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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.

Acknowledgements

Prof. Dr. Willem F. H. Adelaar has been very kind in supervising my research on Xinka while I was enrolled as a doctoral student at the University of Bonn. I would like to thank Prof. Dr. Nikolai Grube for agreeing to let me transfer with the PhD research to Leiden University, when my former supervisor Prof. Dr. Berthold Riese retired in April 2009.

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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My deepest personal thanks go to my beloved parents, Ursula and Kay Sachse, my partner Simon Martin and all those who kept me sane and happy over the years.

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	benefactive
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	patiens
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	Fernandéz (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 Esquíte (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'alan
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. Xinka[1] 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), Yukatek (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]

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[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 documentational 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 morpho-syntactic 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 Galvéz in his Master thesis from 1967. The thesis is, however, primarily focused on the linguistic analysis of the Xinka language of Guazacapán.

Written by Eduardo Pineda Pivaral in 1969, the *Monografía 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* (1952 [1571-1574]), Diego García de Palacio's *Carta relación ... a Felipe II sobre la Provincia de Guatemala* (1983 [1576], see as well Acuña 1982), and Juan de Pineda's *Descripción de la provincia de Guatemala* (1925 [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 diocesis 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 diocesis in a comprehensive work named *Descripción geográfico-moral de la diócesis de Goathemala* (Cortes 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 Cortes 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

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[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*

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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, Popoluca and Chontal speakers (cf. García de Palacio 1982:264).[14] Fuentes y Guzman ([1690] 1972) mentions only the Pipil and the Popoluca. 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" (Fernandez 1938, Juarros 1937), we also find the designations "Xinca-Popoluca" or just "Popoluca" (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 *¢inaka* + *mekayo-tl* "linaje de los murciélagos")

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[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, cofundiéndolos 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 Suchitepéquez y Cuauhtemala: mame y achí, cuauhtemalteca, chicnauteca, utateca, chirrichota. Los Izalcos y costa de Guazacapán: la *popoluca* y *pipil*. La Verapaz: poconchí, cacchí, colchi. La de San Salvador: *pipil* y *chontal*. El Valle de Acaccuastlán y el de Chiquimula de la Sierra: hacaccuastleca 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 Popoluca 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 "Popoluca" 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 "Popoluca 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 Popoluca de Conguaco remained entirely undocumented. It is also possible that the Popoluca 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).

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[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 *ȼ* > *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 *sotz'il*, can be identified in various contexts in the Maya area throughout time. Besides referring to the well-known Tzotzil community of Zinancantán in Chiapas, it was also the name of one of the leading Kaqchikel lineages from Late Postclassic Iximche'. 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 Popoluca de Conguaco.

It is striking that all ethnonymic references for the Xinka, including auto-denominations and external reference alike, are drawn from Nahuan. Moreover, linguistic data on Xinka may even be labelled as "Pipil". In factl, 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.

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[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 popoluca. 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 [Atiquipaque[22] or Nextiquipaque[23]], 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).

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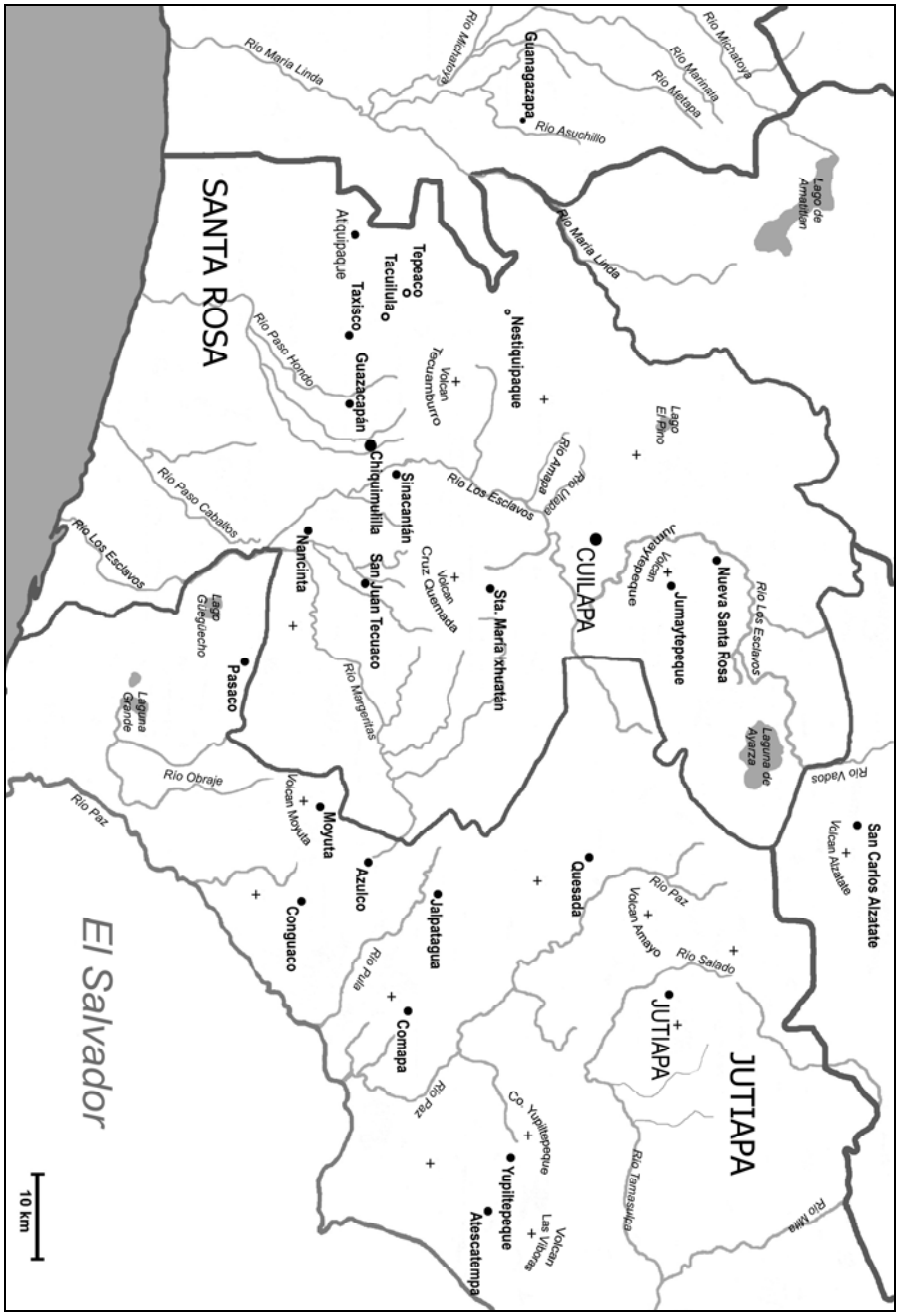
[21] As Fuentes y Guzman was the *encomendero* of Ixhuatan, we can assume that he simply added those Xinka settlements to the account. The unreliability of Fuentes y Guzmán's chronicle has been widely discussed (Carmack 1973:183-187, Fowler 1989), but since most of the cited sources that Fuentes y Guzman 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	<txege>[25]	¢'ehe
	?-LOC		N
	'place of ...'		'?'
Taxisco	tlalix-co[26]	kuku[27]	kuku
	N-LOC		N
	'plain'		'?'
Tecuaco	tecoa-co	tuhkuwa	tuhku-wa
	?-LOC		?–LOC
	'place of ...'		'place of ...'
Guazacapán	guazaca-pan	<tximaja>	¢'ima-ɬa[28]
	snake weed-LOC		gourd-AGT
	'place of snake weed'		'potters'
Nancinta	nancin-tlan	kɨša	kɨša[30]
	nance(-tree)-LOC		bat
	'place of nance trees'[29]		'(place of) bats'
Sinacantan	tzinacan-tlan	kɨštamay	kɨš-tamay
	bat-LOC		bat-?
	'place of bats'		'bat + ? (-place)'
Ixhuatan	ix-huat-tlan	šampiya	šam-piya
	PREP-leaf-LOC		PREP-leaf
	'place of at/below leafs'		'place of/at leafs'
Pasaco	patza-co	šanšowe	šan-šowe
	"water"-LOC		PREP-?
	'place of water'[31]		'place of/at ?'
Atiquipaque	aticpa-c	šamɨpɨy	šam-ɨpɨy
	?-LOC		PREP-?
	'place of ...'		'place of/at ?'
Tepeaco	tepea-co	tahti šami piya	tahti-šami-piya
	?-LOC		savana-PREP-leaf
	'place of ...'		'savana at the leafs'
Tacuilula	tlacuilo-tlan	uruɬ	ʔuru-ɬ
	?-LOC		fall?-PART.ACT/AGT
	'place of ...'[32]		'fall'

[25] Pineda Pivaral (1969): *¢'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 Taxixcó = *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 originial orthography in the ALS gives <tximaja> (= *¢'imaha*); however, the form is morphologically transparent, and thus, is phonemicised as *¢'imaɬa*. The sound change of *ɬ* > *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 Nahua. 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 is 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 Tecuamburro 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 Guzman.[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 Tescuco 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 Sinacantan 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}	≠	X_Y, X_{Jum}, X_S
grammatical traits	X_G, X_Y	≠	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, Fernandéz 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; Fernandéz 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-Paezan[37] (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, Fernandéz, 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 critism 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

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"cough" (XIN *ojo* ~ 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 onomatopoetic (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 Xinca's VOS, nevertheless they seem to share the definite article, *na* preceding the noun in Xinca, *-na* suffixed to the noun in Lenca. Since Xinca seems to have gotten its basic word order from Mayan influence, this may not be a relevant difference in comparing Xinca 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 Nahuan, 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 disrupture 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

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[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 Menschenschlag, 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' (*qi¢ix tišib'in kеč'ab'in ke¢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, Nahuan 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. Nahuan 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 élla 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 *wayaʔ* 'milpa', *ʔiwa* 'to form tortillas', *pa¢'i* 'to grind corn', *ʔu¢'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. *nɨma* 'to eat', *šaya* 'bitter', *¢'ami* 'sour', *ʔɨsɨ¢'ɨ* '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. *¢'ama* 'good', *čɨy* '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'; *¢'ɨmɨ* '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. *ʔauɨak* 'tortilla griddle', *kuɨku* 'pot, bowl', *suk'sin* 'gourd', *¢'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', *mɨša* 'to bury" or *yoɬe* '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. *pɨɬta*, *tuɬtu* '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', *peɬeʔ* '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', *šuruɬi* 'squirrel', *punpun ɬiwi* 'owl' etc.). The direction of borrowing is mostly unclear.

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

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 it 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 *¢* in *ma¢ahtli*.

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 suggests 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
cow	wakaš	< POQ/KAQ, CHR wakaš	< Sp. vaca
dove	palumaš	< KCH/KAQ palomaš	< Sp. paloma
orange	aranšaš	< KCH, POQ aranšeš	< Sp. naranja
lemon	lamuniš	< POQ lamuniš	< Sp. limón
duck	patuš	< POQ patušk, KAQ patš	< Sp. pato
scissors	tašelaš	< KCH tišeraš	< Sp. tijeras
key	lawš	< KCH lawe	< Sp. clavo
mare	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 L_2 as their first and the L_1 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 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	Fernandéz	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

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[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 Taxisco[54], 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 PAPXIGUA 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 L_1 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 L_1 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

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[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 L_1 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]

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[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 distintegration 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.

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[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 moribund[61] 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 L_1 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 L_1 ends and a speech community has become entirely monolingual in the L_2 (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 L_1 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 L_1-speakers: the younger the speakers, the more reduced is their individual linguistic competence in the L_1 (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

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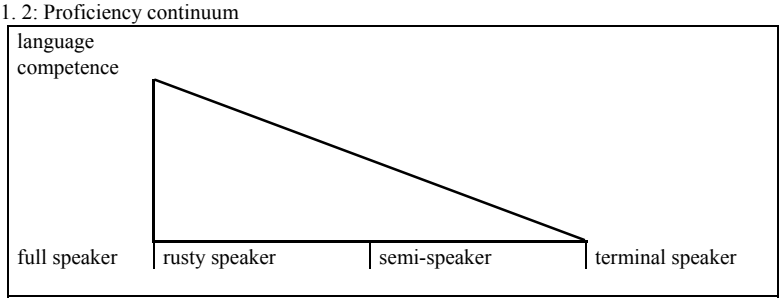
[61] Endangered languages may be classified according to the following categories: (1) *potentially endangered languages*, that is, languages that have started to lose speakers from the infant generation due to bilingual adults who only use the language as their secondary language with reduced lexical 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 L_1 to continue in certain socially or regionally identifiable subgroups. Other significant factors are individual talent for acquiring a language, the exposure to the L_1 (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 L_2 at a rather early stage (e.g. family A), others stay monolingual or preserve the L_1 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 L_1 speakers can be seen as a key factor to the degree of overall proficiency in the L_1. 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 L_1-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 L_1 (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). Intermarriage 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., Fernandéz 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] Intermarriages 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); intermarriage, 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 muncipal 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 communitary 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 Tecuamburro, 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

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[66] Traditionally, the Nahuatl term *calpulli* (cal-pul-li [house-large-absolutive] = 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 Nicarao 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.

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[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 Santtiago 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 cagchíque… (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

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[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 *coadjutor* and *cura interino*, later he obtained the titles of *vicario provincial* and *juéz eclesiástico* of this province
	admission to the *Congregación de San Pedro* 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 Ioseph 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 dìcha, và realzada, con sobrados fundamentos, concluirè este [parágrafo] con el mismo arte kakchiquel, el que dice asi: «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)	*Capitulo Proemial*, 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)	*Capitulo Proemial*, 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 propriedad que la Cakchiquel, ..."

3.	[Art. n° 4 pag. 102 (al margen)] "En la primera exposisión 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 dificil 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 adverbió, 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. [...]. Tayeɧ 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*, *interjeción* 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, preposision, 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 prímeras, 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 lexitimas 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)

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[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 grammatica los verbos neutros con los muchos exemplos que alli 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

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[72] Nebrija's definition of the Spanish tense system deviates from his Latin grammar inasmuch as he employs the following categories: "presente, passado no acabado, passado acabado, passado 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*, *pasiuum*, *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 làtina, y travajaron 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.

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[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 passado...' " (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 (≈ 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).

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[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

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[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 Godinez (*1919), Barrio San Miguel (Guazacapán)

The contact with Raymundo Hernández Godinez[81] (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

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[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.

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[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 Xinca 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 Xinca	original	X_{Ch}	V
1966	McArthur	Xinca	original	X_{Ch}/X_G	V
1966	Schumann	Fonemica del dialecto xinca de Chiquimulilla	original	X_{Ch}	V
1967	Schumann	Xinca 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, Presbitero 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 *zeefe* instead of *zeeje*, a misunderstanding that certainly occurred when the manuscript was filed in the AGI. In the text we can clearly read "zeeje" (/¢'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 Iutiapa* (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 Eustorigio 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, Calderon'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*, congenere 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 Fernandéz (1939).

2.2.2.5 Fernandéz: Diccionario del sinca (1938)

The *Diccionario Sinca* was published in 1938 by the priest Jesús Fernandéz in the journal *Anales de la Sociedad de Geografía e Historia*. The vocabulary of Fernandéz 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 Fernandéz 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, Fernandéz 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 Xinca 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: Xinca 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, morpho-phonemics, 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 Xinca (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 Xinca, 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 Xinca" 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 complementaribility 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; Bredt-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]

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[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.

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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 Zinacantán 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

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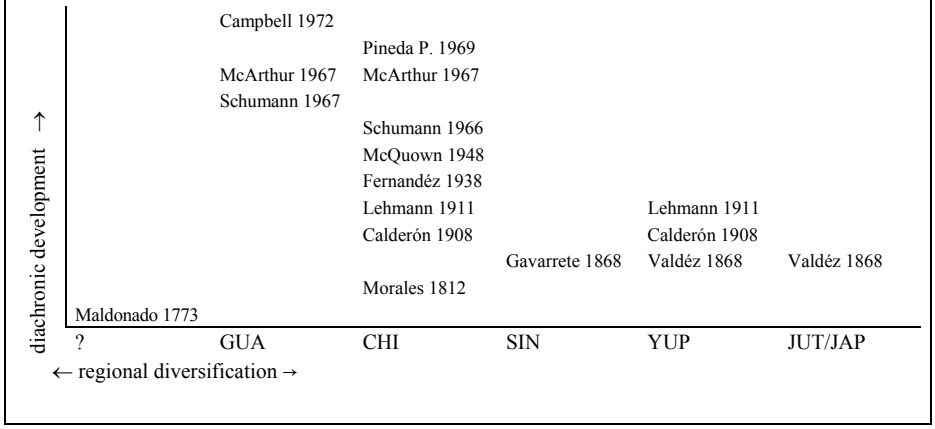
[90] Smailus (1989b:17-23) discusses the problem of using colonial language data as a basis of linguistic description instancing colonial Kaqchikel; his remarks are included in the reflections on the representativeness of the language information from the *Arte de la lengua szinca*.

[91] Artificially created forms are attested in various colonial grammars and text sources written by missionaries (Dedenbach-Salazár 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



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).

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[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 L_2 (e.g. overgeneralisation) may indeed be internally induced and immanent to the system, instances of assimilation to the phonological system of the L_2, 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 L_1 language system (i.e. Xinka) by drawing analogies from the L_2 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 lead 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)

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[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 sɨka-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_Y) 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

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[95] For a detailed account of the principles of modern *Linguistic Typology* and the development of the term 'typology' within the disciplin 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 theory[97] 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

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[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 afore-mentioned 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. Fernandéz' use of the graphemes <sl> and <jl> to indicate *ɬ*, 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 intervocalically 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 *ɕ'*. Initial *š*, in contrast, derives from earlier forms of /s/. For example, in the Mayan loan, X_M *ɕ'ama* > X_M *sama* 'good', and the Xinka term **sama* (as preserved in X_Y) > 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 *š* > *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	ʔa**š**in	:	X_G, X_{Ch}	**h**in	'no'
	b.	X_M	ʔa**š**ɨ	:	X_M	ʔa**h**ɨ	'this (demonstrative)'
	c.	X_M, X_G	**š**urúɬi	:	X_G	**h**uruɬ	'squirrel'
	d.	X_M	**š**ete	:	X_{Ch}	**h**ete	'firefly'
	e.	X_M, X_G	**š**ama	:	X_{Ch}	**h**ama	'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 *š* > *r* / _ *i*, *ɨ́*, *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 *š* is preserved (see § 4.3.1.4.1).

(3.2)	a.	X_M <**sz**ina>	:	X_G **š**ina	:	X_{Ch} **r**ina	'urine, to urinate'
	b.	X_M <hu**sz**i>	:	X_G hu:**š**i, X_{Ch} hu:**š**i	:	X_{Ch} hu:**r**i	'head'

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

(3.3)	X_Y **ȼ'**arara	:	X_{Ch} **ȼ'**arara, **s**arara	:	X_M <**s**arara>, X_G **s**araraʔ	'cold (adjective)'

Another change that distinguishes the Xinka varieties of Jutiapa from the central varieties is the shift *l, ɬ* > *t* / CVʔ_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 <ti**l**a>	:	X_G tiʔ**l**a, X_{Ch} tiʔ**l**a	:	X_Y ti**t**a	'salt'

In X_G there is a process of change that affects nasals in final position: *n* → *ŋ* / _ # (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 <nangú**n**>	:	X_G naŋgu**ŋ**	:	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	→	ʔuy_ša-n
	VT:spin		VT:spin-1sA
	'to spin'		'I spun'
	OT: "hilar" (2391.)		OT: "pret. hilar" (2392.)
b.	ʔeɬama	→	ʔeɬ_ma-ɬa
	VT:borrow		VT:borrow-AGT
	'to borrow'		'(the one) who borrows'
	OT: "prestar" (2251.)		OT:"el que presta" (3806.)
c.	wašata	→	ʔan-waš_ta-ʔ
	VI:enter		1sS-VI:enter-STAT
	'to enter'		'I entered'
	OT:"entrar" (1965.)		OT:"yo entré" (1974.)
d.	ʔuka	→	ʔuk'a-ka
	VT:have, put		VT:have, put-2sA
	'to have, put'		'you (would) have'
	OT:"haber" (1804.)		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, *-ɬi* and *-ɬe*, which result from processes of phonetic assimilation; *-ɬe* 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-**ɬi**	:	kosek-**ɬe**
man-PL		big, large-PL
'men'		'big ones'
OT:"hombres" (3974.)		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	:	X_G _ku=_ya-n
go be-1sS_{DEP}		go=PROG-1sS_{DEP}
'I am going to be'		'I am going' (G-SH)
OT:"voy a estar" (1961.)		

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

variety. Thus, instances of semantic divergence need to be analysed within the ALS and across the comparative sources.

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.

(3.9) a. pari (1) 'hot' "caliente" (4253.) : (2) 'sun' "el sol" (4254.) : (3) 'day' "el día" (4255.)

b. ʔawa (1) 'moon' "luna" (3600.) : (2) 'grandmother' "abuela" (3602.)

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.

(3.10) a. X_Y wona 'cave, hole' (Y-C) : X_M wona <gona> 'mountain' (3830.)

b. X_Y ɬamu, samu 'fish' (Y-C, Y-V) : X_M ɬamu-k [fish-INSTR?] 'shrimp' (4006.)

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.

(3.11) a. *say* (1) ʔima <ima> (2406.) : (2) hi <gi> (1828.) : (3) mi <mi> (1833.)

b. *go away* (1) waka <guaca> (2306.) : (2) waɬa <guaŁa> (2309.)

c. *have* (1) ʔuka <ucà> (1804.) : (2) ʔuna <unà> (1809.) : (3) ʔayu <ayu> (1814.)

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' *ʔatiʔt* 'grandmother, moon'.

(3.12) *moon* (1) X_{Ch} mola

(2) X_G ʔayala (= 'woman')

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 & Hünnemeyer 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).

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[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 & Hünnemeyer 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 & Hünnemeyer 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 *hiʔ* or *heʔ* (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.	<yszàpa agí> ʔišapa ʔahi leave be+3sS$_{DEP}$ 'he is leaving' OT:"está aquel saliendo" (1970.)
			b.	*ʔišapa ʔaya-n leave be-1sS$_{DEP}$ 'I am leaving'
	(2)	Phonological reduction	a.	*ʔišapa _heʔ
			b.	*ʔišapa- _ya-ŋ
	(3)	Grammaticalised markers	a.	ʔišapa heʔ leave PROG+3sS$_{DEP}$ 'he is leaving' (G-SH)
			b.	ti:ki=ya-n sleep=PROG-1sS$_{DEP}$ '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 ** ʔaku + 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 Guathemala>
ʔaku? ʔaya-n Guatemala
go be-1sS$_{DEP}$ TOPN/LOC
'I go to be in Guatemala'
OT:"me voy a estar en G." (1961.)

b. *ʔaku? ʔahi
go be+3sS$_{DEP}$
'he goes to be = he is going'

(2) Reanalysis

a. *ʔaku? ʔaya-n + Verb
go PROG-1sS$_{DEP}$
'I am going to + V'

b. *ʔaku? ʔahi + Verb
go PROG+3sS$_{DEP}$
'he is going to + V'

(3) Phonological reduction

a. ʔaku=ya-n ʔišpa-k(i)
go=PROG-1sS$_{DEP}$ leave-REFL? = go for a walk
'I am going to go for a walk'
OT:"voy a pasear" (Ch-P)

b. ku=ya-n šawaȼ'a
go=PROG-1sS$_{DEP}$ sow
'I am going to sow' (G-RHG)

c. *ku-hi + Verb
ku=y šawaȼ'a
go=PROG+3sS$_{DEP}$ sow
'he is going to sow' (G-RHG)

(4) Morphosyntactic reduction

a. kuy ruru-n
AUX.FUT+3s pick fruit-1sA$_{DEP}$
'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 Nahuan 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.

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[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

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[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 L_2 elements in a non-obsolescent contact situation do not bring about functional loss in the L_1-system and may be seen as mere attempts of L_2-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 L_2, 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.

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[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 interviews[108] 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.

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[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

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[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.

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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'	¢'		f	**s**	š		h	**m**	**n**	ŋ	**l**		**r**	**w**	**y**
McQuown (1948)	**p**	**t**	**k**	**ʔ**			¢	**č**	pʔ	tʔ	kʔ	¢ʔ	čʔ		**s**	š		h	**m**	**n**		**l**		**r**	**w**	**y**
McArthur (1966)	**p**	**t**	**k**	**ʔ**	b	d	g	¢	**č**	pʰ	tʰ	k'	¢'			**s**	š		h	**m**	**n**	ŋ	**l**		**r**	**w**	**y**
Schumann (1966)	**p**	**t**	**k**	**ʔ**	b		g	¢	**č**					f	**s**	š	ṣ	h	**m**	**n**		**l**	ɬ	**r**	**w**	**y**
Schumann (1967)	**p**	**t**	**k**	**ʔ**				¢	**č**						**s**	š	ṣ	h	**m**	**n**		**l**	ɬ	**r**	**w**	**y**
Campbell (1972)	**p**	**t**	**k**	**ʔ**					**č**	p'	t'	k'	¢'		**s**			h	**m**	**n**		**l**	ɬ	**r**	**w**	**y**
Kaufman (1977)	**p**	**t**	**k**	**ʔ**				¢	**č**	p'		k'	¢'	č'	**s**	š		h	**m**	**n**		**l**		**r**	**w**	**y**
Suarez (1983)[114]	**p**	**t**	**k**	**ʔ**				¢	**č**	p'	t'	k'	¢'	č'	-	-		-	-	-		**l**	ɬ	-	-	-
Campbell (1997)	**p**	**t**	**k**	**ʔ**						p'	t'	k'	¢'		**s**	š		h	**m**	**n**		**l**		**r**	**w**	**y**
																			m̓	n̓		l'		r̓	ẇ	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 *¢′*; while McArthur (1966) only indicates a phonemic contrast for *¢* and *¢′*. Campbell attributes phonemic status only to the glottalised form of the alveolar affricate *¢′*, while *č* occurs just in an unglottalised form (1972:187).

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[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 *š*. Schumann distinguishes a third fricative phoneme, the voiceless retroflex *ʂ*. In his earlier work, Campbell defines the sounds [s] and [š] as allophonic variants of the phoneme *ʂ* with [š] only occurring between high vowels *i* and *u* (1972:187). However, he distinguishes *s* and *š* 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 *ḿ*, *ń*, *l′*, *ẃ*, *ý* and glottalised *ŕ*, 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]	p'		t'			k'	
Affricate				č			
[+ glottalisation]			ć'				
Nasal	m		n			[ŋ]	
Fricative		[f]	s	š	[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*, *i̱*, *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_	**p**ula	'make' (SH, RHG, JAP, JS)[115]
t_	**t**ura	'take, bring' (SH, RHG)
k_	**k**otoro	'flying ant' (RHG, JAP)
p'	**p'**up'uʔ	'mat' (SH, RHG, JAP, JS)
t'	**t'**at'aʔ	'father, sir' (SH)
k'	**k'**aɬi	'smoke' (SH, RHG)
ʔ	**ʔ**aku	'walk' (SH, RHG, JS)

(4. 2) Distribution of stops in intervocalic position

VpV	ʔiša**p**a	'leave, emerge' (SH, RHG, JS)
VtV	hu**t**u	'tree'(SH, RHG, JAP, JS)
VkV	ma**k**u	'house' (SH, JS)
Vp'V	p'u**p'**uʔ	'mat' (SH, RHG, JS)
Vt'V	t'a**t'**aʔ	'father, sir' (SH)
Vk'V	čɨr**i̱k'i̱**ʔ	'small' (SH, JAP)

(4. 3) Distribution of stops in final position

_k	šina**k**	'beans' (PE, SH, RHG, JAP, JS)
_k'	tayu**k'**	'hat' (SH, RHG)
_ʔ	ʔuka**ʔ**	'did, done' (SH)
_t	ʔaɬtepe**t**	'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).

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[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/	[ʔam**b**uki]	'snake' (SH)
	b.	/šantiwina/	[šan**d**i^{g}wina]	'above' (SH, JS)
	c.	/nankun/	[nan**g**un]	'afternoon' (SH, RHG, JAP)
	d.	/k(a)rawa/	[**g**ra^{g}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.	**p**u**p**uʔ (SH)	:	**p'**u**p'**uʔ (SH)	'mat'
	b.	ʔi**p**aɬa (SH, JS)	:	ʔi**p'**aɬa (SH)	'to bath'
	c.	ma**p**u (SH, RHG)	:	ma**p'**u (SH)	'tortilla'
(4. 6)	a.	**t**uɬu (SH)	:	**t'**uɬu (SH)	'flower'
	b.	hu**t**u (SH)	:	hu**t'**u (SH)	'tree'
	c.	**t**a**t**a (SH)	:	**t'**a**t'**aʔ (SH)	'father, sir'
(4. 7)	a.	**k**a-ni^{g}wa (SH, JAP)	:	**k'**a-ni^{g}wa (SH)	'you want/ask for'
	b.	su**k**u (RHG)	:	su**k'**u (RHG)	'to tie (sth.)'
	c.	ʔi**k**aɬ (SH)	:	ʔi**k'**áɬ, ʔi**k'**ah, **k'**aʔ (SH, JAP)	'one'
	d.	horo-**k'**aʔ (SH)	:	horo-**k**a (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.	por**k'**e	'because' (SH)	Sp: *porque*	[pɔr'ke]
	b.	**k'**alor	'heat' (SH)	Sp: *calor*	[ka'lɔr]
	c.	ʔaŋ**k'**unyado	'brother-in-law' (SH)	Sp:*cuñado*	[ku'ɲa^{d}o]
	d.	sentrameri**k'**a	'Central America' (SH)	Sp:*Centro América*	['sentro ʔa'merika]
	e.	**p'**ito	'pipe' (SH)	Sp:*pito*	['pito]
(4. 9)	a.	^{g}wa**k'**aš	'cow' (SH, JAP)	Sp:*vaca*	['baka]
	b.	**k'**afé	'coffee' (JS)	Sp:*café*	[ka'fe]

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.	[šina**k'**	**k'**uy	**k'**agoŋ]		b.	[pulaŋ	**k'**aʔ	^{g}waru**k'**]
		/šinak	kuy	kawu-n/			/pula-n	(ʔi)kaɬ	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*, *-Vy* 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. šu**k'**a-ŋ
eat-1sA
'I ate' (SH, JAP)

c. gwe**šk'**e-y
throw-3sA
'he threw' (RHG)

d. **t'**ure-y
take-3sA
'he took' (SH)

(4. 12)
a. ma**k'**u-ŋ
house-1sP
'my house' (JAP)

b. ma**k'**u-ka
house-2sP
'your house' (JAP)

c. ma**k'**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. ha**p'**a-ᵍwa niŋ
pass by-ANT PN:1s
'I passed by' (SH)

c. ᵍwašt**'**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 *-ɬa* (4. 14a) and plural marker *-ɬi* (b).

(4. 14)
a. mu**k'**a-ɬa
work-AGT
'worker' (JS)

b. hu**t'**u-ɬi
tree-PL
'trees' (SH)

In some instances, glottalisation may also result from the deletion of V_2 in three-syllabic forms (see § 4.4.3).

(4. 15)
a. ʔiš**p'**a-ʔ ← ʔišapa
leave/emerge–STAT
'he left/emerged'
"salió" (SH)

b. ɬa**k'**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. ʔahmu**k'**aŋ (SH), ʔahmu**k**an (SH), ʔahmu**k'**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.	mis**t'**un	'cat'	<	L-N *mistli*	'cat'
	b.	ču**k'**ul'ah	'chocolate'	<	L-N *čokolatl*	'chocolate'
	c.	ʔaɬ**k'**aɬ**t'**iɬi	'mayor'	<	L-S *alcalde*	'mayor'
	d.	hura**k'**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 morpho-phonemic process, or whether we are dealing with an instance of overgeneralisation by semi-speakers.

(4. 18) a. ʔam-**p'**iri
1sA-see
'I see' (SH)

b. muh-**k'**u
1pS-go
'let's go' (SH)

c. ka-ʔiša**k'**a
2sS-drink
'you drink' (SH)

d. mu-**t'**unati
3sA-play an instrument
'he plays an instrument' (SH)

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.	ʔani**k'**	/anik/	'today' (SH)
	b.	šu^{g}wi**k'**	/šuwik/	'broom' (SH)
	c.	maɬi**k'**	/maɬik/	'firewood' (SH)
	d.	ʔo:te**k'**	/ʔo:tek/	'bed' (SH)
	e.	pe^{g}we**k'**	/pewek/	'gourd' (SH)
	f.	tayu**k'**	/tayuk/	'hat' (RHG)
	g.	hura**k'**	/hurak/	'man' (SH)
	h.	šina**k'**	/šinak/	'bean' (SH, PE)
	i.	guna**k'**	/wɨnak/	'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.	ʔani**k** (SH)	→	ʔani**ʔ** (SH) ~ ʔane**ʔ** (SH)	'today'
	b.	maɬi**k** (SH, RHG, JAP, JS)	→	maɬi**ʔ** (SH) ~ maɬe**ʔ** (JS)	'firewood'
	c.	šuʔni**k** (RHG, JAP, JS)	→	suni**ʔ** (SH, JAP)	'pot'
	d.	waru**k** (SH, RHG)	→	waru**ʔ** (SH, JAP, JS)	'net'
	e.	tayu**k** (PE, SH, RHG, JS)	→	tayu**h** (JS) ~ tayu**ʔ** (JS)	'hat'

There are cases in the semi-speaker data where *kʼ* 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) → [**t**ayɪʔ] (SH) 'sell'

4.1.2.2 Affricates

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

The affricate *č* occurs in initial and intervocalic position with high vowels *i*, *i̵*, *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	**č**iči	'excrement' (RHG)	ʔiwiči	'hear' (RHG)
či̵	**č**iri̵kiʔ	'small' (RHG, JAP)		
ču	**č**ušumuti	'elderly man' (RHG)	čuču	'dog' (SH, JS)
če	**č**eyk'uk'ə	'to crush, pound' (SH)		
čo	-			
ča	čuh-**č**aya	'elderly woman' (RHG)	šaᵍwača	'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. **č**ik'wit 'basket' (SH) < L-N: *čikiwitl* 'basket' [K-92]
b. mi**č**i 'cat' (SH, RHG) < L-N: *mistli* 'cat'; Spanish: *micho/-a*, *mizo/-a* 'cat'
c. **č**uču 'dog' (JS) < [diffused]
d. **č**ehe '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 *ȼʼ* into *č* (4. 24) and *š* into *č* (4. 25). These sound changes also occur in borrowed forms that include *ȼʼ* or *š*.

(4. 24)
a. **ȼ**'iririʔ (SH, JS) → **č**iririʔ (PE) 'red'
b. **ȼ**'uma (JS) → **č**uma (RHG, JS) 'kiss, suck' < L-M: Kp *ȼumax* 'spit, kiss' [K-03]
c. saᵍwa**ȼ**'a (SH) → šaᵍwa**č**a (RHG) 'sow'

(4. 25)
a. **š**aᵍwača (RHG) → **č**awača (RHG) 'sow'
b. ʔiwiši (RHG) → ʔiwi**č**i (RHG) 'hear'

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

(4. 26)
a. **ȼ**'ahpah (JS) 'sea turtle'
b. saᵍwa**ȼ**'aʔ (JAP), šaᵍwa**ȼ**'a, **ȼ**aᵍwača (RHG) 'sow'
c. **ȼ**'iririʔ (JS) 'small'
d. ki**ȼ**'i (RHG, SH) 'fry'
e. **ȼ**'i̵wi̵ (JS) 'bend corn' well
f. ʔi̵ri̵**ȼ**'i̵ʔ (JAP) 'tasty'

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

(4. 27)	a.	šan**ɸ'**ehe	'Chiquimulilla (toponym)' (JAP, RHG, SH, JS)	
	b.	**ɸ'**oko	'zanate (bird)' (SH, RHG, JS)	< POQ *ɸ'ok* 'blackbird' [C-71]

More occurrences of the syllables *ɸ'e* and *ɸ'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}	**ɸ'**en**ɸ'**erek	'type of bird' (C&K-FN)	
	b.	X_{Ch}, X_{Jum}	**ɸ'**oop'oy	'passion fruit'(C&K-FN)	< pMZ **ɸəpə* 'green' [C&K-76]
	c.	X_G, X_{Ch}	**ɸ'**orna	'to drip, trickle' (C&K-FN)	: X_G, X_{Ch} sorna 'rock with waterspring' (C&K-FN)
	d.	X_G, X_{Ch}, X_{Jum}	**ɸ'**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 *ɸ'* in initial position. The process is also attested in the secondary data. Campbell suggested that the change of *s* (allophonic variants [s] and [š]) to *ɸ'* 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'V**ʔ**CV) or when followed by *-Vn/y/ʔ* (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.	**s**imi (SH, JS)	→	**ɸ'**i**ʔ**mi (SH)	'extinguish'
	b.	**s**uk'u (SH, JS, RHG)	→	**ɸ'**uku (RHG)	'tie'
	c.	**s**ika (SH, RHG)	→	**ɸ'**ika (SH)	'be quite, shut up'

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

(4. 30)	a.	**ɸ'**oko (SH, RHG)	→ **s**oko (SH)	'zanate'	< POQ *ɸ'ok* 'blackbird' [C-71]
	b.	**ɸ'**ama (RHG)	→ **s**ama (SH, JS), **s**an (SH)	'good'	< pMZ **ɸ'am* 'fully grown' [K-03]
	c.	**ɸ'**uma (RHG)	→ **s**uma (RHG)	'water crops'	
	d.	**ɸ'ɨ**w**ɨ** (SH, JS)	→ **s**uwe (JS), **š**iwi (RH, JS)	'bend corn'	

(4. 31)	a.	kwe**ʔɸ'**a (SH, JS)	→ kwe**s**a (JS)	'quail'
	b.	ki**ɸ'**i, ki**ɸ'**e (SH, RHG)	→ ki**s**i (SH)	'to fry'
	c.	wi**ɸ'**u (SH)	→ wi**š**u (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	**m**iya	'chicken' (SH, RHG, JAP, JS)
mɨ	**m**ɨmɨ	'sing' (SH)
mu	**m**uka	'work' (SH, JS)
me	-	-
mo	**m**oroʔ	'it is wet' (JS)
ma	**m**aku	'house' (SH, JS, JAP, RHG)

(4. 33) Distribution of *n*

ni	**n**iᵍwa	'want, ask' (SH, RHG)
nɨ	**n**ɨma	'eat' (SH, RHG, JAP)
nu	**n**uka	'give' (SH, JAP)
ne	**n**e:ɬeke	'1p; personal pronoun' (SH)
no	-	
na	**n**aru	'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.	[ʔa**m**-pula]	/ʔan-pula/	'I make' (SH)
b.	[ʔa**m**-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'u**ŋ**] (SH)	→	[mak'u**m**] (SH)	/mak'u-n/	(house-1sP)	'my house'
b.	[ʔuču**ŋ**] (SH)	→	[ʔuču**m**] (SH)	/ʔučun/		'papaya'
c.	[hi**ŋ**] (SH)	→	[hi**m**] (SH)	/hin/		'no'

(4. 37)

a.	[ma**ŋ**] (SH)	→	[maʔ] (SH)	/man/	*demonstrative*	
b.	[ʔahmuka**ŋ**] (SH)	→	[ʔahmuka**ʔ**] (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)

[ʔa**ŋ**-**n**ela]	/ʔan-neɬa/	'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 *ɬ*, *w* is devoiced changing the cluster into *fɬ*.

(4. 39)

a.	ʔa**f**lak (RHG, JS), ʔo**f**lak (SH, JAP)	← ʔawɬak (SH), <awɬák> (G-S)	'tortilla griddle'
b.	**fɬ**uriyo (JAP)	← <hulúri> (G-S)	'rabbit'

The informants PE, SH and RHG distinguish a voiceless alveolar fricative *s* and a voiceless postalveolar fricative *š*; JAP and JS also use a voiceless retroflex fricative *ʂ* (cf. Schumann 1966, 1967). The simple sibilant *s* (4. 40) and the postalveolar fricative *š* (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; *š* is not attested with *e*, and only in a few cases before *o*.

(4. 40) Distribution of *s*

si	**s**iruka	'hurry' (RHG, JAP)	mu**s**i	'hair' (JS)
sɨ	**s**ɨʔma	'night' (RHG, JS)	k**s**ɨ**s**ima	'give as present' (JAP)
su	**s**uʔmaya	'crab' (RHG, JAP)	ʔu**s**u	'fly' (JS)
se	**s**ema	'fish' (RHG, JAP, JS)	ko**s**eʔ	'big' (JS)
so	pu**s**o	'partridge' (JAP)	-	
sa	**s**amu	'catch, take' (RHG, JS)	ka**s**a	'mosquito' (JS)
sk	ti**s**kiwaŋ	'waist' (PE)		
st	mi**s**tuŋ	'cat' (JS) [L-N]		

(4. 41) Distribution of *š*

ši	**š**inak	'bean' (PE, RHG, JAP, JS)	hi**š**i	'stone' (PE, SH, RHG, JS)
šɨ	**š**ɨma	'mouse' (JAP, JS)	p**š**ɨ**š**ik	'tortilla griddle' (RHG)
šu	**š**urumu	'boy, young man' (RHG)	ha**š**u	'pig' (PE, SH, JAP)
še	-	-		
šo	**š**oʔotok	'piece' (JAP)	po**š**o	'partridge' (JS) [L-M]
ša	**š**aguya	'sit down!' (PE, JAP)	ʔi**š**apa	'leave, emerge' (SH, JS)
šp	mu**š**puʔ	'finger' (JS)		
št	^{g}wa**š**taya	'enter!' (JAP)		
šk	ʔi**š**ka	'drink!' (PE, RHG)		
sm	ki**š**ma	'give as present' (JAP)		
šn	ʔi**š**nak	'sneeze' (JS)		
_š	^{g}waka**š**	'cow' (JAP, JS) [L-S]		

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

(4. 42)	a.	**š**ɨma (JAP, JS)	:	**s**ɨma (SH), **s**uma (SH, RHG, JAP, JS)	'rat'
	b.	**š**a^{g}wača (RHG)	:	**s**a^{g}waɕ'a (SH)	'sow'

JAP and JS show a tendency to change initial *š* 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 *ʂ* before high and low vowels

ʂi	**ʂ**i'nák	'bean' (JAP, JS)	huʂ**ʂ**i-ka	'your head' (JAP)
ʂɨ	**ʂ**ɨma	'night' (JS)	pɨ**ʂ**ik	'gourd' (JAP)
ʂu	**ʂ**uka	'eat' (JAP, JS)		
	> **r**uka	'eat' (SH, JS, JAP)		
ʂa	**ʂ**á	'in, *preposition*' (JAP, JS)		

The sound change is clearly phonetic as there is no attested case of lexical contrast. The shift from *š* to *ʂ* 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) ʔɨsɨ¢'ɨ (RHG) → ʔɨrɨ¢ɨ (SH, JAP) 'tasty'

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

(4. 45) a. wašata (SH, RHG) → waɬata (RHG) 'enter'
b. wakaš (SH, JAP, JS) → wakaɬ (JS) 'cow' [~ wakay (SH)]

(4. 46) ʔikaɬ (SH, JS) → ʔikaš (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. šiŋ (PE, RHG, JAP) → **h**iŋ (PE, SH, RHG, JAP, JS) 'no'
b. šuruɬi (RHG) → **h**uruɬ (SH) 'squirrel'
c. šapun (RHG, JS) → **h**apun (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 *hɨ* is realised by most speakers as *hu*. The phoneme is regularly attested in word- and syllable-final position.

(4. 48) Distribution of *h*

hi	**h**iši	'stone' (SH, RHG, PE, JS)
hɨ	**h**ɨnəkaŋ	'I am knowing' (JAP)
hu	**h**utu	'tree, pole' (SH, JAP, RHG, JS)
he	**h**eʔ	'(he/it) is' (SH)
ho	**h**oroŋ	'I got = I have' (SH, RHG, JAP, JS)
ha	**h**ašu	'pig' (SH, JAP, RHG, PE, JS)
_h	pula**h**	'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) ha**h**i (RHG, JS, PE) : ha**š**i (SH) : ha**y**i (SH, JAP) 'avocado'

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

(4. 50) a. tɨɬa (SH, JS) → tu**h**a (JS) 'yucca'
b. ʔaɬmukaŋ (JS) → ʔa**h**mukan (SH) 'yesterday'
c. wapaɬ (SH, JAP, JS, PE) → wapa**h** (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 *l*

li	-		šilik	'corn cob' (SH)
lɨ	lɨkɨ	'find' (SH)	-	
lu	-		ʔalu	'macaw' (JS)
le	-		ɕ'ehele	'Chiquimultecos' (JS)
lo	-		ʔololoʔ	'white' (RHG, JAP, JS)
la	la^{g}waru	'dance' (PE, RHG)	pula	'make' (SH, RHG, JAP, JS)
-l	ʔiškanal	'corn flour' (PE)		

(4. 52) Distribution of *ɬ*

ɬi	-		k'aɬi	'smoke' (RHG)
ɬɨ	ɬika	'find' (SH, RHG, JS)	ʔiɬɨ^{g}wɨ	'raw sugar' (JAP, RHG, PE, JS)
ɬu	-		ʔuɬu	'fall' (SH, JS)
ɬe	-		əŋʔepeɬe	'I got frightened' (RHG)
ɬo	-		-	
ɬa	ɬapan	'my grandson' (RHG)	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 *š*; 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^{g}waro (PE, RHG)	:	ɬa^{g}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 *š* to *r* (see § 4.1.3.5, § 4.3.1.4.1). This change is related to the change of *š* 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 *r*

ri	ᵍwi**r**iki		'speak' (SH, JAP)
rɨ	či**r**ɨk'ɨʔ		'small' (SH, JAP)
ru	ʔu**r**u**ɬ**		'egg' (SH, JAP)
re	ᵍwe**r**eke		'get angry' (SH, JAP)
ro	ho**r**oŋ		'I got = I have' (SH, RHG, JAP)
ra	ha**r**ana		'sick, ill' (JAP, JS)
kr	g**r**aᵍwa	/karawa/	'woods, wilderness' (JAP)
rk	ᵍwi**r**kiŋ	/wirki-n/	'I spoke' (SH, JAP)
rt	ʔu**r**tuy	/ʔurtu-y/	'he drank' (JS)
r_	**r**uka		'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 *ɬ* instead (4. 55a).

(4. 55)	a.	[wiriki] (SH, RHG) ~ [weriki] (SH)	→	wi**ɬ**iki (RHG)	'speak, word'
	b.	[hu**r**u] (SH, RHG, JAP)	→	*/hulu/	'turkey'

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

(4. 56)	a.	/wili/	[ᵍwi**l**i]	'undress' (SH)
	b.	/wapili-n/	[ᵍwapi**l**iŋ]	'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/	[ho**r**okaʔ]	'you got/received = you have' (SH)
	b.	/piri/	['pi**ɹ**i]	'see' (SH)
	c.	/kuri/	[kuʸ**ɹ**iʔ]	'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 [ᵍw] (see Campbell 1972a:187).

(4. 58) Distribution of *w* in initial position

wi	/**w**iriki/	[ᵍwiriki] (SH, RHG) [wiriki] (RHG, JAP)	'speak'
wɨ	-		
wu	/**w**unak/	[gunak] (PE, SH, JAP)	'witch'
we	/**w**ereke/	[ᵍwereke] (PE, SH)	'get angry'
wo	/**w**ona/	[gona] ~ [wona] (PE)	'hill'
wa	/**w**aruk/	[ᵍwaruk] (JAP, RHG)	'hammock'
_w	/ta**w**/	[taʍ] (RHG)	'wind'

(4. 59) Distribution of *w* in medial position

Vwi	/k'a**w**i/	[k'awi] (SH, JS)	'cry'
		[k'a^{g}wi] (SH)	
Vw**ɨ**	/ʔ**ɨ**ɨ**w**ɨ/	[ʔɨɨ^{g}wɨ] (SH, RHG, JAP)	'sweets'
Vwu	/ša**w**uya/	[šaguya] (SH, JAP, JS)	'sit down!'
	/ka**w**u/	[kawu] (RHG)	'cook'
		[kagu] (SH, JAP)	
Vwe	/pe**w**ek/	[pe^{g}wek] (SH, RHG, JAP)	'gourd'
Vwo	-		
Vwa	/ʔa**w**a/	[ʔawa] (RHG)	'moon'
		[ʔa^{g}wa] (RHG, JAP)	
	/tupa**w**a/	[tupawa] ~ [tupa^{g}wa] (PE)	'he let'

The glide *w* occurs with all vowels, with the exceptions of *wɨ* 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 *ʍ* (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 *ɨ* and *a* (vowel set 3, see § 4.4.2). Furthemore, *y* occurs frequently in word-final position, mostly as a morphological marker.

(4. 60) Distribution of *y*

yi	-		ha**y**i	'avocado' (JAP)
y**ɨ**	**y**ɨp**ɨ**	'vomit' (SH)	h**ɨy**ɨ	'pocket gopher' (SH)
yu	-		ta**y**uk	'hat' (SH)
ye	-		šu^{g}wa**y**e	'caiman' (SH)
yo	**y**ololoʔ	'smooth' (SH) [L-M]	-	
ya	**y**a^{g}wi	'make firewood' (JS)	ʔantu**y**aʔ	'I scolded' (SH)
_y	ʔuka**y**	'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	ʔi**i**šapa	'leave'	h**i**ši	'stone'	ti:k**i**	'sleep'
ɨ	ʔ**ɨ**t**ɨ**w**ɨ**	'raw sugar'	h**ɨ**y**ɨ**	'pocket gopher'	h**ɨ**y**ɨ**	'pocket gopher'
u	ʔ**u**ɬu	'fall'	h**u**tu	'tree, pole'	mak**u**	'house'
e	ʔer**e**ɬeke	'to frighten'	t**e**roʔ	'he died'	were**e**	'get angry'
o	ʔ**o**lolo**o**ʔ	'white'	h**o**ro**o**	'I got = I have'	te:r**o**	'I want'
a	ʔ**a**ku	'walk'	t**a**yuk	'hat'	pul**a**	'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.	ʔ**o:**tek (SH)	:	ʔ**o**tek (SH)	'bed'
	b.	m**u:**tiʔ (SH)	:	m**u**tiʔ (JS)	'hair'
	c.	gwapaɬ (SH)	:	gwa:paɬ (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.	**'**ʔuɬu	'fall' (SH, PE)	→	ʔu**'**ɬu-ʔ (RHG, PE)	'he/it fell'
	b.	**'**tero	'kill, die' (SH, JAP)	→	te**'**ro-ʔ (SH, JS)	'he/it died'

Vowel shift[116] 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.	ʔ**i**ška (SH)	→	ʔ**e**ɬka (SH)	'drink'
	b.	h**i**n (PE, SH, RHG, JAP, JS)	→	h**e**n (SH, JAP, JS)	'no'
	c.	ʔakan**i** (SH, RHG, JAP, JS)	→	ʔakan**e** (SH)	'so, like'
	d.	ʔiwič**i** ~ ʔiwiš**i**ki (RHG)	→	ʔowiš**a** (SH)	'hear'
	e.	kur**i** (PE, RHG, JAP, JS)	→	kur**u** (RHG, JS)	'run'
	f.	ʔarak**i** (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.	ʔ**u**rk**u** (JAP) ~ ʔ**u**rt**u** (JS)	→	ʔ**o**rt**o**- (JAP)	'drink' [< ʔuy-ʔuku "atol"]
	b.	m**u**k'aɬa (JS)	→	m**o**k'ah (JS)	'worker'
	c.	m**u**ra (SH, RHG, JAP, JS)	→	m**o**ra (JAP)	'ear of corn (*elote*)'
	d.	ʔ**u**ɬ**u** (RHG, JS)	→	ʔ**ɨ**ɬ**ɨ** (RHG)	'fall'
	e.	harak**u** (PE)	→	harak**i** (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).

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

(4. 66)	a.	čɨrɨkɨ (SH, RHG, JAP)	→	čiriki (SH, PE)			'small'
	b.	ʔɨšɨšɨ ~ ʔɨsɨɕ'ɨ (SH, RHG, JAP)	→	ʔusuču ~ ʔučuču (RHG)			'tasty'
	c.	nɨʔma (SH)	→	nuʔma (SH, JS)			'eat'
	d.	yɨwa-n (RHG)	→	yuᵍwaŋ (RHG)			'I lost'
	e.	tɬɬa (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)	poɕa (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.	ᵍwaseke (SH)			→	ᵍweseke (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)			→	horana (JS)	'ill'
	i.	ʔušakiyaŋ (RHG)			→	ʔušikiyaŋ (RHG)	'I am smoking'
	j.	ʔišapa (SH, RHG, JS)			→	ʔišapi-n (SH)	'leave, emerge'
	k.	ʔayaɬa (PE, SH, RHG, JAP, JS)			→	ʔayaɬ_ (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; Fernandéz 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 *ɨ*, *ɕ'* and *š* 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]	<b>	<b>			<b>	<b>	<b>	<b>	<b>	<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> <ʼ>		<h> <e>	<h>	<h>
[ȼ] ~ [ȼʻ]	<z>				<tz'>	<tz>	<tz>	<ts> <tx> <tz> <tsh>		
[č] ~ [č']	<ch>		<ch>	<ch>	<ch> <x>	<ch>	<ch> <tch>	<ch>	<ch>	<ch>
[f]	<f>				<f>?		<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> (1x)	<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> <mm>	<m> <mm>	<m>	<m>	<m>
[n]	<n>	<n>	<n>	<n>	<n>	<n>	<n>	<n> <nn>	<n>	<n> <nn>
[l]	<l>	<l>	<l>	<l>	<l>	<l>	<l>	<l>	<l>	<l>
[ɬ]	<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>	<u> <v> <vu> <hu> <g> <cvu>	<gu> <gü> <u> <b>	<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] ~ [iː]	<i>	<i> <y>	<i>	<i> <y>	<i> <y>	<i>	<i>	<i> <y>	<i> <y>	<i>
[ɨ] ~ [ɨː] [ə]	-	-	-	-	<ö> <ü> <üö>	<ö> <ü> <u>	<ö> <ü> <eu>	<ü> <ue> <ou>	<ou> <ue>	-
[u] ~ [uː]	<u>	<u>	<u> <uu> <v>	<u> <uu> <v>	<u>	<u> <uu> <ü>	<u> <uu> <ü>	<u>	<u> <hu>	<u>
[e] ~ [eː]	<e>	<e>	<e>	<e> <ee>	<e>	<e> <ee>	<e> <ee>	<e> <ee>	<e>	<e>
[o] ~ [oː]	<o>	<o>	<o>	<o> <oo>	<o>	<o>	<o>	<o>	<o>	<o>
[a] ~ [aː]	<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>, <b>, <t>, <d>, <c> and <qu> are identified in all inventories as voiceless and voiced representations of labial, alveolar and velar stops. Graphemes <b>, <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'**b**ojóro na tz'úyu>	/n-pohoro na ɸ'uyu/	'I open the abscess' (Ch-C)
	b.	<ram**b**are>	/ran pari/	'(in) the day' (Ch-F)
	c.	<ton**d**ón>	/tonton/	'turtle' (Ch-F)
	d.	<man**g**a>	/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.	<**b**ojóro>, <**b**ojoro>	'to open' (Ch-C), (Ch-F)	:	X_G [poko]
	b.	<huca-ca **b**al experimentar>	'you have experienced' (Ch-Z)	:	X_G [paɬ]
	c.	<guaca **b**ar>	'he already went' (Ch-F)	:	X_G [paɬ]
	d.	<**d**ólo>	'yellow' (Ch-C)	:	X_G [tolo]
	e.	<**g**raua>	'woods, wilderness' (Ch-F)	:	X_G [graˢwa] /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.	<**c**araguá>	[**k**araˢwa]	'woods, wilderness' (Ch-C)	<c> = k
	b.	<**c**ájli>	[**k'**aɬi]	'smoke' (Ch-C)	<c> = k'
	c.	<**k**unú>	[**k**unu]	'cloud' (Ch-C)	<k> = k
	d.	<**k**örú>	[**k'**ɬɾi]	'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.	<na**c**a>	[na**k**a]	'you, *pronoun*' (Ch-Z)
	b.	<**c**unu**qu**i>	[**k**unu**k**i]	'content' (Ch-Z)
	c.	<**c**assa>	[**k'**aša]	'mosquito' (Ch-Z)
	d.	<**c**uetza>	[**k'**weɕ'a]	'quail' (Ch-Z)

Pivaral and JC also use the combinations <cc> and <ck>. In Fernandéz (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 Fernandéz-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.	<catupagua**k**an>	[katupawa**k'**aŋ]	'where you left it' (Ch-F)
	b.	<joloma**k**u>	[holoma**k'**uʔ]	'behind' (Ch-F)
	c.	<**k**egüexa>	[**k'**eweɕ'a]	'anona' (Ch-F)
	d.	<guapi**k**>	[wapi**k'**]	'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.	<**c**agui>	:	<**k**agui>	'cry, scream, protest' (Ch-Z)
			:	<**k**auy>	'cry, scream' (Ch-F)
	b.	<**c**a-uca>	:	<**k**a-uca>	'you (pl.) have' (Ch-Z)
	c.	<**c**alig>	:	<**k**alig>	'some, others' (Ch-Z)
	d.	<ajslagua**c**>	:	<ajlagua**k**>	'tomorrow, until tomorrow' (Ch-F)
	e.	<**c**amac>	:	<**k**amay>	'embrace, carry' (Ch-F)
	f.	<**c**unúu>	:	<**k**unu>	'rain cloud' (Ch-F)
	g.	<**c**uy talán>	:	<**k**uy 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 **k**acan manga hay> /ʔupu-**k**a-ka-n manka ʔay/	'closing your (pl.) ears' (Ch-Z)
	b.	<ka amigo hay> /**k**a ʔamigo ʔay/	'your (pl.) friends' (Ch-Z)

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.	<naucali**g**>	[naw-ka-li**k**]	:	[huray-li**h**]	:	[naw-ka-li**ʔ**]	'sons'
	b.	<jurail**i**g>	[huray-li**k**]	:	[huray-li**h**]	:	[huray-li**ʔ**]	'their eyes'
	c.	<mu**g**pula>	[mu**k**-pula]	:	[mu**h**-pula]	:	[mu**ʔ**-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 *ɬ* (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 <to**t**o>	:	X_G, X_{Ch} to**l**o	'yellow'
	b.	X_{Jum}, X_Y <ti**t**a>	:	X_G, X_{Ch}, X_{Jut} ti**l**a	'salt'
	c.	X_S <mo**t**i>, X_Y mowati	:	X_G mu**ɬ**, X_{Ch} mu**ɬ**a	'white'
	d.	X_{Jut} <tar**t**i>, X_S, X_Y <ta**t**a>	:	X_G, X_{Ch} ta**ɬ**i	'neck'

(4. 78)	a.	X_{Jum} ti**t'**a	:	X_G, X_{Ch} ti**l'**a	~	tiʔla (SH), (Ch-MQ)	'salt'
	b.	X_{Jum} moo**t'**o	:	X_{Ch} moo**l'**a	~	moʔla (Ch-MQ; Ch-S)	'moon'
	c.	X_{Jum} muu**t'**a	:	X_G, X_{Ch} muu**l'**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)	<**h**ucacan>	[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-ʔiši gar]	'I am still alive' (Ch-F)
	b.	<tz'arará>	[ȼ'araraʔ]	'cold' (Y-C)

(4. 81)	a.	<chiriri**́**>	[čiririʔ]	'slim, thin' (Ch-F)
	b.	<huac**á**>	[waka-ʔ]	'he went' (Ch-C)

In the majority of cases, however, the glottal stop is not represented at all.

(4. 82)	<_ana_ulalicá>	[**ʔ**ana **ʔ**ula 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.	<si**c**na>	[si**ʔ**na(k)]	'bean' (Y-V)
	b.	<schu**g**mac>	[su**ʔ**ma]	'night' (Jut-V)
	c.	<su'**c**ma>	[su**ʔ**ma]	'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 Fernandéz contrasts <ch> with <tch>, which either reflects the glottalised form **č′* or even the alveo-dental affricate *ȼ′* (see § 4.1.2.2). In the comparative data the grapheme correlates with both sounds (4. 84).

(4. 84)	a.	X_{Ch} <paa**tch**i>	'corn dough' (Ch-F)	:	X_{Ch} <pá?**ɕ**i>	'corn dough' (Ch-S)
				:	X_G pa?a**ɕ**'i?	'to grind' (G-SH)
				:	X_Y <pa**ch**i>	'corn dough' (Y-C)
	b.	X_{Ch} <pok**tch**e>	'goitre' (Ch-F)	:	X_{Ch} <pok**ch**e>	'goitre' (Ch-C)
	c.	X_{Ch} <**tch**iurcu>	'little, few' (Ch-F)	:	X_{Ch} <**č**i**ɨ**k'i>	'small, little' (Ch-S)
				:	X_G **č**i**ɨ**k**ɨ**?	'small, little' (G-RHG)
				:	X_G **ɕ**'i**ɨ**k'**ɨ**?	'small, little' (G-SH)

The more recent inventories denote the alveo-dental affricate *ɕ′* as <tz>, whereas Morales, Valdez and Gavarette do not represent it at all. Comparative data seem to suggest that in the Zeeje-manuscript the grapheme <z>, which clearly represents *s* and *š*, can also be correlated in a few cases with *ɕ′* (4. 85). However, we can identify most of these cases to be the result of the process of affrication that Campbell described as being caused by the glottalisation of a vowel in medial position (see § 4.1.2.2, § 4.4.6). Since the orthography of the Zeeje-ms. does not distinguish *s* ~ *š* and *ɕ′*, it is possible that in all these cases <z> represents *s* rather than *ɕ′*.

(4. 85)	a.	X_{Ch} <jen**z**an>	'there is nothing' (Ch-Z)	:	X_G hin **š**an	'there is nothing' (G-SH)
	b.	X_{Ch} <hi**z**apiy>	'remove' (Ch-Z)	:	X_G **?**išapi	'remove' (G-SH)
	c.	X_{Ch} <ju**z**uqui>	'half' (Ch-Z)	:	X_{Ch} <ju**tz**ú>	'middle, half' (Ch-F)
	d.	X_{Ch} <**z**umuliqui>	'irrigated' (Ch-Z)	:	X_G <**ɕ?**i?m**ɨ**>	'to irrigate' (G-S)
					X_G **ɕ**'u?ma	'to irrigate' (G-RHG)

Some weak support for this interpretation may be found in Fernandéz who uses <ss>, which is otherwise clearly attested as *s* (4.1.3.3), in contexts that feature the cognate sound *ɕ′* in X_G (4. 86a). However, unlike the Zeeje-ms., Fernandéz also employs grapheme <tz> to represent alveodental affricates (b).

(4. 86)	a.	X_{Ch} <**ss**ajpáa>	'sea turtle' (Ch-F)	:	X_G **ɕ**'ahpah	'sea turtle' (G-JS)
				:	X_G **ɕ**ahpa?	'sea turtle' (G-SH)
	b.	X_{Ch} <**tz**aná>	'*good' (Ch-F)	:	X_G **ɕ**'ama	'good' (G-SH), (G-RHG)

4.1.3.3 Fricatives

All X_{Ch}-inventories contain the grapheme <f>. In the semi-speaker data from X_G, the fricative *f* could be identified as a non-contrastive sound that occurs as a result of devoicing *w* before the voiceless lateral-fricative *ɬ* (§ 4.1.2.4). Comparative data from X_G and the ALS suggest that the same process explains the occurrence of <f> in the data from X_{Ch}. The examples below illustrate cases where the glide *w* or the syllable *hu* have changed into *f* before *ɬ* or *r*. The change is restricted to a few words in X_{Ch}.

(4. 87)	a.	<auj**f**lakan> (Ch-JC)	[?a**ɬ**mukaŋ (SH)]	'yesterday'
	b.	<?aw'**f**lak'> (Ch-MQb), <?o'**f**lak> (Ch-MQa), <au**f**lack> (Ch-P), <au**f**lac> (Ch-JC)	[?a**wɬ**ak (G-S)]	'tortilla griddle'
	c.	<**f**luri> (Ch-MQa, Ch-S)	[h**uɬ**uri (SH)]	'rabbit'
	d.	<**f**rac> (Ch-Z, Ch-C, Ch-F, Ch-JC) , <**f**rag> (Ch-Z), <**f**rak> (Ch-S), <**f**rak'> (Ch-MQb), <**f**rack> (Ch-P), <u**f**rac> (Ch-MA)	[h**u**rak (SH)]	'man'
	e.	<para**f**riqui> (Ch-Z)	[<para**gu**iriqui> (2826.)]	'fight'

Most inventories distinguish sibilants by different graphemes and use <x> or <sh> to represent the alveo-palatal sound. In the Zeeje-ms., Morales employs the

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.	<**z**amaliqui>	'dark ones' (Ch-Z)	:	X_{Ch}	**s**ama (Ch-C&K)
	b.	<**z**icaliqui>	'eagles, hawks' (Ch-Z)	:	X_{Ch}	**š**ik'a (Ch-C&K)
	c.	<hi**z**apiy>	'remove' (Ch-Z)	:	X_G	ʔ**š**api (G-SH)

(4. 89)	a.	<**s**agulla>	'to put, set' (Ch-Z)	:	X_{Ch}, X_G /**š**awuýa/ (Ch-C&K), (G-SH)
	b.	<**s**iri>	'hidden' (Ch-Z)	:	X_{Ch} **š**iri (Ch-C&K)
	c.	<**s**urumu-lig>	'youngsters' (Ch-Z)	:	X_{Ch} **š**urumu (Ch-C&K)
	d.	<gua**s**ata>	'come' (Ch-Z)	:	X_G ^{g}wa**š**ata (G-SH)

(4. 90)	a.	<**z**aja>	:	<**s**a-g>	'voice' ~ 'his name' (Ch-Z)	:	**š**aha (Ch-C&K)
	b.	<jen**z**an>	:	<jen**s**an>	'there is nothing' (Ch-Z)	:	hin **š**an (G-SH)
	c.	<**z**uculiqui>	:	<**s**ucuquiliqui>	'tied, fastened' (Ch-Z)	:	**s**uk'u (Ch-C&K)
	d.	<**z**apucallin>	:	<**s**apu>	'possessed' (Ch-Z)	:	**s**apu '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}	**ȼ'**ama (Ch-C&K) 'good'
	b.	<zama> (Ch-Z)	:	X_{Ch}, X_G	**š**ama (Ch-C&K), (G-SH) 'in, preposition"

The Zeeje-grapheme <z> also denotes *ȼ′* (4. 92), which is otherwise represented quite consistently as <s> (4. 91a). In all other instances, <z> represents *s* or *š*.

(4. 92)	a.	<ju**z**uqui> 'half'	:	<ju**tz**ú> (Ch-F)	'middle, half'
	b.	<**z**umuliqui> 'irrigated'	:	X_{Ch} **ȼ'**əmə (Ch-C&K), X_G <**ȼʔ**iʔmi̇> (G-S), **ȼ'**uʔma (RHG)	'to irrigate'

Both, Fernandéz and Pineda Pivaral, differentiate <s> and <z>; Fernandéz 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.	<**s**uka> :	<**ss**ucán> :	<**x**uka>	'eat, bite' (Ch-F)	:	X_G šuka, **ş**uka, ruka
	b.	<**ss**aguac>			'iron, metal' (Ch-F)	:	X_G sa^{g}wak'
	c.	<**ss**andígüina>			'upwards' (Ch-F)	:	X_G šan tiwina
	d.	<**ss**arar-a>			'very cold' (Ch-F)	:	X_G sararaʔ
	e.	<**ss**ema>			'fish' (Ch-F)	:	X_G se:ma, sema
	f.	<**z**ünjaya>			'black crab' (Ch-F)	:	X_G **ş**imhaya

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.	<**j**en> ~ <**g**en>	[**h**en]	'not, without' (Ch-Z)
	b.	<**j**axú>	[**h**ašu]	'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 Fernandéz and <nn> by Pineda Pivaral requires some comment. Fernandéz 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 ne**mm**a ya ca?>, <tero-na**mm**a>	[nɨʔ**m**a]	'are you hungry?','want to eat' (Ch-F)
	b.	<o**nn**e>	[ʔo**n**e]	'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 *ɬ* orthographically. The lateral-fricative *ɬ* 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 *ɬ* to *š* (or *r*) that is attested in the semi-speaker data from Guazacapán (see § 4.1.2.4).

Fernandéz 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*, *ɨ*, *i*, *o* and *a*, but never before *e*, and <lj, jl> occurring only in medial position and never before *o* .

(4. 96)	a.	<e**lg**tepet> (Ch-Z)	[ʔeɬtepet]				'town'
	b.	<ica**lg**> (Ch-Z)	[ʔikaɬ]	:	<ica**l**> (Ch-Z)	[ʔikal]	'one, a'
	c.	<ipa**jl**a> (Ch-C)	[ʔipaɬa]	:	<ipa**l**a> (Ch-F)	[ʔipala]	'bath'
	d.	<**lh**an> (Ch-JC)	[ɬan]	:	<**l**an> (Ch-C, Ch-F)	[lan]	'no'
	e.	<na**jl**i> (Ch-C, Ch-F)	[naɬi]				'they'
	f.	<paki**sl**> (Ch-F)	[pakiɬ]	:	<paki**l**> (Ch-C)	[pakil]	'ten'
	g.	<ta**jsl**ic> (Ch-F)	[taɬik]				'neck'
	h.	<ta**xl**a> (Ch-F)	[taɬa]				'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 *ɬ* > *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.	<püö**rr**a>	[pɨra]	:	[pɨša]	'root' (Y-C)
	b.	<püö**r**ri>	[pɨri]	:	[pɨšɨ]	'gourd' (Ch-C)
	c.	<**r**uca jush ju**rr**í>	[ruka huš huri]	:	[šuka huši]	'headache' (Ch-P)
	d.	<u**rr**u>	[ʔuru]	:	[ʔušu]	'fly' (Ch-C)

Fernandéz (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 *š* or the retroflex *ʂ* (4. 98).

(4. 98)	a.	<**r**inak>	[rinak]	'bean' (Ch-F)	:	X_G šinak
	b.	<**r**üma>	[ṙima]	'rat' (Ch-F)	:	X_G šɨma
	c.	<**r**uyá>	[ruya]	'older brother' (Ch-F)	:	X_G šuya
	d.	<**r**eké>	[reke]	'rib' (Ch-F)	:	X_G šeke
	e.	<**r**ajá>	[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 *ȼ'*.

(4. 99) <pa**r**i> 'sun, day, heat' (Ch-F)
<pa**rr**i> 'to grind' (Ch-F) : X_G paȼ'i 'to grind' (G-RHG) < L-M: GTz *paȼ '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*, *ɨ* 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 [^{g}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 <b> (4. 101).

(4. 100)	a.	<**gu**azl>	/**w**aɬ/	'three' (Ch-F)
	b.	<**hu**enin>	/**w**enin/	'who?' (Y-C)
	c.	<**hu**anin>	/**w**anin/	'who?' (Ch-C)
(4. 101)	a.	<cha**b**uy>	/ša**w**uy(a)/	'sit down' (Ch-F)
	b.	<lar**b**ur>	/la**w**aro/	'dancer' (Ch-F)
	c.	<guasta**b**an>	/waštа**w**an/	'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 [^{g}w] was also common and [g] occurred just as a free alternation.

(4. 102)	a.	<xangona>	[šan**g**ona]	'northwards, towards the hill' (Ch-F)
	b.	<guona>	[^{g}**w**ona ~ **w**ona]	'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.	<**y**ajyic>	'tumpline, *mecapal*' (Ch-C) (= instr. for carrying firewood)	:	[**y**a^{g}wiʔ] 'make firewood' (G-JS), <**y**áwi> 'trunk' (G-S)
	b.	<mu**y**>	'fruit of chical' (Ch-F)	:	*[mu**y**]
(4. 104)	a.	<a**i**ma>	'ear of corn' (S-Gav, Y-V)	:	[ʔa**y**ma] (G-RHG)
	b.	<u**i**>	'water' (S-Gav)	:	[ʔu**y**] (G-SH)

(4. 105)	a.	<**ll**ugua>	'to lose, misplace' (Ch-Z)	:	[**y**u^{g}waŋ]		'I lost' (G-RHG)
	b.	<a**ll**apa>	'year' (Ch-Z)	:	<ayapa>	*[ʔa**y**apa]	'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	<p**i**r**i**>	[piri]	'to see' (Ch-Z)	<**i**tul>	[ʔituɬ]	'flea' (Y-C)
ɨ	<**üí**lu>	[ʔɨlɨ]	'back' (Ch-F)	<**üö**rá>	[ʔɨraʔ]	'big' (Y-C)
u	<**u**ti>	[ʔuti]	'corn flour' (Ch-F)	<r**u**ruc>	[ruruk]	'cane' (Ch-C)
e	<**e**lajá>	[ʔelaha]	'tongue' (Ch-C)	<hu**e**rén>	[weren]	'frog' (Ch-C)
o	<**o**loló>	[ʔololoʔ]	'white' (Ch-JC)	<m**oo**la>	[moʔla]	'moon' (Ch-F)
a	<**a**yma>	[ʔayma]	'corn' (Y-C)	<p**a**ri>	[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.	<r**ii**nak>	[ri:nak]	'bladder' (Ch-F)	:	<rinak> [rinak]	'bean' (Ch-F)
	b.	<p**aa**tchi>	['pa:či]	'corn dough' (Ch-F)			
	c.	<j**aa**pá>	[ha:pa-ʔ]	'come (pl.) here!' (Ch-F)			
	d.	<t**oo**lo>	['to:lo]	'coral tree' (Ch-F)			
	e.	<t**ee**ró>	[te:roʔ]	'killed' (Ch-F)			
	f.	<naj**uu**n>	[nahu:n]	'son, daughter' (S-Gav)			
	g.	<s**ee**ma>	[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 **ú**ru>	[muɬ 'ʔuru]	'fly' (Ch-C)
	b.	<al**á**n>	[ʔa'la-ŋ]	'over, above me' (Ch-F)
	c.	<cheng**ó**c>	[čen'ko-k]	'it is twisted' (Ch-C)
	d.	<cayay**á**>	[kaya'yaʔ]	'shining' (Ch-C)
	e.	<amuc**á**>	[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, ɛ, ck, sz, Ł, ʊe; 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 <ɛ>, <ck>, <tz>, <tx>, <sz>, <Ł> and <ʊe>, the symbols <ɛk> and <ɛh> also appear in the grammar. With the exception of <ɛ>, <Ł> and <ʊe>[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>, <ɛ>, <4>, <4;>, <ɧ> 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

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[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 <ʊ> 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* <ɛ> 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	
< ɛ >	'tresillo'	/ q' /	≠	< ɛ >	(fol. 2v)
< 4 >	'cuatrillo'	/ k' /	=	< ck >	(fol. 4r-4v)
< 4, >	'cuatrillo con coma'	/ ɋ‘ /	=	< tx >	(fol. 4v-5r)
< ɧ >		/ 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 <ɛ> and <tz>, and explains as follows:

> ... porque en el curso de este arte solo me servirè de la Tz y del tresillo al reves ɛ, por ser estas letras, aunque geminadas, conformes a las de nuestro alphabeto; porque el ɛ 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 <ɛ> 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 <ɛ> 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 <ʊe> 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 *ɬ* and high central vowel *ɨ*. Maldonado de Matos explains the sound values as follows:

> La Ł virulada es casi lo mismo que nuestra L castellana, con la diferencia solamente de que la pronunciacion de la L castellana es limpia y la de la virulada es sucia ó basta [...] La ʊe 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}; < ɛ >; < ɛk >
[g]	< g > preceding {o; a}; < ɛ >
[k']	< ck>; < ɛ >
[ʔ]	< h >; accent; word boundary
[ȼ] ~ [ȼ']	< tx >; < tz >; < sz >
[č] ~ [č']	< ch >; < tx >
[s]	< s >; < z >; < sz >
[š] ~ [ʂ]	< 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] ~ [iː]	< i >; < ii >; < ý >; < j >; + *accent*
[ɨ] ~ [ɨː]	< ʊe >; < ʊeʊe >; + *accent*
[u] ~ [uː]	< u >; < uu >; + *accent*
[e] ~ [eː]	< e >; < ee >; + *accent*
[o] ~ [oː]	< o >; < oo >; + *accent*
[a] ~ [aː]	< a >; < aa >; + *accent*

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			č		
[+ glottalisation]		ȼ'			
Fricative		s	š		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 <b>, <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 <b>. Grapheme <b> is attested in medial position preceding vowel graphemes <u>, <ʊe>, <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 <b>[121]

	<i>	<ʊe>	<u>	<e>	<o>	<a>
<p>	+	+	+	+	+	+
<b>	-	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>	_<b>
<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.	<pu**np**un>	/punpun/	'bladder' (4336.)
	b.	<sʊe**mp** sʊemp>	/sɨm sɨm/	'tense, tight (thing)' (4405.)
	c.	<i**szp**aan>	[ʔišp(')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 <**p**aŁ> [paɬ] (4231.) : X_{Ch} <**b**ar> [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 <b> 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>	<ʊe>	<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. <**t**iɛí> 'to sleep' (3291.) : X_G [**t**i:ki] ~ [**t'**i:ki] (G-SH)
b. <ju**t**u> 'tree, pole' (3989.) : X_G [hu**t**u] ~ [hu**t'**u] (G-SH)

Denoting a voiced alveolar stop, the grapheme <d> only occurs after nasals.

(4. 112) a. <ton**d**ón> [ton**d**on] /ton**t**on/ 'turtle' (4596.)
b. <cun **d**à> [kun**d**a] /kun **t**a/ 'go with god!' (1821.)
c. <szan**d**aa> [šan**d**a:] /šan**t**a/ '*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. <ti**szt**aŁa> /tišta↯a/ '(the one) who breaks wind/farts' (4588.)
b. <tu**Ł**tuc> /tu↯tu-k/ 'instrument for piercing, lance' (4603.)
c. <eŁa**ct**uma> /ʔe↯ak tuma/ 'tongue of deer = type of herb' (3802.)
d. <to**ct**oc> /toktok/ 'mockingbird' (4590.) [L-M]
e. <szu**Ł**téru> /šu↯teru/ '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>, <ɛ>, <ɛk> 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>	<ʊe>	<u>	<e>	<o>	<a>
<c>	-	+	+	-	+	+
<qu>	+	-	-	s	-	-
<ɛ>	+	+	+	+	+	+
<ck>	+	+	s	+	+	+
<ɛk>	s	-	-	-	-	-
<g>	-	-	s	-	-	s

	_<c>	_<qu>	_<ɛ>	_<ck>	_<g>
<t>_	+				
<s>_	+	+	+	+	
<sz>_	+		+	+	
<g>_	+	+			
<n>_					+
<Ł>_	+	+			
<gu>_		+			

According to La Parra's colonial orthographic convention, grapheme <ɛ> 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 <ɛ> and <ck> neither occur in complementary distribution with each other, nor with <c/qu>, which excludes them as allophones or allographs. The use of <ɛ> and <ck> is quite inconsistent. Both graphemes appear in identical lexical contexts and there are no clear minimal pairs (4. 114a).

(4. 114) a. <**ck**òmo> 'knee' (3935.) : <**ɛ**ómo> 'knee' (330.)
b. <**ck**ʊenʊe**ɛ**i> 'happiness, content' (3784.) : <**ɛ**ʊenʊe**qu**i> 'to be happy' (2207.)

The distribution of graphemes <c/qu> and <**ɛ**> 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) <ckʊenʊe**ɛ**i> 'happiness, content' (3784.) : <ɛʊenʊe**qu**i> 'to be happy' (2207.)

(4. 116) a. <**ɛ**únú> 'shadows' (3764.) - <**c**únu> 'to buy' (2178.)
b. <**ɛ**agui> 'to catch with lasso' (2135.) - <**c**agui> 'to cry' (2117.)
c. <szée**ɛ**e> 'small firewood' (4466.) - <szee**qu**e> 'rib' (4447.)

The phonemic interpretation is supported by minimal pairs und in the field notes of Campbell and Kaufman.

(4. 117) a. <**ɛ**agui> 'catch with lasso' (2135.) : X_G, X_{Ch} [**k'**aẇi] 'catch with lasso' (C&K-FN)
b. <**c**agui> '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 <ɛ> (4. 118), while <c/qu> and <**ɛ**> 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 <ɛ>, despite the fact that the comparative data suggest the presence of a glottalised velar stop.

(4. 118)	a.	<**ck**eguesza>	'anona, fruit' (3732.)	:	X_G	<**k'**e**ʔ**wesa> (G-Cam)
	b.	<jara**ɛ**u>	'spinach, *chipilin*' (3929.)	:	X_G	[hara**k**u] ~ [hara**k'**u] (G-SH)
	c.	<isza**ɛ**a>	'to drink' (2420.)	:	X_{Ch}	<iẍá**c'**aj> (Ch-MA)
	d.	<**ɛ**omo>, <**ck**ómo>	'knee' (330.), (3935.)	:	X_{Ch}	<**kʔ**o'mo> (Ch-MQ)
(4. 119)	a.	<**c**oséc>	'big' (3739.)	:	X_G	[**k**osek] (G-S)
	b.	<txo**c**o>	'grackle' (4649.)	:	X_G	[ɕ'o**k**o] (G-SH), (G-Cam)
	c.	<**ɛ**aragua>, <**c**aragua>	'woods' (3713.), (3714.)	:	X_G	[**g**ra^{g}wa] (G-RHG), (G-JS)
	d.	<meená**qu**i>, <na**ɛ**i>	'chilli' (4077.), (4139.)	:	X_G	[na**k**i] (X_G)
	e.	<**c**aŁi>	'smoke' (3702.)	:	X_{Ch}	<**c**ajlij> (Ch-MA)
				:	X_G	[**k'**aɬi] (G-SH)
	f.	<**c**agui>	'to cry' (2117.)	:	X_{Ch}	[**k**awiʔay] (G-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'VʔCV (see Campbell 1972a; § 4.1.2.2).

(4. 120) <**ck**ómo> 'knee' (3935.) : X_{Ch} [**k'**o**ʔ**mo] '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 *-ŋ*, *-y* and *-ʔ*, i.e. CVCV ~ C'VCV-ŋ/y/ʔ.

(4. 121) <szu**c**a> [šu**k**a] 'pain' (4490.) → <szu**ɛ**aan> [šu**k'**a-ŋ] '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 ~ $CV_1C'V_1$-CV_2(C).

(4. 122) <s**a**cáy**a**> [sa**k**aya] 'raise' (3025.) : <sz**a**ɛar**i**> [ša**k'**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.	<Łamu**c**>	'shrimp' (4006.)	:	X_Y	<lamu_>, <samu_>	'fish' (Y-C), (Y-V)
	b.	<maŁʊe**c**>	'firewood' (4056.)	:	X_G	[maɬi**ʔ**] ~ [maɬe**ʔ**]	'firewood' (G-JS)
	c.	<púpu**c**>	'mat' (4338.)	:	X_G	[pupu**ʔ**]	'mat' (G-RHG)
	d.	<szúní**c**>	'pot' (4507.)	:	X_G	[suni**ʔ**]	'pot' (G-SH), (G-JAP)
	e.	<guarú**c**>	'net' (3844.)	:	X_G	[waru**ʔ**]	'net' (G-SH), (G-JS)
	f.	<mu**c**>	'we, 1p' (4089.)	:	X_G, X_{Ch}	[mu**h**]	'we, 1p' (G-SH)
	g.	<auŁá**c**>	[ʔawɬak] (3653.)	:	X_Y	<aljua**t**> [ʔaɬ-wat]	'tortilla griddle' (Y-V)

The opposite process is also attested: some cognates that end in *-V* or *-V?* 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 mis-interpretation.

(4. 124)	a.	<szúni>	[šuni_]	'star' (4504.)	:	X_{Ch} <xunik>	[šuni**k**] (Ch-F)
	b.	<alu>	[ʔalu**ʔ**]	'macaw' (3608.)	:	X_{Ch} <caluck>	[k-ʔalu**k'**] (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.	<suɛu**ck**iɛ>	b. <ɛaguiɛiŁa>
		su**k'**u-**k'**i-**k'**	**k'**awi-**k'**i-ɬa
		tie-AP-INSTR	catch with lasso-AP-AGT
		'instrument to tie sth. up' (4391.)	'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.	<tiŁti**ck**>	[tiɬti**k'**]	'black' (4578.)	<	Pipil *tiltik*	'black' [C-85]
	b.	<pʊeŁta**ɛ**>	[pɨɬta**k'**]	'arrow' (4350.)	:	X_{Ch} <pwiɻ'ta**k'**>	'bow and arrow' (Ch-MQ)
	c.	<gui**ɛi**ɛ>	[wik'i**k'**]	(4332.)	:	X_{Ch} <jishí-guick> [hiši wi**k'**]	'grinding stone' (Ch-P)

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)	<jaɛhʊe>	[**h**ači]	'scratch' (2440.)	:	X_{Ch} <cachic>	[**k**ači-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)	<mu**c** pula>	[mu**k**pula]	'we make' (466.)	:	X_{Ch} <mu**g**pula>	[mu**h**-pula]	'we make' (Ch-Z)

Graphemes <c/qu> and <ɛ> may be phonemicised as *k*, graphemes <ɛ> 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) <charraʊen> [čaraʔɨn] '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>	<ʊe>	<u>	<e>	<o>	<a>
<h>	s	-	s	-	-	-

(4. 130)
a. <Łóme **h**ui> [ɬome ʔuy] 'tepid water' (4029.)
b. <saraŁ **h**uy> [saraɬ ʔuy] 'cold water' (4373.)
c. <tata **h**ipi> [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 escrive 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-Łà> [tahna-ɬaʔ] '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 *ć'*. 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>, <ɛh>, <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>	<ʊe>	<u>	<e>	<o>	<a>
<ch>	+	+	s	+	+	+

Campbell (1972:187) observed that the alveo-palatal affricate *č* is restricted to recent loanwords.

(4. 133)	a.	<chʊey>	[čɨy]	'little, few' (3701.)	<	pM **tyin* 'small', CHR *č'ix*, KCH *čutin* [K-03]
	b.	<chʊerʊeɛʊe>	[čɨrik'ɨ]	"chico, pequeño" (3697.)	<	LEN *ć'iris* 'small' [C-78]; PIP *čupi* 'little' [C-85]
	c.	<chegche>	[čehče]	"boca rota" (3690.)	<	pM **čexe* 'woodpecker' [K-03]
	d.	<chagui>	[čaᵍwi]	"duro" (3688.)	<	WM *čaw 'hard, stiff'* [C-71]
	e.	<poch poch>	[poč poč]	"los bofes" (4314.)	<	pK *pospo ʔy*, ZOQ *pukpuk* [C-77]
	f.	<jachʊe>	[hačɨ]	"recoger" (2445.)	<	EM **xa ʔč* 'to harvest' [K-03]
	g.	<choo>	[čo]	"batir chocolate" (2200.)	<	PIP *čukulat* 'čocolate' [C-85]
	i.	<acha>	[ʔača]	"hacha" (3580.)	<	Sp: *hacha* '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) <**ch**agui> [**č**awi] 'hard thing' (3688.) : <**sz**agui> [**š**awi] '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. <**sz**eé> [še(ʔ)] 'opossum' (4465.) : X_{Ch}, X_Y <**ch**é> [**č**e(ʔ)] (Y-C), (Ch-F)
b. <**sz**aczi> [šak-si] 'to bleach' (3097.) : X_Y <**ch**áchi> [**č**ači] (Y-C)
c. <u**szt**iy> [ʔu**št**i] 'mother-in-law' (4715.) : X_G <u**č**i> [ʔu**č**i] (G-S)

Etymological comparison shows that *č* in Maldonado-Xinka –if attested in a non-borrowed form– can sometimes be correlated with *ȼ′* in X_Y (4. 136). The reverse is also attested: cognate forms that occur in the ALS with *ȼ′* are attested in the comparative data with *č or s* (4. 137). Campbell and Kaufman (see field notes) identify a regular sound change *ȼ′* > *č′* before front vowels *i* and *e* in X_Y, which explains the divergence.

(4. 136) X_M <múchu> : X_Y <canmutz'urru>
[mu**č**u] [kan mu**ȼ'**uru]
'lame, crippled' (4091.) 'let's bow down!' (Y-C)

(4. 137) a. <txáma> [ȼ'ama] 'good, well' (4637.) : X_Y <san> [san] (Y-C)
b. <txinána> [ȼ'inaʔna] 'scorpion' (4647.) : X_G <čináʔna> [činaʔna] (G-S)
: X_Y <chinaney> [činaney] (Y-C)

The grapheme <ɛh> 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 <ɛh> 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) <ja**ɛh**ʊe> 'scratch' (2440.) < EM **xa ƛč* 'harvest'; pCM **xoč* 'scratch' [K-03]
<ja**ch**ʊe> '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 <ɛh> occurs. In some cases <sz> will be interpreted and rendered as *č*.

