pipi-hašu. [N-N]. filled/tamal (of) pig/pork =
 pork tamal: <puepue jaszu> "tamal de
 marrano"

hawa

hawa. [ADJ]. green, unripe: <jaguá> "cosa que
 no está madura"

hawi

hawi(?). [N]. peel, skin, rind: <jaguí> "pellejo
 y piel; la corteza o cáscara de todo árbol y
 fruta"

haw-šaha. [N-N]. peel/skin (of) mouth = lips:
 <jauszaja> "labios"

haw-tuma. [N-N]. peel/skin (of) deer =
 deerskin = whip: <jau tuma> "cuero para
 azotar, piel de ganado"

haw-k'a. [N-CAUS]. to make sth. peel/skin; *to
 hollow out = to empty: <jaúea> "vaciar"

***haya (1)**

haya. [N/ADJ]. female: <jáya> "hembra"

*ŋaya-ŋa. [N-AGT]. *(the one) who is female
 = woman: <ayaŋa> "mujer"

haya-hašu. [N/ADJ-N]. female-pig = sow:
 <jaya jaszu> "marrana"

haya-humu. [N/ADJ-N/ADJ]. female-male =
 womanish: <jaya jumu> "amujerado"

haya-naŋu?. [N/ADJ-N]. female-child =
 daughter: <jaya nau> "hija hembra"

karwa-haya. [N/ADJ-N]. *wild-female =
 widow: <carguajaya> "viuda"

piša-haya. [N/ADJ-N]. *smell-female = smelly
 (bed)bug: <pueszajaya> "chínche hedionda"

šuraya = *čiri-(h)aya. [ADJ-N]. small-female =
 girl, young woman: <szuraya> "muchacha"

tahnawa-haya. [N-N]. place of being born-
 female = female genitals: <tagnaguajaya>
 "partes genitales de la mujer"

ŋuk-šaya. [ADJ-N]. old/married-female =
 old/elderly woman / wife: <ucsza> "la
 vieja"; "mujer, consorte"

šakiŋ-haya [ADJ-N]. L-M:whiteness/excellent-
 female = good woman: <szaciŋ aya> "buena
 moza, hermosa o linda"

witiŋ-(h)aya. [ADJ-N]. soft/tender-female =
 young lady, *virgin: <guitiŋaya> "doncella"

haya (2)

*haya. [N]. crab

šim-(h)aya. [ADJ-N]. black-crab = crab:
 <suemaya> "cangrejo"

hayapu

haya-pu. [VT-N]. *give-hand = receive:
 <jayápu> "recibir"

***hayu**

hayu. [VT]. to clean, scrub: <jayu> "limpiar, fregar, enjugar"

hayu-k šaha. [VT-INSTR N]. instrument for cleaning (the) mouth = cloth, napkin: <jayuc szaja> "pañó de chocolate a modo de servilletas"

hi

hi. [VI]. say: <gi> "decir; defectivo"

hini

hini?. [N]. stomach, belly: <gini> "barriga"

hapa-hini. [VT-N]. pass-stomach = diarrhea: <japá giniy> "evacuaciones"

šuka *šam-(h)ini [VT PREP-N]. bites inside the stomach = stomach pain: <szuca szamini> "dolor de barriga"

hi:ru

hiru. [N]. monkey: <giru> "mico, mono"

hiru

hiru. [VT]. to lick, lap against: <giru> "lamer"

hiru-ťa. [VT-AGT]. (the one) who licks/laps: <giruŁa> "el que lame"

hiri > hiši

hiri. [VT]. to sharpen: <giri> "amolar o raspar"

hiri-k. [VT-INSTR]. instrument for sharpening/grinding = grind stone: <girić> "piedra de amolar"

hir-k'i-ťa. [VT-AP-AGT]. (the one) who sharpens/grind = grinder: <giriŁa> "amolador"

***hiriki**

hir-ki. [?-AP/INCH]. stir (food): <girqi> "menear cosas de comida, o revolver algunas cosas"

hiši

hiši. [N]. stone: <giszi> "piedra"

hok'o

*hok'o. [VT]. fold, bend, break [L-M]

hok'o-wa-ť. [VT-ANT-AGT]. who/what has bend corn = corn husk: <jóéóguàŁ> "el doblador; cáscara de la mazorca"

hono:

hono:. [VI]. to intoxicate, get drunk: <jonoo> "embriagarse"

hono?a

hono-?a. [?-TRANS?]. to guard, care for: <jonóa> "cuidar, guardar"

horo-

horo. [VT]. to watch over, take care, have: <jóro> "cuidar, tener"

horo-ť. [VT-AGT]. (the one) who guards/takes care = caretaker: <jooroŁ> "cuidador"

horo-ť kawayu. [VT-AGT N]. (the one) who guards horse = horse guard: <jooroŁ caguay> "guarda caballo, sirviente"

horo-ť maku. [VT-AGT N]. (the one) who guards house = housekeeper: <jooroŁ macu> "guardián, cuidador de la casa"

horo-ť waya. [VT-AGT N]. (the one) who guards milpa = guard of the milpa: <joroŁ guáyá> "guardián de milpa"

horo-ke-ťa. [VT-AP-AGT]. (the one) who guards = guardian: <jooroééŁa> "guardián, que también llaman tapián"

horoso

horoso. [N]. corozo (African oil palm): <joroso> "coroso; fruta a modo de coyol"

horoso. [N]. type of chilli: <joroso> "cierto género de chile"

howa

howa. [N]. puma [L-M]: <jógua> "león"

huhuť

huhú-ť. [?-AGT]. bee, beehive: <jujúŁ> "panal"

huťi > šuši

huťi. [VT]. to shave: <juŁi> "resurar"

huťi-k. [VT-INSTR]. shaving-instrument = razor blade: <juŁic> "la navaja de resurar"

huťi-k'i-ťa. [VT-AP-AGT]. (the one) who shaves = barber: <juŁieiŁa> "barbero"

***humu**

humu. [N]. male: <jumù> "varón"

humu-na?u?. [N/ADJ-N]. male-child = son: <jumu nau> "hijo varón"

haya-humu. [N/ADJ-N/ADJ]. female-male = womanish: <jaya jumu> "amujerado"

karwa-humu. [N-N]. *wild-male = widower: <cargua jumu> "viudo"

šak'it-humu. [ADJ/N-N]. whiteness/excellent-male = good man [L-M]: <sza eiŁ umu> "buen mozo, visarro"

*šurumu = *čiri-(h)umu. [ADJ-N]. small-male = boy, young man: <szurúmu>, <szurumo> "muchacho"

tahnawa-humu. [N-N]. genitals of male = male genitals: <tağnagua jumu> "partes genitales del hombre"

ʔuk-šumu. [ADJ/N-N]. old/married-male = old/elderly man / husband: <ucszumu> "viejo", "marido"

humu-k'a. [N-CAUS]. to make male = to resist, strive to, bear: <jumúea> "resistir, esforzarse, o aguantar"

*hur

hur-hur. [ADJ-REDUP]. right, straight: <jurjur> "muy derecho, derecho derecho"

hurak

hurak. [N]. man: <jurác> "hombre"

hurak pipi. [N-N]. man-filled? = inflammation?: <jurac pʷepʷe> "cierta inflamación, o especie de abuso que tienen los indios, que dicen les sale, cuando padecen alguna vergüenza"

ʔiliwis-hurak. [ADJ-N]. *bad-man = demon, devil: <iliguís jraac> "demonio"

pene hurak. [N-N]. ʔ-man = split-log drum (instrument): <penejurác> "el tun, instrumento de indios, que es un palo hueco"

hura-k'i. [N-INCH]. become man = bear, give birth: <juraei> "parir"

hura-k'i. [N-INCH/VN?]. becoming of man = childbirth: <juraei> "parto"

hura-k'i-ʔa. [N-INCH-AGT]. (the one) who gives birth: <juraeiʔa> "parida"

hurapi

hu-rapi. [VT]. to anoint, smear, make dirty: <jurápi> "untar, fletar, untara"

huray

huray. [N]. eyes, face: <juráy>, <juraý> "los ojos, la cara"

huray-wapi. [N-N]. eye of foot = ankle bone: <juray guapi> "hueso, que llaman ojo de pie"

muš-huray. [N-N]. hair of eyes = eyelashes: <musz juraý> "pestañas"

ʔuy-hurayi. [N-N]. water of eyes = tears: <uy juraý> "lágrimas"

huri-

huriʔ. [N]. orifice, hole, anus: <jurí> "orificio"

ʔuwi-huri-k. [N-N-INSTR?]. flesh-orifice = buttock: <ugui juurig> "las nalgas"

hurta

hurta. [VT]. to dislocate: <jurta> "desocar, dislocar"

huru

huru. [N]. turkey: <júru> "chompipe, gallo de la tierra"

hururuʔ

hururuʔ. [N]. warm, hot [L-M?]: <jururú> "caloroso"

hururuʔ-pari. [ADJ-N]. warm-heat = very hot thing: <jururú pari> "cosa calorosa"

hu:ši

hu:ši. [N]. head [L-M?]: <juuszí> "cabeza"

hu:ši-mapi. [N-N]. head of palm tree = palm sprout/twig: <juszi mapí> "palmito"

piʔ-hu:ši-k. [NUM-N-INSTR]. two-headed = type of snake: <pijúszi> "culebra de dos cabezas"

ten-hu:ši-k. [ADJ-N-INSTR]. red-headed = type of vulture: <ten júszi> "quebrantahueso"

huta

huta. [VT]. to blow, break wind [L-M]: <júta> "soplar"

huta-k. [VT-INSTR]. instrument for blowing = anus: <jutác> "el orificio, y propiamente el culo"

hutu

hutu. [N]. tree, pole: <jutu> "palo"

hutu-taʔi. [N-N]. pole of neck = neck bone: <jutu taʔi> "hueso del pescuezo"

muʔ-hutu. [ADJ-N]. white-tree = *palo volador*: <muʔ jutu> "palo que llaman volador"

pak'a-hutu. [N-N]. nail-poles = wall-poles, wattle: <paʔa jutu> "palos, que sirven de parales en el bajareque de la casa"

pe:re-hutu. [ADJ-N]. small-pole = rod, twig (for house-building): <peere jutu> "varilla para hacer casas"

hu:tu-k. [N-INSTR]. soot: <juutuc> "hollín, tizne"

šu:tu-k. [N-INSTR]. soot, charcoal: <szuutúc> "tizne, hollín, carbón"

huwa

huwa. [N]. banana, zapote (marmelade plum): <jugúa> "plátano"

ten-huwa. [ADJ-N]. red-zapote: <tenugua> "zapote"

wita huwa. [ADJ-N]. tender-banana/zapote = mashed banana: <guitá jugua> "plátano pasado"

hík'a

hík'a. [VT]. to weave: <juecka> "tejer"

hík'a. [N]. weaving: <jueea> "tejido"

hík'a-ʔa. [VT-AGT]. weaver: <juueeaʔa> "tejendera"

hiŋa

hiŋa. [VT]. to empty liquid from jug; pour out, effuse: <juela> "vaciar agua del cántaro"

hiŋi-k. [VT-INSTR]. instrument for pouring liquid = large pitcher: <uecŁuec> "cántaro"

himi

himi. [VT]. to imitate sb.: <juemue> "remedar"

hini > yamu

hini. [VT]. to know: <juenvue> "saber"

hini-ka. [VT-CAUS]. to make know = to prove, test, analyse: <juenvueea> "probar, hacer experiencia, o análisis de alguna cosa"

hirak

hirak-hiwi. [N-N]. **bee-ayote/sugar = white honey: <juerac Łueguve> "la miel blanca"

hiri

hiri. [N]. parakeet: <juerve> "perico, papagallo"

hiya

hiya. [VT]. to cut, hew/hack with an axe: <jueya> "hachear"

hiya-ki-ŋa. [VT-AP-AGT]: <jueyaeiŁa> "hacheador"

I**ikaŋ**

ik(ŋ)aŋ. [NUM]. one: <ieál>, <yeaŁ>, <yea> "uno"

ik(ŋ)aŋ=ŋak'aŋ. [NUM=ADV]. one yet = one is still missing: <yeaŁ aeaŁ> "uno falta"

ik(ŋ)aŋ=ki. [NUM=INTENS]. one-alone: <iealqui> "solo uno"

iliwis

iliwis. [ADJ]. bad thing: <iliguís> "cosa mala"

iliwis-hurak. [ADJ-N]. bad-man = demon, devil: <iliguís jraac> "demonio"

ima

ima. [VT]. say, tell: <imá> "decir"

in

in. [INT]. *interrogative marker*: <in> "partícula interrogativa"

ipala

ipala. [VI]. to bath: <ipala> "bañarse"

ipala. [VT]. to bathe (sb.): <ipala> "bañar"

ŋipla-ŋa. [VT-AGT]. (the one) who bathes: <iplaŁa> "bañador, bañadora"

ŋipi > ŋipeŋ

*ŋipi. [N]. *unmarried young man, lad tata-ŋipi. [N-N?]. father/uncle-? = single unmarried young man, lad: <tatahipi> "mozeon, mancebo"

ŋisaka

ŋisaka. [VT]. to drink: <iszaea>, <yszàca> "drink"

ŋisaka. [N]. drink: <iszaea> "chilate, bebida"

ŋiška-ŋa. [VT-AGT]. (the one) who drinks = drinker: <iszcaŁa> "bebedor, bebedora"

ŋiška-k. [VT-INSTR]. instrument for drinking = calabash cup: <iszcac> "jícara de beber"

ŋisapa

ŋisapa. [VI]. to leave, go out, come out: <iszapa>, <yszàpa> "salir de un lugar a otro"

ŋišpa-wa pari. [VI-ANT N]. (where) has emerged the sun = sunrise: <iszpagua pari> "la salida del sol"

ŋisapi

ŋisapi. [VT]. remove, take away: <iszapi> "sacar, quitar alguna cosa de un lugar"

ŋiši

*ŋiši. [ADJ]. alive, awake

ŋiši-y(a). [ADJ-?]. be alive, be awake: <isziy> "estar despierto, vivo"

ŋištu

ŋištu. [N]. rash, scar (illness): <isztú> "jiote; enfermedad" ; <isztu> "señal" ; <isztu> "revés de todas las cosas"

ŋiti

ŋiti. [N]. tomato: <iti> "tomate"

ŋituŋ

ŋituŋ. [N]. flea, sand flea: <itúŁ> "las pulgas, niguas"

ŋiwa

ŋiwa. [VT]. form/make tortillas [L-M/MZ]: <ygua> "tortear"

ŋiwa. [N]. tortilla dough: <igua> "masa para tortillas"

ŋiwa-ŋa. [VT-AGT]. (the one) who makes tortillas = tortilla baker: <iguáŁa> "torteadora"

ŋiwaŋ

ŋiwaŋ. [INT]. how much?, *question word*: <yguáŁ> "cuánto; interrogativo"

ʔiwaʔ-ʔakaʔ. [INT-ADV]. how much?-yet =
how much is still missing?: <yguáLacáŁ>
"¿cuánto falta?; interrogativo"

ʔiwaɕ'a

ʔiwaɕ'a. [VI]. to spin: <íguatxa> "hilar"

ʔiwaɕ'a. [N]. thread: <íguatxá> "hilo"

ʔuyša-ʔa. [VI-AGT]. spinner: <uyszaŁa>
"hilandera, hilador"

ʔuyša-k. [VI-INSTR]. spindle: <uyszác>
"malacate"

ʔi:wi > ʔuy

ʔi:wi. [VI]. to drown in water: <igui>, <ygui>
"ahogarse en el agua"

ʔiwiɕ'i

ʔiwiɕ'i. [VT]. to hear sth./sb.: <yguitzi> "oir" ;
<íguitxi> "oir"

ʔuyši-ki. [VT-AP]. to hear (in general):
<uýsziei> "oir"

K

kaʔ (1)

kaʔ. [DIR/EXO]. exocentric directional, go
away: <cá>, <câ> "partícula para ir o llevar"

ka=paʔ. [EXO=PERF?]. *already ago: <capa>
"partícula verbal"

ka-kaʔ. [INT-EXO]. whereto?: <cácá> "dónde;
adverbio para interrogaciones"

natí=ka(ʔ). [ADV=EXO]. thereto, over there:
<natvéca> "allá"

natí=peʔ=kaʔ. [ADV=DIR/CENT=EXO].
through there, from over there: <natvepècà>
"por allá"

ʔištu=kaʔ. [ADV=EXO]. thereto = over there:
<vesztú cá> "allá"

=ka-n. [EXO-IRR]. *ago:

ʔaʔmu=ka-n. [ADV=EXO-IRR]. *today ago =
yesterday: <aŁ mu cán> "ayer"

pi:=ka-n. [NUM=EXO-IRR]. *two ago = the
day before yesterday: <pií can> "anteayer"

ʔi=ka-n. [ʔ=EXO-IRR]. when: <Łue cán>
"cuando"

ka-n wi. [EXO-IRR DIR]. it is: <canguí> "es"

ʔakan=ka-n wi. [ADV=EXO-IRR DIR]. it is
like this: <acan canguí> "así es"

hi=ka-n wi [ADV=EXO-IRR DIR]. *this/it
said: <gi canguí> "aquel dijo"

šaʔ=ka-n wi. [ADV=EXO-IRR DIR]. it is good
to be: <száŁ can gui>. "bueno es estar"

kaʔ (2)

*ka. [INT]. where?, *question word*

kaʔ-kaʔ. [INT-EXO]. whereto?: <cácá>

"dónde; adverbio para interrogaciones"

kaʔ-peʔ. [INT-CENT]. wherefrom?: <cápè>
"de dónde"

kačatče

kačatče. [ʔ]. *expression* (meaning not
understood): <cachatché> "refrán"

kaʔi

kaʔi. [N]. smoke: <caŁi> "humo"

kama (1)

kama. [N]. blood: <cáma> "sangre"

kama. [N]. sperm: <cama> "semen"

kama (2)

kama. [VT]. embrace, carry, be a godfather [L-
M]: <cáma> "abrazar, cargar en brazos" ;
"apadrinar bautismo"

kama-k'i-ʔa. [VT-AP-AGT]. (the one) who
embraces, godfather: <camaeiŁa> "el que
apadrina, carga, o abraza"

kantore

kantore-ʔe. [N-PL]. singers [L-S]: <cantoreŁé>
"los cantores"

kapiltu

kapiltu [N]. council [L-S]: <capil tu> "cabildo"

kapisayo

kapisayo [N]. jacket [L-S]: <capisayo> "chamarrón"

kapun

kapun [N]. castrate, capon [L-S]: <capún>
"capón"

kapuš

kurni kapuš [N-N]. ?-end [L-S]: <curnicapusz>
"cabo de candela"

kara

kara. [ADJ]. heavy thing: <ɕara> "cosa pesada"

karawa

karawa. [N]. bush, woods, wilderness:
<ɕaragua> "monte" ; <caragua> "zacate"

karawa-hašu. [N-N]. wild/bush-pig = wild
pig/boar: <caragua jaszu> "marrano de monte"

muš-karawa. [N-N]. hair of wild/bush =
rubbish: <muszcaragua> "basura"

pene karawa. [N-N]. ? of wild/bush = liquorice
(plant): <penecaragua> "orozus; hierba"

tahti-karawa. [N-N]. plain-wild/bush/grass =
grass of the plain: <tagti caragua> "zacate de
sabana"

wašta-karawa. [VI-N]. enter-bush/wilderness = dusk, nightfall (*vesper*): <guasztacarágua> "vispera"

karwa

karwa. [N]. separated (thing): <cargua> "cosa separada"

karwa-haya. [N-N]. separated-female = widow: <carguajaya> "viuda"

karwa-humu. [N-N]. separated-male = widower: <carguajumu> "viudo"

kaša (1)

kaša. [N]. mosquito: <casza> "zancudo, mosquito"

kaša (2)

kaša [N]. box, chest [L-S]: <casza> "caja"

ka:šik

ka:šik. [N]. reed: <caaszic> "caña de castilla"

kaštiyanu

kaštiyanu. [N]. Spanish: <casztianú> "español"

kaštilan. [N]. Spanish = chicken: <casztilán> "gallina ponedera"

*kaštila mapi. [N-N]. Spanish tortilla = bread: <casztilamapue> "pan"

kaškaš

kaškaš. [N]. agouti: <caszczasz> "cotuza"

kawáyo

kawayo. [N]. horse [L-S]: <caguayo> "caballo"

ho:ro-† kawayu. [VT-AGT N]. (the one) who guards horse = horse guard: <jooroŁ caguayo> "guarda caballo, sirviente"

ʔuta-kawayo. [N-N]. mother-horse = mare: <uta caguayo> "yegua"

kawi

kawi. [VT]. cry: <cagui> "llorar"

kawi-k'i. [VT-AP]. cry out, shout, scream: <caguiéi> "gritar"

kawi-ki-ʔa. [VI-AP-AGT]. (the one) who cries = shouter, screamer: <caguiquiŁa> "gritón"

kayi

kayi. [VT]. sell [L-M]: <cayi> "vender"

kayi-k'i-ʔa. [VT-INCH-AGT]: <cayieiŁa> "vendedor, vendedora"

keneya

keneya. [N]. guineo, plantain [L-N]: <ēeneya> "plátano guíneo"

ki-

ki-(wa). [INTENS]. intensifier-reflexive pronoun

ki-ka. [INTENS/REFL-2sP]. you yourself: <naca eica> "tú mismo"

ki-ka ʔay. [INTENS/REFL-2pP 2PL], you yourselves: <náca eica ay> "tú mismo plural"

ki-ki-h. [INTENS/REFL-?-3sP]. he himself: <nána nag eiqúig qui> "aquel mismo"

ki-wa-n. [INTENS/REFL-?-1sP]. I myself: <eiguan> "yo mismo"

ki-wa-h. [INTENS/REFL-?-3sP]. he himself: <nag eiguag> "aquel mismo"

ki-wa-ka. [INTENS/REFL-?-2s]. you yourself: <náca eiguáca> "tú mismo"

kiriwa

kiriwa-pač'i. [N-N]. ?-ground thing = atol: <eiriguapatxi> "atole, chilate"

kič'i

kič'i, k'iši. [VT]. to roast, fry [L-M]: <quitxi>; <eiszi> "asar"

kič'u

kič'u. [VT]. to exchange, confuse, distort [L-M]: <quitxu> "trocar"

ko:

ko:. [?]. *expression* (meaning unclear): <coo> "refrán, disque"

ko:čo

ko:čo. [ADJ]. dirty: <ēoochó> "cosa sucia"

koka

koka. [N]. woodbox for backpacking [L-M]: <coca> "cacaste"

ko:ra

ko:ra. [N]. row, line, tier [L-S]: <coorá> "en fila, ringlera"

ko:rere

ko:rere. [N]. idol: <coorère> "ídolo"

ko:roro

ko:roro. [N]. liana: <coorōro> "bejuco"

kosek

kosek. [ADJ]. big: <coséc> "cosa grande"

kosek-ʔuy. [ADJ-N]. big-water = river: <coséc üy> "río grande"

kosék-*puri-k. [ADJ N-INSTR]. big drum-instrument = big drum: <coséc punic> "tambor de moros"

koso

koso. [N]. smallpox [L-M]: <cozo> "viruelas"

koško

koško. [N]. buzzard [L-M]: <coszco> "zope"

k(')osme

kosme. [N]. water hyacinth [L-N]: <eosme>
"camalote"

k(')ošme

košme. [N]. type of reed/sticks for bedframes:
<eoszme> "cierta caña o varilla para hacer
tapescos"

košo

čošo. [N]. sewage, waste water: <coszò> "agua
consumida"

koyaya

koyaya. [N]. backrack: <coyaya> "cacaste"

koye

koye. [VT]. to visit: <coye> "visitar"

koyo

koyo. [N]. type of stick for frames or sheds:
<coyo> "cierta varilla con que se hacen
tapescos y ramadas"

krišma

krišma. [N]. christening, baptism [L-S]:
<chriszma> "bautismo"

ku

ku. [VI]: go: <gú> "ir; defectivo"

kučilo

kučilo. [N]. knife [L-S]: <cuchilo> "cuchillo"
haṭa-cuchilo. [N-N]. raise, guard-L-M:knife =
instrument for weeding (= for pulling up weeds):
<jajLa cuchilo> "la cutachilla, instrumento con
que deshieran en lugar de azadón"

kuku

kuku. [N]. Taxisco (toponym): <cúcu>
"Taxisco; pueblo"

kukuwaṭ

kukuwaṭ. [N]. turtledove [L-M]: <cucúguaṭ>
"tortola"

kuṭami

kuṭami. [N]. bromeliad plant (*aechmea
magdalenae*): <euṭami> "pitafloja"

kuṭku

kuṭku. [N]. earthenware bowl, plate [L-M]:
<cúṭcu> "cajete"

kulumak > ṭimaki

kulumak (1). [N]. roof beam?:<culúmac>
"calzonte"

kulumak (2). [N]. bobbin for making lace, fly-
shuttle:<culúmac> "bolillo, palo de tejer"

kumbišyun

kumbišyon. [N]. confession [L-S]:
<cumbisziun> "confesión"

kumi

ʔan-kumi. [1sP-N]. my soul/life: <ancumi>
"mi alma, mi vida"

kunši

kunši. [ADJ]. ashlike thing: <cunszi> "cosa
nesna o cenicienta"

kunu

kunu. [VT]. to buy [L-M]: <cúnu> "comprar"
kunu-k'i-wa. [VT-AP-PART.PF]. bought thing:
<cúnu eigua> "cosa comprada"
kunu-k'i-ṭa. [VT-AP-AGT]. (the one) who
buys: <cunuṣiṭa> "comprador o compradora"

***kup(u)ru**

k'upru-šunik. [ADJ-N]. *deep-pot: <eupru
szunic> "olla honda"

kuri-

kura-n pe. [VI-SUBJ CENT]. come
(subordinate context): <curānbè> "venir"

***kur(u)ni**

kurni kapuš. [N-N]. end of candle = candle
stub: <curni capusz> "cabo de candela"
kur(u)ni puri. [N-N]. end of fire = end of
match: <curni puri> "cabo de ocote"

ku:ru

ku:ruʔ. [VI]. flee: <cuurù> "huir"
kuru-ya. [VI-TRANS]. run, go in a hurry:
<curúya> "andar de priesa, correr; defectivo"

kuruwi

kuruwi (1). [N]. turtledove: <curugui>
"tortolilla" ;

kuruwi (2). [N]. genitals of animals: <curugui>
"partes genitales de las criaturas"

kuruyu

kuruyu. [N]. thick tortilla; *pixton*: <curuyu>
"tortilla gruesa, que llaman pisztón"

kuškuš

kuškuš-pari [N-N]. ʔ-sun/day = type of tree
(*caesalpinia pulcherrima*) [L-M?]:
<cuszcuszpari> "cierto árbol, que da una flor
que llaman barbona"

kuštarika

kuštarica. [N]. costarica = type of cacao [L-S]:
<cusztarica> "cierto cacao, que llaman
costarrica"

kutumi

kutumi. [N]. cramp (illness): <cutumi>
"calambre, enfermedad"

kiri

kiri. [VT]. to fit, adjust, complete: <everve>
"ajustar, completar"

ku:ru-k. [VT-INSTR]. wheel, circle, roll
(rolled up rope): <cuurúc> "cierta rueda o
yagual de mecates"

ku:ru-k-šima. [VT-INSTR-N]. *instrument for
completing-? = roof-ridge, ridgepole: <cuurúc
szuema> "caballete, palo que sirve de
cumblera a la casa"

k(ʼ)iri

kiri [N]. tapir: <everve> "danta"

kiwa

kiwa. [VT]. to lend, to loan: <cuegua>
"prestar"

k'iwa-wa. [VT-PART.PF]. lent thing:
<ckueguagua> "cosa prestada"

k'iwa-k'i-ŋa. [VT-AP-AGT]. (the one) who
lends: <ckueguaeiŋa> "el que presta"

k(ʼ)iya

k'iya. [VT]. to pick up, collect: <evैया>
"pepenar"

K'**k'ak'ara**

k'ak'ara. [VI]. get on all four feet: <cka éára>
"ponerse en cuatro pies"

k'a:ta:

k'a:ta:. [VI]. lie down [L-M?]: <eaataa>
"acostarse"

k'ata-ŋa. [VI-PART]. laid down: <eataŋa>
"acostado"

k'ata

k'ata. [VT]. put: <eata> "poner"

k'ata-k wik'i-k. [VT-INSTR N-INSTR].
instrument for putting-stone = mill stone
(tasmetate): <eatacguieic> "tapesco de moler,
que llaman taszmetate"

k'awi

k'awi. [VT]. to catch with lasso or trap:
<eagui> "lazar, enredar"

kawi-k. [VT-INSTR]. instrument for catching
with lasso = lasso: <caguic> "araypa, lazo"

k'awi-k'i-ŋa. [VT-AP-AGT]. (the one) who puts
out a trap: <eaguiŋa> "el que pone la trampa"

k'awu

k'awu. [VT]. cook [L-MZ]: <ckáu> "cocer
cosas de comer"

kawu. [N]. tamal: <ckau> "tamal blanco"

k'eweša

k'eweša. [N]. anona [L-M]: <ckeguesza>
"anona"

muŋ-k'eweša. [ADJ-N]. white anona: <muŋ
ckeguesza> "anona blanca"

***k'iriwi**

k'irwi. [VT]. choose, select: <ckirgui> "escoger"

k'irwi-k'i-ŋa. [VT-AP-AGT]. (the one) who
chooses/selects: <ckirguieŋa> "escogedor,
escogedora"

***k'isik'u**

k'isku. [VT]. to take out chiggers: <ckiseu>
"sacar niguas"

k'iwí

k'iwí. [N]. patio, yard [L-N]: <εigui> "patio"

k'okama

k'okama. [VI]. to kneel down: <εocama>
"hincarse"

k'olo

k'olo. [VT]. to flay, skin, strip [L-M]: <εólo>
"desollar, quitar el vestido"

k'ot+ko. [VT-?]. clear, empty, vacate: <εoŁco>
"desocupar"

k'omo

k'omo. [N]. knee: <εómo> "rodilla"

harari-k'omo. [N-N]. bone of knee:
<jararickómo> "hueso de la rodilla"

ŋuwi-k'omo. [N-N]. flesh of knee = flesh of
calf: <ugui εómo> "carnaza de la pantorrilla"

k'otoro

k'otoro. [N]. flying ant (zompopo): <ckotòro>
"zompopo"

ŋuta k'otoro. [N]. mother of flying ant = coral
snake: <uta ckotoro> "culebra coral"

k'unu

k'unu [N]. cloud, shade, covered [L-M]:
<éúnú> "las sombras"

k'ini

*k'ini. [ADJ]. *glad, happy

k'ini-ki. [ADJ-INCH]. to become happy:
<evuequei> "alegrarse"

kini-ki-ŋa. [ADJ-INCH-AGT]. (the one) who
becomes happy/is content: <ckuueueiŋa> "el
que se alegra"

k'ini-k'i-Ø. [ADJ-INCH-NOM]. happiness, content: <ckuenuēi> "alegría, contento"

k'iri > ?uru

k'iri. [VT]. pick, pull up: <ckveri> "arrancar"

k'iri

k'iri. [N]. younger brother: <euervé> "hermano menor"

k'irša

k'irša. [VI]. to comb: <ckversza> "peinar"

k'irša-ša. [VI-AGT]. (the one) who combs: <everszaša> "el que peina"

k'irša-k. [VI-INSTR]. instrument for combing = comb: <everszac> "peine"

k'irša-k'i-ša. [VI-AP-AGT]. (the one) who combs: <everszaēiša> "peinador, peinadora"

*k'irwi > k'iwī

k'irwi. [N/ADJ]. lean, thin: <ckuerguue> "cosa flaca"

k'isa (1)

k'isa. [N]. bat, Nancinta (toponym): <evesza> "murciélagos"

k'isa. [N]. *bat (place) = Nancinta: <evesza> "Nancinta; pueblo"

k'is-tamay. [N]. bat-? = Sinacantán (toponym): <evesztamay> "Sinacantan; pueblo"

k'isa (2) > k'itš

k'isa. [N]. half, piece: <evésza> "mitad o pedazo de alguna cosa"

k'iti

k'iti. [VT]. measure [L-M]: <evetue> "medir"

k'iti-wa. [VT-PART.PF]. measured thing: <evetuegua> "cosa medida"

k'iti-ša. [VT-AGT]. (the one) who measures: <evetvèša> "el que mide o medía"

k'iti-š. [VT-AGT]. (the one) who measures: <evetvèš> "el que mide o medía"

k'iti-ki-ša. [VT-AP-AGT]. (the one) who measures: <evetue ēiša> "el medidor" ; <evetuequiša> "el que mide o medía"

k'iti-ki-k. [VT-AP-INSTR]. instrument for measuring = measure: <evetue eic> "medida, vara de medir"

k'iwī (1)

k'iwī. [ADJ]. dry: <ckueguue> "cosa seca"

k'iwu-ya. [ADJ-TRANS]. to dry sth.: <ckueguya> "secar"

k'iwī (2)

k'iwī. [N]. shinbone, leg: <ckueguue> "espinilla"

harari-k'iwī. [N-N]. bone-leg = shinbone:

<jarari-ckuguue> "hueso de la espinilla"

šis-kiwa. [N-N]. ?-leg = waist, backbone:

<Łuesevēgua> "cintura y hueso del espinaso"

L

lamuniš

lamuniš. [N]. lemon [L-S]: <laamunisz> "limón"

lawš

lawš. [N]. nail [L-S]: <laúsz> "el clavo"

lawi

lawi. [N]. key [L-S]: <lagui> "la llave"

lunku

lunku. [ADJ/N]. one-handed, handless, armless: <lungú> "manco"

L

łan

łan. [NEG]. negative marker: <Łán> "no"

*łakama

*łak(a)ma. [VT]. to count, tell

łakma-ša. [VT-AGT]. (the one) who counts/tells: <Łacmáša> "el que cuenta"

łakma-ki-ša. [VT-AP-AGT]. (the one) who counts/tells: <Łacma ēiša> "el contador"

łak'uwa

łak'uwa. [N]. son-in-law: <Łaēugua> "yerno"

łamuk

łamuk. [N]. shrimp: <Łamuc> "camarón"

šuway łamuk. [N]. lizard/cayman-shrimp = sea devil: <szuguay Łamuc> "peje armado"

łapa (1)

łapa. [VI]. follow one after the other: <Łapa> "ir en por de otro, como siguiéndolo de cerca"

łapa-ša. [VI-AGT]. (the one) who follows behind: <Łapaša> "el que va detrás de otro como siguiéndolo"

łapa (2)

łapa. [N]. grandchild, **grandfather: <Łapà> "el nieto, la nieta"

łapi

łapi. [VT]. to shoulder, carry on shoulder: <Łapi> "cargar al hombro"

łapi-k'i-ša. [VT-AP-AGT]. (the one) who shoulders/carries on shoulder: <Łapieiša> "el cargador"

†a:ra

†a:ra. [VI]. to ascend: <Łaarâ> "subir personalmente"

†ara-†a. [VI-AGT]. (the one) who ascends: <ŁaraŁa> "el que sube"

†ara-ya. [VI-TRANS]. to ascend sth. = to lift sth.: <Łaráya> "subir algo de abajo a arriba"

†ara (1)

†ara. [N]. barbarian, cruel: <Łara> "el bárbaro"

†ara (2)

†ara-†imik. [N-N]. **medicine-? = soapwort: <Łaravemuéc> "cierta hierba que sirve a las indias para bañarse"

†awaro

†awaro. [VI]. dance

†awar-†a. [VI-AGT]. (the one) who dances = dancer: <ŁaurúŁa> "bailador"

†enka

†enka. [N]. wild cacao, pataxte: <Łenga> "cacao pataste"

***†i-**

†i-na?. [PREP-DEM]. with him/her/it: <Łiná> "con" ; "con élla"

†i-na(?)=šiki. [PREP-DEM=EXTEN]. and with it = also, as well: <Łiná szoequi> "también, y"

†ik'a

†ik'a. [VI]. to descend: <Łiea> "bajarse personalmente"

†ik(')a-†a. [VI-AGT]. (the one) who descends: <ŁicaŁa> "el que baja"

†ik'a-ya. [VI-TRANS]. to descend sth. = to lower, put down: <Łieaya> "bajar otra cosa de arriba abajo"

†imik

†imik. [N]. pine, ocote: <Łimic> "ocote"

†okama

†okama. [VT]. to boil (water) [L-M]: <Łocama> "hervir el agua"

†ome

†ome-†uy. [ADJ-N]. tepid, lukewarm water: <Łóme hui> "agua tibia"

†ome-ka. [ADJ-CAUS]. make tepid/lukewarm = to temper, to cool down: <Łomeeca> "entibiar"

†uri

†uri. [N]. rabbit: <Łuri> "conejo"

***†iki (1)**

†iki. [INT]. when?, *question word*: <Łvécu> "cuándo; interrogación para futuro"

†ika-n. [INT-SUBJ/IRR]. when: <Łvecán> "cuando"

†ika-n pa?. [INT-SUBJ/IRR ADV]. when already = then: <Łvecán vá> "entonces"

†iki (2)

†iki (1). [VT]. to find, meet (what one has lost): <Łvecue> "hallar lo perdido, o lo que se busca"

†ik'i (2). [VT]. to reach: <Łveeve> "alcanzar"

†ikini

†ikini. [VT]. believe, understand: <Łvecuene> "creer, entender"

†ik(')u

*†iku-. [N?]. *step-

†iku-n na?u. [N-1sP N]. my X-child/son = stepchild: <Łveeun náu> "mi entenado, entenada"

†ipi

†ipi. [VT]. carry behind (load on the back): <Łepue> "cargar por detrás"

†ipi-k. [VT-INSTR]. instrument for carrying = *backrack: <Łepuec> "el instrumento, con que sirve para cargar"

†ipi-ki-†a. [VT-AP-AGT]. (the one) who carries = carrier: <ŁepueeiŁa> "el cargador"

*†isk'iwi > k'iwi

†is-kiwa. [N-N]. ?-leg = waist, backbone: <Łvesevuega> "cintura y hueso del espinaso"

†ita

†ita. [VT]. to move up, bring close: <Łvéta> "arrimar"

†iwi

liwi. [N]. squash = sweet [L-MZ/diff.]: <Łveguve> "ayote"

hirak-†iwi. [N-N]. **bee-squash/sugar = white honey: <†uerac Łveguve> "la miel blanca"

†uy-†iwi. [N-N]. water of ayote = honey, sweets: <uy Łveguve> "la miel, y todo género de dulce"

***†iwi > iliwis**

punpun †iwi. [N-N]. ?-bad = owl: <punpun Łveguve> "tecolote; ave"

M**ma**

ma. [ADV]. conditional TAM-adverbial: <amá> "partícula verbal subjuntiva"

maka

maka. [CONJ]. and [L-S]: <máca> "y"

mačiti

mačiti. [N]. machete [L-S]: <máchiti>
"machete"

maku

maku. [N]. house: <mácu> "casa"

maku-ŋa. [N-PL]. houses: <macuŁa> "casa;
plural"

maku-ŋa. [N-AGT/PART.ACT]. plan/draft of
house: <macuŁa> "el diseño de la casa"

maku-hašu. [N-N]. house of pig = hogshed:
<macu jaszu> "chiquero, posilga de marranos"

maku-miya. [N-N]. house of chicken = chicken
house: <macu mía> "gallinero"

maku-ŋuwaŋ. [N-N]. house of ants = anthill:
<macu uguaŁ> "hormiguero"

maku-tyuŋ. [N-N]. house of god = church:
<macu tiusz> "iglesia"

ma-tyuŋ. [N-N]. house of god = church:
<matiusz> "iglesia"

ho:ro-ŋ maku. [VT-AGT N]. (the one) who
guards house = housekeeper: <jooroŁ macu>
"guardián, cuidador de la casa"

paŋa-maku. [N-N]. straw-house = covering,
market stand: <paŁamacu> "ramada, galera"

ŋiŋi-maku. [N-N]. back of house = behind the
house: <uvelvamacu> "lo de detrás de la casa"

maŋi

maŋi. [N]. ashes: <maŁi> "ceniza"

piša-maŋi. [ADJ-N]. smelling/stinking ashes =
sulfur: <puesza maŁi> "azufre"

maŋi-k. [N-INSTR]. *instrument for ashes =
firewood: <maŁuec> "leña"

maŋiŋa

maŋiŋa. [N]. tamal with bean filling:
<maŁiŁa> "tamal de frisol"

maŋka

maŋ-ka. [CONJ]. although [L-S]: <maŁca>
"aunque, y mas que"

mami

mami. [N]. ear: <mámi>; <máni> "oreja"

mam-an. [N-1sP]. my ear: <maman> "mi
oreja"

man

man. [DEM]. that one, *demonstrative*: <mán>
"ese, esa, eso"

manpita

man-pita [N]. master, owner: <mán pita>
"señor, amo"

mapi

mapi. [N]. coyol palm [L-M]: <mapi> "coyol"

hu:ši-mapi. [N-N]. head of coyol = palm
branch: <juszi mapi> "palmito"

šaru-mapi. [N-N]. sea/southern-coyol =
guiscocoyol: <szaru mapi> "guiscocoyol"

mapi

mapi. [N]. tortilla: <mapue> "tortilla"

haraŋa-mapi. [N-N]. toasted-tortilla =
totopostle: <jaraŁa mapue> "tortilla, tostada,
que llaman totopostle"

kaštila-mapi. [N-N]. Spanish-tortilla = bread:
<casztila mapue> "pan"

puri-mapi. [N-N]. *burn/fire-tortilla = food
(hot), meal: <puri mapue> "comida"

ŋ'iwi-mapi. [N-N]. freshcorn-tortilla:
<txuegue mapue> "tortilla de maíz tierno que
llaman elotaszca"

ma:ra

ma:ra. [VI]. to rest: <màra> "descansar"

ma:ra-ŋa. [VI-AGT]. (the one) who rests:
<maraŁa> "el que descansa"

ma:ra-k. [VI-INSTR]. instrument for resting =
resting place: <maarác> "descansadero, lo que
llaman sesteadero"

mara

mara. [VI]. hurry up: <mára> "abreviar o darse
prisa; defectivo"

mara pe?. [VI DIR/IMP]. come hurry:
<màrapè> "darse prisa; ven tú de prisa"

masa

masa [N]. pineapple [L-N]: <maza> "piña"

maša > mač'a

maša. [N]. mud: <másza> "lodo"

ŋuy-maša. [N-N]. water of mud = muddy
water: <uymasza> "agua de lodo"

mašira

mašira:ŋ. [N]. root [L-M?]: <masziraa> "las
raíces de los árboles, las venas, y nervios del
cuerpo"

***mač'a**

mač'a. [VI]. to stick, paste [L-M]: <matxà> "pegar"

ma:č'a-ŋ. [VI-STAT]. sticky, pasted thing:
<maazaa> "cosa pegada"

maɕ'i

maɕ'i. [VT]. fry [L-M?]: <matxi> "freir"

maši. [VT]. fry: <maszi> "freir"

maši-waʔ. [VT-PART.PF]. fried (thing): <masziɡuá> "cosa frita"

ma:ši:-wa. [VT-LOC]. place where sth. is fried: <mászígua> "lugar en que se frie algo"

maši-ʔa. [VT-AGT]. (the one) who fries: <masziʔa> "la que frie"

me:ʔ

me:ʔ. [ADJ]. green: <meé> "cosa verde"

me:-naki [ADJ-N]. green-chilli: <mee náqui> "chile verde"

meme

meme. [ADJ]. crazy [L-M]: <meme> "loco"

me:re

me:re. [VT]. tear, break: <mére> "romper"

mere-wa. [VT-PART.PF]. torn, broken (thing): <merè gua> "cosa rota"

mere-ʔa. [VT-AGT]. (the one) who tears/breaks: <mere ʔa> "el que rompe o rompía"

mere-ʔ. [VT-AGT]. (the one) who tears/breaks: <merèʔ> "el que rompe o rompía"

mere-ʔa-ki-ʔa. [VT-CAUS-AP-AGT]. (the one) who is obligated to tear: <mèreʔa qui ʔa> "el que ha o tiene de romper"

merio

merio. [N]. half a *real* (Spanish coin) [L-S]: <mério> "medio real"

meša

meša. [N]. table [L-S]: <mésza> "mesa"

mi

mi. [VT]. say: <mi> "decir, aquel dice"

mina

mina. [N]. clarity, clearness, brightness: <mina> "la claridad"

mistun

mistun. [N]. cat [L-N]: <mistún> "gato"

miša

miša. [N]. mass [L-S]: <misza> "misa"

miya

miya. [N]. chicken, hen: <miya> "gallina, la niña del ojo"

pe:re-miya. [ADJ-N]. small-chicken = chick: <peere miya> "pajarillos y pollos"

sim(a)-miya. [ADJ-N]. black-chicken = turkey: <sven miya> "pavil; ave"

maku-miya. [N-N]. house of chicken = chicken house: <macu mía> "gallinero"

pipi-miya. [N-N]. tamal of chicken = tamal filled with chicken: <puepue miya> "tamal de gallina, que llaman de pipián"

tata-miya. [N-N]. father-chicken = rooster: <tata miya> "gallo"

ʔuruʔ-miya. [N-N]. egg of chicken = chicken egg: <uruʔ miya> "huevo de la gallina"

mola

mola. [N]. moon, month: <móla> "la luna, el mes"

moro

moro. [VT]. to make wet, drench, soak [L-S]: <móro> "mojar"

mo:ro-ʔ. [VT-STAT]. wetted, soaked = be wet: <mooroo> "estar mojado"

mu:

mu:. [N]. food: <muú> "todo género de comida"

puri-mu:. [N-N]. *burn/fire-food = food (hot), meal: <puri múu> "comida"

mi:. [VI]. drink: <mvè> "tomar" ; <muevè> "tomar; defectivo"

mu: ʔay. [VI + 2PL]. drink (pl.): <mù ay> "tomad vosotros"

mu:ču

mu:ču. [VI]. get tired: <muuchù> "cansarse"

muču-ʔa. [VI-AGT]. (the one) who is tired: <muchúʔa> "el cansado"

muču

muču. [ADJ]. lame, crippled, limping: <múchu> "cojo"

mika

mika. [VI]. to work: <mueea> "trabajar, servir"

mika-Ø. [VI-NOM]. work: <mueea> "trabajo, tributo"

muka-ʔa. [VI-AGT]. worker, servant: <mueeaʔa> "sirviente"

muʔ ~ muʔ

mu:ʔ. [ADJ/N]. white (thing) [L-MZ]: <muú> "cosa blanca"

muʔ. [ADJ/N]. white (thing): <muʔ> "cosa blanca"

muʔ-(h)ama-y. [ADJ-ADJ-ʔ]. white-ripe = half-ripe: <muʔa may> "medio maduro"

muʔa-ʔuy. [ADJ-N]. white-water = ray, lightning, thunderbolt: <muʔa húy> "rayo"

*muṭa-šiyuk. [ADJ-N]. white-snake = viper, rattlesnake: <múŁasziuc> "víbora de cascabel, culebra"

muṭ-asukar. [ADJ-N]. white-sugar: <muŁ azúcar> "azucar"

muṭ-hutu. [ADJ-N]. white-tree/pole = *palo volador*: <muŁ jutu> "palo que llaman volador"

muṭ-k'eweša. [ADJ-N]. white-anona: <muŁ ckeguesza> "anona blanca"

muṭ-naru. [ADJ-N]. white-earth: <muŁ náru> "tierra blanca"

muṭ-pa:ma-k. [ADJ-N-INSTR]. white-winged = dove: <muŁ pāamac> "paloma de monte"

muṭ-turi. [ADJ-N]. white-child = infant: <muŁ turi> "criatura tierna"

mula

mula. [N]. palm: <mula> "palma"

mumuk

mumu-k. [?-INSTR = N]. puddle, pool (of a river): <múmuc> "posa de algun río"

mura

mura. [N]. fresh ear of corn, *elote*: <múra> "la mazorca tierna, que llaman elote"

murča-

murča-wiya. [ADJ?-N]. ?-cotton = yellow cotton: <murcha guiya> "algodón amarillo, que llaman cuyuscate"

muši

muš. [N]. feather [L-MZ]: <músz> "pluma"

muši. [N]. hair, beard: <muszi> "barbas, pelos del cuerpo"

muš-ʔaṭte. [N-N]. hairs/feathers of genitals = pubic hair: <musz aŁtè> "pilos continentes in partes genitales"

muš-huray. [N-N]. hairs/feathers of eyes = eyelashes: <musz juraý> "pestañas"

muš-karawa. [N-N]. hairs/feathers of wilderness/bush = rubbish: <muszcaragua> "basura"

mušta

mušta. [N]. belly [L-M/diff.]: <muszta> "panza"

muti

muti. [N]. hair: <muti> "cabello"

muyi

muyi. [N]. sapodilla [L-M]: <muyi> "chico, níspero"

mimi

mimi. [VI]. sing: <müemue> "cantar"

mimi-ṭa. [VI-AGT]. (the one) who sings = singer: <müemueŁa> "el que canta"

mira

mira. [ADJ]. bitter: <müerra> "cosa amarga"

miṭaṭki

miṭaṭki. [ADJ-INCH]. to become ? = to dream: <müetaŁcki> "soñar"

miṭaṭki-wa. [VI-PART.PF]. dreamed thing = dream: <müetaŁeigua> "cosa soñada"

miṭ'a

miṭ'a, miša. [VT]. bury [L-M]: <müetxa>, <muesza> "enterrar"

miṭ'a-ṭa, miša-ṭa [VT-AGT]. (the one) who buries: <müetxaŁa>, <mueszaŁa> "el que entierra"

miṭ'a-wa, miša-wa. [VT-LOC]. place of burying = grave, tomb: <müetxagua>, <mueszagua>; "sepultura"

miya

miya. [VT]. to help: <müeya> "ayudar"

miya-ṭa. [VT-AGT]. (the one) who helps: <müeyaŁa> "el que ayuda"

miya-k'i-ṭa. [VT-AP-AGT]. (the one) who generally helps = helper: <müeyaeiŁa> "ayudante"

N

na:(?)

na:ʔ. [ADV]. here: <naá> "aquí"

na:ʔ=peʔ. [ADV=VI/IMP]. come here: <nāpè>; <naapè> "venir; defectivo"

na:ʔ=peʔ. [ADV=DIR]. from here: <naapè> "por aquí"

na

na. [VI]. say: <nā> "decir"

na

na:. [DET/DEM]. the: <nā> "al, la, lo"

na=na. [DET=DEM]. the, *focus determiner*: <nana> "partícula nominal, que quiere significar el, la, lo"

na ʔaḥi. [DET DEM]. this: <na axuè> "éste"; <na...axuè> "este"

na ʔaši. [DET DEM]. this: <na aszve> "ésto"

na man. [DET DEM]. that: <na mán> "a ése"; <na...man> "esa"

nah

nah. [PN]. he/she/it: <nag> "el, aquel"; "*ille, illa, illud*"

nah-ʔik. [PN]. they: <nagʔic> "aquellos"

nah=ki. [PN=INTENS]. he/she/it is: <nagqui> "el es, aquel es"

nah=ʃik'i. [PN=ADV]. he (is) also = he is as well: <nag sziei> "el es, y también"; <nag szoequí> "también"

naka

naka. [PN]. you: <náca> "tú"

naka ʔay. [PN]. you (pl.): <náca ay> "vosotros"

naki

nak'i. [N]. chilli [L-M]: <naei> "chile"

naki čukulat. [N-N]. chilli-chocolate = chocolate with chilli: <naei chuculát> "chile de chocolate"

me:-naki. [ADJ-N]. green-chilli: <mee náqui> "chile verde"

ten-naki. [ADJ-N]. red-chilli: <ten naquí> "chile colorado alias chilleguaque"

č'uwi-naki. [ADJ?-N]. ?-chilli = chiltepe: <txugui naqui> "el chiltepe"; <sugui naqui> "chiltepe"

ʔuy-naki. [N-N]. water of chilli = chilli broth: <uy naqui> "caldo"

nama

nama. [N]. pain: <nama> "dolor"

nama. [VI]. to hurt, ache, feel: <nama> "dolerse o sentir; defectivo"

nani

nani. [VT]. to untie, unfasten, make loose: <nani> "soltar"

nankun

nankun. [N]. afternoon: <nangún> "tarde"

nari:

nari:. [N]. nose, point, tip, end [L-S?]: <nari> "la nariz"; <nariy> "nariz, punta, o extremo de las cosas"

nari-ʔuray. [N-N]. nose of wood = soot: <nari uray> "tizón"

ʔuy-nari. [N-N]. water of nose = mucus, snot: <uy nariy> "mocos"

nariʔa

*nari-ʔa. [?-CAUS]. make *learn/understand(?) = teach: <nariʔá> "enseñar"

nari-ʔa-ki. [?-CAUS-INCH/REFL]. *become taught / teach oneself = learn: <nariʔqui> "aprehender"

nari-ʔa-k'i-ʔa. [?-CAUS-AP-AGT]. (the one) who generally teaches = teacher: <nariʔaeiʔa> "doctrinero, maestro"

nari-ʔ-ki-ʔa. [?-PART.ACT-INCH-AGT]. (the one) who becomes *understanding = student: <nariʔeiʔa> "discípulo"

naru

naru. [N]. earth, ground, soil: <náru> "tierra"

šaya-naru. [ADJ/N-N]. bitter/acid-earth = vitriol: <száya naru> "tierra de caparrosa"

haru:n-naru. [N-N]. tick of earth = chinche, bedbug: <jaruun naru> "talaje"

muʔ-naru. [N-N]. white-earth: <muʔ náru> "tierra blanca"

tahti-naru. [N-N]. plain-earth = plain: <tagti naru> "tierra llana"

nati

nati. [ADV]. there: <natve> "allí"

nati=ka. [ADV=EXO]. thereto, over there: <natvéca> "allá"

nati=peʔ=ka. [ADV=DIR=EXO]. through there, from over there: <natvepěcā> "por allá"

nawaku

nawaku. [N]. petticoat [L-S]: <naguacu> "las naguas"

naʔu

naʔu. [N]. child, offspring, son: <náu> "hijo, hija"

naʔu-ʔa. [N-AGT]. (the one) who is pregnant: <nauʔa> "preñada"

naʔu-pu. [N-N]. child of hand = finger: <naupu> "dedos de las manos"

naʔu-wakaš. [N-N]. child of cow = calf: <nau guacász> "ternero"

naʔu-wapi. [N-N]. child of foot: <nau guapi> "dedos de los pies"

ʔaya-n naʔu. [N-1sP N]. ?-1sP son/child = *friend, companion: <ayán nau> "como hermano"

haya-naʔu. [N-N]. female-child = daughter: <jaya nau> "hija hembra"

humu-naʔu. [N-N]. male-child = son: <jumu nau> "hijo varón"

ʔiku-n naʔu. [N-1sP N]. ?-1sP child = stepchild: <ʔveeun náu> "mi entenado, entenada"

titika-naʔu. [N-N]. compaternity-child =
godchild: <titica nau> "ahijado"

neʔa

neʔa. [PREP]. de: <neʔa> "partícula nominal;
de"

neʔa nen. [PREP PN]. mine: <neʔa nen> "mío,
de mí"

neʔa ʔahi. [PREP DEM]. of/for this: <neʔa
axuʔe> "de éste"

neʔa wena=ki. [PREP INT=INTENS]. of/for
someone: <neʔa guéna qui> "el que, *genitivo*"

ne:ʔek

ne:ʔek. [PN]. we, us: <neʔec> "nos, nosotros"

nen

nen. [PN]. I, me: <nèn> "ego, yo soy"

nem. [PN]. I, me: <nem> "yo, mí, me"

netaka

neta-ka. [VT]. to push: <netaca> "rempujar"

ni-

ni-wena. [NEG]. not-who = nobody:
<niguena> "ninguno"

ni:k'i

ni:k'i. [VT]. to push: <níei> "rempujar poco a
poco"

niwa

niwa. [VT]. to want, ask for: <niguá> "pedir"

niwa-ša. [VT-PREP]. want/ask inside = wish:
<nigua szá>; <niguaszaa> "querer; anómalo"

niwa-k'i-ʔa. [VT-AP-AGT]. (the one) who wants/
asks = *begger(?): <niguaciʔa> "el que pide"

nuka

nuka. [VT]. to give: <nuca> "dar"

nuka-wa. [VT-PART.PF]. given (thing):
<nucagua> "cosa dada"

nu:nuʔ

nu:nuʔ. [N]. mute, dumb: <núnú> "el mudo"

nu:ru

nu:ru. [N]. pus: <núru> "la materia, podre"

nu:ru-ʔ. [*VI-STAT]. swelling of lymphatic
glands; syphilis: <nuurú> "las bubas;
enfermedad"

nuʂuku

nusuku. [VT]. to smoke: <nuszucu> "ahumar"

nukšu-k. [VT?-INSTR]. instrument for
smoking = incense burner, censer: <nucszuc>
"sahumador, incensario"

nukšu-k-se:ma. [VT-INSTR-N]. smoked-fish:
<nucszuc séma> "pescado asado"

nuwi

nuwi. [N]. straw: <nuguí> "la paja"

wiʂu-k-nuwi. [VT-INSTR-N]. instrument for
beating cotton: <guiszcunuguí> "sacudidor de
algodón"

nima

nima. [VT]. to eat [L-M]: <nuema> "comer"

nima-šama. [VT-PREP]. eat-inside = sadness,
worry: <nuema szama> "la tristeza, cuidados"

nima-ʔa. [VT-AGT]. (the one) who eats =
eater: <nuemaʔa> "el que come, comedor"

nima-k. [VT-INSTR]. instrument for eating =
napkin: <nuemác> "la servilleta"

nima-ha. [VT-CAUS]. to make sb. eat = to
feed: <nuemaja> "dar de comer"

nima-ha-k'i-ʔa. [VT-CAUS-AP-AGT]. (the one)
who makes sb. eat = servant (tapian):
<nuemajaeiʔa> "el sirviente, que llaman tapián"

O

ʔoho

ʔoho. [N]. cough [onomat., diff.]: <ojo> "la
tos"

ʔohote

ʔohote. [N]. ojote [L-M]: <ojóte> "cierto
mecate que hacen de corteza de árbol"

ʔone

ʔone. [ADJ]. tender, unripe [L-M/MZ]: <òne>
"cosa tierna"

ʔone:-ʔe. [N-PL]. tender-ones = children:
<ònéʔe> "los muchachos"

ʔone-šinak. [ADJ-N]. tender-bean = *ejote*:
<òneszinác> "ejote, vayna de frisol tierno"

ʔora

ʔora. [N]. hour = midday [L-S]: <óra> "doce
del día"

ʔoro

ʔoro. [ADJ]. only [L-S]: <ʔóro> "sólo"

ʔoro-ha

ʔoro-ha. [ʔ-CAUS]. to make ʔ = trust,
guarantee: <oròja> "fiar"

ʔoro-ha-ki. [ʔ-CAUS-VN]. trusting = trust:
<orójáqui> "cosa fiada"

ʔoro-ha-k'i-ʔa. [ʔ-CAUS-AP-AGT]. (the one)
who trusts: <orojaeiʔa> "el que fia"

ʔoro:-ka

ʔoro:-ka. [N-CAUS]. to chime/toll the (church)bells: <óroóca> "repicar las campanas"

ʔoromo

ʔoromo. [VT]. to pick up, gather, collect: <oròmo> "recoger"

ʔormo-wa. [VT-PART.PF]. picked up/gathered (thing): <órmògua> "cosa recogida"

ʔormo-ʔa. [VT-AGT]. (the one) who picks up: <ormòŁa> "el que recoge, recogía"

ʔormo-ʔ. [VT-AGT]. (the one) who picks up: <ormòŁ> "el que recoge, recogía"

ʔormo-k'e-ʔa. [VT-AP-AGT]. (the one) who picks up/gathers/collects = collector: <ormoēŁa> "el que recoge, recogía"

ʔošo

ʔošo-ka. [N-2sP]. your intestines: <oszòca> "tu tripa"

ʔošto > ʔuštu

ʔošto. [N]. ulcer, wound: <ószto> "úlcer, llaga"

ʔošto-ʔ. [VI-STAT]. rotten: <osztó> "llaguento, podrido"

ʔošto-ʔampuki. [N-N]. ulcer/rotten-serpent = king's evil, *streptothricosis* (illness): <ószto ambuqui> "lamparones, y la crispela; enfermedad"

ʔo:tek

ʔo:ték. [N]. bed, bedframe: <ootéc> "tapesco para dormir"

ʔoto (1)

ʔoto. [N]. orange clay, *talpetate* (type of soil): <óto> "talpetate"

ʔoto (2)

ʔoto. [VT]. to cover, close: <óto> "cerrar, tapar"

ʔoto-wa. [VT-PART.PF]. covered/closed (thing): <ótógua> "cosa tapada"

ʔoto-k. [VT-INSTR]. instrument for covering = cover: <ótóc> "tapadera, tapón de las cosas"

ʔoto-k-šaha. [VT-INSTR-N]. cover-mouth = door: <ótočsaja> "puerta hecha de tapesco"

P**pa (1)**

*pa-ʔ

pa-ʔ. [ADV]. already, *TAM adverbial*: <pá> "partícula verbal"

ʔašin=paʔ. [NEG=ADV.PFV]. *not yet = if not: <aszin vaa> "sino"

ʔika-n paʔ. [INT-SUBJ/IRR ADV]. when already = then: <Łuēcán vá> "entonces"

*pa-ʔ

paʔ. [ADV]. already, *TAM-adverbial*: <paŁ> "ya"

šam pari paʔ. [PREP N ADV]. it is already day = it is early: <szam pari paŁ> "ya es de día"

pa (2)

pa=kaʔ. [ʔ=2s]. you: <pá ea> "ti; partícula verbal"

pahata

pahata. [VT]. to pay [L-S]: <pajata> "pagar"

pahta-wa. [VT-PART.PF]. paid (thing): <pagtágua> "cosa pagada"

pahta-ʔa. [VT-AGT]. (the one) who pays: <pagtáŁa> "el que paga"

pahta-ki-ʔa. [VT-AP-AGT]. (the one) who pays: <pagtaēiŁa> "el que paga"

pahayu

pahayu. [N]. guapinol (fruit): <pajáyu> "guapinol; fruta"

pahi

pahi. [N]. ravine, hole, burial [L-M]: <pági> "barranca"

pahni-k. [VT-INSTR]. instrument for scratching the ground/excavating = planting stick: <pagníc> "estáca, barreta de palo, que sirve para escarbar la tierra"

pahu

pahu. [N]. wax: <páju> "cera negra"

pak'a (1)

pak'a. [VT]. to nail, construct [L-M]: <packa> "clavar"

pak'i. [N]. wall: <packi> "pared"

pak'a hutu. [VT-N]. nail-wood/pole = wall poles, wattle: <paea jutu> "palos, que sirven de parales en el bajareque de la casa"

para-pak'i. [PREP-N]. below/behind-wall = corner of the house: <para paei> "rincón de la casa"

pak'a (2)

pak'a. [N]. fruit (*guanábano annona muricata*) [L-M]: <packá> "cabeza de negro; fruta"

pak'i

pak'i. [N]. cypress nut (fruit) [L-M]: <packi> "piñuela; fruta"

pak'u-šaha

pak'u-šaha. [VT?-N]. to ʔ-mouth = to lie: <pauēusaja> "mentir"

pak'u-šaha. [VT?-N]. ?-mouth = lie:
<packuszája> "mentira"

pa:le

pa:le. [N]. father = priest, monk [L-S]: <paalé>
"sacerdote y todo género de padres"

palumaš

palumaš. [N]. Castilian pigeon, dove [L-S]:
<paluumász> "paloma de castilla"

paťa

paťa. [N]. bundle of straw [L-S]: <paŁa>
"tercio"

paťa-maku. [N-N]. straw-house = covering,
market stand: <paŁamacu> "ramada, galera"

paťama

paťama. [N]. sea turtle: <paŁama> "tortuga
marina"

pa:ma:

pa:ma:. [N]. arm, wing: <paamáa> "brazos,
alas de las aves"

ʔať-pama-h. [PREP-N-3sP]. over/at-his arm =
shoulder: <aŁ pamag> "hombros"

para-pama-h. [PREP-N-3sP]. below-his arm =
armpit: <para páamag> "senos, sobacos de los
brazos"

muť-pama-k. [N-N-?]. white-winged = wild
dove: <muŁ pāamac> "paloma de monte"

pantu:

pantu:. [N]. brother/sister-in-law: <panduu>
"cuñado, cuñada"

ʔaya-n pantuʔ. [ʔ-1sP N]. my-ʔ-brother/sister-
in-law = husband of my husband's/wife's sister:
<ayán pandú> "mi concuño"

papa:

papa:. [N]. uncle: <papáa> "tío"

papuk

papuk. [N-INSTR]. paper: <papúc> "papel"

para (1)

para. [VT]. to search, want: <pàra>, <pára>
"buscar"

para-wiriki. [VT-N]. to search-word = to plead,
litigate, quarrel, fight: <para guíriqui> "pleitar"

para (2)

para. [PREP]. below, behind it

para-pak'i. [PREP-N]. below/behind-wall =
corner (of the house): <para paēi> "rincón de la
casa"

para-pama-h. [PREP-N-3sP]. below/behind-his
arm = armpit: <para páamag> "senos, sobacos
de los brazos"

para-šaha. [PREP-N]. below/behind-mouth =
cheeks: <para szaja> "cachetes"

para-taʔi. [PREP-N]. below/behind-throat =
neck: <para táLi> "pescuezo"

para-wapi. [PREP-N]. below/behind-foot =
sole of foot: <para guapi> "planta del pie"

para-ki

para-ki. [CONJ]. by, because [L-S]:
<paraquiy> "por"

ša:n para-ki. [INT CONJ]. what?-by = because
of what?: <szaan paraqui> "¿por qué?;
interrogativo"

šan=ta ši para-ki. [INT EXTEN CONJ]. and
because of what?: <šzanda szue paraqui>
"¿y para qué?; interrogativo"

pari

pari. [N]. sun, heat, day: <pari> "sol, cosa
caliente, día"

pari-tili. [N-N]. heat/hot-ache = sunstroke:
<paritili> "calentura de tabardillo"

pari-ʔuy. [ADJ/N-N]. heat/hot-water = brandy,
rum: <parihúy> "agua caliente"

ʔanik-pari. [ADV-N]. today-day = today: <anic
pari> "en este día"

hururuʔ-pari. [ADJ-N]. warm-heat: <jururú
pari> "cosa calorosa"

puy-pari. [ADJ-N]. half/centre-day = midday:
<puy pari> "medio día"

ǵ'uǵ'u-pari. [ADJ-N]. ʔ-heat = measles:
<tutzupari> "sarampión, sarpullido;
enfermedad"

kuškuš-pari [N-N]. ʔ-sun/day = type of tree
(*caesalpinia pulcherrima*): <cuszcuszipari>
"cierto árbol, que da una flor que llaman
barbona"

ʔišpa-wa-pari. [VI-ANT/LOC-N]. (where) has
come out-sun = sunrise: <iszpagua pari> "la
salida del sol"

seťe-wa pari. [VT-ANT/LOC-N]. (where) has
laid on side-sun = sunset, afternoon: <seŁëgua
pari> "tarde, caída del sol"

šan pari pať. [PREP N ADV]. it is already in
day = it is early: <szam pari paŁ> "ya es de
día"

pari-k. [N-INSTR]. *instrument of day = luck,
fortune: <paric> "fortuna, suerte"

pari-ka. [N-CAUS]. make hot = heat up:

<paríca> "calentar"

pari-k'i-Ø. [ADJ-INCH-NOM]. *becoming hot
= summer: <pari éi> "verano"

parwa

parwa. [N]. cacao tree: <pargúa> "árbol de madre de cacao"

pari?awa-ʔa. [N-AGT]. *what is from the cacao tree = cold cacao drink: <pariaguála> "bebida, batido, o chocolate frío, que usan los indios de cacao"

pata

pa:ta:. [VI]. accomplish, can: <paátaa> "poder; anómalo"

pata-ʔ. [VI]. accomplished: <patà> "ser" ;
<patà mère> "ser roto"

ʔa-pataʔ. [3sS-VI]. accomplish, be able:
<apatà> "poder; defectivo" ; <a patà orómo> "a ser recogido"

pata-šama. [VT-PREP]. accomplish-inside = remember: <pataszáma> "pensar, acordarse"

pata-ʔa šama. [VT-AGT PREP]. (the one) who accomplishes inside = (the one) who remembers: <pataŁà szàma pè> "el que ha, tiene de acordarse"

pata-ʔ šama. [VT-AGT PREP]. (the one) who accomplishes inside = (the one) who remembers: <patàŁ szàma> "el que se acuerda, se acordaba"

pati

pati. [N]. cloth, blanket [L-M]: <pati> "pañuelo, y la manta"

pati-čukula(t). [N-N]. cloth of chocolate = chocolate cloth: <pati chuculá> "el paño de cholate, a modo de servilleta"