4.3.1.2.2 Alveo-dental affricate

The alveo-dental affricates *ȼ* and *ȼ′* 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 *ȼ′* 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 *ȼ′* rather than *ȼ*, as it is suggested by the comparative material.

Table 4. 12: Distribution of grapheme <tx> representing *ȼ′*

	<i>	<ʊe>	<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 *ȼ′* 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 *č* instead of *ȼ′* in the comparative data (see § 4.1.2.2, § 4.1.3.2).[122]

(4. 139)	a.	<**tx**aguí>	[ȼ'awi]	'to pinch, scratch' (3396.)
	b.	<**tx**ʊeguʊe>	[ȼ'ɨwɨ]	'tender corn, *camagua*' (4656.)
	c.	<**tx**inána>	[ȼ'inaʔna]	'scorpion' (4647.)
	d.	<**tx**úma>	[ȼ'uma]	'to kiss' (3401.)
	e.	<**tx**ege>	[ȼ'ehe]	'Chiquimulilla, *toponym*' (4643.)
	f.	<**tx**oco>	[ȼ'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 *ȼ′*; i.e. the ALS-grapheme <tx> cannot be correlated with the sound *š* 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.	<pa**tx**i>	[paȼ'i]	'to grind' (2843.)	:	<paa**sz**í>	[pa:ši]	'to grind' (2837.)
	b.	<po**tx**a>	[poȼ'a]	'to wash' (2933.)	:	<po**sz**a>	[poša]	'to wash' (2927.)
	c.	<ma**tx**i>	[maȼ'i]	'to fry' (2656.)	:	<ma**sz**i>	[maši]	'to fry' (2662.)
	d.	<gui**tx**u>	[wiȼ'u]	'to flog' (2370.)	:	<gui**sz**u>	[wišu]	'to flog' (2375.)
	e.	<**tx**ʊeri>	[ȼ'ɨri]	'to cut' (3412.)	:	<**sz**ʊérʊe>	[šɨ:rɨ]	'to strike, hit' (3186.)

Campbell and Kaufman (see field notes) indentify a regular process of deaffrication of *ȼ′* > *s* in the varieties of X_G, X_{Ch}, X_{Jum}; in X_Y *ȼ′* is preserved and changes into *č′* before front vowels *i* and *e*. In the ALS, several entries that vary *ȼ′* and *s* / *š* can be shown to be derived from forms which originally feature the sound *ȼ′*. Cognate forms in X_Y give *ȼ′* in most of these cases. Indicative for the direction of sound change are Maya loanwords that feature *ȼ′* (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 *pa**ɕ** 'tamal'	>	X_M	<pa**tx**i> 'to grind' (2843.)
			X_M	<paa**sz**í> 'to grind' (2837.)
b.	pM ***ty**'uy 'bend corn'	>	X_M	<**tx**υeguυe> 'bend corn' (4656.)
			X_G	[**ɕ**i**ɨ**wi**ɨ**] : X_G [**s**uwe] 'to bend corn' (G-JS)
			X_{Ch}	<**x**igüí> 'to bend milpa' (Ch-F)
c.	KCH ***ɕ'**ero* 'to twist'	>	X_M	<**s**e**Ł**è> '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.	<igui**tx**i> [ʔiwi**ɕ**'i] 'hear' (2399.)	→	<úi**sz**in> [wiši-n] 'I heard' (2400.)
b.	<szagua**tx**a> [šawa**ɕ**'a] 'to sow' (3140.)	→	<sau**sz**án> [šawša-n] 'he sowed' (3141.)
c.	<**tx**unic> [**ɕ**'unik] 'bag' (4653.)	→	<**sz**unuum pati> [šunu-m pati] 'long blanket' (4511.)

There are a few cases where the deaffrication of the medial consonant *ɕ'* > *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.	<qui**tx**i> [ki**ɕ**'i] 'roast, fry' (3013.)	→	<**ɛ**i**sz**i> [k'iši] 'roast, fry' (3014.)
b.	<igui**tx**i> [ʔiwi**ɕ**'i] 'to hear' (2399.)	→	<uý**szɛ**i> [ʔuyšik'i] '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	[**ɕ**'oko]
			:	X_G, X_{Ch}	[**s**oko]
b.	<txáma>	'good' (4637.)	:	X_G, X_{Ch}	[**ɕ**'ama]
			:	X_G, X_{Ch}, X_{Jum}	[**s**ama]
			:	X_Y	[**s**an]
c.	<txυemυe>	'to irrigate' (3406.)	:	X_G	[**ɕ**'**ɨ**m**ɨ**]
			:	X_G	[**s**uma]
			:	X_{Ch}	[**s**umu]
d.	<txúma>	'to kiss, suck' (3401.)	:	X_G, X_Y	[**ɕ**'uma]
			:	X_{Ch}	[**s**uma]

In several other instances, roots that occur with *s* and *š* before high and low vowels in the ALS are attested with *ɕ'* in X_Y (as well as X_{Ch} and X_G).

(4. 145)

a.	X_Y, X_G	**ɕ**'uku	:	X_M <**s**uckù> (3077.)	:	X_G, X_{Ch}	[**s**uk'u]	'to tie, bind'
b.	X_Y	ʔi**ɕ**'api	:	X_M <i**sz**api> (2430.)	:	X_G, X_{Ch}	[ʔišapi]	'to leave'
c.	X_Y, X_{Ch}	**ɕ**'arara	:	X_M <**s**ararà> (4374.)	:	X_G, X_{Ch}, X_{Jum}	[sararaʔ]	'cold'
d.	X_Y, X_{Ch}, X_S	**ɕ**'ama	:	X_M <**s**áma> (4372.)	:	X_G	[**s**ama]	'darkness'
e.	X_Y, X_{Ch}	**ɕ**'**ɨ**ma	:	X_M <**s**υema> (4400.)	:	X_G, X_{Ch}	[**s**i**ɨ**ma]	'night'
					:	X_S, X_Y	[**s**ɪʔma]	

e. $X_{G,}$ X_{Ch} **ȼ'**imi : X_Y, X_{Ch} **č**imi
: X_M <**s**ími> (3055.) : X_G [**s**imi] 'extinguish'

There is one case in the ALS, where <tx> and <s> occur in an identical context; the original form seems to be *ȼ'*.

(4. 146) <**tx**uguinaqui> : <**s**uguinaqui>
[**ȼ'**uwi naki] [**s**uwi naki]
'chili, *chiltepe*'(4650.) 'chili, *chiltepe*' (4396.)

As pointed out above, Campbell and Kaufman have identified a change of *ȼ' > č* before *i* and *e* in X_Y. The ALS does not include any clear examples for *ȼ'* preceding *e*. However, examples from the ALS that feature <tx> or <s> before *i* can be correlated with cognates in X_Y that have changed the sound to *č*.

(4. 147) a. <**tx**inána> 'scorpion' (4647.) : X_Y <**ch**inaney> [činaney] (Y-C)
: X_G <**č**iná?na> [čina?na] (G-S)
b. <pa**tx**i>, <paaszi> 'grind' (2843.), (2837.) : X_Y <pa**ch**i> [pači] (Y-C)
c. <qui**tx**i>, <ɛiszi> 'roast, fry' (3013.), (3014.): X_Y <ki**ch**i> [kiči] (Y-C)
d. <**s**ími> 'extinguish' (3055.) : X_Y, X_{Ch} <**ch**ími>[**č**imi] (Ch-F)

There are several examples where *š* resulting from deaffrication has changed into *č* or *h* in X_Y and X_G, or into *r* in X_{Ch}.

(4. 148) a. X_M <pa**tx**i> (2843.), X_G, X_{Ch} pa**ȼ'**i : X_M <paa**sz**i> (2837.)
: X_{Ch} <pa**rr**i> 'millstone' (Ch-F)
: X_Y <pa**ch**i> 'to grind' (Y-C)
b. X_M <po**tx**a> (2933.), X_G, X_{Ch} po**ȼ'**a : X_M <po**sz**a> (2927.)
: X_G [po**č**a] 'wash laundry' (G-SH)
: X_{Ch} <po**'ɼ**ak'> 'wash-place' (Ch-MQb)
: X_Y <pu**j**a> 'to wash' (Y-C)
: X_G [pu**h**a] (G-JS)
c. X_M <qui**tx**i> (3013.), X_G ki**ȼ'**e (SH) : X_M <ɛi**sz**i> (3014.)
: X_Y <ki**ch**i> 'roast, fry' (Y-C)

Deaffrication can also result in a change of *ȼ' > t*. In some cases this change may be triggered by the insertion of a syllable (4. 149a).

(4. 149) a. X_{Ch} <**tz**umikí> : X_M <**t**ujámi>
[**ȼ'**umi-ki] [tu-ha-mi]
'spit' (Ch-F) 'spit' (3307.)
b. X_Y, X_{Ch} <**tz**'arará> : X_{Ch} <**t**arara> : X_M, X_G <**s**ararà>
[**ȼ'**arara] [**t**arara?] [**s**arara?]
'it is cold' 'it is cold' (Ch-MQ) 'cold' (4374.), (G-SH)

The variation of *t ~ š* attested in the corpus in a few cases seems to be related to this process of deaffrication of *ȼ'* (4. 150).

(4. 150) a. X_M <i**t**úŁ> [?i**t**u**ɬ**] 'flea' (3905.) : X_{Ch} <?i'**š**ul> [?i**š**u**ɬ**] 'flea' (Ch-MQa)
b. X_M <**t**úyu> [**t**uyu] 'to begin' (3368.) : X_M <**s**oyo> [**s**oyo] 'to begin' (3072.)

Campbell identified the affrication of *š > ȼ'* 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 ~ C'V?CV), or (2) when followed by *-V(n /y / ?)* (see Campbell 1972a:187; 1997:166; see also § 4.4.6 for examples). Thus, *ȼ'* functions as the glottalised equivalent of the sibilants *s* and *š*. 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 *ć′>š*.

In accordance with glottalisation rules (see § 4.4.6), *s* becomes *ć′* in Mayan loans that exhibit glottalisation of a root consonant (see Campbell 1972a:188).

(4. 151) pM *si:naʔŋ > X_M <txinána> [ć'inaʔna] 'scorpion' (4647.)

In Mayan loans, *č* may change into *ć′* (4. 152); *č* is not originally contrastive in Xinkan (Campbell 1972a; see above).

(4. 152) a. EM **čam* 'sour' > X_M <txamʊe> [ć'amɨ] 'sour, acidic thing' (4640.)
b. CHR *poxč'* 'to wash' > X_M <potxa> [poć'a] 'to wash' (2933.)
c. pCh **č′il* 'to toast, fry' > X_M <quitxi> [kić'i] 'to roast, fry' (3013.)

There are two examples in X_{Ch} where *t* may be replaced with *ć′*. In both cases the ALS gives the cognate with *t*.

(4. 153) a. <**ck**otòro> [k'otoro] 'flying ant' (3749.) : X_{Ch} <co**t**óro> (Ch-C), <co**tz**oy> (Ch-P)
b. <u**t**uymag> [ʔutuy-mah] 'tail' (4711.) : X_{Ch} <**t**umay> (Ch-C), <**tz**umay> (Ch-F)

Graphemes <tx> and <tz> will be phonemicised as *ć′*. 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>, <Ł> and <gu>.

Table 4. 13: Distribution of grapheme <m> in the ALS

	<i>	<ʊe>	<u>	<e>	<o>	<a>
<m>	+	+	+	+	+	+

	_m
c_	+
sz_	+
g_	+
j_	+
r_	+
Ł_	+
gu_	+

(4. 154) Distributional aspects of *m* in the ALS

mi	<miya>	[**m**iya]	'hen' (4080.)
mɨ	<mʊeya>	[**m**ɨya]	'to help' (2719.)
mu	<múra>	[**m**ura]	'fresh ear of corn' (4106.)
me	<meme>	[**m**eme]	'mad, crazy' (4076.) [< KCH *me:m* "mudo"]
mo	<móla>	[**m**ola]	'moon' (4085.) [< XNK *muɬ* 'white'?]
ma	<mácu>	[**m**aku]	'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> [ša**m**piya] /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) <sʊen au> [sɨ**n** ʔaʔu] ← [sɨʔma] + [ʔaʔu] 'black corn' (4403.)

In their field notes, Campbell and Kaufman indicate the glottalised resonant *m̓* 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>	<ʊe>	<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>	[neɬek]	'we, 1p' (65.)	< *na-ɬik
b.	<nen>	[nen]	'I, 1s' (56.)	< *na-nin
c.	<netaca>	[netaka]	'to push' (2741.)	
d.	<ɛeneya>	[k'eneya]	'banana, plantain' (3733.)	[< Sp. *guineo*]
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]	'1s, *pronoun*' (62.)
						/nanin/	[naniŋ]	(G-SH)
	b.	<uchún>	[ʔučun]	(4668.)	:	X_G	[učuŋ]	'papaya' (G-SH)
						X_{Ch} <uuchum>	[ʔučum]	(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 *ȼ'* it becomes *n*, and *ȼ'* can be realised as *s* or *š*.

(4. 159)	a.	<tamptxi>	[tampȼ'i]	/tanȼ'iki/ ~ /tanšiki/	'to twist' (3215.)
	b.	<simpóro>	[simporo]	/sɨn 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 *ń* 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 *ɬ* 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 post-alveolar fricative *š*. 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:

	<i>	<ʊe>	<u>	<e>	<o>	<a>
<s>	+	+	+	+	+	+
<z>	+	-	-	+	s	s
<sz>	+	+	+	+	+	+

(b) Graphemes in intervocalic position:

	<i>	<ʊe>	<u>	<e>	<o>	<a>
<s>	-	+	-	+	(+)	+
<sz>	+	+	+	-	(+)	+

(c) Graphemes in consonantal clusters:

	_s	_z	_sz
c_	+	+	+
ɛ_	+		
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 *š*. Campbell identified complementary distribution for both sounds and defined them as allophonic variants of a single fricative phoneme *ṣ*, with *š* 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	<símì>	[simi]	'extinguish' (3055.)
sɨ	<sʊema>	[sɨʔma]	'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 *š* in initial position in the ALS

ši	<szinác>	[šinak]	'bean' (4472.)
šɨ	<szʊema>	[šɨma]	'mouse' (4527.)
šu	<szúɛa>	[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	-		
ɨsɨ	<ʊesʊeɛʊe>	[ʔɨsɨk'ɨ]	'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.)
i̱ši̱	<mʊesza>	[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 *i̱*, 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.	<**s**ajac>	(Jut-V)	:	<**x**ajác>	(Y-V)	'tooth'
	b.	<**s**ijmatig>	(Jut-V)	:	<**s**imatij>	(Y-V)	'black'
	c.	<**s**oroni>	(Jut-V)	:	<**s**orone>	(Y-V)	'boy, youngster'
	d.	<gic**sh**e>	(Jut-V)	:	<i**x**e>	(Y-V)	'stone'
	e.	<ge**s**alia>	(Jut-V)	:	<u**s**ajle>	(Y-V)	'head'

In the semi-speaker data, *s* between high vowels can be identified mostly as an alternation of *š* or *ɕ′* or as a phonetic feature in loanwords.

(4. 166)	a.	[mu**s**i]	'hair' (JS)	:	[muši?]	'hair, bead' (G-JS)	[L-MZ]
	b.	[?u**s**u]	'fly' (JS)	:	[?ušu]	'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)	<**s**áma>	[sama / ɕ'ama]	'darkness' (4372.)
	<**sz**áma>	[šama]	'inside, *preposition*' (4429.)
(4. 168)	<**s**ʊema>	[si̱?ma]	'night, black thing' (4400.)
	<**sz**ʊema>	[ši̱ma]	'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.	<**s**acáya>	'to raise, lift' (3025.)	:	<**sz**aɕari>	'to scare away' (3092.)
	b.	<**s**aŁáɕa>	'to raise, lift' (3030.)	:	<**sz**aŁ>	'good' (4428.)
	c.	<**s**ipani>	'hell' (4386.)	:	<**sz**ipi>	'to hurt by cutting' (3158.)
					cf. L-N: *šipewa* 'flay, peel, strip' [K-92]	

Grapheme <s> occurs in initial position of loanwords from Mayan (4. 170a-c, f?), Nahuan (d-f) or Spanish (g-h).

(4. 170)	a.	<sicar>	[sikar]	'tobacco' (4381.)	< L-M: pM *si:k' 'tobacco' [C-72]
	b.	<sʊemp>	[sɨmp]	'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: *siwapahtli* 'medicinal plant' [K-92]
	e.	<sompe>	[sompe]	'pine nut' (4389.)	< L-N: *ȼompamitl* 'coral tree' [K-92]
	f.	<seŁè>	[seɬe]	'put aside' (3049.)	< L-N: *šeloa* 'split, cut' [K-92]
					< L-M: KCH *ȼero* 'tear (cloth)' [CH-99]
	g.	<salvia>		'medicinal plant' (4371.)	< L-S: *salvia*
	h.	<selíca>	[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 *ȼ'* in the same context. In most cases *ȼ'* can be identified to result from a process of affrication that turns *s* into *ȼ'* 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 [**s**iru] (G-JAP), X_{Ch} *siru (Ch-F)
	d.	<sʊema>	[sɨʔma]	'night' (4400.)	:	X_{Ch} <**tz**euma> (Ch-F), X_Y <**tz'**üöma> (Y-C)
	e.	<suckù>	[suk'u]	'tie, fasten' (3077.)	:	X_G [**ȼ'**uku] (G-RHG), X_Y <**tz'**ucu> (Y-C)
	f.	<surumay>	[surumay]	'type of flower' (4397.)	:	X_G [**s**urumay], X_{Jum} [**ȼ'**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 **s**awak < WM *čaw* 'hard' [C-71]
	k.	<samu>	[samu]	'to catch' (1069.)	:	X_G [**ȼ'**a'muʔ] 'he bit' (G-SH)
	l.	<sáma>	[sama]	'dark' (4372.)	:	X_{Ch} <**tz**amá> (Ch-F), X_Y <**tz'**amá> (Y-C)
	m.	<sararà>	[sararaʔ]	'cold' (4374.)	:	X_{Ch} <**tz**arará> (Ch-F), X_Y <**tz'**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 Nahuan where the original sound of the donor language *š* changed into *s*.

(4. 172)	a. POQ **čenaq* "frijol"	>	<szinác> [**š**inak] 'beans' (4472.)	: [**ş**inak] "bean" (G-Cam)
	b. pCh **č'ax* "amargo"	>	<szayá> [**š**aya] 'sour' (4463.)	

[123] Much of the variation of *s* and *š* in cross-data comparison also has to accounted for 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 *š* and *s* in cognate forms that are attested with *š* in the ALS (4. 173). Given that the ALS is earlier, we may assume that *š* changed into *s*. However, the Zeeje-manuscript does not distinguish *s* and *š* graphemically. This could be interpreted as an under-representation of sound differences, or may indicate that *s* and *š* 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 *š*.

(4. 173)
a. <**sz**uyá> 'older brother' (4523.) : X_{Ch} **š**uya (Ch-F) ~ **s**uya (Ch-S)
b. <**sz**ʊema> 'night' (4527.) : X_G **š**ɨma (G-JAP) ~ **s**uma (G-SH); X_{Ch} **s**uma (Ch-S)
c. <mu**sz**i> 'hair, beard' (4112.) : X_G mu**š**i (JS) ~ mu**s**i (JS)

Evidence for the direction of change is provided by a regular pattern in which *š* before high and low vowels in the ALS is correlated with *s* in X_Y.

(4. 174)
a. <**sz**aŁ> 'good' (4428.) : X_Y <**s**al> (Y-C)
b. <**sz**agú> 'village' (3103.) : X_Y <**s**agú> (Y-C)
c. <**sz**ápu> 'cotton' (4453.) : X_Y <**s**apu> (Y-C)
d. <**sz**ʊema> 'night' (4527.) : X_Y <**s**uma> (Y-C)
e. <**sz**úunú> 'deep' (4508.) : X_Y <**s**unu> (Y-C)
f. <**sz**uyá> 'older brother' (4523.) : X_Y <**s**uya> (Y-C)
g. <**sz**urúmu> 'boy, youngster' (4517.) : X_Y <**s**orone> (Y-C)
h. <juu**sz**í> 'head' (3994.) : X_Y <hu**s**al> (Y-C)
i. <mu**sz**i> 'hair, beard' (4112.) : X_Y <mo**s**al> (Y-V), <mu**s**al> (Y-C)

This pattern may be connected to the process of deaffrication *ȼ′* > *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) *ȼ′* > *s*, (2) *s* > *š*.

The change from *s* to *š* 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 *š* 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. *š* or *s*, is not definite.

(4. 175)
a. <gua**sz**aɛo> [wa**š**ako] 'throw stones' (2313.) : X_M <gue**s**eke> [we**s**eke] 'throw' (2340.)
b. <**sz**urumo> [**š**urumu] 'boy, youngester' (2.) : X_{Ch} <**ss**orone> [**s**orone] 'young' (Ch-F)

The non-contrastive retroflex sound *ʂ* 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 *š* > *r* in initial and intervocalic position before high and low vowels.

(4. 176)
a. <szína> [**š**ina] 'urine, urinate' (3152.) : X_{Ch} [**r**ina] (Ch-C, Ch-F, Ch-MQ)
b. <szinác> [**š**inak] 'beans' (4472.) : X_{Ch} [**r**inak] (Ch-C, Ch-F, Ch-MQ)
c. <szuckimaŁ> [**š**uk'imáɬ] 'charcoal' (4492.) : X_{Ch} [**r**ukimaɬ] (Ch-C, Ch-F, Ch-MQ)
d. <szeque> [**š**eke] 'chest' (326.) : X_{Ch} [**r**eke] (Ch-F)
e. <szeé> [**š**e] 'opossum' (4465.) : X_{Ch} [**r**e] (Ch-P)
f. <szacatxa> [**š**akaȼ'a] 'to steal' (3088.) : X_{Ch} [**r**ak'aȼ'a] (Ch-F, Ch-P)
g. <szagú> /**š**awu/ 'sitting, seated' (3103.) : X_{Ch} [**r**awu] (Ch-C, Ch-F, Ch-P)
h. <szaczi> [**š**ak-si] 'to bleach' (3097.) : X_{Ch} [**r**ari] (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 *ȼ′*. Otherwise entries with mid vowels preserve an alveolar or post-alveolar fricative (4. 177).

(4. 177) a. <sema> [**s**ema] 'fish' (4380.) : X_{Ch} [**s**ema] (Ch-C, Ch-F)
b. <szoto> [šoto] 'sherd' (4487.) : X_{Ch} [šutu] (Ch-F)

The change can also affect consonants in medial (4. 178) or syllable-final position (4.179).

(4. 178) a. <juuszí> [hu:ši] 'head' (3994.) : X_{Ch} [hu**r**i] (Ch-C, ChF, Ch-P)
b. <puʋeszʋec> [pi:šik] 'jug' (4363.) : X_{Ch} [p**r**i**r**i] (Ch-C, Ch-MQ)
c. <uszúmu> [ʔušumu] 'to smell' (3480.) : X_{Ch} [ʔu**r**umu] (Ch-C)
d. <mászа> [maša] 'mud' (4068.) : X_{Ch} [ma**r**a] (Ch-C, Ch-MQ)
e. <szuszumí> [šušumi] 'coati' (4522.) : X_{Ch} [**r**u**r**umi] (Ch-C, Ch-P)

(4.179) a. <coszco> [koško] 'buzzard' (3750.) : X_{Ch} [ku**r**kur] (Ch-MQ)
b. <tʋeszɛʋe> [t**r**išk**r**i] 'far' (3657.) : X_{Ch} [t**r**i**r**ka] (Ch-MQ), [tu**r**ku] (Ch-Z)

The shift *š* > *r* does not occur in forms that show no variation with *š* 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 *ʂ* by the respective authors, it needs to be taken into account that the semi-speakers of X_G also change initial *š* into *r* in some words (see § 4.1.2.4). All occurrences of initial *r* in X_{Ch} or *ʂ* 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 *š* and *ɬ* 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 *ɬamu* or *ɬamuk* 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) *š* can be identified as the original sound that occurs in most cognates and has changed into *ɬ* in the given examples.

(4. 180) a. X_Y <samu> [**s**amu] 'fish' (Y-V) : X_M <Łamuc> [**ɬ**amu-k] 'shrimp' (4006.)
b. X_G [šuši] 'beard' (G-RHG) : X_M <juŁi> [hu**ɬ**i] 'to shave' (2515.)
c. X_M <puʋeszʋec> [pi:šik] 'jug' (4363.) : X_G [p**ɬ**ik] 'gourd' (G-JS)

In X_G and X_{Ch}, there is an unconditioned change from *ɬ* to *š* in word- and syllable-final position. In all examples given below, *ɬ* can be identified as the earlier form.

(4. 181) a. <yɛaŁ> [ʔika**ɬ**] 'one' (4747.) : X_G ʔikaš (G-SH)
b. <guapáŁ> [wapa**ɬ**] 'seat' (3839.) : X_{Ch} wapaš (Ch-JC)
c. <pagtaan> [pa**h**ta:n] 'to pay' (2811.) : X_{Ch} pašta (Ch-F), (Ch-JC)
d. <pʋeŁta> [p**ɬ**ta] 'arrow' (2988.) : X_{Ch} poštak (Ch-F), puškak (Ch-F)

The opposite case is also attested. In some forms from X_G, X_{Ch} and X_Y *š* changes into *ɬ* in syllable-final position as the result of vowel deletion.

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[124] The only form with initial *r* indicated by Schumann is the article *ra*.

[125] The occurrence of *ʂ* 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* > *ʂ* (see Campbell 1998:19-20), while in Xinka we find a conditioned change *š* > *ʂ* > *r* .

(4. 182) a. <iszaca> [ʔišaka] 'to drink' (2420.) : X_G ʔeɬka (G-SH), (Y-C)
b. <guaszaŁi> [wašaɬi] 'to dress' (2319.) : X_{Ch} waɬti- (Ch-MQb)

Distributional analysis and the identified patterns of sound change suggest that in Maldonado-Xinka *s* and *š* are two separate phonemes that are derived from other sounds. The sound changes *ȼ′* > *s* and *s* > *š* 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 *š*.

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 <ʊe>; 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> not <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. <tenjúszic> [ten hu:šik] 'vulture' "quebrantahueso" (4563.).

In the comparative data *h* occurs regularly in word- and syllable-final position where it may alternate with *ɬ* and *š* (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>	<ʊe>	<u>	<e>	<o>	<a>
<g>	+	-	-	-	-	-
<j>	-	+	+	-	+	+

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. <**j**ururú> [hururuʔ] 'hot (climate)' (3987.)
b. <eŁa**j**a> [ʔeɬaha] 'tongue' (356.)
c. <**g**iní> [hini] 'stomach, belly' (3819.)
d. <ʊelʊe**g**> [ʔiɬih] ~ [ʔiɬig] '*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> [hašu] 'pig' (3945.) : X_G <ášu> [ʔašu] (G-S)
: X_{Ch} <na 'ʔaš^{r}u> (Ch-MQb)

(4. 185) <huca> [huka] (?) 'to do' (Ch-Z) : X_M <uɛa> [ʔuka] 'do, have' (1990.)

Glottal and post-alveolar fricatives *h* and *š* alternate in certain contexts in the ALS, which is also attested in the comparative corpus. In most of these cases, *h* is the morphologically transparent sound and therfore *h* changed into *š*.

(4. 186) a. X_M <juutuc> [**h**u:tuk] 'soot, coal' (3992.) : X_M <szuutúc> [**š**u:tu-k] (4520.)
: X_{Ch} <utuc> [ʔutu-k] (Ch-C)
b. X_M <jʊeya> [**h**iya] 'to cut' (2568.) : X_{Ch} <suyay> [suyay] (Ch-F)
: X_G [šiya] (G-RHG)
c. X_M <jógua> [**h**owa] 'lion, puma' (3955.) : X_{Ch} <xiguy> [šiwi] (Ch-F)[126]
X_{Ch}, X_Y [**h**iwi]

We also find evidence for the reverse change from *š* to *h* in initial and medial position (4. 187). Cognate forms in X_Y that preserve *s* (see above) confirm the direction of change. In the majority of these cases, the ALS features *š* where cognate forms in X_G and X_{Ch} have *h*. Occasionally, the ALS attests both forms (4. 187a-b), which suggests that the shift from *š* to *h* was a change in progress in eighteenth-century Maldonado-Xinka.

(4. 187) a. X_M <aszʊe> [ʔa**š**ɨ] 'this' (3659.) : X_M <agʊé> [ʔa**h**ɨ] 'this' (3605.)
b. X_M <szuszí> [**š**uši] 'beard' (4521.) : X_M <juŁi> [**h**uɬi] 'to shave' (2515.)
c. X_M <aszin> [ʔa**š**in] 'no' (3654.) : X_G [**h**in] 'no'
: X_{Ch} <hin> [**h**in] 'no' (Ch-MQ)
d. X_M <szurúŁ> [**š**urúɬi] 'squirrel' (4515.) : X_G <hurúłi> [**h**uruɬ] 'squirrel' (G-S)
e. X_M <száma> [**š**ama] 'in' (4429.) : X_{Ch} <jama> [**h**ama] 'in' (Ch-Z)
f. X_M <szandaa> [**š**anda] 'what?' (4434.) : X_G [**h**anda] 'how?' (G-JAP)
g. X_M <szeete> [**š**e:te] 'worm' (4467.) : X_{Ch} [**h**eta] 'firefly' (Ch-MQ)
h. X_{Jum} <salac> [**s**alak] 'ax' : X_M <jajŁa> [**h**ahɬa] 'hoe' (3916.)

The change from *š* to *h* is confirmed by some Mayan loans (4. 188) (cf. § 4.5).

(4. 188) L-M *paš 'to break' > X_M <pági> [pa**h**i] 'ravine' (4222.)
> X_{Ch} <paji> [pa**h**i] 'hole, burial' (Ch-C), (Ch-F)

It needs to be mentioned that the weakening of *s* > *h* –especially in syllable and word-final position– is a common feature in Central American Spanish (see Lipski 1985). In some cases in X_Y, *h* has been subsequently dropped and replaced by a glottal stop *ʔ*.

The ALS also provides evidence for a change from *ȼ′* to *h* (4. 189). The direction of this change is unambiguous as the root is a loan from Mayan that features *č* as the original sound which became *ȼ′* upon borrowing (see § 4.3.1.2). Although Maldonado de Matos gives both entries with different etymologies, comparative data confirm that we are dealing with a cognate form.

(4. 189) X_M <txamʊe> [**ȼ'**amɨ] 'sour, bitter' (4640.): X_M <jamʊe> [**h**amɨ] 'acidic thing' (3924.)
: X_Y <jámu> [**h**amu] 'bitter' (Y-C)

Between vowels *h* may change into *y* (4. 190). This change is only attested in a few cases and always occurs between vowels *a* and *i*. It is unconditioned and non-contrastive, but we may note that individual semi-speakers either prefer *h* or *y*.

[126] Fernandéz gives the term with the meaning 'coyote'.

(4. 190) a. X_M <jági> [ha**h**i] 'avocado' (3917.) : X_G, X_{Ch}, X_Y [ha**y**i] (G-JAP), (Ch-MQ), (Y-C)
X_G,X_{Ch},X_Y [hahi]
b. X_M <pági> [pa**h**i] 'to break' (4222.) : X_{Ch} [pa**y**i] (Ch-MQb)
X_{Ch}, X_Y [pahi]

(4. 191) X_M <ayaŁa> [ʔa**y**a**ɬ**a] 'woman' (3661.) : X_{Ch} [ʔa**h**a**ɬ**] (Ch-JC)
X_G,X_{Ch},X_Y, X_{Jum} [ʔaya**ɬ**(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) <jaɛhʊe> [**h**ač'**ɬ**] 'scratch' (2440.) : <cachic> [**k**ači-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 *ɬ*.

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>	<ʊe>	<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 *š* > *ʂ* > *r* that occurs only before vowels of sets 1/3, i.e. *i*, *ɨ*, *u* and *a* (4. 193, see also § 4.1.3.5, § 4.3.1.4.1).

(4. 193) a. X_M <szaŁ> [ša**ɬ**] 'good' (4428.) : X_{Ch} [ra**ɬ**]
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 *-ɬ* and *-š* (4. 194)

(4. 194) a. X_M <guapaŁ> [wapa**ɬ**] 'bench' (3839.) : X_{Ch} <guapar> [wapar] (Ch-JC)
b. X_M <cheŁna> [če**ɬ**na] 'disorder' (2194.) : X_{Ch} <cherna> [černa] 'loosen' (Ch-F)

There are a few examples of *š* 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 *š* 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 *š* > *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} <urrutí> [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 <tojlóni> [toɬoni] '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 [ɾ́] 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 *ɬ*. In the ALS, these sounds are represented by graphemes <l> and <Ł>. Distribution patterns of <l> and <Ł> show both graphemes in inconsistent usage (4. 204) as well as in complementary distribution.

Table 4. 18: Distribution of ALS-graphemes representing laterals

	<i>	<ʊe>	<u>	<e>	<o>	<a>
<l>	s	s	+	s	s	s
<Ł>	+	+	s	+	+	+

	_<l>	_<Ł>
<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, <Ł> 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, <Ł> most likely represents the lateral-fricative *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 <Ł> may follow <c>, <ɛ>, <g>, <j>, <r> and <gu>; after bilabial stops we find <l>.

(4. 197)	a.	<**Ł**ɪɛa>	[ɬik'a]	'to descend' (2595.)
	b.	<**Ł**ʊɛcʊe>	[ɬɨkɨ]	'to find' (2621.)
	c.	<**Ł**uri>	[ɬuri]	'rabbit' (4031.)
	d.	<**Ł**enga>	[ɬenka]	'pataxte cacao' (4023.)
	e.	<**Ł**ocama>	[ɬokama]	'to boil water' (2605.)
	f.	<**Ł**aɛugua>	[ɬak'uwa]	'son-in-law' (4005.)
(4. 198)	a.	<guapá**Ł**>	[wapaɬ]	'bench' (3839.)
	b.	<uguá**Ł**>	[ʔuwaɬ]	'ant' (4678.)
	c.	<pirii**Ł**>	[piriɬ]	'(the one) who sees, seer' (821.)
(4. 199)	a.	<u**Ł**ú>	[ʔuɬu]	'to fall' (3433.)
	b.	<ma**Ł**ʊec>	[maɬɨk]	'firewood' (4056.)
	c.	<pe**Ł**ana>	[peɬana]	'to slip' (2849.)

The grapheme <l> is attested between vowels of all vowel sets.

(4. 200)	ala:	<ipa**l**a>	[ʔipala]	'to bath' (2411.)
	ili:	<gui**l**íca>	[wiʔlika] ~ [ᵍwiʔli] (SH)	'to strip' (2346.)
	ila:	<ti**l**a>	[tiʔla] (G-SH, RHG)	'salty' (4576.)
	ali:	<a**l**iya>	[ʔaliya]	'to manifest, show' (2059.)
	uli:	<pu**l**i>	[puli]	'to clean' (2950.)
	ulu:	<yú**l**u>	[yulu]	'to smoothen' (3538.)
	ule:	<szu**l**e>	[šule]	'little fish' (4500.)
	ula:	<pù**l**a>	[pula] (G-SH, RHG, JS)	'to make' (391.)
	ɨla:	<jʊe**l**a>	[hɨla]	'to pour from jug' (2548.)
	elo:	<pee**l**ó>	[pe:loʔ]	'to dog' (4273.)
	ele:	<pé**l**e>	[pele]	'young lad' (4272.)
	olo:	<to**l**o>	[tolo] ~ [toʔlo]	'yellow' (4591.)
	ola:	<mó**l**a>	[mola] ~ [moʔla]	'moon' (4085.)

In Mayan, Nahuan and Spanish loanwords *l* is preserved (4. 201); however, in Spanish loans, *l* becomes *ɬ* in final position (see § 4.5.2.3). Occurrences of <l> in initial position can be identified as loanwords – there is one single exception where <l> precedes *u* in a Xinka form in initial position (4. 202).

(4. 201)	a.	<ti**l**i>	/ti**l**i/	'heat, to burn' (4258.) [L-M]
	b.	<yú**l**u>	/yu**l**u/	'to smoothen' (3538.) [L-M]
	c.	<a**l**ú>	[ʔa**l**u]	'macaw' (3608.) [L-M]
	d.	<to**l**o>	[to**l**o] ~ [toʔ**l**o]	'yellow' (4591.) [L-N]
	e.	<**l**aúsz>	[**l**awuš]	'nail' (4022.) [L-S]
	f.	<**l**agui>	[**l**awi]	'key' (4019.) [L-S]
(4. 202)		<**l**ungú>	/lunku/	'one-handed' (4030.)

Where <l> 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 <l> in medial position represent the consonantal cluster [ʔl] and which represent [l] in a true intervocalic context.

(4. 203)	a.	<gui**l**íca>	'naked' (2346.)	:	X_G	[ᵍwi**ʔl**i] (SH)
	b.	<ti**l**a>	'salty' (4576.)	:	X_G	[ti**ʔl**a] (SH, RHG)
	c.	<mu**l**a>	'palmtree' (4096.)	:	X_G <múʔla>	[mu**ʔl**a] (G-S)
	d.	<to**l**o>	'yellow' (4591.)	:	X_G <tóʔlo>	[toʔlo] (G-S)
	e.	<mó**l**a>	'moon' (4085.)	:	X_{Ch} <'moʔlΛ>	[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 <l> and <Ł> in medial position in non-contrastive alternation (4. 204a-b).

(4. 204)

a.	<u**Ł**ú>	:	<u**l**ú-ya>
	[ʔuɬu]		[ʔuluya]
	'to fall' (3433.)		'pull down' (3437.)
b.	<pʊeŁta**Ł**a>	:	<puŁta**l**a>
	[piɬta-ɬa]		[piɬtala]
	'bowman' (4351.)		'bowman' (4352.)
c.	<acuqui**Ł**a>	:	<acuqui**l**aŁi>
	[ʔakuki-ɬa]		[ʔakuki-la-ɬi]
	'vagabond' (3589.)		"vagabonds" (3590.)
d.	<acu**Ł**a>	:	<acula**Ł**i>
	[ʔaku-ɬa]		[ʔaku-la-ɬi]
	'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.	<**Ł**aarà>	[ɬa:ra]	'ascend' (2585.)	:	[**ɬ**ara] ~ [**l**ara] (G-SH)	'ascend'
b.	<**Ł**aurú**Ł**a>	[ɬaw(a)ru-a]	'dancer' (4020.)	:	[**l**aˢwaro] ~ [**l**awaru] (G-RHG)	'dance'

After bilabial stops *ɬ* becomes *l* (4. 206).

(4. 206)

a.	<a**pl**a>	:	<apàla>
	[ʔapla]		[ʔapa**l**a]
	'open, *imperative*' (2071.)		'to open' (2067.)
b.	<i**pl**a**Ł**án>	:	<ipala>
	[ʔipla-ɬan]		[ʔipa**l**a]
	'bath, *preterite*' (2414.)		'to bath' (2411.)
c.	<e**pl**e>	:	<epe**Ł**e>
	[ʔeple]		[ʔepeɬe]
	'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 <Ł>, however, there are exceptions (4. 180c).

The fact that <Ł> and <l> 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 <l> 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 <l> and <Ł> in the context *i_i* or *u_u* can be identified as morphological boundaries, representations of [ʔl], loanwords or cases where [ɬ] and [l] alternate.

In the majority of cases, grapheme <r> is attested between high vowels of vowel set 1 (4. 207); laterals surrounded by high central vowels *ɨ* are not affected by this

change. It needs to be pointed out that the change does not only affect *l*; there are likewise very few cases where <Ł> is attested between high vowels of vowel set 1 (4. 208). The distribution therefore seems to confirm Campbell's rule for Maldonado-Xinka.

(4. 207)	X_Y <tojlóni>	[to**ɬ**oni] 'children' (Y-C)	:	X_M <turi>	[tu**r**i]	'child' (4620.)
	*wiliki		:	X_M <guiriɛi>	[wi**r**ik'i]	'speak' (2353.)
	*hulu		:	X_M <júru>	[hu**r**u]	'turkey' (3985.)

(4. 208)	a. <uŁú>	[ʔu**ɬ**u] 'to fall' (3433.)		
	b. <turiŁi>	[turi-**ɬ**i] 'children' (4621.)	[N-PL] =	morphological boundary

An explanation for the inconsistencies and indistinct distributional patterns is provided by Kaufman who has reconstructed all occurrences of laterals *l* and lateral-fricatives *ɬ* to originally derive from phoneme *ɬ* (Campbell & Kaufman: field notes). On the basis of the comparative field data, he proposes that *ɬ′* > *l′* in X_G and X_{Ch} while in X_Y and X_{Jum} *ɬ′* > *t′*. As a matter of fact, a few roots that are attested in the ALS with graphemes <Ł> [ɬ] and <l> [l], [ʔl] can be correlated with the cognate sound *t* in X_Y, Y_{Jut}, X_{Jum} and X_S. The suggested change accounts for the non-complementary distribution of <l> and <Ł> in intervocalic contexts. Kaufman furthermore proposes that X_G, X_{Ch} *ɬ* becomes *l* in X_Y, X_{Jum}, and again reconstructs *ɬ* to be the earlier phoneme, which is supported by the fact that the majority of laterals in the ALS-data are indicated by <Ł>.

The consonantal cluster [ʔl] is given by Campbell and Kaufman as [l']. The patterns of glottalisation and deglottalisation of *ɬ* and *l* that were identified by them are too subtle to be reconfirmed in the ALS-corpus.

Regarding the phonemic interpretation of the ALS-graphemes <l> and <Ł>, grapheme <Ł> is in all cases rendered as *ɬ*. The interpretation of <l> as *l*, *ʔl* or *ɬ* is partially based on cross-data comparison.

(4. 209)	a. X_M <tila>	'salt' (4576.)	:	X_G, X_{Ch} [ti**l**a] ~ [ti**ʔl**a]
			:	X_G, X_{Ch} [ti**l'**a] (C&K:FN)
			:	X_S, X_Y, X_{Jut}, X_{Jum} [ti**t**a]
	b. X_M <táŁi>	'neck' (4540.)	:	X_G, X_{Ch} [ta**ɬ**i] ~ [ta**ɬ**a]
			:	X_{Ch} [ta**ɬ**i] (C&K:FN)
			:	X_S, X_Y [ta**t**a-], X_{Jut} [ta**rt**i]
	c. X_M <tolo>	'yellow' (4591.)	:	X_G, X_{Ch} [to**l**o] ~ [to**ʔl**o]
			:	X_{Ch} [to**l'**o] (C&K)
			:	X_{Ch}, X_Y [to**t**o]
	d. X_M <móla>	'moon' (4085.)	:	X_{Ch} [mo**ʔl**a]
			:	X_{Ch} [moo**l'**a] (C&K)
			:	X_{Jum} [moo**t'**o]
	e. X_M <mula>	'palmtree' (4096.)	:	X_G [mu**ʔl**a] (G-S)
			:	X_G, X_{Ch} [muu**l'**a] (C&K)
			:	X_{Jum} [muu**t'**a]

Etymons that occur in the ALS with the lateral-fricative grapheme <Ł> in medial or syllable-final position are often attested in the comparative data with the glottal fricative *h*. In the majority of these cases, *ɬ* is the morphologically transparent sound. The change of *ɬ* > *h* is unconditioned and non-contrastive. In the secondary comparative data, the occurrence may also be the result of erroneous differentiation of *h* and *ɬ* by the respective authors.

(4. 210) a. <aŁmucán> [ʔaɬmukan] 'yesterday' (3611.) : X_G [ʔahmukaŋ] (G-RHG)
b. <ʊeŁʊec> [ʔiɬik] 'jar, jug' (4732.) : X_Y <jüc> [hɨk] (Y-C)
c. <eŁama> [ʔeɬama] '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>	<ʊe>	<u>	<e>	<o>	<a>
<gu>	+	+	s	+	+	+
<g>	+	+	-	-	-	+

	_<gu>
<ɛ>_	+
<n>_	+
<r>_	+
<Ł>_	+
<gu>_	+

Before front and central vowels, <gu> is used to represent *w*.

(4. 211) a. <**gu**iriɛi> /wiriki/ 'speak' (2353.)
b. <**gu**ʊenac> /wɨnak/ 'witch' (3888.) : X_G [**g**unak] (G-SH)
c. <**gu**ɛuɛrʊe> /wɨrɨ/ 'to wrap' (2380.)
d. <**gu**esza> /weša/ 'iguana' (3861.)
e. <**gu**acász> /wakaš/ 'cow' (3834.)
f. <**gu**aya> /waya/ 'to weed' (2334.)
g. <ca**gu**i> /kawi/ 'to scream' (2117.) : X_G [k'a^{g}**w**i] (G-SH)
h. <a**gu**a> /ʔawa/ 'moon' (3600.) : X_G [ʔa^{g}**w**a] (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 [^{g}w] (Campbell 1972a:187). This distribution applies to the word- and syllable-initial position.

(4. 212) a. <**g**ona> /wona/ 'hill' (3830.)
b. <sza**g**ú> /šawu/ 'to sit' (3103.) : X_G [ša**g**uya] (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 [ʍ] that is attested in modern Xinka (Campbell, Kaufman & Smith-Stark 1986:537).

(4. 213) a. <tá**u**> [taʍ] 'wind' (4551.)
b. <sza**ug**> [šaʍ] 'fingernails' (4459.)
c. <ckáu> [k'aʍ] 'to cook' (2129.) : X_G [ka**g**u] (G-SH, G-JAP)

Campbell and Kaufman identify the glottalised glide [ẇ] 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], [^{g}w] 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>	<ʊe>	<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. <ca**y**i> [kayi] 'to sell' (2141.)
b. <sʊe**y**ʊe> [siyi] 'to return' (3192.)
c. <a**y**ú> [ʔayu] 'optative particle' (3671.)
d. <a**y**áŁa> [ʔayaɬa] 'woman' (3661.)

In initial position, however, <y> occurs regularly only with vowels *ɨ* 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. <**y**ʊegua> [yɨwa] 'to lose' (3549.)
b. <**y**ʊepʊe> [yɨpi] 'to vomit' (3569.)
c. <**y**ána> [yana] 'to be embarrassed' (3509.)
d. <**y**ászi> [yaši] 'to extend, spread' (3519.)

(4. 216) a. <**y**ú> [yu] 'man!, *vocative*' (4761.) [diffused]
b. <**y**úlu> [yulu] 'to smooth (down)' (3538.) [L-M]
c. <**y**eeguász> [yewaš] 'mare' (4759.) [L-S]
d. <**y**oŁana> [yoɬana] 'to fall over precipice' (3529.) [L-M]
e. <**y**óŁe> [yoɬe] '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. <ca**y**i> [kayi] 'to sell' (2141.) [L-M]
b. <mu**y**i> [muyi] 'chicle tree' (4115.) [L-M]
c. <pa**y**í> [payiʔ] 'daughter-in-law' (4267.) [L-M]
d. <taayí> [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.	<pulà**i**>	[pula-y]	'he made' (407.)
	b.	<sàmu**i**>	[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	<**i**szapa>	[**ʔi**šapa]	'to leave' (2425.)
# ʔɨ	<**ʊ**ecŁʊec>	[**ʔɨ**ɬɨk]	'jar, jug' (4732.)
# ʔu	<**u**Łú>	[**ʔu**ɬu]	'to fall' (3433.)
# ʔe	<**e**peŁe>	[**ʔe**peɬe]	'to fear' (2263.)
# ʔo	<**ò**ne>	[ʔone]	'tender thing' (4193.)
# ʔa	<**a**yma>	[**ʔa**yma]	'ear of corn' (3670.)

(4. 220) Vowel graphemes in medial position

CiC	<t**i**ɛ́>	[t**i**:k'i]	'to sleep' (3291.)
CɨC	<mʊeya>	[m**ɨ**ya]	'to help' (2719.)
CuC	<p**u**la>	[p**u**la]	'to make' (391.)
CeC	<epeŁe>	[ʔepeɬe]	'to fear' (2263.)
CoC	<t**o**lo>	[t**o**lo]	'yellow' (4591.)
CaC	<m**á**cu>	[m**a**ku]	'house' (4042.)

(4. 221) Vowel graphemes in final position

Ci #	<tiɛ**í**>	[ti:k'**i**]	'to sleep' (3291.)
Cɨ #	<ʊelʊe**ʊe**>	[ʔi**ɨ**]	'back' (4734.)
Cu #	<mác**u**>	[mak**u**]	'house' (4042.)
Ce #	<epeŁ**e**>	[ʔepeɬ**e**]	'to fear' (2263.)
Co #	<tol**o**>	[tol**o**]	'yellow' (4591.)
Ca #	<aym**a**>	[ʔaym**a**]	'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.	<pir**ii**cà mà>	[pir**i:**-ka ma]	'you would have seen' (795.)
	b.	<pir**ií** pataguaag>	[pir**i:** patawa:h]	'to have been seen' (896.)
	c.	<pir**ij**>	[pir**i:**]	'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	ɨ, e, a
ɨ >	i, u	u	i, a
u >	i, o	i, ɨ, e, (o)	o
e ~	i	i	-
o >	u	u, (e)	-
a >	e, ɨ, (o)	i, ɨ, 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.	<iszaɛa>	[ʔ**i**šak$^{(')}$a]	'to drink' (2420.)	:	X_G, X_Y	[ʔ**e**ɬka] (G-SH), (Y-C)
	b.	<imá>	[ʔ**i**ma]	'say, tell' (2406.)	:	X_G	[ʔ**e**ma] (G-JS)
	c.	<aŁi>	[ʔaɬ**i**]	'by, through' (3606.)	:	X_G	[ʔaɬ**e**] (G-SH, G-JAP)
	d.	<acuqui>	[ʔaku**k**i]	'go, pass by' (2055.)	:	X_G, X_{Ch}	[ʔaku**k**e] (G-SH), (Ch-S)
	e.	<ɛiriguapatxi>	[k(')**iri**wa]	'corn gruel' (3737.)	:	X_{Ch}	[h**ere**we] (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 *ɨ* or X_G, X_{Ch} *a*.

(4. 224)	a.	<tiszi>	[t**i**š**i**]	'lazy person' (4586.)	:	X_G	[t**ɨ**š**ɨ**] (G-S)
	b.	<iguitxi>	[ʔ**i**wiɕ'i]	'to hear' (2399.)	:	X_G	[ʔ**o**wiša] (G-SH)
	c.	<ɛigui>	[k(')iw**i**]	'(court)yard' (3734.)	:	X_{Ch}	<kigua> [kiw**a**] (Ch-P)

Loss of *i* in final position is widely attested.

(4. 225)	a.	<ambuqui>	/ʔampuk**i**/	'snake' (3630.)	:	X_{Ch}	[ʔampuk_] (Ch-F), (Ch-MQa)
	b.	<maŁi>	[maɬ**i**]	'ash' (4054.)	:	X_G, X_Y	[maɬ_] (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 *ɨ* (4. 226b-d).

(4. 226)	a.	<uguáŁ>	[ʔ**u**waɬ]	'ant' (4678.)	:	X_{Ch}		[ʔ**i**waɬ]	
	b.	<putxu>	[p**u**ɕ'u]	'to milk' (2978.)	:	X_M	<pitxu>	[p**i**ɕ'u]	'squeeze' (2884.)
	c.	<juuszí>	[h**u:**ši]	'head' (3994.)	:	X_Y		[h**ɨ**šal] (Y-C)	
	d.	<tumu>	[t**u**m**u**]	'finish' (3319.)	:	X_G		[t**ɨ**m**ɨ**ka] (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> [y**u**l**u**] 'to smooth (down)' (3538.) : X_G [y**o**l**o**lo?] '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> [?**u**rk'**u**] 'to drink' (3460.) : X_G [?**o**rt**o**-] (G-JAP)
b. X_M <jászu> [hašu] 'pig' (3945.) : X_{Ch}, X_S [hašo] (Ch-P), (S-Gav)
c. X_M <szaru> [šar**u**] 'sea, ocean' (4446.) : X_G, X_{Ch} [šar**o**] (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. <ʊesza> [?ɨša] 'illness' (4743.) : X_G, X_{Ch} [?iša?] 'hurt'
b. <ʊesʊɛʊe> [?ɨšik'ɨ] 'make loose' (3497.) : X_{Ch}, X_Y [?išk'i] 'raise'
: X_{Ch} [?išti] 'make loose'
c. <chʊerʊɛʊe> [čɨrɨkɨ] 'small' (3697.) : X_G, X_{Ch} [čiriki] 'small'
d. <aszʊe> [?ahɨ] 'this one' (3659.) : X_M <agi> [?ahi] (1893.)

(4. 230) a. <ʊemʊemí> [?ɨmɨmɨ] 'to smell' (4736.) : X_G, X_{Ch} [?umumu]
b. <ʊelʊeʊe> [?ɨlɨ] 'behind' (4734.) : X_{Ch} [?uluk]
: X_Y [?utuy]
c. <jʊenʊe> [hɨnɨ] 'to know' (2558.) : X_{Ch}, X_Y [hunu]
d. <cʊegua> [kɨwa] 'to lend, loan' (2225.) : X_G, X_{Ch}, X_Y [kuwa]
e. <chʊerʊɛʊe> [čɨrɨkɨ] 'small' (3697.) : X_{Ch} [čuruku]
f. <mʊeya> [mɨya] 'to help' (2719.) : X_G, X_{Ch}, X_Y [muya]
g. <nʊema> [nɨma] 'to eat' (2767.) : X_G, X_{Ch}, X_Y [numa]

(4. 231) a. <ʊeptxʊé> [?ɨpši] 'grown, ripe' (4740.) : X_{Ch} [?opɕi] 'ripe' (Ch-S)
b. <jʊecka> [hɨk'a] 'to weave' (2542.) : X_{Ch} [hoka] 'to weave' (Ch-F)
c. <ckʊenʊeɛi> [k'ɨnɨ-k'i] 'happiness' (3784.) : X_{Ch} [kono-ki] 'be happy' (Ch-F)
d. <pʊemʊe> [pɨmɨ] 'mute' (4357.) : X_{Ch} [pumo] 'the mute one' (Ch-JC)

(4. 232) X_M <tʊemʊe> → X_M <tʊeʊemaŁ>
[tɨmɨ] [tɨma-ɬ]
'to dye, colour' (3378.) '(*dyer =) 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> [šeke] 'chest' (326.) : X_S [sikim] 'chest' (S-Gav)
b. <nen> [nen] "I, 1s" (56.) : X_G [nin] (G-SH)
c. <eŁa> [?eɬa] 'new, fresh' (3801.) : X_Y [?iɬa] '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> [?oromo] 'collect' (2778.) : X_Y [?urumu] (Y-C)
b. <ootéc> [?o:tek] 'bed' (4204.) : X_Y, X_{Jut} [?aɬ-?utu] (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 *ɬ* becomes *r* between high vowels.

(4. 235) a. X_M <t**u**ri> [turi] 'child' (4620.) : X_Y <tójloni> [t**o**ɬoni] 'child' (Y-C)
b. X_M <ap**u**j> [ʔapuh] 'eight' (Y-V) : X_{Jut} <apocar> [ʔap**o**kar] '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 <chooɛec> [č**o**k'ek] 'chocolate beater' (3694.) : X_G [č**e**yk'uki] 'to pound' (G-SH)
b. X_{Ch} <choro> [č**oro**] 'wrinkel, crease' (Ch-F) : X_{Ch} [č**e**rwo] '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. <guaszaɛo> [w**a**š**a**ku] 'throw' (2313.) : X_M <gueseque> [w**e**š**e**ke] 'discard' (2340.)
b. <szandaa> /š**a**nt**a**/ 'why?' (4434.) : X_Y <xintí> [š**i**nt**i**] 'why?' (Y-C)
c. <jarána> [h**a**ra**ʔ**na] 'ill' (3931.) : X_G [h**o**rana] 'sick, ill' (G-JS)
d. <pági> [p**a**hi] 'ravine' (4222.) : X_{Ch} [p**o**horo] 'to open' (Ch-F)

(4. 238) a. <acaní> [ʔak**a**ni] 'so, like' (3582.) : X_{Ch} <acuní> [ʔak**u**ni] (Ch-Z)
b. <aratac> [ʔar**a**tak] 'maguey' (3648.) : X_Y <üruta> [ʔ**ɨ**r**u**ta] (Y-C)
c. <mán> [m**a**n] 'that, *dem.*' (4058.) : X_Y <mun> [m**u**n] (Y-C)
d. <ná> [n**a**] 'the, *det.*' (4133.) : X_Y, X_{Ch} <nu> [n**u**] (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> [ʔ**a**yma] 'ear of corn' (3670.) : X_G, X_{Ch}, X_Y [ʔ**e**yma] (G-SH), (Ch-C), (Y-C)
b. <aratac> [ʔ**a**rata] 'maguey' (3648.) : X_Y <üruta> [ʔ**ɨ**ruta] (Y-C)
c. <acú> [ʔ**a**ku] 'go, walk' (2050.) : X_G, X_{Ch} [ʔ**o**ku] (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(')iriw**a**] 'corn gruel' (3737.) : X_{Ch} [herew**e**] (Ch-JC)
c. <ɛʊesza> [k'**ɨš**a] 'bat' (3796.) : X_G, X_{Ch} [k'**is**ɨ] (G-S), (Ch-F)
d. <jʊecka> [hɨk'**a**] 'to weave' (2542.) : X_{Ch} <jocöc> [hok**o**-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> [ʔaya**ɬa**] 'woman' (3661.)	:	X_{Ch}, X_Y, X_{Jum}	<ayal> [ʔaya**ɬ**_] 'woman' (Ch-F) (Y-C), (Jum-E)
	b.	X_M	<muŁ> [mu**ɬ**_] 'white' (4094.)	:	X_{Ch}	<mula> [mu**ɬa**] '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	[pari]	'day, sun, heat'
CV.CV	a.cú	[ʔaku]	'go'
CV.CV	a.ù	[ʔaʔu]	'corn, maize'
CV.CV.CV	ɛa.ta.Ła	[k'ataɬa]	'lie down (preterite)'
CV.CV.CV	a.cù.ya	[ʔakuya]	'go! (imperative)'
CV.CV.CV.CV	ja.ma.guá.Ła	[hamawaɬa]	'sinner'
CV.CV.CV.CV.CV	aŁ.pa.ra.qui.guà	[aɬparakiwa]	'by, because'
CV.CV.CVC	a.li.yan	[ʔaliyan]	'manifest (preterite)'
CV.CVC	szuu.núc	[šu:nuk]	'navel'
CV.CVC	tá.uc	[taʔuk]	'tortoise'
CV.CVC	a.ràn	[ʔaran]	'send (preterite)'
CV.CVC.CV	ni.guaan.szaa	[niwanša]	'want (preterite)'
CV.CVC.CV	i.ɛal.qui	[ʔikalki]	'one alone'
CV.CVC.CVC	mʊe.taŁ.ckin	[mɨtaɬk'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 (*supino*)'
CVC.CV.CV.CV	ɛʊer.sza.ɛi.Ła	[k'ɨršakiɬa]	'the one who combs hair'
CVC.CVC	ckir.guín	[k'irwin]	'chose (preterite)'
CVC.CVC	et.cán	[ʔetkan]	'harvest (preterite)'
CVC.CVC.CV	tiy.ɛiɛ.Ła	[ti:k'ikɬa]	'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 occurences 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> , <ɛ>, <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 <b>, <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 <b> and <d> are attested as allographs of the phonemes *p* and *t* with <b> occurring only in syllable-initial position before vowel graphemes <ʊe>, <u> and <e>, and <d> before back and low vowels <u>, <o>, <a>, but never with front vowels <i>, <ʊe> and <e>.

Table 4. 24: Initial consonants in the ALS

	[i]	[ɨ]	[u]	[e]	[o]	[a]
[p]	+	+	+	+	+	+
[b]	-	s	s	s	-	-
[t]	+	+	+	+	+	+
[d]	-	-	s	-	s	s
[k]	+	+	+	+	+	+
[g]	-	-	+	-	+	s
[k']	+	+	+	+	+	+
[ʔ]	+	+	+	+	+	+
[ȼ']	+	+	+	(+)	(+)	+
[č]	+	+	(+)	+	+	+
[s]	+	+	+	+	+	+
[š]	+	+	+	(+)	+	+
[h]	+	+	+	-	+	+
[m]	+	+	+	(+)	(+)	+
[n]	+	+	+	(+)	s	+
[l]	s	s	s	s	s	s
[ɬ]	+	+	(+)	(+)	(+)	+
[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 *ȼ'*, *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; partícula nominal (relative noun, possessive)" (4169.).

4.4.1.2 Final consonants

The graphemes <p>, <t>, <c>, <ɛ>, <s>, <sz>, <g>, <j>, <m>, <n>, <r>, <Ł>, <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>, <ɛ>	<g>	<n>	<Ł>	<gu>, <ug>	<y>
/ -k/	/-h/	/-n/	/-ɬ/ > [-h]	/-w/	/-y/

The graphemes that occur regularly in word-final position are <Ł>, <y>, <n>, <c>, <ɛ>, <g> and <gu> or <ug>. For modern Xinka, Campbell (1972a:187) identified the phonemes *-ɬ*, *-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. <pulài> [pula-**y**] 'he made' (407.)
b. <pè ayacà a**y**> [pe ʔaya-kaʔ ʔa**y**] 'you (pl.) will be (in a place)' (1910.)

(4. 244) a. <peegue**c**> [pe:^{g}we**k**] 'gourd' (4271.)
b. <szúní**c**> [šuni**k**] 'pot' (4507.)

The graphemes <gu> and <ug> represent the phoneme *w* in final position (4. 245). While <gu> may still be interpeted phonetically as [gu], the inversed grapheme <ug> indicates the presence of a final devoiced glide [□] that is corroborated by the comparative data.

(4. 245) a. <tá**u**> [ta**ʍ**] 'wind' (4551.)
b. <sza**ug**> [ša**ʍ**] '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 <Ł> in the ALS (4. 246). The change from *ɬ* to *h* is attested throughout the corpus (see § 4.3.1.5.2). For Maldonado-Xinka, we may therefore prefer to reconstruct *-ɬ* to occur regularly in final position.

(4. 246) a. <guapa**Ł**> [wapa**ɬ**] ~ [wapa**h**] 'seat' (3839.)
b. <yguaŁ> [ʔiwa**ɬ**] '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-i**g**> [muti:-**h**] 'his hair' (367.)
b. <na**g** ɛiguaŋ> [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. <ʊerrá> [ʔiɾra**ʔ**] 'big thing' (4272.)
b. <pulà> [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 [ŋ] 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

their final vowel (see § 8.3.1). In this process final *m* becomes *n*, as *the* bilabial nasal does not regularly occur in final position (4. 249b).

(4. 249)	a.	<guíyá**n**>	[wiya**ŋ**]	'sugar cane' (3884.)			
	b.	<sʊe**n** au>	[si**n** ʔaʔu]	'black corn' (4403.)	←	<sʊe**m**a>	[si**ʔm**a]

The consonants *-p*, *-t*, *-ȼ′*, *-s*, *-m*, and *–r* are attested in word-final position only with loanwords (see Schumann 1967:25; Campbell 1972a:187), or as subsequent phonetic changes of regular word-final consonants (see above). In Nahua loans, final *–t* may become *–k* (4. 250). Another case of assimilation to the Xinka sound pattern is the realisation of the final fricative *–š*, which occurs in Spanish loans that have been borrowed from Kaqchikel as *–ɬ* or *–y* (4. 251).

(4. 250)	a.	<epé**t**>	'icaco, fruit' (3811.)	:	X_{Ch}	[ʔepa**k'**] (Ch-F)
	b.	<aŁtèpé**t**>	'village, town' (3617.)	:	X_{Ch}	/ʔaltepe**k**/ (Ch-JC, Ch-MQ)
				:	X_{G}	[ʔa**ɬ**tepe**ʔ**] (G-S, G-SH, G-JS)
	c.	<chuculá**t**>	'chocolate' (4140.)	:	X_{Y}	[čukula**ʔ**], [kula**k'**i] (Y-C)
(4. 251)	X_{M}	<guacász>	'cow' (3834.)	:	X_{G}	[waka**ɬ**] (JS) ~ [waka**y**] (SH)

4.4.1.3 Consonant clusters

Consonants mainly occur in intervocalic contexts. Consonant clusters are only attested in the initial and the second syllable of a word. The occurrence of clusters is restricted and the attested ones mostly result from a morphophonemic process of vowel deletion caused by the grammatical marking of the root (see § 4.4.3.1). We need to distinguish between consonant clusters in intermediate word position that occur with regular verb forms and loanwords, and clusters that result from compounding.

Initial consonant clusters CCV(C) are rather rare and occur mostly with Spanish loanwords or as a result of deletion of V_1 in three-syllabic lexemes, i.e. V → Ø / C_CVCV (cf. Campbell 1972a:187) (4. 252). The only attested non-Spanish initial consonant cluster are *kw-*, *kr-*, *št-* (cf. Schumann 1967:26-27).[127]

(4. 252)	a.	<prima>	[**pr**ima]	'dawn' (4308.)
	b.	<chriszma>	[**kr**išma]	'baptism' (3692.)

In medial position, most consonantal clusters are separated by syllable boundaries (4. 253). Medial clusters are mostly the result of vowel deletion caused by suffixation (4. 254).

(4. 253)	a.	<na**ng**ún>	[na**ŋ_g**un]	'afternoon, late' (4151.)
	b.	<ckaɛ**r**a>	[k'a**k'r**a]	'get on all four feet' (2097.)

(4. 254)	a.	<pajata>	[pahata]	'pay' (2810.)	→	<pa**gt**aan>	[pa**ht**a-n] (2811.)
	b.	<pipiri>	[pipiri]	'gin cotton' (2872.)	→	<pi**pr**in>	[pi**pr**i-ŋ] (2873.)
	c.	<orómo>	[ʔoromo]	'collect' (2778.)	→	<òrmoon>	[ʔormo-ŋ] (918.)

Upon taking the past-suffix *-n*, three-syllabic verbs lose their second vowel (V → Ø / (C)VC_CV(C)). Maldonado de Matos described this as a regular rule:

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[127] Schumann also identifies /kʔ/ and /ȼʔ/ which seem to correspond with the ejectives *k′* and *ȼ′*.

> Adviertase generalmente que todos los verbos de esta lengua, yà sean activos, yà pasivos ó comunes, quando se componen de tres sylabas, pierden en el pretérito la una de en medio. Vgr. el verbo Yszàca, que significa "beber", haze el pretérito Yszcàn perdiendo la Á de en medio; Oròmo haze el pretérito Ormòn; Jayàpu haze el pretérito Jaypun, y asi de los demas (fol. 97r).

In this context, graphemes <p>, <t>, <s>, <sz> and <r> can occur in final position of the first syllable of a word. Otherwise, these consonants occupy the final position only in loanwords.

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 ae often assimilated to the pattern CVCV.

(4. 255)
a. <cachatché> [kača**tče**] '?, *some expression*' (3690.)
b. <ɛosme> [k'o**sm**e] 'water hyacinth' (3748.)
c. <murchaguiya> [mu**rč**awiya] 'yellow cotton' (4107.)
d. <mistún> [mi**st**un] 'cat' (4083.) < L-N: *mistontli* '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> [ʔa**mb**uki] 'snake' (3630.)
b. <tondón> [to**nd**on] 'sea turtle' (4596.)
c. <tamptxi> [ta**mpč**'i] 'to twist' (3215.)
d. <sʊemp sʊemp> /s**ɨmp sɨ**mp/ '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*, *-ɬ*, *-w*, and *-y*.

Table 4. 26 includes only actually occurring combinations of consonantal clusters.

Table 4. 26: Consonant clusters resulting from vowel deletion in the ALS

	[p]	[b]	[t]	[d]	[k]	[k']	[g]	[s]	[š]	[h]	[m]	[n]	[r]	[l]	[ɬ]	[w]	[y]
[p]	-	-	+	-	-	-	-	+	+	-	-	-	+	+	+	-	-
[t]	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
[k]	+	-	+	-	?	-	-	+	+	-	+	+	-	-	+	+	-
[k']	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	+	-
[s]	+	-	+	-	+	+	-	-	-	-	-	+	-	-	-	+	-
[š]	+	-	+	-	+	+	-	-	-	-	+	-	-	-	-	-	-
[g]	-	-	+	-	+	-	-	-	+	-	+	+	-	-	-	-	-
[h]	-	-	-	-	-	-	-	-	-	-	+	+	-	-	+	-	-
[m]	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[n]	-	-	+	+	-	-	+	+	+	-	-	-	-	-	-	+	-
[r]	-	-	-	-	+	+	-	+	+	-	+	+	+	-	+	+	-
[ɬ]	+	-	+	-	+	-	-	-	-	-	+	+	-	-	-	+	-
[w]	-	-	-	-	+	-	-	+	+	-	-	-	-	-	+	-	+
[y]	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-

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 – u – a	<i>/<ý> - <u> - <a>
Set 2	e – o – a	<e> - <o> - <a>
Set 3	ɨ - a	<ʊe> - <a>

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> [m**a**k**u**] 'house' (4042.)
b. <pari> [p**a**r**i**] 'day' (4255.)
c. <guitxu> [w**i**ɕ'**u**] 'beat, hit' (2370.)
d. <tiɕí> [t**i**:k'**i**] 'sleep' (3291.)
e. <túmu> [t**u**m**u**] 'to end, finish' (3319.)

(4. 258)
a. <teerò> [t**e**:r**o**ʔ] 'to die' (3283.)
b. <tolo> [t**o**lo] 'white' (4591.)
c. <ootéc> [ʔ**o**:tek] 'bed' (4204.)
d. <eŁaja> [ʔ**e**ɬ**a**ha] 'tongue' (356.)

(4. 259)
a. <szʊema> [š**ɨ**m**a**] 'mouse' (4527.)
b. <Łʊeguʊe> [ɬ**ɨ**w**ɨ**] '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. <ʊemʊemí> [ʔ**ɨ**m**ɨ**m**i**] 'smelly' (4736.) : X_G <ɨmɨmɨ> [ʔ**ɨ**m**ɨ**m**ɨ**] 'smell' (G-S)
b. <Ł ʊécu> [ɬ**ɨ**k**u**] 'when?' (4034.) : X_G <lɨkɨ> [ɬ**ɨ**k**ɨ**] '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 *ɨ* 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 *š* to *r* in X_{Ch}, or from *š* *to* *ʂ* in the semi-speaker data from X_G, occurs only before high vowels. There is just one attested case where *š* becomes *r* before *e*; i.e. *šeke* → *reke* 'ribs'.

Complementary distribution of *s* and *š* 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 *š* does not occur with vowels *e* and *o*, both sounds are attested with *ɨ*.

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 *-ɬi* → *-ɬe*, or the reflexive/antipassive marker *-ki* → *-ke*, when following roots of vowel set 2.

(4. 261)	a.	<turiŁi>	[tur**i-ɬi**]	'children' (4621.)
	b.	<oneŁe>	[ʔon**e-ɬe**]	'tender things' (4194.)
	c.	<acuqui>	[ʔak**u**-k**i**]	'to walk' (2055.)
	d.	<erŁeque>	[ʔerŁ**e**-k**e**]	'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>	[m**e**ʔ + nak**i**]	'green chilli' (4077.)
	b.	<coséc ùy>	[k**o**s**e**k + ʔ**u**y]	'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*, *-ɬ/-h*, *-n*, *-r*, *-p*, *-t*, *-y*, *-š*, *-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→ Ø/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.	<ɛaragua>, <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'¢a]

4.4.3.1.2 Deletion of V_2

In three-syllabic verbs, V_2 is deleted if the verb receives further suffixation: V → Ø / 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 *-ɬa* (f-g), the instrumentaliser *-k* (h) or the inchoative suffix *-ki* (i).

(4. 264)	a.	X_M	<eŁama> [ʔeɬama] 'lend' (2251.)	→	X_M	<eŁmán> [ʔeɬ_ma-n] 'he lent' (2252.)
	b.	X_M	<oròmo> [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	<guiriɛi> [wiriki] 'to speak' (2353.)	→	X_M	<guirqui> [wir_ki] 'may he speak' (Ch-Z)
	f.	X_M	<pajata> [pahata] 'to pay' (2810.)	→	X_M	<pagtáŁa> [pah_ta-ɬa] 'who pays' (4224.)
	g.	X_G	/ɬawaro/ [ɬa^{s}waro] 'to dance' (G-SH)	:	X_M	<ŁaurúŁa> [law_ru-ɬa] 'dancer' (4020.)
	h.	X_G	/wišata/ [^{s}wišata] 'to whistle' (G-SH)	:	X_M	<guisztác> [wiš_ta-k] 'flute' (3879.)
	i.	X_M	<eréŁa> [ereɬa] 'to scare' (2268.)	→	X_M	<erŁeque> [ʔer_ɬe-ke] 'to become scared' (2274.)

This process of vowel deletion is not attested in forms where *č*, *ć'*, or *m* occur in C_2-position, or *č* 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> [šaru] 'jug' (4456.) → X_M <szárszi> [šarši] '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 <Łʊesɛʊegua> [ɬis_kɨwa] 'waist' (4039.) = *ɬɨsɨ 'thin, slim' + kɨwa 'leg'

Vowel deletion does not seem to be 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> [šapri-wa-n] [degrain-ANT-1sA] 'degrain, *preterite*' (3124.)
b. <szap**a**riguán> [šap**a**ri-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. <ay**aa**n> [*ʔay**a:**n] 'I am, I was' (3663.)
b. <mère pè pat**à**n> [*pat**a:**n] 'I will be broken' (680.)
c. <sàmu pè pat**aa**n> [*pat**a:**n] 'I will be caught' (1177.)
d. <jor**óo**n> [*hor**o:**n] 'get/guard, *pret.*' (2511.) : X_G [hor**ó**ŋ] '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 [m**u**kay] 'he makes' (G-SH) : X_G [m**u-ʔu**ka-y] 'he makes' (G-SH)
b. X_G [š**a**ɬtepet] 'to the village' (G-JAP) : X_G [š**a-ʔa**ɬtepet] '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> → *iwiši-ki → X_M <uýszɨɛi>
[ʔ**iwi**ć'i] [ʔ**uy**šiki]
'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>	[**n**aru]	'earth' (4160.)	:	X_Y	[**ʔ**aru]	'earth' (Y-C)
	b.	<ɛiguán>	[**k**iwan]	'I myself' (143.)	:	X_{Ch}	[**ʔ**iwan]	'alone' (Ch-C)
	c.	<piri>	[**p**iri]	'see' (736.)	:	X_{Ch}, X_Y	[**ʔ**iri]	'see' (Ch-F), (Y-C)
	d.	<guéna>	[**w**ena]	'who' (3856.)	:	X_{Ch}	[**ʔ**ena]	'who' (Ch-Z)
(4. 272)	a.	<eŁama>	[**ʔ**e**ɬ**ama]	'lend' (2251.)	:	X_{Ch}	[_ha'maʔ]	'he lent' (Ch-MQ)
	b.	<epeŁe>	[**ʔ**epe**ɬ**e]	'fear' (2263.)	:	X_{Ch}	[_pɛlɛ' ʔayʔ]	'he is afraid' (Ch-MQ)
	c.	<iɛál>	[**ʔ**ika**ɬ**]	'one' (3891.)	:	X_G, X_{Ch}	[_ka**ɬ**]	'one' (G-SH, Ch-C)
	d.	<iszapa>	[**ʔ**išapa]	'leave' (2425.)	:	X_G, X_Y	[_šapa]	'leave' (G-SH, Y-C)
	e.	<aszin>	[**ʔ**ašin]	'no' (3654.)	:	X_G	[_šin]	'no' (G-JAP, G-RHG)
(4. 273)	a.	<quitxu>	[**ki**ɕu]	'change' (3020.)	:	X_G, X_Y	[_ɕ'u-y]	'change' (G-S, Y-C)
	b.	<cʊegua>	[**kɬ**wa]	'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	<jararí> [ha**r**ari] 'bone' (3934.)	:	X_{Ch}	<jari cúhua> [ha_ri kɨwɨ] 'shinbone' (Ch-C)	:	X_S	<jari> [ha_ri šaha] 'tooth' (S-Gav)
	b.	X_M	<tajana> [ta**ha**na] 'be born' (3205.)	:	X_M	<taana> [ta_na] 'to be' (3220.)			
	c.	X_M	<rakatzá> [ra**k'a**ɕ'a] 'to steal' (Ch-F)	:	X_{Ch}	<ratzá> [ra_ɕ'a] '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:kiyaŋ]	'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>	[ʔam**b**uki]	/ʔam**p**uki/	'snake' (3630.)
	b.	<tondón>	[ton**d**on]	/ton**t**on/	'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	→	<uýszɪɛi>
		[**ʔiwi**ȼ'i]				[**ʔuy**šiki]
		'to hear sth.' (2399.)				'to hear' (3487.)
	b.	<íguatxa>	→	*iw_ȼ'a	→	<úiszaan>
		[**ʔiwa**ȼ'a]				[**ʔuy**šan]
		'to spin' (2391.)				'to spin, *pret.*'(2392.)
			→	*iw_ȼ'a-k	→	<uyszác>
						[**ʔuy**šak]
						'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 *ɬ* 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.	<auŁác>	'tortilla griddle' (3653.)	→	*ʔa**wɬ**ak	: X_{Ch}	[ʔoflak]
	b.	<Łuri>	'rabbit' (4031.)	→	*(ʔa)**wɬ**uri	: X_{Ch}	[fluri]
	c.	<paraguíriqui>	'to quarrel' (2826.)	→	*para-**wr**iki	: 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-neɬa	'mine' (G-SH)	→	ʔa-neɬa	'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-^{g}**w**išaka]	'he drank' (G-SH)
	b.	*ku ʔoteʔ	[MOD bed]	→	X_G	[k**w**oteʔ]	'the *little bed' (G-JS)
	c.	*naʔu-ʔaɬi	[son-PL]	→	X_{Ch}	[nakwaɬiʔ]	'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 velar*k*. 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	<apàla> [ʔa**pal**a] 'to open' (2067.)	:	X_Y	<n-alpa> [ʔn-ʔa**lp**a] 'I open'
	b.	X_M	<auŁác> [ʔaw**ɬ**ak] 'tortilla griddle' (3653.)	:	X_Y	<aljuat> [ʔa**ɬ**wat] 'plate'
	c.	X_M	<jayápu> [**h**aypuh] 'to receive' (2491.)	:	X_Y	<yajpuj> [ya**h**puh] 'to receive'
	d.	X_M	<tunati> [t**u**nat**i**] 'to play instr.' (3325.)	:	X_{Ch}, X_Y	<tinatu> [t**i**nat**u**] 'to play an instrument'
	e.	X_M	<uyszác> [**ʔu**yšak] 'spindle' (4727.)	:	X_{Ch}	<iuxak> [**yu**šak] 'spindle' (Ch-F)
	f.	X_Y	<lahuár> [la**w**a**r**] 'dance' (Y-C)	:	X_{Ch}	<laragú> [la**r**a**w**] 'dance' (Ch-F)
	g.	X_{Ch}	<ajlahuac> [ʔa**ɬ**a**w**ak] 'tomorrow' (Ch-C)	:	X_{Ch}	<ahujlacan> [ʔa**w**ɬakan] '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 *ɬokama* is most likely a Mayan loan; i.e. pCh **lok* 'boiling, froth' (see Appendix 5.A).

(4. 283)					
	X_M	<Łocama> [ɬo**k**a**m**a] 'to boil' (2605.)	→	X_M	<Łomeeca> [ɬo**m**e**k**a] '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'VʔCV. In this process *s* and *š* become *ȼ'* (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 <ɛ>, <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.	<**ck**eguesza>	'anona' (3732.)	:	X_G, X_{Ch}	[k'eʔweʂa]	< pM *k'eweš
	b.	<**tx**inána>	'scorpion' (4647.)	:	X_{Ch}	[ȼ'inaʔna]	
				:	X_G	[ȼ'inaʔn]	< pM si:naʔŋ
	c.	<**tx**ʊemʊe>	'irrigate' (3406.)	:	X_G	[ȼʔiʔmɨ] (G-S)	
				:	X_G	[suʔmak'ay] (G-RHG) [= VT-PROG]	
	d.	<**s**ʊema>	'night' (4400.)	:	X_G	[sɨma] (SH)	
				:	X_G	[siʔma] (G-SH, G-JS, G-RHG)	
				:	X_Y	<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 V_2. 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.	<szuɛaan>	[šuk'a-ŋ]	[eat-1sA]	'eat/bite, *preterite*' (3170.)
	b.	<Ɬʊeɛʊeʊen>	[ɬɨk'ɨ-n]	[reach-1sA]	'reach, *preterite*' (2617.)
	c.	<uɛaca>	[ʔuk'a-ka]	[have-2sA]	'you had, would have' (2035.)
	d.	<mʊeɛaguaan>	[mɨk'a-wa-n]	[work-ANT-1sA]	'work/serve, preterite' (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'VʔCV, 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. *V_1ʔ* (4. 284a).[130] Yet, there are several exceptions to this pattern, some of which indicate a process of deaffrication, i.e. the deglottalisation, *ȼ' > 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 *ʂ > ȼ'* as he defined one phoneme *ʂ* 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 <ɛagui>	:	X_M <caguic>
	[**k'**awi]		[**k**awi-k]
	'catch with lasso' (2135.)		'lasso' (3683.)
b.	X_M <íguatxa>	:	X_M <uyszác>
	[ʔiwaɕ**'**a]		[ʔuyšak]
	'to spin' (2391.)		'spindle' (4727.)
c.	X_M <patxi>	:	X_M <paaszíc>
	[paɕ'i]		[pa:šik]
	'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*, *-ɬ* and *–ʍ* (4. 287). In particular, the occurrence of the grapheme <Ł> in final position suggests that such a rule existed.

(4. 287)

a.	<guapá**Ł**>	[wapa**ɬ**]	'bench, seat' (3839.)
b.	<ckáu>	[k'a**ʍ**]	'to cook' (2129.)
c.	<guarú**c**>	[waru**k**]	'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.	<szúní**c**>	[šuni**k**]	'pot' (4507.)	:	X_G	[suni**ʔ**]	(G-SH, G-JAP)
b.	<urú**Ł**>	[ʔuru**ɬ**]	'egg' (4693.)	:	X_G	[ʔuru**ʔ**]	(G-JAP)
c.	<guarú**c**>	[waru**k**]	'mat' (3844.)	:	X_G	[waru**ʔ**]	(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.	<szuɛaan>	'I ate' (3170.)	:	X_G	[šukaŋ]	(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 → V́ / _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-káŋ]	[make=PROG-2sA$_{DEP}$]	'you were making' (G-SH), (G-JAP)
	d.	[téro]		'I want' (G-SH), (G-PE) [L-S: quiero]
	e.	[teró-ʔ]	[die-STAT]	'he died' (G-SH), (G-JS)
	f.	[ʔan-teró-ʔ]	[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>	['šuya]	'first, before' (4524.)	-	<szuyá>	[šu'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 *ɕ′ > s /_ i, ɨ, 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 *š* (e-f) (see below). Some forms in the ALS that preserve *ɕ′* have cognates in X_G and X_{Ch} where the sound has changed into *s* (g-h).

(4. 294)	a.	X_Y, X_{Ch}	[**ɕ'**arara]	:	X_M, X_G, X_{Ch}, X_{Jum}	[**s**araraʔ]	'cold, wind'
	b.	X_Y, X_{Ch}, X_S	[**ɕ'**ama]	:	X_M, X_G, X_{Ch}	[**s**ama]	'darkness'
	c.	X_Y	[**ɕ'ɨ**ʔma]	:	X_M, X_G, X_{Ch}, X_S	[**sɨ**ʔma]	'night'
	d.	X_Y	[**ɕ'**uku]	:	X_M, X_G, X_{Ch}	[**s**uku]	'tie up'
	e.	X_Y	[ʔi**ɕ'**api]	:	X_M, X_G, X_{Ch}	[ʔi**š**api]	'leave, emerge'
	f.	X_Y	[**ɕ'ɨ**(ʔ)ma]	:	X_M, X_G	[**šɨ**ma]	'rat, mouse'
	g.	X_M, X_G, X_{Ch}	[**ɕ'**ama]	:	X_G, X_{Ch}, X_{Jum}	[**s**ama]	'good'
	h.	X_M, X_G, X_{Ch}	[**ɕ'ɨ**m**ɨ**]	:	X_G, X_{Ch}	[**s**umu]	'water crops'

In the varieties of X_Y, X_{Jut} and –possibly X_S– the original sound *ɕ′* is preserved before all vowels with the exception of the front vowels *i* and *e* where it changes into *č*; i.e. *ɕ′ > č / _ 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}	[**ɕ'**inaʔna]	:	X_G [**č**inaʔna], X_Y [**č**inaney]	'scorpion'
	b.	X_M, X_G, X_{Ch}	[pa**ɕ'**i] ~ [paši]	:	X_Y [pa**č**i]	'grind (corn)'
	c.	pX	*ɕ**ɨ**eʔ	:	X_Y [**č**eʔ]	'opossum'
				:	X_M [**š**eʔ]	

Simultaneously, *s > š /_i, ɨ, 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) *ɕ′ > s* and (2) *s > š*. 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	[**s**apu]	:	X_M, X_G	[**š**apu]	'cotton'
	b.	X_Y	[hu**s**-al]	:	X_M, X_G, X_{Ch}	[hu:**š**i]	'head'
	c.	$X_{Y,}$ X_{Ch}	[**s**uya]	:	X_M, X_{Ch}	[**š**uya]	'elder brother/sibling'

Another change that may be taken as indicative of regional diversification of the Xinka language family is the intervocalic change of *ɬ* or *l > t* / CVʔ_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 Nahuan loanwords that feature a lateral consonant (e.g. 'to flay, strip': X_M, X_G *k'olo*, X_Y k'o**t**o < pM **qol* "to peel, moult" [K-03]).

(4. 297)	a.	X_M, X_G, X_{Ch}	[ti**l**a] ~ [ti**ʔl**a]	:	X_G	ti**l'**a*	: X_Y, X_{Jut}, X_{Jum}, X_S [ti**t**a]	'salt'
	b.	X_M, X_G, X_{Ch}	[ta**ɬ**i] ~ [ta**ɬ**a]	:	X_G	ta**ɬ**i*	: X_Y, X_S [ta**t**a-], X_{Jut} [ta**r**ti]	'neck'
	c.	X_M, X_G, X_{Ch}	[to**l**o] ~ [to**ʔl**o]	:	X_{Ch}	to**l'**o*	: X_{Ch}, X_Y [to**t**o]	'yellow'
	d.	X_M, X_{Ch}	[mo**ʔl**a]	:	X_{Ch}	moo**l'**a*	: X_{Jum} moo**t'**o	'moon'
	e.	X_M, X_G	[mu**ʔl**a]	:	X_G, X_{Ch}	muu**l'**a*	: X_{Jum} muu**t'**a	'palmtree'
	f.	X_M, X_G	[k'o**l**o]				: X_Y k'o**t**o	'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	/š**a**nt**a**/	:	X_Y	[š**i**nt**i**]	'why?'
	b.	X_M	[ʔul**a**]	:	X_Y	[ʔul**i**]	'want, wish'
(4. 299)	a.	X_M	[ʔar**a**tak]	:	X_Y	[ʔ**i**r**u**ta]	'henequen'
	b.	X_M, X_G	[m**a**n]	:	X_Y	[m**u**n]	*demonstrative*
	c.	X_M, X_G	[n**a**]	:	X_Y, X_{Ch}	[n**u**]	*determiner*
	d.	X_M, X_G	[ʔak**a**ni]	:	X_{Ch}	[ʔak**u**ni]	'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 *ɬ* 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 *ɬ* 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	[hu**ɬ**i]	'to shave'	:	X_G	[šuši]	'beard'
	b.	X_M, X_G	[wapa**ɬ**]	'bench'	:	X_{Ch}	[wapaš]	'seat'
	c.	X_M	[p**ɬ**ta]		:	X_{Ch}	[poštak] ~ [puškak]	'arrow'
								[cf. L-M: Toj *pulte* 'bow']
(4. 302)	a.	X_M, X_G	[p**šɬ**k]		:	X_G	[p**ɬ**ik]	'jug, gourd'
	b.	X_M, X_G, X_{Ch}	[waka**š**]		:	X_G	[waka**ɬ**]	'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}	[**h**u:tuk]	'soot	:	X_M	[**š**u:tu-k]	'soot'
	b.	X_M, X_Y	[**h**iya]	'to cut'	:	X_G, X_{Ch}	[**š**iya]	'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 *ɬ* or *š*.

(4. 304)	a.	$X_M, X_Y, X_{Ch,} X_G$	[ha**h**i]	:	$X_{G,} X_{Ch}$	[haši]	:	$X_G, X_{Ch,}, X_Y$	[ha**y**i]	'avocado'
	b.	X_M, X_Y, X_{Ch}	[pa**h**i]	:	X_{Ch}	[pa**ɬ**i]	:	X_{Ch}	[pa**y**i]	'hole, ravine'

The opposite process of a fricative shift is also known: in several other cases, roots that are attested in the ALS with *š* 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 *š* > *h* is indicative of diachronic differentiation between X_M and the central Xinka varieties.