šunu-m-pati. [ADJ-?-N]. long-cloth/blanket: <szuunumpati> "manta doble, que llaman del rey"

pač'i

pač'i, pa:ši [VT]. to grind corn, to mill [L-M/MZ]: <patxi>, <paaszi> "moler"

pač'i. [N]. corn dough (*nixtamal*): <patxi> "la masa para las tortillas"

pač'i-ʔa. [VT-AGT]. (the one) who grinds corn: <pasziŁa> "molendera"

paši-k. [VT-INSTR]. instrument(?) for grinding = kitchen (?): <paaszic> "cocina"

k'iriwa-pač'i. [N-N]. ?-dough = atole: <širigua patxi> "atole, chilate"

pa:wak

pa:wak. [N]. ceiba tree, pine tree: <paaguác> "selva árbol" ; <paguác> "ocote"

payamu

payamu. [N]. coyote: <payámu> "coyote, lobo"

payiʔ

payiʔ. [N]. daughter-in-law: <payi> "nuera"

peʔ

peʔ. [DIR]. *centric directional, future/imperative marker*: <pè> "partícula para futuro y significativa de venir"

ʔaki-peʔ ʔayak ʔik'aʔ ʔayapa [ADV-CENT ADV NUM N]. in a year from now: <æuepè ayac yeál ayapà> "de aquí a un año"

ka=peʔ. [INT=CENT]. wherefrom?: <capè> "de dónde; adverbio para interrogación"

nati=peʔ=ka.[ADV=DIR=EXO]. through there, from over there: <natuepècà> "por allá"

waʔi=peʔ. [NUM=DIR]. three (days) from now = in three days: <guaŁi pè> "de aquí a tres días"

peko-tuma

peko-tuma. [N-N]. ?-deer = cramp (illness): <peco túma> "calambre; enfermedad"

pelo

pelo. [VT]. to peel, shell [L-S]: <pelo> "descallar, descascarar"

pelo-wa. [VT-PART.PF]. peeled (thing): <pelógua> "cosa pelada"

pe:loʔ

pe:loʔ. [N]. dog [L-S]: <peeló> "perro"

peʔana

peʔana. [VI]. to slide, slip: <peŁana> "resbalar"

peʔeʔ

peʔeʔ. [N]. single, unmarried man [L-M]: <péle> "patas, patojo"

peʔteme

peʔteme. [VI]. to turn, return: <peŁteme> "volver, voltearse"

peʔteme-ʔa. [VI-AGT]. (the one) who returns: <peŁteméŁa> "el que vuelve, voltéa alguna cosa"

pene

pene hurak. [N-N]. ?-man = split log drum: <pene jurák> "tun instrumento de indios, que es un palo hueco"

pene karawa. [N-N]. ?-wilderness = licorice (plant): <pene caragua> "orozus; hierba"

penek

pene-k. [ADJ]. annoying, bothersome: <penéc> "enfadoso, ridículo"

pe:re

pe:re. [ADJ]. small, slight: <pére> "cosas menudas, chicas"

pe:re-hutu. [ADJ-N]. small-tree = branches, sticks, wattle: <peere jutu> "varilla para hacer casas"

pe:re-miya. [ADJ-chicken]. small-chicken = chick: <peere miya> "pajarillos y pollos"

pe:re-piya. [ADJ-N]. small-leaf = leaf of *vijagua* [sic:*vijagua* leafs are not small]: <pere piya> "hoja de vijagua"

peše

peše. [N]. lizard [L-M]: <péze> "lagartija"

pewek

pewe-k. [N-INSTR]. gourd: <peeguc> "tecomate"

peyu (1)

peyu. [N]. hernia?, fracture? (type of illness): <péyu> "potra del quebrado; enfermedad"

peyu (2)

peyu. [N]. sonzapote (fruit): <péyu> "sonzapote; fruta"

pi

pi. [NUM]. two, numeral # 2: <pi> "dos"

pi-hu:ši-k. [NUM-N-INSTR]. two-headed? = type of snake: <pijúszič> "culebra de dos cabezas"

pi=hi. [NUM=?]. two (days) ahead = the day after tomorrow: <pigi> "pasado mañana"

pi:=ka-n. [NUM=EXO-IRR]. two (days) ago = the day before yesterday: <piícan> "anteayer"

pi=ka-n-sima. [NUM=EXO-IRR-N]. two nights ago = the night before last night: <picánsuema> "antenoché"

pisina

pisina. [N]. *capulín*, tree: <picina> "capulín; árbol"

piṭa

piṭa-tili [N-N]. ?-ache/hardship = calamity, necessity, want: <piṭatili> "calamidad, necesidad"

piṭka

piṭ-ka. [?-CAUS]. make ? = compose, adorn: <piṭlca> "componer, adornar, remudar"

pima

pima. [N]. figtree: <pima> "amáte; árbol"

pipi (1)

pipi. [N]. flower: <pipi> "una flor aromática a modo de quiebra cajete" ; <pipi> "cierto bejuquillo que comen las bestias y llaman flor amarilla"

pipi (2)

pipi [N]. genitals of children: <pipi> "partes genitales de las criaturas"

pipiri

pipiri. [VT]. to gin cotton: <pipiri> "desmotar"
pipri-ṭa. [VT-AGT]. (the one) who gins cotton: <pipriṭa> "la que desmota, escarmena el algodón"

piri

piri. [VT]. see: <piri> "ver"

piri:-wa. [VT-PART.PF]. seen (thing): <piriigua> "cosa vista"

piri:-ṭa. [VT-AGT]. (the one) who sees: <piriṭa> "el que ve o veía"

piri:-ṭ. [VT-AGT]. (the one) who sees: <piriṭ> "el que ve o veía"

piri-ki-ṭa. [VT-AP-AGT]. (the one) who sees = observer: <piriṭiṭa> "el que mira" ; <piriṭiṭiṭa> "el que ve o veía" ; <piriṭiṭiṭa> "el que ha o tiene de ver"

pišaku

pišak'u. [VT]. to cut a bird's beak: <piszáeu> "despicar, despuntar"

pič'u ~ puč'u

pič'u (1). [VT]. squeeze: <pitxu> "exprimir"

pišu-k-tuma. [VT-INSTR-N]. instrument for squeezing-deer = type of liana: <piszuc tuma> "cierto bejuco, que llaman en castellano tripa de vieja"

pič'u-k'i-ṭa. [VT-AP-AGT]. (the one) who squeezes: <pitxueiṭa> "que aprieta o exprime la cosa"

puč'u (2). [VT]. to milk, squeeze: <putxu> "ordeñar, exprimir"

puč'u-k'i-ṭa. [VT-AP-AGT]. (the one) who milks: <putxueiṭa> "el que ordeña o corralero"

pi:ya

pi:ya. [N]. leaf: <piya> "todo género de hoja"

pi:ya-hašu. [N-N]. leaf (of) pig = pig leaf (plant species): <piyaa jaszu> "hoja que llaman de puerco de monte"

pi:ya-šowe. [N-N]. leaf of *measure? = leaf for measuring salt: <piya szogue> "la hoja con que aforran la sal"

pi:ya-wayá?. [N-N]. leaf of milpa: <piyaguayá> "la hoja de milpa"

pe:re-pi:ya. [ADJ-N]. small-leaf = leaf of *vijagua*: <pere piya> "la hoja de vijagua"

šan-pi:ya. [PREP-N]. on top of-leaf = Ixhuatán: <szampiya> "Ixhuatán; pueblo"

tahti šan pi:ya. [N PREP-N]. plain on top of-leaf = Tepeaco: <tagti szamipíya> "Tepeaco; pueblo"

po:

po:. [VT]. to amaze, astonish: <poò> "asombrar"

po:-k'e-ťa. [VT-AP-AGT]. (the one) who lightens, illuminates: <poóeeŁa> "el que alumbra"

počpoč

počpoč. [N]. lungs [L-M/MZ]: <poch poch> "los bofes"

pohmo

pohmo. [N/ADJ]. blind: <pógmo> "el ciego"

pohmo-ke. [N/ADJ-INCH]. become blind: <pogmóque> "cegar"

pokoko

pokoko. [N]. raccoon: <pocóco> "mapache"

po:k'

po:k. [N]. pinetree: <poóe> "ocote"

pok'o

pok'o. [VT]. break, split [L-M]: <poeo> "quebrar"

pok'o-wa. [VT-PART.PF]. broken/split (thing): <poəogua> "cosa quebrada"

porana

porana. [VI]. to burst [L-M]: <porána> "reventar"

pore

pore. [CONJ.]. but [L-S]: <póre> "pero"

pošana

posana. [VI]. to jump: <posana> "brincar, saltar"

posok'o

posok'o. [VT]. to string (beads): <posócko> "ensartar, engarzar"

posk'o-wa. [VT-PART.PF]. strung (thing): <poscogua> "cosa ensartada o engarzada"

pošo

pošo. [N]. partridge [L-M]: <pószo> "perdiz"

poča

poč'a, poša. [VT]. to wash [L-M]: <potxa>, <posza> "lavar"

poč'a-?. [VT-STAT]. washed = laundry ready to be washed: <potxa> "ropa que está pronta para lavar y está en jabón"

poša-wa. [VT-PART.PF]. washed thing = washed laundry: <poszágua> "la ropa lavada"

poša-wa-ť. [VT-ANT-PART.ACT]. what has washed = leftover soap: <poszáguaľ> "la sobra del jabón"

poč'a-ťa, poša-ťa. [VT-AGT]. (the one) who washes = washer, person who washes: <potxaŁa> "lavandera", <poszaŁa> "lavandera"

pote

pote:. [N]. blouse, *huipil* [L-M]: <poté> "huipil"

poy

poy. [N]. truth: <póy> "la verdad"

poy-poy [N-REDUP]. true-true = really: <poy> "de verdad"

poyo-ť-ke. [VI-PART.ACT-INCH]. become true = reconcile, put right: <poyoŁque> "reconciliar"

poyo-ť-k'e-ťa. [VI-PART.ACT-INCH-AGT]. (the one) who reconciles: <poyoŁeeŁa> "el reconcilianse"

prima

prima. [N]. dawn [*Latin*]: <prima> "alba del día"

pu

pu. [N]. hand: <pu>, <pýu> "mano"

pu-wik'i-k. [N-?-INSTR]. hand of millstone = grinding stone, *mano*: <puguieie> "mano de la piedra de moler"

na?u-pu. [N-N]. child of hand = finger: <naupu> "dedos de las manos"

pula

pula. [VT]. to make: <púla> "hacer"

pula-wa. [VT-PART.PF]. made (thing): <pulâgua> "cosa hecha"

pula-ťa. [VT-AGT]. (the one) who makes sth.: <pulaŁa> "el que hace o hacía"

pula-ť. [VT-AGT]. (the one) who makes sth.: <pulâľ> "el que hace o hacía"

pula-ki-ʔa. [VT-AP-AGT]. (the one) who makes sth.: <pula quiʔa> "el que hace o hacía"

puli

puli. [VT]. to clean, wipe, scrub: <puli>, <puʔi> "limpiar, fregar"

pulpu

pulpu. [N]. dust [L-S]: <puʔpu> "polvo de la tierra"

pumu

pumu. [N]. incense, copal [L-M/MZ]: <púmu> "copal que sirve para sahumerio aromático"

punpun

punpun. [N]. bladder: <punpún> "vejiga"

punpun-ʔiwi. [N-N]. *bladder(=drum?)-bad = owl: <punpun ʔueguve> "tecolote; ave"

pupuk

pupu-k. [N-INSTR]. mat [L-M]: <púpuc> "petate o estera"

puri (1)

puri. [VT]. to respond: <puri> "responder" ; <puri> "encontrar"

pu:ri-ki. [VT-AP]. get married: <púriqui> "casarse"

pu:ri:-k'i-Ø. [VT-AP-NOM]. wedding: <púriéi> "casamiento"

puri-k'i-ʔa. [VT-AP-AGT]. (the one) who gets married = groom: <puriéiʔa> "los novios o casados"

*puri (2)

*puri. [ADJ/N]. *burn?

kur(u)ni-puri. [N-N]. end of burning = end of match: <curni puri> "cabo de ocote"

puri-mapi. [ADJ/N-N]. *burn/fire-tortilla = food (hot), meal: <puri mapue> "comida"

puri-mu:ʔ. [ADJ/N-N]. *burn/fire-food = food (hot), meal: <puri múu> "comida"

puri-ya. [ADJ/N-TRANS]. to burn sth. = blow/kindle the fire: <puriya> "soplar el fuego"

puri (3)

puri. [ADV]. ʔ: <puri> "ha; adverbio"

purik

puri-k. [N-INSTR]. drum: <puric> "caja del cuerpo" ; <puric> "caja velica; instrumento"

kosek-*puri-k. [ADJ N-INSTR]. big drum-instrument = big drum: <coséc punic> "tambor de moros"

puç'u > piç'u

puy

puy-pari. [ADJ-N]. half/centre-day = midday: <puy pari> "medio día"

piki

piki. [N]. liver: <pueckue> "hígado"

pik'i

pik'i. [VT]. to feel, touch: <pueckue> "tentar"

piki-k'i-ʔa. [VT-AP-AGT]. (the one) who feels/touches: <pueckueiʔa> "el que tienta"

pilana

pilana. [VI]. jump up and down: <puelána> "brincar"

piʔi

piʔi. [VI]. to alleviate, lighten: <pueʔué> "aliviarse, aliviado"

piʔta

piʔta. [VT]. wound/kill with an arrow [L-M]: <pueʔta> "flechar o dar de estocadas o tastazos"

piʔta-ʔa. [VT-AGT]. (the one) who wounds/kills with arrow = archer, bowman: <pueʔtaʔa> "flechador"

piʔta-k. [VT-INSTR]. arrow: <pueʔtae> "flecha"

pimi

pimi. [N]. mute person: <puemue> "el mudo o muda"

pipi

pipi. [VT]. fill, swell [L-N]: <púépue> "llenar o hinchar"

pipi-haʃu. [N-N]. filled (thing) of pork = pork tamal: <puepue jaszu> "tamal de marrano"

pipi-miya. [N-N]. filled (thing) of chicken = chicken tamal: <puepue miya> "tamal de gallina, que llaman de pipián"

hurak'-pipi. [N-N]. man-filling/swelling = inflammation?, *erection?: <jurac puepue> "cierta inflamación o especie de abuso que tienen los indios, que dicen les sale cuando padecen alguna vergüenza"

pipi-k. [VT-INSTR]. instrument/place for filling = well, pool: <puepuec> "pozo"

piri

piri. [VI]. to stuff oneself, to satiate: <púérvé> "hartarse"

piri-k. [VI-INSTR/ADJ]. *"stuffed, satiated" = annoying, foolish: <puevéec> "enfadoso, necia"

piša

piša. [VI]. stink, annoy [L-M]: <puésza>
"heder; anómalo"

piša-Ø. [VI-NOM]. stench, stinking (thing):
<puesza> "cosa hedionda"

piša-haya. [N-N]. stinking-crab = stinking
(bed)bug: <puesza jaya> "chinche hedionda"

piša-maʔi. [N]. stinking-ashes = sulfur:
<puesza maʔi> "azufre"

piši-k. [VI-INSTR]. instrument of stench = cup
used for excrement: <pueszuec> "jícara
peste"

piši-k-šina. [?-INSTR-N]. cup (for) urine =
pee-pot: <pueszuec szína> "jícara de orines"

ʔaʔte-piši. [N-N]. genital-cup = urinal?: <aʔte
pueszue> "jícara peste"

pič'i

pič'i. [VT]. to augment, increase: <puetxue>
"aumentar o echar demás sobre otra cosa"

pič'i-wa. [VT-PART.PF]. augmented,
increased (thing): <puetxuegua> "cosa que se
hecha demás, que llaman ipeguil"

S**salvia**

salvia. [N]. medicinal herb [L-S]: <salvia>
"salvia, hierba medicinal"

saʔaka

saʔa-k'a. [ADJ-CAUS]. to raise, lift: <saʔáca>
"alzar, guardar, o levantar para arriba"

saʔ-ka-wa. [ADJ-CAUS-PART.PF]. raised,
guarded (thing): <saʔcagua> "cosa guardada"

**saʔa-k > haʔa-k. [VT-INSTR]. hoe

haʔa(-k)-*cuchillo*. [N-N]. instrument for
pulling weeds-knife = hoe: <jajʔa cuchilo> "la
cutachilla, instrumento con que deshieran en
lugar de azadón"

saʔka

saʔka. [ADJ]. far, distant: <saʔca> "distante o
lejos"

ašin=sʔka. [NEG=ADJ]. not-far/distant =
close, near: <aszinsaʔca> "cerca"

sama > siʔma

sama. [N]. darkness: <sáma> "la oscuridad"

samu

samu. [VT]. to catch, take: <samu> "coger"

samu-wa. [VT-PART.PF]. caught/taken
(thing): <samúgua> "cosa cogido"

sa:mu-ʔa. [VT-AGT]. (the one) who catches/
takes = catcher: <sàmùʔa> "el que coge o cogía"

sa:mu-ʔ. [VT-AGT]. (the one) who
catches/takes: <sàmùʔ> "el que coge o cogía"

sa:mu-ki-ʔa. [VT-AP-AGT]. (the one) who
catches/takes: <sàmuiquiʔa> "el que coge o
cogía"; "el que ha o tiene de coger"

***sara-**

*sara-. [ADJ]. cold

saraʔ-ʔuy. [ADJ-N]. cold water: <saraʔ huy>
"agua fría"

*saraʔ-k'i. [ADJ-INCH]. to make cold =
freeze: <saraʔei> "enfriar"

sara-raʔ. [ADJ-ʔ]. cold (thing): <sararà> "cosa
helada"

sara-raʔ-tawu. [ADJ-ʔ-N]. cold-wind = the
cold: <sararà táu> "el frío"

sa:wak

sa:wa-k. [N-INSTR?]. metal, bell: <saaguac>

"todo género de fierro" ; <ságuac> "campana"

tero-wa sawak. [VI-LOC? N]. place of death-bell:
<terogua saguac> "dobles de las campanas"

selika

selika. [VI]. to administer/take communion [L-
S]: <selica> "comulgar"

selika-ʔa. [VI-AGT]. (the one) who
administers/takes communion: <selicaʔa>
"camulgantes"

seʔe

seʔe. [VT]. to put/lay aside [L-M?]: <seʔè>
"cantearse o ponerse de lado; defectivo";
<zèʔè> "torcerse, cantearse"

seʔe-ʔ. [VT-STAT]. put/laid aside: <seʔè> "de
lado o torcido"

seʔe-wa pari. [VT-ANT/LOC-N]. (where) has
laid on side-sun = sunset, afternoon: <seʔègua
pari> "tarde, caída del sol"

čeʔ(e)-na. [VT-ʔ]. mess up, disorder:
<chèʔna> "desbaratar"

se:ma

se:ma. [N]. fish: <seema> "pescado"

tila-séma. [ADJ-N]. salted-fish: <tila séma>
"pescado salado"

ç'aya-sema. [ADJ-N]. fresh-fish: <txaya sema>
"pescado fresco"

nukšu-k-sema. [VT-INSTR N]. smoked-fish:
<nucszuc séma> "pescado asado"

sikar

sikar. [N]. tobacco [L-M]: <sicar> "tabaco"

siki

siki. [VT]. to begin, start: <siquí> "principiar"
 sik'i-wa. [VT-PART.PF]. begun (thing):
 <siéigua> "cosa comenzada"

si:mi

si:mi. [VT]. to extinguish, put out (light, fire):
 <simi> "apagar"

simi-wa. [VT-PART.PF]. extinguished (thing):
 <simigua> "cosa apagada"

sipani

sipani. [N]. hell: <sipani> "infierno"

siraha

sira-ha. [?-CAUS]. to scoff, mock, despise:
 <siraja> "mofar, menospreciar"
 siraha-k'i-ta. [VT-AP-AGT]. (the one) who
 mocks = joker: <siraja eiŁa> "mofador, burlador"

siru

siru. [VI]. to abbreviate, abridge, cut short:
 <sirú> "abreviar; defectivo"
 siru-ya. [VI-IMP]. abbreviate! = hurry up:
 <ziruya> "darse prisa, abreviar"

siwapati

siwapati. [N]. medicinal plant; *cihuapahtli* [L-N]: <sigua pati> "ciguapate; hierba medicinal"

sompe

sompe. [N]. pinion, pine nut [L-N]: <sompe>
 "piñon; árbol"

soyo

soyo. [VT]. to begin, start: <soyo> "empezar"
 soyo-wa. [VT-PART.PF]. begun/started
 (thing): <soyugua> "cosa empezada"

suk-

suk'sin. [N]. jug, pitcher [L-M]: <suesin>
 "jarro de agua caliente"

suk'u

suk'u. [VT]. to tie, lash, fasten [L-M]: <suckù>
 "atar"

suk'u-wa. [VT-PART.PF]. ties, fastened
 (thing): <sueugua> "cosa amarrada"

suk'u-wa:. [VT-LOC]. place of tying,
 fastening: <sueugua> "el lugar donde se
 amarra"

suk'u-k'i-ta. [VT-AP-AGT]. (the one) who ties,
 fastens: <sueuckiŁa> "el que ata o amarra"

suk'u-k'i-k. [VT-AP-INSTR]. instrument for
 tying, fastening: <sueuckie> "cosa con que se
 amarra o ata"

sumaya

*sim-(h)aya. [ADJ-N]. black-? = crab (from
 sea): <suemaya> "cangrejo"

surumay

surumay. [N]. type of flower: <surumay>
 "cierta flor nombrada, hilas o muñequilla"

sururu

sururu. [N]. southwind [L-S]: <surúru> "el
 viento sur o remolino que hace el aire"

suwi

suwi-naki. [?-N]. ?-chilli = type of chilli,
chiltipiquin: <sugui naqui> "chiltepe"

suy

suy. [N]. turkey: <suy> "pava; ave"

sim

sim-sim. [ADJ-REDUP]. tense, tight (thing)
 [L-M]: <suemp suemp> "cosa tirante"

si?ma

sima. [ADJ/N]. black, dark, night: <suema>
 "cosa negra, noche"

*si?n-?a?u. [ADJ-N]. black-corn = black corn:
 <suen au> "maíz negro"

*sim-(h)aya. [ADJ-N]. black-? = crab (from
 sea): <suemaya> "cangrejo"

*si?n-miya. [ADJ-N]. black-chicken = turkey:
 <suen miya> "paugil; ave"

*si?m-?oro. [ADJ-N]. black-gold = black corn:
 <simpóro> "maíz negro"

ç'ik'(i)-si?ma. [ADJ-N]. half/mid-night =
 midnight: <txueæue suema>; <txueæsuema>
 "media noche"

?a?mu=ka-n si?ma. [ADV=EXO-IRR N].

*today ago night = yesterday night: <aŁ mu
 can suema> "anoche"

pi=ka-n-sima. [NUM=EXO-IRR-N]. two
 nights ago = the night before last night:
 <picánsuema> "antenoche"

šama-k si?ma. [PREP-? N]. in the night = early
 morning: <szamac suema> "de mañana"

wašta-wa si?ma. [VI-ANT/LOC N]. (where)
 entered-night = nightfall, sunset: <guashtagua
 suema> "entrada de la noche"

Š**ša ~ šama ~ šan**

ša. [PREP]. in, at, to: <sza> "en"

niwa-ša. [VT-PREP]. to ask/want-inside = to
 want: <nigua szà> "querer"

sa se:pa. [PREP ADV]. *at separate = apart, aside, offside: <sa sépa> "aparte"

šama. [PREP]. in, inside: <száma> "dentro, en" body parts:

šuka šam-(h)ini. [VT PREP-N]. bites inside-stomach = stomach ache: <szuca szamini> "dolor de barriga"

šan-saha. [PREP-N]. inside-mouth = teeth: <szan szaja> "dientes"

šuka šan-šaha. [VT PREP-N]. bites inside-mouth = toothache: <szuca szan szaja> "dolor de muelas"

šan-šana. [PREP-N]. in-? = dress, clothes: <szan szana> "vestido o ropa de ponerse"

šan-še:ke. [PREP-N]. inside-? = chest, ribs: <szan szeeque> "pecho y costillas"

toponyms:

šam-ípiy. [PREP-N]. inside-? = Atiquipaque (toponym): <szamuepuey> "Atiquipaque; pueblo"

šan-piya. [PREP-N]. in/at-leaf = Ixhuatán (toponym): <szampiya> "Ixhuatán; pueblo"

tahti-šami-piya. [N PREP-N]. plain in/at-leaf = Tepeaco (toponym): <tagti szampiya> "Tepeaco; pueblo"

šan-šowe. [PREP-N]. at/in-? = Pasaco (toponym): <szanszogue> "Pasaco; pueblo"

adverbs:

šan-pari pał. [PREP-N ADV]. it is already in the day = early, morning: <szam pari pał> "ya es de día"

šan-šaru. [PREP-N]. at/in the sea = south: <szanszaru> "abajo el mar, las lagunas, y esteros"

šan-tiwina. [PREP-N]. in the sky = above: <szantiguina> "arriba o en el cielo"

šama-k si?ma. [PREP-? N]. in the night = early morning: <szamac suema> "de mañana"

phrasal verbs:

ʔaku šama. [N-PREP]. go-inside = sadness: <acuszáma> "la tristeza"

níma šama. [N-PREP]. eat-inside = sadness: <nuema szama> "la tristeza o cuidados"

pata šama. [VT-PREP]. accomplish-inside = think, remember: <pataszáma> "pensar, acordarse"

yiwa šama. [N-PREP]. lose-inside = forget: <yueguaszáma> "olvidar"

ša:

ša. [N]. name: <szaa> "nombre de cada uno"

šaha

šaha (1). [N]. mouth: <szaja> "boca"

šaha (2). [N]. door: <szaja> "puerta de casa"

šaha (3). [N]. edge, cutting edge: <szaja> "filo de todo fierro cortante"

tolo-šaha. [ADJ-N]: yellow-mouth = fer-de-lance snake: <tolo szaja> "cantil, culebra, u otra su semejante con la boca amarilla"

haw-šaha. [N-N]. edge of mouth = lips: <jauszaja> "labios"

hayuk šaha. [N-N]. cloth of mouth = napkin: <jayuc szaja> "pañó de chocolate a modo de servilletas"

ʔotok šaha. [N-N]. *tapesco*?-door: <ótoc szaja> "puerta hecha de tapesco"

pak'u-šaha. [?-N]. ?-mouth = (to) lie: <packuszája> "mentira" ; <paućuszaja> "mentir"

ʔuy-šaha. [N-N]. water of mouth = saliva: "uy szajáa" "saliva"

wak'i-k-šaha. [VI-INSTR-N]. played-mouth = nickname: <guaeicszaja> "el mal nombre"

para-šaha. [PREP-N]. below/behind-mouth = cheek: <paraszaja> "cachetes"

šan-šaha. [PREP-N]. inside-mouth = teeth: <szanszaja> "los dientes"

***šaka**

saka-ya. [?-TRANS]. to raise, lift, elevate: <sacáya> "levantar"

šakač'a

šakač'a. [VT]. to steal: <szacatxa> "hurtar"

šakša-ł'a. [VT-AGT]. (the one) who steals = thief: <szacszał'a> "el ladrón"

šak'-

*šak'a. [ADJ]. white [L-M]

šak'al-awiš. [N-N]. whiteness-trousers= white trousers [L-M]: <szaałaguisz> "calzones blancos"

šak'it-haya. [ADJ/N-N]. whiteness/excellent-female = good woman [L-M]: <szaeiŁ aya> "buena moza, hermosa o linda"

šak'it-humu. [ADJ/N-N]: whiteness/excellent-male = good man [L-M]: <sza eiŁ umu> "buen mozo, visarro"

šak-si. [ADJ-POS.VT]. to make white = to bleach, strain: <szaczi> "colar o cernir"

šak'a

šak'a. [VT]. to lead, be best man at wedding: <szaea> "apadrinar matrimonio o llevar por delante a otros"

šak'a-4a. [VT-AGT]. (the one) who leads:

<szæaŁa> "el que lleva por delante a otro"

šak'a-k'i-4a. [VT-AP-AGT]. (the one) who

leads, sponsors = best man at wedding:

<szæackiŁa> "el que apadrina matrimonio"

šak'ari > šaka

šak'a-ri. [?-POS.VT]. to put to flight, scare away:

<szæari> "ahuyentar, espantar y correr animales"

šak'ari-k'i-4a. [VT-AP-AGT]. (the one) who

scares away: <szæarickiŁa> "el aventador,

espantador"

šak'ayaŁ

šak'ayaŁ. [N]. thorn, spine: <szæaayaŁ> "la

espinas"

šaŁ

šaŁ. [ADJ]. good, well: <szāŁ> "bueno,

perfecto, bien"

ʔašin=šaŁ. [NEG=ADJ]. not good/well = bad:

<aszin szāŁ> "malo, no está bueno"

šaŁ-k'i-ya. [ADJ-INCH-TRANS]. to make

become good = compose, set, dress:

<szāŁquiya> "componer o aliñar"

šamati:

šamati:. [N]. forehead: <szamali>, <számaliy>

"frente"

ša:n

ša:n. [INT]. what? (question word): <szán>

"¿qué?; para interrogaciones"

ša:n paraki. [INT INT]. what?-for what reason?

= because? [L-S]: <szāan paraqui> "¿por qué?;

interrogativo"

šan ši:. [INT ADV]. what? = and what?: <szan

szøve> "¿qué?; interrogativo"

ša:n-i. [INT-INT]. what?-= how?: <szāani>

"¿cómo?; interrogativo"

šan=ta:. [INT=INT]. what?-= how?:

<szādaa> "no se qué, y quien sabe qué"

šan=ta ši ʔaŁi. [INT=INT ADV PREP.CAUS]:

what?-=EXTEN because = and because of

what?: <szāda szøve aŁi> "¿y por qué?;

interrogativo"

šan=ta ši paraki. [INT=INT ADV INT]: what?-=

and for what reason? = and what for?: <szāda

szøve paraqui?> "¿y para qué?; interrogativo"

ʔama=šan ʔaka naman [ADJ?=INT? ? ?].

expression (meaning not understood):

<amaszān áca namán> "refrán"

ʔašin=ša:n. [NEG=INT]. not-what = (there is)

nothing: <aszin szān...> "nada"

šana

šan-šana. [PREP-N]. in-? = dress, clothes:

<szan szana> "vestido o ropa de ponerse"

šanu

šanu. [N]. *cojinicuil* (holiday, celebration):

<szanu> "cojinicuil fiesta"

šapari

šapari. [VT]. to de grain: <szapári> "desgranar"

šapri-wa. [VT-PART.PF]. de grain (thing):

<szaprigua> "cosa desgranada"

šapri-k'i-4a. [VT-AP-AGT]. (the one) who

de grains: <szapriciŁa> "el que desgrana"

šapu (1)

šapu. [N]. cotton: <szápu> "algodón"

šapu (2)

šapu. [N]. guisquil, chayote (plant) [L-MZ]:

<szápu> "guisquil o chayote"

šapun

šapun. [N]. soap [L-S]: <szapún> "jabón"

*šar(a)ši

šarši. [VT]. to water, sprinkle, irrigate:

<szárszi> "regar o esparar el agua

menudamente"

šaru (1)

šaru. [N]. *sea, below, *south: <szaru> "abajo"

šaru-mapi. [N-N]. sea/southern-coyol = type of

palm tree, *huiscoyol*: <szaru mapi>

"guiscoyol"

šan-šaru. [PREP-N]. at/in/to the sea = below

the sea: <szanszaru> "abajo el mar, las

lagunas, y esteros"

šaru (2)

šaru. [N]. pitcher [L-S]: <szaru> "jarro"

šata

šata. [VI]. be, doing/repeating sth.: <szàta>

"estar" ; <szata> "estar haciendo o repitiendo

una misma cosa"

šawa (1)

šawa. [N]. brazilwood: <szagua> "brasil;

árbol"

šawa (2)

šawa. [N]. blanket: <szagua> "sábana, colcha,

cobija"

šawaŁ'a

šawaŁ'a. [VT]. to sow: <szagatxa> "sembrar"

šaw(a)ša-wa. [VT-PART.PF]. sown (thing):

<szauszagua> "cosa sembrada"

šaw(a)ša-ʔa. [VT-AGT]. (the one) who sows:
<szauszaʔa> "sembrador"

šawi > čawi

šawi. [VT]. to scratch: <szagüi> "rascar"

šawu (1)

šawu. [N]. fingernail, claw: <szaug> "uña"

šawu (2)

šawu. [VI]. to sit down: <szagü> "sentarse"

šawe. [N]. seat: <szague> "el asiento para sentarse"

ša:wu:-ʔ. [VI-STAT]. seated: <szägü> "estar sentado"

sawu-ya. [VI-TRANS]. put, seat sth.: <szaguya>
"sentar otra cosa, ponerla en alguna parte"

šawu-ʔa. [VI-AGT]. (the one) who sits:
<szaguʔa> "el que está sentado, u ocioso"

šaya

šaya. [ADJ]. sour [L-M]: <szayá> "cosa agria"

šaya-naru. [ADJ-N]. sour/acid-earth = vitriol:
<száya naru> "tierra de caparrosa"

še:

še:. [N]. opossum [L-MZ]: <szeé> "tacuazín"

šeke

šeke. [N]. chest, ribs: <szeque> "la costilla"

šan-šeke. [PREP-N]. at/in-ribs = chest, ribs:
<szan szeque> "pecho y costillas"

še:k'e

še:k'e. [N]. brushwood, small firewood:
<széeee> "leña menuda, que llaman palitos"

še:te

še:te. [N]. worm: <szeete> "lombríz"

ši:ka

ši:k'a. [N]. hawk [L-M]: <szíea> "gavilán"

šila

šila. [N]. seat, chair [L-S]: <szila> "silla de sentarse"

šiʔik

šiʔik. [N]. cob of the corn, olote [L-M]:
<szílic> "olote"

šina

šina. [N]. urine [L-M]: <szína> "orines"

šina. [VI]. urinate: <szína> "orinar"

šina-ʔa. [VI-AGT]. (the one) who urinates:
<szináʔa> "orinador"

píšik-šina. [N]. cup for urine = pee-pot:
<pueszuec szína> "jícara de orines"

šinak

šinak. [N]. bean [L-M]: <szinác> "los frisoles"

ʔone-šinak. [ADJ-N]. soft/tender-bean = *ejote*:
<óne szinác> "ejote, vayna de frisol tierno"

šinu

šinu. [N]. wild reed: <szinu> "caña brava"

šinula

šinula. [N]. lady [L-S]: <szinúla> "señora"

šipi

šipi. [VT]. strike, injure by cutting [L-N]:

<szipi> "cortar heriendo"

šipi-k'i-ʔa. [VT-AP-AGT]. (the one) who cuts,
strikes: <szípiɛiʔa> "cortador"

širi

širi. [VT]. hide: <sziri> "esconder"

širi-ʔa. [VT-AGT]. (the one) who hides:
<sziriʔa> "escondedor"

šiwu

šiwu-ʔu:wiʔ. [N-N]. ʔ-flesh = soapwort (herb):
<szígu úguí> "cierto hierba, que sirve a las
indias para lavar y bañarse"

šiyaku

šiyaku. [N]. liana, rope: <sziyácu> "mecate"

šiyaku. [N]. illicit, awkward: <sziyácu> "ilícito
y torpe amigo o amiga"

šiyuk

šiyuk. [N]. rattlesnake: <szíuc> "cascabel y
chinchin"

muʔa-šiyuk. [ADJ-N]. white-rattlesnake =
viper, rattlesnake: <múʔasziuc> "víbora de
cascabel, culebra"

šokoy

šok'oy. [N]. owl [L-M]: <szoɛoy> "lechuza"

šolko

šolko. [ADJ]. toothless: <szolco> "sin dientes"

šoto

šoto. [N]. earthenware pot: <szoto> "el tiesto"

šo:to-k. [N-INSTR]. instrument for pot =
cooking stone: <szootóc> "tejón y piedras del
fuego, que llaman tenamastes"

šowe

*šowe. [N]. *measure?

pi:ya-šowe. [N-N]. leaf of *measure? = leaf for
measuring salt: <piya szogue> "la hoja con que
aforran la sal"

šan-šowe. [PREP-N]. at/in-*measure?:

<szanszogue> "Pasaco; pueblo"

šuka

šuka. [VT]. to eat, bite: <szúea> "mascar, morder, comer"

šuka šan-šaha. [VT PREP-N]. bites inside-mouth = toothache: <szuca szan szaja> "dolor de muelas"

šuka šam-(h)ini. [VT PREP-N]. bites inside-stomach = stomach ache: <szuca šamíni> "dolor de barriga"

šuk'a-wa. [VT-PART.PF]. eaten/bitten (thing): <szueagua> "cosa comida, mascada, mordida"

šuk'imať

šuk'imať. [N]. coal: <szuckimaľ> "brazas"

šule

šule. [N]. little fish: <szule> "cierto peccecico"

šučtera ~ šučteru

šučtera. [N]. single, unmarried (female) = single woman [L-S]: <szučtera> "la mujer soltera"

šučtero. [N]. single, unmarried (male) = single man [L-S]: <szučtérú> "el hombre soltero"

šu:ni (1)

šu:ni. [N]. snails (from river), sea shell, crayfish [L-M]: <szúni> "jutes y caracoles de ríos de agua dulce; concha del mar"

šu:ni (2)

šu:ni. [N]. star [L-M]: <szúni> "estrella"

šu:nik

šu:ni-k. [?-INSTR]. instrument for ? = pot: <szúníc> "olla"

k'upru-šunik. [N-N]. deep?-pot = deep pot: <šupru szunic> "olla honda"

šu:nu

šu:nu?. [ADJ]. long, deep (thing): <szúunú> "cosa larga"

šu:nu?. [N]. deepness of pools/water: <szúunú> "la hondura de las pozas y de toda agua"

šunu-k'a. [ADJ-CAUS]. make long = to lengthen: <szúnucà> "alargar"

šunu

*šunu- [VT]. darn, strand, join

šu:nu-k. [VT-INSTR]. darn-instrument = navel: <szuunú> "ombligo"

č'uni-k. [VT-INSTR]. darn-instrument = purse, pouch: <txunic> "bolsa que usan las indias en sus naguas"

šu:nu-m-pati. [VT-?-N]. darned?-cloth = altar cloth: <szuunum pati> "manta doble, que llaman del rey"

šupimať

šupimať. [N]. izcanal, thorn tree: <szupímaľ> "izcanal, árbol de espina a modo de cachos"

šur- > čřř-*šuraya > haya****šurumu > humu****šuruk**

šuruk. [N]. staff, walking cane: <szurúc> "bordón"

šuruťi

šuruťi. [N]. squirrel [diff.]: <szurúľ> "ardilla"

šuši

šuši. [N]. beard: <szuszi> "barbas"

šušumi

šušumi [N]. coati [L-M]: <szuszumí> "pizote"

šuti

šuti. [N]. freshwater snails, jutes [L-N]: <szuti> "jutes, a modo de caracoles de los ríos"

šu:tuk > hu:tuk**šuwán**

šuwán. [N]. laural tree: <szuguan> "palo de laurel alias suchicaguite"

šuway (1)

šuway. [N]. grapes, raceme: <szuguay> "todo género de racimo"

šuway (2)

šuway. [N]. lizard, cayman: <szuguay> "lagarto, caiman"

suway-ťamuk. [N-N]. lizard-shrimp/fish = armoured fish = sea devil, monkfish: <szuguay ľamuc> "peje armado"

šui

šui. [VT]. to sweep: <szugui> "barrer"

šui-k. [VT-INSTR]. sweeping-instrument = broom: <szuguic> "escoba"

šui-k'i-ťa. [VT-AP-AGT]. (the one) who sweeps: <szuguicĩľa> "el que barre"

šuya

šu:ya. [ADJ]. first, older: <szúya> "primero, antes"

šuya-ť. [ADJ-?]. older sibling: <szuyá> "hermano mayor"

ši ~ šiki

*ši. [ADV]. and

šan=ši. [INT=ADV]. and what?: <szanszueve>
"¿qué?; interrogativo"

šan=ta=ši. [INT=INT=ADV]. and because of
what?: <szanda szue aLi> "¿y por qué?;
interrogativo"

*šiki. [ADV]. and, adverbial of extension

ʔakan=šiki. [ADV=ADV]. like-also = like this as
well: <acan szuequi> "también", "así también"

ʔama=šiki. [ADV=ADV]. in addition-also =
and also: <ama szuequi> "también, et, y"

ʔina(ʔ)=šiki. [ADV=ADV]. with-also = also,
and: <Liná szuequi> "también, y"

nah=šik'i. [PN=ADV]. he (is) also = he is as
well: <nag szie> "el es, y también"; <nag
szuequi> "también"

šha

šha. [N]. sand [L-M?]: <szueja> "arena"

šik'it

šik'it. [N]. *tempisque* (type of tree):
<szueueél> "tenpisque; árbol y su fruta"

šima (1)

šima. [N]. rat, mouse: <szuema> "ratón"

šima (2)

ku:ruk-šima. [VT-INSTR-N]. *instrument for
completing-? = roof-ridge, ridgepole: <cuurúc
szuema> "caballete, palo que sirve de
cumblera a la casa"

širi

širi. [VT]. to strike, hit, beat: <szuéru> "golpear"

širi-k. [VT-INSTR]. instrument for
striking/beat = striker, beater: <szueruéc>
"golpeador"

šiyi

šiyi. [VI]. to return: <szueyue> "volver"

T**ta**

ta. [VI]. go, come, pass by [L-M?]: <tà> "ir y
venir"; <taà> "venir; anómalo"

tahaʔ

tahaʔ. [QUANT]. many, much: <tajá>
"muchas veces"

tahana

tahana. [VI]. be born, emerge: <tajana> "nacer"

tahna-wa haya. [VI-LOC N]. place of being
born of female = female genitals: <tagnagua
jaya> "partes genitales de la mujer"

tahna-wa humu. [VI-LOC N]. place of being
born of male = male genitals: <tagnagua
jumu> "partes genitales del hombre"

tahti

tahti. [N]: <tagti> "sabana"

tahti-karawa. [N-N]. savanna-wild/bush =
grass from the plains: <tagti caragua> "sacate
de sabana"

tahti-naru. [N-N]. savanna-earth/land = level,
plane lands, plains: <tagti naru> "tierra llana"

tahti-šam-piya. [N PREP-N]. savanna-at the
leafs = Tepeaco (toponym): <tagti szamipiya>
"Tepeaco; pueblo"

tak'ani

tak'ani. [VT]. to impute, aggravate [L-M]:
<tačani> "imputar, achocar"

taʔa

taʔa. [VT]. to burn, light, set on fire [L-M]:
<taʔa> "quemar, encender"

taʔa-tili. [VT-N]. burn-ache/hardship = fever:
<taʔa tili> "calentura"

tawu taʔa-tili. [N VT-N]. cold burn-ache =
shivering, ague: <tau taʔa tili> "fríos y
calenturas"

taʔi

taʔi. [N]. throat: <taʔi> "garganta"

hutu-taʔi. [N-N]. pole of throat = neck bone:
<jutu taʔi> "hueso del pescuezo"

para-taʔi. [PREP-N]. over/behind-throat =
neck: <parataʔi> "pescuezo"

tamaç'i

tam(a)ç'i. [VT]. to twist, make rope: <tamptxi>
"torcer"

tamaç'i-Ø. [VT-NOM]. pita fibre, henequen,
thread, lasso: <tamatxi> "pita flora torcida"

ta:na

ta:na. [VI]. to be: <taana> "el verdadero *sum*
est fui, que también significa ser"; "ser;
anómalo"

ta:nik

ta:nik. [N]. neck, brain: <taaníc> "nuca,
cerebro"

tani-k'i-k'. [N-INCH-INSTR]. instrument for
(laying) neck, brain = head of bed, pillow:
<tani eiç> "cabecera, almohada"

tanɕ'i

tanɕ'i. [ADJ]. deaf, mute, silent: <tanɕi>
"sordo"

ta:pa

ta:pa [N]. nance (fruit) [L-M]: <táapa> "nance;
fruta"

ta:ri

ta:ri. [VT]. to owe sb.: <taari> "deber"

ta:ri:

ta:ri:. [VT]. to join, knot, tie, fasten: <taari>
"trabar"

tariša

tariša. [VT]. to divert, change direction, turn
aside: <tarisza> "desviar"

tar(i)ši-ki. [VT-REFL?/AP]. to withdraw
(oneself): <tarsziqui> "retirarse"

taru > ta:ri (1)

taru. [VT]. to promise: <taru> "prometer"

tašelaš

tašelaš. [N]. scissors [L-S]: <taszélász>
"tijeras"

tata

tata. [N]. father: <táta> "padre"

tata-hipi. [N-N]. father-? = young man:
<tatahipi> "mozeon, mancebo"

tata-miya. [N-N]. father-chicken = rooster:
<tata miya> "gallo"

titika-tata. [n]. compaternity-father =
godfather: <titika tata> "padrino"

tawaɬk'i

tawaɬ-k'i. [ADJ-INCH]. become blessed = to
be blessed: <>taguaŁei> "bendecir"

tawaɬk'i-ʔuy. [VI-N]. blessing-water = holy
water: <taguaŁei húy> "la agua bendita"

tawaɬk'i-wa. [VI-PART.PF]. blessed (thing):
<taguaŁeigua> "cosa bendita"

tawu

tawu. [N]. wind, breeze [L-M]: <táu> "viento"

tawu taɬa-tili. [N VT-N]. cold burn-ache =
shivering, ague: <tau taŁa tili> "fríos y
calenturas"

sararaʔ-taw. [ADJ-N]. cold-breeze = cold:
<sarará táu> "frío"

wona-taw. [N-N]. hill/north-wind = northwind:
<goná tau> "viento, norte"

tawuk

tawuk. [N]. tortoise: <táuc> "tortuga"

ʔuruɬ-tawuk. [N-N]. egg of tortoise = tortoise
egg: <uruŁ tauc> "huevo de tortuga"

taya (1)

taya. [VT]. to castrate animals: <taya>
"castrar los animales"

taya (2)

taya. [VT]. to trample, tread on: <táya> "pisar"

tayu

tayu. [VT]. to put sth. on the head: <táyu>
"ponerse el sombrero, o cualquiera otra cosa en
la cabeza"

tayu-k. [VT-INSTR]. instrument for putting on
the head = hat: <tayúc> "sombrero"

teʔ

teʔ. [N]. female genitals: <té> "es verbum
impurum et significat illa pars mulieris, que
constituit eam in suo femineo genere"

ʔaɬ-te. [PREP-N]. over/at-female genitals =
male genitals: <aŁtè> "*verbum impurum et
significat membrum virile*"

ʔaɬte-piši. [N-N]. genital-cup = urinal?: <aŁte
pueszue> "jicara peste"

čaraʔin-ʔaɬte. [N-N]. ?-genitals = *penis?:
<čarraven aŁtè> "*verbum impurum et
significat pendiculus*"

muš-ʔaɬte. [N-N]. hairs of genitals = pubic
hair: <muš aŁtè> "est verbum disolutum per
quod significatur pilos continentes in partes
genitales"

teɬama

teɬama. [VT]. to lick, lap, flare up: <teŁama>
"lamer"

te:na-

te:naʔ. [QUANT]. much: <teená> "bastante,
mucho"

te:na-n. [QUANT-IRR]. much: <teenan>,
<tènan> "mucho"

tena

tena. [ADJ]. red: <téna> "cosa colorada"

ten-ʔaluʔ. [ADJ-N]. red-parrot = macaw: <ten
alú> "guacamaya"

ten-ʔaʔu. [ADJ-N]. red-maize: <ten au> "maíz
colorado"

ten-hu:ši-k. [ADJ-N-INSTR]. red-headed =
type of vulture: <ten-júszic> "quebrantahueso"

ten-huwa. [ADJ-N]. red-zapote: <tenugua>
"zapote"

ten-naki. [ADJ-N]. red-chilli: <ten naquí>
"chile colorado alias chileguate"

ten-turi. [ADJ-N]. red-child = infant, newborn:
<ten turi> "criatura tierna"

ten-wiʔay. [ADJ-N]. red-lion = puma: <ten
guiʔay> "león"

teneš

teneš. [N]. lime [L-N]: <tenész> "cal"

teno

teno. [VT]. to insert, put in: <téno> "meter"

tero

tero. [VT]. kill: <tero> "matar"

te:ro-ʔ. [VT-STAT]. is killed = die: <teerò>
"morirse"

tero-wa sawak. [VI-ʔ N]. place of death-bell:
<terogua saguac> "dobles de las campanas"

te:ro-ke. [VT-AP]. to (generally) kill = to fish:
<teeròque> "pescar"

tero-k'e-ʔa. [VT-AP-AGT]. (the one) who kills
= killer: <teroeʔa> "el que mata"

teško

teško. [N]. type of bird: <tészco> "cierto
pájaro, de que abusan los indios"

teškoy. [ADJ]. naughty, pernicious: <teszcoy>
"travieso, pernicioso"

***ti**

ti. [VT]. have: <di> "haber; defectivo"

ti:ʔ

ti:ʔ- [PREP]. to, for (indirect object): <tiy>
"para"

ti:ki

ti:ki. [VI]. to sleep: <tiéi> "dormir"

ti:ki-ʔa. [VI-AGT]. (the one) who sleeps =
sleepyhead: <tiéiʔa> "dormilón"

ti:ki-k waru. [VI-INSTR-N]. instrument for
sleeping-net = hammock: <tiéiɛguaru>
"hamáca"

ti:ki-k-ʔa. [VI-REFL?-AGT]. (the one) who
(generally) sleeps = sleepyhead: <tiyɛiɛʔa>
"dormilón"

tila

tila. [N]. salt: <tila> "sal"

tila-se:ma. [N-N]. salt-fish = salted fish: <tila
séma> "pescado salado"

tili

*tili. [N]. ache, suffering, hardship [L-M]

pari-tili. [N-N]. heat/hot-ache = sunstroke:
<paritili> "calentura de tabardillo"

piʔa-tili [N-N]. ʔ-ache/hardship = calamity,
necessity, want: <piʔatili> "calamidad,
necesidad"

taʔa-tili. [VT-N]. burn-ache/hardship = fever:
<taʔa tili> "calentura"

taw taʔa-tili. [N VT-N]. cold burn-ache =
shivering, ague: <tau taʔa tili> "fríos y
calenturas"

tiʔtik'

tiʔtik'. [ADJ]. black [L-N]: <tiʔtick> "negro,
negra"

tišata

tišata. [VT]. to break wind, fart: <tiszata>
"ventosear"

tišta-ʔa. [VT-AGT]. (the one) who breaks
winds, farts: <tisztaʔa> "el que ventoséa"

tiši

tiši. [N]. ilder, lazy person [L-N]: <tiszi>
"haragán"

tita

tita. [N]. leg: <títa> "pierna"

ʔuwi tita-h. [N N-3sP]. flesh of his leg = thigh:
<ugui titag> "muslos"

titika

*titika. [N]. *compaternity relation

titika-naʔu. [N-N]. compaternity-child =
godchild: <titica nau> "ahijado"

titika-tata. [n]. compaternity-father =
godfather: <titica tata> "padrino"

titika-ʔuta. [n]. compaternity-mother =
godmother: <titica utáa> "madrina"

toktok

toktok. [N]. mockingbird [L-M]: <toctoc>
"sensonte de la tierra; ave"

tolo

tolo. [ADJ]. yellow [L-N]: <tolo> "cosa amarilla"

tolo. [N]. bundle: <tolo> "tamate, envoltorio de
ropa"

tolo-ʔaʔu. [ADJ-N]. yellow-corn: <tolo au>
"maíz amarillo"

tolo-šaha. [ADJ-N]: yellow-mouth = fer-de-
lance snake: <tolo szaja> "cantil, culebra, u
otra su semejante con la boca amarilla"

****to:lo**

to:lo. [N]. coral tree: <tolo> "quilate, pito, o
dormilón, árbol"

tone

tone. [VI]. to be silent, quiet, calm: <tonè>
"callar"

to:noha

to:no-ha. [VT-CAUS]. to deceive, cheat:
<tónója> "engañar"

tonoha-k'i-ṭa. [VT-AP-AGT]. (the one) who
deceives = deceiver, liar: <tonojaeiŁa>
"engañador, mentiroso"

tonton

tonton. [N]. sea turtle [L-N]: <tondón>
"tortuga marina"

ṭuruṭ-tonton. [N-N]. egg of turtle = turtle egg:
<uruŁ tondon> "huevo de la tortuga"

tuhami

tuhami. [VI]. to spit: <tujámi> "escupir"

tuhkuwa

tuhku-wa. [N/VT-LOC]. place of ? = Tecoaco
(toponym): <tugcuguá> "Tecoaco; pueblo"

tuṭtu

tuṭtu. [VT]. to pierce, prick, puncture, punch
[L-M]: <tuŁtu> "picar, dar estocadas"

tuṭtu-ṭa. [VT-AGT]. (the one) who pierces,
punches: <tuŁtuŁa> "el que pica"

tuṭtu-k. [VT-INSTR]. instrument for piercing,
puncturing = lance, pike: <tuŁtuc> "cosa con
que se pica, como lanza, pica"

tuṭtu-k'i-ṭa. [VT-AP-AGT]. (the one) who
pierces, pricks: <tuŁtuēiŁa> "el que pica"

tuṭu

tuṭu. [N]. flower (generic term): <túŁu> "todo
género de flor"

tuṭu-ṭampuki. [N-N]. flower-serpent = type of
snake: <tuŁu ambuqui> "suchicúa; culebra"

tuma

tuma. [N]. deer, stag: <túma> "el ciervo,
venado"

tuma-ṭampuki. [N-N]. deer-snake = boa
constrictor, *mazacoatl*: <tuma ambuqui>
"masacúa; culebra"

haw-tuma. [N-N]. peel/skin (of) deer =
deerskin = whip: <jau tuma> "cuero para
azotar, piel de ganado"

ṭeṭak-tuma. [N-N]. tongue (of) deer = type of
herb: <eŁactuma> "lengua de venado; hierba"

peko-tuma. [N-N]. ? (of) deer = cramp
(illness): <peco túma> "calambre; enfermedad"

pišu-k-tuma. [VT-INSTR-N]. instrument for
squeezing-deer = type of liana: <piszuc tuma>
"cierto bejuco, que llaman en castellano tripa
de vieja"

tumin

tumin. [N]. *tomín* (Spanish coin) = money [L-
S]: <tumín> "moneda y todo género de dinero"

tumu

tumu. [VT]. to end, terminate, finish: <túmu>
"acabar"

tumu-wa. [VT-PART.PF]. finished (thing):
<tumuguá> "cosa acabada"

tumuki

tumu-ki. [QUANT]. all, every: <tumuqui>
"todos, todo"

tunati

tunati. [VI]. play an instrument [L-M]:
<tunáti> "tocar instrumento"

tunti-ṭa. [VI-AGT]. (the one) who plays an
instrument = musician: <tuntiŁa> "el que toca
instrumentos"

tupa

tupa. [VT]. to leave, abandon, let: <túpa>
"dejar"

tupa-wa. [VT-PART.PF]. left, abandoned
(thing): <tupágua> "cosa dejada"

tupa-ṭa. [VT-AGT]. (the one) who leaves:
<tupaŁa> "el que deja"

tupilili

tupilili. [N]. variety of herbs [L-N]: <tupilili>
"el calanhilla; hierba"

tura

tura. [VT]. to bring, take: <túra> "traer, llevar"

tura-wa. [VT-PART.PF]. brought, taken
(thing): <turagua> "cosa traída"

turi

turi. [N]. child [L-M]: <turi> "niño"

muṭ-turi. [ADJ-N]. white-child = infant: <muŁ
turi> "criatura tierna"

ten-turi. [ADJ-N]. red-child = infant, newborn:
<tenturi> "criatura tierna"

turuy

turuy. [N]. guava (fruit): <turúy> "guayaba; fruta"

tuštun

tuštun. [N]. *tostón* (Spanish coin) [L-S]:
<tusztun> "tostón"

tutu

tutu. [VI]. suck breast [diff.]: <tútu> "mamar"

tutu-k. [VI-INSTR]. instrument for sucking = breast: <tutúc> "pechos de la mujer"

ʔuy-tutuk. [N-N]. water of breast = milk: <uy tutuc> "leche"

tutu-ha. [VI-CAUS]. make suck = to breastfeed: <tutuja> "dar de mamar"

tutu-k'i-ʔa. [VI-AP-AGT]. (the one) who sucks = nurse: <tutueiʔa> "ama, chichigua"

tuwa

tuwa. [N]. cacao: <túa> "cacao"

mu-tuwa. [3sP-N]. his cacao tree: <mu tũa> "su cacaguatal"

tuya

tuya. [VT]. to scold, grumble: <tuya> "reñir"

tuya-ki. [VT-AP]. to scold = to litigate, rail: <tuyáqui> "pleitear"

tuya-k'i-ʔa. [VT-AP-AGT]. (the one) who scolds: <tuyaieiʔa> "regañon"

tuyu

tuyu. [VT]. to start, begin: <túyu> "comenzar"

tuyu-wa. [VT-PART.PF]. begun, started (thing): <tuyugua> "cosa comenzada"

tuyu-ka. [VT-CAUS]. to make begin = to tease, provoke: <túyúea> "torear o provocar"

tuyu-ha-k'i-ʔa. [VT-CAUS-AP-AGT]. (the one) who teases, provokes: <tuyujaieiʔa> "toreador provocativo"

tyuś

maku-tyux. [N-N]. house of god = church [L-S]: <macu tiusz> "iglesia"

tí:maʔ

tí:maʔ. [N]. louse: <tuevemaʔ> "piojo"

tími

tími. [VT]. to dye, colour: <tuemue> "teñir"

tími-k'i-ʔa. [VT-AP-AGT]. (the one) who dyes, colours = dyer: <tuemueieiʔa> "el que tiñe o tintorero"

tíšk'í

tíšk'í. [ADJ]. far, distant: <tueszeue> "lejos, distante"

ʔašin=tíšk'í. [NEG=ADJ]. not far = close: <aszin-tueszeue> "no lejos"

ǵ'**ǵ'ahama**

ǵ'ahama. [VI]. to sting oneself with thorn: <txajama> "espinarse o lastimarse hiriendose con algo"

ǵ'aka

ǵ'aka. [VT]. fornicate: <txaca> "est verbum impurum et inhonestum et significat quod est fornicare"

ǵ'ama

ǵ'ama. [ADJ]. good [L-M/MZ]: <txáma> "bueno y bien"

ǵ'ama čiriki. [INTENS ADJ]. good/well small = very small: <txamachuerueue> "muy chico"

ǵ'ama ʔiraʔ. [INTENS ADJ]. good/well big = very big: <txamaueerrá> "muy grande"

ǵ'amí

ǵ'amí. [ADJ]. sour, bitter [L-M]: <txamue> "cosa agria o amarga"

hamí. [ADJ]. acidic: <jamue> "cosa acida"

ǵ'awi

ǵ'awi. [VT]. to pinch, scratch: <txaguí> "pelliscar o arañar"

ǵ'awi-k'i-ʔa. [VT-AP-AGT]. (the one) who pinches: <txaguieiʔa> "pelliscador"

ǵ'aya

ǵ'ayaʔ. [ADJ]. wet [L-M]: <txayá> "cosa mojada"

ǵ'aya-se:ma. [ADJ-N]. wet fish = fresh fish: <txaya sema> "pescado fresco"

ǵ'ehe

ǵ'ehe. [N]. Chiquimulilla (toponym): <txege> "Chiquimula; pueblo"

ǵ'imaha

*ǵ'imaha. [N]. (makers of) guacales/pottery = Guazacapán (toponym) [L-M]: <txímaja> "Guazacapán; pueblo"

ǵ'inaʔna

ǵ'inaʔna. [N]. scorpion [L-M]: <txinána> "alacrán, sabandija"

ǵ'ita

ǵ'ita. [N]. straw hat: <txita> "petaquilla de caña o sombrero de petate"

ǵ'oko

ǵ'oko. [N]. grackle, blackbird [L-M]: <txoco> "zanate; ave"

ɕ'uma

ɕ'uma. [VT]. kiss, suck [L-M]: <txúma>
"besar"

ɕ'uma-ʔa. [VT-AGT]. (the one) who kisses:
<txumáʔa> "el que besa"

ɕ'uɕ'u

ɕ'uɕ'u-pari. [ADJ-N]. ?-heat = measles:
<tzutzupari> "sarampión, sarpullido;
enfermedad"

ɕ'uwi

ɕ'uwi-naki. [?-N]. ?-chilli = chiltepe: <txugui
naqui> "el chiltepe" ; <sugui naqui> "chiltepe"

****ɕ'iy**

**ɕ'iy(ku). [VT]. to crush, pound

**ɕi[y]ahuku. [VT]. to bash/batter sb.: <chua
júcu> "golpear, aporrear"

ɕ'iki

ɕ'ik'(i)-siʔma. [ADJ-N]. half/mid-night =
midnight: <txuɛɛve svema>; <txuɛsvema>
"media noche"

ɕ'imí

ɕ'imí. [VT]. to pour water, irrigate: <txuemue>
"regar todo género de siembras"

ɕ'imí-wa. [VT-PART.PF]. watered/irrigated
(thing): <txuemuegua> "cosa regada"

ɕ'imí-ki-ʔa. [VT-AP-AGT]. (the one) who
waters/irrigates: <txuemueɛiʔa> "regador de
siembras"

ɕ'imítiki

ɕ'imí-tiki. [N-N]. ?-? = type of rope made from
bark: <txuemue tɔɛɛve> "cierto mecate de
corteza"

ɕ'iri

ɕ'iri. [VT]. to cut: <txveri> "trozar"

ɕ'iri-k'i-ʔa. [VT-AP-AGT]. (the one) who cuts:
<txveríɛiʔa> "el que trueza o corta"

*ɕ'iri-wa. [VT-PART.PF]. cut (thing):
<txurigua> "cosa trozada"

ɕ'iwí

ɕ'iwí. [N]. fresh/tender/unripe corn:
<txueguve> "maíz tierno o camagua"

ɕ'iwí-ʔuyuk'u. [N-N]. freshcorn-atole:
<txueguve uyuzu> "atole de maíz tierno"

ɕ'iwí-mapi. [N-N]. freshcorn-tortilla:
<txueguve mapve> "tortilla de maíz tierno que
llaman elotászcá"

U**ʔučun**

ʔučun. [N]. papaya [L-M/MZ]: <uchún>
"papaya; fruta"

ʔuk-

ʔuk-šaya. [ADJ-N]. old/married-female =
elderly woman: <ucszaya> "vieja"; "mujer,
consorte"

ʔuk-šumu. [ADJ-N]. old/married-male =
elderly man: <ucszumu> "viejo"

ʔuka

ʔuk'a. (1). [VT]. put, throw: <uca> "poner,
echar alguna cosa en algun lugar"

ʔuk'a. (2). [VT]. do: <uea> "estar ejecutando o
haciendo aquello"

ʔuka. (3). [VT]. have: <ucà>, <ucáa> "hay;
tener o haber; defectivo"

ʔukuʔ

ʔuk'u. [N]. freshcorn tortilla: <ueu> "elotesca,
tortilla de maíz tierno triángula"

ʔuʔaka

ʔuʔa-ka. [VT-CAUS]. to make want = to
desire: <úʔaɛa> "desear"

ʔuʔ-ka-ʔa. [VT-CAUS-AGT]. (the one) who
makes want = (the one) who desires:
<úʔcaʔa> "el que desea"

ʔuʔu

ʔuʔu. [VI]. to fall: <uʔú> "caer"

ʔuʔu-wa. [VI-PART.PF]. fallen (thing):
<uʔugua> "cosa caída"

ʔuʔu-ya. [VI-TRANS]. to make fall = to
throw/pull down: <ulúya> "derribar"

ʔuma

ʔuma. [VT]. to cure, heal: <uma> "curar"

ʔuma-ʔa. [VT-AGT]. (the one) who cures/heals
= healer: <umaʔa> "médico, curandero"

ʔunaʔ

ʔunaʔ. [VT]. have: <unà>, <unáa> "tener,
haber; defectivo" ; "hay"

ʔupuʔ

ʔupuʔ. [VI]. to raise, stand up: <upù>, <upúu>
"pararse"

ʔupu-ya. [VI-TRANS]. to raise sth.: <upuya>
"parar"

ʔupu-wa. [VT-PART.PF]. *raised (thing)?:
<upuguá> "cosa particular"

ʔuray

ʔuray. [N]. fire: <uray> "el fuego"

nari-ʔuray. [N-N]. nose of wood = soot: <nari uray> "tizón"

ʔurk'u

ʔurk'u. [VT]. to drink [L-M]: <ureu> "tragar"

ʔurʔu

ʔurʔu. [ADJ]. complete, entirely: <urʔú> "entero"

ʔuru > k'iri

ʔuru. [VT]. cut fruit from tree: <uru> "cortar fruta"

ʔuru-ʔa. [VT-AGT]. (the one) who cuts fruit: <uruʔa> "el que corta frutas"

ʔuruʔ (1)

ʔuruʔ. [N]. egg: <urúʔ> "huevo"

ʔuru-ʔi. [N-PL]. eggs = testicles: <uruʔi> "los campañones"

ʔuruʔ-miya. [N-N]. egg of hen = chicken egg: <uruʔ miya> "huevo de la gallina"

ʔuruʔ-tawuk. [N-N]. egg of tortoise: <uruʔ tauc> "huevo de tortuga"

ʔurul-ton-ton. [N-N]. egg of (sea) turtle: <uruʔ tondon> "huevo de la tortuga"

ʔuruʔ (2)

ʔuruʔ. [N]. Tacuilula (toponym): <urúʔ> "Tacuilula; pueblo"

ʔuʂaki

ʔuʂaki. [VI]. to smoke tobacco [L-M]: <uszaquí> "chupar tabaco"

ʔuʂk'i-ʔa. [VT-AGT]. (the one) who smokes tobacco: <uszckiʔa> "humador de tabaco"

ʔuʂti

ʔuʂti. [N]. mother-in-law [L-M]: <usztii> "suegra"

ʔaya-n ʔuʂi. [N-1sP N]. ?-1sP mother-in-law = mother-in-law of my son/daughter: <ayán uchi> "mi consuegra"

ʔuʂtu

ʔuʂtu. [N]. illness of groaning; condition of newborns, similar to evil eye: <usztu> "mal de pujido en las criaturas"

ʔuʂtu-ʔampuki. [N-N]. *groaning?-serpent = uterine bleeding (*metrorrhagia*): <usztu ambuqui> "el mal de madre"

ʔusu

ʔuʂu. [N]. fly [L-M/MZ]: <uszu> "mosquito, jején"

ʔuʂumu > ʔimimí

ʔuʂumu. [VT]. to smell, stink [L-M]: <uszuʔumu> "oler"

ʔuta

ʔuta:. [N]. mother: <utà>, <utáa> "la madre"

ʔuta-kawayo. [N-N]. mother of horse = mare: <uta caguay> "yegua"

ʔuta-kotoro. [N-N]. mother of flying ant = coral snake: <uta ckotoro> "culebra coral"

ʔuta-ʔuy. [N-N]. mother of water = river: <uta húy> "el río"

ʔuta-wa:kaš. [N-N]. mother of cow = cow (female): <uta guaacatz> "la vaca"

titika-ʔuta. [n]. compaternity-mother = godmother: <titica utáa> "madrina"

ʔutu

ʔutu. [VI]. to be late: <utú> "tardarse"

ʔutu-k'i. [VI-AP]. to be late (?): <utúei> "tardarse"

ʔutu-k'i-ʔa. [VI-AP-AGT]. (the one) who is late: <utuekiʔa> "el que se tarda"

ʔutuymah

utuymah. [N]. tail: <utuymag> "cola, rabo"

ʔuʂ'i

ʔuʂ'i. [N]. cooked corn for nixtamal [L-M/MZ]: <utxi> "maíz cocido para las tortillas que llaman nixtamal"

ʔúti. [N]. corn flour, *pozol*: <uti> "pinol de maíz, harina"

ʔuʂ'i- > ʂ'ík-

ʔuʂ'i-. [ADJ]. half, middle [L-M]: <utxvúé> "en medio"

ʔuwaʔ

ʔuwaʔ. [N]. ant: <uguáʔ> "la hormiga"

maku-ʔuwaʔ. [N-N]. house of ants = anthill: <macu uguáʔ> "hormiguero"

ʔuwi (1)

ʔuwi. [VT]. to call: <úgui> "llamar"

ʔuwi (2)

ʔuwi:-k. [N-INSTR]. flesh, meat: <uguíg> "todo género de carne"

ʔuwi-hu:ri-k. [N-N]. flesh of orifice = buttock: <ugui juurig> "las nalgas"

ʔuwi-k'o:mo. [N-N]. flesh of knee = flesh of calf: <ugui eoómo> "carnaza de la pantorrilla"

ʔuwi-tita-h. [N-N-3sP]. flesh of his leg = thigh: <ugui titag> "muslos"

šiwu-7uwi7. [N-N]. ?-flesh = soapwort (herb): <szígu úguí> "cierto hierba, que sirve a las indias para lavar y bañarse"

7uwiki

7uwiki = *7uy-ki. [N-INCH/NOM?]. *the watering = winter, rainy season: <ugui ei> "invierno"

7uy

7uy. [N]. water: <uy> "agua"

7uy-hurayi. [N-N]. water of eyes = tears: <uy juraý> "lágrimas"

7uy-4iwi. [N-N]. water of squash/sugar = honey, sweets: <uy Łueguve> "miel y todo género de dulce"

7uy-maša. [N-N]. water of mud = muddy water: <uymasza> "agua de lodo"

7uy-naki. [N-N]. water of chilli = chilli broth: <uy naqui> "caldo"

7uy-nari7. [N-N]. water of nose = mucus, snot: <uy nariy> "mocos"

7uy-šaha7. [N-N]. water of mouth = saliva: <uy szajáa> "saliva"