(4. 305)	a.	X_M	[**ɕ'**am**ɬ**]		:	X_M	[**h**am**ɬ**]	'sour, bitter'
	b.	X_M	[**š**uši]	'beard'	:	X_M	[**h**u**ɬ**i]	'to shave'
	c.	X_M	[ʔa**šɬ**]		:	X_M	[ʔa**hɬ**]	'this'
	d.	X_M	[sa**ɬ**k'a]	'to raise'	:	X_M	[**h**ah**ɬ**a]	'hoe'
	e.	X_M	[ʔašin]		:	X_G, X_{Ch}	[**h**in]	'no'
	f.	X_M, X_G, X_{Ch}	[šan]		:	X_{Ch}	[**h**an]	'in'
	g.	X_M	[šanda]		:	X_G	[**h**anda]	'why?
	h.	X_M	[šete]	'worm'	:	X_{Ch}	[**h**eta]	'firefly'

We can identify some specific types of sound innovations that only occur in X_{Ch}: There is a regular sound change of *š* > *ʂ* > *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	[**š**ina]	:	X_{Ch}	[**r**ina]	'urine'
	b.	X_M, X_G, X_{Ch}	/**š**awu/	:	X_{Ch}	[**r**awu]	'seated, sit down'
	c.	X_M, X_G, X_{Ch}	[hu:**š**i]	:	X_{Ch}	[hu**r**i]	'head'
	d.	X_M, X_{Ch}	[**š**u**š**umi]	:	X_{Ch}	[**r**u**r**umi]	'coati'
	e.	X_M, X_G, X_{Ch}	[pa**ɕ**'i] ~ [paši]	:	X_{Ch}	[pa**r**i]	'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	[**p**a**ɬ**]	:	X_{Ch}	[**b**ar]			'already'
	b.	X_M, X_G	[**t**olo]	:	X_{Ch}	[**d**olo]			'yellow'
	c.	X_M, X_G	[ʔi**k'**a**ɬ**]	:	X_G	[**k'**a**ɬ**]	:	X_{Ch} [**g**ar]	"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}	[**ɬ**amu**k**]	'shrimp'	:	X_Y	[lamu_], [samu_]	'fish'
	b.	X_M, X_G	[ma**ɬɨk**]	'firewood'	:	X_G	[ma**ɬ**i**ʔ**] ~ [ma**ɬ**e**ʔ**]	'firewood'
	c.	X_M, X_G	[pupu**k**]	'mat'	:	X_G, X_{Ch}, X_Y	[pupu**ʔ**]	'mat'
	d.	X_M	[mu**k**-]	"we (1p)"	:	X_G, X_{Ch}	[mu**h**]	"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 **xaʔč*	>	X_M [**h**ači]	:	X_{Ch} [**k**ači-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 *ȼ'* > *s* and *s* > *š* 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, ɬ* > *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:

X_1	=	X_Y, X_{Jut}, $X_{S,}$ (X_{Jum})	[preserves *ȼ'* and *s*; innovates *t*]
X_2	=	X_M, X_G, X_{Ch}, (X_{Jum})	[innovates *s* and *š*; preserves *l, ɬ*]

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 *ʂ* that is only attested with JS and JAP. JS furthermore tends to assimilate *ku* + ʔV to *kw* (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 identified to have been borrowed from Mayan, Nahuan, 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 *_map_ 'coyol palm' [C-72]
	b.	<uszu>	[ʔušu]	'fly' (4718.)	<	pM * _ʔus_ 'fly' < pMZ * _ʔusu_ [C-72]
	c.	<meme>	[meme]	'crazy' (4076.)	<	pM *_me:m_ 'mute, dumb' [C-72]
	d.	<szíɛa>	[šik'a]	'hawk' (4468.)	<	pM *_šihk_ 'hawk' [C-72]
	e.	<naɛi>	[nak'i]	'chilli' (4139.)	<	pK *_naq′_ 'seed, pit' [C-71]
	f.	<muyi>	[muyi]	'chicle tree' (4115.)	<	pM *_muy_ 'chicle tree' [C-72]
	g.	<patí>	[pati]	'cloth' (4060.)	<	pK *_poʔ_ '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 *_k'ay_ 'to sell' [C-72]
	b.	<sicar>	[sikar]	'tobacco' (4381.)	<	pM *_si:k′_ '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 *_paxk′_ 'pineapple' [K-03]
	b.	<packa>	[pak'a]	'to nail' (2801.)	<	GLL *_pahk′_ ~ *_pak′_ '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.	<guʊenac>	[wɨnak]	'witch' (3888.)	<	pM *_winaq_ 'man, person' [C-72]
	b.	<naɛi>	[nak'i]	'chilli' (4139.)	<	pK *_naq′_ 'seed, pit' [C-71]
	c.	<szaɛalaguisz>	[šak'alawiš]	'white' (4411.)	<	KCH *saqal* 'whiteness' [E-65]
	d.	<ɛólo>	[k'olo]	'to flay' (2166.)	<	pM *_qol_ 'to peel' [K-03]

In many Mayan loans, the affricate *ɋ′* has changed into *s* (see § 4.3.1.2.2).

(4. 314)	a.	<szuszumí>	[šušumi]	'coati' (4522.)	<	WM *_ɋ'uɋ'um_ 'coati' [C-72]
	b.	<suɛsin>	[suk'sin]	'jug' (4395.)	<	pM *_ɋuhh_; POQ *suh* 'gourd' [C-71]

This process of deaffrication may also reflect in Mayan loans that change *ɋ′* to *t*.

(4. 315)		<cotó>	[kotoʔ]	'molar' (Ch-C)	<	pM *_q'oʔɋ′_ '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 *_čenaq_ 'bean' [C-71]
	b.	<szúni>	[šuni]	'star' (4504.)	<	EM *_č'umi:l_ 'star' [K-03]
	c.	<coszco>	[koško]	'buzzard' (3750.)	<	pM *_k'ut_ 'buzzard'; pK *_k'uč_ [K-03]
	d.	<szayá>	[šayaʔ]	'sour' (4463.)	<	pCh *_č'ah_ 'bitter' [K-03]

(4. 317)	<jóɛóguàŁ>	[hok'o-wa-ɬ]	'corn husk' (3954.)	< GLL *_xoč_ '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 *ȼ* becomes *ȼ'* when borrowed into Xinkan (4. 319) (cf. Campbell 1972a:189).

(4. 319) a. <txáma> [ȼ'ama] 'good' (4637.) < CHL *ȼam* 'good' [C-72]
b. <tzímaja> [ȼ'ɨmaɬa] 'potter' (4645.) < pM **ȼima(ʔ)* 'gourd, jug' [K-03]
c. <quitxu> [kiȼ'u] 'to exchange' (3020.) < pM **k'eš* 'change' [K-03]

Likewise, *s* may change into *ȼ'* if the root vowel is followed by a glottal stop (Campbell 1972a:188; see also § 4.4.6) (4. 320).

(4. 320) a. <txinána> [ȼ'inaʔna] 'scorpion' (4647.) < pM **si:naʔŋ* 'scorpion' [C-72]
b. <txʊemʊe> [ȼ'ɨmɨ] 'rope' (4661.) < pY **sum* 'lasso, rope' [K-03]

Another process of affrication involves the change from *s* to *č* (4. 321).

(4. 321) a. <poch poch> [poč poč] 'lungs' (4314.) < KCH, KAQ *pospoʔy* '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) <yʊema> [yɨma] '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 *š* 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 **ʔaxš ~ ʔoxš* 'breadnut' [K-03]

(4. 324) a. <pʊesza> [pɨša] 'smelly' (4360.) < pM **pahar* 'skunk'; POQ *pahar* [C-72]
b. <szʊeja> [šɨha] 'sand' (4526.) < GTz **hiʔ* 'sand' [K-03]
c. <mʊesza> [mɨša] 'to bury' (2707.) < pM **muq* 'to bury'; IXL *muxa* [K-03]

We also find the opposite process of Maya *š* being rendered as *h* or *y* (4. 325) (see § 4.3.1.4.2).

(4. 325) <pági> [pahi] 'ravine' (4222.) < pK **paš-* '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 *ɨ* (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 **poʔt* 'cloth' [C-72]
b. <ɛaataa> [k'ata] 'lie down' (2089.) < GK **koȼ'* 'lie down' [K-03]

(4. 327) a. <púpuc> [pupuk] 'mat' (4338.) < pM **pohp* 'mat' [C-72]
b. <cúnu> [kunu] 'buy' (2178.) < WM **koŋ* 'to buy'[C-71]
c. <púmu> [pumu] 'incense' (4335.) < pM **po:m*; pMZ **po:mV* 'incense' [C-72]

(4.328) a. <txʊeɛʊe> [ȼ'ɨk'ɨ] 'half' (4654.) < pCh **ȼ'ok* 'to break' [K-03]
b. [tɨrɨriʔ] 'round' (X_G) < EM **toli* 'round'; IXL *t'oroʔs* [K-03]

(4. 329) <toctoc> [toktok] 'mockingbird' (4590.) < PQM *tuqtuq* 'mockingbird' [S-73]
< KCH *tuktuk* 'woodpecker' [E-65]

(4. 330) a. <poɛo> [poko] 'break' (2905.) < pM **pak'* 'to break, split' [K-03]
b. <yoŁe> [yoɬe] 'spill, scatter' (3534.) < LL **yal* 'scatter, throw' [K-03]

4.5.2.2 Nahuan Loans

There are few loans from Nahuan languages in Xinkan. 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 *ma¢ahtli* > 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. <siguapati> < NAH: s*iwapahtli* 'medicinal plant' [K-92]
[siwapati]
'*ciguapate*' (4383.)
b. <szutí> < 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 eytmologically Nahuan (e.g. <epét> "icaco").

(4. 332) a. <chuculat> [čukulat] 'chocolate' (4261.) < NAH *čokolatl* "chocolate" [K-92]
b. <aŁtèpét> [ʔaɬtepet] 'village, town' (3617.) < NAH *altepetl* 'village, town' [K-92]
c. <tenész> [teneš] 'lime' (4561.) < PIP *teneš* '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 *ma¢ahtli* 'pineapple' [K-92]
[masa]
'pineapple' (4064.)

Most forms borrowed into Xinka from Nahuan languages preserve their phonotactic patterns (4. 335) as well as the affricate sounds *č* and *ȼ* (4. 336).

(4. 335)	a.	<tiŁtick>	[tiɬtik']	'black' (4578.)	<	PIP *tiltik* 'black'; *ti:l* 'charcoal' [C-85]
	b.	<mistún>	[mistun]	'cat' (4083.)	<	PIP *mistun* 'cat' [C-85]
			[miči]	'cat'	<	NAH *mistli* 'cat' [K-92]
	c.	<szipi>	[šipi]	'hurt by cutting' (3158.)	<	NAH *šipewa* 'to flay' [K-92]
(4. 336)	a.	<chuculat>	[čukulat]	'chocolate' (4261.)	<	PIP *čukulat* 'chocolate' [C-85]
	b.	<choo>	[čo]	'beat chocolate' (2200.)	<	NAH *čocolatl* 'chocolate' [K-92]
	c.	<tzutzupari>	[ȼ'uȼ'u pari]	'measles' (4665.)	<	PIP *tsu:tsu* '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 *ȼ' > s* described in § 4.3.1.2.2.

(4. 337)	X_M	<tondón> /tonton/ 'sea turtle' (4596.)	<	PIP *tu:ntu:n* 'sea shell = turtle shell' [C-85]
(4. 338)	X_M	<tiszi> [tiši] 'lazy person' (4586.)	<	PIP *tiškwit = tiš* 'corn dough'; *kwit* ' to grab' [C-85]
(4. 339)	X_M	<sompe> [sompe] 'pine nut' (4389.)	<	NAH *ȼompamitl* '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. *cabildo*
	b.	<caguayo>	[kawayu]	'horse' (3681.)	< Sp. *caballo*
	c.	<cusztaríca>	[kuštarika]	'*rich coast = type of cacao' (3779.)	< Sp. *costa rica*
	d.	<paluumász>	[palu:maš]	'dove' (4237.)	< Sp. *paloma*
	e.	<szinúla>	[šinula]	'lady' (4476.)	< Sp. *señora*
	f.	<puŁpu>	[puɬpu]	'dust' (4334.)	< Sp. *polvo*
	g.	<lagui>	[lawi]	'key' (4019.)	< Sp. *llave*
	h.	<máchiti>	[mačiti]	'machete' (4051.)	< Sp. *machete*

[131] Suárez identifies the phonemes *b*, *d*, *g*, *f*, *x*, *ñ*, *l*, *ƒ* 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. *clavo*
	b.	<paalé>	[pale]	'father' (4235.)	< Sp. *padre*

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. *cabildo*
	b.	<intiuli>	[ʔintyuɬi]	'Indians' (Ch-Z)	< Sp. *indios*
	c.	<acurra>	[ʔakura]	'needle' (Ch-C)	< Sp. *aguja*

(4. 343)	<puŁpu>	[puɬpu]	"polvo" (4334.)	< Sp. *polvo* [polbo]

The alveolar sibilant *s* is palatalised and changes into *š* (4. 344) or *ɬ* (4. 345).

(4. 344)	a.	<szinula>	[šinula]	'lady' (4476.)	< Sp. *señora*
	b.	<cusztaríca>	[kuštarika]	'*rich coast = type of cacao' (3779.)	< Sp. *costa rica*

(4. 345)	a.	<andamaŁtà>	[ʔandamaɬ ta]	'let's go' (2066.)	< Sp. *andamos*
	b.	<arhta>	[ʔaɬta]	'far, distant' (Y-C)	< Sp. *hasta*

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. *caja* [kaxa]
	b.	<szapún>	[šapun]	'soap' (4455.)	< Sp. *jabón* [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. *mojar*
	b.	<acurra>	[ʔakura]	'needle' (Ch-C)	< Sp. *aguja*

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. *perro*

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. *llave*

(4. 350)	<szinula>	[šinula]	'lady' (4476.)	< Sp. *señora*

Since [b] is not a phoneme in Xinka, voiced bilabial stops change into bilabial glides [b] > [w]:

(4. 351)	<caguayo>	[kawayu]	'horse' (3681.)	< Sp. *caballo*

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).

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[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 *-ɬa* (§ 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 *-kaɬi*, and (3) all other human/animate nouns employ the suffix *-ɬi* or *-ɬe* 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 *-ɬi* 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 *ʔin*; 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. *ʔuɬa* '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 *ša'* 'good, well', *ʔakani* 'like, so', *ʔaki* 'a bit' etc.
- 'temporal adverbs' include deictic elements, prepositions and numerals. Examples are *nankun* 'afternoon', *ʔa'ta* 'tomorrow', *ʔa'mu-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 *-'*, 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 ALS[133]

	Prefixes			Suffixes		
	A_{NPAST}, P_{ALIEN}	S	S_{PAST}	$P_{INALIEN}$	A_{PAST}, S_{DEP}	A_{DEP}
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=)ɬik	ʔa-... (ki=)ɬik	Ø-... (ki=)ɬik	-h (ki=)ɬik	-y (ki=)ɬik	-y (ki=)ɬik
	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 *ɬik* and the complex form *ki=ɬik* are used. They also follow the verb, although *ɬik* 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 A_1: 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 A_2: On intransitive verbs in main clauses in nonpast/imperfective S in the third person is marked with *ʔa-*.

Set A_3: On intransitive verbs in main clauses in the past/perfective the third person is unmarked.

Set B_1: 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 B_2: 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 B_3: The person-marking suffixes of this set seem to morphologically combine the suffixes of Set B_2 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>	b.	<mu guayà>
	ka-hašu		**mu-wayaʔ**
	2sP-pig		3sP-milpa
	'your pig'		'his milpa (corn field)'
	OT:"tu marrano" (351.)		OT:"sus milpas" (275.)

(6. 2)

a.	<szaja an>	b.	<utàc>
	šaha:-n		**ʔuta-k**
	mouth-1sP		mother-1pP
	'my mouth'		'our mother'
	OT:"mi boca" (325.)		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 màra>
ʔan-ma:ra
1sS-rest
'I rest'
OT:"yo descanso" (1471.)

b. <a màra>
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 Łic>
mu-piri **ki=ɬik**
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 màra>
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 màra>
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 <cà>; 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

		A_{NPAST}, P_{ALIEN}	S	S_{PAST}
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) Łic>	mu-... (ki=)ɬik	ʔa-... (ki=)ɬik	Ø-... (ki=)ɬik
		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 *ʔan-*, *ʔən-*, and *ʔin-*, which is reflected in the Schumann data (1967). Among the semi-speakers, PE and RHG use almost exclusively the form with the neutral vowel *ʔən-*. Campbell and Kaufman give *n-* as the basic form of the first person in their field notes. Assimilations of *ʔan* > *ʔam* and *ʔin* > *ʔim* 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-*, *ʔa-*, and *Ø-* are basically attested in the same functional contexts as in the ALS. Schumann does not indicate *ʔa-* or the zero-marker, which are, however, attested in the semi-speaker data where *ʔa-* 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->	ʔan-, ʔən- ʔin-	ʔan-	ʔan-, ʔən-	ʔan-	ʔən-	<n->
2s	<ka->	ka-	ka-	ka-	ka-	ka-	<ka->
3s A_{NPAST} / P_{ALIEN}	<mu->	mu-	mu-	mu-	mu-	-	<mu->
3s S	-	ʔa-	ʔa-	ʔa-	ʔa-	-	<ʔa->
3s S_{PAST}	-	Ø-	Ø-	Ø-	Ø-	Ø-	Ø-
1p	<muh->	muh- ʔən-	-	-	-	-	<muk->
2p		-	-	-	-	-	<ka->
3p A_{NPAST} / P_{ALIEN}	<ɬik>	mu-	-	-	-	-	<mu->

CHIQUIMULILLA (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 **mɨ* (or *mə*) and a person-marking suffix of Set B_1. In the plural persons the plural suffix *-ɬi* 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), Fernandéz (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. *ʔən-*)

or high middle vowel (i.e. *ʔɨn-*); 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 **mɨ-* in the function of a first person singular possessor-marking prefix. Although this form could fall into the structural type 2 (combining **mɨ* and the suffix *-ʔ* that can indicate the first person singular possessor in X_{Ch}), 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 Fernandéz 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}

	Ch-Z	Ch-C	Ch-L	Ch-F	Ch-MQ	Ch-S	Ch-P	Ch-JC	Ch-C/K
1s	-	<n'->		<n'->			<en->		<ən->
				<en->					
		<ɨn->P		<in->					
		<un->	<un->	<un->					
				<an->	<aŋ->P				
1sP				<mu->	<mu->				
(Type 2)					<mi->				
2s	-	-		<ca->	<ka->P		<ca->		
		<muc->						<muc->	<mək->
		<mac->P	<mac->	<mac->				<mú->P	
(Type 2)		<manc->P		<manc->					
2sf		<muy->						<muy->P	<məy-> ?
3sA			<mu->	<mu->	<mu->		<mu->	<mú->	<mu->
	<mug->P	<mac->		<mec->					<məh->
	<muc->P	<möc->							
(Type 2)	<mu-> _[k]								
3sS	<a->	<a->							<a->
$3sS_{PAST}$	Ø-	Ø-		Ø-	Ø-	-	-	Ø-	Ø-
1p	<muc->			<mac->					
	<mu-> _[k]								
	<mug->					<muh->			
		<maljki->							<məłki->
		<majki->		<majki->					
		<muljki->		<milki->					
(Type 2)		<maki->		<miki->					
2p	<ka- hay>								
	<ca- hay>								
		<möklic->							<məlik->
		<majlic->		<majlic->					
(Type 2)		<mac->							
2pf									<məliy->
3p	<mug-	<mu->							
(Type 2)	liqui>	<möclic>							<məli(h)>

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 Fernandéz, who give **mɨk-* 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 **mɨk-* in the Fernandéz 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, Fernandéz and Campbell & Kaufman indicate the first person plural as **mɨɬki-* or **mɨki-*, 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. **mɨɬik* (in one case Calderón uses <mak>, which probably also represents a prefix with a high middle vowel, i.e. *mɨk-*). 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 B_2.

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 <məɬih->, 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 *-ɬi* 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	<əlik>		
2pf	<əliy>		
3p	<əlih>		

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 **ʔən-*. In the plural persons variant forms of the structural type 2 are attested that include the plural suffix *-ɬi* and show similarity with the prefixes/proclitics in X_{Ch} and X_{Jum}. In the third person plural the cross-referencing prefix **miɬy-* combines with the plural clitic *ʔaya* following the verb; this form appears to be related to the clitic *ʔay* 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->	= * ɨn-
1sP	<nu->, <mi->*		
2s	<ca->		= *ka-
2sf	<mi->, <mij->, <miy-> (vi, imp) <muy-> (vi, imp)	<mu->	= *mɨy-
3sA	<mu->, <mi>		=*mɨ-
3sS	<a->		= *a-
1p	<muc->, <mu-> _[k]		= *muk-
	<lijiu=>		= *li-?
2p	<ka->		= *ka-
	<lica=>		= *li-ka=
3pA	<miy … aya>		= *mɨ- … ʔaya

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 *ɬi* 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 *ʔan-*, *ʔən* or *ʔn-* in the different varieties, with *ʔən* (or *ʔɨn-*) structurally corresponding to the pattern of Type 2-prefixes. The ALS prefix *ʔan-* corresponds with the form *ʔan-* 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-	ʔə-n-	ʔan-	ʔə-n-	ʔən-	
2s	ka-	ka-	ka-				ka-	
				mə-k-		ʔə-k-		
2sf				mə-y-		ʔə-y-	-	
3sA,P	mu-	mu-	mu(k)-	mə-h-		ʔə-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-ɬ-ki-		ʔə-ɬ-ki-	muh-	ɬi-ʔ
				ki-				
2p	ka- … ʔay	ka-	ka-				ka-	
				mə-ɬi-k-		ʔə-ɬi-k-		ɬi-ka-
2pf	-	-		mə-ɬi-y-		ʔə-ɬi-y-		
3p	mu- … (ki=)ɬik	mu- / ɬik	mu(k)-…liki	mə-ɬi-h-		ʔə-ɬi-h-	*mɬ…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 *məɬki*.

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 *ɬik* or *ki=ɬik* following the marked verb. In X_G *ɬik* 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 *-ɬi* 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-	mɨ-y-	[DEM?-2/3s]
3s	mə-h-	ʔə-h-		[DEM?-3s]
1p	mə-ɬ-ki	ʔə-ɬ-ki	ɬi-ʔ	[DEM?-PL-1p]
2p	mə-ɬi-k	ʔə-ɬi-k	ɬi-ka	[DEM?-PL-2s/p]
2pf	mə-ɬi-y	ʔə-ɬi-y		[DEM?-PL-2/3s/p]
3p	mə-ɬi-h	ʔə-ɬi-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 *mɬk-* 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 **mɨ* 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. **mɨ-h* > **mu-* and **mɨɬki* > **muk-* / *muh-*.

Table 6. 10: Hypothetical development of personal prefixes/proclitics in Xinkan

	Type 2		Type 1
1s	*ʔɨ-n-		> *ʔan- / ʔən-
2s	*mɨ-k-		> *ka-
2sf	*mɨ-y-		-
3s	*mɨ-h-		> *mu-
1p	*mɨ-ɬ-ki		> *muk-, *muh-
		> ɬi-	
2p	*mɨ-ɬi-k	> ɬi-ka-	> *ka-
2pf	*mɨ-ɬi-y		-
3p	*mɨ-ɬi-h		> *mu- / ɬik

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. <mutùa Łic>
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 ucszàya Łi quiŁic>
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-raya
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 neŁa>
ʔan-neɬa
1sP-BEN
'for me, mine'
OT:"mío, de mí" (144.), (243.)

b. <na gracia muneŁa 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 A_2, i.e. the third person is marked with the prefix *ʔa-*.

(6. 12)

a. <an màra>
ʔan-ma:ra
1sS-rest
'I rest'
OT:"yo descanso" (1471.)

b. <cà acù>
ka-ʔaku?
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-ta?
1pS-come
'we come'
OT:"nosotros venimos" (1401.)

e. <cà tá ay>
ka-ta? **ʔay**
2pS-come 2PL
'you (pl.) come'
OT:"vosotros venís" (1402.)

f. <a acù qui Łic>
ʔa-ʔaku? **ki=ɬik**
3pS-go INTENS=3PL
'they (themselves) go'
OT:"aquellos van" (1647.)

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)

a. na nin ʔan-ti:ki
DET PN:1s 1sS-sleep
'I sleep' (G-SH)
'he/she cries'
OT:"llora" (Ch-Z)

b. <a kagui>
ʔa-k'awi
3sS-cry

c. <taj camajlic tíki>
tah ka maɬik ti:ki
IMP:go/EXH do PN:1p sleep
'let's go and sleep!'
OT:"vamos a dormir" (Ch-C)

d. <nkichi ical taju mun úvui>
n-k'iči 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)

e. <nay mícó>
nay mi-ko
PN:2s 2sS-go
'you go'
OT:"tú vas" (Y-C)

f. <nalica lica tiki ajla>
nalika lika=ti:ki ʔaɬa
PN:2p 2pS=sleep tomorrow
'tomorrow you (pl.) sleep'
OT:"mañana dormiréis" (Y-C)

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)

a. <an màrà>
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. <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-ʔuɬu-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-yɨwa-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-nariɬa
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 oròmo>
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=ɬik
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-ɬikɨ 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 *mɨk-niwa
INT:what? 2sA-want
'what do you want?'
OT:"¿qué quieres?" (Ch-C)

d. <xuxo murruca naljki>
šušo mu-ruka naɬki
dog 3sA-bite PN:1p
'the dog bites us'
OT:"el perro nos muerde" (Ch-C)

e. <mu suca nay pelu>
mu-suka nay pe:lu(ʔ)
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 apuɬaʔ hinaʔ wati>
na šu:nik ʔa-puɬa-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:
?-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>
naɬki muɬki-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 *tišˇka* 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) <tiškaka>
tiška-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 B_1 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 B_2 marks A on transitive verbs in the past/perfective as well as S on intransitive predicates in dependent clauses; it differs from Set B_1 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) Łic>	-h (ki=)ɬik	-y (ki=)ɬik	-y (ki=)ɬik
		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 B_3 that differs from Set B_2 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>
$2sA_{PAST}/S_{DEP}$			-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	?	?			<-ka ʔay>
3p	<ɬik>							<-h ɬik>

*nouns ending in C

CHIQUIMULILLA (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 B_1) and subject-marking suffixes (Sets B_2/B_3) 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, Fernandéz and Campbell & Kaufman indicate complex

suffixes that seem to combine the nominal plural suffix *-ɬ(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 **mɨ* 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 Fernandéz 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 Fernandéz-data *-ka(ʔ)* is used. The second person plural also just employs *-k* following the plural morpheme *-ɬi*. 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 *-ɬ* and *-ʔ* that could be attributed to the documentary context). In the Zeeje-ms. the suffix combines with the plural clitic *ɬiki* to mark the third person plural; Calderón and Campbell & Kaufman indicate the plural as *-ɬi-ʔ*, respectively *-ɬi-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		<-V́>	<-V́>	<-V́>	<-ʔ>	<-ʔ>	<-ʔ>		<-(i)ʔ>
		<-n>	<-n>	<-n>				<-n>	<-n>
2s	<-ca>			<-cá>					
		<-c>	<-c>		<-k'>	<-k>		<-c>	<-(i)k>
2sf		<-y>							<-(i)y>
3s	<-g>				<-ɬ>	<-h>	<-g>		<-(i)h>
1p	<-g>								
		<-jki>		<-ljki>					<-(i)łki>
		<-ljki>							
		<-jliki>							
2p	<-ca hay>	<-jlic>							<-(i)łik>
2pf		<-jliy>							<-(i)yłik>
3p	<-g liqui>	<-jlí>		<-ki>?	<-^{h}>				<-(i)łi(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 *-k'* seems to be only attested with imperative verb forms. The second person plural is also attested with two forms *-ɬ-kaʔ* and *-ɬi-k*, both combining the plural morpheme *ɬi* 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 *ɬiki* to mark the third person plural; Calderón and

Campbell & Kaufman indicate the suffix *-ɬi-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 *-ɬkiʔ*, which combines the plural morpheme *ɬ(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					<-ʔ>				<-ʔ>
		<-n>	<-n>	<-n>	<-n>		<-n>	<-n>	<-n(ʔ)>
2s	<-ca>	<-cá>		<-cá>				<-cá>	-kaʔ
		<-c>		<c> $_{imp}$	<-k'>			<-c>	
2sA_{DEP}	<-can>		<-can>	<-kan>			<-cán>		-kan
2sf		<-y>						<-y>	-y
3s	<-y>	<-y>		<-y>	<-y>	<-y>	<-y>		-y(i)ʔ
		<-i>							
3sA_{DEP}	<-llin>								<-yin>
1p	<-g>						<-c>		
							<-ck>		
		<-jki>							-ɬkiʔ
1pA_{DEP}		<jkin>							<-ɬkin>
2p		<-ljca>							-ɬkaʔ
		<-jlic>							
2pA									<-ɬkan>
2pf		<-jliy>							-liy
2pfA_{DEP}									<-ɬkay>
3p	<-y liqui>	<-jlí>		<-li>					-hriʔ ~ -liʔ
3pA_{DEP}									<-hrin>,
									<-ɬin>

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_	Poss. C_	A_{PAST}	A_{DEP}
1s	<-nʔ>	<-'an>	<-n>	<-n>
2s	<-k>	<-ka>	<-kaʔ>	<-kan>
2s	<-y>	<-'ay>	<-y>	<-y>
3s	<-h>	<-i>	<-yiʔ>	<-yin>
1p	<-lki>	<-'alki>	<-lkiʔ>	<-lkin>
2p	<-lik>	<-'alik>	<-lkaʔ>	<-lkan>
2p	<-liy>	<-'aliy>	<-liy>	<-liy>
3p	<-lih>	<-'alih>	<-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>, <-yí>		= *-y / -yiʔ
	<-jli>, <-l>		= *-ɬ(i)
3Sp	<-j>		= *-h
1p	<-c>		= *-k
2p	<-lica>, <-licá>		= *-lika(ʔ)
	<-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 *-ɬi* 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(ʔ) / -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/-ɬ(i)
3sPoss	-h	-h	-k, -ɬ		-h	-h
3sP/C_		-i	-(i)h		-i	
1p	-k	-k	-k	-(a)hki	-ɬkiʔ	-k
				-(i)ɬki	-lki / -alki	
				-h		
2p	-ka ʔay	-ka ʔay	-ka ʔay	-h ka	-lkaʔ, -lka	-ka
					-(a)lik	
2pf				-ɬiy, -(i)yɬik	-liy, -(a)liy	
3p	-y (ki=)ɬik		-y liki	-hri, ɬi	-hriʔ	-y …ʔaya
3pPoss	-h (ki=)ɬik	-h ɬik	-h liki	-ɬi(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'; *ʔuɬu-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 B_1, i.e. the third person is marked with *-h*.

(6. 24)

a. <szaja an>
šaha:-n
mouth-1sP
'my mouth'
OT:"mi boca" (325.)

b. <mutiig quiŁic>
muti:-h **ki=ɬik**
hair-3pP INTENS=PL
'their (own) hair'
OT:"sus cabellos" (367.)

c. <utàc>
ʔuta-k
mother-1pP
'our mother'
OT:"nuestra madre" (361.)

d. <na jamàca>
na **hama-ka**
DET sin-2sP
'your sin'
OT:"tus pecados" (2034.)

e. <Pedro púlai macùg aŁmucàn>
Pedro **pula-y** **maku-h** **ʔaɬmukan**
Pedro make-3sA house-3sP yesterday
'Pedro made his house yesterday'
OT: "Pedro hizo su casa ayer" (2017.)

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 *neɬa* (benefactive/possessive), *ti-* (indirect object) and *ʔaɬi-* (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. <neŁa ag>
neɬa:-h
BEN-3sP
'for him'
OT:"él (genitivo)" (262.)

c. <aŁi cà>
ʔaɬi-kaʔ
PREP.CAUS-2sP
'by/because of you'
OT:"tú (ablativo)" (256.)

(6. 30) a. neɬa-n šawaɕ'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)

In X_{Ch} cross-referencing suffixes also mark the participant on the basic prepositions *ʔaɬ-* 'at, over, by' and *para-* 'at, under' (6. 31). The person-marked preposition *ʔaɬ-* can also occur with numerals in predicate function (6. 32).

(6. 31) a. <ajlajlic>
ʔaɬ-aɬik
PREP-2pP
'over you (pl.)'
OT:"sobre de vosotros" (Ch-C)

b. <alaljki>
ʔal-aɬki
PREP-1pP
'by us'
OT:"por nosotros" (Ch-C)

c. <para-y>
para-y
PREP:under-2sP
'under(neath) you'
OT:"debajo de ti" (Ch-C)

(6. 32) a. <pi alajki naljki>
pi ʔal-ahki naɬki
NUM:2 PREP-1pP PN:1p
'we are two'
OT:"nosotros dos" (Ch-C)

b. <pi ajlajliy>
pi ʔaɬ-aɬiy
NUM:2 PREP-2pP
'you (are) two'
OT:"vosotros dos" (Ch-C)

PRONOUNS: In Xinka, independent pronominal forms consist of a demonstrative or other nominal root that combines with a person-marking suffix of set B_1. This pattern is regular in the ALS as well as in the comparative data (see § 7).

(6. 33) a. <náca>
na-ka
DEM-2sP
'you'
OT:"tú" (75.)

b. <nag>
na-h
DEM-3sP
'he'
OT:"él, aquel" (4143.)

c. <ɛiguan>
ki-wa-n
INTENS/REFL-?-1sP
'myself'
OT:"yo mismo" (142.)

(6. 34) a. nin
*n(a)-ən
DEM-1sP
'I'
OT:"yo" (G-SH)

b. <naljki>
na-ɬki
DEM-1pP
'we'
OT:'nosotros' (Ch-C)

c. <ni-kiguán>
ni ki-wa-n
PN:1s INTENS-?-1sP
'I/me alone'
OT:"yo solo" (Ch-F)

POSSESSOR-MARKING ON VERB FORMS: In the ALS, the third person singular possessor-marking suffix *-h* occurs on the auxiliary *pata-* which is marked with the suffix of the anterior/passive participle *-wa* in auxiliary verb constructions that are used by Maldonado de Matos to fill the passive slot in the Latin grammatical model. In the comparative data *-h* is likewise attested following *-wa* in clauses with changed word order. Verb forms that take the suffix *-h* have a nominal function.

(6. 35) a. <pirií pataguaag>; <pirii pataguàg>
piri-ʔ **pata-wa-h**
see-STAT *accomplish-ANT-3sP
'he was seen = *seen (is) his having occurred'
OT:"aquel ha sido visto" (839.)

b. <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.)

(6. 36) <ša ʔuy ʔuɬuwah Hwan>
ša	ʔuy	ʔuɬu-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 B_2 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 cà>
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. <sàmuuc>
samu:-k
catch-1pA
'we caught it'
OT:"nosotros cogimos" (1086.)

e. <ɛʊetʊecà ay>
k'ɨtɨ-kaʔ **ʔay**
measure-2pA 2PL
'you (pl.) measured it'
OT:"vosotros medisteis" (1250.)

f. <pulái quiŁic>
pula-y **ki=ɬik**
make-3pA INTENS=3PL
'they (themselves) made (it)'
OT:"aquellos hicieron..." (410.)

(6. 38) a. kɨrɨ-n nin_A $tiɬa_O$
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. <pulaká>
pula-kaʔ
make-2sA
'you made it'
OT:"tú hiciste o Uds. hicieron" (G-S)

d. <pirín nak>
piri-n nak_O
see-1sA PN:2s
'I saw you'
OT:"desde que te vi" (Ch-F)

e. <inay avuájla culay>
$ʔinay_A$ ʔawaɬa 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 B_2; 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 (B_2)

	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	-ɬkiʔ	-lkiʔ
2p	-ka ʔay		-ka ʔay	-ɬkaʔ	-lkaʔ
2pf				-ɬiy	-liy
3p	-y (ki=)ɬik		-h ɬik	-hriʔ ~ -ɬiʔ	-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 (B_3)

	X_M	X_G	G-C/K	Ch-C/K	Jum-C/K
1s	-n	-n	-n(ʔ)	-n(ʔ)	-n
2s	-kan	-kan	-kan	-kan	-kan
2sf				-y	-y
3s	-y	-y	-yʔ	-yin	-yin
1p			-k	-ɬkin	-lkin
2p				-ɬkan	-lkan
2pf				-ɬkay	-liy
3p				-hrin, -ɬin	-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 gracía ayaàc>

šaɬ	**ka-n**	**wi**	**šama**	***gracía***	**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 hɨnɨ-kan naka
NEG know-2sA_{DEP} PN:2s
'...that you do/did not know' (G-JAP)

b. ʔaku-n paʔaʔ
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(: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)

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 uɛa can confesar>

ka-taʔ	**peʔ**	**ʔaɬa**	**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 aprobechar>

qué	*sí*	hunu-ka	paʔ	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>

taʔ	**ʔaya-kaʔ**
come	PROG-2sS_{DEP}

'you are coming'
OT:"estás viniendo" (1969.)

(6. 44) <yguitzi nàŁ u ɛa can naca na misza>

ʔiwiɻ'i	**naʔɬ**	**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 líki>

ne	ʔiri=ya-n	liki
PN:1s	see=PROG-1sS$_{DEP}$	PN:3p

'I am seeing them'
OT:"yo los veo" (Ch-C)

FUTURE PERIPHRASIS: 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 tíʔla 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 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.)

(6. 51) a. <capi ixpacá>
ka pi ʔiš(a)pa-kaʔ
INT:where? CENT emerge-2sS$_{DEP}$
'where did you leave from?'
OT:"¿de dónde vienes?" (Ch-C)

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)

c. hanta taʔma 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 *ʔay* and the clitic *ɬik* or the combination *ki=ɬik* 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>	ʔay	e.g. (294.)
third person plural	<Łic>	ɬik	"plural" (269.)
	<qui Łic>	ki=ɬik	e.g. (207.)
	<quigŁic>	ki-h=ɬik	"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 *ʔay* occurs only in the Zeeje-ms., while the third person marker is also found on nouns in the vocabularies of Calderón (1908) and Fernandéz (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 *ɬi* 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	ʔay	ʔay (Ch-Z)		
third person plural				ʔaya
	ɬik	*ɬi	hriʔ, *ɬiʔ	lik
		ɬik		ɬiki
		liki		
		liki ki		

Etymologically, pronominal plural markers in Xinka can be reconstructed to three basic morphemes which occur in different combinations: *ɬi*, *ki* and *ʔay(a)*.

The plural morpheme *ɬi* 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 *ɬik* is an abbreviated form of the morphologically complex form **ɬi-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 *kiʔ* '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 *ʔay* accompanies the second person plural in the ALS, the Zeeje-ms. and in X_G. In X_Y the clitic *ʔaya* 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 *ʔay* 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 Łan ay>
ka-pula **ɬan** **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:"venía 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 Łi ay>
ka-ʔukšaya-ɬi **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 ɛiguáca 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>
neɬa-ka **ʔay**
BEN-2sP 2PL
'yours (pl.)
OT:"vuestro" (292.)

b. <ca neŁa ay>
ka-neɬa **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 *ɬik* or the complex form *ki=ɬik* 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=ɬik*, 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 *ɬik*, i.e. *ki=ɬik* [INTENS=3PL] '(they) themselves'. It is not cross-linguistically uncommon to find intensifier-reflexives in pronominal function.

(6. 58) a. <a acù qui Łic>
ʔa-ʔaku ʔ **ki=ɬik**
3s/pS-go INTENS=3PL
'they themselves go'
OT:"aquellos van" (1647.)

b. <mu piri qui Łic>
mu-pi:ri **ki=ɬik**
3pA-see INTENS=3PL
'they themselves see'
OT:"aquellos ven" (742.)

c. <pulái quiŁic>
pula-y **ki=ɬik**
make-3pA INTENS=3PL
'they themselves made'
OT:"aquellos hicieron, han hecho" (410.)

d. <a acù Łic>
ʔa-ʔaku ʔ **ɬik**
3pS-go 3PL
'they go'
OT:"vayan aquellos" (1681.)

In most attested cases the intensifier *ki* and the plural *ɬik* cliticise to each other, but there are also contexts that show both markers in a discontinuous pattern.

(6. 59) <mà ayu qui agi Łic>
ma **ʔayu** **ki** **ʔahi** **ɬik**
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 *ɬik* 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. <pulaɬík>
pula-ɬik
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 *ɬik* seems to be attested between the verb and the adverbial.

(6. 61) a. <màrà Łic mà>
Ø-ma:ra-ʔ **ɬik** **maʔ**
3pS-rest-STAT 3PL COND
'they would have rested'
OT:"aquellos hayan descansado" (1534.)

b. <sàmui Łic pà ayù>
samu-y **ɬik** **paʔ** **ʔayuʔ**
catch-3pA 3PL PFV AUX
'they will have caught (it)'
OT:"aquellos habrán cogido" (1105.)

(6. 62) a. <a acù pà pè Łic>
ʔa-ʔaku ʔ **paʔ** **peʔ** **ɬik**
3pS-go PFV FUT 3PL
'they would have gone'
OT:"aquellos fueren, hubieren ido" (1711.)

b. <merei mà qui Łic>
mere-y **maʔ** **ki=ɬik**
break-3s COND INTENS=3PL
'they themselves would have broken it'
OT:"aquellos hayan rompido" (631.)

When occurring with phrasal verbs, *ɬik* can likewise precede or follow the preposition.

(6. 63) a. <mu pata nàŁ Łic szàma>
mu-pata **naʔɬ** **ɬik** **šama**
3sA-*accomplish IMPFV 3PL PREP
'they remembered'
OT:"aquellos se acordaban" (1570.)

b. <mu pata Łan szàma Łic>
mu-pata **ɬan** **šama** **ɬik**
3sA-*accomplish OPT PREP 3PL
'they would remember'
OT:"aquellos se acuerden" (1604.)

As pointed out above, the intensifier *ki* and the plural clitic *ɬik* 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 *ɬik* follows the predicate, while *ki* follows the TAM-adverbials *paɬ* and *naʔɬ*. 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 pulày Łic paŁ nàŁ qui>
ka=pa **pula-y** **ɬik** **paɬ** **naʔɬ** **ki**
EXO=PFV make-3sA 3PL PFV IMPFV INTENS
'they had made themselves'
OT:"aquellos habían hecho" (416.)

b. <capa paŁ nàŁ qui agi Łic>
ka=pa **paɬ** **naʔɬ** **ki** **ʔahi** **ɬik**
EXO=PFV PFV IMPFV INTENS be+3sS_{DEP} 3PL
'they themselves had been'
OT:"aquellos habían estado" (1905.)

The plural clitic *ɬik* can follow or precede inflected existential verbs that are accompanied by TAM-auxiliaries.

(6. 65) a. <nàŁ agi Łic>
naʔɬ **ʔahi** **ɬik**
IMPFV be+3pS_{DEP} 3PL
'they were (durative)'
OT:"aquellos estaban" (1899.)

b. <Łan Łic agi>
ɬan **ɬik** **ʔahi**
OPT 3PL be+3pS_{DEP}
'they would be'
OT:"aquellos estén" (1928.)

In auxiliary verb constructions the plural clitic *ɬik* 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-ɬi** **nariɬa** **ɬik** **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-ʔ **maʔ** **ɬik** **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. <púla naŁ patai Łic>
pula **na(ʔ)ɬ** **pata-y** **ɬik**
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, *ɬik* and *ki=ɬik*, are attested in these contexts. They occur with alienably and inalienably possessed nouns.

(6. 67) a. <mutùa Łic>
mu-tuwa **ɬik**
3pP-cacao 3PL
'their cacao trees'
OT:"sus cacaguatales" (272.)

b. <Łapaag Łíc>
ɬapa:-h **ɬik**
grandson-3pP 3PL
'their grandsons'
OT:"sus nietos" (369.)

c. <mutiig quiŁic>
muti:-h **ki=ɬik**
hair-3pP INTENS=3PL
'their (own) hair'
OT:"sus cabellos" (367.)

With non-spatial prepositions *ɬik* 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-neɬa **ɬik**
3pP-BEN 3PL
'theirs, of them'
OT:"de aquellos" (112.)

b. <tiyg Łic>
ti:ʔ-h **ɬik**
IO-3pP 3PL
'to them'
OT:"a, para aquellos" (113.)

c. <neŁa Łic>
neɬa **ɬik**
BEN PL
'theirs, of them'
OT:"de aquellos" (111.)

(6. 69) a. <ti?iɬík>
ti:?=ɬik
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 *ɬik* 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 nagŁic>
nana nah ɬik
FOC PN:3s PL
'they'
OT:"aquellos" (110.)

b. <namán Łic>
na man ɬik
DET DEM 3PL
'to them'
OT:"a ésos" (140.)

c. <nana axʊé Łic>
nana ?ahɨ ɬik
FOC DEM PL
'these'
OT:"éstos" (123.)

d. <neŁa Łic na mán>
neɬa ɬik na man
BEN 3PL DET DEM
'of/for those'
OT:"de ésos" (137.)

e. <aŁi Łic guèna qui>
?aɬi ɬik wena=ki
PREP.CAUS 3PL INT:who=INTENS
'by whom (pl.)?'
OT:"el que (plural, ablativo)" (212.)

(6. 71) a. ?ahe-ɬe
DEM-PL
'these' (G-SH)

b. <nanu juliqui>
nanu hu-liki
DET DEM-PL
'these (ones)'
OT:"éstas" (Ch-Z)

c. <maliqui>
ma-ɬiki
DEM-PL
'these'
OT:"aquellos" (Ch-Z)

In X_Y the third person plural clitic attested with pronouns is *?aya*; however, with quantifiers, the form *liki* is employed.

(6. 72) a. <manaya>
man =?aya
DEM =PL
'those'
OT:"ésos, ésas, ésos" (Y-C)

b. <tajilíki>
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>
?alih ?uka-y *deber* $liki_O$
because do-3pA Sp:owe PN:3p/3PL
'because they owe them'
OT:"por deberlos" (Ch-Z)

b. <ne iriyan líki>
ne ?iri=ya-n $liki_O$
PN:1s see=PROG-1sS_{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	<néŁéc>	ne:-ɬe-k (neʔ-ɬe-k)	*[DEM-PL-1p]	"nosotros, nos" (4170.)
2p	<naca ay>	na-ka ʔay	*[DEM-ka + 2PL]	"vosotros, vos" (4136.)
3p	<nagquiŁic>	na-h ki ɬik	*[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 *ɬi* and the person-marking suffix - V_2 became assimilated following vowel harmony rules (see § 4.4.2); i.e. **na-ɬi-k* [DEM-PL-1p] > *ne:ɬek*). V_1 in <néŁéc> 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 *ɬik* (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 2sf	naka, nak' nay	<náka>	<náca>	<naka>
3s	nah, naɬ naʔ			<nah>
DEM DEM	nah maʔ nahi, naɬi nahɨ "ésto" ('this')	<naman>, <man> <hiʔ> "él" ('he') <nahɨ> "élla" ('she')		
1p	ne:ɬeke, ne:ɬek'	<neɬék>, <neʔeɬék>		<neeɬek> (excl.) <neeɬek ʔay> (incl.)
2p	-			<naka ʔay>
3p	-	<naɬik>		<naaɬik>

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 *nahɨ* '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:ɬek* or *neʔɬek* 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 *ɬi* or *ɬik*. It deviates from the form given in the ALS *na-h (ki) ɬik* in that the cross-referencing suffix *-h* is not present. According to Campbell and Kaufman the first vowel *a* is long.

CHIQUIMULILLA: 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/Fernandéz-data where it follows the non-spatial preposition *ne'a* (§ 9.2.1); e.g. *ne'a 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:'ek* that is attested in the ALS and in X_G. In all other contexts, the pronoun consists of the determiner *na* and the suffix *-'ki* that can be identified as a cross-referencing suffix for the first person plural. Schumann also gives the form *na'ik*. It is unclear whether the forms *ma'ki* and *wa'ki* 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>		<ni?> <nin>	<ni?>	<ni> <nick> <nit>	<nan> <nin> <ni'c>	<ni?>
2s	<naca>	<naca> <nac>	<nac>	<naka> <nak> <nakay>	<nakʌ> <nakᵘ>	<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>	<na'>		<näj>	<naj> <najquí>		<nah>
1p		<-ne> <naljki> <maljki> <hualjki>	<ni-lama>	<-ne> <nalki> <najlki>		<na'í> <na'ík>		<naj-hiquí na> <ni narla>		<na'ki>
2p	<naca hay>	<najlica> <najlic> <majlic> <huajlic>	<na-lic>	<najlic> <majlic>						<na'ik> <na'iy>
2sf										<nay 'ih> <nay 'ik>
3p	<nag-quiliqui> <ma-liqui>	<najli>, <najlij> <najliki> <najna> <najna majliki> <liki>	<nana ma-lic>	<najli> <najna najliki> <liki>				<najlí>	<najliqui>	<na'i(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 *ɬi* and second person singular cross-referencing suffix *-ka*. The full form *naɬika* is only attested in Calderón, in all other contexts the final vowel is deleted, *naɬik* (cf. *naka* > *nak*). Calderón includes the additional forms *maɬik* and *waɬik*. Campbell & Kaufman make a functional distinction of formal and informal address. The forms *nay ɬih* and *nay ɬik* 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 ɬik* in the ALS. In the more recent contexts, the pronominal form is given without *ki*, i.e. **na-h-ɬi(ki)*. In the variant forms *naɬiki* and *naɬi* the cross-referencing suffix *-h* seems to have been dropped, or assimilated to the following lateral-fricative *ɬ*. Demonstrative forms that can substitute for the third person plural in X_{Ch} are structurally identical, i.e. *ma-ɬiki* [DEM-PL]. Campbell & Kaufman give the pronoun as *na-ɬi-h* [DET-PL-3p]. Calderón and Fernandéz also indicate a pronominal form for the third person plural that does not include the plural marker *ɬi*; 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 hat 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 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>		*na(n)
	<nen>, <ne>, <na nen>	<nen>, <ne>	*ne(n)
	<nin>	<nin>	*nin
2s	<naca>	<nac>	*naka
	<nay>, <inay>, <anay>, <nanay>	<anay>	*nay
3s	<naj>, <inaj>		*nah
	<iman>	<man>	*man
	<(i)naj man>, <naj mau>		*nah man
1p	<nec>, <inec>, <na nek>, <naj nec>		*nek
	<nelek>		*nelek
	<lelec>		*lelek ?
2p	<nalica>, <inalika>		*nalika
	<lika(n)>		*lika
	<naj ne inay>		*nah na nay
3p	<(i)naj man aya>		*man aya
	<naya>, <naj naj aya>		*nah aya

The basic form of the third person is *nah* or *ʔinah*. Demonstratives are used in the same context and may combine with *nah*; e.g. *nah man*.

The first person plural pronoun is *nek* or *ʔinek*. 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-ɬi-ka* (DET-PL-2p). There is a short form that simply lacks the determiner, i.e. *ɬi-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 *naɬik*, while all other varieties –including the ALS and the data from X_Y– give *ne:ɬek* 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-ʔušiki 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	nen, ne		nen, ne
		nin, nini, niʔ, nik	nin, nini, niʔ, nik	ninʔ	nin
		nan	nan		nan
2s	naka	naka	naka	naka	naka
		nak'	nak	nak	
2sf	-	nay	nay	nay	na-nay
					nayar
3s		na	na		na
	nah	nah	nah	nah	nah
1p			-ne		nek, na-nek
	ne:ɬek	ne:ɬek(e)			ne-ɬek, le-lek
			naɬi(ki), naɬki	nalki	
			ni naɬa		
			maɬki, waɬki		
1p (incl.)		ne:ɬek ʔay			
2p	naka ʔay		naka ʔay*		
	naka ... ʔay		naka ... ʔay*		
			nakay		nakay (poss)
			ni nakah		
2pf		naɬik**	naɬik, naɬika (1x)	na:lik	naɬika
		(ɬikan)?***	maɬik, waɬik		ɬika, -ɬikan
			hɨ ɬik		
				na:liy	
3p	nah (ki)ɬik		nah kiɬiki		nahaya
		na:ɬik	naɬiki		naya
			naɬi, naɬih	na:lih	
			nahki		
	ɬik		ɬik		
	kiɬik		ɬiki		
DEM	manɬik		maɬiki		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 *ɬik* 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 *-ɬi* (§ 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 *ʔahɨ* and *man* may occur in pronominal function and substitute for the third person independent pronoun *nah* (7. 3).

(7. 2) <najlí fracli>
na-ɬi frak-li
DET-PL man-PL
'these men'
OT:"estos hombres" (Ch-C)

(7. 3) a. <¿cà pè taguà na aszʊe?>
ka peʔ ta-waʔ na ʔašɨ
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 hɨʔ
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. <nen an ima naŁ na misza>

nen $_{A}$	**ʔan-ʔima**	**na(ʔ)ɬ**	**[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>

naɬi$_{S/A}$	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-ɕ'ɨwɨ	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>

ʔaɬa	muh-ti:ki	nek$_{S}$
tomorrow	1pS-sleep	PN:1p

'tomorrow we will sleep'
OT:"mañana dormiramos" (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 nàŁ u ɛa can naca>

ʔiwiɕ'i	**naʔɬ**	**ʔuka-kan**	**naka$_{A}$**
hear	IMPFV	PROG-2sA$_{DEP}$	PN:2s

'you were hearing ...'
OT:"tú estabas oyendo misa, ..." (1989.)

b. <yguitzi nàŁ naca u ɛa can>

ʔiwiɕ'i	**naʔɬ**	**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-ʔ	ʔuka-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$_A$	ʔima=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]$_A$	ʔan-ʔima	naka$_O$
	DET	PN:1s	1sA-tell	PN:2s
	'I will tell you' (G-SH)			
b.	[na	naka]$_S$	ka-ʔaku-ʔ	
	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.	[ʔuɬu-ʔ	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:ɬeke* 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:ɬeke kuy sawaɕ'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 ʔaɬi 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 *-ɬa* 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 Łàn>
naka ki pula-ɬa-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-ɬaʔ
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>
naɬki ti:ki-ɬaʔ ʔawɬakan
PN:1p sleep-PAST.ACT yesterday
'we slept yesterday'
OT:"ayer dormimos nosotros" (Ch-C)

d. <naj nucajlá tijlí>
nah nuka-ɬaʔ ti:-ɬi
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-ʔ
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 heʔ 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-ʔ hiʔ 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 na'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$_A$ ʔakɨ
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 *šɨkʲi* 'also'; the phrase is given as a lexical entry in the vocabulary.

(7. 23) <nagsziɛi>, <nagszʊequí>
nah šɨk'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:ɬeke waɬ
PN:1p NUM:'3'
'we are three' (G-SH)

b. <naɬma'ɛstro>
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-ʔar
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-ʔ nin
get tired-STAT PN:1s
'I am tired' (G-JS)

b. ʔerɬeke-ʔ 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 ɛica>
naka ki-ka
PN:2s INTENS/REFL-2sP
'you yourself'
OT:"tú mismo" (154.)

b. <nána nag ɛiqúig 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-kaʔ** **nem$_{O}$**
INT.what? search-2sA PN:1s
'what have you searched me for?'
OT:"¿para qué me quieres?" (1870.)

b. <mu uɛa 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 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-ʔušíki 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-ɬaʔ na$_{}$ɬi$_{O}$
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 liki$_{O}$
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>
naɬik 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** **ɬik**
DET DEM/3s 3PL
'(to) those'
OT:"a ésos" (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_Y 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]$_O$ ɬika-kaʔ
DET PN:1s find-2sA
'you found me' (G-SH)

b. <nac ni irijlá>
nak$_A$ ni$_O$ ʔiri-ɬaʔ
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:luʔ$_A$
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=šunik]$_O$ [na nin]$_E$
give-3sA DET MOD=pot DET PN:1s
'… (that) he 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)

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. <szamà 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 familya 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(-ʔ) ti(:ʔ)
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 ɬapa
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 ayahuí>
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. <aŁi náca>
ʔaɬi naka
PREP.CAUS PN:2s
'by/because of you'
OT:"por ti" (83.)

b. <neŁa nen>
neɬa nen
BEN PN:1s
'for me/mine'
OT:"mío, de mí" (58.)

c. <tiý neŁéc>
ti:ʔ ne:ɬek
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. ʔaɬi 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>
neɬa 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 ʔaɬi
DEM PREP.CAUS
'because of that/him' (G-JAP)

b. <nac nejla>
nak neɬa
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. ne↓a-n sawaȼ'aʔ nin
BEN-1sP sow PN:1s
'for me to sow (milpa)' (G-SH)

b. ʔan-ne↓a 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 witi↓aya
PN:2s young lady
'you, young lady!' (G-JAP)

b. naka šurumu-↓e
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>, <yú> <hyu>	yu:	"tú, hombre" (Ch-C), (Ch-F)

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(ʔ) yu:
hurry IMP VOC
'hurry, you!'
OT:"apúrate" (Ch-F)

(7. 55) <cayac yu>
ka ya-k yu
INT:where? be-2sS_{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	<ɛiguan>	ki-wa-n	[INTENS/REFL-?-1sP]	"yo mismo" (142.)
2s	<ɛiguáca>	ki-wa-ka	[INTENS/REFL-?-2sP]	"tú mismo" (162.)
	<ɛiguac>	ki-wa-k	[INTENS/REFL-?-2sP]	(153.)
	<ɛica>	ki-ka	[INTENS/REFL-2sP]	(154.)
3s	<ɛiguag>	ki-wa-h	[INTENS/REFL-?-3sP]	"aquel mismo" (174.)
	<ɛiqúig qui>	ki-ki-h ki	[INTENS/REFL-?-3sP + INTENS]	(176.)
1p	<ɛiguác>	ki-wa-k	[INTENS/REFL-?-1pP]	"nosotros mismos" (148.)
2p	<ɛiguáca ay>	ki-wa-ka ʔay	[INTENS/REFL-?-2pP + 2PL]	"tú mismo, pl" (165.)
	<ɛica ay>	ki-ka ʔay	[INTENS/REFL-2pP + 2PL]	(164.)
3p	<qui Ɬic ɛiguàg>	ki=ɬik 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] Fernandéz (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)		kiwa-n (Y-L)
			ki-wa (C&K)		
			wal'a-n (C&K)	k-wat'a-n (C&K)	
		ki-n (C&K), (RHG)			*ki nen (Y-C)
2s	ki-wa-k(a)		ki-wa-k (C&K)		*kiʔa-ka (Y-L)
			kyu:k(a) (C, C&K)	kyuuka (C&K)	
	ki-ka	ki-ka (C&K)			
2sf			ki-wa-y (C,F,C&K)		*ki nay (Y-C)
			wal'a-y (C&K)	k-wat'a-y (C&K)	ki-wa-y (Y-C)
3s	ki-wa-h				
			wal'a-h (C&K)		
		kiʔ (C&K), (SH)			
	ki-ki-h ki	ki-ki-h (C&K)	kiki (Z, C)	kihkih (C&K)	*ki nah man (Y-C)
	ki-h ki		kikih (C&K)		
1p	ki-wa-k	ki-wa-k (C&K)	ki-wa-k (Z)		
			kyu(:)-k (C)		
			ki-wa-ki (C, F)		
			ki-wa-ɬki (C, F, C&K)		
			wal'a-ɬki (C&K)	k-wat'a-lki (C&K)	
					*ki nek (Y-C)
2p	ki-wa-ka ʔay				*ki nalika (Y-C)
			wal'a-ɬik (C&K)	k-wat'a-lik (C&K)	
	ki-ka ʔay				
2pf				k-wat'a-liy (C&K)	
3p	ki ɬik ki-wa-h				
	ki-h ɬik		ki-ɬi-k'i (C&K)	ki-lih (C&K)	*ki nah man
			ki-ɬi-h (C&K)	k'i-h (C&K)	ʔaya (Y-C)
			<li kikí> (C)		

The functional difference of intensifier-reflexives that combine *ki* and the morpheme **wa(ɬa)* 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"
	<nagquí>	nah=ki	[PN:3s=INTENS]	"él es, aquel es"
	<nag ɛiqúig quí>	nah kiki-h =ki	[PN:3s + INTENS-3sP =INTENS]	"aquel mismo"
numeral	<iɛal qui>	ʔikaɬ=ki	[NUM=INTENS]	"sólo uno"
	<tumuqui>	tumu=ki	[QUANT=INTENS/DISTR]	"todos"
	<Łic>	*ɬi=k(i)	[PL=INTENS/DISTR]	3p plural marker
	<qui Łic>	ki=ɬik	[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(ʔ)* <quí> "partícula conclusiva, y afirmatíva" (4366.). Campbell & Kaufman indicate *kiʔ* 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-ʔaka* 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=ɬik* 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> <kiʔinín>	*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	<íka>	*(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-?]	"a o para nosotros" (G-S)	'to/for us'
3p	<kiɬik> <kaɬik>	*k(i)-(a)ɬik	[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 <tiʔiɬ> 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 ɛiguáca>
naka **ki-wa-ka**
PN:2s INTENS-?-2sP
'you yourself'
OT:"tú mismo" (162.)

b. <nag ɛiguag>
nah **ki-wa-h**
PN:3s INTENS-?-3sP
'he himself'
OT:"aquel mismo" (174.)

(7. 57) a. <òro naca ɛica capa jata pè quí>
ʔoro **naka** **ki-ka** **ka-pahata** **peʔ** **kiʔ**
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 ɛica>
na **naka** **ki-ka**
DET PN:2s INTENS-2sP
'(to) you yourself'
OT:"tú mismo (acusativo)" (161.)

c. <nána nag ɛiqúig 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>
naɬki 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>
naɬki ki-wa-ɬki
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 *neɬa* (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 *ʔaɬi* and *ʔaɬparakiwa* are marked with independent pronouns. In all attested cases, the intensifier-reflexive follows the prepositional form.

(7. 61)

a. <anneŁa ɛiguán>

ʔan-neɬa	**ki-wa-n**
1sP-BEN	INTENS-ʔ-1sP

'mine myself = for/of myself'
OT:"de mí mismo" (144.)

b. <tiýg Łic ɛiguàg>

ti:ʔ-h	**ɬik**	**ki-wa-h**
IO-3pP	3PL	INTENS-ʔ-3pP

'to themselves'
OT:"aquel mismo (pl., dativo)" (183.)

c. <aŁi náca ɛica ay>

ʔaɬi	**naka**	**ki-ka**	**ʔay**
PREP.CAUS	PN:2s	INTENS-2pP	2PL

'by yourselves'
OT:"tú mismo (plural, ablativo)" (172.)

The complex causal preposition *ʔaɬ-para-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 *ʔaɬ-* 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. <aŁparaquiguá>

ʔaɬ-para	**kiwa-ʔ**
PREP.CAUS-ʔ	INTENS/REFL-ʔ

'by-ʔ X-self = by/because of X'
OT:"por" (3615.)

b. <aŁparaquiguà nen ɛiguán>

ʔaɬ-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-neɬa	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) <tiý-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. <nagquiŁic>
nah=ki =ł̶ik
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 maqúi>
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 *ʔikaɬ* '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)
<iɛal qui>
ʔikaɬ=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(ʔ) ʔikah=ki
PFV NUM:'1s'=INTENS/DISTR
'already one-time = once ago'
OT:"una vez" (G-S)

b.
<piki (vez) huirkihuí>
pi=ki *vez* wirki-wiʔ
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 waɬki
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-laʔ 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>
ɬih tumu=ki na kikiʔ
PREP QUANT=INTENS/DISTR DET INTENS+3s
'with all of itself'
OT:"todos sus ramos" (Ch-Z)

The third person plural clitic *ɬik* may have grammaticalised from a similar pattern that had *ki* in the function of a distributive marker following the animate plural marker *ɬi* (§ 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) <zèŁèya ɛica>
seɬe-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 *kiʔin* (a) that he otherwise employs as an object pronoun (see § 7.2.1).

(7. 76) a. <nanín imawán kiʔín>
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 quiqui na jú>
ʔuka-y *consolidar* kiki na huʔ
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 kihuay>
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-ʔuka *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>
ʔunu=yin kiki
stretch=PROG+3sS_{DEP} INTENS/REFL+3s
'he is stretching himself'
OT:"estirarse" (Ch-F)

b. <que teno allin quiqui>
ke teno=ʔayin 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>
ȼ'ahma-ʔ ki-wa-n ti(:ʔ) rikayi-ɬi
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 ʔan-ču-huraʔi-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>
n-kute-ki
?-scratch-REFL
'scratch yourself'
OT:"rascanse" (Y-C)

b. <ayun ganúki>
ʔayu-n kanu-ki
*be-1sS_{DEP} stretch?-REFL
'I am stretching myself'
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 ʔi-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>, <pataykikí>
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 *kiʔ* or *ki:*.

(7. 84) a. <naca qui púla Łàn>
naka ki pula-ɬa-n
PN:2s INTENS make-PAST.ACT-SUBJ
'(that) you made it(self)'
OT:"tú lo hiciste" (4771.)

b. <... ca- pajata pè quí>
ka-pahata peʔ kiʔ
2sA-pay IMP INTENS
'you have to pay it(self)'
OT:"lo has de pagar" (1876.)

c. <pulàc naŁ quí>
pula-k na(ʔ)ɬ kiʔ
make-1pA IMPFV INTENS
'we would have done it(self)'
OT:"nosotros hubieramos hecho" (458.)

d. <uisziy ayù pa qui na misza>
ʔuyši-y ʔayuʔ paʔ 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(ʔ)* 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. <nanín 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-1sS_{DEP}	leave	INTENS/OBJ

'I am going to leave him(self)' (G-SH)

c. <imagua ay quí 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
ʔ	INTENS/REFL	PN:1s

'to myself'
OT:"a mí mismo" (Y-C)

b. <maski naj man>

mas	ki	nah	man
ʔ	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+3sS_{DEP}

'who-self is/was = (the one) who is/was'
OT:"el que está o estaba" (1962.)

b. <nána guéna qui Łic>

nana	**wena=ki**	**ɬik**
FOC	INT:who=INTENS	3PL

'who-selves = (they) who'
OT:"el que (plural)" (207.)

(7. 88) a. <guéna ayuqui>
wena **ʔayu** **=ki**
INT:who AUX INTENS
'who-self would = if someone'
OT:"si alguno" (214.)

b. <ayuguenaqui>
ʔayu **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 ʔena=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 ʔena=ki ʔeltepet
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 maqúi>
ni= **wena** **ma** **=ki**
NEG= INT:who SUBJ INTENS
'not who-self = nobody'
OT:"ninguno" (228.)

(7. 91) a. <ɬawanín>
ɬa= 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. <jamaguàŁa>
hama-wa-ɬa
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 ambuquı>
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 uguaŁ>
maku **ʔuwaɬ**
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. <Łómehui>
ɬome 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:"(oíste) misa" (1958.)

b. <nana turi-Łi>
nana turi-ɬi
FOC child-PL
'the children'
OT:"los muchachos" (1979.)

c. <nana jautuma axʊe>
nana haw-tuma ʔahɬ
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. <naùn>
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-ɬi
boy, youngster-PL
'boys, youngsters'
OT:"el muchacho (plural)" (4518.)

b. <mʊeɛaŁaŁi>
mɨk'a-ɬa-ɬi
work-AGT-PL
'workers'
OT:"el sirviente (plural)" (4119.)

c. <papacáŁi>
papa-ka-ɬi
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	-ɬa
- instrumental	-k
plural (human/animare)	
possessor suffix (inalienable)	
demonstrative	naʔ, man, ʔašiʔ
TAM	
- mode	ma, ʔayu
- past	paʔ, paɬ
- 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. *ɕ'imaha* 'potter' = 'people from Guazacapán'. Human-animate nouns mark plural with the suffix *-ɬi*. 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', *ʔayaɬa* 'woman' as well as the Mayan loan *wɬnak* 'witch'. The second group of nouns in the class are descriptive nouns that

denote human characteristics such as states (e.g. *tiɬtik'* 'black (person)', *pele* 'youngster' ("patojo")), disablements (e.g. *pohmo* 'blind', *nunu* 'dumb') or attitudes (e.g. *ɬara* 'barbarian', *tiši* 'lazy man, layabout'). Derived agentives (e.g. *ʔeɬma-ɬa* [borrow-AGT] '(the one) who borrows'; *hɨk'a-ɬa* [weave-AGT] 'weaver') and classifier compounds with gender nouns (e.g. *ʔuk-šaya* [old-female] 'elderly woman'; *witi-ɬaya* [?-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 *-ɬi*, 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', *waya?* 'maize field, *milpa*', *hɨk'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: *ʔaʔu-k* [maize-INSTR] 'calcium carbonate (used as fertilizer)', *ʔaw-ɬa-k* [maize-CAUS-INSTR] 'tortilla griddle, *comal*', *ʔata-k* [?-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* [?-INSTR] 'bed', *pewe-k* [?-INSTR] 'gourd, bowl', *šoto-k* [pot-INSTR] 'cooking stones', *šu:tu-k* [wood-INSTR] 'soot, charcoal', *sawa-k* [hard?-INSTR] 'metal', *šuwi-k* [sweep-INSTR] 'broom', *šuni-k* [?-INSTR] 'pot', *maɬi-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 šɨma* [flee-INSTR + ?] 'roof-ridge, ridgepole'.

Other object nouns are derived product/result nominalisations with verb roots: *ʔiwaȼ'a* 'thread' (*ʔiwaȼ'a* 'to spin'), *poȼ'a* 'laundry that is to be washed' (*poȼ'a* 'to wash'), *hɨk'a* 'weaving, cloth' (*hɨk'a* 'weave'), *čičі* 'excrement' (*čičі* 'to defecate') etc.

There are also non-derived objects, such as *kuɬku* 'pot, bowl' ("*cajete*"), *k'uɬami* 'bromeliad (*aechmea magdalenae*)' ("pitafloja"), *suk'sin* 'water jug', *pati* 'cloth, napkin', *oto* 'rockbed, volcanic tuff' ("talpetate"), *šoto* 'pot', *maɬi* 'ash', *waru* 'hammock' etc.

'Animal designations' comprise:

- domesticated animals: *miya* 'chicken', *huru* 'turkey', *hašu* 'pig', *mistun* 'cat', *suy* 'turkey'
- wild animals: *tuma* 'deer', *pokoko* 'racoon', *šɨma* 'mouse', *hiru* 'kinkajou', *kaškaš* 'agouti, tepescuintle', *ɬuri* 'rabbit', *payamu* 'coyote', *howa* 'puma', *šušumi* 'coati', *wilay* 'tiger', *še* 'possum', *weren* frog', *šuruɬ* 'squirrel', *k'ɨrɨ* 'tapir', *k'ɨša* 'bat'

- reptiles: *ʔampuki* 'snake', *weša* 'iguana', *tonton* "sea turtle, *šuway* 'crocodile', *šiyuk* 'rattlesnake', *pese* 'lizard', *taʔuk* 'turtle', *paɬama* 'sea turtle'
- aquatic animals: *sema* 'fish', *sɨmaya* 'crab', *šuni* 'sea shells, mussels', *ɬamuk* 'shrimp', *šuti*, *šuni* "river snails, *jutes*'
- birds: *koško* 'vulture', *hɨrɨ* 'parakeet', *šok'oy* 'owl', *waka* 'chachalaca, *kukuwaɬ* 'pigeon', *kuruwi* 'turtle-dove', *čehče* 'woodpecker', *waksi* 'vulture-like bird that sings at sunrise and sunset', *teško* 'type of bird', *šik'a* 'hawk', *¢'oko* 'grackle', *toktok* 'mocking bird', *ʔalu* 'parrot', *pošo* 'partridge'
- arachnids: *ʔamu* 'spider', *¢'inaʔna* 'scorpion'
- insects and parasites: *ʔara* 'fly, worm', *kaša* 'mosquito', *ʔtuɬ* 'flea', *k'otoro* 'flying ant, *zompope*', *ʔušu* "small fly, *jején*", *harun* 'tick', *šete* 'worm', *ʔuwaɬ* 'ant', *tɨːmaɬ* 'lice'

'Plant terms' comprise:

- generic terms: *hutu* 'tree, wood, pole', *mašira* 'root', *piya* 'leaf', *šuway* 'every kind of bunch', *tuɬu* 'flower, blossom'
- terms for trees: *ɬimik* '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', *šupimaɬ* 'thorntree (*acacia hindisii*)' ("izcanal"), *šuwan* 'laural ree', *tolo* 'coral tree', *yašik* 'joshua tree', *yɨwɨɬ* '*coachipilín* tree'
- grass and reeds: *karawa* 'grass', *nuwi* 'straw', *šinu* 'wild reed', *¢'ita* 'reed flower', *wiyan* 'sugar cane'
- maguey/henequen: *ʔaratak* 'henequen, *maguey*', *tamaɬ¢'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: *ʔamuɬ* '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* 'pinguin (*bromelia pinguin*)', *peyu* 'sanzapote (*chrysobalanaceae*)', *tapa* 'nance'
- cash crops, food and good for consumption: *ʔayma* 'corn (on the cob)', *ʔaʔu* 'corn (degrained)', *ʔepet* 'icaco (fruit from the coast)', *hahi* 'avocado', *huhuɬ* 'honeycomb', *ʔti* 'tomate', *k'aw* 'white tamal', *k'eneya* 'plantain', *k'iri-wa paɬ¢'i* 'atol, *chilate*', *kuruya* 'thick tortilla, *pixton*', *lenka* 'pataxte (wild cacao)', *ɬɨwɨ* 'pumpkin', *mapɨ* 'tortilla', *mura* 'ear of corn', *elote*", *nak'i* 'chilli', *paɬ¢'i* 'corn dough', *pumu* 'incense, *copal*', *šapu* 'cotton', *sikar* 'tobacco', *šinak* 'beans', *tila* 'salt', *tuwa* 'cacao', *¢'ɨwɨ* "fresh corn, *camagua*", *ʔuk'u* 'fresh corn tortilla', *ʔuruɬ* 'egg', *ʔuɬ¢'i* 'hominy, *nixtamal*', *ʔuti* "corn flour, *pinol*', *ʔuyuku* 'corn gruel, *atol*'

'Environmental terms' include:

- landscape: *k'arawa* 'woods', *pahi* 'ravine', *tahti* 'plain, valley', *wona* 'hill, mountain'

- natural elements: *ʔuy* 'water', *k'unu* 'shadow', *taw* 'wind', *maša* 'mud', *šɨha* 'sand', *wati* 'clay', *pɨpɨk* 'well', *mumuc* 'pool', *kaɬi* 'the smoke'
- celestial bodies: *ʔawa* 'moon', *pari* 'sun', *šuni* 'star'
- time periods, occurrences: *ʔayapa* 'year', *pari* 'day', *sɨma* 'night', *pari-k'i* 'summer', *ʔuwik'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', *ʔɨša* 'scabies', *ʔištu* 'scar' ~ *ʔištuʔ* 'rash', *nuru* 'pus' ~ *nuruʔ* 'yaws (*treponema pertenue*)', *ʔošto* 'ulcer, wound' ~ *ʔošto* 'ulcerous, purulent', *ʔuštu* 'diarrhea'

Non-derived 'abstract terms' in this noun class include: *ʔɨrɨ* 'old thing', *ʔištu* 'the reverse/flipside', *k'ɨša* '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 *-ɬi*, which defines them as human/animate. The nouns in this group can be classified as follows:

- extremeties: *ʔeɬaha* 'tongue', *huray* 'eyes, face', *hu:ši* 'head', *k'omo* 'knee', *k'ɨwɨ* 'shin', *mani* 'ear(s)', *nari* 'nose', *pa:ma(:ʔ)* 'arm, wing', *pu* 'hand', *šama-li* 'forehead', *šawu* 'fingernail, claw', *taɬi* 'throat', *tita* 'leg', *ʔutuyma-h* 'tail', *wapi* 'foot'; and compounds: *naʔu-wapi* 'toes', *naʔu-pu* 'fingers', *šan-šeke* 'chest', *huray wapi* 'a bone in the foot', *para-wapi* 'foot sole', *para-taɬi* 'neck', *para-pama-h* 'armpits'
- body and bones: *ʔuwi-h* 'meat', *harari* 'bone', *ɬɨsk'ɨwa* 'waist, backbone'; and compounds: *ʔuwi tita-h* 'muscles', *ʔuwi k'omo* 'flesh of lower leg, calf', *harari k'ɨwɨ* 'shin bone', *harari ʔɨlɨ-h* 'backbone', *harari k'omo* 'bone of the knee', *hutu taɬi* 'bone of the neck'
- organs: *hini* 'stomach', *mašira* 'blood vessels, nerves', *ʔošo* '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', *ʔɨna* 'excrement'; and compounds: *ʔuy huray* 'tears', *ʔuy nari* 'snot', *ʔuy 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', *mɨk'a* 'work, tribute', *mu/purimu* 'food', *šuya* 'first, earlier', *hama* 'sin'; and objects made by humans: *ʔišak'a* "drink, *chilate*", *ʔiwa* '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* [?-INSTR] 'navel', *tani:-k* [?-INSTR] 'brain', *tutu-k* [suck-INSTR] 'female breast', *huta-k* [?-INSTR] 'anus'; as well as the reduplicated forms: *poč-poč* 'lungs', *pun-pun* 'bladder'

- alienable possessed: *pipi* 'genitals of babies/animals', *pɬk'ɨ* '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 *-ɬi* 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', *k'ɨrɨʔ* 'younger brother/sibling', *wɬhɨʔ* 'younger sister'
- offspring: *naʔu* 'offspring, son/daughter', *humu naʔu* 'son', *haya naʔu* '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*', *ɬak'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 naʔu* [?-CL offspring] 'godson, godchild', *ɬɬk'ɨ-n naʔu* [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] 'Castillian 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 mapɨ* (= Castillian tortilla) 'bread'
- church/religion: *kumbišyun* [Sp:confesión] 'confession', *ʔayuna* [Sp:ayuno] 'fasting, lent', *krišma* [Sp:cristianar] 'baptism, christening', *kapun* [Sp:capon] 'capon', *kantoreɬe* [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: *ʔaɬkalti* [Sp:alcalde] 'mayor', *kaštiyanu* [Sp:castellano] 'Spanish', *kapiltu* [Sp:cabildo] 'council, chapter', *šuɬtera* [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: *puɬpu* [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 *-ɬi*, but are generally alienably possessed, such as e.g. *ʔiwa-ɬa* [make tortillas-AGT] 'tortilla baker' (= "torteadora"), *kunu-k'i-ɬa* [buy-AP-AGT] 'who buys, customer', *wišu-ki-ɬa* [beat-AP-AGT] 'who beats, flogger' ("azotador"). Instrumentals generally refer to inanimate objects/instruments; e.g. *k'ɨrša-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-ɬ* [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. *mɨša-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'; *ʔuk-šaya* [old-female] 'elderly woman') and prepositional compounds (e.g. *ʔaɬ-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. *naʔu wapi* (offspring-foot) 'toe') and (4) coordinate compounds (e.g. *šuway-ɬamuk* [lizard-prawn] 'sea devil').

TOPONYMS are actually not a class in its own right, but include roots (e.g. *k'ɨša* [bat] "Nancinta"; *kuku* [?] "Taxisco"), prepositional compounds (e.g. *šam-piya* [PREP-leaf] "Ixhuatán"), derived nouns (e.g. *tuhku-wa* [?-LOC] "Tecoaco"; *ʔuru-ɬ* [=?-NOM] "Tacuilula"), ethnonyms (e.g. *ɕ'imaha* [L-M:potter] "Guazacapán") and loanwords (e.g. *ʔaɬtepet* '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 *neɬa* 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 *neɬa* 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 *neɬa* (some of the semi-speakers from X_G mark the possessor with the diminutive marker *ču*).

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) ɬik	-h (ki) ɬik

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 *neɬa* (benefactive/possessive), *ti:ʔ-* (indirect object) and *ʔaɬi-* (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. <tiýn>
ti:ʔ-n
IO-1sP
'to me'
OT:"a mí o para mí" (61.)

b. <neŁa Vg>
neɬa-h
BEN-3sP
'for him'
OT:"él (genitivo)" (262.)

c. <aŁi cà>
ʔaɬi-kaʔ
PREP.CAUS-2sP
'by/because of you'
OT:"tú (ablativo)" (256.)

d. <ɛiguan>
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 *neɬa* 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 *ʔaɬ-* 'at, on top of', *para-* 'at, under' and *ɬi-* 'with'.

(8. 8)

a. neɬa-n šawaȼ'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-2pP 2PL
'he turns his eyes to you (pl.)'
OT:"convierte sus ojos hacia vosotros" (Ch-Z)

c. <ajlajlic>
ʔaɬa-ɬik
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 *neɬa* (8. 9). In X_G the prefix-marked benefactive *neɬa* 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 neŁa>
ʔan-neɬa
1sP-BEN
'for me, mine'
OT:"mío, de mí" (144.), (243.)

b. <na gracia muneŁa dios>
na ***gracia*** **mu-neɬa** ***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 **mɨk-* '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 šanɕ'ehe>

naka	ʔan-moka	kaya-k	šan	šan-ɕ'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-ɬa* [be-AGT] 'woman' and Mayan loans such as *wɬnak* '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 *-ɬa*, e.g. *hapa-ɬa* [pass-AGT] 'passenger', *ʔiwa-ɬa* [make tortillas-AGT] 'tortillera', *šakša-ɬa* [steal-AGT] 'thief', *kayi-k'i-ɬa* [sell-AP-AGT] 'seller, merchant', *hama-wa-ɬa* [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-ɬa
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 category[140] contains all terms for animals including domesticated (e.g. *miya* 'hen', *huru* 'turkey', *hašu* 'pig') and wild animals (e.g. *pokoko* 'raccoon', *šɬma* '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', *sɬmaya* 'crab', *šuni* 'sea shell'), birds (e.g. *koško* 'vulture', *hɬɬi* 'parakeet', *šok'oy* 'owl'), arachnids (*ʔamu* 'spider', *ɸ'inaʔna* 'scorpion'), insects and parasites (e.g. *ʔara* 'fly, worm', *kaša* 'mosquito', *ʔituɬ* 'flea').

(8. 12) a. <ca jaszu>
ka-hašu
2sP-pig
'your pig'
OT:"tu marrano" (351.)

b. <mujaszúŁi>
mu-hašu-ɬi
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', *tuɬu* 'flower', *piya* 'leaf', *mašira* 'roots', *karawa* 'grass,

[140] The following sub-categories are not emic.

woods'), terms for trees (e.g. *pima* 'fig tree', *parwa* 'cacao tree', *mapi* 'coyol palm', *pawak* 'pine'), wild plants (e.g. *ʔamuɬ* 'chichicastle'), herbs (e.g. *harak'u* 'chipilin'), and fruit (e.g. *pak'i* 'pinguin'). The category extends to cash crops (e.g. *šinak* 'beans', *nak'i* 'chilli', *tuwa* 'cacao', *ʔaratak* 'henequen', *wiyan* 'sugar cane'), food terms (e.g. *ʔayma* 'corn on the cob', *ʔaʔu* 'degrained corn', *mapɨ* 'tortilla', *ɕ'ɬwɨ* 'fresh corn', *k'aw* 'white tamal', *ʔuyuku* 'atol', *ʔuruɬ* 'egg') and any other sort of good for consumption (e.g. *sikar* 'tobbaco', *huhuɬ* 'honey-comb', *pumu* 'incense, copal'). The ALS illustrates only one the term for 'cacao' with possessor-marking (8. 14a); all the other examples are found in the comparative corpus (8. 15).

(8. 14)

a. <mutùa Łic>
mu-tuwa ɬik
3pP-cacao tree PL
'their cacao tree(s)'
OT:"sus cacaguatales" (272.)

b. <mu guayà>
mu-waya?
3sP-milpa
'his milpa (corn field)'
OT:"sus milpas" (275.)

(8. 15)

a. ʔan-ʔayma
1sP-corn
'my corn' (G-SH)

b. ka-šinak
2sP-beans
'your beans' (G-JAP)

c. <mu-ʔuruł>
mu-ʔuruɬ
3sP-egg
'his egg'
OT:"sus huevos" (Ch-JC)

Terms for 'milpa' and 'fields', which are created and owned by humans, are also attested with prefix marking. Here, it needs to be noted that in the second example from X_{Ch} (Zeeje-ms.) that the possessor-marking prefix/proclitic precedes the active participle *munaki-ɬa* that functions as a modifier to the noun.

(8. 16)

a. <mu guayà>
mu-waya?
3sP-milpa
'his milpa (corn field)'
OT:"sus milpas " (275.)

b. <ka muna quila gragua hay>
ka-muna-ki-la=krawa ʔay
2pP-fruit-INCH PART.ACT=woods 2PL
'your (pl.) fertile fields'
OT:"vuestras fertiles campiñas" (Ch-Z)

It could not be determined whether environmental terms, including names of landscape (e.g. *wona* 'hill', *pahi* 'ravine'), natural elements (e.g. *ʔɯy* 'water', *taw* 'wind', *šɬha* 'sand'), celestial bodies (e.g. *ʔawa* 'moon', *šuni* 'star') and time periods (e.g. *pari* 'day', *sɬma* 'night', *ʔayapa* 'year', *ʔuwik'i* 'winter') can be possessed.

INANIMATE NOUNS DENOTING OBJECTS: Naturally, alienable possession occurs with objects and things that can be optionally and temporarily possessed. Nearly all of these forms attested in the ALS are nominalisations. The majority of these are instrumental nouns. The majority of these are morphologically transparent (e.g. *k'ɬrša-k* [comb-INSTR] 'comb', *wišu-k* [beat-INSTR] 'whip', *ʔiška-k* [drink-INSTR] 'gourd, calabash bowl'), although there are also some, for which the original meaning of the root cannot be reconstructed (e.g. *šuru-k* 'walking cane', *ote-k* 'bed', *pewe-k* 'gourd, bowl', *waru-k* 'net', *šuni-k* 'pot').

The category furthermore includes nouns that are the results of unmarked (e.g. *pak'i* 'wall', *ʔwaɕ'a* 'thread', *poɕ'a* 'laundry (for washing)') or marked product nominalisations with *-ɬ* (e.g. *wapa-ɬ* 'bench', *poša-wa-ɬ* 'soap rest') or with the perfect participle suffix *-wa* (e.g. *maši-wa* [fry-PART.PF] 'fried thing', *pok'o-wa* [break-PART.PF] 'broken thing'). Non-derived object names are also attested (e.g.

kuɬku 'pot, bowl', *pati* '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-wapaɬ
2sP-bench
'your bench' (G-SH)

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)

PLACE NAMES: All place names fall into the category of alienably possessed nouns. This includes generic terms (e.g. *ʔaɬtepet* 'town' [loan]), toponyms formed with the preposition *šam* (e.g. *šam-ɨpɨy* [PREP-?] "Atiquipaque", *šam-piya* [PREP-leaf] "Ixhuatán"), toponyms derived with the locative/ passive past-marker *-wa* (e.g. *tuhku-wa* [?-LOC] "Tecoaco", *mɨša-wa* [bury-LOC] 'burial'), toponyms that are used as ethnonyms (e.g. *ɕ'ehe* [=?] "Chiquimulilla"; *ɕ'imaha* [= potter] "Guazacapán"), toponyms formed by compounds (e.g. *k'ɨš-tamay* [bat-?] "Sinacantán", *tahti-šam-piya* [savanna-PREP-leaf] "Tepeaco") and general nouns functioning as designations of place (e.g. *kuku* [= ?] "Taxisco", *ʔuruɬ* [= egg?] "Tacuilula", *k'ɨša* [= bat] "Nancinta").

(8. 18)
<mug eltepetliqui>
muh-ʔeɬtepet-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', *ʔištu* '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: *pɨk'ɨ* '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 *pospoʔy*, 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', *paɬe* 'priest', *ma-tyuš* 'church', *nawaku* 'petticoat', *tumin* 'money', *šapun* 'soap', *tašelaš* '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-raya* [small-female] 'girl', *haya-humu* [female-male] 'effeminate', *muš-karawa* [hair-woods] 'rubbish, trash', *kosek ʔuy* [big-water] 'river', *me-naki* [green-chilli] 'green chilli', *muɬa-šiyuk* [white-serpent] 'rattlesnake', *ten-hu:ši-k* [red-head-INSTR] 'red-headed vulture', *tolo-ʔaʔu* [yellow-corn] 'yellow corn', or
- a noun, e.g. *karawa hašu* [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-INSTR-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 ucszayáŁi>
muk-ʔuk-šaya-ɬi
1pP-CL:old/married-female-PL
'our wives'
OT:"nuestras mujeres" (307.)

c. <mu ucszàya Łi quiŁic>
mu-ʔuk-šaya-ɬi **ki=ɬik**
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-raya
1sP-CL:old/married-female
'my wife'
OT:"mi mujer" (Ch-C)

c. ka-witi-ɬaya
2sP-CL:?-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', *pɨpɨ miya* [tamal-chicken] 'chicken tamal', *tata miya* [father-chicken/hen] 'rooster', *ʔuruɬ tonton* [egg-tortoise] 'tortoise egg', *ʔuy wakaš* [water-cow] 'broth', *horo-ɬ 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-ɬa mapɨ* [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-pelóʔ>
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. <oszòca>
ʔošo-ka
intestines-2sP
'your intestines'
OT:"tu tripa" (349.)

c. <eŁajaàc>
ʔeɬaha:-k
tongue-1pP
'our tongue'
OT:"nuestra lengua" (357.)

d. <mutiig quiŁic>
muti:-h **ki=ɬik**
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' ~ *táɬi* '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. <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.)