7uy-tutuk. [N-N]. water of breast = milk: <uy tutuc> "leche"

7uy-wa:kaš. [N-N]. water of cow = broth: <uy guaacz> "caldo"

kosek-7uy. [ADJ-N]. big-water = river: <coséc úy> "río grande"

4ome-7uy. [ADJ-N]. tepid, lukewarm water: <Łóme hui> "agua tibia"

mu4a-7uy. [ADJ-N]: white-water = ray, lightening, thunderbolt: <mu4a húy> "rayo"

pari-7uy. [ADJ/N-N]. heat/hot-water = brandy, rum: <parihúy> "agua caliente"

sara4-7uy. [ADJ-N]. cold water: <saraŁ huy> "agua fría"

tawa4-k'i-7uy. [ADJ-INCH-N]. blessing-water = holy water: <taguaŁei húy> "la agua bendita"

7uta-7uy. [N-N]. mother-water = river: <uta húy> "el río"

7uyuku

7uy-uku. [N-VT]. water of/for drinking? = corn gruel (atol): <uyúcu> "atol"

4'iwi-7uyuk'u. [N-N]. freshcorn-gruel: <txueguve uyuzu> "atole de maíz tierno"

7uyumu

7uyumu. [VT]. to hurt: <uyúmu> "lastimar"

í

7i4i

7i4i. [N]. back, rear, spine: <velueve> "espalda"

7i4i-maku. [N-N]. back of house = behind the house: <veluemacu> "lo de detrás de la casa"

harari-7i4ih. [N-N]. bone of spine = backbone: <jarari velueg> "hueso del espinazo"

7i4ik > h4ta

7ina ~ 7imi > 7ušumu

7ina. [N]. excrement: <vena> "excremento"

7inama. [N]. dysentery: <enama> "los pujos de sangre y la disentería"

7imimi. [ADJ]. smelly, stinking: <vemvemi> "cosa olorosa"

4ara-7imik. [N-N-INSTR]. medicine-smell? = soapwort (herb): <Łaravemuéc> "cierta hierba que sirve a las indias para bañarse"

7inti

7inti. [VT]. to spy, lurk: <ventue> "espíar"

-(7)ipiy

šam-ipiy. [PREP-N]. inside-? = Atiquipaque (toponym): <szamvepvey> "Atiquipaque; pueblo"

7ipe'i7 > 7ipi

7ipe'i7. [ADJ]. grown, ripe (thing): <veptxué> "cosa sazona, cosa crecida"

7ira7

7ira7. [ADJ]. big: <verrá> "cosa grande"

7eri. [ADJ]. old: <erve> "cosa vieja"

mas 7ira7. [INTENS ADJ]. more big = bigger: <mas verrá> "más grande"

4'ama 7ira7. [INTENS ADJ]. good big = very big: <txama verrá> "muy grande"

7iša7

7iša. [N]. scabies (illness): <vesza> "sarna; enfermedad"

7išiki

7išiki. [VT]. make loose: <vesveave> "desatar"

7išie'i7

7išiši7. [ADJ]. delicious [L-M]: <veszveszvé> "cosa sabrosa y gustosa"

7ištu

7ištu. [ADV]. there: <vesztú> "allí"

7ištu=ka7. [ADV=EXO]. thereto = over there: <vesztú cá> "allá"

W***wa**

wa. [*VI]. *to go, *directional?*: "que; partícula para tiempos"

wa-kaʔ. [VI-EXO]. to go away; *past-time reference*: <guaca> "irse; anómalo" ; <guacà> "irse"

wa-ʔa. [VI-PAST.ACT?]. to go away; *past-time reference*: <guala> "irse; anómalo"

waka

waka. [N]. type of bird: <guaca> "chacha; ave"

wakaš

wakaš. [N]. cow [L-S]: <guacász> "carne de res, y todo género de ganado mayor"

naʔu-wakaš. [N-N]. child of cow = calf: <nau guacász> "ternero"

ʔuta-wa:kaš. [N-N]. mother-cow = cow (female): <uta guacatz> "la vaca"

ʔuy-wa:kaš. [N-N]. water of cow = broth: <uy guacasz> "caldo"

wa:ki

wa:ki. [VI]. to play: <guaquí> "jugar"

wak'i-k-šaha. [VI-INSTR-N]. played-mouth = nickname: <guaëicszaja> "el mal nombre"

waksi

waksi. [N]. large bird with a distinctive call [L-N]: <guaczi> "cierta ave parecida al zopilote, que canta a la salida y puestas del sol"

wati

wati=peʔ. [NUM=DIR]. three (days) from now = in three days: <gualì pè> "de aquí a tres días"

wanin

wan-in. [INT-INT]. who?: <guanin> "¿quién?"

wapaʔ

wapaʔ. [N]. bench, seat: <guapál> "banco"

wapi

wapi. [N]. foot: <guapi> "pie"

huray-wapi. [N-N]. eye of foot = ankle bone: <juray guapi> "hueso, que llaman ojo de pie"

naʔu-wapi. [N-N]. child of foot: <nau guapi> "dedos de los pies"

ʔaʔ-wapi [PREP-N]. over/on top of foot = dorsum of the foot: <aʔ guapi> "empeine del pie"

para-wapi. [PREP-N]. below/behind-foot = sole of foot: <para guapi> "planta del pie"

wapi-k. [N-INSTR]. instrument of/for foot = sandal: <guapíc> "caites, zapatos de los indios"

wapiik

wapi-k. [N-INSTR]. instrument of foot? = prop, support: <guapuéc> "horcón"

wara > wiri**waru**

waru. [N]. hammock: <guaru> "hamaca"

waru-k. [N-INSTR]. instrument of hammock = net: <guarúc> "matate o red"

ti:ki-k'-waruk. [VI-INSTR N]. instrument for sleeping-net = hammock: <tiëiëguaru> "hamaca"

wasati

wasali. [VI]. to dress, put on clothing:

<guaszaLi> "meter, ponerse el vestido"

wasati-k'i-k. [VT-AP-INSTR]. instrument for becoming dressed = dress: <guaszaLiëic> "vestido, ropa"

wašak

waša-k. [?-INSTR]. raised field: <guaszac> "la milpa de regadillo, que llaman apantes"

***wašaku**

wašak'o. [VT]. to throw stones, shoot:

<guaszaëo> "tirar con piedras"

wašku-ʔa. [VT-AGT]. (the one) who throws stones: <guaszcua> "el que tira piedras"

wašata

wašata. [VI]. to enter: <guaszaàta> "entrar"

wašta karawa. [N-N]. enters-wild(erness) = dusk, nightfall: <guasza carágua> "vispera"

wašta-wa siʔma. [VI-ANT/LOC N]. (where) entered-night = nightfall, sunset: <guaszaagua suema> "entrada de la noche"

wašta-ʔa. [VI-AGT]. (the one) who enters: <guaszaʔa> "el que entra"

wataki

wataki. [?]. it does not matter (expression): <guataqui> "no importa"

watiʔ

wati:. [N]. clay: <guatí> "el barro"

waya

waya. [VT]. to weed, work: <guaya> "desherbar"

waya-ʔ. [VT-STAT]. weeded (thing) = maizefield, milpa: <guayá> "milpa"

horo-ʈ-wayáʔ. [VT-AGT N]. (the one) who watches over milpa = guard of the milpa: <joroʈ. guáyá> "guardián de milpa"

pi:ya-wayáʔ. [N-N]. leaf of milpa: <piyaguayá> "la hoja de milpa"

wena

wen. [INT]. who (question word): <guen> "partícula interrogativa"

wena. [INT]. who: <guéna> "quien, el que"

wena=ki. [INT=INTENS]. he/the one who: <guénaqui>, <guena qui> "el que"

wena ʔayu=ki. [INT AUX=INTENS]: <guena ayuqui> "si alguno"

ni-wena. [NEG-INT]. not-who = nobody: <niguena> "ninguno"

weren

weren. [N]. frog [diff.]: <guerén> "sapo"

weseke

weseke. [VT]. throw away, discard [L-M]: <gueseque> "botar, despreciar"

weske-wa.[VT-PART.PF]. thrown away (thing): <guesquégua> "cosa botada"

weša

weša. [N]. iguana: <guesza> "iguana"

wi:k'ik

wi:k'i-k. [?-INSTR]. instrument of ʔ = mill stone, *metate*: <guiiëic> "piedra de moler"

k'ata-k wik'i-k. [VT-INSTR ʔ-INSTR]. instrument for putting-stone = mill stone (tasmetate): <eatacguiëic> "tapesco de moler, que llaman taszmetate"

puʔ-wik'i-k. [N-ʔ-INSTR]. hand of millstone = grinding stone, *mano*: <puguieie> "mano de la piedra de moler"

wilay

wiʔay. [N]. jaguar: <guiŁai> "tigre"

ten-wiʔay. [ADJ-N]. red-lion = puma: <ten guiŁay> "león"

wilika

wili-ka. [ADJ-CAUS]. to make naked = undress: <guilica> "desnudar"

wina

wina. [N]. holiday, sky [L-M/MZ]: <guina> "fiesta"

šan-ti-wina. [PREP-PREP-N]. towards in the sky = above: <szantiguina> "arriba, en el cielo"

winak

winak'. [N]. witch [L-M]: <guvenac> "brujo"

wiriki

wirik'i. [VT]. speak, talk: <guiriei> "hablar"

wiriki-ʔ. [VT-STAT]. spoken (thing) = word: <guiriqui> "palabra"

para-wiriki. [VT-N]. search-word = plead, litigate, quarrel, fight: <para guiriqui> "pleitar"

wiriki-ʈa. [VT-AGT]. (the one) who speaks = speaker: <guiriquiŁa> "hablador"

wiriš

wiriš. [ADJ]. naughty, mischievous: <guirisz> "travieso"

wišata

*wišata. [VI]. *to whistle

wišta-k. [VI-INSTR]. instrument for whisteling = flute: <guisztác> "la trompeta, clarín"

wiç'u

wiç'u, wišu. [VT]. to beat, whip, flog: <guitxu>, <guiszu> "azotar"

wiç'u-k, wišu-k [VT-INSTR]. instrument for beating/flogging = whip: <guitxuc>, <guiszc> "el azote"

wišu-k-nuwi. [VT-INSTR-N]. instrument for beating cotton: <guiszcunugui> "sacudidor de algodón"

wiç'u-ki-ʈa, wišu-ki-ʈa. [VT-AP-AGT]. (the one) who flogs = flogger: <guitxuquiŁa>, <guiszuquiŁa> "azotador"

wi:ta

wi:ta. [VT]. to hang/lay out in the sun: <guíta> "tender al sol"

wita-wa. [VT-PART.PF]. hung/laid out in the sun (thing): <guitágua> "cosa tendida"

wita-huwa. [ADJ-N]. soft/tender-banana/zapote = mashed banana: <guitá jugua> "plátano pasado"

witi-ʈ-aya. [VT-ADJ-N]. soft/tender-female = young lady, *virgin: <guitiŁaya> "doncella"

wita

wita. [VT]. to hunt, shoot (with arrow): <guita> "cazar, tirar con escopeta o flecha"

wita-ʈa. [VT-AGT]. (the one) who hunts = hunter: <guitaŁa> "cazador, tirador"

wiya

murča-wiya. [N-N]. ʔ-cotton = yellow cotton: <murcha guiya> "algodón amarillo, que llaman cuyuscate"

wi:yan

wi:yan. [N]. sugar cane: <guíyán> "caña dulce"

wi:hi

wi:hiʔ. [N]. younger sister: <guvejúé>
"hermana menor"

wi:ri

wi:ri. [VT]. to wrap up, to wind: <gueverue>
"envolver"

wara. [VT]. to roll/coil up: <guara> "enrojar"

wokʔak

wokʔak. [N-INSTR]. hole, pit: <guocʔac> "hoyo"

wona

wona. [N]. hill, volcano, hole: <goná> "cerro"

wona-tawu. [N]. hill-wind = northwind:
<gonatau> "viento, norte"

Y**yaka**

ya-k'a. [VI-CAUS]. to cause sb./sth. to be = to
make: <yaea> "hacer"

yak'ik

yak'i-k'. [ʔ-INSTR]. instrument for ʔ =
accountʔ: <yaeie> "saguillas y cuentas"

yami

yami. [VT]. to murmur, rumour: <yámí>
"murmurar"

yami-ta. [VT-AGT]. (the one) who murmurs:
<yamíʔa> "murmurador"

yami-k'i-ta. [VT-AP-AGT]. (the one) who
murmurs: <yamiéiʔa> "murmurador"

yana

yana. [VT]. to be ashamed, embarrassed:
<yána> "avergonzarse"

yana-k. [VT-INSTR]. instrument for being
ashamed = ashamed thing: <yanác> "cosa
vergonzosa"

yaru

yaru. [VT]. to hang: <yáru> "colgar"

yaru-k. [VT-INSTR]. instrument for hanging =
hanging (thing): <yarúc> "cosa colgada"

yaši

yaši. [VT]. to extend, spread: <yászi> "extender"

ya:šik

ya:šik. [N]. izote (type of tree): <yaaszic>
"izote; árbol"

yayu

yayu. [VT]. to roll up: <yáyu> "arrollar"

ye:waš

ye:waš. [N]. mare [L-S]: <yeeguász> "yegua"

yoʔana

yoʔana. [vi]. to fling or fall over a precipice:
<yoʔana> "desbarrancarse"

yoʔe

yoʔe. [VT]. to spill, scatter, spread [L-M]:
<yóʔe> "desparramar"

yoʔe-wa. [VT-PART.PF]. spilled (thing):
<yoʔeʔa> "cosa derramada"

yulu

yulu. [VT]. to smooth (down): <yúlu> "alizar,
pisar la masa para las tortillas, moler sutilmente
alguna cosa; *et est verbum impurum ad coitum*"

yu:

yu:. [N]. man (vocative) [diff.]: <yú> "hombre,
nombre anómalo, que sólo tiene el vocativo"

yik'íša

yik'íša. [VT]. to shake [L-M]: <yueckuesza>
"remecer"

yíʔik'í

yíʔik'í. [VT]. to accuse: <yueʔueeue> "acusar"

yíʔik'í-k'í-ta. [VT-AP-AGT]. (the one) who
accuses = accuser: <yueʔueeieʔa> "acusador"

yíma

yíma. [N]. hog plum (fruit) [L-M]: <yüema>
"jocotes; fruta"

yípi

yípi. [VT]. vomit: <yuepue> "vomitar"

yípi-wa. [VT-PART.PF]. vomited (thing):
<yuepuegua> "cosa vomitada"

hapa-ʔ yípi. [VI-STAT N]. passed vomit = vomit:
<ʔapáa yuepue> "vómitos, y evacuaciones"

yíwa

yíwa. [VT]. to lose sth.: <yuegua> "perder"

yíwa-šama. [N-PREP]. to lose-inside = to
forget: <yueguasáma> "olvidar"

yíwa-wa. [VT-PART.PF]. lost (thing):
<yueguagua> "cosa perdida"

yíwa-ti. [VT-ʔ]. to lose: <yueguaʔi> "perder"

yíwaʔi-wa. [VT-PART.PF]. lost (thing):
<yueguaʔigua> "cosa perdida"

yíwaʔi-k'í-ta. [VT-AP-AGT]. (the one) who
loses = loser: <yueguaʔieʔa> "el que pierde"

yíwiʔ

yíwiʔ. [N]. coachipilin (tree): <yueguueʔ>
"coachipilín; árbol"

5. Loanwords in the ALS

This appendix lists the loanwords that can be identified in Maldonado-Xinka. As described in § 1.4, Xinka has borrowed lexical items from Mayan, Mixe-Zoquean, some Central American languages, Nahuan and Spanish. In the ALS, we find loanwords from all of these donor families. Most of the loans have been identified by Campbell (1972, 1978) and Campbell, Kaufman & Smith-Stark (1986). The Nahuan and Spanish loans have not been studied before.

The identification of loanwords follows general criteria of phonological coherence, morphological transparency and lexical similarity (cf. Campbell & Kaufman 1976:83; Campbell 1977:102). Lexical similarities need to be analysed as to whether they have to be attributed to common genetic origin or are the result of borrowing. As the affiliation of Xinka is not clear, most instances of similarities are understood to be the result of cultural contact and diffusion (see Campbell 1979:961). Given that diffusion is a common phenomenon in Mesoamerica, it cannot be clarified in all cases which is the donor and which the recipient language (see Suárez 1983:156). External cultural information is quite limited for Xinka and the analysis has to rely mainly on linguistic criteria.

A. Mayan

The standard source for citation of reconstructed loanwords is Kaufman's Preliminary Mayan Etymological Dictionary (Kaufman 2003 [K-03]). Dienhart's comparative Mayan languages database (Dienhart 1997 [D-97]) has been used as a technical device in the search for borrowed items in Xinkan; all entries have been checked against Kaufman's reconstruction and other dictionaries. Most Mayan loans have been identified by Campbell and Kaufman and are cited accordingly; etymons not previously attested are cited by their source of reference.¹⁸⁶ All orthographies have been phonemicised. The nomenclature of Mayan languages, subgroups and branches follows Kaufman (2003).¹⁸⁷

In many instances it is not clear whether a given term has been borrowed into Xinka from WM or EM, or whether it has entered the language at a very early or very late stage. Yet, for other loans the origin and stage in time, when they entered Xinka, can be defined quite well. I have therefore opted for sorting the loans by semantic domain.

¹⁸⁶ BV-91 = Barrera Vasquez 1991; C-71 = Campbell 1971; C-72 = Campbell 1972; C-77 = Campbell 1977; C-78 = Campbell 1978; C&K-76 = Campbell & Kaufman 1976; CH-99 = Christenson 1999; D-97 = Dienhart 1997 (= *Dienhart's Comparative Mayan Languages Database*); E-65 = Edmonson 1965; H-05 = Hull 2005; K-03 = Kaufman 2003 (= *Preliminary Mayan Etymological Dictionary*); S-73 = Schumann 1973; S-77 = Schumann 1977; W-95 = Wichmann 1995.

¹⁸⁷ CHIK = Chicomuselteko; CHL = Ch'ol; CHR = Ch'orti'; CM = Central Mayan: WM + EM; EM = Eastern Mayan: Greater Mam + Greater K'iche'an; GK = Greater K'iche'an: Uspanteko-K'iche'an + Proto Q'anjob'al; GLL = Greater Lowland: Yukatekan + Greater Tzeltalan; GQ = Greater Q'anjob'al: Chujean + Q'anjob'al + Kotoke; GTz = Greater Tzeltalan: Ch'olan + Tzeltalan; IXL = Ixil; KAQ = Kaqchikel; KCH = K'iche'; LAK = Lakantun; LL (Lowland) = Yukatekan + Ch'olan; MAM = Mam; pCh = proto-Ch'olan; PCH = Poqomchi'; pCM = proto Central Mayan; pK = proto-K'iche'an; pM = proto-Mayan; POP = Popti'; POQ = Poqom: Poqomchi' + Poqomam; pQ = proto-Q'anjob'al; PQM = Poqomam; pY = proto-Yukatekan; QAN = Q'anjob'al; QEQ = Q'eqchi'; TOJ = Tojolab'al; TUZ = Tuzanteco; TZE = Tzeltal; TZO = Tzotzil; TZU = Tz'utujil; WAS = Wasteko; WM = Western Mayan: GTz + GQ; YUK = Yukateko

Some of these domains have been previously established by Campbell (1971, 1972). They include (a) maize complex, agriculture, food production, (b) cultigens and fruit, (c) terms of taste, condition, quality, (d) trade and commerce, (e) measure, (f) material culture (dishes and containers, clothing, construction, household, music), (g-h) fauna, (i) flora, (j) environment, (k) religion and intellectual culture, (l) body, (m) diseases, (n) categories of people, (o) positionals, (p) motion verbs, (q) temporal adverbs and (q) verbs.

Some terms that have been borrowed from Mayan derive ultimately from Mixe-Zoquean; they are listed again separately in the following section. For nomenclature and source citations, see section on Mixe-Zoquean loans.

(a) Maize complex

ʔaʔu	"maíz" (3651.) / degraigned corn (kernel)	<	CM *ʔaw 'to sow' [C-71], [K-03]
ʔaw-lak	"comál" (3653.) / maize-plate	<	CM *ʔaw 'maize'; pM *laq 'plate' [K-03]
ʔayma	"mazorca" (3670.) / ear of corn	<	pM *ʔaʔm 'maize' [C&K-76]; LEN ʔma, ʔema, ʔama; CAC ʔayma, MAT ʔayma, SUM ʔama [diffused]
hoko-wát	"el doblador" (3954.) / corn husk	<	GLL *xoč 'to harvest, break' [K-03]
ʔiwa	"maza para tortillas" (3893.) / tortilla dough	<	EM *wah 'food'; waʔ 'eat' [K-03]; from pMZ *way 'grind corn' [C&K-76]
ʔiwa	"tortear" (2385.) / make tortillas	<	GTz *pač 'tamal'; KCH paʔ [C-77], [K-03]
pač'i, pa:ši	"moler" (2843.) / grind, mill	<	from pMZ *pič'i 'nixtamal' [W-95]
pač'i	"masa para tortillas" (4262.) / corn dough	<	pM *šil 'to chop sth.' [K-03]; KCH šilik 'to remove sth.' [E-65]
šiʔik	"olote" / cob of the corn	<	GK *čih 'nixtamal', POQ ʔuc 'cooked corn' [K-03]
č'iwi	"camagua" (4656.) / fresh corn tortilla	<	from pMZ həč 'to grind' [C&K-76]
ʔuč'i	"maíz cocido, nixtamal" (4712.) / nixtamal	<	EM *wah 'food' [K-03]; ʔXNK -ya transitivity
ʔuti	"pinol de maíz, harina" (4708.) / corn flour	<	
wayaʔ	"milpa" (3855.) / maizefield, milpa	<	
waya	"desherbar" (2334.) / to weed, work	<	

(b) Cultigens and fruit

k'eweša	"anona" (3732.) / anona	<	pCh *k'eweš 'anona' [C-71], [K-03]
mapi	"coyol" (4059.) / coyol palm	<	pM *map 'coyol palm' [C-71]
muyi	"chico, nispero" (4115.) / sapodilla	<	pM *mu:y 'chicle tree' [C-72]
nak'i	"chile" (4139.) / chilli	<	EM/pK *naq 'seed, pit' [C-71], [K-03]
pak'a	"cabeza de negro; fruta" (4216.) / fruit	<	GK *pak 'anona, cherimoya' [K-03]
pak'i	"piñuela; fruta" (4218.) / cypress nut	<	WM *paxk' 'pineapple' [K-03]
parwa	"árbol de cacao" (4251.) / cacaotree	~	KCH par 'small palm tree' [E-65]
sikar	"tabaco" (4381.) / tobacco	<	pCM *ši:k' 'tobacco' [C-71], [K-03]
šinak ¹⁸⁸	"los frisoles" (4472.) / bean	<	WM *čenaq 'beans' [C-71]
ta:pa	"nance; fruta" (4545.) / nance (fruit)	<	EM *ta ʔ; pK tapa ʔ 'nance' [C-77], [K-03]
ʔučun	"papaya; fruta" (4668.) / papaya	<	WM *ʔuhčun 'papaya' [C-77] from pMZ ʔəčə 'papaya' [C&K-76]
yima	"jocotes; fruta" (4767.) / hog plum (fruit)	<	WM *yum 'jocote' [C-77]; CM *rum [K-03]

¹⁸⁸ Interesting is the loan *šinak* 'bean' which clearly derives from WM *čenaq*, as noted by Campbell (1972). The term *šina* 'orin, orinar' may be seen as etymologically related to the term for "bean". In several EM languages the term **kinaq* refers to 'bean' as well as to 'kidney' [pmed]. Kaufman notes the same concept also in Amuzgo-Mixtecan languages and in Chinantecan (Kaufman 1990:102 *apud* Brown 2006:512). Brown suggests that the original meaning of the Amuzgo-Mixtecan and Chinantecan term was 'kidney' rather than bean (2006:512), but the borrowing of the term **čenaq* into Xinka may indicate the opposite direction of semantic extension with *šina* 'urine' and *šinak* 'bladder' being semantically derived from the term for 'kidney'.

(c) Taste, condition, quality

šaya	"cosa agria" (4463.) / bitter	< pCh *č'ah 'bitter' [K-03]
č'ami	"cosa agria, o amarga" (4640.) / sour, bitter	< EM *č'am 'sour, acidic'; MAM č'am [K-03]
hami	"cosa azéda" (3924.) / acidic	
č'aya	"cosa mojada" (4641.) / wet	< pM *č'ax 'to soak'; CHR č'a(x) [K-03]
čáma	"bueno, y bien" (4637.) / good	< TZE, CHL *čam 'good' [C-71], [K-03] from pMZ ča:m 'ripe, good' [C&K-76]
ʔišišiʔ	"cosa sabrosa" (4746.) / delicious	< pM *ʔuč 'bueno' [K-03]

(d) Trade and commerce

kayi	"vender" (2141.) / sell	< pM k'a:y 'to sell' [C-72]
kunu	"comprar" (2178.) / buy	< WM *koy [C-71]; pY *kon; cf. CHR čon [C-71], [K-03]
k'iwi	"patio" (3734.) / courtyard	< GLL+ *k'iwik'market, courtyard' [K-03]

(e) Measure

č'iki	"medio" (4654.) / mid-	< pCh *č'ok 'break' [K-03] (?)
čiy	"poco" (3701.) / little, few	< pM *ty'i:n 'small'; CHR č'i(x), KCH č'utin 'small' [K-03]
čiriki	"pequeño" (3697.) / small	cf. LEN (Salv.) č 'iris 'small' [C-78]; PIP čupi 'little, few' [C-85]

(f) Material culture

1. Dishes and containers

kułku	"cajete" (3760.) / bowl, plate	< PQM kulk 'frying pan' [C-77]
pišik	"jicara peste" (4363.) / calabash cup	< QAN, POP pečan 'cup, dish' [D-97]
suk'sin	"jarro" (4395.) / jug, pitcher	< pM *čuhh; POQ suh 'gourd' [C-71]
šu:nik	"olla" (4507.) / instrument for ? = pot	>? POQ šun 'pot' [C-72]
*č'imaha	"Guazacapan; pueblo" (4645.) / (makers of) guacales/pottery = toponym	< pM *čima(?) ; KCH čimah, CHR čimax 'jug' [K-03] from pMZ *čima ? [C&K-76]

2. Clothings and fabric

pati	"pañuelo, manta" (4060.) / cloth, blanket	< GK po ʔot 'cloth' [K-03], pQ *po ʔ 'cloth' [C-72]
pote	"el guepíl" (4318.) / blouse (huipil)	< KAQ? *saqal 'whiteness', we:s 'trousers' [K-03]
šakal-awiš	"calzones blancos" (4411.) / white pants	

3. Construction

pak'a	"clavar" (2801.) / nail	< GLL *pahk' ~ *pak' [K-03], [C-77]; TZE pahk', YUK pak'(il) 'wall' [K-03]
pak'i	"pared" (4217.) / wall	

4. Other household products

pupúk	"petate, estera" (4338.) / mat	< pM *pohp 'mat' [C-71], [C-72]
č'imí tik'i	"mecate de corteza" (4661.) / rope	< pY *sum 'lasso, rope' [K-03]
koka	"cacaste" (3738.) / backrack	< KCH ko ʔ 'woodbox for backpacking' [CH-99]

5. Music and art

tunati	"tocar instrumento" (3325.) / play an instr.	< Kch tuna:x 'play an instrument' [E-65] from PIP tuntun 'shell' [C-85]

(g) Fauna

ʔamu	"araña" (3625.) / spider	< pM *ʔam 'spider' [C-71], [K-03] from pMZ *ʔamu [C-72]; pZ *ʔamu [W-95]
howa	"león" (3955.) / puma	< WM *how; TUZ how 'coyote' [K-03]

pokoko	"mapache" (4312.) / raccoon	< TZE <i>pokok</i> , POP <i>ponkon</i> 'toad' [D-97]
pese	"lagartija" (4286.) / lizard	< GK * <i>ṣ̥-pa ṣ̥ač</i> 'lizard' from pMZ * <i>paçi</i> [K-03]
ṣ̥uṣu	"mosquito, jején" (4718.) / fly	< pM * <i>ṣ̥u</i> 'fly, mosquito' [C-71]; from pMZ * <i>ṣ̥usu</i> [C&K-76], <i>ṣ̥u:suk</i> [W-95]
ṣ̥uṣumi	"pizote" (4522.) / coati	< WM * <i>ç'uç'um</i> 'coati' [C-71] (not pCh, pY)
wiṣay	"tigre" (3863.) / jaguar	< Mp <i>wiç</i> , <i>wiṣ</i> 'cat' [K-03]; LAK <i>we ṣ̥an k'a</i> 'ocelot' [D-97]
ṣ̥uni	"jutes, caracoles, concha" (4505./4506.) / snails, sea shell, crayfish	< CHL <i>ṣ̥un</i> 'crayfish' [D-97]
ç'iṣaṣna	"alacrán, sabandija" (4647.) / scorpion	< pM * <i>si:na ṣ̥</i> 'scorpion' [C-72]; pCh * <i>sina(m)</i> [C-71]
(h) Fauna – birds		
ṣ̥aluṣ	"guacamaya" (3608.) / macaw	< ?YUK <i>loṣ</i> 'macaw' [BV-91]
çehçe	"boca rota" (3690.) / woodpecker (bird)	< pM * <i>çexe</i> 'woodpecker' [K-03] from pMZ * <i>çehe</i> 'woodpecker' [W-95]
kukuwaṣ	"tortola" (3758.) / turtledove	< LL+WM * <i>kul(ax)te</i> 'dove' [K-03]; [C-71] cf. pOM * <i>ku:k</i> 'turtledove' [W-95]
koṣko	"zope" (3750.) / buzzard	< EM * <i>kuty</i> ; pK <i>k'uç</i> 'buzzard' [C-71], [K-03]
poṣo	"perdiz" (4326.) / partridge	< WM * <i>peç</i> 'partridge' [K-03]
ṣ̥i:k'a	"gavilán" (4468.) / hawk	< pM * <i>ṣ̥ihk</i> 'hawk' [C-71, 72]
ṣ̥ok'oy	"lechuza" (4485.) / owl	< pM * <i>ṣ̥o:ç</i> 'owl' [K-03]; PQM <i>soko'y</i> 'owl' [C-77]
toktok	"sensonte" (4590.) / mocking bird	< PQM <i>tuqtuq</i> 'mockingbird' [S-73]; KCH <i>tuktuk</i> 'woodpecker' [E-65]
ç'oko	"zanate; ave" (4649.) / grackle	< pM * <i>ty'ok</i> 'grackle' [C-71], [C-72]; PQM <i>ç'ok</i> [K-03]
(i) Flora		
ṣ̥amuṣ	"ortiga o chichicastle" (3627.) / nettles	< KAQ <i>amula'y</i> 'nettle' [K-03]
karawa	"monte, zacate" (3713.) / bush, wild	~ YUK, LAK <i>k'a ṣ̥aṣ</i> , Kp <i>k'açela:x</i> 'bushland' [D-97]
ṣ̥ohote	"mecate" (4191.) / rope of tree bark	< ?pM * <i>teṣ</i> 'tree' [K-03]; cf. pZ * <i>ṣ̥oho</i> 'maguey' [W-95]
(j) Environment		
kaṣi	"humo" (3702.) / smoke	< TZE, TZO <i>ç'ail</i> 'smoke' [D-97]
k'unu	"las sombras" (3764.) / cloud, shade	< CHL <i>kun</i> 'fog, vapor' [C-77]
pahi	"barranca" (4222.) / ravine	< EM * <i>paṣ</i> -, pK * <i>paṣ</i> - 'split, break' [K-03]
ṣ̥u:ni	"estrella" (4504.) / star	< EM * <i>ç'umi:l</i> , KAQ <i>ç'umil</i> 'star' [K-03]
tawu	"viento" (4551.) / wind, breeze	< EM * <i>teṣw</i> 'cold' [C-71]
ṣ̥iha	"arena" (4526.) / sand	< GTz * <i>hiç</i> , CHR <i>xiç</i> , TZO, TZE <i>hiç</i> 'sand' [K-03]
sururu	"el viento sur" (4398.) / southwind	< KCH <i>ṣ̥ururem</i> 'whistle, cold' [E-65]
wina	"fiesta" (3864.) / holiday, sky	< TZO <i>winahel</i> 'heaven, sky' [C-77]
(k) Religion and intellectual culture		
ṣ̥ayapa	"año" (3669.) / year	< ?pM * <i>ha ṣ̥</i> 'year' [K-03]
miṣa, miç'a	"enterrar" (2707.) / bury	< pM * <i>muq</i> ; IXL <i>muxa</i> 'to bury' [K-03]
pumu	"copal" (4335.) / incense, copal	< pM * <i>po:m</i> 'incense'; from pMZ * <i>po:m</i> [C-71], * <i>po:m(o)</i> [W-95]
winak'	"brujo" (3888.) / witch	< EM * <i>winaq</i> 'person, people' [C-72]
(l) Body		
ṣ̥eṣaha	"lengua" (3805.) / tongue	~ ?pM * <i>leq</i> 'lick'; WAS <i>lek'a:b</i> 'tongue' [K-03]
hu:ṣi	"cabeza" (3994.) / head	~ ?GLL * <i>xo ṣ̥</i> ; YUK <i>xol</i> ; CHL <i>xol</i> , CHR <i>xor</i> 'head' [K-03]

mašira	"raizes, venas, nervios" (4071./4072.) / roots, veins, nerves	< GK * <i>ra:b'</i> ~ * <i>ra:</i> ?'root' [K-03]; YUK <i>moé</i> 'roots, nervs' [BV-91]
mušta	"panza" (4114.) / belly	< pM * <i>mus(už)</i> 'navel' [C-72] cf. LEN (Hon) <i>musu</i> 'liver' [C-78]
počpoč	"los bofés" (4314.) / lungs	< KCH, KAQ <i>pospož</i> , ZOQ <i>pukpuk</i> 'lungs' [C-77]
šina	"orin, orinar" (4471.)	< EM * <i>kenaq'</i> ; TEK <i>če:naq'</i> , MAM <i>činaq'</i> 'kidney' [K-03]
te	"pars mulieris" (4556.) / female genitals	< KAQ, TZU <i>te</i> ?'mother' [D-97]
(m) Diseases and human conditions		
koso	"viruelas" (3755.) / smallpox	< GK * <i>kohs</i> 'tired'; KCH <i>kosik</i> 'get tired' [K-03]
meme	"loco" (4076.) / crazy	< CM * <i>me:m</i> 'mute' [C-71], [K-03], pM * <i>me:m</i> [C-72]
ʔoho	"la tos" (4190.) / cough	< ?pCh * <i>ʔoxob</i> ; KCH <i>ʔoxob</i> 'cough' [diffused, onom.] [K-03]
pohmo	"el ciego" (4315.) / blind	< pCM * <i>mo:y</i> 'blind' [K-03]
-tili	*ache, suffering' (e.g. 4258.)	< pM * <i>til</i> , pCh * <i>til</i> , KCH <i>til</i> 'burn' [K-03]
(n) People		
ʔone	"cosa tierna" (4193.) / tender, unripe	< LL+WM * <i>ʔune</i> [K-03]; CHR <i>ʔunen</i> 'child, son/daughter' [H-05]; from pMZ * <i>ʔunak</i> , pZoq * <i>ʔune</i> 'child' [C&K-76]
peleʔ	"patas, patojo" (4272.) / single man	< YUK <i>pal</i> 'bachelor' [D-97]
šakič-umu	"buen mozo, visarro" (4416.) / good man	< KCH * <i>saqil</i> 'whiteness' [E-65], XNK <i>humu</i> 'man'
yu:	"hombre (vocativo)" (4761.) / man!	< CHR <i>yum</i> 'father', CHL <i>yum</i> 'grandfather, owner' cf. LEN <i>yu</i> "male" [C-78]; ZOQ * <i>yu:m</i> [diffused] [K-03]
turi	"niño" (4620.) / child	< GK * <i>-tošl</i> 'shoot, offspring'; KCH <i>u-tuš</i> [K-03]; CHIK <i>tušti ʔniq</i> 'child' [D-97]
ʔušti	"suegra" (4715.) / mother-in-law	< pM * <i>ʔis</i> 'woman'; WAS, CHIK <i>ʔušum</i> [K-03], [D-97]
(o) Positionals		
čawi; šawi	"cosa dura" (3688.) / hard, stiff	< WM * <i>čaw</i> 'hard, stiff' [C-71]
hururuʔ	"caloroso" (3987.) / warm, hot	< KCH <i>xururux</i> 'very bright' [E-65]
ko:čo	"cosa sucia" (3742.) / dirty	< KCH <i>k'o</i> 'there is' + <i>ču</i> 'smell' [PLFM]
šimp šimp	"cosa tirante" (4405.) / tense, strained	< pM * <i>šim</i> 'to tie up' [K-03]; cf. pZ * <i>si ʔn</i> 'to tie' [W-95]
(p) Motion verbs and directionals		
ʔaku	"ir, andar" (2050.) / go, walk	~ CHL <i>ku</i> 'go'; <i>ko ʔo</i> 'gone' [D-97]
peʔ	"venir" (2848.) / come	< Kp * <i>peht</i> 'come'; KAQ <i>pe</i> [K-03]
taʔ	"ir, y venir" (3198.) / go, come, pass by	< pM * <i>tal</i> 'come' [C-71]
(q) Temporal adverbs		
ʔampi	"ahora" (3631.) / now	~ ?KCH <i>xam pa</i> [E-65]; <i>xani pa</i> 'when' [K-03] cf. pMZ <i>ʔamVʔ</i> 'just now' [W-95]
ʔanik	"hoy" (3632.) / today	~ CHIS * <i>ya ʔ</i> , TOJ <i>ya ʔni</i> 'today' [K-03]

(r) Verbs

ʔaya	"estar; anómalo" (2086.) / be (in a place)	<	pM *ʔar 'be, exist'; CHR ʔay [K-03]; pCh *ʔayan 'there is'; CHT ʔaya(n) 'be (in a place), exist' [K-03]
hači	"pepenar" (2445.) / pick up, gather		
hač'i	"rascar" (2440.) / scrape, scratch	<	pCM *xoč 'scratch', EM *xa ʔč 'harvest' [K-03]
hapa	"esperar" (2455.) / to wait	~	pY *pak'- 'wait' [K-03]
huta	"soplar" (2537.) / blow	~	pM *ʔuč' ; pYu ʔust 'to blow' [K-03]
kama	"abrazar, cargar" (2099.) / embrace, carry'	<	pM *k'am 'to receive' [K-03]
	"apadrinar bautismo" (2105.) / be godfather		
k'a:ta	"acostarse" (2089.) / lie down	<	GK *koč' 'lie down' [K-03]
kič'u	"trocar" (3020.) / to exchange	<	pM *k'eš 'change' [K-03]; CHL kay [D-97] cf. pMi *kek 'change' [W-95]
k'awi	"lazar, enredar" (2135.) / catch with lasso	<	KAQ k'an ; pYu *k'ahn 'rope' [K-03]
X _{Ch} k'ani-	"lazar" (Ch-F)		
k'iti	"medir" (2240.) / measure	<	Kp k'ut- 'show, teach' [K-03]
kič'i, k'iši	"asar" (3018.) / fry		
maši, mač'i	"freir" (2656.) / fry	<	?pCh *č'il 'to toast, fry' [K-03]
k'olo	"desollar, quitar" (2166.) / to flay, strip	<	pM *qol 'to peel, moult' [K-03]
ʔokama	"hervir el agua" (2605.) / to boil (water)	<	pCh *lok 'boiling, froth'; MAM loqan 'it boiled' [K-03] cf. pMZ *hokos-ni ?'tepid water' [W-95]
mač'a	"pegar" (2651.) / stick, paste	<	LAK č'ay, CHL č'uy 'adhere' [D-97] cf. pZ *čah 'adhere' [W-95]
nima	"comer" (2767.) / to eat	<	Kp *nuhm 'hunger' [K-03]; KCH numik 'be hungry' [E-65]
piŋta	"flechar, dar de estocadas" (2988.) / wound/kill with an arrow	<	pY *pul 'shoot' [K-03]; TOJ pulte 'bow' [D-97]
piša	"heder; anómalo" (4360.) / stink, annoy	<	LAK p'u ʔ-p'u ʔ, p'u ʔ 'stinking' [D-97] from pMZ *pu:č ʔ 'to rot' [W-95]
pok'o	"quebrar" (2905.) / break, split	<	GK *paq' 'split, cut'; GK *poq' 'burst, break' [K-03]
porana	"reventar" (2910.) / burst	<	GQ *pox 'break'; GK *poq' 'burst, break' [K-03]
poč'a, poša	"lavar" (2927.) / wash	<	GTz *pok 'to wash' [K-03]; CHR poxč'i 'wash laundry' [H-05] from pMZ *puh 'to wash' [W-95]
puriya	"soplar el fuego" (2968.) / kindle the fire	<	Kp *poro; CHR puruy 'burn' [K-03]; XNK -ya 'transitiviser'
seŋe	"cantearse" (3049.) / put/lay aside	<	KCH čer- 'to tear sth.' [PLFM]
čeŋa	"desbaratar" (2190.) / waste		
šaksi	"colar, cerrir" (3097.) / bleach, strain	<	pM *saq 'white' [K-03]
suk'u	"atar, amarrar" (3077.) / to tie, lash, fasten	<	pM *čeq 'to tie up'; CHR čuk [K-03] cf. pMZ *soč 'to tie up' [W-95]
tak'ani	"imputar, achocar" (3200.) / impute	<	pM *taq; pCh taq, Kp taq 'order, obligate' [K-03]
taŋa	"quemar, encender" (3210.) / to burn, light, set on fire	<	pM *til 'burn' [K-03]; WAS t'a'i:l; t'a'iyal 'burn' [D-97]
tuŋtu	"picar, dar estocadas" (3313.) / to pierce, prick, puncture, punch	<	WM *tuhk' 'shoot firearm' [K-03] from pZq *tuxkayʔ, pMZ *tuh 'hunt' [W-95]
tutu	"mamar" (3344.) / breastfeed	<	EM *tu ʔ 'breastfeed' [diff.] [K-03]
č'imi	"regar todo género de siembras" (3406.) / to pour water, irrigate	<	pM *tyem 'pour'; KCH čemow [K-03]
č'iri	"trozar" (3412.) / cut	~	CM *tyur 'cut fruit' [K-03]; CHR šuri 'cut' [H-05]
č'uma	"besar" (3401.) / kiss	<	Kp č'u:m 'tit'; KCH č'umanik 'suck, breastfeed' [K-03]

ʔurk'u	"tragar" (3460.) / to drink	< pM *ʔuk' 'to drink'; CHL ʔuč [K-03]
ʔuʂaki	"chupar tabaco" (3475.) / smoke tobacco	< pM *ʔuč' [K-03]; GLL *k'uħč' 'smoke' [K-03]
ʔuʂumu	"oler" (3480.) / to smell, stink	< pCh *ʔuħč' 'smell'; CM *muh 'tasty' [K-03]
ʔimimi	"cosa olorosa" (4736.) / smelly, stinking	
waka	"irse; anómalo" (2306.) / go away	~ CHL wa'wa'nya; TOJ waj 'to walk' [D-97]
waʔa	"irse; anómalo" (2308.) / go away	
weseke	"botar, despreciar" (2340.) / throw away	< pCh *weč' 'throw (away)' [K-03]
yoʔe	"desparramar" (3534.) / to spill, scatter	< LL *yal 'to spill, throw' [K-03] cf. pMZ *yos 'make an offering' [W-95]
yuʔu	"alizar, pisar masa" (3538.) / to smooth	< pM *yul ~ *yol 'smooth'; QEQ yolyol 'slippery' [K-03]
yikiʂa	"remecer" (3543.) / to shake	< pM *yuk 'to shake' [K-03]; cf. pZ *yiʔk 'to shake' [W-95]

B. Mixe-Zoquean

Mixe-Zoquean loans in Xinka were identified and described by Campbell and Kaufman (1976). Forms are cited from Campbell & Kaufman (1976 [C&K-76]) and Wichmann (1995 [W-95])¹⁸⁹. Nomenclature of proto languages and language branches follows Campbell & Kaufman (1976; Kaufman (2003) and Wichmann (1995).¹⁹⁰

Most proto-Mixe-Zoquean loans have been borrowed into Xinkan from Western Mayan languages and are therefore also listed in the preceding section of Mayan loans. There are, however, also loans that have either been borrowed directly, or have entered Xinkan from other Central American languages. Mixe-Zoquean loans fall into semantic domains of (a) maize production and agriculture, (b) cultigens/crops, (c) fauna, (d) environment, (e) people, (f) ritual, (g) adjectives indicating condition, and other terms such as verbs (h) and possibly even some adverbs (i).

(a) Maize complex, food production

ʔuč'i	"nixtamal" (4712.) / nixtamal	< pMZ həč' 'to grind' [C&K-76], [W-95]
ʔúti	"pinol" (4708.) / corn flour	< PoQ ʔuč' 'cooked corn' [K-03]
ʔiwa	"tortear" (2385.) / make tortillas	< pMZ *way [C&K-76]; *way-e 'to grind corn' [W-95]
pa:ši, pač'i	"moler" (2837.) / to grind corn dough	< pMZ *pič'i 'nixtamal' [W-95]
k'awu	"cocer" (2129.) / to cook	< pMZ *k'aw' 'to cook' [W-95]

(b) Cultigens

muʔ, muʔ	"blanco (en frutas)" (4088./4091.) / white	< pMZ *mənE 'sweet potato' [C&K-76]
ʔiwi	"ayote" (4036.) / squash	< pMZ *č'i ʔwa 'squash' [C&K-76]; pMi *č'i ʔwa 'calabash' [W-95]
šapu	"guisquil, chayote" (4454.) / chayote	< pMZ *čəpə 'green' [C&K-76]
č'ima	"Guazacapan = alfarero" (4645.) / potter	< pMZ *čima 'gourd' [C&K-76]
ʔučun	"papaya (fruta)" (4668.) / papaya	< pMZ ʔəčə 'papaya' [C&K-76]
ʔohote	"mecate" (4191.) / rope of tree bark	< ʔpZ *ʔoho 'maguey' [W-95] + ʔpM *teʔ 'tree' [K-03]

¹⁸⁹ Note that Wichmann's grapheme *c* is rendered here as *č*.

¹⁹⁰ pMi = proto-Mixe; pMZ = proto-Mixe-Zoquean; pOM = proto-Oaxaca-Mixe; pZ = proto-Zoquean; Zoq = Zoque

(c) Fauna		
ʔamu	"araña" (3625.) / spider	< pMZ *ʔamu 'spider' [C-72]; pZ *ʔamu [W-95]
šéʔe	"tacuazin" (4465.) / opossum	< pMZ *ʔiʔopossum' [C&K-76]; pZ *ʔihi [W-95]
ʔusu	"mosquito" (4718.) / fly	< pMZ ʔu:suk 'fly' [W-95]
muš(i)	"pelo, pluma" (4112.) / hair, feathers	< pMi *mu ʔi 'bird' [W-95]
(d) Environment		
naru	"tierra" (4160.) / earth	~ ʔpMZ *na:s 'earth, ground, terrain' [W-95]
(e) People		
ʔone	"tierno, bebe" (4193.) / tender, infant	< pZ *ʔune; Pmi *ʔunak 'child' [C&K-76]
yu	"hombre, vocativo" (4761.) / man!	< LEN (Sal) yu 'male' [C-78]; Z *yu:m; CHR yum 'father'; CHL yum 'grandfather, owner'
(f) Ritual		
pumu	"copal" (4335.) / incense, copal	< from pMZ *po:mV [C-71], *po:m(o) 'incense' [W-95]
(g) Condition		
čáma	"bueno, y bien" (4637.) / good	< from pMZ ča:m 'ripe, good' [C&K-76], [K-03], [W-95]
(h) Verbs		
tuʔtu	"picar, dar estocadas" (3313.) / to pierce, prick, puncture, punch	< from pZ *tuxkuyʔ, pMZ *tuh 'hunt' [W-95]
wi:ri	"envolver" (2380.) / to wrap, roll up	~ pZ *woy 'wrap' [W-95]
wara	"enrroyar" (2329.) / to wrap,	
(i) Function words		
ʔahi	"sí" (3599.)	~ pMZ *hiʔ 'yes' [W-95] ~ KCH xeʔ 'yes'
ʔaši, ʔahiʔ	"éste" (3605.)	~ pMZ *yiʔ 'this' [W-95]
ʔampi	"ahora" (3631.) / now	< ʔfrom pMZ ʔamVʔ 'just now' [W-95]

C. Diffused forms in Central American languages

Xinka has some loans that are widely diffused in the Central America.¹⁹¹ Some of these terms can be shown to be ultimately derived from proto Mixe-Zoquean. Most references are from Campbell 1975 [C-75], 1976b [C-76], and 1978b [C-78]; these are widely diffused forms and the direction of borrowing is in most cases unclear. The terms fall into the domains of (a) cultigens/flora, (b) fauna, (c) environment, (d) body parts and other categories (e).

(a) Cultigens and flora		
ʔayma	"mazorca" (3670.) / ear of corn	< pM *ʔʔm 'maize' [C&K-76]; LEN ʔma, ʔema, ʔama; CAC ʔayma, MAT ʔayma, SUM ʔama [diffused] [C&K-76]
ʔiwi	"ayote" (4036.) / squash	< pMZ *ʔi ʔwa 'squash' [C&K-76]; pMi *ʔi ʔwa 'calabash' [W-95]; LEN ʔiway [C-76]; CAC ʔwa [C-75]
šuwán	"palo de laurel" (4493.) / laurel tree	~ LEN (Sal) šuman 'laurel (tree)' [C-78]
turuy	"guayaba" (4622.) / guave	~ LEN (Sal) tororo 'guave' [C-78]

¹⁹¹ CAC = Cacaopera; CHN = Chontal; LEN = Lenka; MAT = Matagalpa; SUM = Sumu

(b) Fauna		
ʔampuki	"culebra" (3630.) / snake	~ LEN (Sal) <i>amap</i> 'snake' [C-78]
weren	"sapo" (3859.) / frog	~ CAC <i>wari</i> 'frog' [C-75]
šuruʔ	"ardilla" (4515.) / squirrel	~ LEN <i>šurih</i> [C-76], CAC <i>susu</i> 'squirrel' [C-75]
punpun ʔiwi	"tecolote" (4337.) / owl	~ CAC <i>paylanpuk</i> 'owl' [C-75]
tí:maʔ	"piojo" (4632.) / louse	~ LEN (Sal) <i>tem</i> 'louse' [C-78]
(c) Environment		
šaru	"mar" (4446.) / sea, ocean	~ LEN (Sal) <i>say</i> 'sea' [C-78]
(d) Body		
mušta	"panza" (4114.) / belly	~ LEN (Hon) <i>musu</i> 'liver' [C-78] (cf. Mayan)
(e) Other		
čiriki	"chico, pequeño" (3607.) / small	~ LEN (Sal) <i>č</i> 'iris' 'small' [C-78]
yú	"hombre...vocativo" (4761.) / man!	~ LEN (Sal) <i>yu</i> 'male' [C-78]; Z <i>*yu:m</i> ; CHR <i>yum</i> 'father'; CHL <i>yum</i> 'grandfather, owner'

D. Nahuatl

Nahuatl loans have entered Xinka from the *lingua franca* Nahuatl as well as directly from neighbouring Pipil.¹⁹² Nahuatl loanwords attested in the ALS stem from the following semantic domains: (a) fauna (b) flora, fruits & crops, (c) food production, (d) political, administrative affairs, (e) colour terms, (f) diseases, (g) conditions, and (h) a few other terms. Some terms that ultimately derive from Pipil or Nahuatl seem to have been borrowed into Xinka via a K'iche'an language (i).

(a) Fauna		
mistun	"gato" (4083.) / cat	< PIP <i>mistun</i> 'cat' [C-85]
šuti	"jutes, caracoles" (4519.) / freshwater snail	< PIP <i>šuti</i> 'freshwater snail' [C-85]
tonton	"tortuga marina" (4596.) / turtle	< PIP <i>tu:ntu:n</i> 'sea shell (turtle shell)' [C-85]
waksi	"ave parecida al zopilote que canta" (3835.) / buzzardlike bird	< NAH <i>wakçin</i> 'large bird with a distinctive call' [K-92]
(b) Flora, fruits & crops		
čukulat	"chocolate" (4261.) / cacao	< PIP <i>čukulat</i> 'chocolate' [C-85]
čo:	"batir chocolate" (2200.)	< NAH <i>čocolatl</i> 'chocolate' [K-92]
k'eneya	"plátano guineo" (3733.) / plantain	< PIP <i>kiniya(h)</i> 'banana' [C-85]
k(')osme	"camalote" (3748.) / water hyacinth	< NAH <i>kos-</i> 'sth. yellow'; <i>mekatl</i> 'rope' [K-92]
siwapati	"ciguapate" (4383.) / ciguapate	< NAH <i>siwapahtli</i> 'medicinal plant' [K-92]
sompe	"piñon" (4389.) / pinion, pine nut	< NAH <i>čompamitl</i> 'coral tree' [K-92]
tupilili	"el calanhilla; hierba" (4618.) / variety of herb	< PIP <i>topilli</i> 'cane, walking stick' [C-85]
(c) Food production		
pipi	"llenar" (2995.) / to fill	< PIP <i>pupu:sah</i> 'filled corn dough' [C-85]
teneš	"cal" (4561.) / lime	< Pip <i>teneš</i> 'lime' [C-85]
(d) Political, administrative		
ʔaʔtepet	"pueblo" (3617.) / town, village	< Nah <i>altepetl</i> 'village, town' [K-92]

¹⁹² Loans are glossed with the abbreviations NAH (= Nahuatl) and PIP (= Pipil). All Pipil loans are attested in Campbell 1985 [C-85], while all Nahuatl loans are cited from Karttunen 1992 [K-92].

(e) Colour terms

ti'ttik'	"negro, negra" (4578.) / black	< PIP <i>tiltik</i> 'black (man)'; <i>ti:l</i> 'charcoal' [C-85]
tolo	"cosa amarilla" (4591.) / yellow	< PIP <i>tultik</i> 'yellow' [C-85]

(f) Diseases

č'uč'u pari	"sarampion" (4665.) / wound-heat = measles	< PIP <i>tsu:tsu</i> 'wound' [C-85]

(g) Conditions

tiši	"haragán" (4586.) / idler, lazy person	< PIP <i>tiškwit</i> = <i>tiš</i> 'corn dough'; <i>kwit</i> 'grab' [C-85]
čiy	"poco" (3701.)	< PIP <i>čupi</i> 'little, few' [C-85]

(h) Other

šipi	"cortar haciendo" (3158.) / strike, cut	< NAH <i>šipewa</i> 'to flay' [K-92]

(i) Nahua terms borrowed via K'iche'an

tunati	"tocar instr." (3325.) / to play an instrument	< KCH <i>tuna:x</i> 'play instr.'
		< PIP <i>tuntun</i> 'shell' [C-85]
masa	"piña" (4064.) / pineapple	< KCH <i>masati</i> 'pineapple'
		< NAH <i>mačahlti</i> 'pineapple' [K-92]

E. Spanish

Spanish loanwords attested in the ALS fall into the following semantic domains (a) material culture (b) food & crops, (c) animals, (d) christianity and religion, (e) colonial office and authority, (f) terms to designate people, (g) trade and commerce, (h) grammar and function words, (i) verbs, and (j) a few other terms.

(a) Material culture

ʔača	"hacha" (3580.) / ax	< Sp. <i>hacha</i>
ʔakuša	"la aguja" (3591.) / needle	< Sp. <i>aguja</i>
ʔanila	"anillo" (3634.) / ring	< Sp. <i>anillo</i>
ʔasero	"el eslabón o acero" (3586.) / metal, steel	< Sp. <i>acero</i>
kapisayo	"chamarrón" (3709.) / jacket	< Sp. <i>capisayo</i>
kaša	"caja" (3722.) / chest, box	< Sp. <i>caja</i>
kapuš	"cabo (de candelá)" (3774.) / (candle) stub	< Sp. <i>cabo</i>
kučila	"cuchillo" (3756.) / knife	< Sp. <i>cuchillo</i>
lawš	"clavo" (4022.) / nail	< Sp. <i>clavo</i>
lawi	"llave" (4019.) / key	< Sp. <i>llave</i>
mačiti	"machete" (4051.) / machete	< Sp. <i>machete</i>
meša	"mesa" (4079.) / table	< Sp. <i>mesa</i>
nawaku	"las naguas" (4141.) / petticoat	< Sp. <i>naguas</i>
paʔa	"tercio" (4232.) / bundle of straw	< Sp. <i>paja</i>
papuk	"papel" (4244.) / paper	< Sp. <i>papel</i>
šapun	"jabón" (4455.) / soap	< Sp. <i>jabón</i>
šaru	"jarro" (4456.) / pitcher	< Sp. <i>jarro</i>
šila	"silla de sentarse" (4470.) / seat	< Sp. <i>silla</i>
tašelaš	"tijeras" (4554.) / scissors	< Sp. <i>tijeras</i>

(b) Food & crops

ka:šik	"caña de castilla" (3725.) / reed	< Sp. <i>castilla</i>
*kaštila mapi	"pan" (3728.) / Spanish tortilla = bread	< Sp. <i>castilla</i>
ʔaranšaš	"naranja" (3645.) / orange	< Sp. <i>naranja</i>
ʔasukar	"azúcar" (4095.) / sugar	< Sp. <i>azucar</i>
kuštarica	"cierto cacao" (3779.) / costarica = type of cacao	< Sp. <i>costa rica</i>

la:muniš	"limon" (4007.) / lemon	< Sp. <i>limon</i>
salvia	"salvia, hierba medicinal" (4371.) / medicinal herb	< Sp. <i>salvia</i>
(c) Fauna		
kaštilan	"gallina ponedera" (3729.) / Spanish = chicken	< Sp. <i>castillan(o)</i>
kawayu	"caballo" (3681.) / horse	< Sp. <i>caballo</i>
palu:maš	"paloma" (4237.) / Castilian pigeon, dove	< Sp. <i>paloma</i>
pe:lo?	"perro" (4273.) / dog	< Sp. <i>perro</i>
wakaš	"carne de res, ganado mayor" (3834.) / cow	< Sp. <i>vaca</i>
ye:waš	"yegua" (4759.) / mare	< Sp. <i>yegua</i>
(d) Christianity, religion		
ʔanima	"corazón" (3635.) / heart, soul	< Sp. <i>corazón</i>
ʔanimaš	"ánimas, ocho de la noche" (3637.) / *hour of prayer	< Sp. <i>ánimas</i>
ʔayuna	"ayuno" (3672.) / fasting, lent	< Sp. <i>ayuno</i>
kantoreʔe	"los cantores" (3706.) / singers	< Sp. <i>cantores</i> , XNK -ʔe (plural)
kapun	"capon" (3711.) / castrate, capon	< Sp. <i>capon</i>
ko:ra	"en fila, ringlera" (3745.) / row, line, tier	< Sp. <i>cola</i>
krišma	"bautismo" (3692.) / christening, baptism	< Sp. <i>cristianar</i>
kumbišyon	"confesión" (3763.) / confession	< Sp. <i>confesión</i>
miša	"misa" (4084.) / mass	< Sp. <i>misa</i>
ʔoro:ka	"repicar las campanas" (2784.) / chime the bells	< Sp. <i>oro</i> , XNK -ka (causative)
pa:le	"padre" (4235.) / father = priest, monk	< Sp. <i>padre</i>
prima	"alba del día" (4308.) / dawn	< Latin <i>prima</i> 'beginning'
selika	"comulgar" (3051.) / administer/take communion	< Sp. <i>celico</i> , -a
tyux	"*dios" (4049.) / god	< Sp. <i>dios</i>
(e) Colonial office and authority		
ʔaʔkalti	"alcalde" (3609.) / mayor	< Sp. <i>alcalde</i>
kapiltu	"cabildo" (3710.) / council	< Sp. <i>cabildo</i>
(f) People		
šinula	"señora" (4476.) / lady	< Sp. <i>señora</i>
kaštiyanu	"español" (3726.) / Spanish, Spaniard	< Sp. <i>castellano</i>
papa:	"tío" (4242.) / uncle	< Sp. <i>papa</i>
šut̚tera	"la mujer soltera" (4501.) / single, unmarried woman	< Sp. <i>soltera</i>
šut̚teru	"el hombre soltero" (4502.) / single, unmarried man	< Sp. <i>soltero</i>
(g) Trade and commerce		
ʔaʔmuʔ	"almud" (3613.) / unit for dry capacity	< Sp. <i>almud</i>
merio	"medio real" (4078.) / half a <i>real</i> (Spanish coin)	< Sp. <i>medio real</i>
pahata	"pagar" (2810.) / to pay	< Sp. <i>pagar</i>
tumin	"moneda, dinero" (4610.) / <i>tomín</i> (Spanish coin)	< Sp. <i>tomin</i>
tuštun	"tostón" (4626.) / <i>tostón</i> (Spanish coin)	< Sp. <i>tostón</i>
(h) Grammar and function words		
maka	"y" (4041.) / and	< Sp. <i>mas que</i>
maʔka	"aunque, y mas que" (4053.) / although	< Sp. <i>mas que</i>
niwena	"ninguno" (4176.) / not-who = nobody	< Sp. <i>ni(nguno)</i> , XNK <i>wena</i> (int.)
ʔoro	"sólo" (4200.) / only	< Sp. <i>sólo</i>
paraki	"por" (4245.) / by, because	< Sp. <i>para que</i>
pore	"pero" (4316.) / but	< Sp. <i>pero</i>
(i) Verbs		
ʔanta	"vamos" (1825.) / let's go!	< Sp. <i>¡anda!</i>
ʔʔapala	"abrir" (2067.) / to open	< Sp. <i>abrir</i> (?YUK <i>jap</i> 'to open')

?ku:ru?	"huir" (2184.) / to flee	< Sp. <i>correr</i>
?mo:ro	"mojar" (2674.) / to make wet, soak	< Sp. <i>mojo</i>
?pelo	"descallar, descascarar" (2855.) / to peel, shell	< Sp. <i>pelar</i> (?Ch'ol <i>pa:l</i> 'to peel')
(j) Other terms		
pu ⁺ pu	"polvo" (4334.) / dust	< Sp. <i>polvo</i>
nari:	"nariz, punta, extremo" (4154.) / nose, tip, end	< Sp. <i>nariz</i>

F. Semantic calques

Xinka shares certain calques, or loan translations, which are widely attested in Mesoamerican languages and have been treated as a defining feature of Mesoamerica as a linguistic area (Campbell, Kaufman & Smith-Stark 1986). The following list indicates which of the calques established by Campbell, Kaufman & Smith-Stark 1986 are attested in the ALS.

1.	door: mouth of house	šaha: door = mouth	<szaja> "puerta de casa" (4426.)
2.	finger: child of hand	na?u-pu?: child of hand	<naupu> "dedos" (4164.)
3.	boa constrictor: deer-snake	tuma-?ampuki: deer-snake	<tuma ambuqui> "masacúa" (4609.)
4.	moon: grandmother	?awa: moon, month, grandmother	<agua> "luna, mês, abuela" (3600.-02.)
5.	cramp: associated with deer	peko-tuma: ?-deer = cramp	<pecotúma> "calambre" (4270.)
6.	twenty: man	hurak: man	[comparative data]
7.	to marry: to join, find	pu:riki: to respond = get married	<púriqui> "casarse" (2973.)
8.	coral snake: mother of driver ant	?uta-kotoro: mother of flying ant	<utackotoro> "culebra coral" (4705.)
9.	edge: mouth	šaha: cutting edge = mouth	<szaja> "filo de todo fierro cortante" (4427.)
10.	soot: nose/mucus of fire	nari ?uray: nose of fire	<nari uray> "tizon" (4159.)
11.	alive: awake	?iši-y(a): be alive, awake	<isziy> "estar despierto, vivo" (2435.)
12.	feather: fur	muši: hair, beard = feather	<muszi> "barbas, pelos" (4112.)

6. Field translations of primary data

To allow for some transparency of the linguistic analysis of the semi-speaker data that were recorded between 2000 and 2003 in Guazacapán, this appendix list the Spanish field translations of the examples given in the text. These field translations include translations provided by the speakers themselves, as well as the forms or phrases that were elicited. For some examples no field translations are available. The examples are not numbered, but simply listed in alphabetical order. It needs to be pointed out that this appendix only lists the examples that are actually mentioned in the main text above; it does not reflect the full extent of the material that was documented in Guazacapán.