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. <chirí 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'ɨwɨ* [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. *naʔu-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 ʊelʊeg>
harari ʔɨłi-h
bone back-3sP
'his backbone'
OT:"el hueso del espinazo" (3937.)

b. <aŁpámag>
ʔaɬ-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', *naʔu* 'son, offspring', *ʔuta* 'mother', *ʔanu* 'aunt', *wɨhɨ* '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>
ɬapa-h ɬik
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 uchí>
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', *mɬk'a* '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-nagu7* (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'iwi* 'yard', *hiši* 'stone', *kama* 'blood, semen', *harari* 'bone', *mašira* 'veins, nerves', *hɬk'a* 'weaving', *šawa* 'cover, bedspread', *šina* 'urine', *hama* 'sin', *mɬk'a* 'tribute, work', *ʔošto* 'ulcer, wound', *wiȼ'uk* 'whip', *wapi* 'foot', *mami* 'ear', *taɬi* '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. *ʔɬna* 'excrement', *harari* 'bone', *wapi* 'foot', *mani* 'ear', *šina* 'urine', *nari* 'nose') and compounds (*harari k'omo* 'knee

bone', *hutu taɬi* '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
hurt 1sP-head
'my head hurts' (G-SH)

b. mu-tita
3sP-leg
'his leg' (G-JS)

c. <ka 'wapi>
ka-wapi
2sP-foot
'your foot'
OT:"tu pie" (Ch-MQ)

d. <tan cuay thala na mu'c rhaja'c>

*ɬan	kway	tala	na	muk-rahak
NEG	FUT	burn	DET	2sP-mouth

'(you) will not burn your mouth'
OT:"no te vayas a quemar la boca" (Ch-JC)

Maldonado de Matos includes the kinship nouns *haya naʔu* '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 naʔu* 'son' and *ɬak'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
3sP-father
'his father' (G-SH)

b. <na mu'c lhapa>
na muk-ɬapa
DET 2sP-grandchild
'(the) your grandchild'
OT:"tu nieto" (Ch-JC)

c. <ran najlí>
r(a) ʔan-naɬi
DET 1sP-relative
'(the) my relative'
OT:"mi pariente" (Ch-C)

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. *waya*ʔ 'milpa', *maku* 'house', *k'iwi* 'yard'), and names of products which are the result of human activity (i.e. *ʔišak'a* 'drink, refreshment', *ʔiwa* 'corn dough', *hɬk'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 aŁmucàn>

Pedro	**pula-y**	**maku-h**	**ʔaɬmukan**
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. <rhal 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-? 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 jamàca>
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*ʔ 'word' (3866.), *k'ɨnɨ-k'i-*ɬ*a* [be happy-AP-AGT] '(the one) who is happy' (3785.), *kunu-k'i-wa* [buy-AP-PART.PF] 'bought thing' (3767.) or *ho:ro-*ɬ *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)* ɬ*i* [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:"mí" (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 ùɛa 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(-ʔ) ti(:ʔ)
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 ayahuí>
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 ʔuy* <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**
?-2sP	father

'your compaternity father = your godfather'
OT:"el padrino" (4580.)

b. <ayán uchí>

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 kumaɋ*; Nahuatl *masa-koʔatl* [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. <purimapʊe>

puri-mapɬ
heat-tortilla

'hot tortilla = meal'
OT:"la comída" (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 = *ejote* 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. <pijúszíc>
pi:-hu:ši-k
NUM:'2'-head-INSTR
'two-heads = two-headed snake'
OT:"culebra de dos cabezas" (4292.)

e. <sʊen au>
sɨn-ʔaʔu
black-corn
'black corn'
OT:"el maíz negro" (4403.)

f. <muŁckeguesza>
muɬ-k'eweša
white-anona
'white anona'
OT:"la anona blanca" (4100.)

Adjective compounds are also used to express temporal concepts. The adjective forms *ɕ'ɨk'ɨ* 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 **ɕɨk'ɨ* 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. <txʊeɛʊesʊema >, <txʊeɛsʊema>
ɕ'ɨk'(ɨ)-sɨma
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-* (**ikaɬ-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*, *-ɬaya*/*-ɬumu* 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-sumu			
			ʔup-šumu			
old woman	ʔuk-šaya	čuk-šaya	ʔaw-šaya			
		čuh-čaya	ʔap-šaya			
husband	ʔuk-šumu	ʔuk-šumu	ʔun-šumo			
			ʔup-šum			
wife	ʔuk-šaya		ʔu-šaya			
			ʔuk-raya			
			ʔun-šaya			
			*ʔup-šayal			
			šaya-ya			
young man	šu-rumu	šu-rumu	šu-rumu	šu-rum	šo-romo	so-rono
young woman	šu-raya	šu-raya	šu-raya		šu-raya	su-raya
young lady	witi-ɬaya	witi-ɬaya	miti-ɬaya [sic]			
widow (female)	karwa haya		kar(a)wa-ya			nut-aya
widow (male)	karwa humu		kar-umu		ka-rumo	unt-aya
					ka-ʔuno	
					unt-umu	

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 Fernandéz (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. <anmukšúmu>
ʔan-uk-šumu
1sP-CL:old/married-male
'my husband'
OT:"mi esposo" (G-S)

b. <ucraia>
ʔuk-raya
CL:old/married-female
'wife'
OT:"mujer" (Ch-C)

c. <un-xumo>
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 *čuk-* 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 *čuk-* functions as a bound morpheme that can be preceded by cross-referencing prefixes (1967:47, 49).

(8. 57) a. <čukšúmu>
ču-(u)k-šumu
DIM-CL:old/married-male
'elderly man'
OT:"anciano" (G-S)

b. <čukšáya>
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:loʔ
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. <awksúmu>
ʔa-uk-sumu
?-CL:old/married-male
'elderly man'
OT:"anciano" (Ch-S)

b. <ʔaw'šaya>
ʔaw-šaya
?-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-raya
DIM/not married-female
'girl'
OT:"la muchacha" (4513.)

b. <szurúmu>
šu-rumu
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; Pivaral gives the form with an initial *m*, which is likely a misspelling.

(8. 60) a. <guitiŁaya>
witi-ɬaya
soft-female
'young lady / virgin'
OT:"la doncella" (3874.)

b. witi-ɬaya
soft-female
'young lady / virgin' (G-JAP), (G-RHG)

c. <mitirlaya>
*witi-ɬaya
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 *ʔun-*, which may be derived from the Spanish indefinite article "un" (the *t* that follows *ʔun* is the result of assimilation) (8. 64). This may suggest that the modifier *kar* can be identified as the numeral *ʔkaɬ* '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>
ʔun-t-umu
NUM:'1'(L-S)-LIG-male
'one male = widower'
OT:"viudo" (Ch-F)

b. <nutaya>, <táya>
*ʔun-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 ɛiŁumu>
šak'iɬ-humu
L-M:whiteness/excellent-male
'excellent-male = good man'
OT:"buen mozo, visarro" (4416.)

b. <sza ɛiŁaya>
šak'iɬ-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 *ʔaɬ-* 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 *ʔaɬ*, and a head noun (Campbell 1978a:36-37). Some place names mentioned by Campbell involve the locative marker *ʔay-* (e.g. *ʔay-(ʔ)ampuk* [LOC-snake] 'place of snake'), the etymology of which is not entirely clear, although it seems to derive from the preposition *ʔaɬ* '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 *ʔaɬ-*.

(8. 66)

a. <szampiya>
šan-piya
PREP-leaf
'in/on/at the leaf'
OT:"Ixhuatán; pueblo" (4441.)

b. <tagti szamipíya>
tahti **šami-piya**
plain PREP-leaf
'plain in/on/at the leaf'
OT:"Tepeaco; pueblo" (4536.)

c. <szamʊepʊey>
šam-ʔɨpɨy
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>
ɕ'ehe
TOPN
'Chiquimulilla'
OT:"Chiquimula [sic]; pueblo" (4643.)

b. <ɛʊesztamay>
k'i̵š-tamay
bat-? = TOPN
'bat-*place? = Sinacantán'
OT:"Sinacantán; pueblo" (3795.)

c. <cúcu>
kuku
TOPN
'Taxisco'
OT:"Taxisco; pueblo" (3757.)

d. <ɛʊesza>
k'i̵ša
bat = TOPN
'bat = Nancinta'
OT:"Nancinta; pueblo" (3797.)

(8. 68)

a. <šanɕʔéhe>
šan ɕ'ehe
PREP TOPN
'in/on/at Chiquimulilla'
OT:"Chiquimulilla (población)" (G-S)

b. <šankištamáy>
šan kiš-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'i̵si̵>
san kiši̵
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' ("hacía") when following a motion verb.

(8. 69)

a. na nin ku=ya-n šan ɕ'ehe
DET PN:1s go=PROG-1sS_{DEP} PREP TOPN
'I am going to(wards) Chiquimulilla' (G-JAP)

b. ku=ya-n šan kuku
go=PROG-1sS_{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: *išwa-tlan* [to sprout-LOC] 'place of sprouting plants' = *šan-piya* [PREP/LOC-leaf] 'place of leaves'; or (b) Sinacantán: *ɕinakan-tlan* [bat-LOC] 'place of bats' = *(šan)-k'i̵ša* [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 *šaru* '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-šaru
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) 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)

b. <xantigüina>, <ssandígüina>, <ranti'win>
*šan-tiwina
PREP-sky
'in/to the sky = above, upwards'
OT:"hacia arriba" (Ch-F), "arriba" (Ch-MQb)

c. <jansharo>
han-šaro
PREP-sea
'in/to the sea = below, downwards'
OT:"abajo" (Ch-P)

d. <xangüiu>
šan-kiw
PREP-yard
'in/to the yard = outside'
OT:"fuera, sitio, delante" (Ch-F)

e. <san gona>
san-wona
PREP-hill
'to the hill = above, upwards' (G-RHG)

f. <jangona>
han-wona
PREP-hill
'to the hill = above, upwards'
OT:"arriba" (Ch-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) a. <u>south</u>
<šanšáro>, <šamšáro> OT:"sobre el mar, sur" (G-S)
<xanxaru>, <ssanrraru> OT:"hacia el mar, hacia el Sur" (Ch-F)
šan-šaru (G-RHG)
PREP-sea
'towards the sea = south(wards)'

b. north
<šawóna> OT:"norte, hacia el cerro" (G-S)
<sa góna> OT:"Tecuamburro (volcán), 2. norte" (Ch-S)
<xangona>, <ssangu-o-na> OT:"hacia el Norte, hacia el cerro" (Ch-F)
ša(n)-wona
PREP-hill/volcano
'towards the hill/volcano = north(wards)'

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-1sS_{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>
ša ša-wona
PREP PREP-hill
'towards north / northwards'
OT:"hacia el norte" (G-S)

b. <xanguarantigüina>
šan wa ran-tiwina
PREP DIR PREP-sky
'go towards the sky = upwards'
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>
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)

[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 *paɬ* (or *paʔa*) (see § 12.5.2). In the ALS, the form is attested with the temporal head nouns *pari* 'day' and *sɬʔma* 'night'.

(8. 77) a. <szam pari pałL>
šam pari paɬ
PREP sun, day PFV
'(it is) already in (the) day'
OT:"ya es de día, ya es tarde" (4440.)

b. <szamacsʊema>
šama-k sɬ(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 *sɬʔma* '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(ʔ)ma
PREP-night
'in(side) the night = the morning'
OT:"la mañana" (Ch-C)

b. ša-sɨʔma
PREP-night
'in the night = at night' (G-RHG)

c. <ra suma>, <rassuma>, <rasu'cma>
ra-su(ʔ)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(ʔ)ma bar
PREP-night PFV
'it is already night = nightfall'
OT:"anochecido" (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, *sɨʔma* and *pari*, occur in a nominal compound that refers to precisely that time of the day. In the given context, *sɨʔma* 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 ȼ'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(ʔ)ma-ki
PREP-night-INCH
'become night'
OT:"anochecer" (Ch-F)

8.3.1.4.4 Body part terms

A number of body part nouns are prepositional compounds consisting of a preposition (*šan*, *ʔaɬ* 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. <szamíni>
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. <raŋʉ'lʉ>
ran-ʔiɬi
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-raha
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 *ʔaɬ* 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. <aŁguapi>
ʔaɬ-wapi
PREP:over-foot
'over the foot = dorsum of the foot'
OT:"empeine del pie" (3619.)

b. <aŁpamag>
ʔaɬ-pama-h
PREP:over-arm-3sP
'over his arm = shoulder'
OT:"los hombros" (3614.)

c. <aɬte>
ʔaɬ-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 Fernandéz 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. <aɬpamá>
ʔaɬ-pama-ʔ
PREP:over/above-arm-?
'over the arm = shoulder'
OT:"hombro" (G-S)

b. <alj pamá>
ʔaɬ-pama-ʔ
PREP:over/above-arm-?
'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. <paratáɬi>
para-taɬi
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)
<parapaɛí>
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 taɬa
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 ʋelʋeg>
harari ʔɨɬɨ-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 juraý>
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. <ʋelʋemacu>
ʔɨɬɨ-maku
back-house
'back of the house = behind the house'
OT:"lo de detrás de la casa" (4735.)

e. <uruŁ míya>
ʔuruɬ miya
egg chicken
'egg of the chicken = chicken egg'
OT:"huevo de gallina" (4695.)

f. <piyaguayá>
piya-wayaʔ
leaf-milpa
'leaf of the milpa'
OT:"la hoja de milpa" (4307.)

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[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)

a. <uy guaacasz>
ʔuy **wakaš**
water meat/beef
'water of meat = broth'
OT:"caldo" (4720.)

b. <pʊepʊe miya>
pɨpɨ **miya**
tamal chicken
'tamal of chicken = chicken tamal'
OT:"tamal de gallina/pipián" (4356.)

c. <macu uguaŁ>
maku **ʔuwaɬ**
house ant
'house of ant = ant hill'
OT:"el hormiguero" (4050.)

d. <ószto ambuqui>
ʔošto **ʔampuki**
wound snake
'wound of snake = king's evil (illness)'
OT:"los lamparones, crisipéla; enfermedad" (4212.)

Instrumental nouns, which can be derived from transitive as well as intransitive roots, are attested as head nouns of possessive compounds.

(8. 95)

a. <guiszucnuguí>
wišu-k **nuwi**
beat-INSTR cotton
'beating-instrument (of/from) cotton = cotton whip'
OT:"sacudidor de algodón" (3883.)

b. <tiɛiɛguaru>
ti:k'i-k **waru**
sleep-INSTR net
'sleeping-instrument (of/from) net = hammock'
OT:"la hamáca" (4573.)

c. <jayuc szaja>
hayu-k **šaha**
clean-INSTR mouth
'cleaning instrument for the mouth = napkin'
OT:"paño de cholate, servilleta" (4261.)

d. <pʊeszʊecszína>
pɨši-k **šina**
?-INSTR orín
'?-instrument for urine = pee-pot'
OT:"la jícara de orines" (4364.)

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)

a. <szuguay Łamuc>
šuway **ɬamuk**
lizard shrimp
'lizard-shrimp = sea devil'
OT:"el peje armado" (4496.)

b. <amuambuqui>
ʔamu **ʔampuki**
spider snake
'spider-snake = cancer'
OT:"el herpes, cancro" (3628.)

c. <cuszcuszpari>
kuškuš **pari**
owl/hawk sun, day
'owl sun/day = type of tree'

OT:"cierto árbol, barbona" (3778.)

d. <jajŁa cuchilo>
hahɬa ***cuchillo***
scratch/raise Sp:knife
'scratch/raise-knife = instrument for weeding, hoe'
OT: "cutachilla, instr. con que deshierban" (3916.)

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', *taɬa* 'heat, fever', *taw* 'cold, wind', and *piɬa* '?'. 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. <taŁa tili>
taɬa **tili**
burn burn/ache
'burn(ing)-ache= fever'
OT:"calentura" (4539.)

c. <piŁatilí>
piɬa **tili**
? burn/ache
'?-ache = urge'
OT:"calamidad, necesidad" (4293.)

d. <tautaŁatili>
taw-taɬa **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. <taɬatiʔli>
taɬa 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. <ʔuytilɛ>
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:"víspera" (3854.)

b. <txʊeguʊe mapʊe>
ɕ'ɨwɨ-mapɨ
bend corn-tortilla
'bend corn-tortilla = tortilla from fresh corn'
OT:"tortilla de maíz tierno" (4657.)

c. <jaraŁa mapʊe>
haraɬa-mapɨ
toast-tortilla
'toast-tortilla'
OT:"tortilla tostada" (3930.)

d. <packuszája>
pak'u-šaha
V:nail-mouth
'?-mouth = lie'
OT:"mentira" (4219.)

e. <paɛajutu>
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>
ʔaku-šama
go-PREP/N:inside
'go inside = sadness'
OT:"tristeza" (3592.)

b. <nʊema szama>
nɨma-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. <guasztaguasʊema>
wašta-wa **sɨma**
enter-ANT/LOC night
'(where) the night entered = nightfall'
OT:"entrada de la noche" (3851.)

b. <seŁè guapari>
seɬe-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 *-ɬ(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) <jooroŁ caguayo>
ho:ro-ɬ **kawayo**
guard/get-AGT horse
'who guards horse = horse guard'
OT:"guarda caballo" (3957.)

(8. 104) a. <sacsal mijya>
saksa-l miya
steal-AGT chicken
'who steals chicken = chicken thief'
OT:"ladrón de gallinas" (Y-C)

b. <ocolá tajma>
ʔoko-la tahma
go-AGT path
'who walks the path = traveller'
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>	te:na-ʔ	"bastante, mucho"
	<teenan>	te:na-n	"mucho"
X_G	<tenáʔ>, < teʔená>	tena-ʔ, teʔna	"muchos (objetos y personas)" (G-S)
X_{Ch}	<tenan>	tena-n	"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. <tènan 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 teènan jurai ic>
na **te:na-n** **huraʔi-k**
DET QUANT-IRR? eyes/face-1pP
'to our faces'
OT:"a nuestras caras" (384.)

d. <néɬa teenan mácu>
neɬa **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 *-ɬi* (§ 8.4.2).

(8. 107) <teenan jamaguaɬa>
te:na-n **hama-wa-ɬa**
QUANT-IRR? sin-ANT-AGT
'much who have sinned = sinners'
OT:"los pecadores" (21.)

In X_G the quantifier *te:na-ʔ* also occurs in adverbial function, preceding an imperative verbal predicate.

(8. 108) te:na-ʔ ʔuɸiru-ka
QUANT-? hurry up-2sS
'hurry up a lot!' (G-JAP)

8.4.1.2 Quantifier taha-

The quantifier *taha-* 'many times' ("muchas veces") is attested in the ALS only as an entry in the vocabulary list. Its morphosyntactic function as a plural marker on inanimate nouns can be reconstructed from the comparative data. The ALS gloss suggests that *tahaʔ* marks frequency or repetitiveness of verbal action. In the comparative data, however, it is predominantly translated as "mucho, todo". The glosses "we, they are" and "gente" in X_{Ch} suggest that the term has some inclusive meaning.

Table 8. 6: Comparative chart of the quantifier *tahaʔ*

	FORM		ORIGINAL GLOSS
X_M	<tajá>	taha-ʔ	"muchas veces"
X_G	<tahaʔ>	taha-ʔ	"todo" (G-S)
X_{Ch}	<tajá>	taha-ʔ	"todos, muchos" (Ch-S)
			"bastante, mucho" (Ch-F), (JC)
	<tajáʔ>	taha-ʔ	"we, they are" (Ch-MA)
	<ta'haʔ>	taha-ʔ	"gente (indígena) (Ch-MQb)
X_Y	<tajá>	taha-ʔ	"mucho, muchos" (Y-C)

In X_G the quantifier *taha-* is attested only once, but it is widely used in X_{Ch} and X_Y where it precedes inanimate as well as animate nouns. In X_{Ch} the quantifier also occurs in adverbial function (see below).

The morphosyntactic properties of the quantifier *taha-* are nominal. It can host the intensifier/distributive clitic *=ki* (8. 109a-b). The quantifier can also be marked for plural with the pronominal plural clitic *=ɬiki* (b-c).

(8. 109) a. <tajaki>
taha=ki
QUANT=INTENS/DISTR
'much, many, all'
OT:"mucho, todo, cantidad" (Ch-C), (Ch-F)

b. <tajaki-jliki>
taha=ki =ɬiki
QUANT=INTENS/DISTR 3PL
'much, many, all'
OT:"muchos, todos" (Ch-C), (Ch-F)

c. <tajilíki>
tahi=liki
QUANT=3PL
'many, all'
OT:"todos" (Y-C)

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-? chicken
'many chicken'
OT:"muchas gallinas" (Ch-JC)

b. <tajá murúrri>
taha-ʔ mururi
QUANT-? beard
'many beards'
OT:"todos son barbados" (Ch-C)

c. <taja' marra>
taha-ʔ mara
QUANT-? mud
'much mud'
OT:"mucho lodo" (Ch-JC)

In X_{Ch} and X_{Y} *taha-* marks quantity on abstract nouns such es 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-? heat
'much heat'
OT:"mucho calor" (Ch-JC)

b. <taja suyi>
taha-ʔ suyi
QUANT-? 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-? 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 *-ɬi* (or *-ɬe*) (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>
ʔuɬu-ʔ taha-ʔ waya-ɬi
fall-STAT QUANT-? milpa-PL
'it fell (= he fell) many milpas'
OT:"botó mucha milpa" (Ch-JC)

b. <tajá onelhe>
taha-ʔ ʔone-ɬe
QUANT-? soft/baby-PL
'many babies'
OT:"que patojal" (Ch-JC)

c. <tajá jono huajlo>
taha-ʔ hono-wa-ɬe
QUANT-? get drunk-ANT-PL
'many drunks'
OT:"muchos bolos" (Ch-JC)

d. <taja' frack>
taha-ʔ frak'
QUANT-? 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-ʔ 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>
taha-ʔ tuwa
QUANT-? cacao/value
'much (is the) the value'
OT:"vale mucho" (Ch-C)

b. <taja' cagüí na one>
taha-ʔ kawi na ʔone
QUANT-? cry DET baby
'much crying (is) the baby'
OT:"mucho llora el nene" (Ch-JC)

In X_{G} and X_{Ch}, *taha-ʔ* occurs independently in nominal function, representing the O argument of imperative or negated transitive predicates.

(8. 116) a. <im pe tahá?>
ʔim pe(ʔ) taha?
say IMP all
'say (it) all!'
OT:"que se diga todo! dígalo todo!" (G-S)

b. <jlhan mujnicua tajá>
ɬan mu-niwa taha?
NEG 3sA-want all/much
'he does not want all/much'
OT:"no quiere bastante" (Ch-JC)

In X_{Ch} *taha-ʔ* is attested with the negative marker *ɬan*. 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>
ɬan taha-ʔ
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-ʔ* occurs in nominal function. The phrase can be literally translated as 'who all?'.

(8. 118) <wa nintaj laʔ>
wanin taɬa-ʔ
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-laʔ 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 pariqui>
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-waya?**
QUANT=DISTR 3sP-milpa
'all of his milpas'
OT:"todas sus milpas" (275.)

c. <tumuqui na jamaguaŁa>
tumu=ki **na** **hama-wa-ɬa**
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 waɬik
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 *-ɬi*. The operator is etymologically related to the comitative adpositional root *ɬi-* 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 *ɬi-* 'with' that is attested in the ALS and in the comparative data precedes the constituent it refers to.

The animate plural suffix *-ɬi* is attested in all Xinka varieties. Its use and application, however, vary.

Table 8. 8: Plural suffixes attested in Xinka

	FORM		GLOSS
X_M	<Łi>, <Łe>, <Ła>	-ɬi, -ɬe, -ɬa	plural
X_G	<ɬi>	-ɬi, -ɬe	plural (G-S)
X_{Ch}	, <liki>	-ɬi-(ki)	plural
X_Y	<-lí>, <-jlí>	-liʔ, -ɬiʔ	plural

In the ALS plural on nouns is marked with the suffixes *-ɬi* and *-ɬe*. The suffix *-ɬe* marks plural only on roots with mid vowels (vowel set 2) (8. 125b-c), while *-ɬi* 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 *-ɬa* (d). There are no other occurrences of this

form of the operator. The allomorphic and irregular variants suggest that suffix *-ɬi* has become fully grammaticalised as a plural marker.

(8. 125)

a. <turiŁi>
turi-ɬi
child-PL
'children'
OT:"el niño (plural)" (4621.)

b. <joro ɛeŁaŁi>
horo-k'e-ɬa-ɬi
guard/get-AP-AGT-PL
'guards'
OT:"el guardián (plural)" (3959.)

c. <onéŁe>
ʔone-ɬe
soft thing/baby-PL
'babies'
OT:"cosa tierna (plural)" (4194.)

d. <macuŁa>
maku-ɬa
house-PL
'houses'
OT:"la casa (plural)" (4043.)

Independent pronouns and cross-referencing affixes are accompanied in the third person plural by the plural clitic *ɬik*, or *ki=ɬik*, which combines the adpositional root *ɬi-* 'with, company of' and the distributive marker *k(i)* (see § 6.3). In the ALS the pronominal pluraliser *ɬik* 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, *-ɬi* and *-ɬe* 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 *-ɬi*. 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-ɬi* [frog-*a*-PL] 'frogs'. There are very few examples in the data that confirm this pattern.

(8. 126)

a. hura-ɬi
man-PL
'men' (G-PE)

b. turi-ɬe
child-PL
'children' (G-JAP)

c. <na peló?ɬi>
na pe:lo(ʔ)-ɬi
DET Sp:dog-PL
'the dogs'
OT:"los perros" (G-S)

In X_{Ch} the use of *-ɬi* and *-ɬe* is likewise random. In most attested cases, *-ɬi* combines with the morpheme *ki* (see § 6.3). The plural suffix *-ɬi* and the form *-ɬiki* 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 *-ɬi*, while objects, plant/food and animals terms are more often attested with *-ɬiki*.

(8. 127)

a. <fragli>, <fragle>
frak-li
man-PL
'men'
OT:"hombres" (Ch-Z)

b. <nanu turilig>
nanu turi-ɬih
FOC child-PL
'the children'
OT:"la puerilidad" (Ch-Z)

c. <utajli>
ʔuta-ɬi
mother-PL
'mothers'
OT:"madres" (Ch-C)

d. <xurumujliki>
šurumu-ɬiki
young man-PL
'young men'
OT:"varón, joven (plural)" (Ch-C)

In X_Y we find plural marker indicated as *-li?* or *-ɬi*. 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 *-?-* (see § 4.1.3.1) or whether they have morphological function. There are no attested cases of the plural suffix *-ɬi* combining with *ki* as it is the case in X_{Ch}. The X_Y data do not indicate an allomorphic distinction of *-ɬi* and *-ɬe*.

(8. 128)

a. <papalí>
papa-li?
uncle-PL
'uncles'
OT:"tíos" (Y-C)

b. <soroniclí>
soroni-k-li?
young man-?-PL
'young men'
OT:"jovenes" (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. <juracŁi>
hurak-ɬi
man-PL
'men'
OT:"el hombre (plural)" (3974.)

b. <ayaŁaŁi>
ʔayaɬa-ɬi
woman-PL
'women'
OT:"la mujer (plural)" (3662.)

c. <szurumuŁi>
šurumu-ɬi
young man-PL
'young men'
OT:"el muchacho (plural)" (4518.)

d. <tisziŁi>
tiši-ɬi
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-ɬe
young man-PL
'young men' (G-SH)
'workers'
OT:"trabajadores" (Ch-C)

b. <macajli>
*mɨka-ɬi
work-PL

c. <jaranaijlíki>
harana-ɬiki
ill-PL
'ill (people)'
OT:"enfermos" (Ch-C)

d. <payilí>
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 *-ɬi*, never with *-ɬe*. In X_{Ch}, however, we find examples of plural marking on agentives with *-ɬe*.

(8. 131)

a. <maraŁaŁi>
mara-ɬa-ɬi
rest-AGT-PL
'those who rest'
OT:"el que descansa (plural)" (4063.)

b. <pooɛeŁaŁi>
pok'e-ɬa-ɬi
illuminate-AGT-PL
'those who illuminate'
OT:"el que alumbra (plural)" (4311.)

c. <caguiquiŁaŁi>
kawi-ki-ɬa-ɬi
cry-AP-AGT-PL
'those who cries'
OT:"el gritón (plural)" (3687.)

(8. 132) a. <sagulali>, <sagulale>
sawu-ɬa-ɬi/ɬe
sit/settle-AGT-PL
'those who settle = settlers, inhabitants'
OT:"habitantes" (Ch-Z)

b. <lopajlájli>
lopa-ɬa-ɬi
blowgun-AGT-PL
'blowgunners'
OT:"cerbataneros" (Ch-C)

c. <n'an puriqui lhajli>
nan(a) puri-ki-ɬa-ɬi
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. <tximajaŁi>
ȼ'imaha-ɬi
TOPN:Guazacapán-PL
'those from Guazacapán
= Guazacapanecos'
OT:"Guazacapan; pueblo (plural)" (4646.)

b. <txegeŁé>
ȼ'ehe-ɬe
TOPN:Chiquimulilla-PL
'those from Chiquimulilla
= Chiquimultecos'
OT:"Chiquimul[ill]a; 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. ȼ'ehe-le
TOPN-PL
'those from Chiquimulilla' (G-JS)

b. <ȼimahá ɬi>
ȼ'imaha-ɬi
TOPN-PL
'those from Guazacapán'
OT:"Guazacapán" (Ch-S)

c. <elgtepet liqui>
ʔeɬtepet-liki
town/village-PL
'town, villages'
OT:"pueblos" (Ch-Z)

Loanwords from Mayan and Spanish with human referents likewise mark plural with the suffix *-ɬi*. 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. <guʊenacŁi>
wɬnak-ɬi
L-M:witch-PL
'witches'
OT:"el brujo (plural)" (3889.)

b. <szinuŁaŁi>
šinuɬa-ɬi
Sp:woman, lady-PL
'women, ladies'
OT:"señora (plural)" (4477.)

c. <paleŁé>
pale-ɬe
Sp:priest-PL
'priests'
OT:"el sacerdote (plural)" (4236.)

(8. 136) a. muher-ɬe
Sp:woman-PL
'women' (G-JAP)

b. <intiuli>
ʔintyu-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 *-ɬi*. 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)

a. <caguayuŁi>
kawayu-ɬi
Sp:horse-PL
'horses'
OT:"caballo (plural)" (3682.)

b. <jaszuŁi>
hašu-ɬi
pig-PL
'pigs'
OT:"marrano (plural)" (3946.)

c. <giruŁi>
hiru-ɬi
monkey-PL
'monkeys'
OT:"mico, mono (plural)" (3824.)

d. <jujuŁi>
huhu-ɬi
honeycomb-PL
'honeycombs'
OT:"panal (plural)" (3966.)

In X_G we find only a few examples of animal terms that are marked with *-ɬi*, while in X_{Ch} and X_Y animal terms are generally indicated to mark plural with *-ɬi* or *-ɬiki*.

(8. 138)

a. kawayu-ɬi
Sp:horse-PL
'horses' (G-JS)

b. <arrújli>
ʔaru-ɬi
pig-PL
'pigs'
OT:"cerdo (plural)" (Ch-C)

c. <zicaliqui>
sika-liki
eagle-PL
'eagles'
OT:"águilas" (Ch-Z)

d. <irulí>
ʔiru-ɬiʔ
monkey-PL
'monkeys'
OT:"monos" (Y-C)

e. <tumaclí>
tuma-k-liʔ
deer-?-PL
'deer (pl.)'
OT:"venados" (Y-C)

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)

a. <tatamiyajli>
tata miya-ɬi
father hen/chicken-PL
'father-chicken (pl.) = roosters'
OT:"gallos" (Ch-C)

b. <urulmiyajli>
ʔuruɬ miya-ɬi
egg hen/chicken-PL
'egg of chicken (pl.) = chicken eggs'
OT:"huevos" (Ch-C)

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 *-ɬi*. 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)

a. <jutuŁi>
hutu-ɬi
tree/pole-PL
'trees'
OT:"los palos" (32.)

b. <giziŁi>
hiši-ɬi
stone-PL
'stones'
OT:"piedra (plural)" (3829.)

c. <macuŁa>
maku-ɬa
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 *-ɬi*.

(8. 141) a. <tujlují>
tuɬu-ɬiʔ
flower-PL
'flowers'
OT:"flores" (Ch-C)

b. <utujli>
ʔutu-ɬi
tree-PL
'trees'
OT:"árboles" (Ch-C)

c. <kertelí>
kerte-liʔ
mountain, hill-PL
'mountains'
OT:"cerros" (Y-C)

d. <jixilí>
hiši-liʔ
stone-PL
'stones'
OT:"las piedras" (Y-C)

(8. 142) a. <makúɬi>
maku-ɬi
house-PL
'houses'
OT:"casas" (G-S)

b. <mug gragua liqui>
*muk-krawa-liki
1pP-woods, forest-PL
'our woods/forests = our fields (?)'
OT:"nuestros campos" (Ch-Z)

c. <talimajlíki>
taɬma-ɬiki
road, path-PL
'roads, paths'
OT:"caminos" (Ch-Z)

d. <guayalí>
waya-liʔ
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. <tajlijlí>
taɬi-ɬi
neck-PL
'necks'
OT:"cuellos" (Ch-C)

b. <jararricli>
harari-k-li
bone-?-PL
'bones'
OT:"huesos" (Y-C)

c. <mapujlíki>
mapu-ɬiki
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*-liki
FOC bad-PL
'the bad ones'
OT:"los males" (Ch-Z)

b. <jan mug derechos liqui>
han muh-*derechos*-liki
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 *-ɬi* 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 *-ɬi*.

(8. 145) a. <ca ucszaya Łi ay>
ka-ʔuk-šaya-ɬi **ʔay**
2pP-CL:old/married-female-PL 2PL
'your (pl.) wives'
OT:"vuestras mujeres" (308.)

b. <mu ucszàya Łi quiŁic>
mu-ʔuk-šaya-ɬi **ki** **ɬik**
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 *-ɬi*. 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-ɬi-n
foot-PL-1sP
'my feet' (G-PE), (G-SH)

b. <huy jurailig>
ʔuy huraʔi-ɬi-h
water eye-PL-3sP
'water of his eyes = his tears'
OT:"sus lágrimas" (Ch-Z)

Although possessor marking indicates that *-ɬi* 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 *šama* that modifies the noun.

(8. 147) <szamà Łi guína>
šama **ɬi** **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 *-ɬi*. All of these forms occur in nominal function.

(8. 148) a. <chʊerʊeɛʊeŁi>
čɨrɨk'ɨ-ɬi
small-PL
'the small ones'
OT:"chico o pequeño (plural)" (3698.)

b. <onéŁe>
ʔone-ɬe
soft-PL
'the soft ones = babies'
OT:"cosa tierna (plural)" (4194.)

c. <cosecŁe>
kosek-ɬe
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-ɬe hiši
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-ɬi (ʔo)ne-ɬe
small-PL soft thing/baby-PL
'small babies'
OT:"hijos pequeños" (Ch-F)

d. <jamulí>
hamɨ-liʔ
sour-PL
'sour ones'
OT:"agrios" (Y-C)

In the Zeeje-ms., the plural marker *-ɬiki* 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 *-kaɬi* or *-k'aɬi*. It combines an otherwise unidentified classifier *-ka* that indicates kinship (not attested otherwise) and the plural marker *-ɬi*.

(8. 151) a. <tatacaŁi>
tata-ka-ɬi
father-CL-PL
'fathers'
OT:"padres" (4547.), "viejos" (4548.)

b. <guʊejʊeɛaŁi>
wɨhɨ-k'a-ɬi
younger brother-CL-PL
'younger brothers'
OT:"las hermanos menores" (3887.)

c. <titica naucaŁi>
titi-ka naʔu-ka-ɬi
?-CL son-CL-PL
'step children'

OT:"los ahijados" (4583.)

d. <ayán panducaŁi>
ʔaya-n pantu-ka-ɬi
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. <nawkaɬi>
naw-ka-ɬi
son-CL-PL
'sons'
OT:"ustedes ("hijos")" (Ch-S)

c. <lacuacájli>
lakwa-ka-ɬi
son-in-law-CL-PL
'sons-in-law'
OT:"yerno (plural)" (Ch-C)

There are singular cases of kinship nouns in the ALS that mark plural simply with *-ɬi*, 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 *-ɬi* (8. 154), which may suggest that the classifier is optional.

(8. 153) <ayán uchiŁi>
ʔaya-n **ʔuči-ɬi**
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. <papalí>
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 / ʔahɨ	"este, esta, esto" "hic, haec, hoc"	referent in close proximity
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 parallelled 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-ɬ	IMPFV	*wena-ta	'who'
proximal	(na…) ʔašɨ	na ʔašɨ, ʔahɨ	*ʔi, ʔiš	'there'	ʔasɨ-k ʔašɨ-ša	'when' 'now'	šan-ta šɨ	'what'
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 *na7* 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.

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[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 form 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.)

b. <na turiŁi>
na **turi-ɬi**
DET child-PL
'the children'
OT:"los niños" (1978.)

c. <na náca>
na **naka**
DET PN:2s
'you'
OT:"a ti" (81.)

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)

b. <na peloʔɬi>
na pe:lo(ʔ)-ɬi
DET Sp:dog-PL
'the dogs'
OT:"los perros" (G-S)

c. <nu base>
nu *base*
DET Sp:basis
'the basis'
OT:"la base" (Ch-Z)

d. <na-gragua-perló>
na krawa pe:loʔ
DET wild Sp:dog
'the wild dog'
OT:"coyote" (Ch-P)

e. <naguona>
na wona
DET hill
'the hill'
OT:"cerro" (S-Gav)

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 not 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-nariɬa** **na** **turi-ɬi**
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. <... asʊèc imaguà na miszà>
ʔasɨk **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. <ʔišʌk'ʌ ʔay na ʔaguardiɛnte>
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 yguitzi ma naŁ patai na misza>"
si **ʔiwiɕ'i** **ma** **na(ʔ)ɬ** **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 oída" (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
go DET wind/cold
'the wind/cold goes' (G-RHG)

b. piri-wa naka na nin
see-ANT PN:2s DET PN:1s
'…, (that) I saw you' (G-JS)

c. hin ʔan-piri na nin
NEG 1sA-see DET PN:1s
'I do not see (it) = I do not like it[145]' (G-SH)

d. <lan, guahtá, na tagú>
lan Ø-wahta-ʔ na tawu
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-ʔima naka
DET PN:1s 1sA-say PN:2s
'I (will) tell you' (G-SH)

b. na naka ka-ʔaku-ʔ
DET PN:2s 2sS-go-STAT
'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=šunik]$_O$ [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 (= 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. <míko 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*, *ʔašɬ* 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 *na(ʔ)* 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 axʊé>, <na aszʊe>
na **ʔašɬ**
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 naʔ
DET DEM
'this' (G-SH)

b. <na jú>, <nu jú>
na huʔ
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 *ʔašɬ* 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 discontinous marking pattern is confirmed in X_G. The translation contexts indicate the demonstrative function of the pattern (8. 168).

(8. 167) a. <szamà na pari axʊè>
šamaʔ **na** **pari** **ʔašɬʔ**
PREP DET day DEM
'in this day = now'
OT:"... ahora" (2036.)

b. <...Łinà nà ayàŁa man ... >
ɬi-naʔ **na** **ʔayaɬa** **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 *ʔašɬ* 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 aszʊe?>
kaʔ **peʔ** **ta-waʔ** **na** **ʔašɬ**
INT:where? CENT come-ANT DET DEM
'where did this (one) come from?'
OT:"¿de donde vino ésto?" (2010.)

(8. 170) a. <hin hɨniɨy namán>
hin hɨniɨ-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 ¢áma mán>
na ¢'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 nariŁa pè na doctrina ...>
nana ***maestro*** **mu-nariɬa** **peʔ** **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-ʔ** **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 paŁ naŁ na misza nana naca ay>
ka=pa ʔuyši-kaʔ paɬ na(ʔ)ɬ 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'
OT:"ya habíais oído misa vosotros" (2018.)

b. <nariŁa patai Łic nana turiŁi ...>
nariɬa pata-y ɬik nana turi-ɬi
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 *ʔahɬ* and *man* in this context.

(8. 180) a. <nána axʊé>
nana ʔašɬ
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 hɨʔ
FOC DEM
'this (one)' (G-JAP)

b. nana senyorita man
FOC Sp:miss DEM
'that miss' (G-SH)

c. <nanu jú>, <nanu … jú>
nanu huʔ
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(ʔ)* occurs in the ALS only in form of the locative adverb *na:(ʔ)* '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	<na>, <ná>	na(ʔ)	"este, aquí"
X_{Ch}	<na>, <naʔ>	na(ʔ)	"esta"
X_Y	<na>	na	"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(ʔ)* "este/aquí". The form is attested in X_G and X_{Ch} where it occurs in a discontinous (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 naʔ
DET eat=PROG-3sA DEM/LOC
'he is eating here'
OT:"él está comiendo aquí" (G-S)

c. <rukukay naná>
ruka=ka-y na naʔ
eat=PROG-3sA DET DEM/LOC
'he is eating here'
OT:"él está comiendo aquí" (G-S)

The proximal demonstrative *ʔašɨ* is represented variously with C_1 *š* 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 *š* (see § 4.2). In the comparative data the demonstrative is attested exclusively with the glottal fricative *h*, confirming the sound change of *š* > *h* in Central Xinka; e.g. *ʔašin* > *hin* (see § 4.5.1).

Table 8. 14: Comparison of proximal demonstrative

	FORM		ORIGINAL GLOSS
X_M	<aszʊe>,	ʔaši	"hic, haec, hoc, esta" (116.)
	<axʊe>		"este" (3659.)
	<agʊé>	ʔahɨ	"este" (3605.)
X_G		hɨʔ	"este, eso" (G-JAP, G-JS)
		huʔ	"este, eso"
X_{Ch}	<jú>	huʔ	"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 *ʔašɨ* indicates a proximal demonstrative. In X_G the demonstrative is translated as "ese" or "este, in X_{Ch} as "este, esto". The form *ʔašɨ* may be etymologically related to the locative adverb *ʔi* or *ʔih* "allí" (G-S) attested in X_G and X_Y (see § 14.2).

(8. 183) a. ʔi peʔ maʔ
LOC come DEM/3s
'there he comes' (G-JAP)

b. ʔih-uka-ʔ
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 axʊè>
na **pari** **ʔahɨ**
DET day DEM
'this day = now'
OT:"ahora" (2036.)

b. <na axʊé>, <na aszʊe>
na **ʔašɨ**
DET DEM
'(to) this (one)'
OT:"a este" (120.), "esto" (3659.)

(8. 185) a. mu-ɕ'uwe na hɨ
3sA-bend corn DET DEM/3s
'he bent this (corn)' (G-JS)

b. <nu verdad jú>
nu *verdad* huʔ
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 ʔayaɬa 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 senyorita 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 *ʔahi* and *man* with the pronominal plural clitic *ɬik* (see § 6.3), just like the regular third person pronoun *nah*. In most cases the plural *ɬik* follows the demonstrative, but it can also precede it (c).

(8. 189) a. <na axʊé Łic>
na **ʔašɬ** **ɬik**
DET DEM PL
'to these'
OT:"a estos" (126.)

b. <nana mán Łic>
nana **man** **ɬik**
FOC DEM PL
'those'
OT:"esos" (136.)

c. <tiý Łic na man>
ti:ʔ **ɬik** **na** **man**
IO 3PL DET DEM
'to/for those'
OT:"a, para esos" (139.)

In X_G and X_{Ch}, animate plural markers *-ɬe* (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-ɬe
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=ɬiki
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 *ʔašɬ*; in X_{Ch} the pattern is also confirmed for the demonstrative/locative adverb *naʔ* "aquí".

Table 8. 16: Structural pattern of adnominal demonstratives

PATTERN		ORIGINAL GLOSS
na NP naʔ	'the NP here'	"este (aquí)"
na NP ʔašɬ	'the NP there'	"este (allá)"
na NP man	'the NP over there'	"ese"

Adnominal demonstratives occur with noun phrases functioning as S arguments, O arguments, adjuncts and nominal predicates. Examples form 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 axʊe neŁa turiŁi>

nana	**haw-tuma**	**ʔahɨ**	**neɬa**	**turi-ɬi**
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 axʊè>

šama	**na**	**pari**	**ʔahɨ**
PREP	DET	day	DEM

'in this day = now'
OT:"ahora" (2036.)

b. <Łinà nà ayàŁa man>

ɬi-naʔ	**na**	**ʔayaɬa**	**man**
PREP-DEM	DET	woman	DEM

'with that woman'
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>

na	hiši	na
DET	stone	DEM/LOC

'this stone'
OT:"esta piedra" (Ch-C)

b. <turay nanu lucha jú>

tura-y	nanu	*lucha*	huʔ
bring-3sA	FOC	fight	DEM

'one/he brought this fight'
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>

ti:(ʔ)	nanu	*reino*	ma-liki
IO	FOC	Sp:kingdom	DEM-PL

'of those kingdoms'
OT:"de esos reinos" (Ch-Z)

b. <nanu pulaqui juliqui>

nanu	pula-ki	hu-liki
FOC	make-VN	DEM-PL

'these deeds'
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-neɬa 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. <¿cà pè taguà na aszʊe?>
kaʔ peʔ ta-waʔ na ʔašɨ
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 aka? 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-ɸ'uwe na hɨ
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 vació, 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-waʔ
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 ʔiri-ɬaʔ
DET PN:1s see-PAST.ACT
'he sees/saw me'
OT:"él me ve" (Ch-C)

d. <man saprikilá>
man sapriki-laʔ
DEM/3s desgrain-PAST.ACT
'that one degrained'
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 hiʔ
PN:3s DET DEM sit be+3sS_{DEP}
'(it is) him that is sitting (there)' (G-SH)

c. <najna majliki>
nah na ma-ɬiki
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 huʔ
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-ʔ 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>
ʔinay na ʔuka-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 hɨʔ ʔən-neɬa
FOC DEM 1sP-BEN
'this is mine' (G-RHG)

b. nana man ʔan-nwera
FOC DEM 1sP-Sp:daughter-in-law
'that one is my daughter-in-law' (G-SH)

c. <nanu jú ical elag>
nanu huʔ ʔikal ʔelah
FOC DEM DET/NUM:'1' new
'this is a new one'
OT:"a ésta una nueva" (Ch-Z)

d. <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)

e. <naʔ na 'maskara>
naʔ na maskara
DEM DET Sp:mask
'this is the mask'
OT:"máscara" (Ch-MQb)

f. <manchítz'üöma>
man *čɨ ɋ'ɨʔma
DEM DIM? black
'that (little) one is black'
OT:"aquel es negro" (Y-C)

Schumann gives pronominal demonstratives functioning as nominal predicates also in a discontinous pattern with the demonstrative following the referent noun phrase.

(8. 205)
<nana kúmu túma mán>
nana kumu tuma 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(ʔ)
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-ʔ 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 maʔ Ø-hapa-ʔ
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-(ʔ) 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 szʊe na mán>
šanta šɨ 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 *ʔaɬi*, which functions as a causal conjunction.

(8. 209) a. man ʔaɬi ture-y maɬik
DEM PREP.CAUS bring-3sA firewood
'that is why he brought firewood' (G-SH)

b. man ʔaɬi 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 axʊé>
neɬa ʔahɨ
BEN DEM/3s
'of this one'
OT:"de éste" (118.)

b. <aŁi na axʊè>
ʔaɬi na ʔahɨ
PREP.CAUS DET DEM/3s
'because of this one'
OT:"por éste" (121.)

c. <néŁa na mán>
neɬa 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 naʔ
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-ɬi man
underneath-ʔ 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, alla, 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.)
	<naggŁic>	nah ɬik	"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 naggŁic>
na nah ɬik
DET PN:3s PL
'they, them'
OT:"a aquellos" (114.)

d. <na nag ɛiguág>
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(ʔ)* 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 ʔ
DEM/3s DEM
'this'
OT:"este, éste" (G-S)

b. ti:ki hi ʔ nah na
sleep be+3sS$_{DEP}$ 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 ʔ
DET=INT
'(he) who'
OT:"el que" (G-S)

d. wena=ta ʔ
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 kɨrɨ-n man=ta tɨɬa
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 ʔikaɬ 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 nalika 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 maqúí 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'aɬ* '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 naŁ iɛal santo>
ka-tana na(ʔ)ɬ ʔik'aɬ *santo*
2sS-be IMPFV INDEF Sp:saint
'you were a saint'
OT:"... serías un santo" (2031.)

The semi-speakers of X_G often abbreviate *ʔikaɬ* 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. ɬiki-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 uxutí>
kaɬ ʔušutiʔ
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-kaʔ ʔikaɬ 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 nahiʔ kah pari
3sS?-return PN:2s LOC INDEF day
'you return there one day' (G-JS)

d. ʔikah ka-taho ta lagriyo hiʔ
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 *-ɬ (or -ɬi) and *-ʔar. It would make sense to identify this suffix as the animate plural marker -ɬi. However, the suffix -ɬ 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'aɬ	ʔikaɬ, kaɬ ʔikah, kah ʔikaʔ, kaʔ	ʔik(')aɬ, kaɬ ʔikah, kah ʔika(ʔ), kaʔ	ʔika	kal, kaɬ, kak	ʔikal, kal	ʔikal
#2	pi	piʔ	pi, piʔ piʔar	ti	piʔar	piʔar piʔal	piaʔr
#3	*waɬi	waɬ, wah ʔiwah	waɬ, wal, wahu, waʔ walar	wala		waɬi, walar wa:lal	warar
#4	-	hiriya, hɨrya	hiriya, ʔiriya iriʔar	hiria	ʔiriʔar	ʔiriʔar ʔiriʔahim	ʔiriʔar
#5	-	pɨhɨ	puh, puhu, pɨhɨ tanak	puh		puh, pɨh, pihar pihi	puhar
#6	-	takaɬ, takaʔ	tak(')aɬ, takaš, taka heyk	takal		takal *pulwa	takalar
#7	-	-	pilwa, puɬna	puhwa		puɬar puɬa	pulwar
#8			hɨrte				hɨɬ-ar
#9				ʔuštu			
#10			pak'iɬ, pakil	pak'il			pakilar

The basic form of the numeral 'one' is *ʔikaɬ* (see Table 8. 19) It consist of the root *ʔika-* and the numeral suffix *-ɬ* 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 *waɬ* or *wal*, which combines the numeral base *wa-* and the numeral suffix *-ɬ* (or *-l*). In the ALS and in X_Y, the numeral base takes the suffix *-ɬi*. 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-ɬ	<iɛál>	ʔikaɬ (JAP)	<icalg> (Z)			<ical>(C, V)	<ical> (V)
	<yɛaŁ>	ʔik'aɬ (JS)	<hical> (Z)			<icalj> (C)	
			<ical> (C)			<ícal> (L)	
			<ícal> (L)				
ka-ɬ		kaɬ (SH)	<cajl> (C)		<calj> (E)	<cal> (C)	
			<'kaɬ> (MQ)		<cal> (G)		
			<kʔaɬ> (S)				
			<calh> (JC)				
ʔika-h		ʔik'ah (RHG)					
		ʔikah (JS)					
k(')a-h		kah (SH)	<caj> (C)				
			<c'aj> (MA)				
			<k'a^h> (MQ)				
ʔik'aš		ʔik'aš (SH)	<caz> (F)				
ʔik(')a	<yɛa>	ʔika (SH)	<ica> (C)	<ica>			
		ʔitáʔ (JS)		(Gav)			
k(')aʔ		kaʔ (PE)	<ka> (F)		<các> (G)		
		k'aʔ (SH)	<ca> (P)				
ʔikaɬ-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)	<ti> (Gav)		<pi> (C)	
			<pi> (C), (L)				
			<pi> (MA)				
pi-ʔ		<piʔ> (S)	<'piʔ> (MQ)				
		piʔ (JAP)	<piʔ> (S)				
pi-ʔar			<piar> (C, F)		<piar> (E)	<piar>(C, V)	<pia'r>(V)
						<bial> (L)	

Table 8. 21: Representations of numeral 'three'

	X_M	X_G	X_{Ch}	X_S	X_Y	X_{Jut}
waɬi	<guaŁi>		<uaju> (F)		<huajli> (C)	
waɬ		<waɬ> (S)	<huajl> (C)			
		waɬ (SH)	<guazl> (F)			
			<waɬ> (S)			
			<güalh> (JC)			
wal			<guaal> (F)			
			<'wal> (MQb)			
wa			<cvuá> (L)			
			<'gwa> (MQa)			
waɬ-ar			<hualár> (C)	<uala> (Gav)	<hualár>(C)	<guarar> (V)
			<gualar> (F)		<ualar> (V)	
					<vuaalal> (L)	

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 *-ɬi* 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)	<'hiriyʌ>(MQ)	<jiria> (Gav)			
		<jiria> (Z)				
		<hiliyʌ> (MQ)				
iriya		<'ʔiriyʌ> (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 **pɨ* 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 *pɨ̈hɨ* and *pɨ̈h*. In X_Y the numeral is given as *pɨɨ̈i*, which clearly combines the numeral base *pɨ-* and the numeral suffix *-ɨi*. 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}
pɨhɨ	<pɨhɨ> (S)	<puju> (Z)		<püjli> (C)	
		<pujö> (L)			
		<pöjü> (F)			
		<'puxu> (MQ)			
		<pɨhɨ> (S)			
pɨh		<püj> (C)	<pvj>	<püj> (C)	
		<puj> (JC)	(Gav)	<piji> (L)	
pɨh-ar				<pijar> (V)	<pujar> (V)

The numeral for the number six (see Table 8. 24) consists of the base *taka-* and the suffix *-ɬ*, 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-ɬ	<takáɬ> (S)	<tacal> (F)	<tacal> (Gav)	<tacal> (L)	<tacalar> (V)
		<ta'k'aḷ> (MQb)			
		<taʔ'kaḷ> (MQb)			
		<tak'áɬ> (S)			
taka-h	tákàh (SH)				
	tak'ah (RHG)				
taka-r		<tácar> (F)			
		<tacash> (JC)			
taka-ʔ	takaʔ (SH)	<tacá> (C, F, L)			
	t'akaʔ (SH)				
tana-		<ta'nʌk> (MQa)		<tanal> seis (C)	

The number seven is indicated by the numeral stem **pu-ɬ-*, which likely combines the numeral root *pu-* and the plural marker *-ɬi* (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_Y	X_{Jut}
pulwa	<pulgua> (Z)		<pulfa> (C)	
	<púlua> (F)		<pulja> (L)	
	<puljna> (C)			
puhwa		<pujua'> (Gav)		
puɬ(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 *hɨɬ(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 **hɨɬ-*, which may be followed by the numeral suffix (taking into account that *ɬ* may become *š*, which again may change into *s*; 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}
hɨ-r-te	<jüörte> (C, F)	
hɨ-rš-ar		<gerjsar> (V)
hɨ-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 *ʔuš-* and the suffix *-tuʔ*. The marker may be related to the spatial deixis marker *tɨ* (see § 14.2.1).

(8. 223) <uxtu'>
ʔuš-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 *pakiɬ*, which combines the numeral base *paki* and the numeral suffix *-l* or *-ɬ*. 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)		
	<pakisl> (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 pɨh* [NUM:'10'-NUM:'5'] 'fifteen'. The number term for 'ten' is attested in X_{Ch} and X_S with the numeral suffix *-ɬ*, i.e. *paki-ɬ* [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-ɬ			
11	paki-n ʔikaɬ	[NUM:10-CL + NUM:1]	<pakincal>	"once" (Ch-C)
			<pakin-kal>	(Ch-F)
12	paki-n pi(ʔ)	[NUM:10-CL + NUM:2]	<paquin pi>	"doce" (Ch-Z)
			<pakinpí>	(Ch-C)
			<pakin-pí>	(Ch-F)
13	paki-n waɬ	[NUM:10-CL + NUM:3]	<pakinhuajl>	"trece" (Ch-C)
			<pakin-guajl>	(Ch-F)
14	paki-n ʔiriʔa(r)	[NUM:10-CL + NUM:4]	<pakiniría>	"catorce" (Ch-C)
			<pakiniriar>	(Ch-F)
			<pakin-iria>	
15	paki-n pɨh	[NUM:10-CL + NUM:5]	<pakinpüj>	"quince" (Ch-C)
			<pakin-püj>	(Ch-F)
16	paki-n takaʔ	[NUM:10-CL + NUM:6]	<pakintacá>	"diez y seis" (Ch-C)
			<pakin-tacá>	(Ch-F)
17	paki-n pulwa	[NUM:10-CL + NUM:7]	<pakin puljna>	"diez y siete" (Ch-C)
			<pakin-pulgua>	(Ch-F)
18	paki-n hɨrte	[NUM:10-CL + NUM:8]	<pakin jöürte>	"diez y ocho" (Ch-C)
			<pakin-jüorte>	(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 *ʔikaɬ* for the number one, literally translating as 'one time twenty'. Analogically, the term for the number fourty 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	ʔikaɬ frak	[NUM:1-NUM:20]	-	-
22	kaɬ frak pi	[NUM:1-NUM:20 + NUM:2]	<calfrag pi>	"veintidos" (Ch-Z)
25	kaɬ frak puhu	[NUM:1-NUM:20 + NUM:5]	<calfrag pujú>	"veinticinco" (Ch-Z)
27	ʔikaɬ frak pulwa	[NUM:1-NUM:20 + NUM:7]	<icalfrag pulgua>	"veintisiete" (Ch-Z)
30	kaɬ frak pakiɬ	[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(:ʔ)	*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 pujú ti hig qui mismo [mes]>

nanu	kal-frak	puhuʔ
FOC	NUM:'1'-NUM:'20'	NUM:'5'

'it is the one-(times)-twenty (and) five'

ti(:ʔ)	hiʔ	ki	*mismo*	*mes*
IO/PREP	be+3sS$_{DEP}$	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 naŁ ɪɛal santo>

ka-tana	**na(ʔ)ɬ**	**ʔik'aɬ**	***santo***
2sS-be	IMPFV	NUM:'1'	Sp:saint

'you were a saint'
OT:"...serías un santo" (2032.)

Constructions where *ʔikaɬ* 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.

ʔik'aɬ	libro	man
NUM:'1'	Sp:book	DEM

'one (that) book' (G-JS)

b. <caj mapo>

kah	mapu
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* huɋ'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) <pijúszíc>
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:"padrastro" (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)

a. <kał pari>
kaɬ pari
NUM:'1' day
'(in) one day = early'
OT:"temprano" (Ch-MQb)

b. <tacaz pari>
taka[ɬ] pari
NUM:'6' day
'six days (ago)'
OT:"la semana pasada" (Ch-F)

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)

d. <jurrí iriar parrí>
huri ʔiriʔar pari
? NUM:'4' day
'four days (ago)'
OT:"hace 4 días" (Y-C)

e. <pi ayapá ray>
pi ʔayapaʔ ray
NUM:'2' year be+3sS_{DEP}
'it has been two years = two years ago'
OT:"hace dos años" (Ch-C)

f. <jurrí piar apahuina>
huriʔ piʔar ʔapawina
? NUM:'2' year
'two years (ago)'
OT:"hace dos años" (Y-C)

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)

a. <guaŁipè>
waɬ-i=peʔ
NUM:'3'=CENT
'in three (days)'
OT:"de aquí a tres días" (3838.)

b. <piícan>
pi:=ka-n
NUM:'2'=EXO-SUBJ/IRR
'two (days) ago'
OT:"anteayer" (4288.)

c. <pigi>
pi=hiʔ
NUM:'2'=LOC:allí
'two (days) from here = the day after tomorrow'
OT:"pasado mañana" (4291.)

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. <pijican>, <pejicán>
pi=hi=ka-n
NUM:'2'=LOC=EXO-SUBJ/IRR
'two (days) ago'
OT:"antes de ayer" (Ch-C)

d. <pijivuac>
pi=wa=k
NUM:'2'=DIR-?
'(in) two (days) = day after tomorrow'
OT:"pasado mañana" (Y-C)

d. ʔaɬa 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'aɬ* '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) <yɛaŁaɛaŁ>
ʔik'aɬ **ʔak'aɬ**
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) <iɛalqui>
ʔik'aɬ-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) huirkihuí>
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 *-ɬi* 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 waɬ
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) ícájla>
ʔikaɬa-ʔikaɬa
NUM:'2'-REDUP
'one by one'
OT:"de uno en uno" (Y-C)

c. <huajli huajli>
waɬi-waɬi
NUM:'3'-REDUP
'three by three'
OT:"de tres en tres" (Y-C)

d. <püjli püjli>
puɬi-puɬi
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', *pɨmɨ* 'dumb', *meme* 'crazy', *harana* 'ill'

DIMENSION/DISTANCE: *kosek* 'big, large', *ʔɨrʌʔ* 'big, large', *pe:re* 'small', *k'ɨrwɨ* 'thin', *šunu* 'long, deep', **tɨš(ɨ)k'ɨ* 'far, distant', *šaɬka* 'distant'

QUANTITY/DEGREE/MEASURE: *čɨy* 'little, few', *ʔurɬu* 'full, whole', *puy* 'half, middle', *ʔuɕ'iʔ* 'in the middle', *ɕ'ɨk'ɨ* 'middle, centre', *ʔamaʔ* 'be left over, more than enough'

AGE: *ʔone* 'tender' (see 'physical properties'), **ʔuk-* 'old', *ʔeɬa* 'new', *hawaʔ* 'unripe', *hamaʔ* 'ripe, mature', *ʔɨpɕ'iʔ* 'ripe, grown'.

VALUE: *šaɬ* 'good', *ɕ'ama* 'good', *ʔliwis* 'bad'.

COLOUR: *tena*, *ten* 'red', *tolo* 'yellow', *me:(ʔ)* 'green', *sɨma, sɨn* 'black', *muɬa, muɬ, muʔ* 'white', **muɬ-ča* [white-ash] '*gray'; there are also the loanwords *šak'* 'white' (L-M) and *tiɬtik* 'black' (L-N)

Physical Properties:

'Weight': *kara* 'heavy' (derives from verb)

'Consistence': *čawi* 'hard' (L-M), *ʔone* 'tender' (see Age), *ma:sa:* 'sticky', *k'ɨwɨ* 'dry'

'State': *k'o:čo* 'dirty'

'Taste': *šayaʔ* 'sour', *ɕ'amɨ* 'sour, bitter', *hamɨ* 'sour, acid', *mɨrʌ(ʔ)* 'bitter', *pɨša* 'smelly'

'Temperature': *pari* 'hot' (N), *ɬome* 'tepid, lukewarm' (L-M), *sararaʔ* 'cold'

'Disability': *čonko* 'crippled', *lunku* 'one-armed', *šolko* 'tooth-less, *pohmo* 'blind', *tanɕ'i* '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)

a. <múŁasziuc>
muɬa šiyuk
white rattlesnake
'white rattlesnake'
OT:"víbora de cascabel, culebra" (4099.)

b. <toloau>
tolo ʔaʔu
yellow corn
'yellow corn'
OT:"maíz amarillo" (4594.)

c. <száya naru>
šaya naru
bitter/acid earth
'bitter/acid earth = vitriol'
OT:"tierra de caparrosa" (4464.)

d. <Łóme hui>
ɬome ʔuy
tepid water
'tepid water'
OT:"agua tibia" (4029.)

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)

a. <perejli jixi>
pere-ɬi hiši
DIM-PL stone
'small stones'
OT:"piedras pequeñas" (Ch-C)

b. <pere onejle>
pereʔone-ɬe
DIM tender/infant-PL
'small infant'
OT:"los niños" (Ch-C)

c. <perejli-nesjle>
pere-ɬi ne-ɬe
DIM-PL infant-PL
'small infant'
OT:"hijos pequeños" (Ch-F)

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. *sɨɬ(ʔ)ma > sɨɬn*) (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)

a. <muŁckeguesza>
muɬ-k'eweša
white-anona
'white anona'
OT:"la anona blanca" (4100.)

b. <sʊen au>
sɨn-ʔaʔu
black-corn
'black corn'
OT:"el maíz negro" (4403.)

c. <ucszumu>
ʔuk-šumu
old-male
'old man/elder'
OT:"el viejo" (4674.)

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-ɬa
lay down-PART.ACT
'laid down'
OT:"acostado" (3720.)

e. <saraŁ huy>
sara-ɬ **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 Nahuan loans (d; see also § 4.5.2.2, § 4.4.1.2).

(8. 247) a. <guiszucnuguí>
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
?-INSTR
'big/large thing'
OT:"cosa grande" (10.)

d. <tiŁtick>
tiɬtik
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(ʔ)*. In some cases the positional meaning of the root is separately attested in the corpus of data; e.g. the diminutive modifier *čɨ-* (§ 8.7.3.2.2) (8. 248a), or the locative adverb *tɨ-* (§ 14.2.1) (b) – both roots are marked with *rɨ*, or *šɨ*. In all other cases, the translation context alone indicates that *–kV_1(ʔ)* 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. <chʊerʊeɛʊe>
čɨ-rɨ-k'ɨ(ʔ)
DIM-?-ADJ.POS
'small'
OT:"chico, pequeño" (3697.)

b. <tʊeszɛʊe>
***tɨ-šɨ-k'ɨ(ʔ)**
'Distance'-?-ADJ.POS
'far, distant'
OT:"lejos" (4634.)

c. <saŁca>
saɬ-ka(ʔ)
?-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 *-ʔ*. 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>
šol-ko(ʔ)
?-ADJ.POS
'tooth-less'
OT:"sin dientes" (4486.)

b. <lungú>
lun-kuʔ
?-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>

*čon-koʔ	na	wapiʔ
*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', *čoh-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_1ʔ

There is a group of three-syllabic adjectives that share the morphotactic structure CVCV.C_2V_1ʔ. 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. <ʋemʋemi>
?ɨmɨ-mi(?)
*excrement-ADJ
'stinking (thing)'
OT:"cosa olorosa" (4736.)

d. <ʋeszʋeszʋé>
?ɨšɨ-ši?
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:"frío" (G-SH)
"(mucho) frío" (Ch-MQ), (Ch-F)
"está tronando" (Ch-MQb)

d. <tereré-uy>, <tururu'?ay>
tɨrɨ-rɨ ?uy
*'flow'-ADJ water
'flowing water'
OT:"truena el agua" (Ch-F),

e. ?ɨsɨ-čɨ?, ?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 V_2. 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-ruʔ **pari**
temperature-ADJ heat
'hot (thing)'
OT:"cosa calorosa" (3986.)

b. <sararà taù>
sara-raʔ **taʔu**
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 Nahuan (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. <sʊemp sʊemp>
sɨmp-sɨmp
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-šaɬ
NEG-ADJ:good
'not good = bad'
OT:"malo, no está bueno" (3658.)

b. <aszintʊeszɛʊe>
ʔašin-tɨšk'ɨ
NEG-ADJ:far
'not far = close'
OT:"no lejos" (3657.)

c. <aszinaɛ́ál>
ʔašin-ʔak'aɬ
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 ɕ'ama
NEG good
'not good = useless' (G-RHG)

b. <lantz'ama>
ɬan ɕ'ama
NEG good
'not good = ugly'
OT:"feo" (Ch-C)

c. <landajá>
ɬan 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 chʊerʊeɛʊe>
ɕ'ama **čɬɨk'ɬ**
AUG:good small
'very small'
OT:"muy chico" (4639.)

b. <txama ʊerrá>
ɕ'ama **ʔɬra?**
AUG:good big, large
'very large'
OT:"muy grande" (4638.)

(8. 260) a. <mas chʊerʊeɛʊe>
más **čɬɨk'ɬ**
AUG/Sp:more small
'very small'
OT:"pequenito, muy chico" (4066.)

b. <mas ʊerrá>
más **ʔɬra?**
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'. Ocassionally, the clitic realised by the semi-speakers as *ke*, and may therefore also be derived from the Spanish "qué".

(8. 261) a. ki kayaya?
INTENS heat
'very hot' (G-PE)

b. <ki tzamá>
ki ɕ'ama?
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 **čɨ-* '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 čɨ-

The diminutive modifier *čɨ-* or *ču-* is a bound form that precedes head nouns and modified noun phrases. The root is the base of the positional adjective *čɨrɨkɨ* 'small'. It occurs as a free form with marker *-rɨ* or *-ru* (realised as *–lu* in X_{Ch} and X_Y), *-y* and the derivational marker of positional adjective *-kɨ*.

Table 8. 30: Diminutive modifier *čɨ-*

	FORM		ORIGINAL GLOSS
X_M	<chʊey>	čɨy	"poco"
	<churu>	ču-ru	Intensifier "pequeño"
X_G		ču	'diminutive'
X_{Ch}		čuy	
	<chulu>	ču-lu	"pequeño" (Ch-F)
	<čʉ'ku?>	čɨ-ku	"pequeño" (Ch-MQ)
	<čöcoy>		"despacio" (Ch-F)
X_{Jum}			
X_Y	<chulu>	ču-lu	"pequeño" (Y-C)

The root *čɨ-* is widely diffused (pM **ty'i* 'small', CHR *č'ix*, KCH *č'utiʔn* [K-03]; LEN (Salvador) *ɕ'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 *ɕ'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 *čɨrɨk'ɨ* '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 *ɕ'ama* and *más* (see above).

(8. 264) <churu chʊerʊeɛʊe>
čuru **čɨrɨk'ɨ**
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(ʔ)
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 *čɨ́y* is only listed as a lexical item in the vocabulary.

(8. 266) <chuyone>
čuy-ʔone
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 *čɨ́-* with the derivational suffix for positional adjectives *-kV₁ʔ*, is attested in X_{Ch} (see § 8.7.2.2).

(8. 267) a. <chöcoy>
čɨ-koy
DIM-ADJ.POS
'slowly'
OT:"despacio" (Ch-F)

b. <čʉ'kuʔ>
čɨ-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. taɬa-ʔ ču-mak'u-ʔ
burn-STAT DIM-house-3sP
'his little house burned' (G-RHG)

c. ku šawaɕ'a-n ču-ʔayma
go sow-1sP DIM-corn
'I go to sow (little) corn' (G-JAP)

d. kiʔ ʔɨrɨɕ'ɨʔ 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 ʔen-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-ʔone 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
flesh DIM?-hand-1sP
'the flesh of my hand'[149] (G-PE)

b. ša ʔeskina ču-mak
PREP Sp:corner DIM-house
'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>
miku šuraya
MOD:small/DIM girl
'little girl'
OT:"niña" (G-S)

b. <míko máku>
miko maku
MOD:small/DIM house
'little house'
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>
miku-ɬi
small-PL
'small ones'
OT:"pequeñito, muchachito" (Ch-F)

b. <míko na máku>
miko na maku
MOD:small DET house
'the house is small'
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 rɨma
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 *-kV₁* (see § 8.7.2.2) or the form *ʔakɨ* '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 maɬɨk
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 naɬik 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 šawaȼ'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 ɨra? šuraya poʔȼa hiʔ ku>
na ʔɨraʔ šuraya poʔȼa hiʔ 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)', *ʔaɬ-* '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 *ʔaɬ-* and *para-* can furthermore take possessor-marking suffixes, cross-referencing their nominal complement that may follow as a noun phrase (e.g. *ʔaɬ-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, hacía"
towards, from		ʂa	sa			sa	"en" (adentro,
		ča	ʂa			ha	encima),
			ra				"de"
			ha				
in, on	šan	šan	han	san	san	san	"sobre de",
towards			šan	šan	šan	šan	"en, encima"
			san	šam	šam	šam	"a"
			ran				
in, inside	šama		hama	šama			"en, entre"
				hama			"allí"
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.), *šawuɬa* "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 he$ʔ_{PROG+3sS_{DEP}}$ ša ʔuy
girl play PREP water
'the girl is playing in the water' (G-SH)

b. <ra macu ay>
ra maku ʔay
PREP house be+3sS_{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 ʔaɬtepet
go=PROG-1sS$_{DEP}$ PN:1s PREP town
'I am going into town' (G-JAP)

c. <un xayé ra maku>
ʔun-šaye ra maku
1sS-return PREP house
'I returned home'
OT:"yo regresé a casa" (Ch-F)

d. <cuyá rhatálti>
ku=ya-ʔ ra taɬti
go=PROG-1sS/STAT PREP (hill)slope
'(I am) going to the hillslope'
OT:"voy a la loma" (Ch-JC)

(9. 4) a. na niʔ 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-3sS$_{DEP}$ 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:-ɬa 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 ʔakaniʔ
DET PN:1s NEG 3sA-carry PREP bring-1sA ADV
'I do not carry to bring it?' (G-SH)

b. hin=ka ša mu-ɬika
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 tɨru
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. <szamíni>
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** **paɬ**
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. <šan¢ʔéhe>
šan ¢'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 *sɬʔma* 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(ʔ)ma-ki
PREP-night-INCH
'to become night, dark'
OT:"anochecer" (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 in 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. <haŋ 'ᵍwaʔ>
han-waʔ
PREP-DIR
'at-go away= over there'
OT:"allá" (Ch-MQb)

b. <janhuac>; <janguac>
han wa-k
PREP-DIR-?
'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. <sí szàma macutiusz naŁ ayacà>

si	**šama**	**maku-tyuš**	**na(ʔ)ɬ**	**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 axʊè>
šama **na** **pari** **ʔahɨ**
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 sʊema>
šama-k **sɨma**
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. <niguaszàa>
niwa ša
ask PREP
'ask/wish towards = to want'
OT:"querer" (2751.)

b. <yɒeguaszáma>
yɨwa šama
lose PREP
'lose inside = forget'
OT:"olvidar" (3559.)

c. <pataszáma>
pata šama
*accomplish PREP
'accomplish inside = think, remember'
OT:"pensar, acordarse" (2832.)

d. <nɒema szama>
nɨma šama
eat PREP
'eat inside = sadness'
OT:"tristeza, cuidados" (3592.)

(9. 22)

a. yɨwa-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. <tarisza>
tari-ša
*come-PREP
'divert, change direction'
OT:"desviar" (3232.)

b. <szacatxa>
šaka-ɕ'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 ragúc ja>

aquí	ʔikaɬ	wapaɬ	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 ʔaɬ-

The spatial prepositional root *ʔaɬ-* 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 *ʔaɬ-* (ALS)

	FORM		ORIGINAL GLOSS
over, above	<aŁ>, <aŁi>	ʔaɬ, ʔaɬi	"encima o sobre" (3607.)
by, through	<aŁ>, <aŁi>	ʔaɬ, ʔaɬi	"por" (3606.)

The prepositional root *ʔaɬ-* occurs as a bound form and as a free form. It is not clear whether the free form *ʔaɬi* combines the prepositional root and the third person singular cross-referencing suffix *-y*.

In the ALS, the spatial preposition *ʔaɬ-* 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 *ʔaɬpamaʔ* 'shoulder' is attested (9. 27).

(9. 26)

a. <aŁ guapi>
ʔaɬ-wapi
PREP:over-foot
'over the foot = dorsum of the foot'
OT:"empeine del pie" (3619.)

b. <aŁpamag>
ʔaɬ-pama-h
PREP:over-arm-3sP
'over his arm = shoulder'
OT:"los hombros" (3614.)

c. <aŁte>
ʔaɬ-te
PREP:over-female genitals
'over female genitals = male genitals'
OT:"*membrum virile*" (3616.)

(9. 27) <aɬpamá>
ʔaɬ-pama-ʔ
PREP:over/above-arm-?
'over the arm = shoulder'
OT:"hombro" (G-S)

In X_G and X_{Ch}, *ʔaɬ* 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 senyorita ʔaɬ naka
say-3sA DET MOD girl PREP PN:2s
'the girl said about you' (G-JS)

b. <pohuoy ajuaru na pári>
powo-y ʔaɬ 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>
ʔaɬ 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 ʔaɬ 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 *ʔaɬ-* 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 *ʔaɬ-*, i.e. 'over, above' ("sobre, encima") and 'by, through' ("por") are attested in this morphosyntactic context. The third person singular form *ʔaɬi* 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>
ʔaɬ(a)-y = ʔaɬ-i
PREP:over/above-3sP
'over/above him/her/it'
OT:"sobre de él" (Ch-C)

d. <ajlajli>
ʔaɬa-ɬi
PREP:over/above-PL
'over/above them'
OT:"sobre de ellos" (Ch-C)

e. <alaljki>, <alaljkí>
ʔala-ɬki
PREP:by/through-1pP
'by us'
OT:"por nosotros" (Ch-C, Ch-F)

In X_Y the prepositional root is **ʔata-*, which illustrates the change of *l* to *t* that occurs in this variety in intervocalic contexts (see § 4.5.1). In the third person singular the consonant *ɬ* is preserved.

(9. 30)

a. <atan man>
ata-n man
PREP:over/above-? DEM/3s
'over that one'
OT:"sobre de él" (Y-C)

b. <ajli>
ʔaɬ-i
PREP:over-3sP
'over him'
OT:"sobre él o élla" (Y-C)

In X_Y the preposition *ʔata* (or *ʔaɬi*) can furthermore be preceded by *ʔaɬ-*, rendering a reduplication of the prepositional root that denotes the spatial concept 'below, underneath' ("debajo").

(9. 31)

a. <alatau neu>
ʔal-ata-n nen
PREP:over-PREP-1sP PN:1s
'below/underneath me'
OT:"debajo de mí" (Y-C)

b. <alájli man>
ʔaɬ-aɬ-i man
PREP-PREP-3sP DEM/3s
'below/underneath him'
OT:"debajo de él" (Y-C)

c. <alatan man aya>
ʔal-ata-n man=ʔaya
PREP:over-PREP-? DEM/3p=PL
'below/underneath them'
OT:"debajo de ellos" (Y-C)

d. <alatal utuc>
ʔal-ata-l ʔutuk
PREP:over-PREP-? bed
'below/underneath the bed'
OT:"debajo de la cama" (Y-C)

Preceded by numeral *pi* 'two' and marked with cross-referencing personal suffixes, *ʔaɬa* functions as a non-spatial preposition expressing 'both'. In Mesoamerican languages, the semantic concept 'both' is often realised by relational nouns that take possessor-marking inflection.

(9. 32)

a. <pi alajki naljki>
pi ʔala-hki naɬki
NUM:'2' PREP:over/by-1pP PN:1p
'by us two = both of us'
OT:"nosotros dos" (Ch-C)

b. <pi ajlajlí>
pi ʔaɬa-ɬi
NUM:'2' PREP:over/by-PL
'by them two = both of them'
OT:"los dos ellos" (Ch-C)

c. <piki alajliki>
pi=ki ʔala-ɬiki
NUM:'2'=INTENS/DISTR PREP:over/by-1pP
'by us two alone = both of us alone'
OT:"dos solos estamos o somos" (Ch-C)

9.1.3 Preposition para

The prepositional root **pa-* denotes the position 'under/below, behind' ("debajo, detrás"). The preposition occurs in the ALS only in the form *para*, which seems to combine the prepositional root and a demonstrative. The etymology of **pa-* is unclear. It is unclear whether the preposition may in some way be related to the TAM-adverbial *paʔ* and *paɬ* (see § 12.5.2), or whether there is a relation to the Western Mayan root **paat* 'back, behind' (Kaufman 2003:312). This spatial preposition *para* must not be confused with the homonym prepositional loan from Spanish *para*, which is also attested in the ALS, i.e. *para ki* "por" (4245.).

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)

a. <para guapi>
para-wapi
PREP:below-foot
'below the foot = sole of the foot'
OT:"planta del pie" (4246.)

b. <para szaja>
para-šaha
PREP:below/behind-mouth
'below the mouth = jaw'
OT:"cachetes" (4250.)

c. <para táŁi>
para-taɬi
PREP:below-throat
'below the throat = neck'
OT:"pescuezo" (4249.)

d. <para paɛí>
para-pak'i
PREP:below/behind-wall
'below/behind the wall = corner'
OT:"el rincón de la casa" (4247.)

e. <para páamag>
para-pama-h
PREP:below/behind-arm-3sP
'below his arm = arm pit'
OT:"los senos, sobacos de los brazos" (4248.)

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)

a. pa-šaha-k
PREP-mouth-INSTR
'mouth' (G-PE)

b. <pokche pa ra tajla>
pokče para-taɬa
goitre PREP:below/behind-throat
'the goitre is at the neck'
OT:"el bocio está en el pescuezo" (Ch-C)

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 suggests that it is a Spanish loan, although the spatial concept of 'downwards' would equally bear sense.

(9. 35)

a. ʔa-mukaʔ para wayaʔ
3sS-work PREP:below milpa
'he works below the field' (G-JAP)

b. <para maku>
para maku
PREP:below house
'inside the house'
OT:"dentro de la casa" (Ch-F)

c. <urlú pa ra uto tero guarle>
Ø-ʔuɬu-ʔ para ʔutu tero-wa-ɬa
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)

d. <para gragua>
para krawa
PREP woods
'*downwards/through the woods'
OT:"por los montes" (Ch-Z)

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-2sfP
'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-ɬi
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	<neŁa>	-neɬa/neɬa-	"para"
indirect object	<tiý>	ti:ʔ-	"a, para"
cause/reason	<aŁi>	ʔaɬ-i	"por"
	<aŁparaquigua->	ʔaɬ-para kiwa-	"por"
comitative	<Łiná>	ɬi-naʔ	"con"

9.2.1 Benefactive and independent possessive

The preposition *neɬa* indicates a benefactive with the semantic notions of possessive/genitive and purposive. It is used as an alternative strategy for expressing possession. Maldonado de Matos categorises the preposition as a genitive particle and translates it with the Spanish preposition "de".

Table 9. 6: Comparison of benefactive preposition in Xinka

	FORM		ORIGINAL GLOSS
X_M	<neŁa>	neɬa	"partícula nominal; de" (4169.)
X_G	<néɬa>	neɬa	"su (posesivo)" (G-S)
			"de él, de élla" (G-S)
X_{Ch}	<nejla>	neɬa	"para" (Ch-C), (Ch-F)
	<nelag>	nela-h	"de, a, para" (Ch-Z)
X_Y	<nala>	nala	"de él" (Y-C)

The etymology of *neɬa* is not transparent. In the ALS, the preposition appears as an unmarked form or with possessor-marking affixes that reference the beneficiary of the action or state that is expressed by the predicate. The marked preposition is given with both, cross-referencing prefixes and suffixes. On nouns, possessor-marking prefixes usually indicate alienable possession, while suffixes mark inalienable possession (§ 6.2). Analysis of the comparative data shows that on the non-spatial preposition *neɬa*, the use of possessor-marking prefixes and suffixes is dependent on the functional context of the preposition. If the benefactive preposition precedes a noun phrase it indicates the concept of 'possession' and takes possessor-marking prefixes. In contrast, when the preposition precedes a verbal predicate, it takes possessor-marking suffixes and indicates the concept of 'purposiveness'. In the ALS the free form *neɬa* is attested in both functional contexts.

Table 9. 7 illustrates the pattern of prefix-marking on the benefactive preposition *neɬa* and the corresponding glosses by Maldonado de Matos.

Table 9. 7: Benefactive/possessive preposition with person-marking prefixes (ALS)

	FORM			ORIGINAL GLOSS
1s	<anneŁa>	ʔan-neɬa	[1sP-BEN]	"mío, de mí" (59.)
2s	<cá neŁa>	ka-neɬa	[2sP-BEN]	"tuyo, de ti" (77.)
3s	<muneŁa>	mu-neɬa	[3sP-BEN]	"suyo" (95.), "de aquel" (105.)
1p	<muc néŁa>	muk-neɬa	[1pP-BEN]	"de nosotros, nuestro" (68.)
2p	<caneŁa ay>	ka-neɬa ʔay	[2pP-BEN 2PL	"de vosotros" (88.)
3p	<mu neŁa Łic>	mu-neɬa ɬik	[3pP-BEN + PL]	"de aquellos" (112.)
	<neŁa Łic>	neɬa ɬik	[BEN + PL]	(111.)

The pattern is confirmed by the data from X_G and X_{Ch}, where the preposition is likewise attested with the possessor-marking prefixes of the respective variety (see § 6.1.1). Schumann identifies the unmarked preposition *neɬa* as the third person singular (1967:40). The semi-speakers from X_G, however, use the form that is attested in the ALS, i.e. *mu-neɬa* [3sP-BEN] (9. 37b).

(9. 37) a. ʔan-neɬa
1sP-BEN
'mine' (G-SH, G-RHG)

b. mu-neɬa
3sP-BEN
'his/her' (G-RHG)

c. <macnejla>
*mɨk-neɬa
2sP-BEN
'yours'
OT:"tuyo, tuya" (Ch-F)

d. <majlic nejla>, <majlicuejla>
maɬik-neɬa
2pP-BEN
'yours (pl.)'
OT:"vuestros" (Ch-F), (Ch-C)

The paradigm of suffix-marking for the preposition *neɬa* that is indicated in the ALS is illustrated in

Table 9. 8. Maldonado de Matos gives *neɬa* 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 *neɬa*. 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	<neŁa an, en, in, on, ʊen, un>	neɬa –n	"mi (genitivo)" (244.)
2s	<néŁà ca>	neɬa -ka	"tu (genitivo)" (253.)
3s	<neŁa ag, eg, ig, og, ʊeg, ug>	neɬa –h	"él (genitivo)" (262.)
1p	<néŁa ac, ec, ic, oc, ʊec, uc>	neɬa –k	"nuestro (genitivo)" (281.)
2p	<neŁa ca ay>	neɬa -ka ʔay	"vuestro (genitivo)" (292.)
3p	*<neŁa ag, eg, ig, og, ʊeg, ug Łic>	*neɬa -h ɬik	"*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 **neɬa-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. *neɬaʔ* (§ 9.2.1).

(9. 38)

a. neɬa-k'aʔ
BEN-2sP
'yours' (G-SH)

b. <neɬaɬík>
neɬa ɬik
BEN+3p PL
'theirs'
OT:"de ellos" (G-S)

c. <nelagqui>
nela-h-ki
BEN-?-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 *neɬa* preceding person-marking prefixes (e.g. <neŁa mu> "él, *genitive*" (261.); <néŁa 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 **neɬa + prefix* would appear as a prepositional phrase on its own.

The free preposition *neɬa* 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. <neŁa mácu>
neɬa **maku**
BEN house
'of the house …'
OT:"de la casa" (42.)

b. <néŁa an ucszáya>
neɬa **ʔan-ʔukšaya**
BEN 1sP-wife
'of my wife, my wife's …'
OT:"de mi mujer" (311.)

c. <nana jau-tuma axʊe neŁa turiŁi>
nana **haw-tuma** **ʔahɨ** **neɬa** **turi-ɬi**
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. <neŁa nag>
neɬa **nah**
BEN PN:3s
'his, her'
OT:"de aquel" (104.)

In X_G and X_{Ch}, the free benefactive preposition *neɬa* 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 neɬa nin
1sP-bed BEN PN:1s
'my bed is mine' (G-SH)

b. ʔayaɬa neɬa 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>
neɬa muk-*consuelo*
BEN 1pP-Sp:consolation
'for/to our consolation'
OT:"para nuestro consuelo" (Ch-Z)

e. <nijla na frac>
*neɬa na frak
BEN DET man
'of the man, the man's …'
OT:"de este hombre" (Ch-C)

When preceding a nominal complement, *neɬa* 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 muneŁa dios>
na ***gracia*** **mu-neɬa** ***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-neɬa wapaɬ man
DET PN:1s 1sP-BEN bench DEM
'this bench is mine' (G-SH)

b. ka-neɬa ša maku-n
2sP-BEN PREP house-?
'it is yours inside the house' (G-JAP)

The prefix-marked preposition *neɬa* 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-neɬa
hat black 1sP-BEN
'the black hat is mine' (G-SH)

b. nana hɨʔ ka-neɬa
FOC DEM 2sP-BEN
'this is yours' (G-RHG)

c. <naj na macu na macnejla>
nah na maku na *mɨk-neɬa
PN:3s DET house DEM 2sP-BEN
'this is the house that is yours'
OT:"esta casa es tuya" (Ch-C)

In the ALS as well as in X_{Ch}, the preposition *neɬa* 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 <aŁparaquigua> indicated by Maldonado de Matos (see § 9.2.3).

(9. 44) <an neŁa ɛiguán>
ʔan-neɬa **ki-wa-n**
1sP-BEN INTENS/REFL-?-1sP
'of myself'
OT:"de mí mismo" (144.)

(9. 45) <majkinejla kiauaki>, <majkinejla kiguaki>
mahki-neɬa ki-wa-ki
1pP-BEN INTENS/REFL-?-1pP
'of ourselves'
OT:"nuestro" (Ch-C), (Ch-F)

In interrogative clauses, the preposition *neɬa* 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 neŁa>
wena **neɬa**
INT:who BEN
'whose? / for whom?'
OT:"quien, el que (genitivo)" (188.)

b. <ni guéna maqúí muneŁa>
ni **wena** **ma** **ki** **mu-neɬa**
NEG INT COND INTENS 3sP-BEN
'of / for nobody'
OT:"ninguno (genitivo)" (230.)

(9. 47) a. <huanin nejlá na mácu ne>
wanin neɬa 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 neɬa
PN:1s BEN
'for me'
OT:"para mí" (Ch-JC)

b. <nac nejla>
nak neɬa
PN:2s BEN
'for you'
OT:"tengo, para ti" (Ch-C)

Preceding a verb phrase, the preposition *neɬa* 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 *neɬa* takes cross-referencing affixes. In the ALS, only prefixes are attested in this context.

(9. 49) a. <neŁa a acù>
neɬa ʔa-ʔaku ʔ
BEN 3sS-go
'for/so he/one goes'
OT:"para ir" (1717.)

b. <neŁa a oròmo>
neɬa ʔa-ʔoromo
BEN 3sA-pick up
'for/so he/one picks it up'
OT:"para recoger" (981.)

c. <neŁa capùla cacumbision...>
neɬa 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 *neɬa* 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 neɬa mu-ʔiwa ʔayaɬa
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 neɬa 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. tamaɕ'iʔ neɬa kuy puɬa-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 neɬa 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 ijxaca>
lan ɕ'ama neɬa 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, *neɬa* can take person-marking suffixes or it can occur unmarked with all inflectional morphology being referenced on the verbal predicate. In this function, *neɬa* 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 neɬa(-)n(-)šawaɕ'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 neɬa(-)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. neɬa(-)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 ɛica>
ti:ʔ-ka ki-ka
IO-2sP INTENS/REFL-2sP
'to you, to yourself'
OT:"tú mismo (dativo)" (160.)

d. <...mu nariŁa pè ... tiy turiŁi>
mu-nariɬa peʔ […] ti:ʔ turi-ɬi
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. <tiý ca> "tú, *dativo*" (254.); <tiý 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	<tiýn>	ti:ʔ-n	"a mí, para mí, Dat" (61.)
2s	<tiýca>	ti:ʔ-ka	"a ti, para ti" (79.)
3s	<tiýg>	ti:ʔ-h	"a, para aquel" (106.)
1p	<tiýɛ>	ti:ʔ-k'	"a, para nosotros" (70.)
2p	<tiýca ay>	ti:ʔ-ka ʔay	"a, para vosotros" (89.)
3p	<tiyg Łic>	ti:ʔ-h ɬik	"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 dieres 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 ulsíh imaváy tiʔíɬ>
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. <ɬandi ndi pulayán ti?k>
ɬan-di ndi pula=ya-n ti(:)?-k
NEG-INT INT make=PROG-1sS$_{DEP}$ 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>
?akw=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>
n-pata pa(?) ti(:?)-n
1sA-accomplish PFV IO-1sP
'I have accomplished me/myself
= I have recovered'
OT:"yo sané" (Y-C)

b. <neu kötu tin>
nen ki-ti ti(:?)-n
PN:1s scratch IO-1sP
'I scratch myself'
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>
čenko-k ti(:?) pu
twist-STAT? IO arm
'his arm is twisted = dislocated'
OT:"su brazo está torcido" (Ch-C)

b. <xu-umi ti na guapí>
*šu:nu ti(:?) na wapi?
swell IO DET foot
'the foot is swollen'
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>
?ay ?oho ti:?
Sp:EXIST cough IO
'he has a cough'
OT:"tiene catarro" (Ch-F)

b. <cayayá ti>
kayaya? ti(:?)
hot IO
'(it is) hot to/for him/it = it sparkles(?)'
OT:"relumbrar" (Ch-C)

c. <tuyac ti>
tuya-k ti(:ʔ)
scold-2s/IMP IO
'scold him'
OT:"regáñalos" (Ch-C)

d. <pu naj mau chiri ti>
pu nah man čiri(-ʔ) ti(:ʔ)
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:ʔ
break/tear-IO?
'it burst' (G-SH)

b. <jorotik>
horo-tik
guard/get-IO?
'to hold a vigil'
OT:"vigilar, velar" (Ch-F)

c. <vuirrutiy>
*~~w~~iri-ti:(ʔ)
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 *ne~~ɬ~~a*.

(9. 63) <neŁa tiyg>
ne~~ɬ~~a ti:ʔ-h
BEN IO-3sP
'for him'
OT:"a, para aquel" (107.)

The preposition *ti:ʔ-* 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 tiýg>
wena ti:ʔ-h
INT:who IO-3sP
'to whom?'
OT:"quien, el que (dativo)" (189.)

b. <ni guéna maqúí tiýg>
ni wena ma ki ti:ʔ-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)-ɬik
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 *neɬa* (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>
puɬa-(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) sɨʔma
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>
ȼ'ahma-ʔ ki-wa-n ti(:ʔ) rikayi-ɬi
sting-STAT INTENS/REFL-?-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 *ʔaɬ-* '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 *ʔaɬi* and as the complex form *ʔaɬparak'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 *ʔaɬi* consists of the spatial prepositional root *ʔaɬ-* 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 *ʔaɬ-* 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	<aŁi>	ʔaɬi	"por" (3606.)
X_G	-	ʔaɬi, ʔaɬe	"por"
X_{Ch}	<alig>	ʔalih	"por, pro, contra, sobre, a" (Ch-Z)
	<ajli>	ʔaɬi	"por" (Ch-C)
	<ayin>	ʔa-yin	"por" (Ch-C), (Ch-F)
X_Y	<ajli>	ʔaɬi	"por" (Y-C)

The preposition *ʔaɬi* 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. <aŁi náca>
ʔaɬi **naka**
PREP.CAUS PN:2s
'by/because of you'
OT:"por ti" (83.)

b. <aŁi na axʊé>
ʔaɬi **na** **ʔahɬ**
PREP.CAUS DET DEM
'by/because of this'
OT:"por éste" (121.)

c. <nana macu pulà pataguàg aŁi Pedro>
nana **maku** **pula** **pata-wa-h** **ʔaɬi** **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 ʔaɬi šuraya
Ø-cry-STAT PREP.CAUS girl
'he cried because of the girl' (G-SH)

b. ʔaɬi 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, *ʔaɬi* 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 szʊe aŁi>
šan=ta **šɨ** **ʔaɬi**
INT:what?=INT EXTEN PREP.CAUS
'because of what = why?'
OT:"¿y por qué? (interrogativo)" (4435.)

b. <guèna aŁi>
wena **ʔaɬi**
INT:who PREP.CAUS
'because of whom?'
OT:"quien, el que (ablativo)" (191.)

(9. 71) a. han=ta ʔaɬi 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 ʔaɬi 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 ʔaɬi *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 *ʔaɬi* 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 ʔaɬi nana hɨni-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 ʔaɬi hin
NEG PREP.CAUS NEG
'not because of this = why not'[151] (G-JAP), (G-RHG)

(9. 73) a. man ʔaɬi šin šan mura
DEM PREP.CAUS NEG INT corn cob
'because of this there were no corn cobs' (G-JAP)

b. hin ka-niʔma-ɬa man ʔaɬi 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 šuwi na ʔaɬi
go sweep DET PREP.CAUS
'go sweeping because of him' (G-JS)

d. <jarána ya ma ájli lan puri tá>
harana ya ma ʔaɬi 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 *ʔaɬi* 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. <aŁi aguiszù na turiŁi a erŁèque>
ʔaɬi **ʔa-wišu-ʔ** **na** **turi-ɬi** **ʔa-ʔerɬeke**
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. <aŁi ca yguitzí na misza [...] a szin ca pùla na jamaà>
ʔaɬi **ka-ʔiwiɕ'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 oir misa [...] no pecas" (2044.)

(9. 75) a. te:ro yɨpɨ nin ʔaɬi 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 nänuma>
ʔayi-n na numa
PREP.CAUS-1sP DET eat
'because I (already) ate'
OT:"ya comí" (Ch-F)

Maldonado de Matos gives the form <aŁparaquigua> 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 *ʔaɬi* it is translated into Spanish as "por"; both prepositional forms introduce the causee in passive constructions.

(9. 76) <aŁparaquiguá>
ʔaɬ-para **kiwa-ʔ**
PREP.CAUS-? INTENS/REFL-STAT
'by-? X-self = by/through X'
OT:"por" (3615.)

With the exception of the prepositional root *ʔaɬ-* 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 stop[152], 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 *ʔaɬi* 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 ʔaɬi ki
3sA-breath PREP.CAUS INTENS
'he breathes because of him-/her-/itself'
OT:"suspira por élla" (Ch-Z)

The free causal preposition *ʔaɬi* 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 *ʔaɬpara kiwa*.

(9. 78) a. <aŁparaquiguàn>
ʔaɬ-para kiwa-n
PREP.CAUS-? INTENS/REFL-1sP
'by/for myself = by me'
OT:"por mí" (64.)

b. <nucà pà pè patai tíyg 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'

ʔaɬ-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 ɬan pata-y ʔaɬ-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 *ʔaɬi*. A reflexive construction may function as a complement noun phrase (9. 79c).

(9. 79) a. <aŁparaquiguà an ucszáya>
ʔaɬ-para kiwa-ʔ ʔan-ʔukšaya
PREP.CAUS-? INTENS/REFL-? 1sP-wife
'because of my wife herself'
OT:"por mi mujer" (315.)

b. <aŁparaquiguà jútu>
ʔaɬ-para kiwa-ʔ hutu
PREP.CAUS-? INTENS/REFL-? tree
'because of the tree itself'
OT:"por el palo" (31.)

c. <aŁparaquiguà nen ɛiguán>
ʔaɬ-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 *ʔaɬi* the complex preposition functions as the causal conjunction 'because' (= "porque") when preceding a verbal predicate.

(9. 80) a. <aŁparaquiguà jarana ayacà>

ʔaɬ-para	**kiwa-ʔ**	**harana**	**ʔaya-kaʔ**
PREP.CAUS-?	INTENS/REFL-?	ill	be-2sS_{DEP}

'because you were ill'
OT:"porque estuvistes enfermo" (1958.)

b. <aŁparaquiguà aszin pa ayù jʊenʊei>

ʔaɬ-para	**kiwa-ʔ**	**ʔašin**	**pa(ʔ)**	**ʔayuʔ**	**hɬnɬ-y**
PREP.CAUS-?	INTENS/REFL-?	NEG	PFV	AUX	know-3sA

'because he would not have known'
OT:"porque no habrá sabido" (2022.)

c. <aŁparaquiguà ca yguitzí na misza>

ʔaɬ-para	**kiwa-ʔ**	**ka-ʔiwiɛ'i**	**na**	**miša**
PREP.CAUS-?	INTENS/REFL-?	2sA-hear	DET	Sp:mass

'because you hear the mass'
OT:"por oir misa" (2044.)

9.2.4 Comitative/instrumental

A comitative or instrumental marker introduces a second agent to the clause. The prepositional root *ɬi-* 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 *ɬina(ʔ)*, which combines the root *ɬi-* 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 *ɬi-* is used with independent pronouns of the first and second person singular. In the semi-speaker data from X_G the initial lateral-fricative *ɬ* 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 *ɬi* is likely related to the plural marker of human/person nouns *-ɬi* (§ 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	<Łina>	ɬi-na	"con" (4027.)
	<Linà>	ɬi-naʔ	(1955.)
X_G		hi-na	"con"
		ʔi-na	
	<hína>	hi-na	"con (conjunción)" (G-S)
X_{Ch}	<lig>	lih	"con" (Ch-Z)
		li	
	<lina>	li-na	
	<ninaʔ>	ni-naʔ	"contigo" (Ch-MQa)
X_Y		li	"con" (Y-C), (Y-L)
	<lina>	li-na	
	<ina>	ʔi-na	

The preposition *ɬina(ʔ)* 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 ɛaŁ paraqui upu ayacà Łinà nà ayàŁa man>

tuk'aɬ	**para ki**	**ʔupu**	**ʔaya-kaʔ**	**ɬi-naʔ**	**na**	**ʔayaɬa**	**man**
CONJ	Sp:for	stand	be-2sS$_{DEP}$	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 Łinà juicio ayacà>

niwa-n	**naʔɬ**	**ki**	**ša**	**ɬi-naʔ**	***juicio***	**ʔaya-kaʔ**
ask-1sA	IMPFV	INTENS	PREP:inside	PREP-DEM	Sp:judgement	be-2sS$_{DEP}$

'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	ʔayaɬa	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-ɬa
go=PROG-1sS$_{DEP}$	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-naʔ	rapun
go=PROG-1sS$_{DEP}$	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 *ɬi* combines with the demonstrative *na(ʔ)*. 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 *ɬi* 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 eyma 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 *ɬi-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 Łinà>
ka-puriki ɬi-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-ɬa 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 mycó ina>
ʔaɬa 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 *ɬina(ʔ)* and *ɬi-* is unclear. In most comparative contexts, the second agent is represented by a pronoun following the free preposition **ɬina*.

(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 *ɬi* and the form *ɬina*, can follow the question word.

(9. 89) a. <huanin li parvúki>

wanin	li(ʔ)	*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 *ɬina(ʔ)* in combination with the adverbial of extension *šɨkɨ* 'also', forming the conjunction 'as well, and'. The form is not attested in syntactic context or elsewhere in the corpus.

(9. 90) <Ɬiná szʊequi>

ɬi-naʔ	**šɨkɨ**
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 šanɕʔéhe>

naka	ʔan-moka	kaya-k	šan	šan-ɕ'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. Transitivised and intransitivised stems 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*, *-ɬa*). 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)-ɬik	-y ... (ki)-ɬik	-y ɬik

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	
- transitiviser/causative	-ya, -ɬa, -ka, -ha
TAM-suffix	-ɬa, -wa
cross-referencing (A_{PAST}, A_{DEP})	
TAM-suffix	
- stative-resultative	-ʔ
- subjunctive	-n
plural	ʔay, ɬik
[auxiliary]	[ɬan, ʔayu]
TAM-adverbials	maʔ
	paʔ, paʔɬ
	naʔɬ
	peʔ
intensifier	ki
plural	ɬik

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) a. <an nariŁa naturiŁi>
ʔan-nariɬa na turi-ɬi
1sA-teach DET child-PL
'I teach the children'
OT:"yo enseño a los muchachos" (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 oròmo>
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=ɬik
3pA-make INTENS=3PL
'they (themselves) make'
OT:"aquellos hacen" (398.)

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-ɬikɨ naka$_O$
1sA-find PN:2s
'I find you' (G-SH)

b. ka-sawaɕ'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 natiyaʔ$_E$
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 naɬki$_O$
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-ʔiɕ'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'iči 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 cà>
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. <ɛʊetʊecà ay>
k'ɨtɨ-ka ʔay
measure-2pA 2PL
'you (pl.) measured it'
OT:"vosotros medisteis, habéis medido" (1250.)

f. <puláí quiŁic>
pula-y ki=ɬik
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-kaʔ
make-2sA
'you made it'
OT:"tú hiciste, Uds. hicieron" (G-S)

b. kɨrɨ-n nin$_{A}$ tɨɬa$_{O}$
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-kaʔ 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>
naɬi$_{S/A}$ 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$_{A}$ ʔawaɬa 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 nàŁ>
ka-ʔiwiɕ'i ma naʔɬ
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 pìrìi 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 **maʔ**
catch-1sA COND
'I should have caught'
OT:"yo haya cogido" (1122.)

b. <mere cà ayù pè>
mere-kaʔ **ʔayuʔ** **peʔ**
break-2sA AUX FUT
'you will have broken'
OT:"tú habrás rompido" (605.)

c. <uiszicà paŁ nàŁ qui>
ʔuyši-kaʔ **paɬ** **naʔɬ** **ki**
hear-2sA PFV IMPFV INTENS/OBJ
'if you had heard it(self)'
OT:"hubieras oído" (2018.)

While the second person plural clitic *ʔay* always seems to precede the TAM-adverbials, the third person plural clitic *ɬik* can occur preceding or following the TAM-adverbials and auxiliaries.

(10. 11) a. <pulaí naŁ qui Łic>
pula-y **na(ʔ)ɬ** **ki=ɬik**
make-3pA IMPFV INTENS=3PL
'they would have made it'
OT:"aquellos hubieran hecho" (462.)

b. <sàmui Łic pà ayù>
samu-y **ɬik** **paʔ** **ʔayu**
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 **peʔ* is only attested with nonpast/imperfective verb forms (10. 13a), the perfective/relational adverbial **paʔ* 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 paʔaʔ
DET PN:1s eat-1sA PFV
'I have already eaten' (G-JAP)

b. <ɬiniɬka paʔáɬ>
ɬiniɬ-ka paʔaɬ
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>
ʔən-ʔišaka pəʔ
1sA-drink FUT
'I will drink'
OT:"beberá" (Ch-F)

b. <mug pula bal mas de jiria allapá>
muh-pula bal *mas de* hiria ʔayapa
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 paʔaʔ $waruʔ_O$
make-1sA PN:1s PFV net
'I already made the net' (G-JAP)

b. ɬɨkɨ-kaʔ weyša$_O$ paʔaʔ
find-2sA iguana PFV
'you already found an iguana' (G-SH)

c. <na tumáɬi horoɬík tɨmáɬi šan hawíɬi paʔáɬ>
[na tuma-ɬi]$_A$ horo =ɬik tɨma-ɬi$_O$ šan hawi-ɬi paʔaɬ
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'; *hɨ́nɨ* '*to learn about sth.' > *hɨ́nɨ-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. <jʊenʊei>
hɨnɨ-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 ¢'araraʔ
get-1sA cold
'I got cold = I have/am/feel cold'
OT:"tengo frío" (Y-C)

In X_{Ch} the verb *hɨ́nɨ* is attested with the meaning 'to learn" (10. 17b). X_Y indicates a distinction between the verbs *hɨ́nɨ* "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. <hɨnɨka>
hɨnɨ-ka
learn-2sA
'you learned = you know'
OT:"ustedes saben, tú sabes" (G-S)

b. <jünún>
hɨnɨ:-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-kaʔ
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>

šaɬ	**ɬan**	**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>

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)

b. <lugnuy nucay 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 taɬma
go PN:1s PROG+3sS$_{DEP}$ 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 aŁa uɛa can confesar>
ka-taʔ **peʔ** **ʔaɬa** **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 *ʔin*, which follows the verb (10. 24).

(10. 24) <taí na maestro nari Ła in na turi Łi>
Ø-ta:-yi-ʔ **na** ***maestro*** **nariɬa=ʔin** **na** **turi-ɬi**
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 <ucaìn> (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 *ʔin*.

(10. 25) <nana doctrína nariŁa pè patai ucaìn maestro ...>
nana ***doctrina*** **nariɬa** **peʔ** **pata-y** **ʔuka=ʔin** ***maestro*** **ti:ʔ** **turi-ɬi**
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. <aŁi ca yguitzí na misza [...]a szin ca pùla na jamaà>

ʔaɬi	**ka-ʔiwiɋ'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 oir misa [...] no pecas" (2044.)

b. <aŁparaquiguà á szin pa ayù jʊenʊei na doctrina>

ʔaɬ-para	**kiwa-ʔ**	**ʔašin**	**pa(ʔ)**	**ʔayuʔ**	**hɨnɨ-y**	**na**	***doctrina***
PREP.CAUS-?	INTENS/REFL-?	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 *ʔʊka* 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. <asʊec naŁ pùla uɛan na an oracion>

ʔasɨk	**na(ʔ)ɬ**	**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 nàŁ u ɛa can naca na misza>

ʔiwiɋ'i	**naʔɬ**	**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-ɬa
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-2sA$_{DEP}$
'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-3sA$_{DEP}$	Sp:submit	INTENS/REFL+3p

'… where they submitted themselves'
OT:"se entregaron" (Ch-Z)

b. <n'diajli huixu huacá>

ndi	ʔaɬi	wišu-wa-kaʔ
INT:what	PREP.CAUS	beat-ANT/PASS-2sS$_{DEP}$

'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-waʔ
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 ʔ* (§ 11.1.2.2).

(10. 35) <asʊec pulaguà nà sermon>

ʔasɬk	**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 szìn 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	*mik-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 *?in* (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	**?in**	**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 tumin?>

naka	**?in**	**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.)

(10. 39) a.

hanta	wena	tupa-wa-n	na-hɨ?
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 szàŁ na jamàca>

pata-Ø	**šama**	**šaɬ**	**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-tamaɕ'iʔ
take-IMP.VT	PN:2s	2sP-lasso

'take your lasso!' (G-JAP)

b. <tupanan>

tupa-Ø	na-n
leave-IMP.VT	LOC-?

'leave it there!'
OT:"déjalo ahí" (Y-C)

c. <nen lájta nay akü>

nen$_O$	lahta-Ø	nay	ʔakɨ
PN:1s	push-IMP.VT	PN:2s	ADV:little

'push me a little'
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 Ɬʊèɛʊe na perdon>
ʔašin **ka-ɬɨk'ɨ** **na** ***perdón***
NEG 2sA-find DET Sp:forgiveness
'… you do not find forgiveness'
OT:"... no consiguiréis 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 naʔ
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-kaʔ naka maɬik
NEG EXO take-2sA PN:2s firewood
'you did not bring firewood' (G-JAP)

d. <jlhan mujnicua tajá>
ɬan muh-nikwa tahaʔ
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 hɨni-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"), *kɨšɨma* '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-ɬe 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:ʔ-*: 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 **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 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 *ʔuka* 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. tataʔ ʔi ʔutaʔ 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	ʔaɬiʔ	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 *-ʔin*. 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

neɬa	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)-ɬik	Ø- ... (ki)-ɬik	-i / -y ɬik	(-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	-ɬa, -wa
dependent cross-referencing suffixes (S_{DEP})	
TAM-suffix	
- stative-resultative	-ʔ
plural	ʔay, ɬik
[auxiliary]	[ɬan, ʔayu]
TAM-adverbials	ma
	paʔ, paʔɬ
	naʔɬ
	peʔ
[auxiliary]	ʔayu
intensifier	ki
plural	ɬik

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 *-ɬa*.

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-ɬa* [go-?] 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 V_2 upon inflection (10. 52a).

(10. 52)

a. <an guaszata>
ʔan-wašata
1sS-enter
'I enter'
OT:"yo entro" (1971.)

b. <cà acù>
ka-ʔaku ʔ
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-ta ʔ
1pS-come
'we come'
OT:"nosotros venimos" (1401.)

e. <cà tá ay>
ka-ta ʔ **ʔay**
2s/pS-come 2PL
'you (pl.) come'
OT:"vosotros venís" (1402.)

f. <a acù qui Łic>
ʔa-ʔaku ʔ **ki=ɬik**
3s/pS-go INTENS=3PL
'they go'
OT:"aquellos van" (1647.)

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)

a. <anwiríki>
ʔan-wiriki
1sS-speak
'I speak / I am speaking'
OT:"yo estoy hablando" (G-S)

b. na nin ʔan-ti:ki ša ʔo:tek
DET PN:1s 1sS-sleep PREP bed
'I sleep in the bed' (G-SH)

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)

d. <a kagui>
ʔa-k'awi
3sS-cry
'he/she cries'
OT:"llora" (Ch-Z)

e. <ajla muj tiki nec>
ʔaɬa muh-ti:ki nek
tomorrow 1pS-sleep PN:1
'tomorrow we sleep'
OT:"mañana dormiramos" (Y-C)

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 (*Ø-*) 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-ʔaku ʔ	ʔa-ʔaku ʔ
		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
	Prefix-VI-y(i)-ʔ	ʔan-ta:-y(i)-ʔ	Ø-ta:-y(i)-ʔ
	Prefix-VI-ɬa	ʔan-ʔaku-ɬa	ʔa-ʔaku-ɬa
		ʔan-wa-ɬa	Ø-wa-ɬa

INTRANSITIVE VERBS MARKED WITH -ʔ: Most intransitive roots/stems take the stative past-suffix *-ʔ*, which leads to the deletion of V_2 three-syllabic roots and stems (10. 54d).

(10. 54) a. <an màrà>
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. <màrà>
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 màrà ay>
ka-ma:ra-ʔ **ʔay**
2s/pS-rest-STAT 2PL
'you (pl.) rested'
OT:"vosotros descansasteis" (1491.)

f. <guacà qui Łic>
Ø-waka-ʔ **ki=ɬik**
3pS-enter-STAT INTENS=3PL
'they (themselves) entered'
OT:"aquellos se fueron, han ido" (1748.)

The one-syllabic motion verb *taʔ* 'come' lengtens 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 ý>
ʔan-ta:-yi-ʔ
1sS-come-LIG-STAT
'I came'
OT:"yo vine, he venido" (1410.)

b. <tá ý qui Łic>
Ø-ta:-yi-ʔ **ki=ɬik**
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) <màra qui Łic>
Ø-ma:ra **ki=ɬik**
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-ʔuɬu-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 *-ɬa(ʔ)*: Maldonado de Matos gives the past/perfective form of the motion verbs *ʔaku* 'go' and *wa* 'go away' with the active past marker *-ɬa* (§ 12.2.2). When inflected with *-ɬa*, 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 *-ɬa*, 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 Ła>
ʔan-ʔaku:-ɬa
1sS-go-PAST.ACT
'I went'
OT:"yo fui, he ido" (1654.)

b. <a acù Ła>
ʔa-aku:-ɬa
3sS-go-PAST.ACT
'he went'
OT:"aquel fue, ha ido" (1656.)

(10. 59)

a. <anguaŁa>
ʔan-wa-ɬa
1sS-go away-PAST.ACT
'I went away'
OT:"yo me fui, me he ido" (1739.)

b. <guaŁa>
Ø-wa-ɬa
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 *-ɬaʔ* 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 *-ɬa* 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-ɬaʔ
DET PN:1s 1sS-sleep-PAST.ACT
'I slept' (G-SH)

b. hin Ø-ti:ki-ɬaʔ sɨʔma
NEG 3sS-sleep-PAST.ACT night
'he did not sleep (last) night' (G-SH)

(10. 61)

a. <man saprikilá>
man Ø-sapriki-laʔ
DEM/PN:3s 3sS-degrain-PAST.ACT
'he degrained'
OT:"desgranó la mazorca" (Y-C)

b. <nec muc saprikilá>
nek muk-sapriki-laʔ
PN:1p 1pS-degrain-PAST.ACT
'we degrained'
OT:"desgranemos la mazorca" (Y-C)

In the comparative data we find *-ɬa* 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 *ʔuɬa-* (§ 10.1.3.5, § 12.2.2).

(10. 62) a. hura? Ø-ʔaku:-ɬa ša sawaɕ'a-ʔ
man 3sS-go-PAST.ACT PREP sow-STAT
'the man went to sow (his milpa)' (G-JAP)

b. kiɾi-n nin tiɬa ʔi Ø-ʔaku:-ɬa ʔayaɬa 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 *-ɬa* are also attested without cross-referencing affixes; S is represented by personal pronouns.

(10. 63) a. ti:ki-ɬa naka
sleep-PAST.ACT PN:2s
'you slept' (G-SH)

b. na nin wirki-ɬa 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 guaŁa nàŁ>
muk-wa-ɬa **naʔɬ**
1pS-go-PAST.ACT IMPFV
'we went away'
OT:"nosotros nos íbamos" (1733.)

b. <cà acù mà nàŁ ay>
ka-ʔaku? **ma** **naʔɬ** **ʔay**
2s/pS-go COND IMPFV 2PL
'you (pl.) would have gone'
OT:"vosotros fuerais, iríais, fueséis" (1692.)

c. <a acù pè>
ʔa-ʔaku? **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 acùŁa paŁ nàŁ>
ka=pa **ka-ʔaku:-ɬa** **paɬ** **naʔɬ**
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 **naʔɬ**
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 nàŁ>
ʔan-waka-ʔ **naʔɬ**
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 *paʔaɬ* 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-haȼ'a-ki paʔ
1sS-ʔ-INCH PFV
'I already rest = I am resting'
OT:"está descansando" (Y-C)

(10. 69) a. <anderó paʔáɬ>
ʔan-tero-ʔ paʔaɬ
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 *ɬik* can precede or follow TAM-adverbials, while the complex form *ki=ɬik* only occurs in final position.

(10. 71) a. <guacaŁic mà nàŁ>
Ø-waka **ɬik** **maʔ** **naʔɬ**
3s/p-go away 3PL COND IMPFV
'they would have gone away'
OT:"aquellos se fueran, irian, y fuesen" (1767.)

b. <guaŁa pà pè Łic>
Ø-wa-ɬa **paʔ** **peʔ** **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 Łic>
Ø-ta:-yi-ʔ **maʔ** **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 *-ʔ*. Maldonado de Matos translates this subordinate verb form as an infinitive; i.e. '(by) beating'.

(10. 72) <aŁi aguiszù na turiŁi a erŁèque>
ʔaɬi **ʔa-wišu-ʔ** **na** **turi-ɬi** **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 *-ʔ* 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-akuʔ
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 *-ʔ* are attested on transitive verb roots. The impersonal predicates are attested in main clauses and are reflected in the semantic context.

(10. 74) a. ʔa-piri-ʔ hina naka ʔakuki hiʔ
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 ʔa-pata-ʔ ʔakuki
NEG 3sS-*accomplish-STAT walk
'one does not accomplish to walk = one cannot walk' (G-RHG)

c. <na šuunik apuɬaʔ hinaʔ wati>
na šu:nik ʔa-puɬa-ʔ hinaʔ 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 *ʔa-ʔma* [3sS-speak] 'he speaks' expresses that someone generally speak (i.e. he is capable of speaking), while the transitive predicate *mu-ʔma* [3sA-speak] 'he speaks/says it' would express that someone says something specific.

(10. 75) a. naʔu-n ... hin ʔa-ʔima
son-1sP NEG 3sS-speak
'my son does not speak (in general)' (G-SH)

b. man=ta ʔa-tero-ʔ čiɨiki ʔ
DEM=INT 3sS-die-STAT small
'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 *ʔuka* that also takes the suffix *-y* (cf. § 10.1.1.7).

(10. 76) a. <ha-ucai labrar>
ʔa-ʔuka-y *labrar*
3sS-do-? Sp:labrar
'one/he works'
OT:"se labra" (Ch-Z)

b. <inaj man aukí>
ʔi-nah-man ʔa-ʔuki-ʔ
?-PN:3s-DEM 3sS-do-?
'he/one does'
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 *ʔaya* '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 *ʔaya* '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 gracía ayaàc asʊec muc terò>
šaɬ ka-n wi šama *gracía* 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. <guenaqui nà pè agi aŁa temprano pè acùg>
wena=ki naʔ peʔ ʔahi ʔaɬa *temprano* peʔ ʔaku-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-1sS$_{DEP}$ DIR?
'that I would enter'
OT:"para que entre" (G-S)

b. <wašatay sɨma>
wašata-y sɨma
enter-3sS$_{DEP}$ night
'(that) it became evening'
OT:"ya entró la noche" (Ch-F)

c. ʔaku-n paʔaʔ
go-1sS$_{DEP}$ PFV
'(that) I am already going' (G-SH)

d. hin ʔan-niwa ʔakuki hiʔ hina nin
NEG 1sA-want walk be+3sS$_{DEP}$ 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 ʔayaɬa
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. <asʊec uŁù na macu tiusz>

ʔasiɬ	**Ø-ʔuɬu-ʔ**	**maku**	**tyuš**	
CONJ	3sS-fall-STAT	house	Sp:god	

'when the church fell (= collapsed)'
OT:"... cuando cayó la iglesia" (2018.)

b. <asʊec muc terò>

ʔasiɬ	**muk-tero**
CONJ	1pS-die

'when we die'
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 ayaàn>

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 ɛaŁ paraqui upu ayacà Łinà nà ayàŁa>

tuk'aɬ	**para ki**	**ʔupu**	**ʔaya-kaʔ**	**ɬinaʔ**	**na**	**ʔayaɬa**	**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 *ʔin* (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 aszʊe?>

kaʔ	**peʔ**	**ta-waʔ**	**na**	**ʔašɬ**
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>

hanta	mara-ka	k-aka
INT	get angry-2sS_{DEP}	INTENS/REFL-2sP

'why are you angry at yourself?'
OT:"¿por qué enojas a ti?" (G-S)

b. <capi ixpacá>

ka	pi	ʔiš(a)pa-kaʔ
INT:where?	CENT	emerge-2sS_{DEP}

'from where did you leave?'
OT:"¿de dónde vienes?" (Ch-C)

c. <indí patacá na'c>
ʔinti pata-kaʔ nak
INT *accomplish-2sA PN:2s
'what have you accomplished (to get)? = what do you have?'
OT:"¿y qué tenés vos?" (Ch-JC)

In X_Y the third person singular on intransitive predicates in interrogative clauses is also cross-referenced with the nominal suffix *-h*.

(10. 86) <naca curug>
na ka kuru-h
LOC INT run-3sP
'whereto did he run?'
OT:"¿a dónde huyó?" (Y-C)

10.1.2.5 Intransitive predicates in imperative clauses

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).

(10. 87) 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.)

The comparative data confirm the morphology of intransitive imperative predicates.

(10. 88) a. ɬara-ya hutu man
ascend/climb-IMP.VI tree DEM
'climb that tree!' (G-RHG)

b. <toney na'c>
tone-y nak
be silent-IMP.VI PN:2s
'be silent!'
OT:"cállate" (Ch-JC)

c. <isapaiya>
ʔisapa-ya
leave/emerge-IMP.VI
'emerge!'
OT:"sal tú!" (Y-C)

10.1.2.6 Intransitive predicates in negative clause

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.

(10. 89) <aszin pà pè ca acù misza aɬa>
ʔašin paʔ peʔ ka-ʔakuʔ miša ʔaɬa
NEG PFV CENT 2sS-go Sp:mass tomorrow
'(if) you did not go to mass tomorrow'
OT:"si no fueréis a oir misa mañana" (2040.)

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 quejín 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 Transitively 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
LOC 3sA-sleep PREP bed
'there he sleeps in the bed' (G-SH)

b. neɬa mu-ʔišapa paseyo
BEN 3sA-emerge/leave Sp:walk
'so that he leaves for a walk' (G-SH)

c. hin mu-ʔulu na ku mutiʔ
NEG 3sA-fall DET MOD hair
'the (little) hair does not fall' (G-JS)

d. <mutzá gu ar>
mu-ɕ'awu *ʔaɬ
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 chased[157] 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 *wirki-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 ʔayaɬa pari$_A$
3sA-speak PREP:with moon sun
'the sun speaks with the moon' (G-SH)

b. na nin wirki-n hina naʔ
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)ɬan* 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" "poner/hechar"	'have, do' 'put, throw'	progressive VT
	<ayù>	ʔayu:	"tener/haber"	'have, get'	subjunctive
	<una>	ʔuna	"tener/haber"	'have, get'	verb derivation
	<Łan>	ɬan	*"querer"	'want'	optative
	<paátaa>	pa:-ta:	"poder"	'can' = *accomplish	abilitative?
	<pata>		"ser"	'be' = '*accomplish	"passive" (interpretation)
AUX + V	<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) a. <tà ayacà>
taʔ **ʔaya-kaʔ**
come AUX/PROG.VI-2sS_{DEP}
'you are coming'
OT:"estás viniendo" (1969.)

b. <yguitzi nàŁ u ɛa can naca ...>
ʔiwiɋ'i **naʔɬ** **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 *ɬik* 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
VERB$_1$ (lexical verb)	
TAM-adverbials	peʔ, paʔ(ɬ), naʔɬ
VERB$_2$ (auxiliary verb)	ʔaya-, ʔuka-, pata- ʔayu, ʔuna, ɬan
TAM-suffix	-wa
dependent-marking pronominal suffix	
plural clitics	ɬik, 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	
VERB$_1$ (auxiliary verb)	šata, pata, **ku-ya, **ko
TAM-suffix	-ɬa / -wa
TAM-adverbials	peʔ, paʔ(ɬ), naɬ etc.
VERB$_2$ (lexical verb)	
dependent-marking pronominal suffix	
plural	ɬik, 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**
3sS-can/able-STAT pick up
'one is able to pick up = to be picked up'
OT:"a ser recogido" (1065.)

b. <ca szàta pùla>
ka-šata **pula**
2sS-return make
'you return to make it'
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-1sS$_{DEP}$]	"yo estoy, estuve" (1888.)
<ayacà>	ʔaya-kaʔ	[be-2sS$_{DEP}$]	"tú estás, estuvistes" (1889.)
<agi>	ʔahi [=*ʔaya-y]	[be+3sS$_{DEP}$]	"aquel está, estuvo" (1890.)
<ayaac>	ʔaya-k	[be-1pS$_{DEP}$]	"nosotros estamos, estuvimos" (1891.)
<ayacà ay>	ʔaya-kaʔ ʔay	[be-2pS$_{DEP}$ + 2PL]	"vosotros estabais, estuvisteis" (1892.)
<agi qui Łic>	ʔahi ki ɬik	[be-3pS$_{DEP}$ + 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$_{Jum}$ 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 *ʔa-* and cliticises to the preceding main verb.

Table 10. 10: Comparative chart of auxiliary *ʔaya* with cross-referencing suffixes

	X_M	X_G	X_{Ch}	X_{Jum}	X_Y
1s	ʔaya-n	ya-n ʔya-n*	ya-n ya-ʔ*	ʔaya-ẃa-n*	ya-n
2s	ʔaya-ka	ya-ka ya-kaʔ*	ya-ka ya-kaʔ*	ʔaya-ẃ-kaʔ*	-
2sf			ya-y*	ʔaya-ẃa-y*	-
3s	ʔah-i	hiʔ, heʔ	hiʔ ~ hi^{g} ʔay ʔay-iʔ ~ ʔayʔ* ya	ʔay-iʔ*	<hi> ʔay ya *ʔanya
1p	ʔaya-k	ʔya-k*	ya-ɬkiʔ*	ʔaya-ẃa-lkiʔ*	
2p	ʔaya-ka ʔay	ya-kaʔ ʔay*	ya-ɬka*	ʔaya-ẃa-lkaʔ*	
2pf				ʔaya-ẃa-liy*	
3p	ʔah-i ki ɬik	hiʔ nahɬik* ɬik*	ʔayʔ-ɬik*	ʔayili*	

*Example from Campbell & Kaufman: field data

In the third person the root consonant changes from *y* to *h*, i.e. *ʔaya-n* [be-1sS_{DEP}] 'I am' ("estoy); *ʔahi* [be+3sS_{DEP}] 'he/she is' ("está"). Comparative data from X_{Ch}, X_{Jum} and X_Y suggest that the original form was * *ʔaya-y* > * *ʔay-i* [be-3sS_{DEP}], which subsequently changed into *ʔah-i* (cf. sound change *y* > *h*, § 4.3.1.4.2). In X_G *ʔahi* > *hiʔ*, although in X_{Ch} the form *ʔay* prevails. Both forms are attested in X_Y, although *hiʔ* may occur in a distinct functional context (see below). In X_{Ch} the variant form [ʔey] is attested. In X_G *kiʔ* can occur instead of *hiʔ*.

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 *ʔaya* 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 *ʔay* as a marker for obligatory or necessary action and translates it as "por necesidad".

The variation of all third person markers *hiʔ*, *ʔay* 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-ʔ
ill be-STAT
'you are ill' (G-RHG)

b. harana heʔ
ill be+3sS_{DEP}
'he/she is ill' (G-SH)

c. harana ʔay
ill be+3sS_{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. <nàŁ aýaan>
naʔɬ **ʔaya:-n**
IMPFV be-1sS$_{DEP}$
'I was'
OT:"yo estaba" (1894.)

b. <pè agí>
peʔ **ʔahiʔ**
CENT/FUT be+3sS$_{DEP}$
'he will be'
OT:"aquel estará" (1908.)

c. <mà ayacà>
maʔ **ʔaya-kaʔ**
COND be-2sS$_{DEP}$
'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-2sS$_{DEP}$
'you are coming'
OT:"estás viniendo" (1969.)

b. <yszàpa agí>
ʔišapa **ʔahiʔ**
leave be/PROG+3sS$_{DEP}$
'he is leaving'
OT:"está aquel saliendo" (1970.)

(10. 101) a. ti:ki=ya-n
sleep=PROG-1sS$_{DEP}$
'I am sleeping' (G-RHG)

b. šawu hiʔ
sit PROG+3sS$_{DEP}$
'he is sitting' (G-SH)

c. <tiki ay>
ti:ki ʔay
sleep PROG+3sS$_{DEP}$
'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. <tilijí nay>
tili hiʔ nay$_O$
see *be+3sS$_{DEP}$ 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(ʔ)$_A$
bite *be+3sS$_{DEP}$ 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-ɬkin	[be-1pS/A$_{DEP}$]
2p		ya-ɬkan	[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>
naɬik 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 ʔ **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 PERIPHRASIS: 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 guarrata>
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-ʔ* is attested unmarked preceding a cross-referenced verb.

(10. 108) <cuyá ghuajtán rhamacú>

ku=ya-ʔ	wahta-n	ra	maku-ʔ	
go=PROG-STAT	enter-1sS$_{DEP}$	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	ʔaku-n	nin	ya
AUX.FUT	go-1sS$_{DEP}$	PN:1s	Sp:already
'I am already going' (G-SH)			

b.

kuy	pula-n	maɬik
AUX.FUT	make-1sA$_{DEP}$	firewood
'I am going to make (= chop) firewood' (G-RHG)		

c.

hanta	kuy	šuka-kan	naka	
INT	AUX.FUT	eat-2sA$_{DEP}$	PN:2s	
'what will you eat?' (G-JAP)				

(10. 110) a. <acuay upulan mayaya tic>

ʔakway	ʔu	pula-n	mayaya	ti:-k
FUT	?	make-1sA	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-2sS$_{DEP}$
'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	ʔan-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	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 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-1sS$_{DEP}$
'I am ill'	
OT:"estuvistes enfermo" (1954.)	

b. <szàma gracía ayaàc>

šama	***gracia***	**ʔaya:-k**
PREP	Sp:grace	COP:be-1pS$_{DEP}$
'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 aña>

qué	ʔuy	*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 *ʔɪka* 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. <aɛʊeca ayac anic>
ʔak'i̶-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 hiši ti:ʔ
be-VN? stone IO
'being stone to him = like stone to him'
OT:"parece piedra" (Ch-C)

10.1.3.2 Auxiliary ʔɪka

The transitive verb *ʔɪka* (or *ʔɪk'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 *ʔɪka* in the ALS

	FORM		GLOSS
auxiliary	<ucáa>	ʔuka-ʔ	"tener, haber; defectivo" (3417.)
auxiliary	<ɯɛa>	ʔuka	"estar executando, haciendo aquello" (1985.)
full verb	<ɯɛa>	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 suniʔ
put/throw-IMP.VT PN:3s (O) PREP pot
'throw it into the pot!' (G-JAP)

b. <mug huca ical simple piriqui>
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 čiwo
LOC:there 3sA-do/make Sp:shed Sp:goat
'there he makes the goat shed' (G-SH)

b. <ucan pa>
ʔuka-n paʔ
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 *-ɬa* and *-wa* and hosts TAM-adverbials.

Table 10. 13: Combinations of the auxiliary *ʔuka* with TAM-adverbials (ALS)

FORM		ORIGINAL GLOSS
<ucà mà>	ʔuka maʔ	"hubiese habido" (1819.)
<ucà nàŁ>	ʔuka naʔɬ	"había" (1806.)
<ucà pè>	ʔuka peʔ	"habrá" (1807.)
<ucà pàpè>	ʔukaʔ paʔ peʔ	"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 uɛa naŁqui absolver naca>
ʔan-ʔuka **na(ʔ)ɬ** **ki** ***absolver*** **naka**
1sA-do IMPFV INTENS Sp:absolve PN:2s
'I myself would absolve you'
OT:"te absolviera yo" (2037.)

b. <mu uɛa 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
$1sA/A_{DEP}$	<uɛan>	ʔuk'a-n	ʔuka-n	ʔuka-n	ʔuka-n
			ka-n*		
$2sA/A_{DEP}$	<uɛaca>	ʔuk'a-ka	ʔuka-ka	ʔuka-ka	
$2sA_{DEP}$	<uɛacan>	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 *ƛuka* takes transitive dependent-marking suffixes (A_{DEP}). In X_G the third person form *ƛukay* varies with *ƛukey*; 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 *ƛukay* ~ *ƛukey* is unclear.

The nominal form *ƛukah* occurs as a progressive auxiliary in subordinate contexts and as an existential referring to past events, i.e. *ƛuka-h* [have-3sP] 'there was' ("había"), which contrasts with the *ƛuka-y* [have-3sA] 'there is' ("hay").

PROGRESSIVE AUXILIARY: In auxiliary function, *ƛuka* 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. <asʊec naŁ pùla uɛan na an oracion>

ʔasɬk	**na(ʔ)ɬ**	**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 nàŁ u ɛa can naca na misza>

ʔiwiɛ'i	**naʔɬ**	**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 *ƛuka* 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	tiʔla	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.

(10. 127) a. piri=ka-ʔ nin ʔikah *ave*
see=PROG-STAT? PN:1s INDEF Sp:bird
'I am seeing a bird' (G-JS)

b. nana nin ʔima=ka-ʔ naka
FOC PN:1s tell=PROG-STAT? PN:2s
'I was telling you' (G-RHG)

(10. 128) a. ti:ki ʔuka-h nin
sleep PROG-3s PN:1s (S)
'I am sleeping' (G-JS)

b. ʔušaki ʔuka-h naʔ
smoke PROG-3s DEM/3s
'he does smoke = he smokes' (G-JS)

LIGHT VERB: The verb *ʔʊka* 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, *ʔʊka* exhibits transitive inflectional morphology.

(10. 129) a. <uɛaca mà restituir szan gui szac szacà... >
ʔuka-ka **ma** ***restituir*** **šan** **wi** **šakša-ka**
do-2sA COND Sp:restitute INT DIR? steal-2sA
'you would have restituted what you have stolen'
OT:'hayáis restituído lo que hurtasteis" (2035.)

b. <ca tà pè aŁa uɛa can confesar>
ka-taʔ **peʔ** **ʔaɬa** **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 *ʔʊka* 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 ʔuruɬ
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 ¢'imi-ʔ
do-3sA extinguish-STAT
'he extinguished (it)' (G-SH)

EXISTENTIAL: With predicate nominals *ʔʊka* functions as an existential verb indicating existence and possession (i.e. "hay" = 'there is') (see § 10.2.2.3). There are no examples of *ʔʊka* 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 *ʔʊkah* is used in the past, while *ʔʊkay* 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 *gobierno* hɨʔ
PREP have=? $be+3sS_{DEP}$ 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 *ʔaɬi* 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 doctrína nariɬa pè patai ucaìn maestro ...>
nana ***doctrina*** **nariɬa** **peʔ** **pata-y** **ʔuka=ʔin** ***maestro***
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>
ʔuka=yin naka *asegurar* ʔay
do=be+3sS$_{DEP}$ PN:2p Sp:assure 2PL
'[that would be] assuring you (pl.)'
OT:"asegurando os" (Ch-Z)

b. <muca callin>
muka ka=yin
work PROG.VT=be+3sS$_{DEP}$
'working, serving'
OT:"sirviendo" (Ch-Z)

10.1.3.3 Auxiliary ʔayuʔ

The verbal root *ʔayuʔ* '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, *ʔayuʔ* is referred to as an optative marker (*partícula optativa*).

Table 10. 16: Attested cases of *ʔayu* in the ALS

	FORM		ORIGINAL GLOSS
auxiliary	<ayù>	ʔayuʔ	"tener, haber; defectivo" (1814., 2087.)
*copula	<ayù>	ʔayuʔ	"hay, tiene" (1814.)
TAM-adverbial	<ayú>	ʔayuʔ	"partícula optativa" (3671.)

Maldonado de Matos combines *ʔayuʔ* with the imperfective adverbial *naʔɬ* (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, *ʔayuʔ* 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 *ʔayuʔ* in the ALS

FORM		Latin category	ORIGINAL GLOSS
<ayù nàŁ>	ʔayuʔ naɬ	imperfecto	"había, tenía" (1816.)
<ayù pè>	ʔayuʔ peʔ	futuro imperfecto	"habrá, tendrà" (1817.)
<ayupè>			"partícula verbal" (3673.)
<páayú>	paʔ ʔayu	futuro perfecto	"partícula verbal" (4214.)
<ayù pà pè>	ʔayuʔ paʔ peʔ	futuro, subjuntivo	"hubiere, hubiere habido" (1818.)
<ayù mà>	ʔayuʔ maʔ	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 *-ɬa*.

(10. 138) a. <pulài ayù pè>

pula-y	**ʔayuʔ**	**peʔ**
make-3sA	AUX	FUT

'he will have made (it)'
OT:"aquel habrá hecho" (425.)

b. <sàmuun pà 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:-ɬa	**paʔ**	**ʔayuʔ**
3sS-go-PAST.ACT	PFV	AUX

'he would have gone'
OT:"aquel habrá ido" (1674.)

d. <pulacà 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 pà guiszucà na Juan aŁparaquiguà...>

naka	**ʔayuʔ**	**paʔ**	**višu-kaʔ**	**na**	**Juan**	**ʔaɬ-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 jʊenʊei na doctrina>

ʔašin	**paʔ**	**ʔayuʔ**	**ɬɨnɨ-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 ayacà>

paʔ	**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 yú*^{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.

ka?	ta:=ya-ka	wi?	ʔayu?
INT:where?	come=PROG-2sS_{DEP}	DIR?	AUX

'where are you coming/arriving at?' (G-SH)

b.

ʔaku	ʔayu?	ʔa?	nasyon	man
go	AUX	PREP	Sp:nation	DEM

'*that nation is going?' (G-JS)

For X_{Ch}, Schumann lists an existential <ayú?> "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 complasencia>

ʔayu	pu	ti:ʔ	nanu	*mayor complacencia*
EXIS	FUT	IO	DET	Sp: greatest pleasure

'he will have of the greatest pleasure'
OT:"tendrá la mayor complacencia" (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>

ʔayu-n	kuruki	weršeke
PROG-1sS_{DEP}?	run	throw down

'running I threw down = running I fell'
OT:"corriendo me caí" (Y-C)

b. <nen yuntili man>

nen	yu-n	tili	man
PN:1s	PROG-1sS_{DEP}	see	DEM

'I am seeing him'
OT:"yo lo veo" (Y-C)

(10. 145) a. <ʔayum-pumupa>

ʔayu-n	pumu	pa(ʔ)
PROG-1sS_{DEP}	swim	PFV

'he was swimming'
OT:"está nadando, es nadador" (Y-C)

b. <ayun pachi nu aya>

ʔayu-n	pači	nu	ʔaya
PROG-1sS_{DEP}	grind	DET	woman

'the woman is grinding'
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 *mi-* (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 tiemblas" (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 ʔ* '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 ʔ* 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>	ʔunaʔ	"tener, haber; defectivo" (1809.), (3449.)
<unà>	ʔunaʔ	"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) a. <jarana>
hara-na
ill-have
'get ill'
OT:"enfermarse" (2465.)

b. <tajana>
taha-na
exist-have
'get existing = to get born'
OT:"nacer" (3205.)

c. <yoŁana>
yoɬa-na
L-M:throw-have
'get thrown = to slip'
OT:"desbarrancarse" (3529.)

Such verbs ending in *–na* are frequently attested in the comparative data.

(10. 148) a. harana hiʔ
hara-na hiʔ
ill-have be+3sS$_{DEP}$
'he is being ill' (G-SH)

b. <tz'orana>
ȼ'ora-na
?-have
'drip'
OT:"gotear" (Ch-C, Ch-F)

c. <man ay upá huoróna>
man ʔayu paʔ woroʔ-na
DEM be+3sS$_{DEP}$ PFV *boil-have
'it is already boiling'
OT:"el agua está hirviendo" (Y-C)

10.1.3.5 Auxiliary ʔuɬa (optative)

Complex predicates with *ʔuɬa-* are regularly attested only in X$_{Ch}$ and X$_{Y}$. In Maldonado-Xinka we find the causative transitive verb *ʔuɬaka* 'wish, desire' ("desear") as a lexical entry in the vocabulary. In X$_{Ch}$ and X$_{Y}$ the transitive root *ʔuɬa* or *ʔula* (X$_{Y}$) is given with the meaning 'want, love'.

Table 10. 19: Comparative statement of occurrences of the verb * *ʔuɬa*

	FORM			ORIGINAL GLOSS
X$_{M}$	<úŁaɛa>	ʔuɬa-ka	[want-CAUS]	"desear" (3428.)
	<Łan>	ɬa-n	[*want-SUBJ]	"partícula optativa" (4009.)
X$_{Ch}$	<ulán>	ʔuɬa-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)
ʔuɬa-ka naʔ
want-CAUS DEM/3s
'he lent (money)'[160] (G-JS)

The root *ʔuɬa*, 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. <nen ulan nay>
nen ʔula-n nay
PN:1s want-1sA PN:2s
'I want you'
OT:"te quiero, te amo" (Y-C)

b. <nay ajla ulay>
nay ʔaɬa 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 ketɨ
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-haʧ'aki
want-SUBJ/1sA 1sS-rest
'I want to rest'
OT:"quiero descansar" (Y-C)

b. <nen ula-n jonó>
nen 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 nay>
ʔula-n tamiki(?) lina nay
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 *ʔuɬa* 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 *ʔula* 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 *ʔuɬa*. 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 **ʔuɬan* '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 Łan>

ʔa-ʔaku ʔ	**ɬan**
3sS-go/walk	OPT

'he wished (to) walk = he walked (subj.)'
OT:"aquel vaya" (1684.)

(10. 157) a. <mu mere Łàn>

mu-mere	**ɬan**
3sA-break	OPT

'he wished (to) break (it) = he broke it (subj.)'
OT:"aquel rompa" (616.)

b. <mucpùla Łan 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) <szàŁ Łan mucpùla na oracion>

šaɬ	**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 *ʔaya* and *pata-*. This may be taken as evidence that *ɬan* is not functionally identical with the active past marker *-ɬa* (§ 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 <-Łaan> with a double vowel, while the subjunctive <Łan> is always given with short vowel.

(10. 159) a. <Łan ayaan>

ɬan	**ʔaya:-n**
OPT	be-1sS$_{DEP}$
'(I wish) I were'	
OT:"yo esté" (1923.)	

b. <ɛʊètʊe Łan pataan>

k'ɨtɨ	**ɬan**	**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 *-ɬa* have grammaticalised from the same source are found in the the semi-speaker data from X_G. Here the past suffix *-ɬa* is attested with the transitive verb *nɨʔma* '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-nɨʔma-ɬaʔ
NEG 2sA-eat-PAST.ACT/OPT
'you did not want to eat' (G-SH)

b. numa-ɬa-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	<patà>	pata(ʔ)	"*sum est fui*, ser" (1877.)
auxiliary	<paátaa>	pa:ta:	"poder; defectivo" (2831.)
auxiliary	<apatà>	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. Troughout 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 (V_2) 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 Łic>	pata-y ɬik	[*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	
3s	pata-y	ʔapata-ʔ	pat'-ey	pata ʔapata	pat'ay	pataʔ
1p	pata-k		pat'a-k		pat'aɬki	
2p	pata-ka ʔay					
3p	pata-y ɬik		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>
pata **šama**
*accomplish PREP:inside
'accomplished inside = think, remember'
OT:"pensar, acordarse" (2832.)

b. <pata an mà szàma>
pata:-n **maʔ** **šama**
*accomplish-1sA COND PREP:inside
'I should have accomplished inside = remembered'
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 Łic nana turiŁi>
nariɬa **pata-y** **ɬik** **nana** **turi-ɬi**
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>
ʔima **naʔɬ** **pata-y** **nana** **miša**
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. <guiszùpe ayu patai nana Juan…>
wišu-ʔ **peʔ** **ʔayu** **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. <pirií 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 Łic pataguà>
pula-ʔ **ɬik** **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 *-ɬa*.

(10. 168) a. <patà mere>
pata-ʔ **mere**
*accomplish-STAT break
'be broken'
OT:"a ser roto" (732.)

b. <patà nàŁ sàmu>
pata-ʔ **naʔɬ** **samu**
*accomplish-STAT IMPFV catch
'would have been caught'
OT:"que fuera, hubiera de haber sido cogido" (1226.)

c. <patàn pirii>
pata-n **piri(-ʔ)**
*accomplish-SUBJ see(-STAT)
'to be seen'
OT:"de ser visto" (899.)

d. <aŁi pataŁa orómo>
ʔaɬi **pata-ɬa** **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. <neɬà á patà ɛʊetʊe>

neɬa	**ʔa(-)pata-ʔ**	**k'ɨtɨ**
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 *ʔʊka* (§ 10.1.4.1). In all cases person is marked on the light verb *ʔʊka* and thus on the head of the verbal compound that functions as the main verb of the auxiliary construction. In the third person, *ʔʊka* 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. 173) a. hin ʔapata-ʔ ʔakuki
NEG *accomplish-STAT walk
'(I) have not accomplished walking = (I) cannot walk' (G-RHG)

b. hin ʔapata-n ti:ki
NEG *accomplish-1sA sleep
'I have not accomplished sleeping = I cannot sleep' (G-RHG)

c. hin pata-kaʔ wiriki hi-naʔ
NEG *accomplish-2sA speak PREP:with-DEM/PN:3s
'you have not accomplished speaking with him/her = you cannot speak to her' (G-SH)

The verb *pata* can precede the intensifier-reflexive *kiwa-* 'alone' (§ 7.2). The pattern is attested in the Calderón-data from X_{Ch} (10. 174) and in the Campbell & Kaufman-data from X_G and X_{Ch} (10. 175). In all given examples, *pata* and the intensifier-reflexive show agreement in person-marking.

(10. 174) a. <patan iguán>, <patan ihuan>
pata-n ʔi-wa-n
*accomplish-1sA INTENS-?-1sP
'I accomplished myself = I alone'
OT:"yo solo" (Ch-C), (Ch-F);

b. <patay kihuay>
pata-y ki-wa-y
*accomplish-2sA INTENS-?-2sP
'you accomplished yourself = you alone'
OT:"tú vosotros solo(s)" (Ch-C), (Ch-F)
"estoy solo" (Ch-C)

(10. 175) a. <pat'aka gika>
pat'a-ka ki-ka
*accomplish-2sA INTENS-2sP
'you accomplished yourself = you alone'
OT:"solito tú" (G-C&K)

b. <pat'an giwan>
pat'a-n ki-wa-n
*accomplish-1sA INTENS-?-1sP
'I accomplished myself = I alone'
OT:"solito yo" (Ch-C&K)

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-ʔ paʔ 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-ʔ ti:ʔ ʔin harana
*accomplish-STAT IO+3s INT ill
'who is sick accomplished him(self) = the sick one recovered'
OT:"sane el enfermo" (Y-C)

10.1.3.7 Auxiliary šata (repetitive)

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 **šaʔta*.

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 ʔ* '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. <szataan>
šata:-n
to be doing/repeating-1sA
'I was doing/repeating (it)'
OT:"estar haciendo (pret.)" (3136.)

d. <szataŁán>
šata-ɬa-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-ʔuɬu-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
FUT eat-1sA$_{DEP}$ PN:1s
'I will eat' (G-JS)

b. ku šawaȼ'a-n ču ʔayma
FUT sow-1sA$_{DEP}$ DIM corn
'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 ɬina 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>
ʔan-ko ʔan-wiriki
1sS-FUT 1sS-talk
'I will talk'
OT:"platicaré" (G-S)

b. <koɬík wirikiɬík>
Ø-ko ɬik Ø-wiriki ɬik
3sS-FUT 3PL 3sS-talk 3PL
'they will talk'
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-ʔ
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
2sS-go/FUT PREP dance LOC
'you go to dance there' (G-SH)

b. <n'co pata>
n-ko pata
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: waʔ* [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>
tero-ɬaʔ
want-PART.ACT/AGT
'wanting = the wish'
OT:"deseo" (G-S)

b. <acuni atero hucay compensar>
ʔakuni ʔa-tero ʔuka-y *compensar*
ADV:like 3sA-want do-3sA Sp:compensate
'like (this) he wants to compensate'
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
want sleep DET PN:1s
'I want to sleep' (G-PE)

b. te:ro nuʔma paʔaʔ
want eat PFV
'I already want to eat' (G-JAP)

c. <tero núma ní>
te:ro nuʔma niʔ
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 ɬawaro 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:"frío" (Ch-C), (Ch-F)

c. <teroj párri>; <teron parri>
te:ro-h/-n pari
want-? 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 Jesperson 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 *ʔuka* '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 *ʔuka* and occur between the head and the Spanish verb. Morphosyntactically, *ʔuka* 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 *ʔuka*. The light verb *ʔuka* 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 *ʔuka* (§ 10.1.3.2), which always follows its referent verb and marks the subject with cross-referencing suffixes.

In the ALS, the light verb *ʔuka* 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 uɛa naŁqui absolver naca>

ʔan-ʔuka	**na(ʔ)ɬ**	**ki**	***absolver***	**naka**
1sA-do	IMPFV	INTENS	Sp:absolve	PN:2s

'I would absolve you'
OT:"te absolviera yo" (2037.)

b. <ca Ùɛa condenar naca anima>

ka-ʔuka	***condenar***	**naka**	***anima***
2sA-do	Sp:condemn	PN:2s	Sp:soul

'you condemn your soul'
OT:"te has de condenar" (1955.)

c. <mu uɛa 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. 193) <uɛaca mà restituir szan gui szac szacà>

ʔuka-ka	**maʔ**	***restituir***	**šan**	**wi**	**šakša-kaʔ**
do-2sA	COND	Sp:restore	INT	DIR?	steal-2sA

'... you would have restored what you have stolen'
OT:"hayáis restituído 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 degrained 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-? DET Sp:lie DEM
'you do/did (it) this lie = you lied' (G-JS)

b. <ha ucai labrar>
ʔa-ʔuka-y *labrar*
3sS-do-? 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:-ɬa ʔayaɬa ʔuka bender
go-PAST.ACT woman do Sp:sell
'the woman went (to) sell (it)' (G-SH)

b. neɬa ʔuka barer ʔayaɬa
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 aŁa uɛa can confesar>
ka-taʔ **peʔ** **ʔaɬa** **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 aprobechar>
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 posíble 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-ʔuka *faltar* hiʔ
NEG 3sA-do Sp:be lacking PROG+3sS$_{DEP}$
'he is not lacking'
OT:"no ha defecharle" (Ch-Z)

(10. 207) a. ʔuka=ka-y ʔenkontrar
do=PROG-3sA Sp:meet
'he was meeting [me]' (G-SH)

b. <huca-cay abusar ti santidad>
ʔuka=ka-y *abusar* ti:ʔ *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) ʔuka-n mandar ɕ'ɨri-ʔ mutuʔ
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. ʔakuki hiʔ ʔuka bagar hiʔ
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 ʔuka *obligación* ʔuka-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 *ʔuka* 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-ʔuka poɕ'a-ʔ
3sA-do wash-STAT = laundry
'she does laundry' (G-SH)

b. ʔuka-h šawi-ʔ
do-3sP sit down-STAT
'he sat down' (G-JS)

c. ʔuke-y paʔaɕ'i-ʔ mu-masa
do-3sA grind-STAT 3sP-Sp:corn dough
'she ground her dough' (G-SH)

(10. 211) a. ʔuka-y ʔuɬu ʔuy
do-3sA fall water
'(the) water/rain fell' (G-SH)

b. na nin ʔuke-y ʔipaʔla
DET PN:1s do-3sA bath
'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)
ʔuka	na	nin	šamu-n	ʔən-ču-šuruk
do	DET	PN:1s	take, catch-1sA	1sP-DIM-cane

'I took my cane' (G-RHG)

(10. 213) a.
na	nin	ʔuka	ɬawaro
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.
ʔaɬa	peʔ	kuy	ʔuka	ti:ki	hiʔ	nin
tomorrow	CENT	AUX.FUT	do	sleep	PROG+3s	PN:1s

'tomorrow I am going to be sleeping' (G-SH)

b.
ʔuka	ʔuwake	hiʔ	ku	pe:loʔ
do	play	PROG+3s	MOD	Sp:dog

'the dog is playing' (G-RHG)

(10. 215)
hin	ʔan-piri	ka	ʔušaki-ʔ
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 *ʔuka*, 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 *ʔaya* and the causative derivation *-ka*, i.e. **ʔaya-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	pəʔ	ti:ʔ	*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>

ʔapata	pəʔ	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 *yɨwa 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. <yʊeguaszáma>
yɨwa **šama**
lose PREP:inside
'lose inside = forget'
OT:"olvidar" (3559.)

(10. 218) a. <yeguá rama>, <yugúa rhama>
yɨwa 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 szàma>
pata-kaʔ **šama**
*accomplish-2sA PREP:inside
'you accomplished inside
= you remembered'
OT:"tú te acordaste, te has acordado" (1572.)

b. <niguaŁaanszaa>
niwa-ɬa-n **ša**
ask-PAST.ACT-SUBJ PREP:inside
'to have asked inside = to have wanted'
OT:"querer; anómalo (pretérito)"(2753.)

c. <yʊeguaan szàma>
yɨwa-wa-n **šama**
lose-ANT-SUBJ PREP:inside
'to have lost inside = to have forgotten'
OT:"olvidar (pretérito)" (3560.)

d. <guapatain szàma>
wa **pata=ʔin** **šama**
go/IMP *accomplish=SUBJ PREP
'go to accomplish inside
= may he remember!'
OT:"acuérdese aquel" (1596.)

(10. 220) a. yɨwa-n ša?ma
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) <nɒema szama>
nɨma 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. <paɛuszaja>
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-parafriqui>
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. <paraŁan guiriqui>
para-ɬa-n **wiriki**
search-PAST.ACT-1sA word
'I did search word = I did argue'
OT:"pleitar (pretérito)" (2828.)

b. <paraguaan guiriqui>
para-wa-n **wiriki**
earch-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) <japáginíy>
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. ʔuɬu ʔuy
fall water
'water fell = it rained' (G-SH)

c. <juye-naru>
huyɨ 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 nàca?>
wena **naka**
INT:who PN:2s
'who are you?'
OT:"¿quién sois vos?" (1872.)

b. <òro naca ɛica>
ʔoro **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 axʊe neŁa turiŁi>
nana **haw-tuma** **ʔahɨ** **neɬa** **turi-ɬi**
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-ɬa nin
DET PN:1s MOD work-AGT PN:1s
'I am (a) worker' (G-JS)

b. ne:ɬeke waɬ
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 ʔikaɬ miya
DEM=INT Sp:thief take-3sA NUM:1 chicken
'that is the thief who took a/one chicken' (G-SH)

b. nana hɨʔ ʔan-neɬa
FOC DEM 1sP-BEN
'this is what is mine' (G-RHG)

c. <nanu jú nag nubase>
nanu huʔ 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 maʔ hapa-ʔ
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 *ɬan*.

(10. 234) <szaŁ Łan>
šaɬ ɬan
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>
naɬki muɬki-ʔurah *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-ʔ nin
get tired-STAT PN:1s
'I am tired' (G-JS)

b. ʔerɬeke-ʔ 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 paŁ>
šam pari paɬ
PREP day PFV
'it is already in the day'
OT:"ya es de día" (4440.)

(10. 238) nin ša mak'u-ʔ
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 structually 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-frak	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>

naɬki	miɬki-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 *tɨškɨ* "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>
ʔan-tiški
1sS-far
'I am far'
OT:"estoy lejos" (G-S)

b. <tiška-ka>
tiška-ka
far-2sS
'you are far'
OT:"estás lejos" (G-S)

c. <n-uraki>
n-ʔuraki
1sS-big
'I am big'
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 **ʔahiʔ**
INT:who?=INTENS COP:be+3sS$_{DEP}$
'(he) who is'
OT:"el que está, estaba" (1962.)

(10. 244) a. nana hiʔ
FOC COP:be+3sS$_{DEP}$
'this one is' (G-JAP)

b. <ra maku ni ya>
ra maku ni =ya
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-kaʔ**
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-1sS_{DEP}
'I am ill' (G-RHG)

b. <marak-yaká?>
marak=ya-kaʔ
angry=COP:be-2sS_{DEP}
'you are angry'
OT:"enojas a ti" (G-S)

c. hono heʔ
drunk COP:be+3sS_{DEP}
'he is drunk' (G-SH)

d. harana hiʔ nin
ill COP:be+3sS_{DEP} PN:1s
'I am ill' (G-JS)

e. <jarana ya cá>
harana=ya-kaʔ
ill-COP:be-2sS_{DEP}
'you are ill'
OT:"estás enfermo" (Ch-F)

f. <mɛmɛ'ʔayʔ>
meme ʔay
mad/crazy COP:be+3sS_{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) <keꞇi ʔay harana>
ke-tꞇ ʔay harana
now-ADV COP:be+3sS_{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>
šama maku-tyuš na(ʔ)ꞇ ʔaya-kaʔ
PREP house-god IMPFV COP:be-2sS_{DEP}
'you would have been in the church'
OT:"hubieras estado en la iglesia" (1959.)

b. <Łinà juicio ayacà>
ꞇinaʔ *juicio* ʔaya-ka
PREP Sp:judgement COP:be-2sS_{DEP}
'you were sober'
OT:"hubieras estado en juicio" (1957.)

c. <szama pecado mortal agi>
šama *pecado mortal* ʔahi
PREP Sp:mortal sin COP:be+3sS_{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. naha ʔ 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, *ʔuka* 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 naha ʔ sarara ʔ
have-STAT LOC:here cold
'it has cold here = it is cold here' (G-SH)

b. <na kokóʔ uʔká šaw uráy>
na koko ʔ 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-wapaɬ
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 is 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
chicken /hen have Sp:fat
'the hen got fat = the hen is fat' (G-SH)

b. mal ʔuka-ʔ
Sp:bad have-STAT
'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 *ʔuka*.

(10. 254) a. muču-ʔ ʔuka-ʔ
get tired-STAT have-STAT
'he has gotten tired' (G-JS)

b. tero-ʔ ʔuka-ʔ
die-STAT have-STAT
'he has died' (G-JS)

c. wereke ʔuka-h
angry/anger have-3sP
'he had anger' (G-JS)

In X_G the existential verb *ʔuka* occurs with the stative-resultative marker *-ʔ* indicating existence/ possession in the non-past; i.e. *ʔuka-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 *ʔuka-h* 'there was' ("había") precedes predicate nominals (10. 255) and usually follows predicate adjectives (10. 256). No other cross-referencing affixes are attested with *ʔuka* functioning as an existential.

(10. 255) a. ʔuka-h na ku ʔaʔu
have-3sP DET MOD corn
'there was the corn' (G-JS)

b. ʔuka-h ʔigwana naʔ
have-3s iguana LOC:here
'there was an iguana here' (G-SH)

(10. 256) a. ʔone ʔuka-h ʔawa
tender have-3s moon
'the moon had (= was) tender' (G-JAP)

b. harana ʔuka-h naʔ
ill(ness) have-3s DEM/3s
'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)>
nen su *bueno*
PN:1s COP:be good
'I am good'
OT:"yo estoy bueno" (Y-C)

b. <su sa maku>
su sa maku
COP:be PREP house
'he is in the house'
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 transitivisation, 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 *ʔuɬa* '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?)
-ɬa/-ɬ	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-ɬa* [make-AGT] = '(the one) who makes' > *pula-ɬa* [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
-ɬa	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.)

c. <poszáguaŁ>
poša-wa-ɬ
wash-ANT-PART.ACT
'what/who has washed = soap rest'
OT:"la sobra del jabón" (4324.)

This section also includes identifiable cases of non-productive nominalisations in the ALS, the sources of which are in most cases unclear (§ 11.2.3, § 11.2.4, § 11.3.3).

11.1.1 Action nominalisation (verbal noun)

The suffix *-ki* (or *-ke* following roots with mid vowels) derives nouns from two- and three-syllabic transitive and intransitive roots that refer to the process denoted by the verb. Maldonado de Matos classifies these forms as the Latin category of *supinum*. In traditional grammar this form of action nominalisation is also referred to as a verbal noun, gerund or *nomen actionis*. The Spanish translation context gives an infinitive form in nominal function, e.g. "a recoger", "a ir", which indicates the objective and purpose of the verbal action and corresponds with the Latin category of *supinum I* (Metzler 1993:620).

The operator is attested with intransitive verbs, including active and stative roots, which are often translated by Maldonado de Matos as Spanish reflexive verbs. The following examples from the ALS illustrate verbal nouns that are derived from intransitive verbal roots by means of the marker *-ki*.

(11. 2)
a. <maaráqui>
ma:ra-ki
rest-VN
'resting'
OT:"a descansar" (1555.)

b. <muuchuqui>
mu:ču-ki
get tired-VN
'getting tired'
OT:"cansarse (supino)" (2688.)

c. <txajmaquí>
ʧahma-ki
get stung-VN
'getting stung'
OT:"espinarse (supino)" (3395.)

In the majority of attested cases, *-ki* derives verbal nouns from transitive roots and stems. All types of transitive stems are attested. It is not entirely clear whether the occasional spelling of the morpheme with <ε> suggests that the velar is sometimes glottalised. In most cases Maldonado de Matos indicates the vowel preceding the suffix with an accent, which may either simply mark the stress pattern or could suggest the presence of an inserted glottal stop.

(11. 3)
a. <pulàqui>
pula-ki
make-VN
'to making'
OT:"a hacer" (477.)

b. <teróɛe>
tero-k(')e
kill-VN
'to killing'
OT:"matar (supino)" (3282.)

c. <tutujaqui>
tutu-ha-ki
suck-CAUS-VN
'to breastfeeding'
OT:"dar de mamar (supino)" (3356.)

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. <guaszcuqui>
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		TRANSITIVE VERB ROOTS
a.	<aráqui> **ʔara-ki -Ø** send-AP-NOM 'the watching' OT:"mirar (supino)" (2085.)	cf.	<araqui> **ʔara-ki** send sb.-VN 'the sending' OT:"enviar (supino)" (2079.)
b.	<tuyáquí> **tuya-ki-Ø** scold-AP-NOM 'the litigation, arguing' OT:"pleitear (supino)" (3367.)	cf.	<tuyaquí> **tuya-ki** scold sb.-VN 'the scolding' OT:"reñir (supino)" (3362.)
c.	<cagui ɛi> **kawi-k(')i-Ø** cry-AP-NOM 'the screaming' OT:"gritar (supino)" (2128.)	cf.	<caguíqui> **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* [?-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 <ɛi>, 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. <ckʋenʋeɛi>
k'ɨn-k'i-(ʔ)
be happy-VN/AP-(STAT)
'happiness'
OT:"alegría, contento" (3784.)

b. <guiriqui>, <guiri ɛi>
wiri-ki / wiriʔ-k'i-(ʔ)
?-VN/AP-(STAT)
'word, speaking'
OT:"palabra" (3866.); "hablar" (2553.)

c. <púríɛi>
pu:ri-k'i-(ʔ)
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* > *-kɨ*. 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. <lɨpɨkɨ>
ɬɨpɨ-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. <nawʌɬ 'tiki>
na waɬti-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 *-ʔ* 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 *-ʔ*, 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-ʔ* [3sS-ripen-STAT] 'it ripened' = 'it is ripe'. It can be argued that the inflectional function of *-ʔ* 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. <seŁè>
seɬe-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. <ckʋeguʋe>
k'ɨwɨ-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/AP?-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. <jʊeɛa>
hɨk'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. <yeoguá>
yɨwa-ʔ
lose-STAT
'is lost = the lost (thing)'
OT:"cosa perdida" (Ch-F)

d. <pɨriʔ>
pɨri-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>
hɨk'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. <pulàgua>
pula-wa
make-PART.PF
'made (thing)'
OT:"cosa hecha" (4333.)

b. <poszàgua>
poša-wa
wash-PART.PF
'washed (thing)'
OT:"ropa lavada" (4325.)

c. <órmògua>
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>
ʔuɬu-wa
fall-PART.PF
'fallen (thing)'
OT:"cosa caída" (4687.)

b. <cúnuɛigua>
kunu-k'i-wa
buy-AP-PART.PF
'bought (thing) = the buy, purchase'
OT:"cosa comprada" (3767.)

c. <taguaŁɛigua>
tawa-ɬ-k'i-wa
bless-PART.ACT-INCH-PART.PF
'blessed (thing)'
OT:"cosa bendita" (4531.)

11.1.2.3 Active participle

The suffixes *-ɬa* and *-ɬ* 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 *-ɬa* (§ 12.2.2). In the ALS, the suffix *-ɬ* 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. <ɛataŁa>
k'ata-ɬa
lay down-PART .ACT
'laid down'
OT:"acostado" (3720.)

b. <saraŁ huy>
sara-ɬ **ʔuy**
get cold-PART.ACT? water
'cold water'
OT:"agua fría" (4373.)

c. <taguaŁ ɛigua>
tawa-ɬ-k'i-wa
bless-PART.ACT-INCH-PART.PF
'blessed thing'
OT: "cosa bendita" (4531.)

Participles and non-agentive nouns marked with *-ɬ* 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 *-ɬ* 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'ɨwɨ-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>
ʔɨmu-l
*say?-PART.ACT
'write, the writing'
OT:"escribir" (Ch-F)

c. <iẍác'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 *-ɬa* 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 *-ɨ* 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>
*k'ɨwɨ-y
dry-PART.ACT?
'dried thing = toasted'
OT:"totoposte" (Ch-F)

b. <sagullay>
sawu-ya-y
seat-TRANS-PART.ACT?
'place'
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>
čiči
VI:defecate
'defecate, relieve stomach'
OT:"exonerar vientre" (2195.)

b. <chichi>
čiči-Ø
defecate-NOM
'defecating/defecation = excrement'
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>
ʔištu-Ø
ʔ-NOM
'scar, mark'
OT:"señal" (3913.)

cf. <isztú>
ʔištu-ʔ
ʔ-STAT
'rash, disease'
OT:"jiote; enfermedad" (3912.)

b. <núru>
nuru-Ø
*rot-NOM
'pus, secretion'
OT:"la matería, podre" (4182.)

cf. <nuurú>
nu:ru-ʔ
*rot-STAT
'abscess, ulcer, disease'
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. <Łʊepʊec>
ɬɨpɨ-k
carry behind-INSTR
'instrument for carrying'
OT:"instrumento para cargar" (4037.)

b. <guiszúc>
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>
ʔiš(a)ka-k
drink-INSTR
'cup, dish'
OT:"jícara de beber" (3908.)

b. <ɛʊerszac>
k'ɨr(ɨ)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. <ɛaguí> → <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. <iszaɛa>, <yszàca> → <iszcac>
ʔišak'a / ʔišaka **ʔiška-k**
drink drink-INSTR
'to drink' 'instrument for drinking = cup'
OT:"drink" (2420.) OT:"jícara de beber" (3908.)

c. <íguatxa> → <uyszác>
ʔiwaɕ'a **ʔuyša-k**
spin spin-INSTR
'to spin' 'instrument for spinning = spindle'
OT:"hilar" (2391.) OT:"malacate" (4727.)

d. <patxi>, <paaszí> → <paaszíc>
paɕ'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. <tiɛiɛguaru>
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 *ʔišpa-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. *ʔišpa-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 waruʔ
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. <suɛuckiɛ>
suk'u-k'i-k'
tie-AP-INSTR
'instrument for tying, knotting = rope?'
OT:"cosa con que se amarra" (4391.)

b. <ɛʊetʊeɛic>
k~~i~~t~~i~~-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:"paño 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) <guapíc>
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
PREP mouth-INSTR
'mouth' (G-PE)

b. wapi-k
foot-INSTR
'sandal' (G-PE)

c. <xu'tuk>
hutu-k
wood-INSTR
'pole, tree'
OT:"madera" (Ch-MQa)

d. <rumuck>
rumu-k'
smell-INSTR
'skunk'
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 júszic>
ten-hu:ši-k
red-head-INSTR?
'red-headed = vulture'
OT:"quebrantahueso" (4563.)

b. <muŁ pàamac>
muɬ-pa:ma-k
white-wing, arm-INSTR?
'white-winged = dove'
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>
taʔu-k
?-INSTR?
'tortoise'
OT:"tortuga" (4552.)

b. <paguác>
pawa-k
?-INSTR?
'pine'
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>
kunu-k'
buy-INSTR/AGT
'buyer, customer'
OT:"comprador" (Ch-F)

b. <marac>
mara-k
get angry, upset-INSTR/AGT
'choleric, bad person'
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 *ʔuɬa* 'want' (§ 10.1.3.5).

Agent nominalisation is derived by the suffix *-ɬ(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 *-ɬa* (11. 44) and its variant *-ɬ* (11. 45) occur with transitive and intransitive verbs. The two markers do not seem to exhibit any functional difference.

(11. 44)

a. <màrà Łà>
ma:ra-ɬa
rest-AGT
'(the one) who rests'
OT:"el que descansa" (1556.)

b. <acúŁa>
ʔaku-ɬa
go-AGT
'(the one) who goes'
OT:"el que se va huído" (3587.)

c. <pulaŁa>
pula-ɬa
make-AGT
'maker, (the one) who makes'
OT:"el que hace, hacía" (479.)

d. <juʊɛaŁa>
hɨ:k'a-ɬa
weave-AGT
'weaver'
OT:"la tejendera" (3997.)

(11. 45)

a. <pulàŁ>
pula-ɬ
make-AGT
'maker, (the one) who makes'
OT:"el que hace, hacía" (478.)

b. <piriiŁ>
piri-ɬ
see-AGT
'seer, (the one) who sees'
OT:"el que ve, veía" (821.)

c. <jooroŁ>
ho:ro-ɬ
guard-AGT
'caretaker, (the one) who takes care'
OT:"el cuidador" (3956.)

In the comparative data the two markers *-ɬa* and *-ɬ* 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 *-ɬa* 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-ɬa ~ muka-ɬa
work-AGT
'worker' (G-JS)

On transitive verbs the agentive marker *-ɬ* occurs in the same contexts as *-ɬa*. 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 *-ɬ*, 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-ɬ
work-AGT
'worker' (G-JS)

b. <rac-rahl>
rakra-ɬ
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. <iplaŁa>
ʔip(a)la-ɬa
bath-AGT
'(the one) who bathes'
OT:"bañador, bañadora" (3902.)

b. <eŁmaŁá>
ʔeɬ(a)ma-ɬa
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 *-ɬ* only. In X_{Ch} and X_Y, we find the full agentive marker *-ɬa* in the same context, which supports the idea that both agentive suffixes are used interchangeably.

(11. 49) a. <joroŁ guáyá>
horo-ɬ **waya?**
guard-AGT milpa
'guardian of the milpa'

OT:"guardián de milpa" (3960.)

b. <patàŁ szàma>
pata-ɬ **šama**
*accomplish-AGT PREP
'(the one) who accomplishes inside
= rememberer'
OT:"el que se acuerda, acordaba" (1637.)

(11. 50) a. <pujlaj huayá>
puɬa-h waya?
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 <ɛi>, 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-ɬa* '(the one) who sees/looks' ("el que mira") ~ *piri-ki-ɬa 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-ɬa* '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-ɬa* '(the one) who goes' ("el que anda/se va huido").

(11. 51)

a. <araquiŁa>
ʔara-ki-ɬa
send-AP-AGT
'(the one) who sends = who looks'
OT:"mirón" (3646.)

b. <pula quiŁa>
pula-ki-ɬa
make-AP-AGT
'(the one) who makes = maker'
OT:"el que hace, hacía" (480.)

c. <jooro ɛéŁa>
ho:ro-k'e-ɬa
guard-AP-AGT
'(the one) who guards = guardian'
OT:"el guardián... " (3958.)

d. <tuŁtuɛiŁa>
tuɬtu-k'i-ɬa
sting-AP-AGT
'(the one) who stings'
OT:"el que pica" (4604.)

e. <tiyɛiɛŁa>
ti:k'i-k'-ɬa
sleep-REFL?/AP-AGT
'(the one) who sleeps = sleepyhead'
OT:"dormilón" (4574.)

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 *-ɬ* (11. 52b).

(11. 52)

a. <teerókilá>
te:ro-k'i-la
kill-AP-AGT
'killer'
OT:"matador, asesino" (Ch-F)

b. <caykil>
kay-k'i-l
sell-AP-AGT
'seller, merchant'
OT:"vendedor" (Ch-F)

c. <cayikíla>
kayi-k'i-la
sell-AP-AGT
'seller, merchant'
OT:"vendedor" (Y-C)

The agentive marker *-ɬa* is furthermore attested with causative stems (ending in *-ha* and *-ɬa*) 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)

a. <nʊemajaɛiŁa>
nɬma-ha-k'i-ɬa
eat-CAUS-AP-AGT
'(the one) who makes (sb.) eat = servant'
OT:"sirviente" (4185.)

b. <ereŁaquiŁa>
ʔere-ɬa-ki-ɬa
*fear-CAUS-AP-AGT
'(the one) who makes (sb.) afraid = scarecrow'
OT:"espantador" (3818.)

c. <mèreŁa qui Ła>
mere-ɬa-ki-ɬa
destroy, break-CAUS-AP-AGT
'(the one) who breaks, destroys (sth.)'
OT:"el que ha, tiene de romper" (654.)

The functional difference of the active past marker *-ɬa* 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 *-ɬ* omitting the final vowel.

(11. 54) <acùŁaŁ>
ʔaku-ɬa-ɬ
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 *-ɬ(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 *-ɬ* marks agentive or an active participle.

(11. 56) a. <jamaguáŁa>
hama-wa-ɬa
sin-ANT-AGT
'sinner'
OT:"el pecador" (20.)

b. <jóɛóguàŁ>
hok'o-wa-ɬ
break-ANT-PART.ACT/AGT
'what has broken = corn husk'
OT:"doblador, cáscara de mazorca" (3954.)

c. <poszáguaŁ>
poša-wa-ɬ
wash-ANT-PART.ACT/AGT
'what has washed = soap rest'
OT: "la sobra del jabón" (4324.)

(11. 57) a. tero-waʔ-ɬa
die/kill-ANT-AGT
'(the one) who has died = the dead' (G-JAP), (G-JS)

b. <hoko-wá-ɬ>
hoko-wa(ʔ)-ɬ
break-ANT-PART.ACT/AGT
'what has broken = corn husk'
OT:"hoja de maíz, totomostle (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-ɬa
house-AGT
'plan/layout of house'

OT:"diseño de la casa" (4045.)

b. <nauŁa>
naʔu-ɬa
offspring-AGT
'(the one) who has offspring
= pregnant (woman)'
OT:"la preñada" (4165.)

c. <guapáŁ>
wapa-ɬ
foot?-AGT?
'bench'
OT:"el banco" (3839.)

A significant number of Xinka animal (11. 59) and plant names (11. 60) end in *-ɬ*. 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 *-ɬ* in these contexts, but forms such as *huhu-ɬ* 'honey-comb' (3965.) or *ʔʌwa-ɬ* 'ant' (4678.) might indicate that the marker has grammaticalised from the animate plural marker *-ɬi* (§ 8.4.2).

(11. 59)
a. <urúŁ>
ʔuru-ɬ
*fall-NOM/AGT
'egg'
OT:"el huevo" (4693.)

b. <tʊeʊemaŁ>
tɨma-ɬ
dye-NOM/AGT
'louse'
OT:"piojo" (4632.)

c. <cucúguaŁ>
kuku-wa-ɬ
?-ANT?-NOM/AGT?
'turtledove'
OT:"la tortola" (3758.)

d. <itúŁ>
ʔitu-ɬ
?-NOM/AGT
'flea'
OT:"las pulgas, niguas" (3905.)

(11. 60)
a. <amùŁ>
ʔamu-ɬ
?-NOM/AGT
'nettle, *chichicaste*'
OT:"la ortiga, chichicastle" (3627.)

b. <sza ɛaayaŁ>
šak'aya-ɬ
?-NOM/AGT
'thorn'
OT:"la espina" (4414.)

c. <szupímaŁ>
šupima-ɬ
?-NOM/AGT
'*izcanal*, tree with thorns'
OT:"el yscanal, árbol de espina" (4512.)

d. <yʊeguʊeŁ>
yɨwɨ-ɬ
?-NOM/AGT
'*coachipilin*, tree'
OT:"el coachipilín; árbol" (4769.)

The ALS gives examples of the agentive form combining with the centric directional *peʔ* 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>
ʔaku-ɬa peʔ
go-AGT CENT/DEON
'(the one) who has to go'
OT:"el que ha, tiene de ir" (1723.)

b. <màrà Łà pè>
ma:ra-ɬa(ʔ) peʔ
rest-AGT CENT/DEON
'(the one) who has to rest'
OT:"el que ha, tiene de descansar" (1557.)

The agentive marker *-ɬa* derives nominal stems that may take the animate plural marker *-ɬi* (§ 8.4.2) or function as the basis for instrumental derivation.

(11. 62)
a. <aculaŁi>
ʔaku-ɬa-ɬi
go-AGT-PL
'those who flee'
OT:"el que se va huido (plural)" (3588.)

b. <tupaŁaŁi>
tupa-ɬa-ɬi
leave (sth.)-AGT-PL
'those who leave (sth.)'
OT:"el que deja (plural)" (4617.)

c. <jooro ɛeŁaŁi>
horo-k'e-ɬa-ɬi
guard-AP-AGT-PL
'guardians'
OT:"el guardián (plural)" (3959.)