ʔaheʔe	"éstos" (G-SH)
ʔahmukan ɕ'uʔmaʔ	"ayer regó (su milpa)" (G-RHG)
ʔahmukan hapawan kaʔ ʔayaʔa ʔimey hin	(G-SH)
ʔahmukan kunun haraku	"ayer compré chipilin" (G-SH)
ʔahmukan mukawaka	"ayer trabajé [sic]" (G-RHG)
ʔahmukan puʔiʔ nanin	"ayer lo lavé" (G-RHG)
ʔahmukan ʔaku:ʔa nin	"fui" (G-SH)
ʔakani kapiri mupula buya	"están haciendo buya" (G-SH)
ʔaku ʔayuʔ ʔaʔ nasyon man	(G-JS)
ʔakuki hiʔ naka	(G-SH)
ʔakuki hiʔ ʔuka bagar hiʔ	"la muchacha se anda vagando" (G-SH)
ʔakuki naka despasiyo	"que vaya despacio" (G-SH)
ʔaku:ʔa ʔayaʔa ʔuka bender	"lo fue a vender élla" (G-SH)
ʔakun paʔaʔ	"ya me voy" (G-SH)
ʔakuy k'iʔɕ'iʔ ʃa ʔuraya	"lo va poner al fuego asar" (G-SH)
ʔakuya naka	"anda" (G-SH)
ʔakuyan nin	"voy" (G-SH), (G-PE); "voy ir" (G-JAP)
ʔaʔa peʔ	"mañana" (G-RHG), (G-SH)
ʔaʔa peʔ hin	"mañana no" (G-SH)
ʔaʔa peʔ kuy pokon hiʃiʔ	"yo voy a quebrar piedras mañana" (G-SH)
ʔaʔa peʔ kuy ʔimakan	"mañana le vamos a decir" (G-SH)
ʔaʔa peʔ kuy ʔiʃpan kuyakan wayaʔ	"voy a trabajar mañana" (G-SH)
ʔaʔa peʔ kuy ʔuka ti:ki hiʔ nin	"mañana voy a dormir" (G-SH)
ʔaʔa peʔ kuyan ʃa poɕ'aʔ	"se fue lavar ese montón de ropa" (G-SH)
ʔaʔa peʔ piwan	"pasado mañana" (G-SH)
ʔaʔi naka	"por Usted" (G-SH)
ʔaʔi ware hiŋ kata:yiʔ naka	"por el temporal no vino" (G-SH)
ʔaʔi wari hin kata:yiʔ naka	"por el temporal dos días no vino" (G-SH)
ʔamanika paʔaʔ	"está amaneciendo" (G-RHG)
ʔampula nin heʔ	"estoy haciendo" (G-SH)
ʔamukaʔ para wayaʔ	"trabajar debajo la milpita" (G-JAP)
ʔančumak'un	"estoy en mi casa" (G-RHG)
ʔanhaʃu	"mi cerdo" (G-SH)
ʔanʔiki naka	"voy a hallar a Usted" (G-SH)
ʔanmakuʔ nin	"mi casa" (G-SH)
ʔanmuču paʔaʔ wiriki	"me cansó hablando" (G-RHG)
ʔanneʔa	"es mío" (G-SH), (G-RHG)
ʔanneʔa makuʔ nin	(G-SH)

ʔanneʔa nin	"ésto es mi banco" (G-SH)
ʔanneʔa	"es mío" (G-SH), (G-RHG)
ʔanpewek	"[mi] tecomate" (G-RHG)
ʔanpuley mal nin ʔaʔiʔ šukan mučo	"ayer comí bastantes tortillas" (G-SH)
ʔanta:yiʔ paʔ kaʔ	"ya vino" (G-RHG)
ʔantamah ša ʔaʔtepet	"vamos para el pueblo" (G-JS)
ʔantamah šawaǵ'a	"vamos ir a sembrar" (G-RHG)
ʔantamah ta šawun man	"entra!" (G-JS)
ʔantamaʔ paʔaʔ	"vamos ya" (G-JAP)
ʔantamaʔta	"vamos" (G-JAP)
ʔantamaʔta šawun man	"entra!" (G-JS)
ʔantamaʔta ʔa ti:ki hiʔ	"vamos a dormir" (G-JS)
ʔantamaʔtaʔ	"vamos" (G-JAP)
ʔanʔabwelo ʔanʔabwela nin	"mis abuelos" (G-SH)
ʔanʔayma	"mi maíz" (G-SH)
ʔanʔo:tek neʔa nin	"mi cama" (G-SH)
ʔanʔuʔuʔ	"me cayí" (G-RHG)
ʔapiriʔ hina naka ʔakuki hiʔ	"te miren andando con élla" (G-SH)
ʔayaʔa neʔa naʔum	"la mujer de su hijo" (G-RHG)
ʔayala	"luna" (G-SH)
ʔeʔa wena: hanta kunukaʔ naka hinaʔ čutiʔ	"como lo compré con un comerciante" (G-SH)
ʔeʔaʔ nana man turakaʔ nin	"es nuevo por eso me lo trajo" (G-SH)
ʔənčučaya	"mi viejita" (G-RHG)
ʔənčučumuti paʔaʔ	"es soy muy viejo" (G-RHG)
ʔənčunaʔun	"mi hijo [mío]" (G-RHG)
ʔənčušuruk	"mi bordón" (G-RHG)
ʔənkuʔa ʔipaʔa	"me fuí a bañar" (G-RHG)
ču mak'um	"ésta es mi casa" (G-PE)
ču miku šurumu	"es pequeño el muchacho" (G-RHG)
ču naʔun	"éste es mi hijo" (G-RHG), (G-PE)
ču ʔiwiči ču turi	"que no oye el niño" (G-RHG)
ču ʔone turi	"que es tiernito" (G-JS)
čuhčaya paʔaʔ	"está vieja" (G-RHG)
čukuk	"amarrar" (G-RHG)
dixe ke sə naman wapilin	"dije que me duelen las canillas" (G-JAP)
donde weskeʔaʔ	(G-SH)
ʔerʔekeʔ nin	"me asusté" (G-SH)
hamaʔ paʔaʔ	"ya está maduro" (G-RHG)
hanta ka turakaʔ naka šaʔtepet	"¿qué vas ir hasta al pueblo?" (G-JAP)
hanta kuy šukakan naka	"¿qué vas a comer?" (G-JAP)
hanta taʔma turakakan naka	"¿qué camino llevas?" (G-JAP)
hanta wena tupawan nahíʔ	"¿quién dejó ésto?" (G-RHG)
hanta ʔaʔi tupawakaʔ	"¿porqué lo dejastes?" (G-RHG)
hanta ʔima ti:ʔ nin	"(qué) me está diciendo?" (G-SH)
hanta ʔimakaʔ naka	"¿qué dijiste más?" (G-SH)
hapan na temporal	"que pasó el temporal" (G-RHG)
hapan turan nin naka	"te pasé a buscar" (G-JAP)
hap'awa nin	"he pasado" (G-SH)
hapayaʔ delante yu:	"pasen adelante" (G-SH)
harana heʔ nin	"estoy enfermo" (G-SH)
harana heʔ	"está enfermo" (G-SH)
harana naka	"estar enfermo" (G-JS)
harana yaʔ	"vos está enfermo" (G-RHG)
harana hiʔ nin	"estoy enfermo" (G-JS)

harana ʔukah naʔ	"tengo cinco días de estar enfermo" (G-JS)
haranayan	"estoy enfermo" (G-RHG)
harari čupun	"carne de mi mano, puño" (G-PE)
harari k'u	"pierna" (G-RHG)
hay ʔaka pulakaʔ naka	"¿para dónde vas?" (G-JS)
haymaka naʔ	"¿cómo se llama Usted señor?" (G-JS)
hin č'ama	"no sirve, no es bueno" (G-RHG)
hin hinikan naka	"que no sabes" (G-JAP)
hin kaneʔa nana senyorita man	(G-SH)
hin kuʔa ša krawa	"no fue para el monte" (G-RHG)
hin kuyakan naka ša ʔuy	"que no vas ir al río Usted" (G-JAP)
hin muʔuka debolber	"no devuelve" (G-SH)
hin niwan wenata ʔakuʔa	"no se quien me buscó ayer" (G-SH)
hin šan familya ni	"mi familia ... no hay" (G-SH)
hin šan paʔaʔ	"no hay ... " (G-SH)
hin šan ʔantura nin	(G-SH)
hin ʔaʔi hin	"que cómo no" (G-JAP)
hin ʔanʔušiki nay	"no te oigo" (G-SH)
hin ʔapatan ti:ki	"no puedo dormir" (G-RHG)
hin ʔiwišiki	"está sordo" (G-RHG)
hin ʔuka	"no hay" (G-PE), (G-RHG), (G-SH)
hin hapaway manta kuy ʔima nin hinaʔ	"ya no lo esperó que lo iba decir" (G-SH)
hin hapaʔ nahaʔ	"no pasaron aquí" (G-SH)
hin hinikan naka	"que no sabes" (G-JAP)
hin horoka na ki waʔ	"tres" (G-JS)
hin horokaʔ ʔima nin neʔa kuyan ša ʔotra parte	"si en caso tiene y si no, voy en otra parte" (G-SH)
hin humaka naʔ	"no huelo" (G-RHG)
hin ka turakaʔ naka maʔik	"no trajistes leña" (G-JAP)
hin kahapaya natiyaʔ	"no pasas allí" (G-SH)
hin kaniʔmaʔa man ʔaʔi ʔukey ʔenfriyar kakomida	"se enfrió tu comida porque no quisiste comer luego" (G-SH)
hin kata:yiʔ nahaʔ	"no vino" (G-SH)
hin kuʔa ša krawa	"no fue para el monte" (G-RHG)
hin kuy lač'ay naka	"no te va a morder" (G-SH)
hin kuy nimaʔan naka	"qué no vas a comer vos" (G-JAP)
hin kuyaka naka ša wayaʔ	"no vas ir vos a la milpa" (G-JAP)
hin kuyakan naka ša ʔuy	"no vas ir al río Usted" (G-JAP)
hin kuyakaʔ desbarankar manta natiya	"no vas a caer allá" (G-SH)
hin mupiri naʔ	"ya no mira" (G-JS)
hin muʔuka bisitar nin	"no me visitan" (G-SH)
hin muʔulu na ku mutiʔ	"no caye pelo" (G-JS)
hin niwan wenataʔ ʔaku:ʔa	"no hay ninguno quien me buscó ayer" (G-SH)
hin patakaʔ wiriki hinaʔ	(G-SH)
hin pirikakan naka	"no estás mirando" (G-JAP)
hin šan paʔaʔ	"no hay ... trabajo" (G-SH)
hin te:ro šuka naka	"no quieres comer" (G-PE)
hin ti:kiʔaʔ siʔma	"no me dejaron dormir" (G-SH)
hin tupan nin naka tupawaʔ	"yo no dejé, usted lo dejó" (G-RHG)
hin ʔaʔi hin kuy sawač'aʔ nin	"que cómo no iba sembrar" (G-JAP)
hin ʔaʔi hin	"cómo no" (G-JAP), (G-RHG)
hin ʔaʔi nana hinikan nin	(G-JAP)
hin ʔaʔi šukan nak'i	(G-SH)
hin ʔankuʔ	(G-SH)
hin ʔanniwa ʔakuki hiʔ hina nin	"yo no quiero que anda conmigo" (G-SH)

hin ʔanpiri kaʔušakiʔ	"no me gusta fumar" (G-SH)
hin ʔanpiri na nin	"no me gusta" (G-SH)
hin ʔanʔišapa nin	"yo no salgo" (G-SH)
hin ʔanʔušiki nay	"no le oigo a Usted" (G-SH)
hin ʔapata manta ʔateroʔ čirikiʔ	"el que se muere chiquito" (G-SH)
hin ʔapataʔ ʔakuki	"ya no puedo andar" (G-RHG)
hin ʔapataʔ ʔuka benir	"no pudo venir" (G-SH)
hin ʔawiriki nin	"no me habla" (G-SH)
hin ʔuka	"no hay" (G-RHG), (G-SH)
hin ʔukay hin hapaway manta ku ʔima nin hinaʔ	"... ya no lo esperó que lo iba decir" (G-SH)
hin hapaway manta k'u ʔima nin hinaʔ	"... ya no lo esperó que lo iba decir" (G-SH)
hin ka turakaʔ naka maʔik	"que no trajistes leña" (G-JAP)
hin kaweske muškarawa	"no bote basura!" (G-RHG)
hin šan ʔayma	"no había maíz" (G-JAP)
hina pari mapu	"con tortilla caliente" (G-JAP)
hinaʔ ʔikah šapun	"con un jabón" (G-JS)
hinka ša muʔika	"que no vas por atrás" (G-RHG)
hiriya	(G-SH)
hiši neʔa muʔiwa ʔayaʔa	"la piedra de moler" (G-SH)
hono heʔ	"está bolo" (G-SH)
honoʔ ʔukaka naka	"está bolo" (G-JS)
horokaʔ ʔikaʔ ču turi man	"... tuvieron un niño" (G-JS)
horoʔaʔ nahuʔ mura man	"ya tenes elote" (G-JS)
horon nin ʔayma	"yo tengo maíz" (G-SH)
hurah man muʔuka leʔer	"el hombre sabe leer" (G-SH)
hurak puʔah maʔik heʔ	"el hombre está haciendo leña" (G-SH)
huraʔi	"hombres" (G-PE)
huraʔ ʔaku:ʔa ša sawač'aʔ	"el hombre se fue a sembrar" (G-JAP)
huraʔin	"mis ojos" (G-PE)
ʔi hiʔ hapawa natiya muʔuka pikar nin	"donde está el panal me pica la abeja" (G-SH)
ʔi peʔ maʔ k'uʔ paʔaʔ	"allí viene ya" (G-JAP)
ʔihukaʔ paʔaʔ	"aquí está allá" (G-JAP)
ʔihukaʔ ta šunik	"aquí está ya la ollita" (G-JAP)
ʔihukaʔ	"aquí está" (G-JAP)
ʔihukaʔ čuwapaʔ	"aquí está el banco" (G-JAP)
ʔika	"uno" (G-SH)
ʔik'ah	"uno" (G-RHG)
ʔikah hiši	"una piedra" (G-JS)
ʔikah kataho ta lagriyo hiʔ	"le dieron un pedazo de quesadilla" (G-JAP)
ʔikaʔ	"uno" (G-JAP)
ʔik'aʔ libro man	"un libro" (G-JS)
ʔik'aš	"uno" (G-SH)
ʔima na	"dígame a ella" (G-SH)
ʔiman naka paʔaʔ	"ya te dije" (G-SH)
ʔiman nin hanta kaniʔwa	"decíme que es lo que quieres" (G-SH)
ʔimey na ku senyorita ʔaʔ naka	"dijo ese señorita sobre ti" (G-JS)
ʔimey nankun paʔaʔ	"ya es tarde" (G-SH)
ʔimʔuka ku mubanko	"aquí está el [su] banco" (G-RHG)
ʔipala pe kaʔ	"me fui a bañar" (G-SH)
ʔiplaʔ hiʔ	"está bañando" (G-JS)
ʔirč'in nin peloʔ	"... que me mordió el perro" (G-JAP)
ʔiraʔ hin	"no es grande aquí" (G-SH)
ʔiraʔ nahaʔ ʔukey	"hay amplitud" (G-SH)
ʔiraʔ paʔaʔ	"ya está grandecito" (G-SH)

ʔiri paʔaʔ	"ya está grande ese" (G-SH)
ʔišapa heʔ	"está saliendo" (G-SH)
ʔišapa hiʔ	"está saliendo" (G-SH)
ʔišapin ša ʔuray	"yo saqué del fuego" (G-RHG)
ʔišičiʔ, ʔusučuʔ	"sabroso" (G-RHG)
ʔišikiyan	"está oyendo" (G-RHG)
ʔišp'awaʔ	"ha salido" (G-SH)
ʔitaʔ	"uno" (G-JS)
ka ta:yaka wiʔ ʔayuʔ	"¿dónde vas?" (G-SH)
kah	"uno" (G-SH)
kakamisa naka	"tu camisa" (G-SH)
kakewaʔaʔ nin	"que me prestás" (G-SH)
kako ša lawaro natiya	"venía bailar" (G-SH)
kaʔ	"uno" (G-SH)
kaʔiki šuraya neʔa kaʔawaro	(G-SH)
kaneʔa ša makun	"es tuyo ... aquella casa" (G-JAP)
karaʔ hutu	"el palo pesaba mucho" (G-JAP)
kasawaʔ'a naka trigo	"ustedes siembran trigo" (G-SH)
kašinak	"tus frijoles" (G-JAP)
kašuka naka ka munukey naru	"cuando nos murimos hacen la sepultura" (G-SH)
kata hiʔ ʔeskalera	"¿dónde está la escalera?" (G-RHG)
kataya naka	"acostáte" (G-JAP), "acuestate!" (G-PE)
kataʔ sawačan naka	"¿dónde está su milpa?" (G-SH)
kati:ki naka	"dormite" (G-SH)
kati:kiʔaʔ ʔay	"Vds. están durmiendo" (G-RHG)
katura naka kawapik	"lleva tus caites" (G-JAP)
kawapaʔ	"tu banco" (G-SH)
kawayuʔi	"plebe de caballo" (G-JS)
kawitiʔáya	"tu doncella" (G-JAP)
kawiʔ ʔaʔi šuraya	"yo lloro por esa patoja" (G-SH)
k'awu hiʔ	"está cociendo" (G-RHG)
kawun nanin kaʔ libra de ʔaʔu neʔa pulan manta ništamal	(G-SH)
kawun nin paʔaʔ	"que ya lo había cocido" (G-JAP)
kayayaʔ pari paʔaʔ	"que calorón había allá" (G-JAP)
kayayaʔ paʔaʔ pari	"ya está fuerte el sol" (G-JAP)
kayayaʔ peʔ	(G-SH)
kayayáʔ	"calorisado" (G-SH)
kaye nin manta	(G-SH)
kayin nin ʔikaʔ ču kamisa	"vendí unas camisas" (G-JAP)
kaʔ	"uno" (G-PE)
k'aʔ	"uno" (G-SH)
kaʔ ta hiʔ kamačite	"¿dónde está tu machete?" (G-SH)
kaʔ ta:yaka	"¿adónde vas?" (G-RHG)
kaʔ waʔ wiʔ ʔiplakay	"me fui bañar" (G-JS)
kaʔtaʔ hiʔ kamačite	"¿dónde está tu machete?" (G-SH)
kaʔuka labar karopa	"vas a lavar" (G-SH)
k'aʔuk'ey šinak man ʔaʔi turey maʔik	"mi esposa está cocinando frijol" (G-SH)
ke sə naman wapilin	"dije que me duele las canillas" (G-JAP)
ke šikaki hu:šin	"me duele la cabeza" (G-RHG)
ke šukaki ʔənčuhu:šin	"me duele la cabeza" (G-PE)
ke sukakín ʔənčuhuraʔin	"que me duele los ojos [míos]" (G-RHG)
ke šukan hu:ši nanin	"me duele la cabeza" (G-JAP)
ke ʔimey na naka paʔaʔ	"¿qué palabra dijo Usted?" (G-JS)
kepʔe hiši	"hay mucha piedra" (G-RHG)

ki kayaya?
 ki nama ʔenčuwapilin
 kirin nin tiʔa ʔi ʔaku:ʔa ʔayaʔa ʔuka bender
 kiša hinin
 kisima nin kašinak
 kiʔ ʔiriʕiʔ hina ču naki
 kiʔwaʔ hiʔ
 kontento ʔukaʔ hina naka
 korason naka
 koʔ ka na ša šaru man
 k'oʔlo hiʔ ʔišapa heʔ mukwero takwasin
 ku ɕ'awaka naka ʔayma
 ku ču mapu man
 ku ču muti paʔaʔ
 ku maʔik
 ku nakaʔ ču šuráya man
 ku šapun ču miya
 ku šawaɕ'a na senyor
 ku šawaɕ'an ču ʔayma
 ku šukan nin
 ku šuwi na ʔaʔi
 ku wereke
 kupayaka
 kupayan ɕ'ehe
 kupayan paʔaʔ
 kupayan paʔaʔ naʔ
 kupayaʔ
 kuriya peʔ
 kuriʔa taʔ
 kuruki
 kuruy nin ku ʔampuki
 kuy hapan turay
 kuy kayin wenata mukunu kwerno man
 kuy kunun neʔa nuka naka
 kuy ʔaraʔ hutuʔ
 kuy muʔuka gwardar nin
 kuy nimaʔaʔ nin
 kuy nuʔma nin
 kuy pulan maʔik
 kuy pulaʔ fyesta
 kuy puriki šuraya man
 kuy rurun
 kuy samun nin miya mán
 kuy šawaɕ'a
 kuy šuka na ku mura man
 kuy šukakan naka sema
 kuy šuwin nin neʔan šawuʔ hinaʔ
 kuy ti:ki hiʔ nin
 kuy tumuy šuka ɕ'oko
 kuy waštay
 kuy waštaʔ ša mak'uʔ
 kuy wišuy nak
 kuy wišuʔ
 kuy ʔakun nin ya

"que calor" (G-PE)
 "me duele la canilla" (G-PE)
 "yo arranqué yucca y lo fue a vender élla" (G-SH)
 "duele el estómago" (G-RHG)
 "regálame tu frijol" (G-JAP)
 "que sabroso con chile" (G-JAP)
 "está doblando" (G-SH)
 "estoy contento con Usted" (G-JS)
 "tu corazón" (G-JS)
 "vamos a la mar" (G-JS)
 "yo pelé el tacuazín" (G-SH)
 "que si no va sembrar maíz" (G-JAP)
 "es la tortilla" (G-JS)
 "ya estoy viejo" (G-RHG)
 "vamos a leñar" (G-JS)
 "corte de la mujer" (G-JS)
 "jabón gallo" (G-RHG)
 "el señor ya sembró" (G-RHG)
 "vas a sembrar milpa" (G-JAP)
 "me va comer [dos elotes]" (G-JS)
 "estaba barriendo" (G-JS)
 "el se va poner más fuerte" (G-SH)
 "te vas a salir" (G-RHG)
 "voy ya a Chiquimulilla" (G-RHG)
 "ya me voy" (G-SH)
 "ya me voy" (G-SH)
 "ya me voy" (G-SH)
 "andáte" (G-RHG)
 "andáte" (G-PE)
 "que corre" (G-RHG)
 "me corrió una culebra" (G-RHG)
 "te voy pasar llevando" (G-SH)
 (G-SH)
 "voy comprar para que te lo regalo" (G-SH)
 "va subir al palo" (G-SH)
 "te voy a esperar [sic]" (G-SH)
 (G-SH)
 "voy a comer" (G-SH)
 "voy hacer leña" (G-RHG)
 "hay una vez fiesta" (G-SH)
 (G-SH)
 "voy a cortar" (G-RHG)
 "voy agarrar el pollo" (G-JAP)
 "va a sembrar" (G-RHG)
 "va comer elotes cocidos" (G-JS)
 "vas a comer pescado" (G-JAP)
 "yo voy a barrer para sentarme" (G-SH)
 "yo voy a dormir" (G-SH)
 "se lo va comer todo el zanate" (G-JAP)
 "él va ir" (G-JAP)
 (G-SH)
 "te va pegar" (G-SH)
 (G-SH)
 "ya me voy" (G-SH)

kuy ʔakun paʔaʔ	"ya me voy" (G-SH)
kuy ʔanti:ki nin paʔa	"me voy a dormir" (G-JAP)
kuy ʔipala nin	"voy a bañarme" (G-SH)
kuy ʔiplaʔaʔ na nin	"voy a bañarme" (G-PE)
kuy ʔiplaʔin man	"fue a bañar a la mar" (G-JS)
kuy ʔiʃpawan nin ʃa parakeʔ	"va salir a buscar" (G-SH)
kuy ʔuka benir lwego	"si va venir luego" (G-SH)
kuy ʔuka desgranar ʔanʔayma	"yo voy a desgranar mi maíz" (G-SH)
kuy ʔuʔu ʔuy	"lluvia" (G-PE)
kuy ʔurtun nin ku ʔu ʔuy	"voy a tomar agua" (G-JS)
kuy ʔipala nin	"voy a bañarme" (G-SH)
kuya ʔawaru	"va a bailar" (G-RHG)
kuyakan resibir hina naka	(G-SH)
kuyakaʔ kayiʔ maʔis man	"llevaste a vender maíz" (G-SH)
kuyakaʔ lawaro hina nin	"vas a bailar conmigo" (G-SH)
kuyan ʔuman wiyan	"voy a chupar caña" (G-RHG)
kuyan honoʔ	"me voy a embolar" (G-RHG)
kuyan nanin ʃa ʔaʔtepet	"vamos ir al pueblo" (G-PE)
kuyan nin kunun	"que iba comprar" (G-JAP)
kuyan nin ʃa ʔaʔtepet	"voy ir al pueblo" (G-JAP)
kuyan paʔaʔ	"ya me voy" (G-SH, G-JAP), "ya me fui" (G-SH)
kuyan ʃa krawa	"que voy ir al monte" (G-RHG)
kuyan ʃa te:ro tuma	(G-SH)
kuyan ʃan kuku	"voy a Taxisco" (G-RHG)
kuyan ʃan montanya	"sube a la montaña" (G-RHG)
kuyan ʃaʃaru	"voy al mar" (G-RHG)
kuyan ʃawaʕ'a	"voy a sembrar" (G-RHG)
kuyan ti:ki nin paʔaʔ	"me voy a dormir (ya)" (G-JAP)
kuyan tupa kiʔ	"voy ir a dejarle" (G-SH)
kuyan tura maʔik	"voy ir a traer leña" (G-RHG)
kuyan ʔuka tirar ku tuma	"voy a cazar venado" (G-RHG)
kuyan	"yo voy" (G-SH)
kuyaʔ kuy kayin	(G-SH)
ladron turey ʔikaʔ miya	"el ladrón se llevó mi pollo" (G-SH)
ʔaraya hutu man	"subite al palo" (G-RHG)
ʔikakaʔ nin naka	"me hallaste" (G-SH)
ʔikaya paʔaʔ	"bajate del palo" (G-RHG)
ʔikikaʔ weyʃa paʔaʔ	"yo maté una iguana" (G-SH)
ʔikin kaʔ geʃpo	"hallé una iguana" (G-SH)
mak'uʔ na	"su casa" (G-SH)
mal ʔukaʔ	"está malo" (G-RHG)
man ʔaʔi	"por eso" (G-JAP)
man ʔaʔi hapan turan nin naka	"por eso te pasé a buscar" (G-JAP)
man ʔaʔi mupula nin	"estoy haciendo" (G-JAP)
man ʔaʔi ʃin ʃan mura	"que por eso no había elote" (G-JAP)
man ʔaʔi turey maʔik	(G-SH)
manta kamapu hin kanuka nin	(G-SH)
manta kapiri hapaʔ ʃan tiwina	(G-SH)
manta ladron turey ʔikaʔ miya	"el ladrón se llevó mi pollo" (G-SH)
manta man naʔun	"mis hijos" (G-SH)
manta miko man	"ese es mico" (G-SH)
manta mumak'u man naʔun	"la casa de mi hija" (G-SH)
manta naʔuʔ senyora ʔuwiʔ	"la señora llamó sus hijos" (G-SH)
manta ʃunik' ʃa ʔuraya heʔ	"la olla está en el fuego" (G-SH)

manta tuŋu man ʔololoʔ
 manta wiriki hina naka
 manta ʔateroʔ čirikíʔ
 manta ʔayaŋa man ʔakuki hiʔ hina šurumu
 manta ʔayaŋa ʔaku ša motor pač'ikiʔ pulaʔ man
 manta ʔimakaʔ nin
 manta
 maraʔya
 mĩrkin ču coreʔo ʔənčuwapik
 miya ʔuka gorda
 mok'aŋ
 muč'iwi nahi
 muč'uwe nahi
 muču ya nin
 mučuʔ nin
 mučuʔ ʔukah nin
 mučuʔ ʔukaʔ
 mučuʔayaŋa neŋa naʔu-n
 muhapaya natiya
 muherŋe
 muhk'u paʔaŋ
 muhku ša kosta man
 muhku ša merkado
 muk'aŋa, mukaŋa
 mukan ʔaŋi horokaʔ nin kaʔ turi man
 mukara kiki manta mukomestible
 mukunu mapu
 mukwerpo nin
 mumaŋik
 mumuk'u hiʔ
 muneŋa
 mura man kuy šukan nin
 murtiʔ
 mušuy naka nahiʔ kah pari
 mutataʔ
 mutečo ʔənčumaku
 mutita naʔ
 mututu
 muweriki hina ʔayaŋa pari
 muʔayaŋa
 muʔuka doler muʔestomago
 muʔuka nin desbelar
 muʔuka poč'aʔ
 na ču humu turi maʔ
 ná hu milagro
 na hurak man
 na huraŋe kiʔ šə muniwa nin waruʔ
 na kah
 na man huru
 na man ʔənčuʔermano
 na naka kaʔakuʔ
 na naka kwatro šurumu
 na naka mukay na mentir man
 na naka simikaʔ ʔuraya

"esa flor es blanca" (G-SH)
 "el muchacho dice que..." (G-SH)
 "el que se muere chiquito" (G-SH)
 (G-SH)
 "se fue la mujer hacer su masa" (G-SH)
 (G-SH)
 "ése, el que" (G-SH)
 "descanse" (G-SH)
 "me rompió el caite" (G-RHG)
 "la gallina está gorda" (G-SH)
 "el trabajador" (G-JS)
 "dobló su milpa él" (G-JS)
 "¿dobló su milpa él ya?" (G-JS)
 "ya me cansé" (G-PE)
 "estoy cansado" (G-JS)
 "estoy cansado" (G-JS)
 "viene cansado" (G-JS)
 "su mujer de su hijo" (G-RHG)
 "pasa y no me habla" (G-SH)
 "mujeres" (G-JAP)
 "nos vamos" (G-SH)
 "vamos a la costa" (G-SH)
 "vamos al mercado" (G-SH)
 "trabajador" (G-JS)
 (G-JS)
 "comestible ... élla cargase" (G-SH)
 "el patojo compra tortillas" (G-SH)
 "mi cuerpo" (G-SH)
 "su leña" (G-SH)
 "está cantando" (G-SH)
 "es de él" (G-RHG)
 "me va comer dos elotes" (G-JS)
 "se reventó" (G-SH)
 "¿cuándo vas a venir?" (G-JS)
 "su papá" (G-SH)
 "techo de la casa" (G-RHG)
 "las piernas suyas" (G-JS)
 "su pecho" (G-JS)
 "habla la luna con el sol" (G-SH)
 "su mujer" (G-RHG)
 "me duele el estómago" (G-SH)
 "zancudos me desvelan" (G-SH)
 "se fue lavar la señora" (G-SH)
 "el niño" (G-JS)
 "ese milagro" (G-JS)
 "ese hombre" (G-SH)
 "me piden mucho los hombres (el matate)" (G-JAP)
 "hija única" (G-SH)
 "ese chompipe" (G-JAP)
 "éste es hermano" (G-RHG)
 "vos se fuistes, Usted se fue" (G-SH)
 "él tiene cuatro hijos" (G-SH)
 "mentir" (G-JS)
 "Usted apagó el fuego" (G-SH)

na naka šukaŋa?
 na naka ŋuka? harana
 na nin hapakan terowaŋa
 na nin hapakay
 na nin hapan nin ša makuka pero hin ŋikin naka
 na nin hapawan natiya pero ŋikiy mudwenyo

na nin hin ku lawaro man
 na nin hin muŋaya ša turan ŋakani?
 na nin hin ŋanpata?
 na nin hin ŋapatawa ya?
 na nin hin
 na nin horon ka hutu man
 na nin horon ka? besino ŋi ne:teke komo ŋenemigo
 na nin horowan ŋika?
 na nin hu:šin
 na nin kinika he?
 na nin kirin manta tiŋa
 na nin ku mukaŋa nin
 na nin kuy wašata
 na nin kuy ŋuka ŋetaka
 na nin kuyan šan e'ehe

na nin likaka?
 na nin nukakakey
 na nin parakakan nuwi
 na nin piri naka he?
 na nin pirin wiriki hina ŋayaŋa
 na nin pulakan waru?
 na nin pulan trabaho manta ŋimaka? nin
 na nin šawaŋ'an ŋahmukan
 na nin šukan paŋa?
 na nin te:ro šukakakan
 na nin te:ro wiriki ŋati horon nin ka? problema hina nin

na nin wiriki hi?
 na nin wirikiŋa hina?
 na nin wirkin hina na?
 na nin ŋaku:ŋa ŋipaŋa
 na nin ŋanneŋa siya man
 na nin ŋanneŋa wapaŋ man
 na nin ŋanpobre
 na nin ŋantayuk
 na nin ŋanti:ki
 na nin ŋanti:ki ša ŋo:tek
 na nin ŋanti:kiŋa?
 na nin ŋantuya? ke?
 na nin ŋanŋima naka
 na nin ŋispa? ša mak'u?
 na nin ŋuka ŋawaro
 na nin ŋuka preparar ya? neŋan šawaŋ'a? wayan
 na nin ŋukan apagar ŋuray
 na nin ŋukay sukuy nin wapili? manta miyaŋe man
 na nin ŋukey ŋipaŋla

"Usted almorzó" (G-SH)
 "vos tienes enfermedad" (G-JAP)
 "que aquí estaba esperando al muerto" (G-JAP)
 "yo estoy esperando" (G-SH)
 "yo pasé a tu casa" (G-JAP)
 "yo pasé por allá y como allí andaba el dueño,
 me halló" (G-SH)
 "yo no bailo" (G-JS)
 "no cargo como llevarlo" (G-SH)
 "no puedo" (G-SH)
 "no puede (mandar a un)" (G-SH)
 "yo no" (G-SH)
 "tengo un mangal" (G-SH)
 "tengo un vecino y no vive tranquilo" (G-SH)
 (G-JS)
 "mi cabeza" (G-SH)
 "yo estoy contento" (G-SH)
 "yo arranqué yucca" (G-SH)
 "porque soy trabajador" (G-JS)
 "yo voy a entrar" (G-SH)
 "mañana yo tapisco ..." (G-SH)
 "voy ir a Chiquimulilla",
 "fuimos para Chiquimulilla" (G-JAP)
 "me hallaron" (G-SH)
 "puede ser una que lo ponga" (G-SH)
 "estoy buscando techo de la casa" (G-SH)
 "yo te miré" (G-SH)
 (G-SH)
 "yo estoy haciendo matate" (G-JAP)
 "yo hice el trabajo" (G-SH)
 "que sembró ayer" (G-RHG)
 "yo ya comí" (G-JAP)
 "tengo hambre" (G-SH)
 "yo vine hablar con Usted de mi problema
 que tengo" (G-SH)
 "estoy platicando" (G-SH)
 "con élla platiqué" (G-SH)
 "y yo platiqué con élla" (G-SH)
 "me fui a bañar" (G-SH)
 "ésto es mi banco" (G-SH)
 "ésto es mi banco" (G-SH)
 "yo soy pobre" (G-SH)
 "mi sombrero" (G-SH)
 "yo duermo" (G-SH)
 "yo duermo en la cama" (G-SH)
 (G-SH)
 "yo le regañé" (G-SH)
 "le voy a decir" (G-SH)
 "yo salí de mi casa" (G-SH)
 "quiero ir a bailar" (G-SH)
 "estoy preparando terreno para sembrar milpa" (G-SH)
 "yo apagué la llama" (G-RHG)
 "yo amarré a la gallina" (G-SH)
 "yo me bañé" (G-SH)

na ni? ʔispa ša mak'u?
 na pari
 na tupawa?
 nah na man
 nah na man šawu hi?
 naha kuy ʔamuk'a naka
 naha? he? hapun
 naha? tupan
 nahi ʔimey nin
 naka kaču makun
 naka kuy puʔiki ʔalape
 naka šurumuʔe
 naka ti:kiʔa?
 naka tupawa?
 naka wišu nanin
 naka witiʔaya
 naka ʔimaka? nin
 naʔa ku? ʔuka ʔuy
 nama he? hu:šin man ʔaʔi hin ʔanʔišapa ša pari
 nama ša hu:ši
 nama ʔanhu:ši
 nama ʔanwapilin
 namah
 naman huru
 nana hi?
 nana hi?
 nana hi? kaneta
 nana hi? ʔanneʔa
 nana kuy kuya? ša mak'uk
 nana man hurak ʔaku domingo
 nana man tayuk turan nin
 nana man turey
 nana man ʔannwera
 nana ma? ʔukay ɕ'imi?
 nana miku šuraya
 nana na man kuy ʔuka šuwik'
 nana nanin nukey na naka
 nana nin haranayan
 nana nin nukey na naka
 nana nin ʔimakan naka
 nana nin ʔimaka? naka
 nana nini haranayan
 nana senyorita man
 nana ʔuy man klara hi?
 nana? na nin hapakan
 nankun paʔa?
 natiya he?
 natiya hin ninguno ʔakuki
 natiya kuyan tero?
 natiya muʔara manta pari
 natiya muti:ki ša ʔo:tek
 natiya muʔuka kural čiwo
 natiya ti:ki hi?
 na? hurah man hin ʔapata? ʔuka benir