(11. 63) a. <puriqui lhajli>
puri-ki-ɬa-ɬi
respond-AP-AGT-PL
'those who respond = those who get married'
OT:"los del casamiento" (Ch-JC)

b. <ragulajli>
rawu-la-ɬi
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 *-ɬi*, 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 jamaguaŁa>
te:na-n **hama-wa-ɬa**
QUANT:many-IRR sin-ANT-AGT
'sinners'
OT:"los pecadores" (21.)

b. <tumuqui na jamaguaŁa>
tumuki **na** **hama-wa-ɬa**
QUANT:all DET sin-ANT-AGT
'all sinners'
OT:"todos los pecadores" (22.)

(11. 65) a. <tajá jono huajlo>
taha? hono-wa-ɬo
QUANT:many get drunk-ANT-AGT
'many drunks'
OT:"muchos bolos" (Ch-JC)

b. <terohuajla jli>
tero-wa-ɬa-ɬi
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 *-ɬ* (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>
taɬa-y pumu
burn-3sA/AGT copal
'he burned copal = burner of copal'
OT:"quemador de copal" (Ch-C)

b. <talay-naguapí-ayarla>
tala-y na wapi ʔayaɬa
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…'.

(11. 67) a. <mʊetxagua>, <mʊeszagua>
mɨša-wa
bury-LOC
'burial'
OT:"sepultura" (4125.), (4128.)

b. <maszígua>
maši-wa
fry-LOC
'place where sth. is fried'
OT:"lugar en que se fríe algo" (4074.)

c. <suɛuguaa>
suk'u-wa:
tie-LOC
'place where sth. is tied'
OT:"lugar donde se amarra algo" (4394.)

Intransitive verbs marked with the suffix *-wa* occur in initial position of nominal compounds (§ 8.3.4). The exact function of *-wa* in these contexts is not fully understood: the suffix been identified as an anterior/perfect or as a locative marker. Morphosyntactically, these contexts may be verb phrases with the noun in second position functioning as the subject of a stative intransitive verb. It is also possible that *-wa* functions as locative nominaliser; e.g. *wašta-wa sɨma* [enter-LOC + night] 'where entered the night' = 'entering-place of the night'. A parallell construction is attested e.g. in Mayan languages, e.g. KCH *r-eli-b'al q'i:x* [3sP-rise-LOC + sun/day] 'rising-place of the sun'.

(11. 68) a. <tagnaguajaya>
tah(a)na-wa **haya**
be born-LOC/ANT female
'place of being born of female
= female genitals'
OT:"las partes genitales de la mujer" (4533.)

b. <guasztagua sʊema>
wašta-wa **sɨma**
enter-LOC/ANT night
'(where) the night has entered
= nightfall'
OT:"entrada de la noche" (3851.)

c. <iszpaguapari>
ʔišpa-wa **pari**
come out/rise-LOC/ANT day
'(where) the sun has come out/risen = sunrise'
OT:"la salida del sol" (3911.)

The ALS lists several toponymic expressions that end in *-wa* (see § 1.2.2). It is not in all cases possible to identify the verbal basis of the derivation and thus the etymology of the toponym. However, all attested forms confirm the morphosyntactic function of the marker *-wa* as a locative derivation.

(11. 69) a. <ɛaragua>
k'ara-wa
?-LOC
'woods, forest'
OT:"monte" (3713.)

b. <tugcuguá>
tuhku-waʔ
?-LOC
'Tecoaco, toponym'
OT:"Tecoaco, pueblo" (4600.)

Place names in the Xinka area often end in the locative marker *-wa* (Campbell 1978a:36-37). With the exception of Campbell's toponymic analysis, the other secondary data sources give only selected examples of toponyms ending in *-wa*.

11.2 Derivation of transitive verbs

This section discusses processes that derive transitive verbs, including transitivisations; i.e. valency-increasing operations, which add a core argument to the verbal predicate, processes of denominalisation and the derivation of transitive verbs from positional roots. Valency-increasing operations include the transitivisation of intransitive verbs (see § 11.2.1) and the derivation of causative verbs (see § 11.2.2). One causative marker is also attested with nominal or adjectival roots; other transitivisers occur only with nominal/positional roots.

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 transitivisers express different semantic connotations. Table 11. 3 provides a functional and distributional summary of transitivisers in Maldonado-Xinka.

Table 11. 3: Distribution of transitivisers (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'?
-ɬa	?	-	+	'want N'	ʔuɬa 'want'

11.2.1 Transitivisation 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 transitivisation 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)

a. <japaya>
hapa-ya
pass by-TRANS
'to come in, step forward'
OT:"ir, pasar adelante" (2460.)

b. <curúya>
kuru-ya
run/flee-TRANS
'to run'
OT:"correr (defectivo)" (2189.)

c. <ulúya>
ʔulu-ya
fall-TRANS
'to throw to the ground'
OT:"derribar" (3437.)

d. <szaguya>
šawu-ya
sit/be seated-TRANS
'to seat, put sth.'
OT:"sentar, poner otra cosa" (3108.)

e. <Łaráya>
ɬara-ya
ascend-TRANS
'to lift (sth.)'
OT:"subir algo de abajo a arriba" (2589.)

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)

a. <jamaya>
hama-ya
ripe-TRANS
'to make ripe = to cook'
OT:"madurar, dar cocimiento" (2450.)

b. <ckʊeguya>
k'ɨw(ɨ)-ya
dry-TRANS
'to dry (sth.)'
OT:"secar" (2230.)

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) a. wišu-ya
beat-TRANS
'to beat (sth., sb.)' (G-RHG)

b. <upuy>
ʔupu-y
stand upright-TRANS
'stand up, rise'
OT:"levantarse, ponerse en pie" (Ch-F)

c. <licay>
lika-y
come down-TRANS
'to bring down'
OT:"bajar" (Y-C)

In X_{Ch} the transitiviser *-ya* occurs with derived intransitive stems. This context is unattested in Maldonado-Xinka.

(11. 73) a. <puriki ya>
puri-k'i-ya
respond-AP-TRANS
'to marry'
OT:"desear casarse" (Ch-F)

b. <mutajkiya>
muta-h-ki-ya
?-PART.ACT-INCH-TRANS
'to dream'
OT:"soñar" (Ch-F)

c. <jarackey>
hara-k'e-y
break-AP-TRANS
'to scratch'
OT:"rascar" (Ch-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 *-ɬa*. It is not clear whether *-ha* and *-ɬa* are variant representations of the same operator. A distinct etymological origin of causative markers is suggested, i.e. *ʔɪka* 'do' and *ʔuɬa* 'want'. The causative markers *-ka*, *-ha* and *-ɬa* 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).

(11. 74)

a. <úŁaɛa>
ʔuɬa-ka
want-CAUS
'to wish (sth.)'
OT:"desear" (3428.)

b. <nʊemaja>
nɨma-ha
eat-CAUS
'to feed'
OT:"dar de comer" (2772.)

c. <jaraŁa>
hara-ɬa
heat-CAUS
'to toast'
OT:"tostar" (2468.)

d. <jonóa>
hono-ʔa
take care-CAUS
'to guard, protect'
OT:"cuidar, guardar" (2501.)

11.2.2.1 Causative verb with -ka

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 *ʔʊka* '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 *-ɬa*.

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. <paríca>
pari-ka
heat-CAUS
'to heat'
OT:"calentar" (2821.)

b. <szùnuɛà>
šunu-ka
long-CAUS
'to lengthen'
OT:"alargar" (3174.)

c. <guilíca>
wili-ka
naked-CAUS
'to undress'
OT:"desnudar" (2346.)

d. <selíca>
seli-ka
Sp:blessed-CAUS
'to receive communion'
OT:"comulgar" (3051.)

(11. 76)

a. <ʔiškʌ 'mutⁱ>
ʔiš-ka mut(i)
good/alive-CAUS hair
'(he) ordered (his) hair = combed himself'
OT:"se peinó" (Ch-MQ)

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 does 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 *hɨnɨ-k'a* [know-CAUS] 'to prove, experiment' may be literally translated as 'to make know (sth.)'.

(11. 77)

a. <jʊenʊeɛa>
hɨnɨ-ka
know-CAUS
'make know = to prove, experiment'
OT:"probar, hacer experiencia" (2563.)

b. <úŁaɛa>
ʔuɬa-ka
*want-CAUS
'make want = to wish, long for'
OT:"desear" (3428.)

c. <túyúɛa>
tuyu-ka
begin/scold-CAUS
'to provoke, make upset'
OT:"torear, provocar" (3373.)

(11. 78) a. <tɨmɨ-ká>
tumu-ka
finish-CAUS
'to complete'
OT:"completar" (G-S)

b. <imacack>
ʔima-ka-k'
say-CAUS-AP
'to tell'
OT:"decir" (Ch-P)

c. <táca>
ta-ka
?-CAUS
'to harvest'
OT:"tapiscar" (Y-C)

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 *-ɬa* (§ 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. *nɨma-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) a. <nʊemaja>
nɨma-ha
eat-CAUS
'to feed'
OT:"dar de comer" (2772.)

b. <tutuja>
tutu-ha
suck-CAUS
'to breastfeed'
OT:"dar de mamar" (3351.)

c. <tónója>
to:no-ha
be silent-CAUS
'to deceive'
OT:"engañar" (3301.)

d. <tuyujaɛiŁa>
tuyu-ha-k'i-ɬa
begin-CAUS-AP-AGT
'who provokes = bull-fighter'
OT:"el toreador" (4630.)

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) a. <sirujaca na'c>
siru-ha-ka nak
abreviate-CAUS-2sA PN:2s
'make abreviate = hurry up'
OT:"apurate vos" (Ch-JC)

b. <tuyujay>
tuyu-ha-y
begin-CAUS-3sA
'(he) began sth.'
OT:"empezar" (Ch-F)

c. <tatijaytiy>
tati-ha-y ti:ʔ
VT?-CAUS-3sA IO
'to undress him'
OT:"desnudarse" (Y-C)

The operator *-ha* derives causative stems that are fully productive and take further TAM-suffixes.

(11. 81) a. <nʋemajaan>
nɨma-ha-n
eat-CAUS-1sA
'I fed (sb.)'
OT:"dar de comer (pretérito)" (2773.)

b. <nʋemajaŁaan>
nɨma-ha-ɬa-n
eat-CAUS-PAST.ACT-1sA
'I have fed (sb.)'
OT:"dar de comer (pretérito)" (2774.)

c. <nʋemajaguaan>
nɨma-ha-wa-n
eat-CAUS-ANT-1sA
'I had fed'
OT:"dar de comer (pretérito)" (2775.)

11.2.2.3 Causative verb with -ɬa

Causative derivations with the operator *-ɬa* are less frequent in the ALS. The marker likely derives from the transitive verbal root *ʔuɬa* '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-ɬa* [heat-CAUS] 'to want heat = 'to toast' ("tostar").

(11. 82) a. <jaraŁa>
hara-ɬa
heat-CAUS
'to toast'
OT:"tostar" (2468.)

b. <eréŁa>
ʔere-ɬa
*fear?-CAUS
'to frighten'
OT:"espantar" (2268.)

c. <nariŁá>
nari-ɬa
*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-ɬa>
ʔere-ɬa
*fear?-CAUS
'to chase, scare away'
OT:"arrear" (G-S)

b. <na adislay ni?>
*nari-ɬa-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>
(hɨ)ya-wa-ɬa
chop-ANT-CAUS
'to chop with machete'
OT:"machetear" (Ch-P)

Causative stems derived by *-ɬa* exhibit transitive morphology and are attested with transitive cross-referencing suffixes (11. 84a) and TAM-markers (b).

(11. 84) a. <jaraŁán>
hara-ɬa-n
heat-CAUS-1sA
'I toasted (it)'
OT:"tostar (pretérito)" (2469.)

b. <jaraŁaguan>
hara-ɬa-wa-n
heat-CAUS-ANT-1sA
'I had toasted'
OT:"tostar (pretérito)" (2471.)

The causative marker *-ɬa* 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 *-ɬa* can also take the antipassive marker *-ki* (b).

(11. 85) a. <jaraŁaŁan>
hara-ɬa-ɬa-n
heat-CAUS-PAST.ACT-1sA
'has toasted'
OT:"tostar (pretérito)" (2470.)

b. <nariŁaɛiŁa>
nari-ɬa-k'i-ɬa
*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 *-ɬa* and a causative marker *-ɬ*. The term *nariɬak'iɬa* 'teacher' literally translates as '(the one) who teaches' whereas the term *nariɬk'iɬa* 'student/pupil' is semantically '(the one) who learns/studies'. The difference between the given stems is *nari-ɬa* [*know-CAUS] 'to teach' and *nari-ɬ* [*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 *-ɬa* and *-ɬ* are indeed distinct operators.

(11. 86) a. <nariŁaɛiŁa>
nari-ɬa-k'i-ɬa
*know-CAUS-AP-AGT
'who teaches = the teacher'
OT:"el doctrinero, maestro" (4155.)

b. <nariŁɛiŁa>
nari-ɬ-k'i-ɬa
*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 *-ɬi*. 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. <taɛani>
taka-ni
order-POS.VT
'to impute, ascribe sth.'
OT:"imputar, achacar" (3200.)

b. <Łapini>
ɬapi-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. <čoyɛʔni 'ʔay>
čoye**ʔ**-ni ʔay
cut-POS.VT PROG+3sS_{DEP}
'they are bending down (corn stalks)'
OT:"están doblando" (Ch-MQa)

b. <guurunín>
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 degrain'
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 hickup', '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>
p~~i~~pi-ri
full-POS.VT
'to burp'
OT:"eructar" (Ch-F)

c. <süsürre>
s~~i~~si-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-ɕ'iʔ
?-POS.VT
'to twist, spin' (G-RHG)

b. <yuncháchi>
yu-n ča-či
PROG-1sS$_{DEP}$ *L-M:white?-POS.VT
'*I am bleaching'
OT:"colar" (Y-C)

The function of the operator *-ɬi* 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 *ɬi* "con".

(11. 94) a. <guaszaŁi>
waša-ɬi
?-POS.VT
'to dress'
OT:"meter, ponerse el vestido" (2319.)

b. <yʊeguaŁi>
yɨwa-ɬi
?-POS.VT
'to lose'
OT:"perder" (3554.)

(11. 95) a. <ʔuwa-ɬí>
ʔuwa-ɬi
?-POS.VT
'to kill'
OT:"matar" (G-S)

b. <yicualjli>
yikwa-ɬi
?-POS.VT
'to lose'
OT:"perder" (Ch-F)

c. <n'guajli>
n-wa-ɬi
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 *taʔ* '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. <pʊeŁta>
pɨɬ-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. <piszáɛu>
piša-ku
tight-DIR
'to blunt'
OT:"despicar, despuntar" (2890.)

(11. 99) a. mumu-k'u hiʔ
sing-DIR PROG+3sS_{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. <iszaɛa>
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-waɋ'a
CAUS-?
'to spin'
OT:"hilar" (2391.)

e. <yszàpa>
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 peripherically. 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 *ʔerɬeke* (11. 101e), the suffix may also be interpreted as a reflexive or an anticausative marker.[163]

(11. 101)

	a.	b.
	<tuyáquí>	<teeròque>
	tuya-ki	**te:ro-ke**
	scold sb.-AP	kill sb.-AP
	'scold (generally) = litigate, argue'	'kill (generally) = to fish'
	OT:"pleitar" (3363.)	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 *ʔerɬeke* as an inchoative verb (see next § 11.3.2) that derives an intransitive from an adjectival stem, i.e. **ʔerɬe-ke* [*scared/frightened-INCH] 'become scared/frightened'. However, it is not clear whether the stem **ʔerɬe-* does indeed have a nominal/ adjectival function.

c. <araqui>
ʔara-ki
send sth.-AP
'to send (generally) = view, observe'
OT:"mirar" (2080.)

d. <uýszɪɛi>
***ʔuyši-k(')i**
hear sth.-AP
'to hear (generally)'
OT:"oir" (3487.)

e. <a erŁèque>
ʔa-ʔer-ɬe-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. *verše-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 <ɛi> (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 *-ɬa* (§ 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 <ɛi>. 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. <nʊemajaɛiŁa>
nɨma-ha-k'i-ɬa
eat-CAUS-AP-AGT
'(the one) who nourishes = servant'
OT:"sirviente" (4185.)

b. <ɛʊerszaɛiŁa>
k'ɨrša-k'i-ɬa
comb-AP-AGT
'(the one) who combs = hairdresser'
OT:"peinador" (3790.)

(11. 104) a. <suɛuckiɛ>
suk'u-k'i-k'
tie-AP-INSTR
'instrument for tying, knotting = rope?'
OT:"cosa con que se amarra" (4391.)

b. <ɛʊetʊeɛic>
kɨtɨ-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. <pirikíjli>
*piri-k'i-ɬa
see-AP-AGT
'(the one) who sees = the doctor'
OT:"el médico" (Ch-C)

b. <caykil>
kayi-ki-ɬ(a)
sell-AP-AGT
'(the one) who sells = seller, merchant'
OT:"vendedor" (Ch-F)

(11. 106) 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)

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. <lucuquila>
luku-ki-la
find-AP-PAST.ACT
'has met'
OT:"se encontró" (Ch-Z)

b. <muy tz'ana kiya>
muy-ȼ'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. <tiɛiɛŁa>
ti:k'i-k'(i)-ɬa
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. <tuɬúki>
tuɬu-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 *-ɬ* (see § 11.1.2.3) seem to glottalise the velar stop of the inchoative marker.

(11. 112) a. <saraŁɛi>
tawa-ɬ-k'i
*bless?-PART.ACT–INCH
'become blessed'
OT:"bendecir" (3247.)

b. <taguaŁɛi>
sara-ɬ-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 Fernandéz-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>
mɨta-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. <yoŁana>
yoɬa-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. <chèŁna>
čeɬ(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:"espinarse, lastimarse" (3389.)

c. <teŁama>
teɬa-ma
burned-POS.VI
'to flare'
OT:"lamear" (3267.)

d. <Łocama>
ɬoka-ma
boiling-POS.VI
'to boil'
OT:"hervir el agua" (2605.)
[cf. pCh **lok* '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 **woq* 'to boil']

(11. 117)

a. <kɨšma>
*kiɕ'u-ma
change-POS.VI
'to give as present'
OT:"regalar" (G-S)
[cf. pM **k'eš* 'change']

b. <jatixma>
hatiš-ma
sneeze-POS.VI
'to sneeze'
OT:"estornudar" (Ch-C)
[cf. pM **hat'is* ~ **hat'iš*]

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: *ʔoromo* 'to collect, pick up', *ʔušumu* 'smell', *ʔuyumu* 'to hurt (oneself)', *peɬte-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 *-ɬa* 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	-ɬa	
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-wašata
1sS-enter
'I enter'
OT:"yo entro" (1971.)

b. <cà acù>
ka-ʔaku ʔ
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. <cà 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-ʔoromo
1pA-pick up
'we pick up it'
OT:"nosotros recogemos" (909.)

d. <cà sàmu ay>
ka-samu ʔay
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. <anwiríki>
ʔan-wiriki
1sS-speak
'I speak / I am speaking'
OT:"yo estoy hablando" (G-S)

b. <a kagui>
ʔa-k'awi
3sS-cry
'he/she cries'
OT:"llora" (Ch-Z)

c. <ajla muj tiki nec>
ʔaɬa muh-ti(:)ki nek$_S$
tomorrow 1pS-sleep PN:1p
'tomorrow we sleep'
OT:"mañana dormiramos" (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-sawaȼ'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>
ʔan-ʔaku ʔ peʔ
1sS-go FUT
'I will go'
OT:"yo iré" (1666.)

b. <canuca pà pè tiyg…>
ka-nuka paʔ peʔ ti:ʔ-h
2sA-give PFV FUT IO-3s
'you gave (= would give) him/her…'
OT:"si le dieres…" (2038.)

c. <a acù nàŁ pè>
ʔa-ʔaku ʔ na ʔ ɬ pe ʔ
3sS-go IMPFV FUT
'one will have to go'
OT:"haber de ir" (1714.)

d. <cà pùla nàŁ ay>
ka-pula na ʔ ɬ ʔay
2pA-make IMPFV 2PL
'you (pl.) made (it)'
OT:"vosotros hacíais" (403.)

e. <ca yguitzi ma nàŁ>
ka-ʔiwiɕ'i ma(ʔ) na ʔ ɬ
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-paɬta bari
1sA-pay PFV
'I already paid'
OT:"he sido pagado" (Ch-C)

c. <npula pi ní>
n-pula pi niʔ
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. <asʊec muc terò>
ʔasɨk muk-tero:
CONJ 1pS-die
'when we die'
OT:"....cuando nos muramos" (1953.)

b. <szàŁ Łan muc pùla na oracion>
ša ɬ ɬan 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. <szàŁ cangui szàma gracía ayaàc asʊec muc terò>
ša ɬ ka-n wi šama *gracía* 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 aŁa uɛa can confesar>
ka-taʔ peʔ ʔaɬa 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-1sS$_{DEP}$ 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>
naka$_S$ 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 *-ɬa(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>, <maraŁaa>
Ø-ma:ra-ɬa?
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-waʔ
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. <piriŁa>, <piriŁaan>
piri-ɬa:-n
see-PAST.ACT-1sA
'I saw/did see (it)'
OT:"yo vi, he visto" (750.)
"ver (pretérito)" (2880.)

c. <piriguàn>, <piriguaan>
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 *Łan*, vgr.: El verbo *Púla* el primer preterito haze *Pulàn*, el segundo *Pulaguàn*, y el terzero *Púla Łan*. 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 *-ɬa* 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 process[165]. 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 C_2 *š* > *ȼ′* (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.

of past-time reference contrast, one can argue that *-ʔ* is a resultative marker that points to the state resulting from some event or action, while *-wa* indicates an anterior that refers to the event or action itself (see Bybee *et al.* 1994:65).

(12. 14)	a.	<potxa>	b.	<poszágua>
		poɕ'a-ʔ		**poša-wa**
		wash-STAT		wash-PART.PF
		'to be washed		'has/was washed
		= laundry that is ready for washing'		= laundry that has been washed'
		OT:"ropa que está pronta para lavar ..." (4319.)		OT:"ropa lavada" (4324.)

The suffix *-ɬa* 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 provides a comparative overview of the functional contexts of the three suffixes *-ʔ*, *-ɬa* and *-wa* that used in Xinka to mark past-time reference. Although it seems plausible that the tense/aspect markers are etymologically related to the participles/nominalised forms, and maybe also to further derivations, it needs to be stressed that the markers could simply be homonyms of different origins.

Table 12. 2: Functional comparison of markers for past-time reference

	-ʔ	-ɬa	-wa
roots	intransitive, (transitive)	intransitive, transitive	transitive, intransitive
cross-referencing affixes	prefixes	prefixes, suffixes	suffixes
tense	past	past	past
nominaliser/ participle	stative: result of action in progress	active: agentive active participle	perfect / (passive?): product of realised action
further derivations		causative	locative nominalisation
syntactic context	in basic word order	subordinate clause, affirmative and negative declarative clauses	subordinate clause, interrogative clause, left-dislocated adverbials
function	resultative/stative	active past	anterior/perfect

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-kaʔ
break-2sA
'you broke (it)"
OT:"tú rompistes" (587.)

c. <ormo ì>
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(ʔ)
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	**maʔ**
catch-1sA	COND

'I should have caught'
OT:"yo haya cogido" (1122.)

b. <mere cà ayù pè>

mere-kaʔ	**ʔayuʔ**	**peʔ**
break-2sA	AUX	FUT

'you will have broken'
OT:"tú habrás rompido" (605.)

c. <uiszicà paŁ nàŁ qui>

ʔuyši-kaʔ	**paɬ**	**naʔɬ**	**ki**
hear-2sA	PFV	IMPFV	INTENS

'you yourself had heard (it)'
OT:"hubieras oído" (2018.)

d. <pulaí naŁ qui Łic>

pula-y	**na(ʔ)ɬ**	**ki=ɬik**
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.

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. <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 màrà>
ʔan-ma:ra-ʔ
1sS-rest-STAT
'I (am) rested'
OT:"yo descansé" (1483.)

b. <ca guacà>
ka-waka-ʔ
2sS-go-STAT
'you (are) gone = you went'
OT:"tú te fuistes, has ido" (1740.)

c. <ca guasztà>
ka-wašta-ʔ
2sS-enter-STAT
'you entered'
OT:"tú entraste" (1975.)

d. <teerò>
Ø-te:ro-ʔ
3sS-die-STAT
'he (is) dead = he died'
OT:"morirse (pretérito)" (3284.)

e. <isziy>
Ø-ʔiši-ʔ
3sS-live-STAT
'he/it (is) alive'
OT:"estar vivo (pretérito)" (2436.)

f. <Łíɛa>
Ø-ɬi:k'a-ʔ
3sS-descend-STAT
'he descended'
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)

a. na naka ka-ʔaku-ʔ
DET PN:2s 2sS-go-STAT
'you went' (G-SH)

b. Ø-yɨwa-ʔ
3sS-get lost-STAT
'it got lost' (G-RHG)

c. <tu'pʌʔ>
Ø-tupa-ʔ
3sS-stay-STAT
'it/he stayed'
OT:"se quedó" (Ch-MQ)

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)

e. <n'patá>
n-pata-ʔ
1sS-bath-STAT
'I bathed'
OT:"ya se bañó" [sic] (Y-C)

f. <avuajla n'tiki ne>
ʔawaɬa n-ti(:)ki ne
yesterday 1sS-sleep PN:1s
'yesterday I slept'
OT:"ni ayer dormí yo" (Y-C)

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)

a. <teeròquè>
Ø-te:ro-ke-ʔ
3sS-kill-AP-STAT
'he fished'
OT:"pescar (pretérito)" (3288.)

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)

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)

a. <an tá ý>
ʔan-ta:-y(i)-ʔ
1sS-come-LIG-STAT
'I came'
OT:"yo vine, he venido" (1410.)

b. <tá ý>
Ø-ta:-y(i)ʔ
3sS-come-LIG-STAT
'he came'
OT:"aquel vino, ha venido" (1412.)

(12. 24)

a. ʔan-ta:-yi-ʔ paʔ kaʔ
1sS-come-LIG-STAT PFV DIR
'I already came' (G-RHG)

b. hin ka-ta:-yi-ʔ naha ʔ
NEG 2sS-come-LIG-STAT LOC
'you did not come here' (G-SH)

c. <ent tay curruck eperle>
ʔan-t'a:-yi-(ʔ) kuru-k ʔepeɬe
1sS-come-LIG-STAT run-? fear
'I came running (with) fear'
OT:"me vine corriendo por miedo" (Ch-P)

d. <tayí pa naj moch>
Ø-ta:-yi-ʔ pa(ʔ) nah moč
3sS-come-LIG-STAT PFV DET owner
'the owner already came'
OT:"ya vino el patrón" (Y-C)

In the third person plural, when followed by the plural *ki=ɬik*, 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 Łic>
Ø-ma:ra ki=ɬik
3sS-rest INTENS=3PL
'they (themselves) rested'
OT:"aquellos descansaron, han descansado" (1492.)

b. <guaŁá qui Łic>
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. <iguí>
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. <'mɨʔmu>
mɨʔmu
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. <Łaaràn>
ɬa:ra:-n
ascend-1sS$_{DEP}$
'(that) I ascended'
OT:"subir (pretérito)" (2586.)

b. <iszpaan>
ʔišpa:-n
leave-1sS$_{DEP}$
'(that) I left'
OT:"salir de un lugar (pret.)" (2426.)

c. <caguiɛin>
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 màrà mà>
ka-ma:ra-ʔ **maʔ**
2sS-rest-STAT COND
'you would have rested'
OT:"tú hayas descansado" (1530.)

b. <màrà 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(ʔ)** **ʔayuʔ**
3sS-come-STAT PFV AUX
'he will/would have come'
OT:"aquel habrá venido" (1430.)

d. <muc màrà mà ayù>
muk-ma:ra-ʔ **maʔ** **ʔayuʔ**
1pS-rest-STAT COND AUX
'we would have rested'
OT:"nosotros hubieramos … descansado" (1538.)

e. <capa an màrà paŁ nàŁ>
ka=pa **ʔan-ma:ra-ʔ** **paɬ** **naʔɬ**
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. <ʔuuɬuʔ Hwan ša ʔuy>
Ø-ʔu:ɬu-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-ɬiki-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-ʔ hutu
(3sS-)weigh-STAT tree
'the tree weighted ~ the tree is heavy' (G-JAP)

b. (Ø-)taɬa-ʔ piši̱ʔ
(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-ɕ'amu-ʔ nin
3sA-sting-STAT PN:1s
'he bit me' (G-SH)

b. <mu'yoʔ>
Ø-muyo-ʔ
3sS-help-STAT
'he helped him'
OT:"le ayudó" (Ch-MQ)

c. <man suaká pelu>
man Ø-suka-ʔ 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. <aŁparaquíguà merè>
ʔaɬ-para **kiwa-ʔ** **mere-ʔ**
PREP.CAUS-? INTENS/REFL-? break-STAT
'because it itself is broken'
OT:"por romper" (651.)

b. <pirii>
pi:ri-ʔ
see-STAT
'to be seen'
OT:"a ver" (818.)

(12. 35) a. Ø-wišu-ʔ
3sS-beat-STAT
'he is beaten' (G-JS)

b. man=ta naʔuʔ senyora Ø-ʔuwi-ʔ
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-ʔ ša mak'uʔ
DET PN:1s leave-STAT PREP home
'I left from the house' (G-SH)

b. <nen japá san türu>
nen hapa-ʔ san ti̱ri̱
PN:1s pass-STAT PREP river
'(it was) me (who) passed over (the/a) river'
OT:"paso un río" (Y-C)

(12. 37) a. ¢'imi-ʔ 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>
¢'ahma-ʔ ki-wa-n ti(:ʔ) rikayi-ɬi
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-ʔ paʔaʔ
die-STAT PFV
'he is already/still dead' (G-JS), (G-SH)

b. si ʔuka-ʔ paʔaʔ
Sp:if have-STAT PFV
'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-¢'uʔma-ʔ
yesterday 3sS-water-STAT
'yesterday he watered (his field)' (G-RHG)

b. ʔahmukan puɬi-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 ¢'imi-ʔ
FOC DEM do-3sA extinguish-STAT
'he extinguished it' (G-SH)

b. ʔuke-y ¢'iri-ʔ mutíʔ 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-ʔ **pata-wa:-h**
make-STAT *accomplish-ANT-3sP
'to have been made'
OT:"haber sido hecho" (558.)

b. <pulà pataguàn>
pula-ʔ **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 *-ʔ* precedes an unmarked intransitive lexical verb (b).

(12. 43) a. <hin paataʔ wašat'an>
hin pa:ta-ʔ 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-ʔ 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 *-ɬa(ʔ)*. In syntactic context, the past suffix *-ɬa(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 *-ɬa(ʔ)* is spelled in the ALS as <-Łaa> or <-Łá> (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 *-ɬa* 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 *ʔuɬa* 'want' (see § 10.1.3.5). The optative connotation is suggested by certain translation contexts of transitive verbs marked with *-ɬa* 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 *-ɬa* 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 *-ɬa(ʔ)* with two- and three-syllabic intransitive (12. 44) and transitive verbs. While intransitive motion verbs only take the suffix *-ɬa* (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. <acuŁa>
ʔaku:-ɬa
go-PAST.ACT
'went'
OT:"ir (pretérito)" (2051.)

b. <tiɛiŁá>
tik'i-ɬaʔ
sleep-PAST.ACT
'slept'
OT:"dormir (pretérito)" (3293.)

c. <teroqueŁá>
tero-ke-ɬaʔ
die/kill-AP-PAST.ACT
'fished'
OT:"pescar (pretérito)" (3289.)

Transitive stems in *-ɬa* 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. <nʊemaŁaan>
nɬma-ɬa:-n
eat-PAST.ACT-1sA
'I ate'
OT:"comer (pretérito)" (2769.)

b. <iszapiŁán>
ʔišapi-ɬa:-n
take out-PAST.ACT-1sA
'I took out'
OT:"sacar, quitar (pretérito)" (2432.)

c. <ŁicayaŁaan>
ɬika-ya-ɬa:-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 *-ɬa* 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. <cunuŁá>
kunu-ɬaʔ
buy-PAST.ACT
'(he) bought'
OT:"comprar (pretérito)" (2180.)

b. <piriŁa>
piri-ɬa
see-PAST.ACT
'[I] saw'
OT:"yo vi, he visto" (750.)

(12. 47)

a. <araquiŁan>
ʔara-ki-ɬa-n
send-AP-PAST.ACT-1sS_{DEP}
'has generally sent = looked'
OT:"mirar (pretérito)" (2082.)

b. <taguaŁɛiŁan>
tawa-ɬ-k'i-ɬa-n
*bless?-PART.ACT-INCH-PAST.ACT-1sS_{DEP}
'blessed'
OT:"bendecir (pretérito)" (3249.)

In the ALS the intransitive roots *ʔaku*ʔ 'go', *ma:ra* 'rest', *hama* 'sin' and *wa* 'go away' are attested with the past suffix *-ɬa* and cross-referencing prefixes that mark

person agreement. The verbs *ʔaku ʔ* and *ma:ra* are given with distinct marking in the third person. While the motion verb *ʔaku ʔ* takes the person-marking prefix *ʔa-*, *ma:ra* has zero-marking when inflected with the past marker *-ɬa*. It is striking that the motion verbs *ʔaku ʔ*, *ku* and *wa* exhibit a different stress pattern than other intransitive verbs. Motion verbs simply employ the past suffix *-ɬa* 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 gùŁa>
ʔan-ku-ɬa
1sS-go-PAST.ACT
'I went'
OT:"yo fui, he ido" (1795.)

b. <anguaŁa>
ʔan-wa-ɬa
1sS-go-PAST.ACT
'I left/went'
OT:"yo me fui, me he ido" (1739.)

c. <a acùŁa nàŁ>
ʔa-ʔaku:-ɬa **naʔɬ**
3sS-walk-PAST.ACT IMPFV
'he would have gone'
OT:"que hubiera de haber ido" (1715.)

(12. 49)

a. <ca jama Łà>
ka-hama-ɬaʔ
2sS-sin-PAST.ACT
'you sinned'
OT:"pecasteis" (2035.)

b. <màra Łà>
Ø-ma:ra-ɬaʔ
3sS-rest-PAST.ACT
'he rested'
OT:"aquel descansó" (1488.)

c. <muc màra Łà>
muk-ma:ra-ɬaʔ
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 *-ɬa* or *-la* (12. 50), while other intransitive roots and stems add a glottal stop, i.e. *-ɬaʔ* (12. 51). All attested cases of the suffix *-ɬa(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-ɬa ʔipaɬa
1sS-go-PAST.ACT bath
'I went to bath' (G-RHG)

b. Ø-wa-ɬa
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:"fuí 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-ɬaʔ
NUM:'2'=EXO-IRR 1sS-sleep-PAST.ACT
'two days ago I slept' (G-SH)

b. Ø-ti:ki-ɬaʔ šurumu man
3sS-sleep-PAST.ACT boy DEM
'that boy slept' (G-SH)

c. <ipalajlá vari>
Ø-ʔipala-ɬaʔ 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 *-ɬa*; 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 *-ɬa* 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 *-ɬa* taking cross-referencing prefixes to mark person agreement.

(12. 53) ka-kɨwa-ɬaʔ 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 *-ɬa* 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 *-ɬa* (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-ɬaʔ
DET PN:2s eat-PAST.ACT
'you ate = *it was you who ate' (G-SH)

b. horo-ɬaʔ 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-ɬaʔ
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 naɬki ruka-ɬaʔ 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-ɬaʔ ti:ʔ-ɬi
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 éllos" (Y-C)

(12. 55) a. na nin ʔaku:-ɬa ʔipaʔɬa
DET PN:1s go-PAST.ACT bath
'I went to bath = *it was me who went to bath' (G-SH)

b. <nac tikilá ahujlacan>
nak ti(:)ki-laʔ ʔawɬakan
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 *-ɬa*. 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-ɬaʔ naka
sleep-PAST.ACT PN:2s
'you slept' (G-SH)

b. ʔahmukan ʔaku:-ɬa 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 *-ɬa* 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 *-ɬa* 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 púlaŁàn>
naka ki pula-ɬa-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 Łàn>
ʔašin nen šakša-ɬa-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 *-ɬa*. 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) *-ɬa* occurs in a context where it does not seem to indicate past-time reference.

(12. 58) a. numa-ɬa-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 nɨma-ɬa-n naka
NEG AUX.FUT eat-?-SUBJ PN:2s
'(that) you will not eat' (G-JAP)

ETYMOLOGY/FUNCTION: The precise function of the marker *-ɬa* is not well understood.[167] In the majority of contexts the morpheme is attested on predicates that indicate past-time reference. Predicates with *-ɬa* 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-ɬaʔ
NUM:'2'=EXO-IRR 1sS-sleep-PAST.ACT
'two days ago I slept' (G-SH)

b. <najlij na ma tikijlá ahujlacan>
naɬi na ma ti(:)ki-ɬaʔ ʔawaɬakan
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 *-ɬa* can be followed by the temporal adverbial *paʔaʔ*, which again underlines the function of the morpheme as a past marker. In all given examples where *paʔaʔ* follows, the suffix *-ɬa* is not marked with *-ʔ* in final position (12. 60).

(12. 60) a. nɨma-ɬa paʔaʔ šurumu
eat-PAST.ACT PFV young man
'the young man already ate' (G-JAP)

b. <guikaslabar>
wika-ɬa bar
throw-PAST.ACT PFV
'he already threw (it)'
OT:"tirado, tiro" (Ch-F)

Verbal stems with the past marker *-ɬa* 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 *-ɬa* and the derivational suffix for agent nominalisation are separate morphemes.

(12. 61) <acùŁaŁ>
ʔaku-ɬa-ɬ
go-PAST.ACT-AGT
'(the one) who went'
OT:"el que iba" (1722.)

The fact that the suffix *-ɬa* occurs with causative verbs derived by *-ɬa* 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.

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[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 *-ɬaʔ*, 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 *-ɬa(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. <nariŁaŁaan>
nari-ɬa-ɬa-n
*know-CAUS-PAST.ACT-1sA
'taught'
OT:"enseñar (pretérito)" (2735.)

b. <tutujaŁan>
tutu-ha-ɬa-n
suck-CAUS-PAST.ACT-1sA
'breastfed'
OT:"dar de mamar (pretérito)" (3353.)

In the comparative data we find a few attested cases of intransitive lexical verbs with *-ɬa* in intransitive progressive and future constructions. Intransitive progressives with *-ɬa* are only attested in X_G; the construction expresses a past progressive.

(12. 63) a. na? ʔaku:-ɬa hi? ʔipaʔɬaʔ
PN:3s walk-PAST. ACT PROG+3sS_{DEP} bath
'he was going to bath' (G-SH)

b. ka-ti:ki-ɬaʔ ʔay
2pS-sleep-PAST.ACT PROG+3s
'you (pl.) were sleeping' (G-RHG)

Lexical verbs marked with *-ɬa* are also attested in future constructions with the third person form of the grammaticalised future auxiliary *kuy* (see § 12.4.1). In these contexts, *-ɬa* may mark either an active participle (§ 11.1.2.3) or an optative mood, i.e. *nɨma-ɬaʔ* [eat-OPT] 'wish to eat'.

(12. 64) a. kuy nɨma-ɬaʔ nin
AUX.FUT eat-PART.ACT/OPT? PN:1s
'I am going to eat' (G-SH)

b. kuy ʔipla-ɬaʔ 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 *-ɬa* 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 *-ɬa*.

(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 *-ɬa* 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 *-ɬa* 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 Łàn. >
ʔa ***señor*** **naka** **ki** **pula-ɬa-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 Łàn>
ʔašin **nen** **šakša-ɬa-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 *-ɬa*. 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-ɬa ša krawa
NEG (3sS-)go-PAST.ACT PREP woods
'he did not go to the woods' (G-RHG)

b. hin ka-nɬʔma-ɬaʔ man ʔaɬi
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-ɬaʔ
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-laʔ
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 *-ɬa* 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-ɬaʔ
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-ɬaʔ
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 *waɬa* '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. <guaŁa>
wa-ɬa
go-PAST.ACT
'to go away'
OT:"irse, anómalo" (1725.)

b. <caguaŁa>
ka-wa-ɬa
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. <guacà>
wa-kaʔ
go-EXO
'go'
OT:"irse; anómalo" (1724.)

b. <an guacà nàŁ>
ʔan-wa-kaʔ **naʔɬ**
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 *-ɬa* the transitive roots/stems with the anterior-suffix *-wa* are indicated with the first person singular cross-referencing suffix *-n*.

(12. 74)

a. <nucaguaan>
nuka-wa:-n
give-ANT-1sA
'I have given'
OT:"dar (pretérito)" (2758.)

b. <ormoguaan>
ʔormo-wa:-n
pick up-ANT-1sA
'I have picked up'
OT:"recoger, pepenar (pret.)" (2781.)

c. <nʊemajaguaan>
nɨma-ha-wa:-n
eat-CAUS-ANT-1sA
'I have fed/given to eat'
OT:"dar de comer (pretérito)" (2775.)

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)

a. <uŁuguaan>
ʔuɬu-wa:-n
fall-ANT-1sS_{DEP}
'(that) I have fallen'
OT:"caer (pretérito)" (3435.)

b. <posnaguaan>
posna-wa:-n
jump-ANT-1sS_{DEP}
'(that) I have jumped'
OT:"brincar, saltar (pretérito)" (2918.)

c. <araquiguan>
ʔara-ki-wa:-n
send-AP-ANT-1sS_{DEP}
'(that) I have looked/observed'
OT:"mirar (pretérito)" (2083.)

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 tiʔíɬ>

na	ʔulsih	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) <waraʔ'wey>
(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. <sàmuguà>
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-waʔ
rest-ANT
'rested, has rested'
OT:"haber descansado" (1548.)

(12. 83) a. ʔišp'a-waʔ
pass-ANT
'he left' (G-SH)

b. tupa-waʔ ʔen=ču=naʔu-n
stay-ANT 1s=DIM=son-1sP
'my little son stayed' (G-PE)

c. <kunuwáʔ>
kunu-waʔ
buy-ANT
'he has bought'
OT:"obsequió" (G-S)

(12. 84) a. <ʔiš'taʔwΛ>
ʔištaʔ-wa
?-ANT
'(he has) emptied'
OT:"lo vacié" (Ch-MQa)

b. <tereré guá uy>
terereʔ-waʔ ʔuy
?-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. <guasztaguasʊema>
wašta-wa -sɬma
enter-ANT/LOC -night
'(where) the night has entered = nightfall'

OT:"la entrada de la noche" (3851.)

b. <iszpaguapari>
ʔišpa-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. <ʔiši'wa>
ʔiši-waʔ
*become-ANT
'it has become'
OT:"ya está hecho" (Ch-MQa)

b. <ʔišiwa ʔoh'tɛ>
ʔiši-wa ʔohteʔ
*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 ʔaɬi 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 *-ɬa* or *-ɬ*. It needs to be noted that Maldonado de Matos indicates agentives marked with *-ɬ* with an accent on the second root vowel (V_2), 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. <jamaguáŁa>
hama-wa-ɬa
sin-ANT-AGT
'who has sinned = sinner'
OT:"el pecador" (20.)

b. <poszáguaŁ>
pošaʔ-wa-ɬ
wash-ANT-PART.ACT/AGT
'what/who has washed = soap rest'
OT:"la sobra del jabón" (4324.)

c. <jóɛ́góuàŁ>
ho:k'oʔ-wa-ɬ
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. <hokowáɬ>
hoko-wa-ɬ
break-ANT-PART.ACT/AGT
'what/who has broken = corn husk'
OT:"hoja de maíz, totomostle" (G-S)

c. <irikí hual>
ʔiri-ki-wa-ɬ
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 *ʔasɨk* '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. <asʊec pulaguà nà sermon>

ʔasɨk	**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. <asʊèc imaguà na miszà>

ʔasɨk	**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. <asʊec uɬù pataguà nana macu tiusz>

ʔasɨk	**ʔuɬu-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	ɬiki-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 anní?wa>

na	tiši	huraki	?ima-wa-y	[hin	?an-niwa]$_{O\text{-}COM}$
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 *-?*.

(12. 95)

a.

naka	tupa-wa
PN:2s	leave/let-ANT

'you left/let it' (G-RHG)

b.

piri-wa	naka$_O$	na	nin$_A$
see-ANT	PN:2s	DET	PN:1s

'(because)[169] I saw you' (G-JS)

c. <piri va ni (bien)>

piri-wa	ni
see-ANT	PN:1s

'I saw/see'
OT:"veo muy bien" (Ch-C)

d. <imagua ay quí na'c>

?ima-wa	?ay	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	?en=ču	maku-m
stay-ANT	PN:2s	1sP=DIM	house-1sP

'(that) you stay in my small house' (G-PE)

c.

na	nin	hin	?apata-wa	ya?
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 múc jeregue>
ɬamu kw=ay pula-wa na mɨk-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 puɬa-wa at'ul nan
go=PROG+? 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 *-ɬa*.

(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 szàc szà guacàn 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 aszʊe?>
kaʔ **=peʔ** **ta-waʔ** **na** **ʔašɬ**
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 ʔaɬi 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=ahɨʔ
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 tinucaj 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-ɬ-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 minigquiguay nac... >
ki tal *mini-ɬ-ki-wa-y nak
Sp:how clear-PART.ACT-INCH-ANT-2sfS$_{DEP}$ PN:2s
'how have you woken up?'
OT:"¿qué tal amaneciste?" (Ch-JC)

c. <huanin u huitz'ukij huacá>
wanin *ti:ʔ wiɕ'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 ʔišpawah>
hin piri-n ka: ʔišpa-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 šaɬtepet>
han hiʔ ta-wa-ka š-aɬtepet
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 ʔišpawah taata-ka>
ka: ʔišpa-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 ʔuɬuwah Hwan>
ša ʔuy ʔuɬu-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 ʔišpawah Hwan>
ša pwerta ʔišpa-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. <ʔaɬ kawayu tawanʔ>
ʔaɬ 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. ʔahmukan hapa-wa-n kaɬ ʔayaɬa ʔim-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>
ʔala=wak kw=ay ʔišpa-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. <ɛʊètʊè pataguaan>
k'ɬ:tɬ-ʔ **pata-wa-n**
measure-STAT *accomplish-ANT-1sA
'I was measured'
OT:"yo fui, he sido medido" (1329.)

b. <pulà pataguacàn>
pula-ʔ **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-ʔ **pe?** **ʔayu?** **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-ʔ **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 *-ʔ*, 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-ʔ **pata-waʔ**
catch-STAT *accomplish-ANT
'has been caught'
OT:"haber sido cogido" (1224.)

b. <pulà mà patagùa>
pula-ʔ **maʔ** **pata-waʔ**
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. <ɛʊètʊe pataguaag>
kʼɨ:tɨ **pata-wa-h**
measure *accomplish-ANT-3sP
'have been measured'
OT:"haber sido medido" (1388.)

b. <maŁca oromo ma pataguag … tu muqui na jamaca>
maɬka **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. <guaszàta ayaan>
wašata **ʔaya:-n**
VI:enter PROG.VI-1sS_{DEP}
'I am entering'
OT:"estoy entrando" (1968.)

b. <... pùla uɛan 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 *ʔɪka* 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. <wari'ʔay>
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-RHG)

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>
ʔišapa 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-1sS$_{DEP}$
'I am sleeping' (G-RHG)

b. ʔišapa hiʔ
leave PROG+3sS$_{DEP}$
'he is leaving' (G-SH)

c. ʔiši-ki=ya-n
*VT:hear-AP=PROG-1sS$_{DEP}$
'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. <yeguá ei pari>
yɨwa ʔey pari
descend PROG+3sS$_{DEP}$ sun
'the sun is descending'
OT:"se está poniendo el sol" (Ch-F)

b. <ʔuya ʔay nah man>
ʔuya ʔay nah man
laugh PROG+3sS$_{DEP}$ PN:3s DEM
'he is laughing'
OT:"él se está riendo" (Y-C)

(12. 117) <huca hig aljurai>
ʔuka hiʔ ʔal-huray
have PROG+3sS$_{DEP}$ 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>
*kɨni-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 waya?
NEG go=PROG-2sS$_{DEP}$ PN:2s PREP milpa
'you are not going to the milpa' (G-JAP)

b. hin ku=ya-kan naka ša ʔuy
NEG go=PROG-2sA$_{DEP}$ 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-1sS$_{DEP}$
'I am eating' (G-RHG)

b. k'awu hiʔ
VT:cook PROG+3sS$_{DEP}$
'it/he is cooking' (G-RHG)

c. <poʔɕ̧a hiʔ>
poʔɕ̧'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 tamaɕ̧'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) <ɬandi ndi pulayán tiʔk>
ɬanti 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>
ʔiwiɕ̧'i=ya-n
hear=PROG-1s
'I am hearing it'
OT:"lo estoy oyendo" (Ch-C)

b. <išak'a ʔay>
ʔišak'a ʔay
drink PROG+3s
'he is drinking'
OT:"anda tomando" (Ch-MQb)

c. <pirillin val colunas>
piri=yin *baɬ *colunas*
see=PROG+3s PFV Sp:columns
'he is already seeing columns'
OT:"viendo ya las columnas" (Ch-Z)

d. <n'di pulayin pere onejle>
nti pula=yin pere ʔone-ɬe
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 $pe:lu?_A$
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 hɨka
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 paʔaɬ
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 naɬik =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. <tɛro 'nu?mani yam'ba^{h}>
te:ro nu?ma ni =ya-n paɬ
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-maɬ=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 hiʔ
sleep do/have PROG+3sS$_{DEP}$
'he is doing/having sleep = he is sleeping' (G-JS)

b. na nin kɨnɨ=ka heʔ
DET PN:1s content=do/have PROG+3sS$_{DEP}$
'(it is) me (who) is being content' (G-SH)

(12. 134) niwa=ka-kan heʔ
wish/ask=do/have-2sA$_{DEP}$ PROG+3sS$_{DEP}$
'you are doing/having wish = you are wishing' (G-SH)

GRAMMATICALISATION OF AUXILIARY HIʔ: There are a few rare examples in X_G which show that the third person singular progressive auxiliary *hiʔ* 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 hiʔ
stand-1sS$_{DEP}$ PROG
'I am standing' (G-JAP)

b. ʔan-pula nin$_{S/A}$ heʔ
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 *hiʔ* 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 hiʔ
bath-STAT PROG+3sS$_{DEP}$
'he is bathing' (G-JS)

b. tiːkʼi-ʔ hiʔ
sleep-STAT PROG+3sS$_{DEP}$
'he is sleeping' (G-SH)

c. kɨʔwa-ʔ hiʔ
bend corn-STAT PROG+3sS$_{DEP}$
'he is bending corn' (G-SH)

In X_G intransitive verb forms with the active past suffix *-ɬa* are attested as lexical verbs in progressive constructions. This form seems to be indicating a past progressive for intransitive verbs.

(12. 137) naʔ ʔaku:-ɬa hiʔ ʔipaʔɬaʔ
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 *ʔaya* again functions as a copula.

(12. 138)
hurak	puɬa-h	maɬik	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 *ʔuka* 'do, have' (§ 10.1.3.2) functions as an auxiliary verb that marks progressive aspect on transitive verbs. Maldonado de Matos indicates the verb <uɛa> [ʔuka] with the literal meaning "estar executando 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 *ʔuka-* 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 *naʔɬ* (§ 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 *ʔuka*, not to the dependent lexical verb.

(12. 139) a. <asʊec naŁ pùla uɛan na an oracion>

ʔasɨk	**na(ʔ)ɬ**	**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 nàŁ u ɛa can naca na misza>

ʔiwiɕ'i	**naʔɬ**	**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 *ʔuka* are attested in X_G, X_{Ch} and $X_{Y.}$ In the majority of examples from X_G the auxiliary *ʔuka* has become cliticised to the lexical verb. Also in X_G, the third person form of the progressive auxiliary *ʔukay* varies with *ʔukey*. It is not clear whether the two forms indicate any functional difference.

(12. 140) a.
na	nin	pula=ka-n	waruʔ$_O$
DET	PN:1s	make=PROG-1sA	net

'I am making a net' (G-JAP)

b.
šuka=ka-n
eat=PROG-1sA

'I am/was eating (it)' (G-RHG)

c.
niwa=ka-kan	hina	nin$_O$
ask=PROG-2sA_{DEP}	PREP	PN:1s

'(what) are you asking me (for)?' (G-SH)

c.
šuka=ka-kan	naka$_{S/A}$
eat=PROG-2sA_{DEP}	PN:2s

'you are eating' (G-SH)

e.
suʔma=k'a-y
water=PROG-3sA

'he/she is watering (the field)' (G-RHG)

f.
k'aʔu=k'e-y	šinak$_O$
cook=PROG-3sA	beans

'(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 kacan 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 occurs 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 tíʔla ša šankúko>
ku=ya-n kaya=ka-n tiʔla ša šan-kuko
go=PROG.VI-1sS$_{DEP}$ 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. ʔaɬa 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-ʔ ʔuka-y naʔ$_{S/A}$
sweep-STAT PROG-3sA DET/PN:3s
'he is sweeping' (G-JS)

b. hono-ʔ 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-ʔ 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'iyan>
ʔiwiȼ'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>
naɬik 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>
poȼ'=ya-kan *mɨk-*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 Pivaral-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 tambié

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-1sS_{DEP}]	=	ku=yan	'I am going to'
2s	*(ʔa)ku	+ ʔaya-ka	[go + be-2sS_{DEP}]	=	ku=yaka	'you are going to'
3s	*(ʔa)ku	+ ʔahi	[go + be+3sS_{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 Guathemala>
ʔakuʔ **ʔaya:-n** ***Guatemala***
go be/PROG-1sS_{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 ¢'ehe
go=PFV=PROG-1sS_{DEP} TOPN
'I am already going to Chiquimulilla' (G-RHG)

(12. 158) a. ku=ya-n ša krawa
go=PROG-1sS_{DEP} PREP woods
'I am going (to go) into the woods' (G-RHG)

b. hin ku=ya-ka naka ša wayáʔ
NEG go=PROG-2sS_{DEP} PN:2s PREP milpa
'you are not going (to go) to the milpa' (G-JAP)

c. <cuyá rhatálti>
ku=ya-ʔ ra taɬti
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. ʔaɬa peʔ ku=ya-n ša poɕ'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
go=PROG-1sS$_{DEP}$ PFV
'I am already going' (G-SH), (G-JAP)

b. <cuyá bar>
ku=ya-ʔ bar
go=PROG-STATPFV
'I am already going'
OT:"ya me voy" (Ch-JC)

(12. 163) a. ku=pa=ya-n paʔaɬ
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 *ʔin* (§ 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.

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[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_{DEP} 1sS-arrive/go] "andaré") and 'arrive, come' in all others (e.g. <tan> *ta-n* [arrive/come-1sS_{DEP}] "yo vengo"). However, in both contexts, 'arrive' would seem to be the basic meaning of the verb.

(12. 164) a. <kuyán anwiríki>
ku=ya-n ʔan-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. <nanín kuyán pulán pokóko ki hiʔ>

na	nin	ku=ya-n	pula-n	pokoko	ki	hiʔ
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 hiʔ 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 tíʔla>
ku=ya-n kaya=ka-n tiʔla$_O$
go=PROG-1sS$_{DEP}$ sell=PROG-1sA salt
'I am going to be selling salt'
OT:"venderé sal ..." (G-S)

(12. 169) ku=y ʔuka 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-1sS$_{DEP}$ sleep PN:1s PFV
'I am already going to sleep' (G-JAP)

b. ku=ya-kaʔ lawaro hina nin
go=PROG-2sS$_{DEP}$ dance PREP:with PN:1s
'you are going to dance with me' (G-SH)

c. <kuy ta>
ku=y ta
go=PROG+3sS$_{DEP}$ come
'it/he will come'
OT:"andará" (G-S)

d. ku=y ʔuɬu ʔuy
go=PROG+3sS$_{DEP}$ fall water
'water/rain will fall' (G-PE)

(12. 171) a. <cuyan guarrata>
ku=ya-n warata
go=PROG-1sS$_{DEP}$ enter
'I am going to enter'
OT:"voy a entrar" (Ch-P)

b. <najlic cuyaca tiki ray>
naɬik ku=ya-ka ti(:)ki ray
PN:2p go=PROG-2sS$_{DEP}$ sleep 2PL?
'you (pl.) are going to sleep'
OT:"vosotros dormís" (Ch-C)

c. <cway acuc'>
kw=ay ʔakuk(i)
go=PROG+3sS$_{DEP}$ walk
'he is going to walk'

OT:"to walk" (Ch-MA)

d. <cuay ulú na huy>
kw=ay ʔuɬu-ʔ na ʔuy
go=PROG+3sS$_{DEP}$ 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 maɬik* '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 maɬik
go=PROG-1sS$_{DEP}$ bring firewood
'I am going to bring firewood' (G-RHG)

b. <acuyán-ruck>
ʔaku=ya-n ruk'
go=PROG-1sS$_{DEP}$ 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-1sS$_{DEP}$ 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 ɬawaru
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 puɬiki ʔaɬa 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 ɬaraw 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 = *?(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 = *?(who) is going to work is you' (G-JAP)

c. ne:ɬeke ku=y sawaɋ'a nin
PN:1p go=PROG+3sS$_{DEP}$ sow PN:1s
'we will sow = '?(it is) us (who) is going to sow' (G-SH)

d. <cuay, numa nác>
kw=ay numa nak
go=PROG+3sS$_{DEP}$ eat PN:2s
'you are going to eat =*?(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 = *?(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
LOC go=PROG-1sS$_{DEP}$ die-STAT
'here I am going to be dead' (G-SH)

b. ku=ya-n hono-ʔ
go=PROG-1sS$_{DEP}$ get drunk-STAT
'I am going to be drunk' (G-RHG)

c. ku=y ɬara-ʔ hutuʔ
go=PROG+3sS$_{DEP}$ ascend-STAT tree
'he is going to climb the tree' (G-SH)

d. <kuyáka yiwá>
ku=ya-ka yiwa-ʔ
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'iʔɕ'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. ʔaɬa peʔ kuy poko-n hiši ʔ
tomorrow CENT go=PROG+3sS$_{DEP}$ break-1sA stone
'tomorrow I will break stone' (G-SH)

b. ku=y wišu-y nak$_O$
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 maɬe
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 taɬma
go=PROG+3sS$_{DEP}$ make-1sA path/road
'I will make the path/road'
OT:"voy a hacer el camino" (Ch-C)

c. <kway tɛɬmay naʔ u'ray>
kw=ay teɬma-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 paʔaʔ
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 paʔaʔ
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 ʔu¢'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 ɬɨpɨ-n
go=PROG-STAT carry-1sA
'I am going to carry'
OT:"cargar" (Ch-F)

b. <cuyá turacá mura>
ku=ya-ʔ tura-kaʔ 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 *ʔɨka* 'do, put' it can become cliticised to the future auxiliary: *ku* + *ʔaya* + *ʔɨka* > *ku=ya=ka-* = 'going to do'. This form is only attested in X_G.

(12. 191) a. ʔaɬa peʔ ku=y ʔišpa-n ku=ya=ka-n wayaʔ
ADV CENT go=PROG+3sSDEP 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 nin$_S$
leave-1sA PN:1s
'I am going to leave (it)' (G-SH)

b. hanta ka tura-kaʔ naka š-aɬtepet
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 *=ɬa* (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 tanɕi-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 wašti-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 puɬa-wa ʔatul nan ahaɬ
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 *-ɬa*: There are a few examples in X_G where the lexical verb in a future construction takes the suffix or clitic *-ɬa*, 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=ɬaʔ 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 nɨma=ɬa-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)ɬa* '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 ʔawaɬa ku=la-y
?-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 anwiríki>
ʔan-ko ʔan-wiriki
1sS-FUT 1sS-talk
'I will talk'
OT:"platicaré" (G-S)

b. <ko wiríki>
Ø-ko Ø-wiriki
3sS-FUT 3sS-talk
'he will talk'
OT:"platicará" (G-S)

c. <ko-ɬík wiriki-ɬík>
Ø-ko ɬik Ø-wiriki ɬik
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. neɬa ku ʔ 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 naɬik$_O$ 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. neɬa 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 na'ʔuy>
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-ɬa
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-ɬa 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 ɬina nay
1sS-go PREP:with PN:2s
'I go with you'
OT:"voy con ustedes" (Y-C)

Here *ko* always carries the inflectional information while the following main verb is unmarked.

(12. 211) a. <nco ixkin>
n-ko ʔiški-n
1sS-go/FUT loosen-SUBJ
'I go to loosen it = I will loosen it'
OT:"anda a desatar" (Y-C)

b. <n'co pata>
n-ko pata
1sS-go/FUT bath
'I go to bath = I will bath'
OT:"voy a bañarme" (Y-C)

12.5 TAM-adverbials

The predicate can be accompanied by adverbials that express temporal, aspectual and modal categories that are realised independently of the predicate's tense/aspect categories. Maldonado de Matos uses these adverbials, which he refers to as 'verbal particles' (*partículas verbales*), to create the different *tempus*-categories of the Latin model of grammar. Some of these adverbial combinations are confirmed by the comparative data, while the majority are exclusively attested in the ALS and are possibly not representative patterns of the language.

This section discusses only adverbials that are relevant to the tense/aspect-system; other adverbial forms are treated in § 13.6. The TAM-adverbials described in the following sections share certain morphosyntactic properties in that they seem to occur in the same slots, following person-marked verbs and stative participles, while always preceding auxiliary verbs. All TAM-adverbials are monosyllabic and appear to have arisen from deictic roots (including diffused forms), which seems to bear sense given that these adverbials are used to mark temporal deixis. Adverbial forms end in either *-ʔ* or *-ɬ* (or *-h*); the exact function of these suffixes is not understood.

Table 12. 4: TAM-adverbials in the ALS

FORM		GLOSS	FUNCTION	SOURCE
<pè>	peʔ, *peʔh	deixis = 'come' obligation = 'must' future = 'will'	future/deontic?	centric directional *peʔ*
<pà>, <paŁ>	paʔ, paɬ	'already', 'yet' 'still'	perfective/ completive	?
<nàŁ>	naʔɬ	past-time reference unreal events	imperfective/ durative?	demonstr. *naʔ* 'this'
<mà>	maʔ(ɬ)	'if'	conditional	demonstr. *ma(n)* 'that'
<acaŁ>	[ʔakaɬ	'yet', 'until'	?	exocentric directional *kaʔ*[175]

Not all TAM-adverbials co-occur with all types of predicates. While the perfective adverbial *paʔ/paɬ* is attested with all types of predicates but subordinate predicates marked with *-wa* (§ 12.2.3), the use of the other categories is more restricted. The future/obligation adverbial *peʔ* occurs regularly with nonpast/imperfective and imperative predicates but not with predicates that indicate

[175] This adverbial falls structurally into the group of TAM-adverbials which is why it is included in this table. Contextually, however, the form functions as a modal adverb and does not mark any tense/aspect categories which is why it is treated in § 13.6).

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 *naʔɬ* 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. -ɬa	Anterior -wa	Imperative
peʔ	+	+	-	-	+
paʔ / paɬ	+	+	+	-	+
naʔɬ	+	+	-	-	-
maʔ(ɬ)	+	+	-	-	-

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 not 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 *naʔɬ* (§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
<pè>	peʔ	[FUT]	futuro imperfecto
<ayù pè>	ʔayuʔ peʔ	[AUX + FUT]	futuro perfecto
<pà pè>	paʔ peʔ	[PFV + FUT]	futuro subjuntivo
<naŁ pè>	naʔɬ peʔ	[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 *-ɬ* 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 munariŁa pè...>
nana ***maestro*** **mu-nariɬa** **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 piuí>
raprik'i pi *niʔ
degrain FUT PN:1s
'I will degrain (the corn)'
OT:"desgranaré la mazorca" (Ch-C)

b. <inuc raia i ni maljki cu pé>
in-ʔukraya ʔi ni maɬiki 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(ʔ) ta-k
INT:when FUT come-2sS
'when will you come?'
OT:"¿cuándo vienes?" (Ch-C)

b. <naj pi rapriki>
nah pi(ʔ) rapriki
PN:3s FUT degrain
'he will degrain (corn)'
OT:"desgranará la mazorca" (Ch-C)

(12. 216) a. <pinac rapriki>
pi(ʔ) nak raprik'i
FUT PN:2s degrain
'you will degrain (corn)'
OT:"desgranarás la mazorca" (Ch-C)

b. <ajlahuac piní tíki>
ʔaɬa=wak pi(ʔ) niʔ 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 peʔ
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 *peʔ* 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 ʔayuʔ peʔ
make-1sA AUX FUT
'I will have made'
OT:"yo habré hecho" (423.)

b. <ormoon pè ayù>
ʔormo-n peʔ ʔayuʔ
pick up-1sA FUT AUX
'I will have picked it up'
OT:"yo habré recogido" (936.)

c. <guiszùpe ayu patai...>
Ø-wišu-ʔ peʔ ʔayuʔ pata-y
3sS-beat-STAT FUT AUX *accomplish-3sA
'he will have been beaten'
OT:"… habrá sido azotado..." (2025.)

In combination with the perfective adverbial *paʔ*, 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-ʔakuʔ paʔ peʔ
1sS-go PFV FUT
'I would go'
OT:"yo fuere, hubiere ido" (1706.)

b. <canuca pà pè tiyg…>
ka-nuka paʔ peʔ 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 paʔ peʔ ka-ʔakuʔ 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** **pale$_S$**
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 *ɨ*. 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(ʔ) *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 Łic>
mara pe? ɬik
*hurry CENT/IMP 3PL
'(may) they hurry up!'
OT:"vengan aquellos de priesa" (1851.)

(12. 224) a. <yiwá pe>
yiwa pe(ʔ)
enter/descend CENT/IMP
'enter!'
OT:"¡entre!" (G-S)

b. <mare po yu>
mare *pə(ʔ) yu
hurry CENT/IMP man
'hurry up, man!'
OT:"¡apúrate!" (Ch-F)

In X_G and X_{Ch}, the directional *peʔ* 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 peʔ
run-IMP.VI CENT
'run here!' (G-RHG)

b. <sulluya pe hay>
suyu-ya pe(ʔ) ʔay
return-IMP.VI CENT 2PL
'you (pl.), return here!'
OT:"¡volved!" (Ch-Z)

c. <ʔakuy 'pe>
ʔaku-y pe(ʔ)
go-IMP.VI CENT
'come here!'
OT:"¡ven acá!" (Ch-MQ)

(12. 226) a. <rúka pe>
ruka-Ø pe(ʔ)
eat-IMP.VT CENT
'come, eat it!'
OT:"¡que coma! (él, élla)" (G-S)

b. <im pe taháʔ>
ʔim pe(ʔ) tahaʔ
say CENT QUANT:all
'come, say it all!'
OT:"¡que se diga todo!" (G-S)

c. tura-Ø peʔ ʔan-pewek
take-IMP.VT CENT 1sP-gourd
'bring (me) my gourd!' (G-RHG)

d. <tura pe na mapu>
tura-Ø pe(ʔ) na mapu
take-IMP.VT CENT DET tortilla
'bring the tortilla!'
OT:"¡trae la tortilla!" (Ch-F)

In the ALS the adverbial *peʔ* 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 peʔ
run-SUBJ CENT/IMP
'come run!'
OT:"venir" (1838.), "¡ven tú!" (1839.)

b. <curànbè ay>
kura-n peʔ ʔay
run-SUBJ CENT/IMP 2PL
'come run you (pl.)'
OT:"¡venía vosotros!" (1840.)

In X_G the centric directional *peʔ* and exocentric directional *kaʔ* 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. ?uwe-Ø pe=ka?
call-IMP.VT CENT=EXO
'come away call (him)!' (G-SH)

d. ?ipala pe=ka?
bath CENT=EXO
'come away and bath!' (G-SH)

OBLIGATION: In the ALS the adverbial *pe?* is attested in position following predicates, where it expresses obligation of action.

(12. 229) <ca-pajata pè quí>
ka-pahata pe? ki?
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 *pe?* 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. <pulaquiŁa pè>
pula-ki-ɬa pe?
make-AP-AGT FUT/DEON
'(the one) who will/must make'
OT:"el que ha, tiene de hacer" (481.)

b. <màràŁà pè>
ma:ra:-ɬa? pe?
rest-AGT FUT/DEON
'(the one) who will/must rest'
OT:"el que ha, tiene de descansar" (1557.)

(12. 231) <temprano pè acùg>
temprano pe? ?aku-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 *pe?* 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. <peló? pe>
pe:lo? pe(?)
Sp:dog CENT/IMP
'dog will/must come!'
OT:"que se haga perro" (G-S)

c. kayaya? pe?
heat CENT/IMP
'heat will/must come!' (G-SH)

Maldonado de Matos uses *pe?* in combination with the TAM-adverbial *na?ɬ* 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 *?a-* (§ 6.1). The translation context again signalises obligation of action. The exact function of *na?ɬ* 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 nàŁ pè>
ʔa-ʔaku ʔ na ʔ ɬ pe ʔ
3sS-go IMPFV FUT/DEON
'one will have to go'
OT:"haber de ir" (1714.)

b. <a pùla nàŁ pè>
ʔa-pula na ʔ ɬ pe ʔ
3sS-make IMPFV FUT/DEON
'one will have to make'
OT:"haber de hacer" (471.)

The combination of the locative adverb *na ʔ* 'here' and the centric directional verb *pe ʔ* indicates an imperative of direction expressing movement towards the position of the speaker. In the examples from the ALS, *pe ʔ* functions as a verbal predicate in the imperative mode.

(12. 234) a. <nà pè>
na ʔ pe ʔ
LOC:here CENT/IMP
'come here'
OT:"ven acá tú" (1842.)

b. <nà pè ay>
na ʔ pe ʔ ʔay
LOC:here CENT/IMP 2PL
' you (pl.), come here'
OT:"venía acá vosotros" (1843.)

In X_Y the combination of *na ʔ* and *pe ʔ* can precede verbs, indicating a purposive meaning.

(12. 235) <na pe ratz'a sama>
na ʔ pe ʔ ra¢'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. na ʔ pe ʔ na
LOC:here CENT DEM
'come (here), hurry up' (G-RHG), (G-SH)

b. na ʔ pe ʔ na naka
LOC:here CENT DET PN:2s
'you, come (there)' (G-SH)

c. <pe naná>
pe(ʔ) na na ʔ
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) ti(:)ki ʔaɬa=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: *pa?* and *paɬ*. 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. *pa?*. In X_G the form *pa?aɬ* or *pa?ah* is attested, but since Maldonado de Matos does not mark the vowel in <paŁ> 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 *pa?*, and in X_S and X_{Jut} only **paɬ* is indicated. In X_{Ch} the initial consonant of the adverbial equivalent to X_M *paɬ* is voiced, i.e. [b] instead of [p] (see § 4.1.3.1), while the short form *pa?* 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

	*pa?	*paɬ	ORIGINAL GLOSS
X_M	<pá>	<paŁ>	
X_G	pa?, pa?a?	paɬ, pa?aɬ, pah	"pasado inmediato" / "pas. remoto" (G-S)
X_{Ch}	pa?	baɬ, bah, bar	"ya", "partícula que marca pasado" (Ch-S)
X_S		bar	"ya"
X_Y	pa?		"ya"
X_{Jut}		paɬ, pah, par	"ya"

In the ALS, both adverbials occur in different contexts, but the functional difference of *pa?* and *paɬ* is not straightforward. Although the database does not fully support this analysis, the difference may be determined by syntactic hierarchy, with the adverbial *pa?* occurring in main clauses and adverbial *paɬ* in subordinate clauses or clauses with divergent, or marked, word order (see below).

TAM-ADVERBIAL *pa?*. The adverbial *pa?* occurs in the ALS only in combination with other TAM-adverbials: (1) *pe?* (see § 12.5.1) used by Maldonado de Matos to indicate the Latin category of *futuro subjuntivo* and (2) with the auxiliary *?ayu* (§ 10.1.3.3) indicating *futuro perfecto*. The adverbial *pa?* also seems to occur in combinations with other forms: (1) *ka=pa?* 'there was' that is used by Maldonado de Matos to create a pluperfect form, (2) the interrogative marker *?a=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 *pa?*.

Table 12. 8: Combinations of TAM-adverbial *pa?* with other adverbials (ALS)

FORM			ORIGINAL GLOSS
<pá>	pa?	[PFV]	"partícula verbal" (4213.)
<páayú>	pa? ?ayu?	[PFV AUX]	"futuro perfecto" (4214.)
<pà pè>	pa? pe?	[PFV FUT]	"futuro subjuntivo" (e.g. 463.)
<capa>	ka=pa	[EXO=PF´V]	"partícula verbal" (3707.)
<apa>	?a=pa	[?=PFV]	"¿como?" (partícula interrogativa) (3640.)

The adverbial *pa?* 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 subjunctivo*. In both contexts, *pa?* is attested with transitive as well as intransitive verbs that mark person with cross-referencing affixes. The combinations of *pa?pe?* and *pa? ?ayu* are used by Maldonado de Matos interchangeably to indicate *futuro perfecto* (12. 238c-e); the *futuro subjunctivo* is always marked with *pa?pe?* (a-b).

(12. 238) a. <an acù pà pè>
ʔan-aku ʔ pa ʔ pe ʔ
1sS-go PFV FUT
'I would have gone'
OT:"yo fuere, hubiere ido" (1707.)

b. <mu mere pa pè>
mu-mere pa(ʔ) pe ʔ
3sA-break PFV FUT
'he would have broken'
OT:"aquel rompiere,
hubiere rompido" (640.)

c. <màra Łic pàpè>
Ø-ma:ra =ɬik pa ʔ pe ʔ
3sS-rest =3PL PFV FUT
'they will have rested'
OT:"aquellos habrán descansado" (1511.)

d. <guacà pa ayù Łic>
Ø-waka-ʔ pa ʔ ʔayu ʔ ɬik
3pS-go-STAT PFV AUX 3PL
'they will have gone'
OT:"aquellos se habrán ido" (1761.)

e. <sàmucà pa ayù>
samu-ka ʔ pa(ʔ) ʔayu ʔ
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 paŁ naŁ>
ka=pa pula-n paɬ na(ʔ)ɬ
EXO=PFV make-1sA PFV IMPFV
'I had done'
OT:"yo había hecho" (411.)

b. <capa uiszicà paŁ naŁ … >
ka=pa ʔuyši-kaʔ paɬ na(ʔ)ɬ
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 *kaɬi* and the perfective adverbial *pa(ʔ)*, preceding a noun phrase; the function of *-ɬi* is not understood.

(12. 240) <kaɬí pa ikáhki huráki>
ka-ɬi =pa ʔikah=ki huraki
EXO-? =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 *paɬ*. The adverbial form *paɬ* is translated by Maldonado de Matos as "ya"; it occurs in the ALS in only two contexts: (1) in combination with the TAM-adverbial *naʔɬ* (§ 12.5.3) indicating the *pretérito plusquamperfecto* and (2) as a single marker following a prepositional phrase.

Table 12. 9: Contexts of adverbial *paɬ* in the ALS

FORM			ORIGINAL GLOSS
<paŁ>	paɬ	[PFV]	"ya" (4231.)
<paŁ naŁ>	paɬ naʔɬ	[PFV + IMPFV]	"pretérito plusquamperfecto"

In constructions used by Maldonado de Matos to fill the pluperfect slot of the grammatical model, *paɬ* always precedes the other TAM-adverbial *naʔɬ*. Pluperfect of intransitive and transitive verbs is formed with the same pattern.

(12. 242) a. <capa cà màrà paŁ naŁ>

ka=pa	**ka-ma:ra-ʔ**	**paɬ**	**na(ʔ)ɬ**
EXO=PFV	2sS-rest-STAT	PFV	IMPFV

'it was that you already rested = you had rested'
OT:"tú habías descansado" (1495.)

b. <capa mereí paŁ nàŁ>

ka=pa	**mere-y**	**paɬ**	**naʔɬ**
EXO=PFV	break-3sA	PFV	IMPFV

'it was that he already broke (it) = he had broken'
OT:"aquel había rompido" (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 *paɬ* is also attested following a prepositional phrase in predicative function. In the comparative data we find both adverbials *paʔ* and *paɬ* in this context (see below).

(12. 244) <szam pari paŁ>

šam	**pari**	**paɬ**
PREP	day	PFV

'(it is) already in the day'
OT:"ya es de día" (4440.)

Both adverbials *paʔ* and *paɬ* 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 *paʔaʔ* (12. 246) and *paʔaɬ* (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 paʔaɬ
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-paɬta 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 *pəʔ*. The adverbial combination of *paʔ* and *peʔ* 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 *paʔaʔ* (12. 250) and *paʔaɬ* (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. <hɨnɨka pa>
hɨnɨ-ka pa(ʔ)
know-2sA PFV
'you already knew (it)'
OT: "supiste, lo supiste" (G-S)

d. <junu-ca pa hay>
hunu-ka paʔ ʔay
know-2pA PFV 2PL
'you (pl.) already knew'
OT: "sabéis aprovecharlos" (Ch-Z)

e. <turam'ba'>
tura-n paʔ
bring-1sA PFV
'I already brought it'
"ya lo trajó" (Ch-MQ)

f. <pajtan pa nay>
pahta-n pa(ʔ) nay
pay-1sA PFV PN:2s
'I already paid you'
"*ya te pagé (está pagado)" (Y-C)

(12. 251) a. nuk'a-n paʔaɬ
give-1sA PFV
'I (already) gave (it)' (G-SH)

b. <hɨnɨn paʔáɬ>
hɨnɨ-n paʔaɬ
know-1sA PFV
'I (already) knew (it)'
OT: "supe, lo supe" (G-S)

c. <junuy bal>
hunu-y bal
know-3sA PFV
'he has already learned'
OT: "sabe ya" (Ch-Z)

d. <sucaibar>
šuka-y bar
eat-3sA PFV
'he (already) ate'
OT: "él lo comió, comido" (Ch-F)

e. <taibar>
Ø-ta:-yi-ʔ bar
3sS-come-LIG-STAT PFV
'he already came'
OT: "ya ha venido" (Ch-F)

Past/perfective intransitive predicates marked with the agentive past suffix *-ɬa* (§ 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. nɨʔma-ɬa paʔaʔ
eat-PAST.ACT PFV
'he already ate' (G-RHG)

b. <ne xigüilabar>
ne šiwi-ɬa bar
PN:1s bend corn-PAST.ACT PFV
'I already bent corn'
OT: "ya dobló la milpa" (Ch-F)

(12. 253) <capa a acùŁa paŁ nàŁ>
ka=pa ʔa-ʔaku-ɬa paɬ naʔɬ
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 paʔaʔ
go-1sS_{DEP} PFV
'I already go' (G-SH)

b. ku=ya-n paʔaʔ
go=PROG-1sS_{DEP} PFV
'I am already going' (G-SH)

(12. 255) a. ti:ki-n nin paʔaʔ
sleep-1sS_{DEP} PN:1s PFV
'(that) I already slept' (G-JAP)

b. <yiwán pa>
yiwa-n pa(ʔ)
descend-1sS$_{DEP}$ PFV
'(that) I already descended'
OT: "entré" (G-S)

c. <yiwáka paʔáɬ>
yiwa-ka paʔaɬ
descend-2sS$_{DEP}$ 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. ʔamaniɬka 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. <anyiɬwapal>
ʔan-yiɬwa paɬ
1sS-descend PFV
'I descended'
OT: "yo estoy bajando" (G-S)

b. <uslubar-uy>
ʔuɬu 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>
ʔuɬu-ʔ paʔ ra ʔuto *tero-wa-ɬa
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 *paʔaɬ* 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 *paʔaɬ* 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(ʔ)
DET PN:1s descend PFV
'I descended'
OT: "entré" (G-S)

b. <hiniɬka pa>
hiniɬ-ka pa(ʔ)
know-2sA PFV
'you knew'
OT: "supiste, lo supiste" (G-S)

(12. 260) a. <nanín yiwá paʔáɬ>
na nin yiwa paʔaɬ
DET PN:1s descend PFV
'I descended'
OT: "entraba, entré" (G-S)

b. <hiniɬka paʔaɬ>
hiniɬ-ka paʔaɬ
know-2sA PFV
'you knew'
OT: "supiste, lo supiste" (G-S)

Schumann employs *paɬ* 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, *paʔaɬ* and *paʔaʔ* can occur in final position, suggesting that the adverbial form is not determined by its position within the clause.

(12. 261) a. <nahiɬ akúki ša wayá paʔáɬ...>
nahiɬ ʔaku-ki ša waya paʔaɬ
DEM go-REFL? PREP milpa PFV
'these already walk in the milpa'
OT: "... fueron a la milpa" (G-S)

b. <... rúka hiʔ na ɕáma núwi paʔáɬ>
ruka hiʔ na ɕ'ama nuwi paʔaɬ
eat PROG+3sS$_{DEP}$ DET good straw PFV
'he is/was already eating good straw'
OT: "... estaba comiendo buena paja" (G-S)

(12. 262) a. ʔima-n naka paʔaɬ
say/tell-1s PN:2s PFV
'I already told you' (G-SH)

b. ke ʔime-y na naka paʔaʔ
Sp:INT say-2sA DET PN:2s PFV
'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>
paʔ peʔ ʔaya-n
PFV FUT be-1sS$_{DEP}$
'I would have been'
OT: "yo estuviere, hubiere estado" (1947.)

b. <pà ayù ayaac>
paʔ ʔayuʔ ʔaya-k
PFV AUX be-1pS$_{DEP}$
'we will have been'
OT: "nosotros habremos estado" (1915.)

c. <capa paŁ nàŁ ayaan>
ka=pa paɬ naʔɬ ʔaya-n
EXIS=PFV PFV IMPFV be-1sS$_{DEP}$
'I had been'
OT: "yo había estado" (1900.)

In X_G the use of the two adverbials *paʔ* and *paʔaɬ* may be depending on the marking of the predicate. In the following examples, *paʔaʔ* follows a nominal predicate marked with *-ʔ* (12. 264), while *paʔaɬ* 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 *-ɬ* may be participle derivations (see § 11.1.2).

(12. 264) a. ʔiɾa-ʔ paʔaʔ
big-STAT PFV
'he is already big' (G-SH)

b. sama-ʔ paʔaʔ ʔah-naru
dark-STAT PFV PREP-earth
'the earth is already dark' (G-JAP)

(12. 265) a. ʔiɾi paʔaɬ
big PFV
'he is already big' (G-SH)

b. sama paʔaɬ ʔah-naru
dark PFV PREP-earth
'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
die-STAT PFV
'he is already dead' (G-JS), (G-SH)

b. si ʔuka-ʔ paʔaʔ
Sp:if have-STAT PFV
'if there still is' (G-JAP)

c. <chimi-pa>
*čimi-(ʔ) paʔ
extinguish-(STAT) PFV
'it is already extinguished'
OT: "ya está apagado" (Ch-F)

d. <chenepá>
*čene-(ʔ) paʔ
burn-STAT PFV
'it is already burned'
OT: "ya está quemado" (Y-C)

e. <tupapá>
*tupa-(ʔ) paʔ
stay-(STAT) PFV
'he still stayed'
OT:"se quedó" (Y-C)

(12. 267) a. ʔɨrɨ-ʔ paʔaɬ
grow-STAT PFV
'he/it is already big/grown-up' (G-SH)

b. kayaya-ʔ paʔaɬ pari
hot-STAT PFV sun
'the sun is already hot/strong' (G-JAP)

c. <llugua bal>
*yuwa-(ʔ) (=)baɬ
lose-(STAT) (=)PFV
'it is already lost'
OT: "pereció" (Ch-Z)

d. <tɛro'ßaɻ>
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 *paʔaɬ* 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. ɬɨka-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-maɬ paʔaʔ
IMP:go-EXH PFV
'let's go already' (G-JAP)

d. <ka 'taʔyʌ ya'ßa>
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 *paʔaɬ*, 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 paʔaɬ
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>
ȼ'iʔma pa(ʔ)
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 paŁ>
šam pari paɬ
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 paʔáɬ>
pokoko paʔaɬ
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. <sombra'ßar>
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 *paʔaɬ* 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 paʔaɬ 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**	**ʔaɬa**
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 *paʔaɬ* 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 tumáɬi horoɬík tɨmáɬi šan hawíɬi paʔáɬ>

na	tuma-ɬi	horo	=ɬik	tɨma-ɬi	šan	hawi-ɬi	paʔaɬ
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 ... paʔáɬ>

ruka	hiʔ	Luis	mapu	…	paʔaɬ
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 *paɬ*, are attested preceding the subordinate auxiliary *pata* that carries the inflectional information.

(12. 278) a. <oròmo pa pè Łic pataguaag>

ʔoromo	**pa(ʔ)**	**peʔ**	**ɬik**	**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 ɛʊètʊè paŁ naŁ pataguaag>

ka=pa	**kʼɨ:tɨ-ʔ**	**paɬ**	**na(ʔ)ɬ**	**pata-wa-h**
EXO=PFV	measure-STAT	PFV	IMPFV	*accomplish-ANT-3sP

'he had been measured'
OT:"aquel había sido medido" (1337.)

b. <capa yguitzi paŁ naŁ pataguà>
ka=pa **ʔiwiȼ'i** **paɬ** **na(ʔ)ɬ** **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+3sS$_{DEP}$ go-1sS$_{DEP}$ PFV
'I am already going to go' (G-SH)

b. <cuay tiqui bar>
kw=ay ti(:)ki bar
go=PROG+3sS$_{DEP}$ 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-?
'I am already going' (G-SH)

b. ku=pa=ya-ka
go=PFV=PROG-2sS$_{DEP}$
'you are already going' (G-RHG)

c. ku=pa=ya-n ȼ'ehe
go=PFV=PROG-1sS$_{DEP}$ 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, *paʔaʔ* and *paʔaɬ* are attested.

(12. 283) a. ku=pa=ya-n paʔaɬ
go=PFV=PROG-1sS$_{DEP}$ PFV
'I am already going to go already' (G-SH)

b. ku=pa=ya-n paʔaʔ naʔ
go=PFV=PROG-1sS$_{DEP}$ PFV PN:3s
'I am already going to go already' (G-SH)

12.5.3 Imperfective/durative

The adverbial *naʔɬ* 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 *naʔaɬ* 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 *naʔɬ* with the conditional adverbial *maʔ* (§ 12.5.3) to indicate the Latin category of *imperfecto subjuntivo*, with the perfective adverbial *paɬ* (§ 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 *naʔɬ* in the ALS

FORM			LATIN CATEGORY
<nàŁ>	naʔɬ	[IMPFV]	imperfecto circumloquio segundo also: plusquamperfecto
<mà nàŁ>	maʔ naʔɬ	[COND + IMPFV]	imperfecto subjuntivo
<… paŁ nàŁ>	paɬ naʔɬ	[PFV + IMPFV]	plusquamperfecto
<nàŁ pè>	naʔɬ peʔ	[IMPFV + FUT]	futuro infinitivo

The adverbial *naʔɬ* 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 naʔɬ ʔay
2pA-make IMPFV 2PL
'you (pl.) made (it)'
OT:"vosotros hacíais" (403.)

b. <an ima naŁ na misza>
ʔan-ʔima na(ʔ)ɬ na miša
1sA-say IMPFV DET Sp:mass
'I said the mass'
OT:"yo decía misa" (1982.)

c. <yguitzi nàŁ uɛacan na misza>
ʔiwiʦ'i naʔɬ 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>
naʔɬ ʔaya-kaʔ
IMPFV be-2sS$_{DEP}$
'you were'
OT:"tú estabas" (1895.)

The use of the adverbial *naʔɬ* 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 ý paŁ nàŁ>
ka=pa Ø-ta:-yi-ʔ paɬ naʔɬ
EXO=PFV 3sS-come-LIG-STAT PFV IMPFV
'it was (that) he had already come'
OT:"aquel había venido" (1418.)

b. <capa uiszicà paŁ naŁ … ay>
ka=pa ʔuyši-kaʔ paɬ naʔɬ
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, *naʔɬ* 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 naŁ iɛal santo>
ka-tana **na(ʔ)ɬ** **ʔikaɬ** ***santo***
2sS-be IMPFV INDEF Sp:saint
'you were a saint'
OT:"fueras un santo" (2031.)

b. <an uɛa naŁ qui absolver naca>
ʔan-ʔuk'a **na(ʔ)ɬ** **ki** ***absolver*** **naka**
1sA-do IMPFV INTENS Sp:absolve PN:2s
'I would absolve you'
OT:"te absolviera yo" (2036.)

(12. 287) <sàmu nàŁ>
samu **naʔɬ**
catch IMPFV
'that he (would have) caught'
OT:"que cogiera, hubiera de haber cogido" (1143.)

Maldonado de Matos uses *naʔɬ* 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 nàŁ>
mu-samu **ma** **naʔɬ**
3sA-catch COND IMPFV
'he would have caught'
OT:"aquel cogiera, cogería y cogiese" (1118.)

b. <ca yguitzi ma nàŁ na misza… >
ka-ʔiwi¢'i **ma** **naʔɬ** **na** **miša**
2sA-hear COND IMPFV DET Sp:mass
'(if) you heard (= would hear) the mass'
OT:"si oyeras mísa …" (2031.)

(12. 289) a. <pulàn naŁ qui>
pula-n **na(ʔ)ɬ** **ki**
make-1sA IMPFV INTENS
'I would have made it myself'
OT:"yo hubiera, habría y hubiese hecho" (452.)

b. <uiszicà nàŁ qui na doctrina>
ʔuyši-kaʔ **naʔɬ** **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 *naʔɬ* 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 nàŁ pè>
ʔa-pula **naʔɬ** **pɛʔ**
3sS-make IMPFV FUT/IMP
'one will have to make'
OT:"haber de hacer" (471.)

The exact function of the adverbial *naʔɬ* 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 *naʔɬ* (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>	maʔ	[COND]	perfecto subjuntivo
<mà nàŁ>	maʔ naʔɬ	[COND + IMPFV]	imperfecto subjuntivo
<mà ayù>	maʔ ʔayuʔ	[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 nàŁ na misza...>
ka-ʔiwi¢'i maʔ naʔɬ na miša
2sA-hear COND IMPFV DET Sp:mass
'(if) you heard (= would hear) the mass'
OT:"si oyeras misa..." (2031.)

c. <sàmuí 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>
maʔ **ʔaya-n**
COND be-1sS$_{DEP}$
'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) <ni guéna maqúi>
ni= **wena** **ma** **=ki**
NEG= INT:who COND =INTENS
'nobody'
OT:"ninguno" (228.)

In the semi-speaker data from X_G the conditional adverbial *maʔ* 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-kaʔ maa a naw-ɨk>
wišu-kaʔ ma: a naw-ɨk
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 *maʔaɬ*, the use of which seems to be dependent on word order. While *má* precedes the predicate, *maʔaɬ* only seems to occur in the position following the predicate. The exact function of the *má* and *maʔaɬ* in these contexts is not understood.

(12. 295) <ʔi má akuʔ honowaɬa>
ʔi má Ø-ʔaku-ʔ hono-wa-ɬa
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) <hoonoʔ maʔaɬ na huurak (na) ʔišpaʔ
ho:no-ʔ maʔaɬ na hu:rak na ʔišpa-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-?-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 V_1, 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> *ɬapi* ~ <Łapí> *ɬapiʔ* or *ɬapi:*. 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 V_1 (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. kɨsɨma-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>
ʔuka-Ø ʔisal
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. <yʊeckʊesza>
yɨk'ɨša-Ø
shake-IMP.VT
'shake it!'
OT:"remecer (imperativo)" (3547.)

b. <szapari>
šapari-Ø
degrain-IMP.VT
'degrain it'
OT:"desgranar (imperativo)" (3126.)

(13. 5) a. <paríca>
pari-ka-Ø
heat-CAUS-IMP.VT
'heat it up!'
OT:"calentar (imperativo)" (2825.)

b. <nʊemaja>
nɨma-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. <paɛuszajaca>
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:"¡quiebra 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 *ʔay*. 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 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:"¡sabed!" (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-tamaɕ'iʔ
take-IMP.VT PN:2s 2sP-lasso
'take/bring your lasso!' (G-JAP)

b. <nen lájta nay akü>
nen$_O$ lahta-Ø nay ʔakɨ
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>
ʔipla-Ø
bath-IMP.VT
'(take a) bath!'
OT:"bañar (imperativo)" (2415.)

cf. <iplaya>
ʔipla-ya
bath-IMP.VI
'bath!'
OT:"bañarse (imperativo)" (2419.)

b. <màrà>
ma:ra-(ʔ)
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. <kurɨ>
kuru-Ø
VI:run-IMP.VT
'run!'
OT:"andar (imperativo)" (G-S)

b. <ma tz'údru>
maɕ'uru-Ø
VI:bend down-IMP.VT
'bend down!'
OT:"¡agacharse, 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. <mʊetaŁcki>
mɨta-ɬ-k'i-Ø
?-PART.ACT-INCH-IMP.VT
'dream!'
OT:"soñar (imperativo)" (2717.)

b. <guiriɛi>
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 *despacio*
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. <ʔuš'tuʔ>
ʔuštu-ʔ
*sit down-IMP.VI
'sit down!'
OT:"¡siéntate!" (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. <acùya>
ʔaku-ya
go-IMP.VI
'go!'
OT:"¡vaya tú!" (2053.), "¡ve tú!" (1678.)

b. <Łiɛáya>
ɬik'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 *-yʔa*.

(13. 18) a. mara-ʔ-ya
rest-?-IMP.VI
'rest!' (G-SH)

b. šawu-ya
sit-IMP.VI
'sit down!' (G-RHG), (G-JAP)

c. ɬara-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:"¡sentate!" (Jum-G)

d. <cumay ne>
ku-ma-y ne
go-?-IMP.VI LOC:here
'go/come here!'
OT:"¡ven acá!" (Y-C)

As with the unmarked imperative on transitive verbs, three-syllabic intransitive roots in the ALS may lose V_2 upon taking the imperative marker *-ya* (13. 20). In the comparative data three-syllabic intransitives often preserve all their vowels (13. 21).

(13. 20) <guasztáya>
wašta-ya
enter-IMP.VI
'enter!'
OT:"entrar (imperativo)" (2328.)

(13. 21) <isapaiya>
ʔisapa-ya
leave/emerge-IMP.VI
'emerge!'
OT:"¡sal tú!" (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.

(13. 22) a. <acuquíya>
ʔaku-ki-ya
go-REFL?/AP-IMP.VI
'walk!'
OT:"andar (imperativo)" (2058.)

b. <cagui ɛiya>
kawi-k'i-ya
cry-AP-IMP.VI
'scream!'
OT:"gritar (imperativo)" (2127.)

c. <teroqueya>
tero-ke-ya
kill-AP-IMP.VI
'fish!'
OT:"pescar (imperativo)" (3290.)

The command expressed by the imperative verb refers to the second person. The plural clitic follows after the suffix.

(13. 23) <màràya ay>
ma:ra(ʔ)ya **ʔay**
rest-IMP.VI 2PL
'rest you (pl.)!'
OT:"¡descansad vosotros!" (1515.)

In X_G and X_{Ch} we find the intransitive imperative with *–ya* to be accompanied by second person independent pronouns.

(13. 24) a. kata-ya naka
lie down-IMP.VI PN:2s
'lie down!' (G-JAP), (G-PE)

b. ʔaku-ya naka
go-IMP.VI PN:2s
'go!' (G-SH)

c. <toney na'c>
tone-y nak
be silent-IMP.VI PN:2s
'be silent!'
OT:"¡cállate!" (Ch-JC)

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>
muy-wasta-ya muy-kasunu-ya
2sS-enter-IMP.VI 2sS-sit down-IMP.VI
'enter, sit down!'
OT:"¡entra, siéntate!" (Ch-C)

b. <mi ij curúya>
mɨ-kuru-ya
2sS-run-IMP.VI
'run!'
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 *peʔ* 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 peʔ
run-IMP.VI CENT/IMP
'run here!' (G-RHG)

b. <sulluya pe hay>
suyu-ya pe(ʔ) ʔay
return-IMP.VI CENT/IMP 2PL
'return here (you, pl.)!'
OT:"¡volved!" (Ch-Z)

c. <akuy 'pe>
ʔaku-y pe(ʔ)
go-IMP CENT/IMP
'go/come here!'
OT: "¡ven acá!" (Ch-MQ)

The combination of the intransitive imperative and the directional *taʔ* 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. <maʔra-ya ta>
maʔra-ya taʔ
rest-IMP.VI DIR:come
'come rest!'
OT:"descansar" (G-S)

b. <acuy-ta>
ʔaku-y taʔ
go-IMP.VI DIR:come
'come and go!'
OT:"¡ándate, vete!" (Ch-F)

The perfective adverbial *paʔa* (X_G) or *baʔ* (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. ɬika-ya paʔaʔ
descend-IMP.VI PFV
'descend/come down already!' (G-RHG)

b. <ka'taʔyΛ ya'ßa>
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. <mʊeszaya>
mɬša-ya
bury-IMP.VI
'bury!'
OT:"enterrar (imperativo)" (2712.)

cf. <mʊesza>
mɬša-Ø
bury-IMP.VT
'bury (it)!'
OT:"enterrar (imperativo)" (2711.)

b. <úisziya>
ʔuyši-ya
hear-IMP.VI
'hear!'
OT:"oir (imperativo)" (2404.)

cf. <úiszi>
ʔuyši-Ø
hear-IMP.VT
'hear (it)!'
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 nö>
mɨy-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 Łic>
ʔa-ʔakuʔ **ɬik**
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>
taː-ka
come-2sS$_{DEP}$
'(that) you come!'
OT:"¡ven tú!" (1435.)

b. <tà cà ay>
taː-kaʔ **ʔay**
come-2pS$_{DEP}$ 2PL
'(that) you (pl.) come!'
OT:"¡venid vosotros!" (1438.)

(13. 35) a. <rúka peká>
ruka pe-kaʔ
eat come/CENT-2sS$_{DEP}$
'come and eat!'
OT:"¡come, coman!" (G-S)

b. ʔuwe pe-kaʔ
call come/CENT-2sS$_{DEP}$
'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 akü>
kuru-ka muka ʔakɨ
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>
kɨrɨ-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-ɬik
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. ¢'i?re-y ?an-muti?
cut-3sA/2sf? 1sP-hair
'(that he) cut my hair!' (G-SH)

b. <nucay na mu tutuc>
nuka-y na mu-tutuk
give-2sA DET 2sP-breast
'give him your breast!'
OT:"¡dale la chiche!" (Ch-JC)

c. <japay>
hapa-y
pass sth.-2sA
'pass (it)!'
OT:"¡pásame algo!" (Jum-E)

d. <n'gua-i-naj nu gona>
nwa-y nah-nu gona
close?-2sA DEM-DET hole
'close that hole!'
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>
yiwa-ka pe =ka?
enter-2sS CENT/IMP =EXO
'enter!'
OT:"¡entra!" (G-S)

b. <tupacapé>
tupa-ka pe?
let/leave-2sA CENT/IMP
'let/leave it!'
OT:"¡anda déjalo!" (Ch-C)

c. <a cuc' pejá>
?aku-k pe =ha
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 *-?* with the grapheme <c>.

(13. 41) a. <acuyac puec>
?aku-ya-k
go-IMP.VI-2sS?
'go!'
OT:"¡andate!" (Ch-P)

b. <laní-yac>
lani-ya-k
?-IMP.VI-2sS?
'endure'
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 *?antama*ɬ, 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 *-ma*ɬ with the form *?anta*, 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 *?an-* and the directional/motion verb *ta?*.

(13. 42) <an da màŁ>
?anta-maɬ
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 maʔɬ>
ʔanta-maɬ
IMP:go-EXH
'let's go'
OT:"¡vámonos!" (G-S)

b. ʔanta-mah ša ʔaɬtepet
IMP:go-EXH PREP town
'let's go into town' (G-JS)

c. ʔanta-mah šawaȼ'a
IMP:go-EXH sow
'let's sow/plant' (G-RHG)

In Maldonado-Xinka the exhortative *ʔantamaɬ* may be followed by the directional *taʔ* (13. 44). In X_G TAM-adverbials are attested in the same position (13. 45b).

(13. 44) <andamaŁtà>
ʔanta-maɬ **taʔ**
IMP:go-EXH DIR
'let's go'
OT:"¡vámonos! (defectivo)" (2066.)

(13. 45) a. ʔanta-maɬ taʔ ʔa ti:ki hiʔ
IMP:go-EXH DIR Sp:PREP sleep PROG+3sS$_{DEP}$
'let's go to sleep!' (G-JS)

b. ʔanta-maɬ paʔaʔ
IMP:go-EXH PFV
'let's go already!' (G-JAP)

The suffix *-maɬ* is attested in X_G with other intransitive and transitive verb roots. Schumann gives the form as *-maʔɬ* (1967:45), whereas the primary data from X_G indicate *-maɬ* or *-mah*. In X_{Ch} *-muy* is attested in a similar context.

(13. 46) a. <rúka máʔɬ>
ruka-maʔɬ
eat-EXH
'let's eat!'
OT:"¡comamos!" (G-S)

b. <yiwá maʔɬ>
yiwa-maʔɬ
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 rajá 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(ʔ)
IMP:go/EXH DIR/come
'let's go/come'
OT:"¡vámonos!" (Ch-F)

d. <data tik>
da ta(ʔ) 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>
miɬki-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 ʔaɬtepet
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 *peʔ* 'come (towards the speaker)' and *taʔ* '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 pe>
ruka pe(?)
eat CENT/IMP
'come eat = eat it!'
OT:"¡que coma! (él, élla)" (G-S)

b. <tura pe na mapu>
tura pe(?) 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 pe?
run-IMP.VI CENT/IMP
'come run = run here!' (G-RHG)

b. <sulluya pe hay>
suyu-ya pe(?) ?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 Łic>
ma:ra pe? ɬik
*hurry CENT/IMP 3PL
'(may) they hurry up!'
OT:"¡vengan aquellos de priesa!" (1851.)

(13. 55) a. <yiwá pe>
yiwa pe(?)
enter/descend CENT/IMP
'enter!'
OT:"¡entre!" (G-S)

b. <mare po yu>
mare *pe(?) 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 quí>
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(ʔ)
let/leave-2sA CENT/IMP
'come, leave it!'
OT:"¡anda déjalo!" (Ch-C)

The ALS also indicates the directional *peʔ* 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 *peʔ* following the predicate might suggest that it rather specifies the direction of the command.

(13. 58) a. <curànbè>
kura-n peʔ
run-SUBJ CENT/IMP
'come (to) run!'
OT:"venir" (1838.), "¡ven tú!" (1839.)

b. <curànbè ay>
kura-n peʔ ʔay
run-SUBJ CENT/IMP 2PL
'come (to) run you (pl.)'
OT:"¡venid vosotros!" (1840.)

In X_G the directional *peʔ* can take the suffix *-kaʔ*, 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 *taʔ* 'come' (§ 13.1.3). The inflectional pattern underlines that directionals are actually verbs in Xinka. However, we can also not exclude that *-kaʔ* is in fact not a pronominal marker but the exocentric directional *kaʔ* that may cliticise to the centric directional, specifying the direction of command 'come away!'.

(13. 59) a. <rúka peká>
ruka pe-kaʔ
eat come/CENT-2sS$_{DEP}$
'come and eat!'
OT:"¡come, coman!" (G-S)

b. <yiwáka peká>
yiwa-ka pe-kaʔ
descend-2sA come/CENT-2sS$_{DEP}$
'come and enter!'
OT:"¡entra!" (G-S)

c. ʔuwe pe-kaʔ
call come/CENT-2sS$_{DEP}$
'come and call (him)!' (G-SH)

d. ʔipala pe-kaʔ
bath come/CENT-2sS$_{DEP}$
'come and bath!' (G-SH)

In X_{Ch} the *peʔ* 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 *-ɬa* 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 **peʔ** **ʔaku-h**
Sp:early CENT/DEON go-3sP
'early must be his going = early he must go'
OT:"ha de venir temprano" (1964.)

b. <màrà Łà pè>
ma:ra:-ɬaʔ peʔ
rest-AGT CENT/DEON
'(the one) who must rest'
OT:"el que ha, tiene de descansar" (1557.)

c. <pulaquiŁa pè>
pula-ki-ɬa peʔ
make-AP-AGT CENT/DEON
'(the one) who must make (it)'
OT:"el que ha, tiene de hacer" (481.)

d. <pata Łà szàma pè>
pata-ɬaʔ šama peʔ
*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 *peʔ* (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(ʔ)
rain CENT/DEON
'come rain = may it rain!'
OT:"que llueva" (G-S)

b. <peló ʔ pe>
pe:loʔ pe(ʔ)
Sp:dog CENT/DEON
'come dog = may he (turn into) dog!'
OT:"que se haga perro" (G-S)

c. kayayaʔ peʔ
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 *naʔ* 'here' the directional *peʔ* '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>
naʔ **peʔ**
LOC:here CENT/IMP
'come here'
OT:"¡ven acá tú!" (1842.)

b. <guenaqui nà pè agi aɬa>
wena=ki **naʔ** **peʔ** **ʔahi** **ʔaɬa**
INT:who=INTENS LOC CENT/DEON be+3sS_{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 *naʔ* and the directional verb *peʔ* 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(ʔ) raɕ'a sama
LOC:here CENT/come throw up
'come here to throw up'
OT:"para arrojar" (Y-C)

b. <nape yack>
na pe(ʔ) 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. *naʔ peʔ na(ʔ)*. 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. naʔ peʔ na
LOC:here CENT DEM
'come, 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.

(13. 66) <nac pe na tiki ajlahuac>

nak	pe(ʔ)	na	ti(:)ki	ʔaɬa=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 ta ʔ:

The directional *ta ʔ* 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 *pe ʔ* (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 *kunta ʔ* can be accompanied by another form of the directional *ta ʔ*.

(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 *ta ʔ* 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 *ta ʔ* also occurs with the exhortative *ʔantama ɬ* (see § 13.1.4). This context is attested in the ALS as well as in the comparative data.

(13. 69) <andamaŁtà>

ʔanta-maɬ	**taʔ**
IMP:go-EXH	DIR

'let's go!'
OT:"¡vamonos! (defectivo)" (1827.)

(13. 70) a. ʔanta-maɬ=taʔ
IMP:go-EXH=DIR
'let's go!' (G-JAP)

b. <da ta>

da	ta(ʔ)
IMP:go/EXH	DIR

'let's go!'
OT:"¡vámonos!" (Ch-F)

c. <da ta nama>

da	ta(ʔ)	nɨma
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*ʔ, *ka*ʔ, *pe*ʔ) and demonstratives (*na*ʔ, *šɬ*ʔ). The question words *šan* 'what?', *wena* 'who', *ka pe*ʔ 'where?' and the polar question marker *ʔin* 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 szʊeʊe>	šan ši:	"¿qué?" (4449.)
<szaan paraqui>	ša:n para ki	"¿pórqué?" (4439.)
<szaani>	ša:ni	"¿cómo? para interrogaciones" (4438.)
<szandaa>	šan=ta:	"¿*qué?" (4434.)
<szanda szʊe aŁi>	šan=ta ši ʔaɬi	"¿y porqué?" (4435.)
<szanda szʊe paraqui>	šan=ta ši paraki	"¿y para qué?" (4436.)
<szanda szʊe na màn>	šan=ta ši na man	"¿y qué es eso?" (4437.)
<cácá>	ka=kaʔ	"¿dónde?" (3679.)
<capè>	ka=peʔ	"¿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.)
<yguaŁ>	ʔiwaɬ	"¿cuánto?" (4749.)
<apa>	ʔapa	"¿cómo?" (3640.)
<Łʊécu>	*ɬikɨ	"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 **ʔinti*. 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* o *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?	ʔiwaɬ	ʔiwaɬ	ʔiwa(ɬ)	ʔiwalar	"¿cuánto?"
how? how many?	ʔapa				"¿cómo?"
				ʔapa	"¿cuánto?"
who?	wena				"quien"
		wena-ta		wenin	"¿quién?"
			wanin	wanin	
when?	ɬiki, ɬika-n	kihkɬ	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 *ʔin* 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*; *ɬikan* = **ɬiki* + *in*). It seems plausible that the interrogative clitic *ʔin* 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 **ɬiki*, 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 *ʔiwaɬ*, 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	yes/no question marker
		ʔin=ti [ʔindi]	"¿qué?"
		wan=in	"¿quién?"
		ʔi=waɬ	"¿cuánto?"
what?	šan	šan (han)	"¿qué?"
		šani (hani, hay)	"¿qué?/ ¿cómo?/ ¿dónde?"
		šan=ta (han=ta)	"¿qué?/ ¿por qué?"
		šan šɬ	"¿y qué?
		šan=ta šɬ	"¿y por qué?"
who?	wena	wena	"quien"
	wan	wan=in	"¿quién?"
when?	ɬik-	ɬikɬ	"¿cuándo?" (futuro)
		ɬika-n	"cuándo" (indirect)
		lik=wak	"cuándo"
how?	ʔapa	ʔapa	"¿cómo?/ ¿cuánto?"
where?	ka	ka=kaʔ	"*¿a dónde?"
		ka=peʔ	"¿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 **ʔin=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 *šɬ:* 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 *šɬ:* could be etymologically related to the proximal demonstrative *ʔašɬ* (§ 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	han=ta			"¿qué, cómo?"
	wena=ta				"¿quién?"
		man=ta			"¿dónde?"
ti		n=ti			"¿para qué?"
		in=ti			"¿como qué?"
				šin=ti	"¿por qué?"
šɬ	šan=ta šɬ				"¿qué?"
i	šan-i			šan-i (han)	"¿cómo, qué?"
			han-i		"¿dónde, qué?"

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 aszʊe?>

ka	**pe?**	**ta-wa?**	**na**	**?ašɨ**
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?>

ʔuyši-y	**pa(ʔ)**	**ʔayuʔ**	**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 púlaguàn?>

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 tumin?>

naka	**ʔin**	**šakša-wa-kan**	**na**	**tumin**
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 X_G and X_{Ch} the interrogative clitic *ʔin* co-occurs with the marker *ti* forming the Wh-question marker *ʔinti*, which is variously translated as 'what?' ("¿qué?") or 'how?' ("¿cómo?"). In all cases the question word occurs in initial position and precedes the predicate (§ 13.2.3.1, examples (13. 83) and (13. 84)).

In yes/no questions the interrogative marker *ʔin* seems to function as a tag question marker. It is likely that this operator has developed from the negative marker ***in* (§ 13.4.1), since negative markers are a cross-linguistically attested source for tag question markers (see Heine & Kuteva 2002:216-217). In other contexts, the interrogative *ʔin* has developed into a relativiser. The relation of the interrogative and the subjunctive/irrealis enclitic *ʔin* is not entirely clear, inasmuch as the subjunctive could have grammaticalised from the interrogative as well as directly from the negator since both forms occur always in postposition to their referent form (see § 13.3).

13.2.3 Content questions

Content or information questions are marked with question words that occur in sentence-initial position and indicate what type of information is requested. Content questions can also be embedded as complements. The verbal predicates of such embedded content questions employ dependent-marking cross-referencing suffixes to mark person agreement.

13.2.3.1 Non-human (and generic) and reason

Questions for fact, thing, mood, reason or cause are realised with the question word *ša:n* that combines with the deictic clitics *=i* and *=ta.* This interrogative is not to be confused with the free preposition *šan* (§ 9.1.1.2) that has a short root vowel. However, the question word *ša:n* could be morphologically complex, consisting of the bound preposition *ša* and the basic interrogative marker *ʔin* (see § 13.2.1).

(13. 74) a. <szán>
ša:n
INT:what?
'what?'
OT:"¿qué? (para interrogaciones)" (4433.)

b. <¿szàn para cà nem?>
ša:n **para-kaʔ** **nem**
INT:what? search-2sA PN:1s
'what have you searched me for?'
OT:"¿para qué me quieres?" (1870.)

c. <szaan paraqui>
ša:n **para** **ki**
INT:what? Sp:for Sp:that/what
'why?'
OT:"¿por qué? (interrogativo)" (4439.)

In X_{Ch} the non-human question marker is found as *han*. It is attested with verbal and nominal predicates alike. The two examples given below show the marker in indirect function, that is, in dependent clause. The verbal predicate in the second example exhibits dependent-marking cross-referencing suffixes (b).

(13. 75) a. <jan mug derechos liqui>
han muh-*derechos*-liki
INT:what 3sP-right-PL
'what (are) his/ther right(s)?'
OT:"y cuales son sus derechos" (Ch-Z)

b. <jam bulá cacán ...>
han pula=ka-kan
INT:what make=PROG-$2sA_{DEP}$
'what were you making?'
OT:"¿qué hiciste?" (Ch-P)

The question marker *šan-i* consisting of the non-human interrogative and the unspecified suffix *-i* is given by Maldonado de Matos as a question word for manner; *šani* 'how?' (13. 76). However, the form seems to parallel the Spanish question word "¿qué?", which in some contexts can be used as referring to questions of manner. In X_{Ch} and X_Y, the form *hani* is given simply as "¿qué?" (13. 77).

(13. 76)
<szaani >
ša:n-i
INT-?
'how?'
OT:"¿cómo? (interrogativo)" (4438.)

(13. 77) a.
<jani jaypuguac>
ha:ni haypu-wa-k
INT receive-ANT-1pA
'what did we receive?'
OT:"con que lo recibimos" (Ch-Z)

b.
<xanijan>
ša:ni han
INT ?
'what?'
OT:"¿qué?" (Y-C)

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.

(13. 78) a.
hay ma-ka na?
INT:what? say/name-2sA DEM/3s
'what have you named it? = what is your name?'[177] (G-JS)

b.
<jai>
hay
INT:what?
'what?'
OT:"a (que)" (Ch-Z)

c.
<hueni jay haya>
weni hay haya
INT:who? INT? PL
'who are they?'
OT:"¿quiénes son ellos?" (Y-C)

The combination of *šan* and the directional *ta?* (§ 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 *šɬ*, which is given by Maldonado de Matos as a copula 'and' ("y"). The marker *šɬ* may be related to the demonstrative *?ašɬ* 'this', although it is consistently translated as a copula in the ALS. The combination *šan-ta šɬ* precedes demonstratives (c) and relational nouns (d).

(13. 79) a.
<szandaa>
šan=ta:
INT=DIR/INT
'what?'
OT:"¿qué?, no se qué,
y quien sabe qué" (4434.)

b.
<szanszʊeʊe>
šan šɬ:
INT and/DEM
'(and) what?'
OT:"¿qué? (interrogativo)" (4449.)

c.
<szanda szʊe na mán>
šan=ta šɬ na man
INT=DIR/INT DEM DET DEM
'and what is this?'
OT:"¿y qué es eso?" (4437.)

d.
<szanda szʊe aŁi>
šan=ta šɬ ?aɬi
INT=DIR/INT DEM PREP.CAUS
'and why?'
OT:"¿y por qué? (interrog:)" (4435.)

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>
ketɬ 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 taʔáɬ marák yaká?>
n=ti taʔaɬ mara-k ya-kaʔ
INT=?/INT ? angry-INCH be-2sS$_{DEP}$
'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. <ɬandi ndi pulayán tiʔk>
ɬan=ti n=ti pula=ya-n tiʔ-k
NEG=? INT=?/INT make=PROG-1sS$_{DEP}$ 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 *ʔaɬi* (§ 9.2.3) or its Spanish equivalent *para ki* "para qué". The form *šɨ:* is given by Maldonado de Matos as a coordinate conjunction 'and', which reflects in the translation context.

(13. 85) a. <szanda szʋe aŁi>

šan=ta	**šɬ**	**ʔaɬi**
INT=DIR/INT	EXTEN	PREP.CAUS

'and why?'
OT:"¿y por qué? (interrogativo)" (4435.)

b. <szanda szʋe paraqui?>

šan=ta	**šɬ**	***para ki***
INT=DIR/INT	EXTEN	Sp:what for?

'and what for?'
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 *ʔaɬi* (13. 86). In X_{Ch} the marker *ʔinti* is attested in the same context, where it may also combine with the directional *ta* (13. 87b).

(13. 86)

han=ta	ʔaɬi	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>

(ʔi)n=ti	ʔaɬi
INT=?/INT	PREP.CAUS

'why?'
OT:"¿por qué?" (Ch-C), (Ch-F), (Ch-JC)

b. <nti taʔáɬi>

n=ti	ta	ʔaɬi
INT=?/INT	DIR	PREP.CAUS

'why?'
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	ʔena	wen-in	"quien, el que"
		wena=ta			
Assertive	wena ... ki		ʔena=ki		"el que"
	wena ... ʔayu ki				"si alguno"
Negative	ni wena		la wanin	na=wan	"ninguno"
			ɬanti 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 *ɬik*. In the ALS, only *wena* is attested with plural marking, whereas *wanin* is found in X_{Ch} with plural referents.

(13. 89) <guéna Łic>
wena **ɬik**
INT:who PL
'who (pl.)?'
OT:"quien, el que (plural)" (196.)

(13. 90) <huanin lic najlic>
wanin lik naɬik
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* ʔay$_O$
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-ɬaʔ
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 aŁi>
wena **ʔaɬi**
INT:who PREP.CAUS
'because of whom?'
OT:"quien, el que (ablativo)" (191.)

b. <guèna neŁa>
wena **neɬa**
INT:who BEN
'whose, for whom'
OT:"quien, el que (genitivo)" (188.)

c. <guèna tiýg>
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 neɬa 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 ʔaɬi 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 naɬik* (plural) and the third person plural *lik* are attested following the question word *wanin* "quién?".

(13. 96) a. wena man Ø-wiriki-ʔ 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 naɬik
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=hɨʔ
INT=DIR/INT INT:who leave-ANT-SUBJ DET=DEM
'what is who has left this? = who has left this?' (G-RHG)

b. ʔeɬa 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=taʔ ʔaku:-ɬa
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 Łic>
nana wena=ki =ɬik
FOC INT:who=INTENS =3PL
'whoselves = they who'
OT:"el que (plural, nominativo)" (207.)

c. <guena qui agi>
wena=ki ʔahi
INT:who=INTENS be+3sS_{DEP}
'(he/the one) who is/was'
OT:"el que está, estaba" (1962.)

d. <aŁi guéna qui>
ʔaɬi 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, *ʔena=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 ʔena=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>
ʔena=ki naka$_O$ ʔuka-y *alucinar* ʔay$_O$
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 ʔena=ki ʔeltepet
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 *ʔayu* (§ 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 ʔayu =ki
INT:who AUX =INTENS
'(the one) who(self) would = if someone'

OT:"si alguno" (214.)

b. <ayuguenaqui>
ʔayu wena =ki
AUX INT:who =INTENS
'(the one) who(self) would
= if someone'
OT:"si alguno" (3674.)

c. <na guéna ayuquiŁic>
na **wena** **ʔayu** **=ki** **=ɬik**
DET INT:who AUX =INTENS =3PL
'they who(selves) would'
OT:"si alguno (acusativo)" (225.)

In combination with the negator *ni-* the question word indicates the negative quantifier 'nobody', i.e. in Spanish "ninguno" or "nadie". In X_{Ch} the negative quantifier consists of the negative morpheme *ɬan* and the interrogative *wanin*. In one attested example, the negative *ɬan* is followed by the interrogative marker *ti*.

(13. 104) a. <niguena>
ni **wena**
NEG INT:who
'not who = nobody'
OT:"ninguno" (4176.)

b. <ni guéna maqúi>
ni **wena** **ma** **=ki**
NEG INT:who COND?=INTENS
'not who(self) would = nobody'
OT:"ninguno" (228.)

(13. 105) a. <ɬawanín>
ɬa 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)

13.2.3.3 Manner

Maldonado de Matos gives two question words for manner, i.e. 'how?', none of which is attested in syntactic context. The first form is *ša:n-i*, which is a complex form combining the question word for non-human objects *ša:n* and the suffix *-i*. The other form is the marker *ʔapa*, which is not etymologically transparent, although it could be related to the perfective/relational adverbial *paʔ* (§ 12.5.2).

(13. 106) a. <szaani>
ša:n-i
INT:what?-?
'how?'
OT:"¿cómo?" (4438.)

b. <apa>
ʔapa
INT
'how?'
OT:"¿cómo? (adverbio int.)" (3640.)

In X_Y *ʔapa* is likewise attested in interrogative function, but refers to questions of quantity rather than manner. In the given contexts, 'how?' and 'how much/many?' may be seen as replaceable concepts. And since quantity is otherwise referred to in interrogative context with the question word *ʔiwaɬ* (§ 13.2.3.6), it is suggested that the reference to manner is the original reference of the interrogative marker *ʔapa*.

(13. 107) a. <apaulai de tumi>
ʔapa ʔula-y *de* tumi
INT want-3s A Sp:of Sp:money
'how (much) money did he want?'
OT:"¿cuánto vale?" (Y-C)

b. <apalic sagú>
ʔapa lik sawu-ʔ
INT PL sit-STAT
'how (many) are seated?'
OT:"¿cuántos son ustedes?" (Y-C)

13.2.3.4 Location

The question word for location *ka* seems to be related to the exocentric directional marker *ka* (see § 14.1.1). It can combine with further directionals to specify movement towards or from the location referred to in the question. In the ALS, the exocentric directional *kaʔ* indicates movement away from the deictic

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. <cácá>
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	ʔaku	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 kɨrɨ-n man=ta tɨɬa
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 ʔikaɬ 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 tuɬu 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 ***ɬɨkɨ*** 'when?' ("¿cuándo?") is not attested in syntactic context. It may be etymologically related to the verb ***ɬɨkɨ*** 'find, meet'. In the ALS ****ɬɨkɨ*** is explicitly defined as an interrogative for future events. The form ***ɬɨkan*** 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. <Łʊécu>
ɬɨkɨ
INT:future
'when?'
OT:"cuándo (int. para futuro)" (4034.)

b. <Łʊecán>
ɬɨka-n
INT-?
'when'
OT:"cuando" (4032.)

c. <Łʊecán Vá>
ɬɨka-n **waʔ**
INT-? DIR
'then'
OT:"entonces" (4033.)

The comparative data confirm this pattern. The form **ɬɨkɨ* is attested in X_G and X_Y (13. 116a, c); in X_Y *ɬɨkan* is used as a direct question marker (d). In X_{Ch} the interrogative root **lɨk* combines with the directional *wa-k*, which also indicates future events (b) (see § 14.1.1.3). Schumann indicates another form, *kɨhkɨ* (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. <lɨkɨ>
ɬɨkɨ
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>
lɨkɨ ta(ʔ)
INT come
'when does he come?'
OT:"¿cuándo vendrá?" (Y-C)

d. <lüöcan mi japá>
lɨka-n mu-hapa-ʔ
INT-? 3sA-pass-STAT
'when did he pass?'
OT:"¿cuándo pasó? (Y-C)

e. <kɨhkɨ>
kɨhkɨ
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 *ʔiwaɬ*. The interrogative form can co-occur with the adverb *ʔakaɬ* that is otherwise attested with the negative marker *ʔašin* (§ 13.4.1.1).

(13. 117) a. <yguaŁ>
ʔiwaɬ
INT
'how much?'
OT:"¿cuánto? (interrogatívo)" (4749.)

b. <yguáŁacáŁ>
ʔiwaɬ **ʔakaɬ**
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 *ʔiwaɬ* occurs with the numeral classifier *-ar* (see § 8.6).

(13. 118) a. <iwáɬ tuwá>, <igualj tuhuá>
ʔiwaɬ tuwa-ʔ
INT:how much cacao-STAT = worth
'how much is it worth?'
OT:"¿cuánto vale?" (G-S), (Ch-C), (Ch-F)

b. <ihualár súyi>
ʔiwaɬ-ar suyi
INT:how many-CL time, turn
'how many times?'
OT:"¿cuántas veces?" (Y-C)

In addition to *ʔiwaɬ* 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 =*ʔin*, 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 =*ʔin* may be related to the interrogative marker *ʔin* 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 *ʔin* 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) <¿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 =*ʔin* (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 *ʔin* 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 *ʔin* 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 *-ɬa* in affirmative and negative declarative contexts. The relativised predicate references the third person singular.

(13. 120) a. <a señor naca qui púla Łàn>

ʔa	***señor***	**naka**	**ki**	**[pula-ɬa-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 Łàn>

ʔašin	***señor***	**ʔašin**	**nen**	**[šakša-ɬa-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-taʔ [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=hɨʔ$_{O}$]$_{REL}$
INT:what INT:who leave-ANT-INT/SUBJ DET=DEM
'what (is) who has left this?' (G-RHG)

(13. 122) a. [hapa-n na temporal$_{S}$]$_{COM}$
pass by-SUBJ DET Sp:rainy season
'(that) the rainy season passed' (G-RHG)

b. [ʔɨrɕ'ɨ-n nin$_{O}$ peːloʔ$_{A}$]$_{COM}$
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) <taí na maestro nari Ła in na turi Łi>
Ø-ta:-yi-ʔ [na *maestro*]$_{S}$ [nariɬa=ʔin [na turi-ɬi]$_{O}$]$_{SUB}$
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 doctrína nariŁa pè patai ucaìn maestro ...>
nana *doctrina* nariɬa peʔ 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 **ʔən* 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>
waʔ pula=ʔin
go make=SUBJ
'go to make = may he make it!'
OT:"haga aquel" (430.)

b. <gua sàmu in Łic>
wa samu=ʔin ɬik
go catch=SUBJ 3PL
'go to catch = may they catch it!'
OT:"cojan aquellos" (1109.)

(13. 131) a. <guà màràquiin>
waʔ ma:ra:-ki=(i)n
go rest-REFL?=SUBJ
'go to rest = may he rest'
OT:"descanse aquel" (1514.)

b. <guàŁic tonéquèn>
waʔ ɬik 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 *peʔ* is attested in the same context (13. 132).

(13. 132) a. <pe-kukin>
pe(ʔ) 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 ʔišk'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 *peʔ* 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 =peʔ
run-SUBJ =CENT/IMP
'run!'
OT:"¡ven tú!" (1839.)

b. <curànbè ay>
kura-n =peʔ ʔay
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>
ʂagu-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>
ʔišk'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. taɬa-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)>
ʔipaɬa=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 Łic mucàn>
wi ɬik 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 *peʔ*, which may indicate that the time is moving towards the speaker (see § 14.1.2.1; § 14.3).

(13. 141) a. <aŁmucán>
ʔaɬmu=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (3611.)

b. <ayapacan pè>
ʔayapa=ka-n peʔ
year=EXO-SUBJ/IRR CENT
'last year'
OT:"el año pasado" (2037.)

c. <piícan>
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>
ʔaɬmu=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (G-S)

b. <ahujlacan>, <ʔaßla'kaŋ>
ʔawɬa=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (Ch-C), (Ch-MQ)

c. ʔaɬa peʔ 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 canguí>
ʔakan **ka-n** **wiʔ**
ADV:like EXO?-SUBJ/IRR DIR?
'it is like this'
OT:"así es" (3583.)

b. <gi canguì>
hi **ka-n** **wiʔ**
speak? EXO?-SUBJ/IRR DIR?
'he spoke'
OT:"aquel dijo" (1831.)

c. <szàŁ cangui szàma gracía ayaàc asʊec muc terò>
šaɬ **ka-n** **wi** **šama** ***gracía*** **ʔaya:-k** **[ʔasɬk** **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 inaukí>
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. <nagquinqui>
nahki-n ki
PN:3p-SUBJ INTENS
'they were/would be (themselves)'
OT:"sean" (Ch-Z)

It could not be clarified whether the suffix *-n* that is attested with some quantifiers (see § 8.4.1) is in some way related to the subjunctive/irrealis clitic. Quantifiers are otherwise also attested with the suffix *-ʔ* and with the intensifier/distributive clitic *=ki* (which does not occur with *te:na-* 'much'). In the given examples, the marker *-n* could be indicating the notion of being unspecified or indeterminate, which seems to be semantically related to the irrealis.

(13. 146) a. <tenan jutu>

te(:)na-n	**hutu**
QUANT-IRR?	tree

'much tree = trees'
OT:"palo (plural)" (3991.)

b. <tumun pariqui>

tumu-n	**pari=ki**
QUANT-IRR?	day=INTENS/DISTR

'all days = every (of the) days'
OT:"todos los días" (2032.)

IRREALIS MARKER WITH OPTATIVE: The subjunctive/irrealis marker constitutes furthermore part of the optative marker *ɬan* that is only attested in the Maldonado data and can be shown to derive from the verb *ʔuɬa* 'want, wish' (see § 10.1.3.5).

(13. 147) a. <mu mere Łàn>

mu-mere	**ɬa-n**
3sA-break	OPT-SUBJ/IRR

'he wished (to) break (it) = he broke it (subj.)'
OT:"aquel rompa" (616.)

b. <szàŁ Łan mucpùla na oracion>

šaɬ	**ɬa-n**	**muk-pula**	**na**	***oracion***
good	OPT-SUBJ/IRR	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.)

13.4 Negation

Negation in Xinka is analytically marked by clitics and adverbs that occur in position preceding the negated clause or constituent (cf. Payne 1997:282).

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).

Negation can also be expressed by inherently negative stems, i.e. the "negative existential" *ʔeyeɬ*. There are cases of negative operations causing a change in word order.

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
<Łan>	ɬan	"no"	?
<aguán>	ʔawan	"no (oraciones imperativas negativas)"	prohibitive
<eyeŁ>	ʔeyeɬ	"no (adverbio, *sum est fui*)"	negative existential
<ni…>	ni-	(negation of indefinite pronoun)	negative quantifier

The negative operator *ʔašin* 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 *ɬa(n)* and *na(n)*.

Table 13. 7: Comparative chart of basic negative markers in Xinkan

	X_M	X_G	X_{Ch}	X_S	X_{Jum}	X_Y
no	ʔašin	hin, him šin	hen, hin	him		ʔašin
NEG						ʔin
no/OPT	ɬan		ɬa, ɬan ɬa-mu(k/y)		ɬa	 ɬa-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-*, *ɬa-* and *na-* / *ni-*, which seem to combine with the operator *-n* when occurring as free forms. The root **ʔašɨ* / **hi-* might be identical with the affirmative marker *ʔahɨ* 'yes' (§ 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 *ɬa-* 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>
***ɬa-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
*?-NEG/IRR
'no'
OT:"*no" (Ch-C)

In X_Y the form *ʔin* is attested as a negative marker. In this case, it is not clear whether *ʔin* 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 *ɬa-* and *na-* can also be prefixed to interrogative pronouns, in which case *-n* is lost.

There are two forms that employ the suffix *-ɬ* in the context of negative operations. The negative existential *ʔeye-ɬ* from the ALS and the negative marker *naɬ* attested in X_{Ch} (see below). According to the ALS gloss, the form *ʔeyeɬ* 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 ɬʊèɛʊe na perdon>
ʔašin **ka-ɬikɬ** **na** ***perdón***
NEG 2sA-find DET Sp:forgiveness
'you do not find forgiveness'
OT:"no consiguiréis el perdón" (2033.)

b. <a szin ui szicà nà miszà>
ʔašin **ʔuyši-kaʔ** **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 **šaɬ**
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 szìn 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 *hiʔ*, which is also attested

in X_{Ch}. The form *ʔašin* 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 *ɬa(n)* to express negation.

13.4.1.2 Negative marker ɬan

Maldonado de Matos indicates a negative marker *ɬan* that is not otherwise attested in the ALS. However, the form *ɬan* is employed by Maldonado de Matos as an optative marker (13. 154), which derives from the verb *ʔuɬa* 'wish' (see § 10.1.3.5).

(13. 153) a. <Łán>
ɬan
NEG
'no'
OT:"no" (4008.)

b. <Łán>
ɬan
OPT
'*may'
OT:"partícula verbal optativa" (4009.)

(13. 154) a. <a màra Làn>
ʔa-ma:ra **ɬan**
3sA-rest OPT
'he may rest'
OT:"aquel descanse" (1519.)

b. <muc-pùla Łan na penitencia>
muk-pula **ɬan** **na** ***penitencia***
1pA-make OPT DET Sp:penitence
'they say we (may) do pentinence'
OT:"dicen que hagamos penitencia" (2029.)

In most other Xinka varieties *ɬan* or *ɬa* is attested in the function of a negative marker. In X_{Ch} *ɬa(n)* largely occurs in the same functional contexts in which *ʔašin* or *hin* occur in the ALS and X_G. The fact that the ALS lists both forms, *ʔašin* and *ɬan,* suggests that the regional variation arises from functional difference. Given that Maldonado de Matos uses *ɬan* as an optative marker, the negator may originally have expressed an irrealis concept, or simply translates as to 'not want'. In X_G *ɬan* is attested as a negative marker only in the Schumann-data.

(13. 155) a. <la>
*ɬa
NEG
'no'
OT:"partícula negativa, no" (Ch-C), (Ch-F)

b. <lan>, <łan>, <lhan>
ɬa-n
*wish?-NEG/INT= NEG
'no'
OT:"no, partícula negativa" (Ch-C)

c. <langú>
ɬan-ku
NEG-go
'no go'
OT:"no" (Ch-F)

d. <ɬantí [ɬandí]>
ɬan-ti
NEG-INT
'nothing'
OT:"no hay" (Ch-S); "nada" (Ch-C/F)

The negative root *ɬa* also occurs in the form *ɬa-mu(k)* that is only attested in very few cases where it does not seem to be morphologically transparent.

(13. 156) a. <lamu cú>
ɬa-mu ku
NEG-? go
'you do not go'
OT:"no vayas" (Ch-C), (Ch-F)

b. <hlamú pirica>
ɬa-mu piri-ka
NEG-? see-2sA
'you did not see'
OT:"no viste" (Ch-JC)

c. <lamu'c urica ná>
ɬa-muk wri-ka naʔ
NEG-? speak-2sA DEM
'you did not speak it'
OT:"no oíste lo que hablaron" (Ch-JC)

There is one example in the X_{Ch}-data that gives the marker *ɬan* in a non-negative, but optative context as it is attested in the ALS. In the following context, a literal translation of *ɬan* as a negative operator (i.e. 'he does not know') would not reflect the given translation of 'maybe' as well as a literal translation of 'maybe/possibly he knows' does.

(13. 157)
<länjönó>
ɬan hɨnɨ
NEG/OPT know
'(he) does not know = maybe'
OT:"quizá" (Ch-F)

Schumann also indicates *ɬa* apparently in the function of a question word for human/person referents. Although no further context is provided, the negator may occur here in predicative function; an overt question marker is missing.

(13. 158)
<la-nák>
ɬa nak
NEG PN:2s
'(is it) not you?'
OT:"¿quién eres?" (Ch-S)

13.4.1.3 Negative markers ni- and na-

The form *ni* is used in the ALS to mark negative on interrogative pronouns. Since this negative operator does not occur elsewhere in Xinka, it is possible that it has been borrowed from Spanish.

(13. 159)
<ni guéna ma qui>
ni **wena** **ma** **ki**
NEG INT:who COND INTENS/DISTR
'nobody who'
OT:"ninguno" (228.)

In X_G the form *ney* is used as a negative marker that precedes verbal predicates. It is not clear whether this negator is related to, or even functionally identical, with the negative marker *na* that occurs as *nan* or *naɬ* in X_Y and can combine with other clitics.

(13. 160)
ney horoy *esperansa*
NEG get-3sA Sp:hope
'he did not get (= does not have) hope' (G-SH)

In the comparative data the marker *na-* is used to mark negation in several contexts. In X_Y *na-* is attested in the same function as *ni-* in the ALS, i.e. preceding the human/person question word. This leaves it unclear whether *ni* is a Spanish loan or a Xinka etymon.

(13. 161) a. <nahánda>
na han-ta
NEG INT:what?-DIR
'not what = nothing'
OT:"nada" (G-S)

b. <namáa>
na-ma:
NEG-say
'not say = lie'
OT:"mentir" (Ch-F)

c. <navuan>
na-wan
NEG-INT:who?
'not who = nobody'
OT:"ninguno" (Y-C)

*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
*go?-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>
wa=ta=ki
NEG=come?=INTENS?
'it is not important'
OT:"no importa" (3845.)

b. <huáki>
wa=k'i
NEG=INTENS?
'not (good)'
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>

ʔašin	**ka-pula**	**na**	**hama**
NEG	2sA-make	DET	sin

'you do not make sin = you do not sin'
OT:"no pecas" (2044.)

b. <a szin uý szin nà mísza>

ʔašin	**ʔuyši-n**	**na**	**miša**
NEG	hear-1sA	DET	Sp:mass

'you did not hear the mass'
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 *-ɬa* 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	nahaʔ
NEG	3sS-pass by-STAT	LOC:aquí

'he did not pass here' (G-SH)

c. hin ɬɨnɨ-kan naka
NEG know-2sA$_{DEP}$ PN:2s
'(that) you do not know' (G-JAP)

d. hin Ø-ku-ɬa 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 laɕ'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 debolber
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 aɬa>
ʔašin paʔ peʔ kaʔakuʔ miša ʔaɬa
NEG PFV CENT 2sS-go Sp:mass tomorrow
'(if) you would not go to mass tomorrow'
OT:"si no fueréis a oir misa mañana" (2040.)

b. <á szin pa ayù jʊenʊei na doctrina.>
ʔašin paʔ ʔayuʔ ɬɨnɨ-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 *ɬa-* is attested in X_{Ch} in the same functional contexts. The functional difference of *hin* and *ɬan* 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 *ɬan* 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. <ɬa awusíki>
ɬa ʔawusi-ki
NEG hear-AP
'does not hear = deaf'
OT:"sordo" (Ch-S)

c. <guanín lanjonó>
wanin lan *hɨnɨ-ʔ
INT:who? NEG know-STAT
'who does not know'
OT:"no sé quién" (Ch-F)

d. <lan, guahtá, na tagú>
ɬan 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 *ɬamu-(k)* occurs in X_{Ch} in the same contexts as **ɬan*. 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. <jlhamúc acugüí nac>
ɬamuk ʔaku-wiʔ nak
NEG go-? PN:2s
'you do not go'
OT:"no vas ir vos" (Ch-JC)

c. <lhamú cuay pocó>
ɬamu 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 naljönó>
wanin nal hɨnɨ
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. <hiŋ iwrikⁱ>
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 *ʔawan* "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 rúka we pe>

hin	ruka-Ø	we	pe(ʔ)
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)	ʔašin šan	hin šan			"no hay"
nothing		ɬan-ti	ɬan-ti		"nada"
there is no(thing)			nan-ti	nan-ya	"no hay"
nothing		na hanta			"nada"
		na hay			

There is only one attested case of a negative existential in the ALS that consists of the negative marker *ʔašin* 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. <¿szàn para cà nem?>

šan	**para-kaʔ**	**nem**
INT:what?	search-2sA	PN:1s

'what have you searched me for?'
OT:"¿para qué me quieres?" (1870.)

b. <a szìn szàn paraan nàca>

ʔašin	**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
NEG INT 1sA-take/bring PN:1s
'I take/bring nothing' (G-SH)

b. hin šan ʔayma
NEG INT:what corn
'there is no corn' (G-JAP)

c. šin šan šinak'
NEG INT:what beans
'there are no beans' (G-PE)

d. <hin tíʔla šan>
hin tíʔla šan
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 *paʔaʔ*.

(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>
nan-ti
NEG-INT
'there is nothing'

OT:"no hay" (Ch-F)

b. <nandi rak?>
nan-ti ra-k
NEG-INT name-2sP
'there is not your name
= do you not have a name?'
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 *ɬan* (13. 181a). In X_G *ɬan-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. <ɬandí>, <landi>, <landiʔ>
ɬan-ti
NEG-INT
'there is nothing'
OT:"nada, no hay" (Ch-C), (Ch-S),
"not" (Ch-MA)

b. <landi malh ramacú>
lan-ti maɬ ra makuʔ
NEG-INT firewood PREP house
'there is no firewood in the house'
OT:"no hay leña en la casa" (Ch-JC)

c. <landú acú>
lan-tɨ ʔakɨʔ
NEG-INT now
'not now'
OT:"no ahora" (Ch-F)

d. <ɬandi ndi pulayán tiʔk>
ɬan-ti n-ti pula=ya-n ti:ʔ-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 *ʔuka* 'have' is attested in this context (13. 182a); in other Xinka varieties we find negative operators to precede the existential verb *ʔaya* 'be in a place' (b-c).

(13. 182) a. hin ʔuka
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 *ʔin* and the negative operator *ʔašin*.

(13. 183) a. <önaxin>
*ʔinʔ ašin
INT? NEG
'nothing'
OT:"nada" (Y-C)

b. <in axin jorí>
ʔin ʔašin 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 *ʔašin*.

(13. 184) a. <aszin szaŁ>
ʔašin šaɬ
NEG good
'not good = bad'
OT:"malo, no está bueno" (3658.)

b. <aszin saŁca>
ʔašin saɬka
NEG distant
'not distant = near'
OT:"cerca" (3656.)

c. <aszintʊeszɛʊe>
ʔašin tišk'ɨ
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 *ɬan* (c-d) and X_Y the marker *na* (e).

(13. 185) a. hin ɸ'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'aɬ* 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) <aszinaɕál>
ʔašin ʔak'aɬ
NEG ADV:yet, still
'not yet'
OT:"todavía no" (3655.)

(13. 187) a. <langar atá>
ɬan-kar ʔa-taʔ
NEG-yet 3sS-come
'he does not come yet'
OT:"todavía no viene" (Ch-F)

b. <navuac tayá>
na-wak ta-yaʔ
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. ʔiɾaʔ 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 *ʔaɬi* 'by, because of' ("por") to indicate "negative causation".

(13. 190) a.
hin	ʔaɬi	šuka-n	nak'i
NEG	PREP.CAUS	eat-1sA	chilli

'because I did not eat chilli' (G-SH)

b.
hin	ʔaɬi	hin
NEG	PREP.CAUS	NEG

'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>
ni=wena
NEG=INT:who
'nobody'
OT:"ninguno" (4176.)

b.
<ni guéna maqúi>
ni=wena **ma** **ki**
NEG=INT:who COND INTENS
'nobody'
OT:"ninguno" (228.)

In X_{Ch} the negative quantifier combines the question word *wanin* 'who?' and the negative prefix *ɬa-* (13. 192a) or the free negative existential *ɬan-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.
<ɬawanín>
ɬa=wanin
NEG=INT:who?
'no who = no one, nobody'
OT:"nadie, no está" (Ch-S)

b.
<landí huanin pulajlá>
ɬan=ti wanin pula-ɬaʔ
NEG=INT INT:who? make-PAST.ACT
'nothing = no one who did make it'
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 *ʔahɨ* or *ʔa:*. The comparative data indicate similar forms, suggesting that the main affirmative marker is *ʔahɨ*. The form is widely diffused (e.g. pMZ **hɨʔ* [W-95]; KCH *heʔ* [E-65]).

Table 13. 9: Comparison of affirmative markers

	FORM		ORIGINAL GLOSS
X_M	<agʊe>	ʔahɨ	"si"
	<aa>	ʔa	
X_G	<áhɨ>	ʔáhɨ	"si" (G-S)
		ʔahi, ʔahe	(G-SH)
X_{Ch}	<a^h>	ʔah	"si" (Ch-MQ)
	<uj>	ʔuh	(Ch-F)
	<ɨ>	ʔɨ	(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 púlaŁàn>

ʔa	***señor***	**naka**	**ki**	**pula-ɬa-n**
AFF	Sp:sir, mister	PN:2s	INTENS	make-PAST.ACT-SUBJ

'yes Sir, (it was) you (who) did make it'
OT:"si 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 *ȼ'ama* (13. 194b) is in addition also used as an augmentative modifier (§ 8.7.3.1).

(13. 194) a. <szaŁ>
šaɬ
ADJ:good
'good, perfect'
OT:"bueno, perfecto" (4428.)

b. <txáma>
ȼ'ama
ADJ:good
'good, well'
OT:"bueno, bien" (4637.)

Function and meaning of the affirmative adjective roots are confirmed by the comparative data.

(13. 195) a. <ȼáma>
ȼ'ama
ADJ
'good, well'
OT:"bueno" (G-S)

b. <tzama ná>
ȼ'ama na?
ADJ DEM
'it/he is good'
OT:"bueno" (Ch-F)

c. <sal parri>
*saɬ pari
good day
'good day'
OT:"¡buenos días!" (Ch-C), (Y-C)

In X_G and X_{Ch} the adjective **šaɬ* '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>
šah=ki
ADJ:good=INTENS ?
'good'
OT:"bien" (G-S)

b. <sajkí ti>
*sah-ki ti
ADJ:good-INTENS? ?
'good'
OT:"estoy bueno, estás bueno" (Ch-F)

(13. 197) a. <qui>
ki
INTENS
'?'
OT:"partícula conclusiva, afirmativa" (4366.)

d. <guena qui>
wena =ki
INT:who =INTENS/DISTR
'*whoself = (he/the one) who'
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. <acaní>
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 *ʔakaɬ* 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 *-ɬ* (cf. § 12.5). The adverb *ʔakaɬ* 'yet, still' is also attested in X_{Ch} and X_{Y}.

(13. 200) a. <aszinaɛal>
ʔašin **ʔakaɬ**
NEG ADV:yet, still
'not yet'
OT:"todavía no" (3655.)

b. <yɛaŁaɛaŁ>
ʔikaɬ **ʔakaɬ**
NUM:'1' ADV:yet, still
'one is missing'
OT:"una falta" (4748.)

(13. 201) a. <lankar>
ɬan *kaɬ
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 *šɨki*. The vowel pattern *ɨ ~ i*, which does not follow vowel harmonic rules (§ 4.4.2), might be an indication that the form is morphologically complex. The meaning of *šɨ* is not attested in the corpus of data, although it is possible that there is an etymological relation to the demonstrative *ʔašɨ* 'this' (§ 8.5.2), i.e. *šɨ-ki* 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>, <nagszʋequí>
nah **ši-ki**
PN:3s ?DEM-EXTEN
'he also/as well'
OT:"también" (2049.),
"él es, y también" (4147.)

b. <Łiná szʋequi>
ɬi-naʔ **ši-ki**
PREP-DEM ?DEM-EXTEN
'as well, also'
OT:"también, y" (4028.)

c. <acàn szʋequi>
ʔakan **ši-ki**
ADV:like ?DEM-EXTEN
'like (this) as well'
OT:"así 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 *-ɬa(k)* is not understood.

(13. 203) <šíki>
ši-ki
?DEM-EXTEN
'also, as well'
OT:"también" (G-S)

(13. 204) a. <n'frac kilac ni...>
n-frak 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'aawaʔ* and X_{Jum} *k'waʔ* with the meaning 'also', which may be related to the form *k'iwi(ʔ)* 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 *-waʔ* or *-wiʔ* 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:ši 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>
muɬ-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?>
na maku ki ʔololoʔ
DET house ADV white
'the house (is) very white'
OT:"la casa es muy blanca" (G-S)

b. <ki tzamá>
ki ¢'ama-ʔ
ADV dark-STAT
'(it is) very dark'
OT:"muy obscuro" (Ch-F)

c. <ki galan>
ki *galan*
ADV Sp:elegant
'very elegant'
OT:"hermoso, admirable" (Y-C)

(13. 208) a. <kikaşʌ>
ki kaša
INTENS mosquito
'much/a lot of mosquitos'
OT:"mucho zancudo" (Ch-MQb)

b. <kimaša>
ki maša
INTENS mud
'much/a lot of mud'
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 *nɨma
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-ɬ	impf
proximal	ʔašɨ, ʔahɨ	"este"	*ʔi, ʔiš	"allí"	ʔasɨ-k	"cuándo"
					ʔašɨ-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.)	centric (come towards but away from DC)
		"partícula concursiva" (3197.)	
<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 *kaʔ* 'go, take', which indicates a 'motion away from the deictic centre', and the centric marker *peʔ* '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	< ʔ	-	past	'go from here'		+
hiʔ	< ʔ	-	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 *ʔašɨ* '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 *ʔahi* '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 *ka?*, *hi?* and *wa?*. The forms *ka?* and *wa?* occur in spatial and temporal function, while *hi?* is only attested as a temporal marker. With respect to the dimension of time, *ka?* references temporal concepts in the past, while *hi?* and *wa?* 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 ka?

The directional *ka?* 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 *ka?* always follows the adverb. The stress pattern in example (a) seems to suggest that *ka?* cliticises to the adverb. Example (c) shows that the operator is not a bound form; with the centric directional *pe?* occurring between the locative adverb and the directional *ka?*. 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. <natʊéca>
natɨ=ka(?)
LOC:there=EXO
'over there'
OT:"allá" (4167.)

b. <ʊesztú cá>
?ɨštu=ka?
LOC:there=EXO
'over there'
OT:"allá" (4745.)

c. <natʊepècà>
natɨ pe? ka?
LOC:there CENT EXO
'from/through over there'
OT:"por allá" (4168.)

d. <saŁca>
***saɬ=ka**
LOC=EXO?
'distant, far'
OT:"distante, lejos" (4369.)

In temporal deixis, the directional *ka?* 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. <aɛʊeca ayac yɛál ayapa>
?ak'ɨ-ka ?aya-k ?ik'aɬ ?ayapa
*now-EXO be-VN? NUM:'1' year
'one year from now'
OT:"ahora un año" (3594.)

(14. 3)

a. <piícan>
pi:=ka-n
NUM:'2'=EXO-SUBJ/IRR
'the day before yesterday'
OT:"anteayer" (4288.)

b. <aŁmucán>
?aɬmu=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (3611.)

c. <ayapacan pè>
?ayapa=ka-n pe?
year=EXO-SUBJ/IRR CENT
'last year'
OT:"el año pasado" (2037.)

The question word for location *kaʔ* '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 *kaʔ* the question word indicates the concept 'where to?', with the centric directional *peʔ* the concept 'where from?'.

(14. 4)

a. <cácá>

kaʔ	**kaʔ**
INT:where?	EXO

'where to?'
OT:"¿dónde?" (3679.)

b. <capè>

ka	**peʔ**
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-kaʔ naka maɬik
NEG EXO? carry-2sA PN:2s firewood
'… (that) you did not carry firewood' (G-JAP)

b. tur-ey kan neɬa 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 hiʔ

The directional *hiʔ* 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 *ʔih*, *hi* 'there' ("allí") that is attested in X_G, which may, again, be related to the demonstrative *ʔašɨ* 'this' that is attested in the ALS.

(14. 6)

<pi gi>

pi	**hi(ʔ)**
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 waʔ

The directional *waʔ* 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 *hiʔ*, i.e. with numerals indicating a distance in days. The following example may suggest that *wa(ʔ)* indicates temporal distance into the future (14. 8). There is no indication that *waʔ* refers to a movement with respect to the deictic centre as does the directional *kaʔ*. In X_Y *ka* and *wa* can co-occur in the same functional context (b).

(14. 8) a. ʔaɬa pe? pi=wa-n
tomorrow CENT NUM:'2'=DIR-SUBJ/IRR
'the day after tomorrow' (G-SH)

b. <pijcavuac>
pi=ka=wa=k
NUM:'2'=DIR=DIR=?
'the day after tomorrow'
OT:"pasado mañana" (Y-L)

The directional function of *wa?* seems to be confirmed by similar contexts in X_{Ch} where the forms *wa?* and *wak* can combine with locative adverbs, indicating more specific concepts of spatial deixis.

(14. 9) a. <haŋ 'gwaʔ>
han waʔ
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-ʔ 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 *pe?* and *ta?* 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 *pe?* may refer to a movement 'towards the deictic centre/speaker', while *ta?* 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 *pe?* 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 *pe?* follows behind its referent form. In example (14. 10) *pe?* adds a directional meaning to the locative reference. It occurs between the locative adverb and the directional *ka?*, which together form the basic locative adverbial; i.e. *natɨ* + *ka?* ('there' + exocentric directional) = 'over there' (Sp. "allá"). Co-occurring with temporal adverbs, *pe?* 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) <natʊepècà>
natɨ pe? ka?
there CENT EXO
'from/through over there'
OT:"por allá" (4168.)

(14. 11) a. <aɛʊepè ayac yɛál agua>

ʔak'ɬ	**peʔ**	**ʔaya-k**	**ʔik'aɬ**	**ʔawa**
*now	CENT	be-VN?	NUM:'1'	month

'one month from now'
OT:"de aquí a un més" (3597.)

b. <guaŁipè>

waɬ-i	**pe(ʔ)**
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 ʔišpaʔ Hwan>

Watemala	peʔ	Ø-ʔišpa-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 *naʔɬ* (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 nàŁ pè>

ʔa-pula	**naʔɬ**	**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 quí>

ka-pahata	**peʔ**	**kiʔ**
2sA-pay	CENT/DEON	INTENS

'you yourself will have to pay (it)'
OT:"lo has de pagar" (1876.)

b. <pulaquiŁa pè>

pula-ki-ɬa	**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 acùg>

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>
tura-k pe(ʔ)
bring-? CENT
'take to = bring'
OT:"traer" (Ch-P)

b. <piríc bej>
piri-k beh
see-? 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 *ʔantamaɬ* (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>
ku=nta taʔ
go-IMP:go DIR
'you go (with god)'
OT:"ve o anda tú con dios" (1823.)

b. <andamaŁtà>
ʔanta-maɬ taʔ
IMP:go-EXH DIR
'let's go!'
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
run-IMP.VI DIR
'run!' (G-PE)

b. nuka-Ø taʔ naʔ
give-IMP.VT DIR DEM
'give him' (G-JAP)

c. <acuy-ta>
ʔaku-y ta(ʔ)
go-IMP.VI DIR
'go!'
OT:"ándate, vete" (Ch-F)

(14. 19) a. ʔanta-maɬ=ta
IMP:go-EXH=DIR
'let's go!' (G-JAP)

b. <da ta nama>
da ta niɬma
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?'. It 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 *ɬik* 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 Łic mucàn>
wi ɬik 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 acugüí nac>
ɬamuk 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. kaʔ waʔ wiʔ 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(ʔ)
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(ʔ)
NEG eat-IMP.VT DIR? IMP
'that he may not eat'
OT:"¡que no coma!" (G-S)

There a 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 wiʔ
ADV:like EXO-SUBJ/IRR DIR?
'it is like this'
OT:"así es" (3583.)

b. <gi canguì>
hi ka-n wiʔ
speak? EXO-SUBJ/IRR DIR?
'he spoke'
OT:"aquel dijo" (1831.)

c. <szàŁ cangui szàma gracía ayaàc asʊec muc terò>
šaɬ **ka-n wi šama *gracía* ʔaya:-k [ʔas**ɬ**k 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) <maɬca uɛaca mà restituir szan gui szac szacà ...>
[maɬ=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 restituído 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
<naà>	na:(ʔ)	[here]	"aquí" (4134.)
<natʊé>	na-tɨ	[here-DISTANCE]	"allí" (4166.)
<ʊesztú>	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. *natɨʔ* and *ʔištuʔ*. Both translated as "allí" by Maldonado de Matos, the morphological analysis of **na-tɨ* [*here-DISTANCE] and **ʔiš-tɨ* [*there-DISTANCE] indicates that they refer to different deictic regions. The marker **tɨ* is not semantically transparent, but could be etymologically related to the root **tišɨ* '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 **iš* 'there' are parallel to the demonstrative roots *na(ʔ)* 'he, this one' ("él, éste") and *ʔašɨ* '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. <naná>; <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 naná>
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 *naha7*, which may involve the preposition *ha* (= *ša*) or may be etymologically related to the TAM-adverbial *na7ɬ* that is attested in the ALS and X_G (see § 12.5.3).

(14. 29) a. na-ha7
LOC:here-PREP?
'here, now' (G-JS)

b. šawu na-ha7
sit LOC:here-PREP?
'sit here' (G-SH)

c. na-ha7 tupa-n
LOC:here-PREP? leave, let-1sA
'I left it here' (G-RHG)

The locative adverb *na-tiɬ* '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 *7aya* '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-7* (d).

(14. 30) a. šawu-ya nati=ya ka-wapaɬ
sit-IMP.VI LOC:there-EXIS 2sP-bench
'here is your bench' (G-SH)

b. nati=ya mu-ɬara man=ta pari
LOC:there-EXIS 3sS/A-rise DEM=INT sun
'here rises the sun' (G-SH)

c. nati=ya ti:ki hi7
LOC:there-EXIS sleep be+3sS$_{DEP}$
'here he is sleeping' (G-SH)

d. hin ka-hapa-ya nati=ya-7
NEG 2sS-pass-IMP LOC:there-EXIS-STAT
'do not pass there!' (G-SH)

In X_{Ch} the adverbial form *natiɬ* 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-7 bar natiɬ 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 *tiɬ* and refer to the concept of 'distance' (see above). It is not entirely clear whether the form *7atiɬkal* (14. 32a) indicated by Schumann corresponds in any way with **nati*, as no examples are given. The morpheme **-kaɬ* 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 **7ati* combines with the spatial preposition *ha(n)* (= **ša(n)*). Fernandéz also indicates **kati* instead of **7ati*. While *7ati-ha7* is given with the meaning 'here' (Sp: "aquí") (b), *7ati-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 *ha7* and *han* (see § 9.1.1).

(14. 32) a. <atɨkál>
ʔatɨ=kal
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 *ʔɨš-tu* 'there' could be etymologically related to the demonstrative *ʔašɨ* 'this' that indicates proximal distance. In X_G the deictic clitic *ʔɨ* or *ʔɨh* is attested with the meaning 'here' or 'there'. In X_{Ch} the deictic root *ʔɨš* 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 kʼuʔ paʔaʔ
LOC:there come DEM/3s MOD PFV
'there he will already come' (G-JAP)

c. <ʔišʼkaʔ>, <ʔiša?>
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.)
<natʊé ca>	natɨʔ ka(ʔ)	[there + EXO]	"allá" (4167.)
<natʊé pè ca>	natɨʔ peʔ ka(ʔ)	[there + CENT + EXO]	"por allá" (4168.)
<ʊesztú cá>	ʔištuʔ ka(ʔ)	[over there + EXO]	"allá" (4745.)

The locative adverb *natɨ* combines with the directionals *kaʔ* and *peʔ* to specify movement towards or from the deictic centre that is indicated by the adverb; i.e. *natɨ ka* 'there to', *natɨ 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 *natɨ kaʔ* 'over there' and not *natɨ* 'there' alone. None of these forms is attested in the ALS in syntactic context.

(14. 34) a. <natʊéca>
natɨʔ ka(ʔ)
LOC:there EXO
'there'
OT:"allá" (4167.)

b. <natʊepècà>
natɨ(ʔ) peʔ kaʔ
LOC:there CENT EXO
'over there'
OT:"por allá" (4168.)

In X_{Ch} the locative adverb **natɬ* co-occurs with the exocentric directional *ka(ʔ)* that is preceded by the form <hay>, which may either be identified as the prepositional form *hay* or as the Spanish demonstrative "allí". The specific semantics of the form are not reflected in the translation context in the Zeeje-ms.

(14. 35) <jai natuca tumuqui nanu castianuli>

hay	natu-ka	tumu-ki	nanu	kastiyanu-ɬi
PREP/Sp:allí	there-EXO	QUANT-DISTR	FOC	Sp:Spanish-PL

'to all the Spanish there'
OT:"a que todos los Españoles" (Ch-Z)

The combination of the locative adverb *naʔ* 'here' and the centric directional *peʔ* indicates movement towards the position of the speaker. In all attested cases, *peʔ* functions as a verbal predicate in the imperative mode, while *naʔ* specifies the direction.

(14. 36) a. <nàpè>; <naapè>

naʔ	**peʔ**
LOC:here	come/CENT

'come (here)'
OT:"venir (defectivo)" (1841.), (2733.)

b. <nà pè>

naʔ	**peʔ**
LOC:here	come/CENT

'come here'
OT:"ven acá tú" (1842.)

c. <guenaqui nà pè agi>

wena=ki	**naʔ**	**peʔ**	**ʔahi**
INT:who=INTENS	LOC:here	CENT/DEON	be-3sS_{DEP}

'(the one) who will have to be here'
OT:"el que ha de estar mañana aquí" (1964.)

In the comparative data the combination *na peʔ* can occur with imperative as well as future translation contexts. The pattern is extended by another *naʔ* following the motion verb *peʔ* that expresses the imperative command 'come!'; i.e. *naʔ peʔ naʔ*. The morphology of the pattern is not entirely understood. In analogy with the pattern from the ALS the *naʔ* in initial position would be identified as the locative adverb, while *naʔ* following the imperative predicate might function as a demonstrative or third person pronoun. In X_{Ch} there are constructions where the future adverbial *peʔ* is preceded by an independent pronoun, while here it is the locative adverbial *naʔ* that follows *peʔ*.

(14. 37) a.

naʔ	peʔ	naʔ
LOC:here	come/IMP	DEM?

'come here! / hurry up!' (G-RHG), (G-SH)

b.

naʔ	peʔ	naʔ
LOC:here	come/IMP	DEM?

'there he comes' (G-RHG)

c. <nac pe na tiki ajlahuac>

nak	pe(ʔ)	na(ʔ)	ti(:)ki	ʔaɬa=wak
PN:2s	FUT	LOC:here	sleep	tomorrow=DIR

'tomorrow you will sleep'
OT:"mañana dormirás" (Ch-C)

Maldonado de Matos indicates the Latin category of *infinitivo futuro* with the TAM-adverbials *naʔɬ* and *peʔ* (14. 38). It is not clear whether this form from the ALS corresponds to the combination of *naʔ peʔ* preceding unmarked verbs in X_{Ch} and X_Y (14. 39).

(14. 38) a. <merè nàŁ pè>
mere-ʔ **naʔɬ** **peʔ**
break-STAT IMPFV CENT/IMP
'to have to break'
OT:"haber de romper" (646.)

b. <a pùla nàŁ pè>
ʔa-pula **naʔɬ** **peʔ**
3sS-make IMPFV CENT/IMP
'to have to make'
OT:"haber de hacer" (471.)

(14. 39) a. <nape yack>
na(ʔ) pe(ʔ) yak
LOC:here come/CENT Sp:already
'(to) come here already'
OT:"ya vengo" (Ch-P)

b. <na pe ratz'a sama>
na(ʔ) pe(ʔ) raȼ'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(ʔ) ka(ʔ)
LOC:here EXO
'where(to)?'

OT:"¿dónde, a dónde?" (Y-C)

b <naca curug>
na(ʔ) ka(ʔ) 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 yahuí>
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 parallelled (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 **ʔakɨ* occurs in the ALS only in combination with directionals, while *ʔampɨ*, *ʔanik* and *ʔasɨk* 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. *ʔaɬ-*).

Table 14. 6: Temporal adverbs (ALS)

FORM		ORIGINAL GLOSS
<ambʊè>	ʔampɨ	"ahora" (3631.)
<aɛʊe->	*ʔakɨ-	"ahora" (3593. – 3598.)
<anic>	ʔanik	"hoy" (3632.)
<asʊec>	ʔasɨk	"cuando" (3675.)
<Ɬʊecán>	ɬɨkan	"cuando" (4032.)
<aɬmúu>	ʔaɬmu	"hoy" (3610.)
<aɬa>	ʔaɬa	"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 *ʔašɨ*, 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 *ɬɨka-n* 'then-future' derives from the interrogative marker for future events *ɬɨkɨ* 'when?' (see § 13.2.1). The suffix *-n* is likely identified as the subjunctive/irrealis marker that indicates non-actual events (see § 13.3).

Table 14. 7: Comparative chart of temporal adverbs in Xinka

	X_M	X_G	X_{Ch}	X_Y
now	ʔampɨ		pɨ-k (luego)	
	*ʔak'ɨ			ʔakuʔ
				ke-tɨ
when	ʔasɨ-k			
right now		ʔašɨ-ša		
	ɬɨka-n	kɨhkɨ (G-S)	ʔɨɬɨk	
later, next				ta-k
always			hay	
today	ʔanik	ʔanik	ʔanik	
		ʔahkwan (G-S)		
	ʔaɬmu:			
tomorrow	ʔaɬa	ʔaɬa=wa		
yesterday	ʔaɬmu=ka-n	ʔaɬmu=ka-n	ʔawɬa=ka-n	ʔawaɬa
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 **pɨ-* '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 *tɨ* 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 'tɨʔ>
hay tɨʔ
ADV:always DISTANCE
'never'
OT:"nunca" (Ch-MQ)

b. <ketɨ>
(ʔa)ke tɨ
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 *peʔ*, *ka(ʔ)* and *hiʔ* are attested in this context; in the comparative data we also find *taʔ* and *waʔ*. The centric directional *peʔ* 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 *peʔ* and *ka(ʔ)* combine with temporal adverbs to indicate the time span that links the past or future with the time of utterance.

The adverb **ʔakɨ* '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 *peʔ* the adverb indicates events in the future relative to the time of utterance, i.e. *ʔakɨ=peʔ* [now=CENT] *'until, in' (*"hasta"), whereas the exocentric directional *kaʔ* indicates an event that occurred a specified time period ago, i.e. *ʔakɨ=ka* [now=EXO] *'before/since' (*"hace").

(14. 43) a. <aɛʊepè ayac yɛál pari>

ʔak'ɨ=peʔ	**ʔaya-k**	**ʔik'aɬ**	**pari**
*now=CENT	be-VN?	NUM:'1'	day

'eight days ago'
OT:"de aquí a ocho días" (3596.)

b. <aɛʊepè ayac yɛál ayapà>

ʔak'ɨ=peʔ	**ʔaya-k**	**ʔik'aɬ**	**ʔayapa**
*now=CENT	be-VN?	NUM:'1'	year

'a year ago'
OT:"de aquí a un año" (3598.)

(14. 44) a. <aɛʊeca ayac anic>

ʔak'ɨ=ka	**ʔaya-k**	**ʔanik**
*now=EXO	be-VN?	today

'eight days from now'
OT:"ahora ocho días" (3593.)

b. <aɛʊeca yɛal agua>

ʔak'ɨ=ka	**ʔik'aɬ**	**ʔawa**
*now=EXO	NUM:'1'	month

'a month from now'
OT:"ahora un mes" (3595.)

In X_G and X_{Ch} the directionals *peʔ* and *waʔ* combine with the temporal noun *ʔaɬa* 'tomorrow', referencing the time period ahead. Schumann indicates the existence of both forms, *ʔaɬa peʔ* and *ʔaɬa=wa-k peʔ* in X_G. The function of the suffix *-k* is unclear.

(14. 45) a. ʔaɬa peʔ
ADV:tomorrow CENT
'(until) tomorrow' (G-RHG), (G-SH)

b. <áła peká>

ʔaɬa	pe(ʔ)	kaʔ
ADV:tomorrow	come/CENT	EXO

'tomorrow (they) will come'
OT:"mañana ven' (G-S)

c. <áławak petáʔ>

ʔaɬa=wa-k	pe(ʔ)	taʔ
ADV:tomorrow=DIR-?	CENT	come/DIR

'tomorrow (you) will come'
OT:"mañana vienes" (G-S)

d. <ajlahuac>; <ʔahla'wΛʔ>
ʔaɬa=wa-k/ʔ
ADV:tomorrow=DIR-?
'tomorrow'
OT:"mañana" (Ch-C), (Ch-MQ)

The exocentric marker *ka(ʔ)* 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>
ʔaɬmu=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (3611.)

b. <Łʊecán>
ɬi=ka-n
?=EXO-SUBJ/IRR
'when, then (future)'
OT:"cuando" (4032.)

(14. 47) a. <ahmukán>
ʔaɬmu=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (G-S)

b. <ahujlacan>, <ʔaßla'kaŋ>
ʔawɬa=ka-n
today=EXO-SUBJ/IRR
'yesterday'
OT:"ayer" (Ch-C), (Ch-MQ)

The centric directional *peʔ* 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 *peʔ* 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 Fernandéz (1938:365) gives the phrase *ʔayapa peʔ* 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 *peʔ* is primarily deictic and not tense-based. The morphology of the temporal referent *ʔayapa* is not entirely clear.

(14. 48) a. <ayapa pè>
ʔayapa **peʔ**
year CENT
'last year'
OT:"el año pasado" (2036.)

b. <ayapacan pè>
ʔayapa=ka-n **peʔ**
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 *peʔ* 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. <guaŁi pe>
waɬ-i **pe(ʔ)**
NUM:'3' CENT
'three days from now'
OT:"de aquí a tres días" (3838.)

b. <piícan>
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(ʔ)*. 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(ʔ)
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 *ʔaɬa 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) ʔaɬa 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 *sɨma* '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. <aŁmucansʊema>
ʔaɬmu =ka-n sɨʔma
today =EXO-SUBJ/IRR night
'tonight'
OT:"anoche" (3612.)

c. <pi cán sʊema>
pi =ka-n sɨʔma
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. <'kał 'pari>
kaɬ 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 *ȼ'ɨk'-* '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. <txʊeɛsʊema>
ȼ'ɨk'-sɨʔma
half/mid-night
'midnight'
OT:"media noche" (4655.)

(14. 55) a. <puy pari>
puy pari
*half/mid? day
'midday' (G-RHG)

b. <tzucu-tzuma>
ɕ'uku-ɕ'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 sʊema>
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 manana" (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. <cácá>
kaʔ =kaʔ
INT:where?=EXO
'where(to)?'
OT:"¿dónde?" (3679.)

b. <capè>
ka(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(ʔ) 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 kaʔ 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(ʔ)* with the preceding locative adverb *na(ʔ)* 'here', rendering *naʔ* + *kaʔ* [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 *kaʔ* and the directional *peʔ* is also attested in X_G and X_{Ch} (14. 61). In X_G the interrogative marker can furthermore combine with the directional *taʔ* (14. 62); this form is not attested in the ALS.

(14. 61) <kapi>
ka=pi(ʔ)
INT=CENT
'wherefrom?'
OT:"de dónde? (interogativo)" (Ch-C)

(14. 62) a. <katáʔ>
ka=taʔ
INT:where?=DIR:come
'whereto?'
OT:"¿a qué?" (G-S)

b. kaʔ=taʔ hiʔ ka-mačíte
INT=DIR be+3sS_{DEP} 2sP-machete
'where is your machete?' (G-SH)

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)

	S_{NPAST}	S_{PAST}	S_{DEP}	A_{NPAST}	A_{PAST}	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)ɬik	Ø-... (ki)ɬik	-y (ki)ɬik	mu-... (ki)ɬik	-y (ki)ɬik	-

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.)

b. <cà acù>
ka-ʔaku?
2sS-go
'you go'
OT:"tú vas' (1643.)

c. <a màra>
ʔa-ma:ra
3sS-rest
'he/she rests
OT:"aquel descansa" (1473.)

(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 mícó>
nay$_S$ *mɨ(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 màrà>
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-ʔuɬu-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'pʌʔ>
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 aŁa temprano pè acùg>
wena=ki na? pe? ʔahi ʔaɬa *temprano* pe? 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 ɛaŁ paraqui upu ayacà Łinà nà ayàŁa>
tuk'aɬ para ki ʔupu ʔaya-kaʔ ɬinaʔ na ʔayaɬa 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. <asʊec uŁù na macu tiusz>
ʔasɨk Ø-ʔuɬu-ʔ maku tyuš
CONJ 3sS-fall-STAT house Sp:god
'when the church fell (= collapsed)'
OT:"... cuando cayó la iglesia" (2018.)

b. <asʊec muc terò>
ʔasɨk 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 sɨma>
wašata-y sɨma
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. <... asʊec uŁù na macu tiusz>
[ʔasɨk Ø-ʔuɬu-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-ɬa [naka]$_S$
3sS-sleep-PAST.ACT PN:2s
'you slept' (G-SH)

b. mu-wiriki [hina ʔayaɬa]$_{OBL}$ [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 degrained'
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 nariŁa>
ʔan-nariɬa
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-ɬiki 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-suka nay pe:lu(ʔ)
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 apuɬaʔ hinaʔ wati>
na šu:nik ʔa-puɬa-ʔ hinaʔ 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. <aŁi a óròmo>
ʔaɬi 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-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.)

(15. 16) a. kɨrɨ-n ninA tɨɬaO
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>
ʔinayA ʔawaɬa 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>

šaɬ	**ɬan**	**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 yguitzí na misza [...]a szin ca pùla na jamaà>

ʔaɬi	**ka-ʔiwiʨˈiʔ**	**na**	**miša**	**ʔašin**	**ka-pula**	**na**	**hamaʔ**
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 ɛa can naca na misza>

ʔiwiʨˈi	**naʔɬ**	**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.)

b. <ca tà pè aŁa uɛa can confesar>

ka-taʔ	**peʔ**	**ʔaɬa**	**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.)

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 uiszicà paŁ naŁ na misza nana naca ay ...>

ka=pa	**ʔuyši-kaʔ**	**paɬ**	**na(ʔ)ɬ**	**[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.)

(15. 21) a.

ɬika-kaʔ	[nin]$_O$	[naka]$_A$
find-2sA	PN:1s	PN:2s

'you found me' (G-SH)

b. <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)

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]$_O$**	**[ʔaɬmukan]$_{ADV}$**
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-nariɬa**	**[na**	**turi-ɬi]$_O$**
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-waʔ-ɬa]$_O$
DET	PN:1s	wait=PROG-1sA$_{DEP}$	die-ANT-AGT

'I was awaiting the dead' (G-JAP)

b.

[na	nin]$_{S/A}$	šuka-n	paʔaʔ
DET	PN:1s	eat-1sA	PFV

'I have already eaten' (G-JAP)

c. <nen nitz'api elay>
[nen]$_A$ n-ʔiɕ'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 nàŁ u ɛa can naca na misza>
ʔiwiɕ'i naʔɬ 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. kɨrɨ-n [nin]$_A$ [tɨɬa]$_O$
pick/pull-1sA PN:1s yucca
'I harvested yucca' (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)

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 naŁ na misza>
ʔan-ima **naʔɬ** **[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...>
[neɬa **ka-pula** **[ka-kumbisyon]$_O$]$_{ADV}$**
BEN 2sA-make 2sP-Sp:confession
'in order to make your confession'
OT:"para confesarte …" (2042.)

b. <ca ùɛa 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 uɛa naŁqui absolver naca ...>
ʔan-ʔuka **na(ʔ)ɬ** **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 uɛa 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-nariɬa** **[na** **turi-ɬi]$_O$**
PN:1s 1sA-teach DET child-PL
'I teach the children'
OT:"yo enseño a los muchachos" (1978.)

c. <yguitzi nàŁ u ɛa can naca na misza>
ʔiwiʗ'i **naʔɬ** **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. <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. <n'dala ni pumu>
n-tala [ni]$_A$ [pumu]$_O$
1sA-burn PN:1s incense
'I burn copal'
OT:"quemo 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>
[naɬi]$_A$ 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 nariɬa pè na doctrina tiy turiɬi>
[nana *maestro*]$_A$ mu-nariɬa peʔ [na *doctrina*]$_O$ tiːʔ turi-ɬi]$_E$
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 [tiːʔ-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.)

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=šunik]$_O$ [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-ɬe]$_A$ 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 clauses 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 (*ʔaɬi*, § 9.2.3), instrument/ company (*ɬi-*, § 9.2.4) and maybe even the beneficiary (*neɬa*; § 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 *ʔaɬi*, 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 aŁi Pedro>
nana maku pula pata-wa-h [ʔaɬi 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 [ʔaɬi 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 *ɬina(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 Łinà nà ayàŁa man>
para ki ʔupu ʔaya-kaʔ [ɬi-naʔ na ʔayaɬa man]$_{OBL}$
Sp:for stand be-2sS$_{DEP}$ PREP-DEM DET woman DEM
'because you are standing with this woman'
OT:"...por haber de estar con esa mujer" (1955.)

b. <ca- puriqui Łinà>
ka-puriki [ɬi-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-ɬa [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 ʔayaɬa]$_{OBL}$ 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 frak]$_{OBL}$
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 A_1, A_2 and A_3 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 B_3 that is employed to mark A on subordinate transitive verbs differs from the set B_2, 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 B_1), while the verbal S/A is expressed by *-y* (set B_2).

Table 15. 6: Cross-referencing affixes in the third person-marking possessor and A

	A	Possessor
mu-	nonpast/imperfective	alienably possessed
-y -h	past/perfective	inalienably possessed

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	-kaʔ	-kan	naka, nay	tripartite/accusative?
3s	-y, (-ʔ)	-y	nah, naʔ	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 B_2) as past/perfective A, subordinate predicates reference A with suffixes of set B_3. 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 *ʔin*, 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 B_2 and B_3) with past/perfective A marking (set B_2) on the one hand, and inalienable possessor-marking (set B_1) 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 B_2 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 lead 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 (íd: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 *=ʔin* (a), which might assimilate the third person singular cross-referencing suffix *-y* (see § 10.1.1.2).