"yo salí de mi casa" (G-SH)
 "el sol" (G-JAP)
 "el lo dejó" (G-RHG)
 "él" (G-SH)
 "el que está sentado" (G-SH)
 "aquí vas a trabajar" (G-JAP)
 "allí está jabón" (G-SH)
 "que lo iba dejar" (G-RHG)
 "el me dijo" (G-RHG)
 "ésta es tu casa" (G-PE)
 "Ud. va a lavar mañana" (G-RHG)
 "vos, muchachos" (G-SH)
 "tú dormiste" (G-PE)
 "tú lo dejastes; Usted lo dejó" (G-RHG)
 "tú me pegastes" (G-PE)
 "tú, doncella" (G-JAP)
 "Usted me dijo" (G-SH)
 "para que llueva" (G-SH)
 "me duele la cabeza" (G-SH)
 "me duele la cabeza" (G-JS)
 "me duele la cabeza" (G-SH)
 "me duelen los pies" (G-SH)
 "doler" (G-JS)
 "ese chompipe" (G-JAP)
 "éso" (G-JAP)
 "ésto está" (G-JAP)
 "éste de él, tuyo" (G-RHG)
 "éste es mío" (G-RHG)
 "el va ir a tu casa" (G-JAP)
 "el va oír misa domingo" (G-SH)
 "yo te traje este sombrero" (G-SH)
 (G-SH)
 "es mi nuera" (G-SH)
 "el apagó" (G-SH)
 "la niña" (G-SH)
 "estás barriendo" (G-SH)
 "yo te doy algo" (G-JS)
 "estoy enfermo" (G-RHG)
 "yo te doy algo" (G-JS)
 "yo te dije" (G-RHG)
 "te dijo" (G-RHG)
 "estoy enfermo" (G-RHG)
 "esa señorita" (G-SH)
 "el agua está clara" (G-SH)
 "aquí estaba esperando..." (G-JAP)
 "ya es tarde" (G-JAP), (G-SH), (G-RHG)
 (G-SH)
 "allí no hay quien cuida" (G-SH)
 "allí voy a morir" (G-SH)
 (G-SH)
 "el duerme" (G-SH)
 "mandó hacer su coral" (G-SH)
 "dónde Usted se quedó por la noche" (G-SH)
 "no pudo venir" (G-SH)

na? pe? na	"veníte (G-RHG), "apuráte" (G-SH)
na? pe? na naka	"venga acá" (G-SH)
na? pe? na?	"veníte, apuráte" (G-RHG), (G-SH)
na? pe? na?	"allí viene el" (G-RHG)
na? pe? na naka	"venga acá" (G-SH)
na? ?aku:ʔa hi? ?ipaʔʔa?	"se fue a bañar" (G-SH)
na?un hin ?a?ima	"el niño no puede trabajar" (G-SH)
na?un hin ?a?uka mandar	"el niño no puede trabajar (G-SH)
na?un nin	"mi hijo" (G-SH)
ne:ʔeʔe kuy sawaʔ'a nin	"nosotros vamos a sembrar" (G-SH)
ne:ʔeʔe waʔ	"nosotros somos tres" (G-SH)
neʔa ku? nukey	(G-SH)
neʔa muʔuka mu?ima ?uta kiʔ'i?	"asámelo" (G-SH)
neʔa mu? sukan nin	"van comer bien" (G-SH)
neʔa mu?iʔapa paseyo	"para que salga al paseo" (G-SH)
neʔa ?uka barer ?ayaʔa	"barrer" (G-SH)
neʔaka ?iʔaka	"Usted mandó hacer atol" (G-SH)
neʔak'a?	'yours' (G-SH)
neʔan sawaʔ'a? nin	"para sembrar la milpa" (G-SH)
neʔan šawaʔ'a? wayan	"para sembrar la milpa" (G-SH)
ney horoy ?esperansa	"no hay esperanza" (G-SH)
nimaʔa pa?a? šurumu	"ya comió ya el patojo" (G-JAP)
nin ša mak'u?	(G-SH)
niwakakan he?	"estás pidiendo" (G-SH)
niwakakan hina nin	"... porque te dirigiste conmigo" (G-SH)
niwey manta pulakey pilares	(G-SH)
niʔmaʔa paʔa?	"élla ya comió" (G-RHG)
nuka ta? na?	"dales" (G-JAP)
nukaka mapu na man	"vos le distes una tortilla a el" (G-RHG)
nukan naka kah mapu	"yo te di una tortilla" (G-RHG)
nuk'an paʔaʔ	"ya te di" (G-SH)
nukay na nanin	"Usted me va a dar" (G-JS)
nukey na ku šunik na nin	"Usted me dio la olla" (G-JS)
nukey nin mapu	"me dio tortilla" (G-JAP)
numaʔan nin hina na?	"que comí yo con él" (G-JAP)
numaya pe? paʔa?	"vení almorzar ya" (G-JAP)
nu?mayan	"estoy comiendo" (G-RHG)
?one ?ukah ?awa	"está pura tiernita la luna" (G-JAP)
pa šahak	"boca" (G-PE)
pari ?uka?	"el sol está muy caliente" (G-JS)
pero hin mu?uka deklarar si na nin ?o wena=ta?	(G-SH)
pi:kan ?ukay desgranar ?an?ayma	"anteayer desgrané" (G-SH)
pikan ?anti:kiʔa?	"anteayer dormí todo el día" (G-SH)
pirika? nin ?ikah ?awe	"yo veo un pájaro" (G-JS)
pirin hapa? šantiwina	"pájarito" (G-SH)
pirin ke? hapawa? ?ani? naha?	"yo lo veo que pasó" (G-SH)
pirin nin mara?ya hi?	"yo lo ví descansando el" (G-SH)
pirin paʔa?	"ya lo ví" (G-SH)
piriwa naka na nin	"porque yo lo ví a Usted" (G-JS)
piriwan ne naka	(G-JS)
piri? nin naka	"tú me mirastes" (G-SH)
pi?	"dos" (G-JAP)
porke pirikakan naka ke nankun paʔa?	(G-JAP)
pu:riki hina? šurumu	"se casaron, están junto" (G-SH)

pula nin kan
 pulan nin paʔaʔ waruʔ
 puy pari
 puy pari paʔaʔ
 ša hutu man
 ša ku maku man
 ša mak'uʔ nin
 ša merkado ʔukaʔ
 ša nankun paʔaʔ
 ša siʔma
 ša ʔeskina čumak
 ša ʔoflak
 ša ʔuraya heʔ
 sama paʔaʔ ʔah naru
 šamami
 šampari paʔaʔ
 šamuy ku pelo ču šurumu
 šamuy nin ku ʔampuki
 šamuy ʔika ču ku weša ku pelo
 šan šaru
 šan tiwina paʔaʔ pari
 san wona
 šanari
 sararaʔ nanin
 šawu hiʔ
 šawu nahaʔ
 šawuya natiya kawapaʔ
 šawuya šaw
 šawuya
 si ʔukáʔ paʔaʔ
 sika ki hu:šin
 šika ʔay
 šin kaniwa naka mas kaldo
 šin šan šinak'
 siʔma paʔaʔ
 šukakakan nin
 šukakakan naka
 šukakan
 šukakey nin
 sukakin ʔančuhuraʔin
 šukan
 šukan nin hina naʔ
 šukay kiʔ ša hinin
 šuraya ʔuwaka heʔ ša ʔuy
 šurumuʔe
 šuwik
 šuwiki
 šuwiʔ ʔukay naʔ
 suʔmak'ay
 tak'ah
 takah
 takaʔ
 taʔan muškarawa
 taʔaʔ ču mak'uʔ

"lo estoy haciendo" (G-JAP)
 "ya hice el matáte" (G-JAP)
 "medio día, tarde" (G-JAP), (G-RHG)
 "ya es tarde" (G-JAP)
 "en el palo" (G-SH)
 "en su casa" (G-JS)
 "en mi casa" (G-SH)
 "en [el] mercado [está/hay]" (G-SH)
 "ya es tarde" (G-JAP)
 "de noche, en la noche" (G-SH, G-RHG)
 "esquina de la casa" (G-RHG)
 "en el comal" (G-JAP)
 "está en el fuego" (G-SH)
 "ya es oscuro" (G-JAP)
 "oreja" (G-PE)
 "ya es tarde" (G-RHG)
 "el chucho agarró al patojo" (G-RHG)
 "me mordió una culebra" (G-RHG)
 "el chucho agarró una iguana" (G-RHG)
 "sur, el mar" (G-RHG)
 "el sol ya está hasta arriba" (G-JAP)
 "arriba" (G-RHG)
 "en la nariz" (G-SH)
 "tengo frío" (G-PE)
 "está sentado" (G-SH)
 "sentar [aquí]" (G-SH)
 "allí es tu banco" (G-SH)
 "sentáte" (G-PE)
 "sentáte", "sientase" (G-RHG), (G-JAP)
 "si todavía hay" (G-JAP)
 "me duele la cabeza" (G-RHG)
 "cállate!" (G-RHG)
 "no quieres más caldo" (G-JAP)
 "no hay frijol" (G-PE)
 "ya es noche" (G-SH)
 (G-SH)
 "estás comiendo" (G-SH)
 "yo lo comí pues" (G-RHG)
 "estoy comiendo" (G-SH)
 "me duelen los ojos" (G-RHG)
 "comamos!" (G-RHG)
 "comió junto con el" (G-JAP)
 "me duele el estómago" (G-RHG)
 "la niña está jugando entre el agua" (G-SH)
 "muchachos" (G-SH)
 "escoba" (G-RHG), (G-JS)
 "barrer" (G-RHG)
 "está barriendo" (G-JS)
 "está regando" (G-RHG)
 "seis" (G-RHG)
 "seis" (G-SH)
 "cuatro" (SH)
 "quememos la basura!" (G-RHG)
 "se quemó la casa" (G-RHG)

tata? piši?	"se quemó el guacal" (G-RHG)
tamaç'i?	"torcer pita" (G-RHG)
tamaç'i? ne?ta kuy pu?an k'a? waruk	(G-SH)
tata? ?i ?uta? mu?imey šuraya	(G-SH)
tay ti:ki	"está durmiendo" (G-JS)
tayuk si?ma? ?anne?ta	"mi sombrero es negro" (G-SH)
te:ro ni?ma he?	"quiero comer, tengo hambre" (G-SH)
te:ro nu?ma pa?a?	"ya quiere comer" (G-JAP)
te:ro pirikay	"quieren ver" (G-SH)
te:ro šuka nin kan	(G-JAP)
te:ro ti:ki nanin	"quiero dormir" (G-PE)
te:ro ti:ki pa?	"tengo sueño" (G-SH)
te:ro ti:kiyan	"tengo sueño" (G-RHG)
te:ro yip? nin ?a?i šukan nak'i	"quiere vomitar por haber comido chile" (G-SH)
te:ro ?i?akayan	"quiero tomar" (G-RHG)
te:na? ?uçiruka	"que se apuren" (G-JAP)
terowa?ta	"(el) muerto" (G-JAP), (G-JS)
teroy kah miya	"mató un pollo" (G-SH)
tero? hurak man ?anbesino nin	"se murió ese vecino" (G-SH)
tero? ?awaro hi?	"élla quiere bailar" (G-SH)
tero? pa?a?	"ya se murió" (G-JS), (G-SH)
tero? ?uka?	"se murió" (G-JS)
ti:(?) muteritoriyo man	"extranjero" (G-SH)
ti:ki hi? nah na	"el está durmiendo" (G-SH)
ti:ki pa?a?	"está durmiendo" (G-JAP)
ti:ki ?uka hi?	"estaban durmiendo" (G-JS)
ti:ki ?ukah nin	"estoy durmiendo" (G-JS)
ti:ki ?uka?	"el está durmiendo" (G-JS)
ti:ki?ta? naka	"vos dormiste" (G-SH)
ti:ki?ta? šurumu man	"el durmió" (G-SH)
ti:kimah	"dormimos" (G-JS)
ti:kin nin pa?a?	"yo dormí" (G-JAP)
ti:kiyan	"estoy durmiendo" (G-RHG)
ti:k'i? hi?	"está durmiendo" (G-SH)
tupa natiya?	"déjalo" (G-SH), "déjamelos allí" (G-JAP)
tupaka? naka mura	"tú lo dejaste" (G-SH)
tupan nin	"lo voy a dejar" (G-SH)
tupawa ?ənçuna?un	"se quedó sólo mi hijo [mío]" (G-PE)
tupawa naka ?ençumakum	"quedate aquí" (G-PE)
tupey ?uru? miya	"ya le dejó la gallina el huevo" (G-SH)
tura naka katamaç'i?	"lleva tu lazo" (G-JAP)
tura pe? ?anpewek	"traeme el tecamate" (G-RHG)
turan çupewek ?ay	"traeme mi huacal" (G-RHG)
turan muyi? kunu nin	"comprame chico" (G-JAP)
turey kan ne?ta para nin	"élla me trajo ésto por es nuevo" (SH)
turey na waru?	"el llevó el matáte" (G-JAP)
turey nin ša maku?	"me llevó para su casa" (G-JAP)
turi?te	"patos" (G-JAP)
ç'amu? nin	"me picó" (G-SH)
ç'a?ka?	"medio día" (G-SH)
ç'ehele	"Chiquimultecos" (G-JS)
ç'imi? nin ?uraya	"yo apagué el fuego" (G-SH)
ç'i?rey ?anmuti?	"cortáme mi pelo" (G-SH)
?uka na ša suni?	"hecharlo en la olla" (G-JAP)

ʔuka nanin šamun ʔənčušuruk
 ʔuka pula hiʔ nin tamaɕ'i
 ʔuka remendar yan
 ʔuka teher yan
 ʔuka teher ʔayaʔa man
 ʔuka ʔuwake hiʔ ku pelo
 ʔuka ʔuy
 ʔukah na ku ʔaʔu
 ʔukah šawiʔ
 ʔukah ʔigwana naʔ
 ʔukakan madurar
 ʔukakay na mapu
 ʔukakay ʔenkontrar
 ʔukakaʔ naka kosečar wayak
 ʔukan mandar ɕ'iriʔ mutuʔ
 ʔukay ɕ'imiʔ
 ʔukay frihol
 ʔukay ʔenkontrar ʔuruʔ
 ʔukay ʔuʔu ʔuy
 ʔukaʔ nahaʔ sararaʔ
 ʔukey ɕ'iriʔ mutiʔ nanin
 ʔukey naʔ ša naru
 ʔukey paʔaɕ'iʔ mumasa
 ʔuʔaka naʔ
 ʔuʔu ʔuy
 ʔuluʔ na ku ču turi man
 ʔuʔuʔ nanin
 ʔupun hiʔ
 ʔuray čenoʔ
 ʔuraya hiʔ
 ʔurtuy nay kah trago maʔ
 ʔušaki ʔukah naʔ
 ʔuwe pe kaʔ
 wa na tawu
 wakaʔ manta miya man
 waʔ
 waʔa
 wapak
 wapik
 wapilik'aʔ
 wapiʔin
 wašata ša ti:ki
 waštaya naka
 waštaʔ niwaʔ hin ʔikiʔ
 waštaʔya ʔakuki hiʔ naka
 wena kuy ʔuka resar
 wena man wirikiʔ hina naka
 wenataʔ
 wereke ʔukah
 weskeka muškarawa
 weskey šam posa
 wišata
 wišuya
 wišuʔ

"yo agarré mi bordón" (G-RHG)
 "estoy haciendo matate" (G-SH)
 "esté remendiendo" (G-RHG)
 "está tejendo" (G-RHG)
 "aprendió la señora a tejer" (G-SH)
 "está jugando el chucho" (G-RHG)
 "hay bastante agua" (G-SH)
 "había maíz" (G-JS)
 "salió a sentarse" (G-JS)
 (G-SH)
 "para hacerlo madurar" (G-SH)
 "está echando las tortillas" (G-RHG)
 "... me encontré aquí" (G-SH)
 "cuando disponer de tapiscar me dices" (G-SH)
 "me cortaron el pelo" (G-SH)
 "el apagó" (G-SH)
 "hay un frijol" (G-SH)
 "encontró unos huevos" (G-RHG)
 "llovió" (G-SH)
 "hay mucho frío aquí" (G-SH)
 "me lo quitó" (G-SH)
 "en la tierra" (G-JS)
 "hechar las tortillas" (G-SH)
 "estoy prestando dinero de el" (G-JS)
 "llovió" (G-SH)
 "ese niño se caye" (G-JS)
 "me caí" (G-PE)
 "estoy parado" (G-JAP)
 "se está quemando" (G-JS)
 "está ardiendo" (G-SH)
 "tomó Usted un trago" (G-JS)
 "fuma mucho" (G-JS)
 "andar llamarlo" (G-SH)
 "norte" (G-RHG)
 "se escapó la gallina" (G-SH)
 "tres" (G-SH)
 "muerto" (G-JAP)
 "canilla" (G-RHG)
 "caite" (G-PE)
 "tus pies" (G-SH)
 "canilla" (G-PE), (G-SH)
 "fue a dormir" (G-RHG)
 "entró" (G-JAP)
 "no lo halló el que entró" (G-SH)
 "pase adelante" (G-SH)
 "no se que santo está rezando" (G-SH)
 "quién habló con Usted" (G-RHG)
 "quién" (G-SH)
 (G-JS)
 "tire la basura!" (G-RHG)
 "se ahogó (en el pozo)" (G-SH)
 "silbar" (G-SH)
 "pegar" (G-RHG)
 "lo mataron", "le pegó con el" (G-JS)

witiŋaya
 ya tero? pa?a?
 yuwan šaman ʔančusemiya
 yuwan šan may su semiya
 yuwan ʔənčutumin
 yiwan šama
 yiwa?

"patoja" (G-JAP), (G-RHG)
 "ya se murió" (G-SH)
 "está perdida su semilla" (G-RHG)
 (G-RHG)
 "yo perdí mi pisto" (G-RHG)
 "se me olvidó" (G-RHG)
 "se perdió" (G-RHG)

7. List of recorded interviews

Place	Informant	Date	Length
Guazacapán	Cruz Martinez, Maria	2003-03-10	50 min.
	Don Herlindo	2001-03-24	45 min.
	Esquite, Antonio	2000-03-10	45 min.
	Esquite García, Pablo	2000-02-29	135 min.
		2000-03-01	90 min.
	Godinez, Francisco	2000-11-14	60 min.
		2003-03-15	40 min.
	Gómez, Mercedes	2000-03-09	30 min.
	Hernandez, Felix	2003-03-10	50 min.
	Hernandez, Gilberto	2000-02-28	45 min.
	Hernandez, Sebastián	2000-03-06	90 min.
		2000-03-08	90 min.
		2000-03-09	90 min.
		2000-03-13	90 min.
		2000-03-14	135 min.
		2000-03-15	135 min.
		2000-03-16	180 min.
		2000-10-27	135 min.
		2000-10-28	135 min.
		2000-10-30	approx. 100 min.
		2000-10-31	approx. 110 min.
		2000-11-01	approx. 100 min.
		2000-11-08	60 min.
		2001-03-27	approx. 40 min.
	Hernandez Godinez, Raymundo	2003-03-12	143 min
		2003-03-16	
		2003-03-17	133 min.
		2003-03-18	
		2003-03-19	147 min.
		2003-03-21	
	López Pérez, José Antonio	2003-03-22	63 min.
		2001-03-24	45 min.
		2001-03-25	45 min.
		2001-03-26	45 min.
		2001-03-28	45 min.
	Martinez Hernandez, Carlos	2003-03-10	65 min.
	Santos, Elena	2000-02-29	30 min.
		2000-03-03	30 min.
	Santos, Juan	2000-03-03	55 min.
		2000-03-12	65 min.
		2000-03-19	90 min.
		2000-10-29	90 min.
		2000-11-03	90 min.
Chiquimulilla	Soliz, Eliodoro	2000-03-04	30 min.
	Chávez, Ricardo	2000-11-10	30 min.
	García, Agustín	2000-11-05	30 min.

Summary

This dissertation presents a comprehensive description of Xinka based on the missionary grammar *Arte de la lengua szinca* (ALS) that was written by the priest Manuel Maldonado de Matos around 1773. Xinkan is an isolate family of today mostly extinct, closely related languages in southeastern Guatemala. The ALS is the earliest source on the grammar of a Xinkan language, which is otherwise not well documented or described.

The objective of the dissertation is to analyse the linguistic forms and structural patterns of the late colonial grammar by drawing on comparative data, including (a) primary data that were documented by the author with the last Xinka-speakers in the town of Guazacapán, Santa Rosa, Guatemala between 2000-03, and (b) all accessible secondary linguistic data of Xinkan languages from the towns of Guazacapán, Chiquimulilla, Yupiltepeque, Jumaytepeque, Sinacantan and Jutiapa. Both, primary and secondary, data are fragmentary and constrained by varying modes of linguistic representation. The dissertation discusses the methodological implications of describing colonial Xinka grammar based on such a heterogeneous corpus of diachronic and regionally diverse data. The chosen approach is historical. Morphosyntactic categories of eighteenth-century Xinka are reconstructed by employing current understandings about universal pathways of language change and the evolution of grammar that can bridge the gaps in the corpus of data.

The dissertation comprises seventeen chapters, including information about the cultural context of the language (§ 1), a description of the ALS and the comparative sources that make up the corpus of data (§ 2), and a method chapter that defines the theoretical background and chosen approach (§ 3). The reconstructive description of Xinka morphosyntax (§ 5-17) is preceded by a description of Xinka phonology and the orthographic conventions employed in the ALS (§ 4). The appendix includes a concordance of the linguistic data from the colonial grammar and a dictionary of the ALS lexical entries.

Xinka is head-marking with VOS word order. Person agreement differs on transitive and intransitive verbs as well as in main and dependent clauses. Xinka has accusative alignment, but exhibits a split in the treatment of S and A arguments based on tense/aspect, third person distinction and syntactic hierarchy. There is alienable and inalienable possession and only animate nouns with human referents have morphological plural. Pronouns are complex forms consisting of a determiner and a person-marking suffix. Definite determiners precede the referent noun, while demonstratives follow. The basic pattern of auxiliary verb constructions is V + AUX. Light verb constructions have the order LV + V. There are patterns of transitivity and detransitivisation. Nominalisations include verbal nouns, instrumentals, agentives and locatives. TAM-categories are marked inflectionally or indicated by adverbials. Inflectional markers for past-time reference are also used to derive stative, perfect and active participles. Anterior/perfect marking seems to be sensitive to switch-reference. Progressive and future are expressed periphrastically. Imperatives are marked differently on transitive and intransitive verbs. The basic interrogative marker has grammaticalised as a subjunctive/irrealis on subordinate predicates and negators. Xinka employs spatial and non-spatial prepositions which

are both used as syntactic subordinators. Adverbial categories of spatial and temporal deixis are to some extent realised by the same markers. Directionals are of verbal origin.

Samenvatting

Reconstructieve grammaticabeschrijving van het 18^e-eeuwse Xinka

Dit proefschrift omvat een zo volledig mogelijke beschrijving van het Xinka op basis van de missiegrammatica *Arte de la lengua szinca* (ALS), die geschreven werd door de priester Manuel Maldonado de Matos in 1773. Het Xinka vormt een geïsoleerde taalfamilie, die uit meerdere nauw met elkaar verwante, nu overwegend ausgestorven talen bestaat, die ooit in het zuidoosten van Guatemala werden gesproken. De ALS vormt de oudste bron met betrekking tot de grammatica van het Xinka, die voor het overige niet goed gedocumenteerd of beschreven is.

Het doel van dit proefschrift is de taalvormen en structuurpatronen van de laatkoloniale grammatica te analyseren door gebruikmaking van vergelijkingsmateriaal, bestaande uit (a) primaire data verzameld door de auteur bij de laatste sprekers van het Xinka in de stad Guazacapán, Santa Rosa, Guatemala in 2000-3, en (b) al het toegankelijke secundaire materiaal van de Xinka-talen uit de steden Guazacapán, Chiquimulilla, Yupiltepeque, Jumaytepeque, Sinacantan en Jutiapa. Zowel de primaire als de secundaire gegevens zijn fragmentarisch van aard en beperkt van gebruikswaarde door de uiteenlopende vormen van taalkundige representatie waaraan zij onderhevig zijn. Dit proefschrift behandelt de methodologische implicaties van de grammaticabeschrijving van het Xinka uit de koloniale periode op basis van een dergelijk heterogeen corpus, dat bestaat uit diachronische en regionaal gediversifieerde gegevens. De gekozen benadering is diachronisch, hetgeen betekent dat morfosyntactische categorieën van het laatkoloniale Xinka worden gereconstrueerd met behulp van hedendaagse inzichten in universele processen van taalverandering en grammaticale evolutie, die ons in staat stellen functionele lacunes in een heterogeen materiaalcorpus te overbruggen.

Het proefschrift omvat 17 hoofdstukken, die, onder andere, informatie bevatten over de culturele context van de taal (§ 1), een beschrijving van de ALS en de vergelijkende bronnen die samen het materiaalcorpus vormen (§ 2), alsmede een methodologische verhandeling waarin de theoretische uitgangspunten en de gekozen onderzoeksbenadering worden gedefinieerd (§ 3). De reconstructieve beschrijving van de morfosyntaxis van het Xinka (§ 5-17) wordt voorafgegaan door een analyse van het klanksysteem van het Xinka en van de spellingsconventies die in de ALS worden gebezigd (§ 4). In de appendix bevinden zich, onder andere, een concordantie van alle taalkundige gegevens uit de koloniale grammatica en een woordenboek van de lexicale lemmata die erin voorkomen.

Het Xinka is nucleusmarkerend ('head-marking') en de basiswoordvolgorde is VOS. De persoonsmarkering in het werkwoord verschilt naargelang het werkwoord overgankelijk of onovergankelijk is en of het deel uitmaakt van een hoofdzin dan wel van een bijzin. De argumentenstructuur is accusatiefgericht maar vertoont een splitsing in de behandelingswijze van S- en A- argumenten die gebaseerd is op tijd en aspect, syntactische hiërarchie en de onderscheiding van de derde persoon. Er wordt onderscheid gemaakt tussen vervreemdbaar en onvervreemdbaar bezit. Alleen bij substantieven die naar (bezielde) menselijke wezens verwijzen wordt het

meervoud morfologisch aangegeven. Pronomina zijn complexe vormen die bestaan uit een determinerend element en een persoonsaanduidend achtervoegsel. Bepalende elementen gaan vooraf aan het refererende substantief, terwijl aanwijzende elementen erop volgen. Het basispatroon bij hulpwerkwoordconstructies is V + AUX, terwijl zogenaamde 'light verb' constructies de volgorde LV + V vertonen. Er worden zowel transitiverende als detransitiverende werkwoordafleidingen aangetroffen. De werkwoordnominalisering omvatten een verbaal nomen, een instrumentaal nomen, een agentief en een locatief nomen. TAM-categorieën worden door flexie, dan wel door middel van bijwoorden aangegeven. Flectiemarkeringen die een verleden tijd aangeven worden ook gebruikt voor het afleiden van actieve, statieve en verleden deelwoorden. Het gebruik van de voortijdig/perfectum markering lijkt onderhevig te zijn aan referentwisseling ('switch-reference'). De progressieve vorm en de toekomstige tijd worden door omschrijvende constructies uitgedrukt. De gebiedende wijs wordt verschillend weergegeven naargelang het werkwoord overgankelijk of onovergankelijk is. Het vraagpartikel heeft zich grammaticaal ontwikkeld tot een subjunctief/irrealis markering bij ondergeschikte predicaten en ontkenningen. Het Xinka onderscheidt ruimtelijke en niet-ruimtelijke voorzetsels, die beide ook als syntactisch onderschikkende elementen worden gebruikt. Adverbiale categorieën voor de ruimtelijke en de temporele deixis worden voor een deel door middel van dezelfde vormen aangeduid. Richtingaanduidende elementen zijn van verbale oorsprong.

Zusammenfassung

Rekonstruktive Grammatikbeschreibung des kolonialzeitlichen Xinkas (18. Jh.)

Die vorliegende Dissertation beinhaltet eine umfassende Beschreibung des Xinka auf der Basis der im Jahre 1773 von dem Priester Manuel Maldonado de Matos verfassten Missionarsgrammatik *Arte de la lengua szinca* (ALS). Das Xinka ist eine isolierte Sprachfamilie, die aus mehreren eng miteinander verwandten Sprachen besteht, welche einst in Südostguatemala gesprochen wurden und heute ausgestorben sind. Die ALS ist die älteste Quelle zur bislang nicht hinreichend beschriebenen Grammatik des Xinka.

Zielsetzung ist es, die Sprachformen und Strukturmuster der spätkolonialen Grammatik unter Heranziehung von Vergleichsdaten zu analysieren, welche (a) primäre Sprachdaten, die von der Autorin mit den letzten Xinkasprechern in Guazacapán, Guatemala, zwischen 2000-03 dokumentiert wurden, und (b) sämtliche zugänglichen sekundären Sprachdokumentationen zum Xinka der Ortschaften Guazacapán, Chiquimulilla, Yupiltepeque, Jumaytepeque, Sinacantan und Jutiapa umfassen. Primäre wie sekundäre Sprachdaten sind fragmentarisch und durch die unterschiedlichen Formen der linguistischen Darstellung in ihrer Aussagekraft eingeschränkt. In der vorliegenden Dissertation werden die methodologischen Implikationen der grammatischen Beschreibung des kolonialzeitlichen Xinka auf der Basis eines solch heterogenen Korpus aus diachronen und regional diversifizierten Daten diskutiert. Die gewählte Herangehensweise ist diachron, d.h. morpho-syntaktische Kategorien des spätkolonialen Xinka werden rekonstruiert, indem universale Prozesse von Sprachwandel und Grammatikevolution zur Überbrückung funktionaler Lücken im heterogenen Datenkorpus herangezogen werden.

Die Dissertation besteht aus siebzehn Kapiteln: Dem ersten Kapitel über den kulturellen Kontext der Sprache (§ 1) folgt eine Beschreibung des Datenkorpus, d.h. der Quelle (ALS) und des Vergleichsmaterials (§ 2), sowie ein Methodikkapitel, das die theoretische Basis und die Herangehensweise begründet (§ 3). Eine Analyse der Phonologie des Xinka und der orthographischen Konventionen der ALS (§ 4) geht der rekonstruktiven Beschreibung der Morphosyntax in den übrigen Kapitel voran (§ 5-17). Im Anhang finden sich unter anderem eine Konkordanz sämtlicher linguistischer Daten der kolonialzeitlichen Grammatik sowie ein Wörterbuch der lexikalischen Einträge.

Xinka ist kopfmarkierend mit VOS Grundwortstellung. Die Personalmarkierung des verbalen Prädikats unterscheidet sich bei transitiven und intransitiven Verben sowie im Haupt- und Nebensatz. Xinka hat eine Akkusativ-Ausrichtung, aber behandelt S- und A-Argumente in Abhängigkeit von Tempus/ Aspekt und syntaktischer Hierarchie sowie in der dritten Person unterschiedlich. Im Possessiv werden die Kategorien alienabel/inalienabel unterschieden. Nur belebte/menschliche Substantive verwenden einen morphologischen Plural. Pronomen sind komplexe Formen, die aus einem Determinator und einem Personalsuffix zusammengesetzt sind. Determinatoren stehen dem Bezugswort voran, während Demonstrative folgen. Das Grundmuster bei Auxiliarverbkonstruktionen ist V + AUX, während sog. *Light Verb*-Konstruktionen die Wortfolge LV + V

aufweisen. Es sind derivationale Operatoren der Transitivity und Detransitivity nachgewiesen. Nominalisierungsprozesse schließen Verbalnomen, Instrumental, Agentiv und Lokativ ein. TAM-Kategorien sind entweder durch Verbalflexion oder Adverbien indiziert. Dieselben Flexionssuffixe, die zur Markierung von Prädikaten mit Vergangenheitsbezug verwendet werden, operieren bei der Derivation der Partizipalkategorien Stativ, Perfekt und Aktiv. Die Verwendung der Anterior/Perfekt-Markierung scheint *switch-reference*-abhängig zu sein. Progressiv und Futur werden durch periphrastische Konstruktionen ausgedrückt. Imperativ ist bei transitiven und intransitiven Verben unterschiedlich markiert. Die Interrogativpartikel wurde als Subjunktiv/Irrealis-Markierung an subordinierten Prädikaten sowie bei Negatoren grammatikalisiert. Xinka unterscheidet räumliche und nicht-räumliche Präpositionen, die beide als syntaktische Subordinatoren fungieren. Adverbiale Kategorien räumlicher und temporaler Deixis werden zum Teil durch dieselben Formen realisiert. Direktionale sind verbalen Ursprungs.

Resumen

Descripción reconstructiva de la gramática del xinka del siglo XVIII

La presente disertación trata de la descripción extensa del xinka en base al arte colonial misionero *Arte de la lengua szinca* (ALS) que fue escrito por el sacerdote Manuel Maldonado de Matos alrededor de 1773. El xinka es una familia lingüística aislada en el sureste de Guatemala, que está constituida por varias lenguas de relación genética cercana que hoy en día están casi extintos. El ALS es la fuente más temprana para la gramática del xinka, que no está bien documentada o descrita.

El objetivo de la disertación es el análisis de las formas lingüísticas y rasgos estructurales del ALS. En ese análisis se compara los datos coloniales del arte xinka con (a) datos primarios, que fueron documentados por la autora con los últimos hablantes del xinka en el pueblo de Guazacapán, Santa Rosa, Guatemala entre 2000-03, y (b) con todos los datos lingüísticos secundarios de los pueblos de Guazacapán, Chiquimulilla, Yupiltepeque, Jumaytepeque, Sinacantán y Jutiapa. Los datos son fragmentarios y restringidos por diversos modos de representación lingüística. La disertación discute las implicaciones metodológicas de la descripción gramatical del xinka colonial que se funde en una base de datos tan heterogénea incluyendo datos diacrónicos y regionalmente diversificados. El enfoque metodológico es diacrónico. Las categorías morfosintácticas del xinka colonial están reconstruidas, empleando procesos universales de cambio lingüístico y de evolución gramatical para cerrar las lagunas funcionales en la base de datos.

La disertación comprende diecisiete capítulos, que incluyen información sobre el contexto cultural de la lengua (§ 1), una descripción del ALS y de los datos comparativos que constituyen la base de datos (§ 2), un tratamiento metodológico que define la base teórica y el método del análisis (§ 3), el análisis de la fonología xinka y de las convenciones ortográficas del ALS (§ 4), y la descripción reconstructiva de la morfosintaxis (§ 5-17). El apéndice incluye una concordancia de los datos lingüísticos del arte colonial y un diccionario de las entradas lexicales del ALS.

En el xinka se marca el núcleo de la frase. El orden básico de la oración es VOS. La marcación de persona en el predicado se distingue en verbos transitivos e intransitivos, igual como en cláusulas independientes y dependientes. Xinka tiene un sistema de alineación acusativa, pero dependiente de tiempo/aspecto, de la jerarquía sintáctica y en la tercera persona se trata los argumentos de S y A de manera distinta. Se distinguen sustantivos alienables e inalienables. Plural está marcado morfológicamente solamente en sustantivos animados humanos. Pronombres son formas complejas que consisten de un determinante y un sufijo de persona gramatical. Determinantes definidos preceden al sustantivo, mientras que los demostrativos van después de estos. El patrón básico de construcciones con verbos auxiliares es V + AUX. Las construcciones con verbos ligeros (*light verb constructions*) siguen el orden LV + V. Existen procesos de transitivización y detransitivización. Los procesos de nominalización incluyen sustantivos verbales, instrumentales, agentivos y locativos. Las categorías de TAM están indicados por medio de flexión y por adverbios. Los sufijos flexionales que marcan una referencia

al pasado son también usados para derivar participios estativos, perfectos y activos. El marcador del anterior/perfecto parece ser sensitivo al cambio de referencia (*switch-reference*). El progresivo y el futuro son construcciones de tipo perifrástico. Verbos transitivos e intransitivos marcan el imperativo de manera diferente. La partícula interrogativa que se ha gramaticalizado como marcador de subjuntivo/irrealis ocurre con predicados subordinados y con negativos. En el xinka hay preposiciones espaciales y no-espaciales que se emplean como subordinadores sintácticos. Algunas categorías adverbiales de deixis espacial y temporal están realizados por las mismas formas. Los direccionales son de origen verbal.

Curriculum Vitae

Frauke Sachse was born on 26 November 1972 in Delmenhorst, Germany. She attended schools in Germany and The Netherlands and graduated from Gymnasium Bremervörde in 1992. Later the same year she enrolled at the University of Bonn, Germany, for Anthropology and Precolumbian Studies (major), English (minor) and Archaeology (minor). During her studies she participated in archaeological excavations in Mexico, Belize and Bolivia and undertook linguistic field research in Guatemala. The MA was awarded on 28 April 1999. She has been working as a research assistant (*wissenschaftliche Hilfskraft*) at the department for Precolumbian Studies and Anthropology (*Abteilung Altamerikanistik und Ethnologie*) of the University of Bonn between 2001-2003, and was then temporarily hired as a faculty member (in 2003-2004 and in 2006). The Department appointed her as a course lecturer (*Lehrbeauftragte*) between 1999-2001 and from 2003-present. Since 2004 she has been the president of the European Association of Mayanists (WAYEB) and has been actively involved in the organisation of the European Maya Conferences since 2003.