(15. 47) a. <taí na maestro nari Ła in na turi Łi>

Ø-ta:-yi-ʔ	**[na**	***maestro*]$_S$**	**[nariɬa=ʔin**	**[na**	**turi-ɬi]$_O$]$_{SUB}$**
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 aŁa uɛa can confesar>

ka-taʔ	**peʔ**	**ʔaɬa**	**[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 ùɛa 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 transitivisation 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) <aŁi aguiszù na turiŁi a erŁèque>

[ʔaŧi	**ʔa-wišu-ʔ**	**[na**	**turi-ŧi]$_{O}$]$_{SUB}$**	**ʔa-erŧeke**
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. <neŁec>
[ne:ɬek]$_{NP}$
PN:1p
'we'
OT:"*nos*" (65.)

c. <iszcáŁa>
[ʔiš(a)ka-ɬa]$_{NP}$
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. <jujuŁi>
[huhu-ɬi]$_{NP}$
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 uɛa pè castigar naca Dios ay>

[mu-ʔuka	**peʔ**	***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:"(oíste) misa" (1958.)

b. <nana turi-Łi>
[nana turi-ɬi]$_{NP}$
FOC child-PL
'the children'
OT:"los muchachos" (1979.)

c. <nana jautuma axʊe>
[nana haw-tuma ʔahɨ]$_{NP}$
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 ambuquı>
[tuma **ʔampuki]$_{NP}$**
N:deer snake
'deer snake = boa constrictor'
OT:"la masacúa; culebra" (4609.)

b. <Łómehui>
[ɬome **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. <ıɛal 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 **ʔuwaɬ]$_{NP\text{-}GEN}$**
house (Pd) ant (Px)
'house of ant = ant house/hill'
OT:"el hormiguero" (4050.)

b. <jarari ʊelʊeg>
[harari **ʔi̵i̵-h]$_{NP\text{-}GEN}$**
bone (Pd) back-3sP (Px)
'bone of his back = his backbone'
OT:"hueso del espinazo" (3937.)

c. <ʊelʊemacu>
[ʔi̵i̵ **maku]$_{NP\text{-}GEN}$**
back (Pd) house (Px)
'back of the house = behind the house'
OT:"lo de detrás de la casa" (4735.)

d. <uruŁ míya>
[ʔuruɬ **miya]$_{NP\text{-}GEN}$**
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. mi̵rki-n [[ču=koreʔo]$_{NP}$ [ʔən-ču=wapik]$_{NP}$]$_{NP\text{-}GEN}$
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]$_{NP}$]$_{NP\text{-}GEN}$
flesh (Pd) DIM=hand-1sP (Px)
'flesh of my hand = fist' (G-PE)

c. <maj pamac naj lamuc>
[[mah pamak]$_{NP}$ [nah lamuk]$_{NP}$]$_{NP\text{-}GEN}$
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*] [ʔən-ču=maku]$_{NP}$]$_{NP\text{-}GEN}$
3sP-Sp:roof (Pd) 1sP-DIM=house (Px)
'the roof of my house' (G-RHG)

b. man=ta [[mu-mak'u man]$_{NP}$ [naʔu-n]$_{NP}$]$_{NP\text{-}GEN}$
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]$_{NP}$]$_{N\text{-}GEN}$
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]$_{NP}$]$_{NP\text{-}GEN}$
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 [ʔikaɬ 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 nàca?>
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 ayacà>
harana$_{NP}$ **ʔaya-kaʔ$_{COP}$**
ill COP:be-2sS$_{DEP}$
'you were ill'
OT:"estuvistes enfermo" (1958.)

b. <guena qui agi>
[wena=ki]$_{NP}$ **ʔahiʔ$_{COP}$**
INT:who=INTENS COP:be+3sS$_{DEP}$
'(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. <màràŁà pè>
[ma:ra:-ɬaʔ]$_{NP}$ peʔ
rest-AGT FUT/DEON
'(the one) who must rest'
OT:"el que ha o tiene de descansar" (1557.)

b. <szam pari paŁ>
[šam pari]$_{PP}$ paɬ
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 paʔáɬ>
pokoko$_{NP}$ paʔaɬ
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 Ła>
[ʔan-ʔaku-ɬa]$_{VP}$
1sS-go-PAST.ACT
'I went'
OT:"yo fui, he ido" (1654.)

d. <a acù pè>
[ʔa-ʔaku$_V$ 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>
[ʔan-nariɬa]$_{VP}$ **[na** **turi-ɬi]$_{NP}$**
1sA-teach DET child-PL
'I teach the children'
OT:"yo enseño a los muchachos" (1977.)

b. <mere cà>
[mere-kaʔ]$_{VP}$
break-2sA
'you broke (it)'
OT:"tú rompistes" (587.)

c. <ca pùla pè>
[ka-pula$_{V}$ **peʔ$_{ADV}$]$_{VP}$**
2sA-make FUT
'you will make it'
OT:"tú harás" (418.)

d. <...naca qui púla Łàn>
[naka **ki]$_{NP}$** **[pu:la-ɬa-n]$_{VP\text{-}SUB}$**
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 *ʔin*.

(16. 18) <taí … nari Ła in na turi Łi>
[Ø-ta:-yi-ʔ]$_{VP}$ **...** **[nariɬa=ʔin]$_{VP\text{-}SUB}$** **[na** **turi-ɬi]$_{NP}$**
3sS$_{COM}$-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 ùɛa condenar naca anima>
[ka-ʔuka ***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 uɛa pè castigar naca Dios ay>
[mu-ʔuka **peʔ** ***castigar*]$_{VP}$** **naka$_{NP1}$** ***dios*$_{NP2}$** **ʔay$_{NP1}$**
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 uɛa can confesar>
[ka-taʔ **peʔ]$_{VP}$** **ʔaɬa** **[ʔuka-kan** ***confesar*]$_{VP\text{-}SUB}$**
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 nàŁ u ɛa can naca ...>
[ʔiwiʗ'i naʔɬ ʔuka-kan]$_{VP}$ naka$_{NP}$
hear IMPFV AUX/PROG.VT-2sA$_{DEP}$ 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 pula]$_{VP}$
NEG 2sA-return make
'you do not return to make it'
OT:"no lo vuelvas a decir" (1887.)

b. <patà nàŁ sàmu>
[pata-ʔ naʔɬ 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>
[pata-kaʔ šama]$_{VP}$
*accomplish-2sA PREP:inside
'I could inside = I remembered'
OT:"tú te acordaste, te has acordado" (1572.)

b. <niguaŁaanszaa>
[niwa-ɬa-n ša]$_{VP}$
wish-PAST.ACT-1sA PREP:inside
'I did wish/ask inside = I wanted'
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>
wa$_{VP}$ [pata=ʔin šama]$_{VP\text{-}SUB}$
go/IMP *accomplish=SUBJ PREP
'go to accomplish inside = may he remember!'
OT:"¡acuérdese 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-ɬa-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 axʊè>
[šama [na pari ʔahɨ]$_{NP}$]$_{PP}$
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 nałˌ ayacà>
***si* [šama maku tyuš]$_{PP}$ naʔɬ ʔaya-kaʔ**
Sp:if PREP house god IMPFV be-2sS$_{DEP}$
'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-nariɬa peʔ [na *doctrina*]$_{O}$ [ti:ʔ turi-ɬi]$_{PP}$
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. <tiý 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 *neɬa* (see § 9.2.1). In the second example the prepositional phrase has predicative function (16. 28b).

(16. 28) a. <neŁa mácu>
[neɬa maku]$_{PP}$
BEN/POSS house
'of the house / the house's...'
OT:"de la casa" (42.)

b. <nana jau-tuma axʊe neŁa turiŁi>
[nana haw-tuma ʔahɬi]$_{S}$ [neɬa turi-ɬi]$_{PP}$
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. <yʊeguaŁiy na gracia muneŁa dios>
yɬwaɬi-y [na *gracia*]$_{NP}$ [mu-neɬa *dios*]$_{PP\text{-}GEN}$
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 *neɬa* (some of the semi-speakers from X_G mark the possessor with the diminutive marker *ču*).

(16. 30) a. [ʔan-neɬa maku?]$_{PP}$ [nin]$_{NP}$
1sP-BEN house (Pd) PN:1s (Px)
'my house' (G-SH)

b. [mu-ču-ʔayaɬa]$_{NP}$ [neɬa 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-neɬa]$_{PP}$
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 *ʔaɬi* introduces prepositional phrases that are oblique arguments indicating a participant of the predicate.

(16. 31) a. <nana macu pulà pataguàg aŁi Pedro>
[nana maku]$_{NP}$ pula pata-wa-h [ʔaɬi 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. <aŁi náca>
[ʔaɬi naka]$_{PP}$
PREP.CAUS PN:2s
'by/because of you'
OT:"por ti" (83.)

c. <aŁi na axʊé>
[ʔaɬi na ʔahɬ]$_{PP}$
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>
[šaɬ ɬan]$_{NP}$ **[muk-pula** **na** **oración]$_{S\text{-}COM}$**
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 gracía ayaàc ...>
[šaɬ **ka-n** **wi]$_{NP}$** **[šama** **gracía** **ʔaya:-k]$_{S\text{-}COM}$**
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.)

This basic constituent order of clauses with nominal predicates is attested in the comparative data.

(16. 33) a. [na nin ʔan-neɬa]$_{NP}$ [wapaɬ man]$_{S}$
DET PN:1s 1sP-BEN bench DEM
'it is mine that bench = that bench is mine' (G-SH)

b. [hin ka-neɬa]$_{NP}$ [nana senyorita man]$_{S}$
NEG 2sP-BEN FOC Sp:girl DEM
'(she) is not yours, that girl' (G-SH)

c. <chihuic ti na maj atulí na jarána>
[čiwik ti(ʔ)]$_{NP}$ [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 ralo" (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] paɬ
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 nàŁqui szà Łinà juicio ayacà>
niwa-n naʔɬ ki ša [[ɬinaʔ *juicio*]$_{ADV}$ ʔaya-kaʔ]$_{O\text{-}COM}$
ask-1sA IMPFV INTENS PREP PREP Sp:judgement COP:be-2S$_{DEP}$
'I wished myself that you were sober'
OT:"quisiera yo que estuvieras ... en juicio" (1957.)

b. <guenaqui szamà pecado mortal agi yʊeguaŁiy na gracia...>
[[wena=ki]$_S$ [šama *pecado mortal*]$_{ADV}$ ʔahi]$_{S\text{-}COM}$ yɬwaɬi-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 nà pè agi aŁa temprano pè acùg.>
[[wena=ki]$_S$ [naʔ peʔ]$_{ADV}$ ʔahi ʔaɬa$_{ADV}$]$_{S\text{-}COM}$
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 naŁ iɛal santo>
[ka-tana na(ʔ)ɬ]$_{VP}$ [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*]$_S$ [nariɬa=ʔin na turi-ɬi]$_{ADV}$
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-ɬa]$_{VP}$ [naka]$_S$
sleep-PAST.ACT PN:2s
'you slept' (G-SH)

b. [kuy puriki]$_{VP}$ [šuraya 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]$_{VP}$ [ʔayaɬa 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 aŁa uɛa can confesar>
[ka-taʔ peʔ]$_{VP}$ ʔaɬa$_{ADV}$ [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 Łinà>
ka-puriki [ɬi-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-ɬaʔ]$_{VP}$ [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-šaye-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-ɬa]$_{VP}$ [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-ɬa]$_{VP}$ [ša sawaɕ'a]$_{ADV}$
man 3sS-go-PAST.ACT PREP sow
'the man went to sow his milpa' (G-JAP)

c. <naj man tikí avuajla>
[nah man]$_S$ [ti(:)ki-ʔ]$_{VP}$ [ʔawaɬa]$_{ADV}$
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 sʊec naŁ pùla uɛan na an oracion ca guaszatà>
[ʔasɨk na(ʔ)ɬ pula ʔuka-n [na ʔan-*oración*]$_O$]$_{ADV}$ [ka-wašata-ʔ]$_{VP}$
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.)

b. <aŁi aguiszù na turiŁi a erŁèque>
[ʔaɬi ʔa-wišu-ʔ [na turi-ɬi]$_O$]$_{ADV}$ [ʔa-ʔerɬeke]$_{VP}$
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 ʔayaɬa]$_{ADV}$ [pari]$_{S/A}$
3sA-speak PREP moon sun
'the sun speaks with the moon' (G-SH)

b. <ajla muj tiki nec>
[ʔaɬa]$_{ADV}$ muh-ti:ki [nek]$_S$
tomorrow 1pS-sleep PN:1p
'tomorrow we sleep'
OT:"mañana dormiramos" (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-ɬaʔ]$_{VP}$
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 degrained'
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 *pata*. 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. <nariɬa patai Łic nana turiLi aŁparaquíguàn>
[nariɬa pata-y ɬik]$_{VP}$ [nana turi-ɬi]$_{S}$ [ʔaɬ-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 aŁparaquiguan>
[nana turi-ɬi]$_{S}$ [nariɬa ɬik pata-y]$_{VP}$ [ʔaɬ-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. <... asʊec uŁù na macu tiusz>
[ʔasɨk ʔuɬu-ʔ [maku tyuš]$_{S}$]
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 [ʔiwiʨ'i ma na(ʔ)ɬ pata-y]$_{VP}$ [na miša]$_{S}$
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 paʔaʔ 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 [šan-tiwina]$_{OBL}$]$_{O\text{-}COM}$]$_{REL}$
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]$_{OBL}$]$_{O\text{-}COM}$
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 naʔɬ]$_{VP}$ [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 ɬan]$_{VP}$ [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 ùɛa 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 uɛa naŁqui absolver naca ...>
[ʔan-ʔuka na(ʔ)ɬ ki *absolver*]$_{VP}$ [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 [ʔikaɬ peso]$_O$
receive-3sA NUM:'1' Sp:peso (currency)
'he received one peso'
OT:"recibió un peso" (Ch-C)

d. <pirín 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. ɬiki-kaʔ [weyša]$_O$ paʔaʔ
find-2sA iguana PFV
'you already found an iguana' (G-SH)

b. tur-ey [nin]$_O$ [ša maku ʔ]$_{ADV}$
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 uɛa can pè qui confesar naca na palè ca nuca pà pè tiyg na doctrina>
[mu-ʔuka ka-n pe? 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 paɬ na(ʔ)ɬ]$_{VP}$ [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 uɛa 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. ɬika-kaʔ [nin]$_O$ [naka]$_A$
find-2sA PN:1s PN:2s
'you found me' (G-SH)

b. tup-ey [ʔuruɬ]$_O$ [miya]$_A$
leave-3sA egg hen
'the hen left (an) egg' (G-SH)

c. šamu-y [nin]$_O$ [ku ʔampuki]$_A$
catch-3sA PN:1s MOD snake
'the snake caught me' (G-RHG)

d. <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)

(16. 57) kuy tumu-y [šuka]$_O$ [ɕ'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]$_O$** **[ʔaɬmukan]$_{ADV}$**
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-nariɬa]$_V$** **[na** **turi-ɬi]$_O$**
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)ɬ]$_V$** **[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 yʊeguaŁiy na gracia ...>
[wena=ki **šama** ***pecado mortal*** **ʔahi]$_{A\text{-}COM}$** **[yɨwaɬi-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 tumáɬi horoɬík tɨmáɬi šan hawíɬi paʔáɬ>
[na tuma-ɬi]$_A$ horo =ɬik [tɨma-ɬi]$_O$ [šan hawi-ɬi paʔaɬ]$_{ADV}$
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 [naɬki]$_O$
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-ɬa]$_O$
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-ʔiɕ'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 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.)

b. <nen yuntili man aya>
[nen]$_A$ [yu-n tili]$_V$ [man=ʔaya]$_O$
PN:1s be-1sS$_{DEP}$ 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 ɛica capa jata pè quí>

[ʔoro	**naka**	**ki-ka]$_A$**	**ka-pahata**	**peʔ**	**kiʔ**
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. <nanín imán kiʔáka>

na	nin$_A$	ʔima-n	kiʔ-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-tuyaʔ	kɛʔ$_O$
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 nàŁ u ɛa can na misza>

[ʔiwiɻ'i	**naʔɬ**	**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 nàŁ u ɛa can naca na misza>

[ʔiwiɻ'i	**naʔɬ**	**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 nàŁ naca u ɛa can na misza>

[ʔiwiɻ'i	**naʔɬ]$_{VP}$**	**[naka]$_A$**	**[ʔuka-kan]$_{VP\text{-}SUB}$**	**[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)

a. kɨrɨ-n [nin]$_A$ [tɨɬa]$_O$
pick/pull-1sA PN:1s yucca
'I harvested yucca' (G-SH)

b. tupa-kaʔ [naka]$_A$ [mura]$_O$
leave-2sA PN:2s cob of corn
'you left (a) cob of corn' (G-SH)

c. <pirinick ey>
piri [ni]$_A$ [k'e-y]$_O$
see PN:1s OBJ-2sf
'I saw you'
OT:"yo te ví" (Ch-P)

d. <n'dala ni pumu>
n-tala [ni]$_A$ [pumu]$_O$
1sA-burn PN:1s incense
'I burn copal'
OT:"quemo copal" (Ch-C)

e. kuy samu-n [nin]$_A$ [miya man]$_O$
AUX.FUT catch-1sA PN:1s chicken DEM
'I will catch the chicken' (G-JAP)

TAM-adverbials can occur between the A and O constituents, which resembles the pattern in example (16. 66c).

(16. 68) pula-n [nin]$_A$ paʔaʔ [waruʔ]$_O$
make-1sA PN:1s PFV net
'I already made the net' (G-JAP)

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)

a. [na nin]$_{S/A}$ šuka-n paʔaʔ
DET PN:1s eat-1sA PFV
'I have already eaten' (G-JAP)

b. [na nin]$_{S/A}$ šawaɕ'a-n [ʔahmukan]$_{ADV}$
DET PN:1s sow-1sA yesterday
'I sowed yesterday' (G-RHG)

c. <najli pulay>
[naɬi]$_{S/A}$ pula-y
PN:3p make-3s/pA
'they made'
OT:"ellos hacen" (Ch-C)

d. <inay avuájla culay>
[ʔinay]$_{S/A}$ [ʔawaɬa]$_{ADV}$ kula-y
PN:2s yesterday want-2sfA
'you wanted yesterday'
T:"ayer quisite tú" (Y-C)

Schumann indicates a similar pattern to express habitual activity; in his example, the transitive verb is unmarked (nonfinite).

(16. 70) <namán rúka>
na man ruka
DET DEM eat
'he (= that one) eats'
OT:"él come (habitual)" (G-S)

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>
šaɬ **ɬan** **[muk-pula** **[na** ***oración*]$_{O}$]$_{S\text{-}COM}$**
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. <... asʊèc imaguà na miszà ...>
[ʔasɨk **ʔima-waʔ** **[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 likwise 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]$_{O}$]$_{O\text{-}COM}$
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*]$_{ADV}$]$_{O\text{-}COM}$
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 ʔayaɬa]$_{ADV}$]$_{O\text{-}COM}$
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*]$_{S}$]$_{O\text{-}COM}$
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...>
[neɬa **ka-pula** **[ka-kumbisyon]$_{O}$]$_{ADV}$**
BEN 2sA-make 2sP-Sp:confession
'in order to make your confession'
OT:"para confesarte …" (2042.)

b. <aŁi ca yguitzí na misza ...>
⌊ʔaɬi ka-ʔiwiɕ'i ⌊na miša⌋$_{O}$⌋$_{ADV}$
because 2sA-hear DET Sp:mass
'because you hear the mass … '
OT:"por oir misa …" (2044.)

c. <a sʊec naŁ pùla uɛan na an oracion ca guaszatà>
⌊ʔasɨk na(ʔ)ɬ ⌊pula ʔuka-n⌋$_{VP}$ ⌊na ʔan-*oración*⌋$_{O}$⌋$_{ADV}$
CONJ:when IMPFV make PROG-1sA$_{DEP}$ 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. <maŁca ormocà ma szaŁ tumuqui na jamaca ay ...>
⌊maɬ=ka ʔormo-kaʔ ma šaɬ ⌊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 nàŁ na misza tumuqui pari, …>
⌊ka-ʔiwiɕ'i ma naʔɬ ⌊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*⌋$_{S}$ ⌊nariɬa=ʔin ⌊na turi-ɬi⌋$_{O}$⌋$_{ADV}$
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 uɛa can confesar>
⌊ka-taʔ peʔ ⌋$_{V}$ ʔaɬa$_{ADV}$ ⌊ʔuka-kan *confesar*⌋$_{SUB}$
2sS-come FUT tomorrow do-2sS$_{DEP}$ 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-maɬ=ta [šawu-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 Calerdón-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 nariŁa pè na doctrina tiy turiŁi>
[nana *maestro*]$_A$ [mu-nariɬa pɛʔ]$_V$ [na *doctrina*]$_O$ [ti:ʔ turi-ɬi]$_E$
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 VOE 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-kaʔ [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 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 will have given (= told) him the creed'
OT:"... si le dieres la doctrina" (2038.)

(16. 83) a. [na hura-ɬe]$_A$ kiʔ šə mu-niwa [nin]$_O$ [waruʔ]$_E$
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 nariŁa naturiŁi>
ʔan-nariɬa [na turi-ɬi]$_O$
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 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.)

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 ɬʊèɛʊe na perdon>
ʔašin ka-ɬikɬ [na *perdón*]$_{O}$
NEG 2sA-find DET Sp:forgiveness
'you do not find forgiveness'
OT:"no consiguiréis 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]$_{A}$ [maɬik]$_{O}$
NEG EXO take-2sA PN:2s firewood
'you did not bring firewood' (G-JAP)

c. <jlhan mujnicua tajá>
ɬan muh-nikwa [taha ʔ]$_{O}$
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 šaɬ
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 *-ɬa*, is not understood.

(16. 92) a. <a szin señor aszin nen szac szaan>
ʔašin ***señor*** **ʔašin** **[nen]$_{NP}$** **[šakša:-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 szàc szà Łàn>
ʔašin ***señor*** **ʔašin** **[nen]$_{NP}$** **[šakša-ɬa:-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 Łàn>
ʔa ***señor*** **[naka** **=ki]$_{NP?}$** **[pula-ɬa:-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. <aɬparaquiguà á szin pa ayù jʊenʊei na doctrina>
⌈ʔaɬ-para kiwa-ʔ ʔašin pa(ʔ) ʔayuʔ hɨnɨ-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 misa aɬa ...>
⌈ʔašin paʔ peʔ ka-ʔakuʔ ⌈miša⌋$_{ADV}$ ⌈ʔaɬa⌋$_{ADV}$⌋$_{ADV}$
NEG PFV FUT 2sS-go Sp:mass tomorrow
'(if) you will not have gone (to) mass tomorrow…'
OT:"si no fueréis a oir 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 hɨnɨ-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. ɬara-ya [hutu man]$_{ADV}$
ascend/climb-IMP.VI tree DEM
'climb (up) that tree!' (G-RHG)

b. <curuca muca akü>
kuru-ka [muka ʔakɨ]$_{ADV}$
run-2sS$_{DEP}$ 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. <púla penitencia>
pula-Ø **[*penitencia*]$_O$**
make/do-IMP.VT Sp:penitence
'do penitence!'
OT:"haz penitencia" (2026.)

b. <púla 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>
[neɬa **ka-pula** **ka-kumbisyon]$_{ADV}$**
BEN 2sA-make 2sP-Sp:confession
'in order to make your confession,'

pata-Ø **šama** **šaɬ** **[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-tamaɕ'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]$_{O}$
throw-2sA rubbish
'throw (away) the rubbish!' (G-RHG)

b. <nucay na mu tutuc>
nuka-y [na mu-tutuk]$_{O}$
give-2sA DET 2sP-breast
'give him your breast!
OT:"¡dale la chiche!" (Ch-JC)

(16. 103) tura peʔ [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]$_{A}$ [ʔakɨ]$_{ADV}$
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. kɨsɨma-Ø [nin]$_{O}$ [ka-šinak]$_{E}$
give-IMP.VT PN:1s 2sP-bean
'give (as present) me your beans!' (G-JAP)

b. <nuka'nik>
nuka-Ø [nik]$_{O}$
give-IMP.VT PN:1s
'give (it to) me!'
OT:"¡déme la mano!" (Ch-MQa)

Adjuncts like locative adverbials follow the imperative predicate.

(16. 106) a. tupa-Ø [natiya]$_{ADV}$
let/leave-IMP.VT LOC:here
'let it here!' (G-SH), (G-JAP)

b. <tupanan>
tupa-Ø [nan]$_{ADV}$
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 *peʔ* 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* peʔ]$_{NP}$ [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 *ʔin*. 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) <¿uisziy pa ayù misza?>

ʔuyši-y	**pa(ʔ)**	**ʔayuʔ**	**[miša]$_{O}$**
hear-3sA	PFV	AUX	Sp:mass

'will he have heard mass?'
OT:"¿habrá oído misa?" (2023.)

(16. 109) <hɨniy namán na>

hɨni-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. <¿nem 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. <¿naca in szàcszàguacan 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	[muyiʔ]$_{O}$	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 *–waʔ* (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 aszʊe?>
[kaʔ peʔ]$_{NP}$ [ta-waʔ [na ʔašɨ]$_{S}$]$_{REL}$
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 ixpacá>
ka pi ʔiš(a)pa-kaʔ
INT:where? CENT emerge-2sS_{DEP}
'from where did you leave?'
OT:"¿de dónde vienes?" (Ch-C)

b. <indí patacá na'c>
ʔinti pata-kaʔ [nak]$_{A}$
INT *accomplish-2sA PN:2s
'what can you do?'
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?>
šan para-kaʔ [nem]$_{O}$
INT search-2sA PN:1s
'what have you searched me for?'
OT:"¿para qué me quieres?" (1870.)

b. <a szìn szàn paraan nàca>
ašin šan para-n [naka]$_{O}$
NEG INT search-1sA PN:2s
'I have not searched you for anything'
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-kaʔ [naka]$_{A}$
INT:what? say/tell-2sA PN:2s
'what did you say?' (G-SH)

b. <hándah maráka káka>
hanta mara-ka k-a-ka
INT get angry-2sA REFL-?-2sP
'why are you angry at yourself?'
OT:"¿por qué enojas a ti?" (G-S)

c. <huanín teró ca>
wanin tero:-ka
INT:who? kill-2sA
'who did you kill?'
OT:"¿a quién has matado?" (Ch-C)

d. <ndí mok ni guá?>
nti mɨk-niwa
INT:what? 2sA-want
'what do you want?'
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=huʔ]$_O$
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 [taʔma]$_O$ 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-taʔ *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-ʔ [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 maʔ]$_S$ [Ø-hapa-ʔ]$_{REL}$
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 tojloní>
šin ʔuka-h [man toɬoni]$_S$
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 aŁi Pedro>

[nana	**maku]$_S$**	**[pula-ʔ**	**pata-wa-h]$_{VP}$**	**[ʔaɬi**	**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]$_V$ [domiŋgo]$_{ADV}$
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 aŁ mucàn>

[nana	**Pedro]$_A$**	**[pula-y]$_V$**	**[(na)**	**maku-h]$_O$**	**[ʔaɬmukan]$_{ADV}$**
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-nariɬa]$_V$ [na turi-ɬi]$_O$
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-ɬa:-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 [naɬki]$_O$
dog 3sA-bite PN:1p
'the dog bites us'
OT:"el perro nos muerde" (Ch-C)

c. <nen nitz'api elay>
[nen]$_A$ n-ʔiȼ'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 axʊe neŁa turiŁi>
[nana haw-tuma ʔahɨ]$_S$ [neɬa turi-ɬi]$_{NP}$
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-ču-ʔermano]$_{NP}$
DET DEM 1sP-DIM-Sp:brother
'that one is my little brother' (G-RHG)

b. <manchítz'üöma>
[man]$_S$ či ȼ'iʔma$_{NP}$
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 hɨʔ]$_S$ [ʔən-neɬa]$_{NP}$
FOC DEM 1sP-BEN
'this is mine' (G-RHG)

b. <nanu jú ical elag>
[nanu huʔ]$_S$ [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 hiʔ]$_{NP}$
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]$_{NP}$ [[tuɬu 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]$_S$ [mɨk-neɬa]$_{NP}$]$_{Srel}$
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(ʔ)]$_{S/A}$
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=ʔaya]$_{O}$ 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]$_{S/A}$ [wapiliʔ [man=ta miya-ɬe 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:ɬeke]$_{NP}$ [kuy sawaȼ'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 szaan>
[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-ɬa:-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 ahujlacan>
[naɬi]$_{NP}$ [na ma [ti(:)ki-ɬaʔ ʔawaɬakan]$_{REL}$]$_{S}$
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-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)

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) [ʔeɬaʔ]$_{NP}$ [nana man [tura-kaʔ [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 [ʔikaɬ 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, 33fff.). 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>

šaɬ	**ɬan**	**[muk-pula**	**na**	***oración*]$_{S\text{-}COM}$**
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 gracía ayaàc asʊec muc terò>

šaɬ	**ka-n**	**wi**	**[šama**	***gracía***	**ʔaya:-k]$_{S\text{-}COM}$**
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-ʔušakiʔ]$_{O\text{-}COM}$
NEG 1sA-see 2sA-smoke
'I do not see/like that you smoke' (G-SH)

b. ʔakani ka-piri [mu-pula [buya]$_{O}$]$_{O\text{-}COM}$
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 [šan-tiwina]$_{OBL}$]$_{O\text{-}COM}$]$_{REL}$
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*]$_{S}$]$_{O\text{-}COM}$
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]$_{O\text{-}COM}$
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]$_{OBL}$]$_{O\text{-}COM}$
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*]$_{OBL}$]$_{O\text{-}COM}$
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*]$_{O\text{-}COM}$
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]$_{A}$ [ʔaɬ naka]$_{E}$ [ki ku]$_{O\text{-}COM}$
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]$_{O\text{-}COM}$]$_{ADV}$
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 uɛaca mà restituir szan gui szac szacà ...>
[maɬ=ka ʔuka-ka maʔ *restituir* [šan wi šakša-kaʔ]$_{REL/O\text{-}COM}$]$_{ADV}$
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]$_{OBL}$]$_{REL/O\text{-}COM}$
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]$_{A}$ kɨrɨ-n [man=ta tɨɬa]$_{REL/O\text{-}COM}$
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]$_{REL/O\text{-}COM}$
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]$_{REL/O\text{-}COM}$
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]$_{O}$ [ɕ'oko]$_{S/A}$
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 ʔayaɬa]$_{OBL}$]$_{O\text{-}COM}$
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 *-ɬa* (§ 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
<asʊec>	ʔasɨ-k	[DEM?-?]	"cuando" (3675.)	when
<ayác>	ʔaya-k	[be-VN?]	"(así) como, parece" (3660.)	'being' = like
<tuɛaŁ>	tu=k'aɬ	[?=ADV]	"si" (1955.)	if yet
<aszin vaà>	ʔašin=paʔ	[NEG=PFV?]	"sino" (2033.)	if not (= not yet)
<sí>	si	Sp. *si*	"si" (1959.)	if
<maŁca>	maɬ=ka	Sp. mas que?	"aunque, mas que" (4053.)	although
<neŁa>	neɬa	[PREP.BEN]	"para" (2042., 4169.)	for
<aŁi>	ʔaɬi	[PREP.CAUS]	"por" (3606.)	by
<aŁparaquiguà>	ʔaɬ-para kiwa-	[PREP.CAUS-? + INTENS/REFL]	"por" (3615.)	because, by
<paraquiy>	para ki	Sp. porque	"por" (4245.)	because, by

The other subordinators in Xinka can be identified as adverbial forms and non-spatial prepositions. The temporal conjunction *ʔasɨk* 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=kaɬ* seems to combine the conditional marker *tu* and the adverbial of restriction *ʔak'aɬ* (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 *ʔasɨk* '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 *ʔašiša* 'now' ("ahorita") that is attested in X_G. The form *ʔasɨk* may be morphologically complex, perhaps consisting of the demonstrative *ʔašɨ* '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 paŁ naŁ na misza nana naca ay asʊec uŁù na macu tiusz>

ka=pa	**ʔuyši-kaʔ**	**paɬ**	**na(ʔ)ɬ**	**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,'

[ʔasɨk	**Ø-ʔuɬu-ʔ**	**[maku**	**tyuš]$_S$]$_{ADV}$**
CONJ	3sS-fall-STAT	house	Sp:god

'when the church fell (= collapsed)'

OT:"ya habíais oído misa vosotros, cuando cayó la iglesia" (2018.)

b. <... asʊec uŁù pataguà nana macu tiusz>

[ʔasɨk	**Ø-ʔuɬu-ʔ**	**pata-waʔ**	**[nana**	**maku**	**tyuš]$_S$]$_{ADV}$**
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. <szàŁ cangui szàma gracía ayaàc asʊec muc terò>

šaɬ	**ka-n**	**wi**	**šama**	***gracía***	**ʔaya:-k**
good	EXO-SUBJ/IRR	DIR?	PREP	Sp:grace	be-1pS_{DEP}

'it is good ? (that) we are in grace'

[ʔasɨk	**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 nàŁqui szà Łinà juicio ayacà asʊec pulaguà nà sermon>
niwa-n **na?ɬ** **ki** **ša** **ɬina?** ***juicio*** **?aya-ka?**
ask-1sA IMPFV INTENS PREP PREP:with Sp:judgement be-2sS_{DEP}
'I myself asked (that) you would be sober'

⌊?asɨk **pula-wa?** **⌊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 naŁ ayacà asʊèc imaguà na miszà ... >
si **šama** **maku** **tyuš** **na(?)ɬ** **?aya-ka?**
Sp:if PREP house Sp:god IMPFV be-2sS_{DEP}
'if you had been in the church'

⌊?asɨk **?ima-wa?** **⌊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 *na?ɬ* (see § 12.5.3); the intransitive main predicate follows after the adverbial clause.

(17. 13) <a sʊec naŁ pùla uɛan na an oracion ca guaszatà>
⌊?asɨk **na(?)ɬ** **pula** **?uka-n** **⌊na** **?an-*oración*⌋$_{O}$⌋$_{ADV}$** **ka-wašata-?**
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 *?aɬi* or the complex form including the non-spatial preposition and the intensifier-reflexive pronoun, i.e. *?aɬ-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. <aŁi ca yguitzí na misza [...] a szin ca pùla na jamaà>
⌊ʔaɬi ka-ʔiwiɕ'i-ʔ ⌊na miša⌋$_{O}$⌋$_{ADV}$ ʔašin ka-pula na hama ʔ
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 oir misa [...] no pecas" (2044.)

b. <aŁi aguiszù na turiŁi a erŁèque>
⌊ʔaɬi ʔa-wišu-ʔ ⌊na turi-ɬi⌋$_{O}$⌋$_{ADV}$ ʔa-ʔerɬeke
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 *ʔaɬ-para kiwa-ʔ* (see § 9.2.3).

(17. 15) a. <paraqui jarana ayaàn a szin uý szin nà mísza>
⌊*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. <aŁparaquiguà jarana ayacà a szin ui szicà nà miszà>
⌊ʔaɬ-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 aŁparaquiguà á szin pa ayù jʊenʊei na doctrina>
naka ʔayuʔ paʔ wišu-kaʔ na Juan
PN:2s AUX PFV beat-2sA DET Juan
'you will have beaten Juan,'

⌊ʔaɬ-para kiwa-ʔ ʔašin pa(ʔ) ʔayuʔ ɬɨnɨ-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 *ʔaɬi* (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]$_{A}$ [ʔaɬiʔ 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,'

[ʔaɬi 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 [ʔaɬi 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 *ʔaɬi* and a noun phrase. These patterns correspond with the use of the preposition "por" in Spanish.

(17. 18) [ʔaɬi 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 *ʔaɬi* 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+3sS$_{DEP}$ head-1sP DEM
'my head is hurting,'

[ʔaɬi 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 [ʔaɬi tur-ey [maɬik]$_{O}$]$_{ADV}$
cook=PROG-3sA$_{DEP}$ beans DEM PREP.CAUS bring firewood
'(she) is cooking beans, that is because she brought firewood' (G-SH)

c. man [ʔaɬi 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 [ʔaɬi 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 [ʔaɬi 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 [ʔaɬi hin kuy sawaɕ'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 *neɬa* 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 aŁa uɛa can confesar>

ka-taʔ	**peʔ**	**ʔaɬa**	**[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*]$_{S}$**	**[nariɬa=ʔin**	**[na**	**turi-ɬi]$_{O}$]$_{ADV}$**
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 doctrína nariŁa pè patai ucaìn maestro tiy turiŁi>

[nana	***doctrina*]$_{S}$**	**nariɬa**	**peʔ**	**pata-y**
FOC	Sp:creed	teach	CENT	*accomplish-3sA

'the creed will be taught to the children'

[ʔuka=ʔin	**[*maestro*]$_{S}$**	**[tiːʔ**	**turi-ɬi]$_{E}$]$_{ADV}$**
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 *ʔin* (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-3sS$_{DEP}$ bath=SUBJ DEM/3s
'that one went to bath' (G-JS)

b. ʔanta-maɬ=ta [šawu-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. <cuní ay ascan pulan taljma>
ku ni ʔay [ʔaska-n pula-n [taɬma]$_O$]$_{ADV}$
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 *neɬa* 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 *neɬa* are used when the predicate of the main clause is transitive; with intransitive main predicates the deranking strategy is employed.

(17. 25) <neŁa ca pùla ca cumbision pata szàma szàŁ na jamàca>
[neɬa ka-pula [ka-kumbisyon]$_O$]$_{ADV}$
BEN 2sA-make 2sP-Sp:confession
'in order to make your confession,'

pata-Ø šama šaɬ [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 *neɬa* 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-ɬiki šuraya [neɬa ka-ɬawaro]$_{ADV}$
2sA-find girl BEN 2sS-dance
'you find (a) girl for you to dance' (G-SH)

b. [neɬa mu-šuka]$_{ADV}$ mu-ʔima [ʔuta]$_{O}$ [kiɕ'i-ʔ]$_{O\text{-}COM}$
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'

[neɬa 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 ʔaɬ huray]$_{ADV}$ ka-ʔuka *desengeñar*
BEN-? 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. wašta**ʔ**-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 ʔayaɬa [ʔaku [ša motor]$_{ADV\text{-}LOC}$
DEM=INT woman go PREP Sp:engine=mill
'that is the woman that went to the mill'

[paɕ'i-kiʔ pula-ʔ man]$_{ADV}$]$_{REL}$
grind-? 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-2pA$_{DEP}$	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=kaɬ* 'if': The form could be a combination of a conditional subordinator **tu* and the adverbial of restriction *ʔakaɬ* 'still, yet' (§ 13.6), i.e. *tu=kaɬ* [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 uɛa 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 dieres 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 *naʔɬ* (§ 12.5.3). Condition is expressed in different ways with combinations of verb forms and adverbials that either include *naʔɬ* 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 *naʔɬ* has a conditional function in these contexts, or whether it simply expresses a form of past-time reference.

(17. 31) a. <ca yguitzi ma nàŁ na misza…, ca taana naŁ iɛal santo>

[ka-ʔiwiɋ'i	**ma**	**naʔɬ**	**[na**	**miša]$_{O}$ ...]$_{ADV}$**
2sA-hear	COND	IMPFV	DET	Sp:mass

'if you heard the mass … '

ka-tana	**na(ʔ)ɬ**	**[ʔikaɬ**	***santo*]$_{S}$**
2sS-be	IMPFV	INDEF	Sp:saint

'you were a saint'

OT:"si oyeras misa …, fueras un santo " (2031.)

b. <sí szàma macutiusz naŁ ayacà [...] ui szicà nàŁqui na doctrina.>

[*si*	**[šama**	**maku**	**tyuš]$_{ADV}$**	**naʔɬ**	**ʔaya-kaʔ...]$_{ADV}$**
Sp:if	PREP	house	Sp:god	IMPFV	be-2sS$_{DEP}$

'if you had been in the church [...]'

ʔuyši-kaʔ	**naʔɬ**	**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 uɛa naŁqui 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)ɬ**	**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=kaɬ* '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 *=kaɬ* 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)kaɬ* seems to be coherent in this context.

(17. 32) <tu ɛaŁ paraqui upu ayacà Łinà nà ayàŁa man ca ùɛa condenar naca anima ...>

[tu=kaɬ	**para ki**	**ʔupu**	**ʔaya-kaʔ**
CONJ:if=yet	CONJ:because	stand	be-2sS$_{DEP}$

'because if you are standing'

[ɬina? **na** **?ayaɬa** **man]$_{OBL}$]$_{ADV}$**
PREP DET woman DEM
'with that woman'

ka-?uka ***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 *?ašin* and the TAM adverbial *pa?* 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 aŁa>

[?ašin **pa?** **pe?** **ka-?aku?** **miša** **?aɬa]$_{ADV}$**
NEG PFV FUT 2sS-go Sp:mass tomorrow
'(if) you will not have gone (to) mass tomorrow'
OT:"si no fueréis a oir misa mañana... " (2040.)

b. <.... aszinvaà ca ima tumuqui szamà na ca confesion a szin ca Łʊèɛʊe na perdon>

[?ašin **pa?** **ka-?ima** **tumu=ki** **šama?** **na** **ka-*confesión*]$_{ADV}$**
NEG *PFV 2sA-say QUANT=DISTR PREP DET 2sP-Sp:confession
'if you do not say all in your confession,'

?ašin **ka-ɬik'ɨ** **na** ***perdón***
NEG 2sA-find DET Sp:forgiveness
'you do not find forgiveness'

OT:"si no los decís todos en tu confesión, no consiguiréis 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 *maɬka* 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(ɬ)* (§ 12.5.3) and the cliticised verb *?uka* 'have', i.e. **maɬ=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 uɛaca mà restituir [...] ca jama Łà>

[maɬ=ka **?uka-ka** **ma?** ***restituir*]$_{ADV}$** **ka-hama-ɬa?**
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 Łʊèɛʊe na perdon>

[maɬ=ka **?ormo-ka?** **ma** **šaɬ** **[tumu-ki** **na** **hama-ka** **?ay]$_{O}$]$_{ADV}$**
CONJ gather-2sA COND good QUANT-DISTR DET sin-2pP 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 confesion,'

ʔašin ka-ɬɨk'ɨ ⌊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 consiguiréis 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 qué* '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 nuruki
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 Guathemala>

ʔakuʔ ʔaya-an ⌊Guatemala]$_{ADV}$
go be-1sS$_{DEP}$ 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:"fueréis 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-¢'ehe
DET PN:1s go=PROG-1sS$_{DEP}$ 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. <xagüí 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 kíhui>
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-2sS$_{DEP}$ 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-2sS$_{DEP}$ 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 …>
ʔikaɬ *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 [ʔikaɬ 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]$_{NP}$ [ʔayaɬa 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 ahujlacan>
[naɬi]$_{NP}$ [na ma [ti(:)ki-ɬaʔ ʔawaɬakan]$_{REL}$]$_S$
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-ɬe 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]$_{O}$ ʔiri-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 [ʔikal hura(ʔ)]$_{O}$]$_{REL}$
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 uɛaca mà restituir szan gui szac szacà...>
[maɬka ʔuka-ka(ʔ) maʔ *restituir* [šan wi šakša-kaʔ]$_{REL/O-COM}$]$_{ADV}$
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 szìn szàn paraan nàca>
ʔašin [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*	[hay[183]	natu-ka	[tumuki]$_{S/A}$	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 aŁa temprano pè acùg.>

[wena=ki$_S$	**[naʔ**	**peʔ]$_{ADV}$**	**ʔahi**	**ʔaɬa]$_{S-COM}$**
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 yʊeguaŁiy na gracia...>

[wena=ki$_S$	**[šama**	***pecado mortal*]$_{ADV}$**	**ʔahi]$_{S-COM}$**	**yɬwaɬi-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-ɬa]$_{REL/O-COM}$
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-1sS$_{DEP}$ 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 čɨrɨkɨʔ]$_{REL/S-COM}$
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]$_{A}$ kɨrɨ-n [man=ta tɨɬa]$_{REL/O-COM}$
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.)	*and*
<póre>	pore	Sp. *pero*	"pero" (4316.)	*but*
<o>	o	Sp. *o*	"o" (1955.)	*or*

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 ùɛa condenar naca anima ó catupa ó ca puriqui Łinà>

ka-ʔuka	***condenar***	**naka**	***anima***
2sA-do	Sp:condemn	PN:2s	Sp:soul

'you condemn your soul,'

o	**ka-tupa**	***o***	**ka-puriki**	**ɬi-naʔ**
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	kaʔ	besino
DET	PN:1s	get-1sA	INDEF	Sp:neighbour

'I got (= have) a neighbour'

ʔi	ne:ɬeke	komo	ʔenemigo
Sp:and	PN:1p	Sp:like	Sp:enemy

and we (are) like enemies' (G-SH)

b.

pero	hin	mu-ʔuka	deklarar	si	na	nin	ʔo	wena=taʔ
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	ɬiki-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 *šɨkɨ* 'as well' (see § 13.6), i.e. *ʔakan šɨkɨ* 'like this as well' (2048.), *ʔama šɨkɨ* '(more) as well' (2047.), *ɬina(ʔ) šɨkɨ* '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
peel	PROG+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 šan¢ʔéhe>

naka	ʔan-moka	kaya-k	šan	šan-¢'ehe
PN:2s	1sP-COMIT	sell-1sA	PREP	PREP-?

'you and I sold in Chiquimulilla'

OT:"tú y yo vendemos en Chiquimulilla" (G-S)

References

Acuña, René (ed.)

1982 *Relaciones geográficas del Siglo XVI: Guatemala.* Instituto de Investigaciones Antropológicas, Etnohistoria, Serie Antropológica, 45. Mèxico: UNAM. [Apéndice VI: Carta dirigida als rey por el Licenciado Palacio (1576)]

Archivo Arzobispal

18th c. *Congregación de S[an] Pedro – 1733*; Libro de recepciones donde se assientan los congregantes y hermanos de la congregacion de Nuestro Padre San Pedro.

Autos instruidos sobre provisiones de curatos de este arzobispado desde 1764 hasta 1769. A4-18.Tomo 2; 1.41: folios 18r-19v.

Visitas Pastorales. Tomo 25. M. Pedro Cortes y Larráz 1769 / 1774 / 1775: fol. 15-33.

Archivo General de Centroamerica

18th c. A1; Legajo 100; Expediente 2138: fol. 15; fol. 45.

A1; Legajo 4247; Expediente 33832

Adams, Richard & Santiago Bastos

2003 *Las relaciones étnicas en Guatemala, 1944-2000*. Colección ¿Por qué estamos como estamos? Antigua Guatemala: CIRMA

Adelaar, Willem F. H.

1989 Review of Greenberg. Language in the Americas. *Lingua* 78: 249-255

1991 The endangered languages problem: South America. In *Endangered Languages*; Robert H. Robins & Eugenius M. Uhlenbeck (ed.): 45-91. Oxford: Berg Publishers Ltd.

1998 The endangered situation of native languages in South America. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 1-15. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo.

2001 Descriptive linguistics and standardization of newly described languages. In *Endangered Languages of the Pacific Rim: Lectures on Endangered Languages, 2 – from Kyoto Conference 2000*; Osamu Sakiyama (ed.): 69-80. Kyoto: Nakanishi Printing.

Adelaar, Willem F.H. with Pieter C. Muysken

2004 *The Languages of the Andes*. Cambridge: Cambridge University Press.

Aikhenvald, Alexandra Y.

2000 Areal typology and grammaticalization: The emergence of new verbal morphology in an obsolescent language. In *Reconstructing Grammar: Comparative Linguistics and Grammaticalization*; Spike Gildea (ed.): 1-37. Typological Studies in Language; 43. Amsterdam, Philadelphia: John Benjamins

2002 *Language Change in Amazonia*. Oxford, New York: Oxford University Press.

2003 *A Grammar of Tariana, From Northwest Amazonia*. Cambridge: Cambridge University Press.

2006 Serial verb constructions in typological perspective. In *Serial Verb Constructions: A Cross-Linguistic Typology*. Explorations in Linguistic Typology; 2; A. Aikhenvald & R.M.W. Dixon (eds.): 1-68. Oxford, New York: Oxford University Press

Aikhenvald, Alexandra Y. and R.M.W. Dixon (eds.)
2006a *Serial Verb Constructions: A Cross-Linguistic Typology*. Explorations in Linguistic Typology; 2. Oxford, New York: Oxford University Press
2006b *Grammars in Contact: A Cross-Linguistic Typology*. Explorations in Linguistic Typology; 4. Oxford, New York: Oxford University Press

Alexander-Bakkerus, Astrid
2005 *Eighteenth-Century Cholón*. Ph.D. thesis, Leiden University. Utrecht: LOT.

Alvarado, Pedro de
1973 "Carta de Relación de Pedro de Alvarado a Hernán Cortés, 28 de julio de 1524." In *Datos para la historia de la iglesia en Guatemala*, Agustin Estrada-Monroy (ed.), vol. I: 23-40. Sociedad de Geografía e Historia de Guatemala; 26. Guatemala: Sociedad de Geografía e Historia de Guatemala.

Andersen, R. W.
1982 Determining the linguistic attributes of language attrition. In *The Loss of Language Skills*; R. D. Lambert & B. F. Freed (eds.): 83-117. Rowley, MA: Newbury House Publishers

Anderson, Gregory D. S.
2006 *Auxiliary Verb Constructions*. Oxford Studies in Typology and Linguistic Theory. Oxford: Oxford University Press.

Anderson, Stephen R.
1985 Typological distinctions in word formation. In *Language Typology and Syntactic Description: Vol. 3 - Grammatical Categories and the Lexicon*; edited by Timothy Shopen: 3-56. Cambridge: Cambridge University Press.

Anderson, Stephen R. & Edward L. Keenan
1985 Deixis. In Language Typology and Syntactic description: Vol. 3 - Grammatical Categories and the Lexicon; T. Shopen (ed.): 259-308. Cambridge: Cambridge University Press

Andrews, Richard J.
1975 *Introduction to Classical Nahuatl.* Austin, London: University of Texas Press.

Annamalai, E.
1998 Language survival in India: challenges and responses. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 17-31. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo.

Bergsland, Knut
1998 Two cases of language endangerment: Aleut and Sámi. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 33-47. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo

Bradley, David
1998 Minority language policy and endangered languages in China and Southeast Asia. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 49-83. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo.

Bredt-Krisza, Cristina & Ursula Holl
1997 Descripción del 'Vocabulario de la lengua cakchiquel' de fray Domingo de Vico. In *La descripción de las lenguas amerindias en la época colonial*; Klaus Zimmermann (ed.): 175-192. Bibliotheca Ibero-Americana. Frankfurt am Main: Vervuert.

Brenzinger, Matthias

1992 *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa* (ed.). Contributions to the Sociology of Language. Berlin, New York: Mouton de Gruyter

1998 Various ways of dying and different kinds of deaths: scholarly approaches to language endangerment on the African continent. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 85-100. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo.

Brenzinger, Matthias & Gerrit J. Dimmendaal

1992 Social contexts of language death. In *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*; Matthias Brenzinger (ed.): 3-5. Contributions to the Sociology of Language. Berlin, New York: Mouton de Gruyter

Breton, Alain

2007 *Rabinal Achi: A Fifteenth-Centry Maya Dynastic Drama*. Boulder: University Press of Colorado

Brinton, Daniel G.

1885a On the language and ethnologic position of the Xinca indians of Guatemala. Read before the American Philospohical Society: October 17, 1884. *Proceedings of the American Philosophical Society* 22: 89-97. Philadelphia

1885b *The Annals of the Cakchiquels: The Original Text, with a Translation, Notes and Introduction*. Brinton's Library of Aboriginal American Literature; 6. Philadelphia

Brown, Cecil H.

2006 Prehistoric chronology of the common bean in the New World: the linguistic evidence. *American Anthropologist* 108(3): 507-516

Brown, Keith & Jim Miller (ed.)

1999 *Concise Encyclopedia of Grammatical Categories*. Amsterdam: Elsevier.

Bussmann, Hadumod

1998 *Routledge Dictionary of Language and Linguistics*. London: Routledge. [Original: German]

Busto, Inocencio del

1962 Localización de Atiquipaque: un pueblo xinca desaparecido. *Anales de la Sociedad de Geografía e Historia de Guatemala*, 35: 101-151. Guatemala.

Butt, Miriam

2003 The light verb jungle. *Harvard Working Papers in Linguistics* 2003/9: 1-49.

Bybee, Joan, Revere Perkins & William Pagliuca

1994 *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World. Chicago*: University of Chicago Press.

Calderón, Eustorgio

1908 *Estudios lingüísticos. I. Las lenguas (Sinca) de Yupiltepeque y del Barrio de Norte de Chiquimulilla en Guatemala. II. Las lenguas de Oluta, Sayula, Texistepec en el Istmo de Tehuantepec en Mexico*. Guatemala

1939 Ensayo lingüístico sobre el Pupuluca y otra lengua india del Sudeste de Guatemala, congénere del Pupuluca, precedido de un corto vocabulario de ambos idiomas. In *Anales de la Sociedad de Geografía e Historia de Guatemala*, 16: 74-80 & 156-163. Guatemala

Campbell, Lyle

1971 *Historical Linguistics and Quichean Linguistic Prehistory*. UCLA dissertation. Ann Arbor: Xerox University Microfilms

1972a Mayan loan words in Xinca. *International Journal of American Linguistics*, 38: 187-190

1972b A Note on the so-called Alagüilac Language. *International Journal of American Linguistics* 38: 203-207.

1975 El estado actual y la afinidad genética de la lengua indígena de Cacaopera. *Revista de la Universidad de El Salvador*, Jan-Feb: 45-54

1976a The linguistic prehistory of the southern Mesoamerican periphery. In *Frontera de Mesoamerica*, 14a Mesa Redonda, vol. 1. México: Sociedad Mexicana de Antropologia.

1976b The last Lenca. *International Journal of American Linguistics*, 42: 73-78.

1977 *Quichean Linguistic Prehistory*. University of California Publications in Linguistics; 81. Berkeley, Los Angeles: University of California Press.

1978a Quichean prehistory: linguistic contributions. In *Papers in Mayan Linguistics*, Nora C. England (ed.): 25-54. Miscellaneous publications in Anthropology, 6. Columbia: University of Missouri

1978b Distant genetic relationship and diffusion: a Mesoamerican perspective. In *Actes du XLIIe congrès international des Américanistes, Paris 1976*. vol. 4: 595-605. Paris

1979 Middle American languages. In *The Languages of Native America: Historical and Comparative Assessment*; Lyle Campbell & Marianne Mithun (eds.): 902-1000. Austin: University of Texas Press

1996 Typological and areal issues in grammar. In *Concise Encyclopedia of Syntactic Theories*; Keith Brown & Jim Miller (eds.): 339-343. Cambridge: Elsevier Science Ltd.

1997a *American Indian languages: the Historical Linguistics of Native America*. Oxford Studies in Anthropological Linguistics; 4. New York, Oxford: Oxford University Press

1997b Linguistic contributions to Guatemalan prehistory. In *The Life of Language: Papers in Linguistics in Honor of William Bright*; Jane Hill, P.J. Mistry & Lyle Campbell (eds.): 183-189. Trends in Linguistics: Studies and Monographs; 108. Berlin: Mouton de Gruyter

1998 *Historical Linguistics: an Introduction*. [2. ed.]. Cambridge, Mass.: The MIT Press

Campbell, Lyle & Lawrence Feldman

1975 Some comments on modern Xinca agriculture. In *Papers on the Xinca of Eastern Guatemala*; Lyle Campbell *et al.* (ed.): 41-42. Columbia: University of Missouri.

Campbell, Lyle & Ives Goddard

1991 Summary report: American Indian languages and principles of linguistic change. In *Patterns of Change, Change of Patterns: Linguistic Change and Reconstruction Methodology*; Philip Baldi (ed.): 15-30. Berlin, New York: Mouton de Gruyter

Campbell, Lyle & Terrence Kaufman

1971-79 Field notes. Unpublished data.

1976 A linguistic look at the Olmecs. *American Antiquity* 41(1): 80-89

1980 On Mesoamerican linguistics. *American Anthropologist* 82: 850-857. Washington, D.C.: American Anthropological Association

1983 Mesoamerican historical linguistics and distant genetic relationships: getting it straight. *American Anthropologist* 85: 362-372. Washington, D.C.: American Anthropological Association

Campbell, Lyle, Terrence Kaufman & Thomas C. Smith-Stark
1986 Meso-America as a linguistic area. *Language* 62(3): 530-570

Campbell, Lyle & Marianne Mithun
1979 *The Languages of Native America: Historical and Comparative Assessment*. Austin: University of Texas Press

Campbell, Lyle & Martha Muntzel
1989 The structural consequence of language death. In *Investigating Obsolence. Studies in Language Contraction and Death*, Nancy Dorian (ed.): 181-196. Cambridge: Cambridge University Press

Carmack, Robert S.
1973 *Quichean Civilization: The Ethnohistoric, Ethnographic, and Archaeological Sources*. Berkeley: University of California Press

1981 *The Quiché Maya of Utatlán: The Evolution of a Highland Guatemala Kingdom*. University of Oklahoma Press, Norman

Christenson, Allen J.
1999 *K'iche' – English Dictionary*. Unpublished Ms., available for download at www.famsi.org.

2004 *Popol Vuh, Volume II*. Literal Poetic Version. Translation and Transcription. Winchester, New York: O Books.

Chung, Sandra & Alan Timberlake
1985 Tense, aspect, and mood. In *Language Typology and Syntactic Description: Vol. 3 - Grammatical Categories and the Lexicon*; Timothy Shopen (ed.): 202-258. Cambridge: Cambridge University Press.

Comrie, Bernard
1976 *Aspect: An Introduction into the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press

1989 *Language Universals and Linguistic Typology. Syntax and Morphology*. 2nd ed. [1981]. Chicago: University of Chicago Press

1999 Tense. In *Concise Encyclopedia of Grammatical Categories*; Keith Brown & Jim Miller (eds.):363-368. Amsterdam: Elsevier

Comrie, Bernard & Tania Kuteva
2008 Relativization Strategies. In *The World Atlas of Language Structures Online*; Martin Haspelmath & Matthew S. Dryer, David Gil, Bernard Comrie (eds.). Chapter 122. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/122

Consejo del Pueblo Xinka de Guatemala
2004 Gramática y diccionario Xinka – una descricpión y introducción al idioma. Chiquimulilla, Santa Rosa: CECI

Cortés y Larráz, Pedro [1768-70]
1958 *Descripción geográfico-moral de la diócesis de Goathemala hecha por su arzobispo, el Ilmo. Sor. Don Cortes y Larraz, del Consejo de S.M., en el tiempo que la visitó y fue desde el día 3 de Noviembre de 1768 hasta el día 1º de julio de 1769; desde el día 22 de Noviembre de 1769 hasta el día 9 de Febrero de 1770; desde el día 6 de Junio hasta el día 29 de Agosto del dho. año de 1770*. Biblioteca "Goathemala" de la Sociedad de Geografía e Historia de Guatemala. Guatemala

Coto, Fray Thomas de [~ 1650]
1983 *Thesavrvs Verborvm: Vocabvlario de la Lengua Cakchiquel V[El] Guatemalteca*, Nueuamente hecho y Recopilado con Summo Estudio, Trauajo y Erudicion; René Acuña (ed.). UNAM, México D.F.

Crespo, Alonso [1740]
1920 Noticias estádisticas del reino de Guatemala, recogidos en virtud de real orden de 8 julio de 1739. Expediente 5003 legajo 210. Archivo Nacional Guatemala. In *Zentral-Amerika - Teil I: Die Sprachen Zentral-Amerikas in ihren Beziehungen zueinander sowie zu Süd-Amerika und Mexiko*. Vol. 2; Walter Lehmann. Berlin: Verlag Dietrich Reimer

Cristofaro, Sonia
2003 *Subordination*. Oxford Studies in Typology and Linguistic Theory. Oxford, New York: Oxford University Press.

Croft, William
1990 *Typology and Universals*. Cambridge, New York: Cambridge University Press
1996 Typology and Grammar. In *Concise Encyclopedia of Syntactic Theories*; Keith Brown & Jim Miller (eds.): 343-350. Cambridge: Elsevier Science Ltd.

Croft, William, Keith Denning & Suzanne Kemmer (eds.)
1990 *Studies in Typology and Diachrony: Papers Presented to Joseph H. Greenberg on his 75th birthday*. Typological Studies in Language; 20. Amsterdam, Philadelphia: John Benjamins

Crystal, David
2000 *Language Death*. Cambridge: Cambridge University Press

Dary Fuentes, Claudia
2003 *Identidades étnicas y tierras comunales en Jalapa*. Guatemala, Instituto de Estudios Interétnicos de la Universidad de San Carlos de Guatemala.
2008 ¿Poqomames, Xinkas o Mestizos?: hacia la búsqueda y reconstrucción de las identidades étnico-culturales en Jalapa: un análisis del discurso. *Revista Estudios Interétnicos*; 21(1):61-96

Dedenbach-Salazar Sáenz, Sabine
1993 *Una gramática colonial del quichua del Ecuador: transcripción e interpretación de un manuscrito del Archivo Histórico Nacional de Colombia*. Bonner Amerikanistische Studien; 20. Institute of Amerindian Studies, University of St. Andrews; 25. Bonn, St. Andrews.
1997 La descripción gramatical como reflejo e influencia de la realidad lingüística: la presentación de las relaciones hablante-enunciado e intra-textuales en tres gramáticas quechuas coloniales y ejemplos de su uso en el discurso quechua de la época. In *La descripción de las lenguas amerindias en la época colonial*; Klaus Zimmermann (ed.): 291-319. Bibliotheca Ibero-Americana. Frankfurt am Main: Vervuert.

Dedenbach-Salazar Sáenz, Sabine & Lindsey Crickmay (eds.)
1999 *La lengua de la cristianización en Latinoamérica: catequización e instrucción en lenguas amerindias / The Language of Christianisation in Latin America: Catechisation and Instruction in Amerindian Languages*. Bonner Amerikanistische Studien; 32 / CIASE Occasional Papers; 29. Markt Schwaben: Verlag Anton Saurwein

DeLancey, Scott
1982 Aspect, transitivity and viewpoint. In *Tense-Aspect: Between Semantics and Pragmatics*; Hopper, Paul J. (ed.): 167-184. Amsterdam & Philadelphia: John Benjamins.
1990 Ergativity and the cognitive model of event structure in Lhasa Tibetan. *Cognitive Linguistics* 1: 289-321.

Dienhart, John M.
1997 *The Mayan Languages: A Comparative Vocabulary*. Electronic version. Odense University.

Diessel, Holger
2008 Distance contrasts in demonstratives. In *The World Atlas of Language Structures Online*; Martin Haspelmath & Matthew S. Dryer, David Gil, Bernard Comrie (eds.). Chapter 41. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/41

Dirección Departamental de Educación de Santa Rosa
2000 *Revalorización de la cultura xinka a través de la escuela: una guía documental que valora las culturas que conviven en el departamento de Santa Rosa*. Guatemala: Ministerio de Educación.

Dixon, Roland B.
1969 *Zoque and Xinca compared with Penutian*. Abhandlungen der völkerkundlichen Arbeitsgemeinschaft, 20. Nortorf [1924]

Dixon, Robert M. W.
1991 The endangered languages of Australia, Indonesia and Oceania. In *Endangered Languages*; Robert H. Robins & Eugenius M. Uhlenbeck (ed.): 229-255. Oxford: Berg Publishers Ltd.

1994 *Ergativity*. Cambridge Studies in Linguistics; 69. Cambridge: Cambridge University Press.

2000 *The Rise and Fall of Languages*. Cambridge: Cambridge University Press

2006 Complement clauses and complementation strategies in typological perspective. In *Complementation*; R.M.W. Dixon & Alexandra Y. Aikhenvald (eds.): 1-47. Oxford, New York: Oxford University Press

Dixon, Robert M.W. and Alexandra Y. Aikhenvald
2000 *Changing Valency: Case Studies in Transitivity. Cambridge*: Cambridge University Press

Dorian, Nancy
1980 Maintenance and loss of same-meaning structures in language death. *Word* 31:39-45

1981 *Language Death: The Life Cycle of a Scottish Gaelic Dialect*. Philadelphia: University of Pennsylvania Press

1989 *Investigating Obsolescence: Studies in Language Contraction and Death* (ed.). Studies in the Social and Cultural Foundations of Language, 7. Cambridge: Cambridge University Press

Dressler, Wolfgang U.
1981 Language shift and language death: a protean challenge for the linguist. *Folia Linguistica* 15: 5-27

Dryer, Matthew S.
2008 Definite Articles. In *The World Atlas of Language Structures Online*; Martin Haspelmath & Matthew S. Dryer, David Gil, Bernard Comrie (eds.). Chapter 37. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/37

Dürr, Michael
1987 *Morphologie, Syntax und Textstrukturen des (Maya-)Quiche des Popol Vuh. Linguistische Beschreibung eines kolonialzeitlichen Dokuments aus dem Hochland von Guatemala*. Mundus Reihe Alt-Amerikanistik; 2. Bonn: Holos.

Dürr, Michael & Peter Schlobinski
1994 *Einführung in die deskriptive Linguistik*. [2. Aufl.]. Opladen: Westdeutscher Verlag

Edmonson, Munro S.
1965 *Quiche - English Dictionary*. Middle American Research Institute, Tulane University; 30. New Orleans.

1967 Classical Quiche. In *Handbook of Middle American Indians, Vol. 5 - Linguistics*, Norman McQuown (ed.): 249-267. Middle American Research Institute, Tulane University. Austin: University of Texas Press.

England, Nora & Stephen R. Elliott (eds.)
1990 *Lecturas sobre la lingüistica Maya*. La Antigua Guatemala: CIRMA

Estrada Belli, Francisco
1996 *Survey and Excavation in Santa Rosa, Guatemala 1996*. Report submitted to the National Geographic Society; National Science Foundation. Boston University, Dez. 1996. Boston.

1999 *The Archaeology of Complex Societies in Southeastern Pacific Coastal Guatemala: A Regional GIS Approach*. BAR International Series 820. Oxford: Hadrian Books.

Estrada Belli, Francisco & Laura J. Kosakowsky
1996 El proyecto Santa Rosa: resultados de la primera temporada. In *IX Simposio de Investigaciones Arqueológicas de Guatemala*. J.P. Laporte & H.L. Escobedo (eds.): 565-582. Museo Nacional de Arqueología y Etnología, Guatemala.

Estrada Belli, Francisco, Laura J. Kosakowsky & Marc Wolf
1998 Survey and excavation in Pacific Coastal Jutiapa, Guatemala 1997. *Mexicon* 20(3): 55-59.

Estrada Belli, Francisco, Laura Kosakowsky, Marc Wolf & D. Blank
1996 Patrones de asentamiento y uso de la tierra desde el Preclásico al Postclásico en la costa del Pacifico de Guatemala: La arqueología de Santa Rosa, 1995. *Mexicon* 18(6): 110-115.

Estrada Monroy, Agustín (ed.)
1973 Carta de Relación de Pedro de Alvarado a Hernán Cortés, 28 de julio de 1524. In *Datos para la historia de la iglesia en Guatemala*, vol. I: 23-40. Sociedad de Geografía e Historia de Guatemala; 26. Guatemala: SGHG

Evans, Nicholas
2001 The last speaker is dead – long live the last speaker. In *Linguistic Fieldwork*; Paul Newman & Martha Ratliff (Eds.): 250-281. Cambridge: Cambridge University Press

Feldman, Lawrence H.
1972 Moving merchandise on protohistoric Quautemallan. In *Atti del XL Congresso Internazionale degli Americanisti Roma-Genova; 3-10 Settembre 1972*, vol. 4: 193-197.

1974 *Papers of Escuintla and Guazacapan. A contribution to the History and Ethnography of South-Eastern Guatemala*. Occasional Publications in Mesoamerican Anthropology; 7. Greeley, Colorado: Museum of Anthropology, University of Northern Colorado.

1976 Names and deities in early Guatemala. In *Actas del XLI Congreso Internacional de Americanistas Mexico, 2 - 7 de Septiembre de 1974*, vol. 2: 236-242. Mexico.

1979 Vanishing transhumant cacao planters: The Xinca of the Michatoya Drainage, Guatemala. In *Actes du XLIIe Congrès International des Américanistes. Congrès du Centenaire. Paris, 2-9 Septembre 1976*, vol. 8: 95-101. Paris.

1981 *Colonial Manuscripts of Jalapa, Jutiapa & Santa Rosa Departments in the Republic of Guatemala*. Report for Organization of American States; 597 pp.

1985 *A Tumpline Economy: Production and Distribution Systems in 16th century Eastern Guatemala*. Culver City: Labyrinthos.

1986 Colonial languages of the gobierno of Guatemala: a review of the primary sources. *Journal of Mayan Linguistics*, 5 (2): 1-15. Iowa City.

1989 In the back of beyond: colonial documentation for a rural backwater. In *New Frontiers in the Archaeology of the Pacific Coast of Southern Mesoamerica*; F.J. Bove und L. Heller (ed.): 243-256. Arizona State University Anthropological Research Papers; 39. Tempe: Arizona State University.

1990 Lenguas coloniales de la gobernación de Guatemala: una reseña de fuentes primarias. *Anales de la Academia de Geografia e Historia de Guatemala*, 64: 105-118. Guatemala.

1991 Names from the South. *MAYAB*, 7: 53-57. Madrid.

1992 *Indian Payment in Kind: The Sixteenth-century Encomiendas of Guatemala*. Culver City: Labyrinthos

Feldman, Lawrence H. & G.R. Walters (ed.)

1980 *The Anthropology Museum's excavations in Southeastern Guatemala*. Preliminary Reports. Miscellaneous Publications in Anthropology, 9. Special Reports 1 & 2. Columbia, Miss.: University of Missouri.

Fernandéz, Jesús

1938 Diccionario del Sinca. *Anales de la Sociedad de Geografía e Historia de Guatemala* 15: 84-95 & 359-366

Fernández de Miranda, María Teresa

1967 Inventory of classificatory materials. In *Handbook of Middle American Indians, 5: Linguistics*, Norman McQuown (ed.): 63-78. Middle American Research Institute, Tulane University. Austin: University of Texas Press.

Fowler, William R., Jr.

1989 *The Cultural Evolution of Ancient Nahua Civilizations: The Pipil Nicaro of Central America*. Norman: University of Oklahoma Press.

Fox, Anthony

1995 *Linguistic Reconstruction: An Introduction to Theory and Method*. Oxford Textbooks in Linguistics. Oxford: Oxford University Press

Fuentes y Guzmán, Francisco Antonio de [1690]

1972 *Historia de Guatemala, o Recordación florida, escrita en el siglo XVII por el Capitán C. Francisco Antonio de Fuentes y Guzmán, [...]*, que publica por primera vez con notas e ilustraciones D. Justo Zaragoza 1882. 2 vols. Madrid.

Gaitán Lara, Sonia Dalia

1999 Dinamica de las cofradías xincas de Chiquimulilla. Epoca Colonial. *Estudios – Revista de Antropología, Arqueología e Historia*; 3ª época (agosto): 184-193. Universidad San Carlos de Guatemala.

García de Palacio, Diego [1576]

1983 *Carta-relación de Diego García de Palacio a Felipe II sobre la Provincia de Guatemala, 8 de marzo de 1576. Relación y forma que el Licenciado Palacio, oidor de la real Audiencia de Guatemala, hizo para los que hubieren de visitar, contar, tasar y repartir en las provincias de este distrito*. Versión paleográfica de María del Carmen León Cazares. Instituto de investigaciones filológicas centro de estudios Mayas; Fuentes para el estudio de la cultura Maya; 2. Mexico: Universidad Nacional Autónoma de México

Gavarrete, Juan

1868 *Vocabularios de la lengua xinca de Sinacantan por D. Juan Gavarrete y de Yupiltepeque y Jalapa por D. Sebastián Valdez, cura de Iutiapa (1868)*. Copiados de los originales en poder de Don Juan Gavarrete, en Guatemala, Febrero de 1875. Transcription C.H. Berendt. Manuscript. 9 pages. Tozzer Library, Harvard University, Cambridge, Mass.

Gildea, Spike
1998 *On Reconstructing Grammar. Comparative Cariban Morphosyntax*. Oxford Studies in Anthropological Linguistics; 18. New York, Oxford: Oxford University Press

2000a *Reconstructing Grammar: Comparative Linguistics and Grammaticalization* (ed.). Typological Studies in Language; 43. Amsterdam, Philadelphia: John Benjamins

2000b On the genesis of the verb phrase in Cariban languages: diversity through reanalysis. In *Reconstructing Grammar: Comparative Linguistics and Grammaticalization*; Spike Gildea (ed.): 65-105. Typological Studies in Language; 43. Amsterdam, Philadelphia: John Benjamins

Givón, T.
1979 *On Understanding Grammar*. New York: Academic Press.

1994 *Voice and Inversion*. Typological Studies in Language; 28. Amsterdam, Philadelphia: John Benjamins

1995 *Functionalism and Grammar*. Amsterdam, Philadelphia: John Benjamins.

2000 Internal Reconstruction: As method, as theory. In *Reconstructing Grammar: Comparative Linguistics and Grammaticalization*; Spike Gildea (ed.): 107-160. Typological Studies in Language; 43. Amsterdam, Philadelphia: John Benjamins

2001 *Syntax: An Introduction*. 2 vols. [second edition] Amsterdam, Philadelphia: John Benjamins.

Gordon, Raymond G., Jr. (ed.)
2005 *Ethnologue: Languages of the World*. [15th ed.]. Dallas, Tex: Summer Institute of Linguistics International. Online version: http//:www.ethnologue.com/

Greenberg, Joseph H.
1966 Some universals of grammar with particular reference to the order of meaningful elements. In *Universals of Language*, J. Greenberg (ed.): 58-113. Cambridge, Mass.: MIT Press.

1987 *Languages in the Americas*. Stanford: Stanford University Press.

Grenoble, Leonore & Lindsay Whaley (ed.)
1998 *Endangered Languages: Language Loss and Community Response*. Cambridge: Cambridge University Press

Hale, Kenneth
1992 Language endangerment and the human value of linguistic diversity. *Language* 68: 4-10

1998 On endangered languages and the importance of linguistic diversity. In *Endangered Languages: Language Loss and Community Response*; Lenore A. Grenoble & Lindsay A. Whaley (eds.): 192-216. Cambridge: Cambridge University Press

Harris, Alice C. & Lyle Campbell
1995 *Historical Syntax in Cross-Linguistic Perspective*. Cambridge Studies in Linguistics; 74. Cambridge: Cambridge University Press

Haspelmath, Martin
2008 Indefinite pronouns. In *The World Atlas of Language Structures Online*; Martin Haspelmath & Matthew S. Dryer, David Gil, Bernard Comrie (eds.). Chapter 46. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/46

Haspelmath, Martin & Matthew S. Dryer, David Gil, Bernard Comrie (eds.)
2008 *The World Atlas of Language Structures Online.* Munich: Max Planck Digital Library. Available online at http://wals.info

Haviland, John B.
1988 It's my own invention: a comparative grammatical sketch of colonial Tzotzil. In *The great Tzotzil dictionary of Santo Domingo Zinacantán*; Robert M. Laughlin: 79-121. Smithsonian Contributions to Anthropology. Washington D.C.: Smithsonian Institution Press.

Hawkins, John A.
1983 *Word Order Universals*. New York: Academic Press.

Heine, Bernd
1993 *Auxiliaries: Cognitive Forces and Grammaticalization*. New York, Oxford: Oxford University Press

Heine, Bernd, Ulrike Claudi & Friederike Hünnemeyer
1991 *Grammaticalization: A Conceptual Framework*. Chicago: University of Chicago Press.

Heine, Bernd & Tania Kuteva
2002 *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press
2007 *The Genesis of Grammar: A Reconstruction*. Oxford: Oxford University Press

Heine, Bernd & Hiroyuki Miyashita
2008 The intersection between reflexives and reciprocals: a grammaticalization perspective. In *Reciprocals and Reflexives: Theoretical and Typological Explorations*; Ekkehard König & Volker Gast (eds.): 169-223. Berlin, New York: Mouton de Gruyter

Heine, Bernd & Mechthild Reh
1984 *Grammaticalization and Reanalysis in African Languages*. Hamburg: Helmut Buske

Hernández Sacristan, Carlos
1994 Notas als 'Arte para aprender la lengua mexicana' de Andrés de Olmos. In *Estudios de Lengua y Cultura Amerindias I - Actas de las II Jornadas Internacionales de Lengua y Cultura Amerindias, Valencia, 24-26 noviembre de 1993*; Julio Calvo Pérez (ed.): 123-130. Valencia: Universidad de Valencia.
1997 Categoría formal, categoría funcional y teoría de la traslación en las primeras gramáticas den náhuatl. In *La descripción de las lenguas amerindias en la época colonial*; Klaus Zimmermann (ed.): 43-58. Bibliotheca Ibero-Americana. Frankfurt am Main: Vervuert.

Herrera, Guillermina
1990 Las lenguas indígenas de Guatemala: situación actual y futura. In *Lecturas sobre la lingüistica Maya*. Nora C. England und Stephen R. Elliott (ed.): 27-50. Centro de Investigaciones Regionales de Mesoamérica. La Antigua Guatemala

Hill, Jane H.
1978 Language death, language contact, and language function. In *Approaches to Language: Anthropological Issues*; W.C. McCormack & S.A. Wurm (eds.): 45-78. The Hague: Mouton.
1983 Language death in Uto-Aztecan. *International Journal of American Linguistics* 49: 258-76

Hopper, Paul J. & Elizabeth Traugott
1993 *Grammaticalization*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.

Hovdhaugen, Even (ed.)
1996 *… and the Word was God: Missionary Linguistics and Missionary Grammar*. Münster: Nodus.

Hull, Kerry
2005 *An Abbreviated Dictionary of Ch'orti' Maya*. Ms. Final report for the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI), grant #03031.

Ichon, Alain & Rita Grignon
1998 El título de Ixhuatán y el problema xinca en Guatemala. In *Memorias del Segundo Congreso Internacional de Mayistas, Merida, Yucatán, agosto de 1992*: 327-338. México: UNAM, Instituto de Investigaciónes Filológicas; Centro de Estudios Mayas.

Jones, Oakah L. Jr.
1994 *Guatemala in the Spanish Colonial Period*. Norman: University of Oklahoma Press.

Juarros, Domingo [1808-18]
1937 *Compendio de la historia de la Ciudad de Guatemala*. Escrito por el B.D. Domingo Juarros, presbítero secular de este arzobispo. 2 vols. Guatemala

Karttunen, Frances
1992 *An Analytical Dictionary of Nahuatl*. Norman: University of Oklahoma Press.

Kaufman, Terrence
1977 Areal linguistics and Middle America. In *Native Languages of the Americas*, vol. 2; Thomas A. Sebeok (ed.): 63-87. New York, London: Plenum Press

1990a Algunos rasgos estructurales de los idiomas mayances con referencia especial al k'iche'. In *Lecturas sobre la Lingüística Maya*; Nora E. England & Stephen R. Elliott (eds.): 59-114. Guatemala: CIRMA/Plumsock.

1990b Early Otomanguean homelands and cultures: some premature hypotheses. *University of Pittsburgh Working Papers in Linguistics* 1: 91-136.

2003 *A Preliminary Mayan Etymological Dictionary* (with the assistance of John Justeson). Online publication on www.famsi.org

Kaufman, Terrence & William Norman
1984 An outline of Proto-Cholan phonology, morphology and vocabulary. In *Phoneticism in Mayan Hieroglyphic Writing*, John S. Justeson & Lyle Campbell (eds.): 77-166. Institute for Mesoamerican Studies Publication; no. 9. Albany: State University of New York.

Kibrik, Aleksandr E.
1991 The problem of endangered languages in the USSR. In *Endangered Languages*; Robert H. Robins & Eugenius M. Uhlenbeck (ed.): 257-273. Oxford: Berg Publishers Ltd.

Kiefer, J.
1999 Modality. In *Concise Encyclopedia of Grammatical Categories*; Keith Brown & Jim Miller (eds.): 223-229. Amsterdam: Elsevier

König, Ekkehard & Volker Gast
2008 *Reciprocals and Reflexives: Theoretical and Typological Explorations*. Berlin: de Gruyter

König, Ekkehard & Peter Siemund (with Stephan Töpper)
2008 Intensifiers and reflexive pronouns. In *The World Atlas of Language Structures Online*; Martin Haspelmath & Matthew S. Dryer, David Gil, Bernard Comrie (eds.). Chapter 47. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/47

Krauss, Michael
1998 The scope of the language endangerment crisis and recent response to it. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 101-113. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo

Laughlin, Robert
1988 *The Great Tzotzil Dictionary of Santo Domingo Zinacantán*. Smithsonian Contributions to Anthropology. Washington D.C.: Smithsonian Institution Press.

2001 *La gran serpiente cornuda:¡Indios de Chiapa, no escuchen a Napoleón!* Ensayos 1. Programa de Investigaciones Multidisciplinarias sobre Mesoamérica y el Sureste. San Cristóbal, México: UNAM

Launey, Michel

1997 La elaboración de los conceptos de la diátesis en las primeras gramáticas del náhuatl. In *La descripción de las lenguas amerindias en la época colonial*; Klaus Zimmermann (ed.): 21-41. Bibliotheca Ibero-Americana. Frankfurt am Main: Vervuert.

Lehmann, Christian

1990 Towards lexical typology. In *Studies in Typology and Diachrony: Papers Presented to Joseph H. Greenberg on his 75th birthday*, William Croft, Keith Denning & Suzane Kemmer (eds.): 161-186. Typological Studies in Language; 20. Amsterdam, Philadelphia: John Benjamins

Lehmann, Walter

1910 Ergebnisse einer Forschungsreise in Mittelamerika und México 1907-1909. *Zeitschrift für Ethnologie*; 42: 682-749.

1911 *Xinca-Vocabulare*; Guatemala: 1. Dialekt von Chiquimulilla; verglichen mit dem von Yupiltepeque. Nach Orig. Ms. von Prof. Dr. Karl Sapper kopiert von Dr. W. Lehmann. München, 1. Januar 1911. 2. Xinca von Yupiltepeque, aufgenommen von Dr. Karl Sapper. Nach Ms. von E. Seler, kopiert von Dr. W. Lehmann. München, 3.4.1910. 3. Dialekt von Sinacantan. 4. Dialekte von Yupiltepeque und Jutiapa. Manuscript.

1915 Über die Stellung und Verwandtschaft der Subtiaba-Sprache der Pazifischen Küste Nicaraguas und über die Sprache von Tapachula in Südchiapas. *Zeitschrift für Ethnologie*; 47: 1-34.

1920 Die Sprachen des südöstlichen Guatemala (Xinca und Pupuluca von Conguaco). In *Zentral-Amerika - Teil I: Die Sprachen Zentral-Amerikas in ihren Beziehungen zueinander sowie zu Süd-Amerika und Mexiko,* vol. 2: 723-780. Berlin: Verlag Dietrich Reimer

1928 *Xinca-Vokabular und -Grammatik*. In Arte de la lengua Szinca, compuesto por el Mstr. Dn. Manuel Maldonado de Matos, cura proprio del partido de Santiago Sacatepequez, Guatemala 1770; auszugsweise kopiert. Ms. Berlin: Iberoamerikanisches Archiv.

o.J. *Vergleichende Wortlisten. Honduras*. Ms. Berlin: Iberoamerikanisches Archiv

Letona Zuleta, Jos. Vinicio, Carlos Camacho Nassar & Juan Antonio Fernández Gamarro

2003 Las tierras comunales xincas en Guatemala. In *Tierra, identidad y conflicto en Guatemala*; Carlos Camacho Nassar (ed.):71-141. Guatemala: FLACSO, MINUGUA, CONTIERRA

Levinson, Stephen

1999 Deixis. In *Concise Encyclopedia of Grammatical Categories*; Keith Brown & Jim Miller (eds.): 132-136. Amsterdam: Elsevier

Lichtenberk, František

2000 Reciprocals without reflexives. In *Reciprocals: Forms and Function*; vol. 2; Zygmunt Frajzyngier & Tracis S. Walker-Curl (eds.): 31-62. Typological Studies in Language; 41. Amsterdam, Philadelphia: John Benjamins

Liedtke, Stefan

1991 *Indianersprachen - Sprachvergleich und Klassifikation. Eine ethnolinguistische Einführung in die Grundlagen und Methoden*. Hamburg: Helmut Buske Verlag.

Lipski, John M.

1985 /s/ in Central American Spanish. *Hispania*; 68(1):143-149.

Longacre, Robert
1967 Systemic comparison and reconstruction. In *Handbook of Middle American Indians, vol. 5 - Linguistics*, Norman McQuown (ed.): 117-159. Middle American Research Institute, Tulane University. Austin: University of Texas Press.

Lopez García, Angel
1995 Nebrija y la naciente tipología lingüistica: lo antiguo y lo nuevo en las primeras gramáticas amerindias. *Amerindia - revue d'ethnolinguistique amérindienne*;19/20; La "découverte" des langues et des écritures d'Amérique - Actes du colloque international, Paris, 7-11 Septembre 1993: 245-251. Paris: l'Association d'Ethnolinguistique Amérindienne.

López Ixcoy, Saqijix Candelaria Dominga
1997 *Ri ukemiik ri K'ichee' Chii' – Gramática K'ichee'*. Guatemala: Cholsamaj

Lothrop, S. K.
1939 The southeastern frontier of the Maya. *American Anthropologist* 41: 42-54

MacLeod, Murdo J.
1973 *Spanish Central America: A Socioeconomic History, 1520-1720*. Berkeley: University of California Press.

Maldonado de Matos, Manuel
[~1770] *Arte de la lengua szinca con algunas reflexiones criticas al arte cakchiquel*. Manuscript. Microfilm of the Tozzer Library, Harvard University. Cambridge, Mass.

1918a *Vocabulario de la lengua szinca*. Photostat Edition; Tozzer Library, Harvard University. Cambridge, Mass.

1918b *Arte de la lengua szinca*. Photostat Edition; Tozzer Library, Harvard University. Cambridge, Mass.

2004 *Arte de la lengua szinca*: e*studio introductorio y edición del texto*; Frauke Sachse (ed.). Fuentes Mesoamericanas; 5. Markt Schwaben: Verlag Anton Saurwein

Matsumura, Kazuto (ed.)
1998 *Studies in Endangered Languages.* Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995. Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo

McArthur, Harry
1966 Xinca. In *Languages of Guatemala*; Marvin K. Mayers (ed.): 309-312. Janua Linguarum, series practica; 23. The Hague: Mouton and Co.

McQuown, Norman A.
1948 *Vocabulario Xinca recopilado en Chiquimulilla del 29 al 30 de noviembre (1948) con Mauricio García y Desiderio García González*. Microfilm Collection of Manuscripts on Cultural Anthropology; no. 296, series LVI. University of Chicago Library, 1977. Chicago

1967 Classical Yucatec (Maya). In *Handbook of Middle American Indians*, *vol. 5 - Linguistics*, Norman McQuown (ed.): 201-247. Middle American Research Institute, Tulane University. Austin: University of Texas Press.

1976 American Indian linguistics in New Spain. In *American Indian Languages and American Linguistics*. The second Golden Anniversary Symposium of the Linguistic Society of America, held at the University of California, Berkeley, on November 8 and 9, 1974; Wallace L. Chafe (ed.): 105-127. Lisse: The Peter de Ridder Press

Metzler Lexikon Sprache
1993 *Metzler Lexikon Sprache*; Helmut Glück (ed.). Stuttgart, Weimar: Verlag J.B. Metzler

Mithun, Marianne
1991 The role of typology in American Indian historical linguistics. In *Patterns of Change, Change of Patterns: Linguistic Change and Reconstruction Methodology*; Philip Baldi (ed.): 31-54. Berlin, New York: Mouton de Gruyter
1998 The significance of diversity in language endangerment and preservation. In *Endangered Languages: Language Loss and Community Response*; Lenore A. Grenoble & Lindsay A. Whaley (eds.): 163-191. Cambridge: Cambridge University Press
2001 Who shapes the record: the speaker and the linguist. In *Linguistic Fieldwork*; Paul Newman & Martha Ratliff (eds.): 34-54. Cambridge: Cambridge University Press
2007 Gammars and the community. In *Perspectives on Grammar Writing*; Thomas E. Payne & David J. Weber (eds.): 45-69. Benjamins Current Topics; 11: Amsterdam, Philadelphia: John Benjamins.

Monzón, Cristina
1995 La morfología en las primeras artes de lenguas amerindias. In *Amerindia - revue d'ethnolinguistique amérindienne*, 19/20; La "découverte" des langues et des écritures d'Amérique - Actes du colloque international, Paris, 7-11 Septembre 1993: 253-261. Paris: l'Association d'Ethnolinguistique Amérindienne.

Mora-Marín, David
2005 Kaminaljuyu Stela 10: Script Classification and Linguistic Affiliation. *Ancient Mesoamerica* 16: 63-87

Morales, Hermenegildo
1812 *Proclama traducida del castellano al idioma Zeefe (que se habla en algunas partes del arzobispado de Guatemala) por Dr. Hermenegildo Morales, Presbitero Indio*. Manuscript. Archivo General de Indias, legajo 943. Sevilla

Muysken, Pieter
1999 Nominalization. In *Concise Encyclopedia of Grammatical Categories*; Keith Brown & Jim Miller (eds.): 248-252. Amsterdam: Elsevier

Næss, Åshild
2007 *Prototypical Transitivity*. Typological Studies in Language; 72. Amsterdam, Philadelphia: John Benjamins

Nansen Diaz, Eréndira
1995 Las lenguas que forman cuerpo con el verbo. Apuntes para la historia del término incorporación. *Amerindia - revue d'ethnolinguistique amérindienne*, 19/20; La "découverte" des langues et des écritures d'Amérique - Actes du colloque international, Paris, 7-11 Septembre 1993: 263-272. Paris: l'Association d'Ethnolinguistique Amérindienne.

Nash, Manning
1967 *Handbook of Middle American Indians, vol. 6 - Social Anthropology* (ed.). Middle American Research Institute, Tulane University. Austin: University of Texas Press.

Nebrija, Antonio de [1492]
1980 *Gramática de la lengua castellana*. Antonio Quilis (ed.). Madrid: Editora Nacional.

Newman, Stanley
1967 Classical Nahuatl. In *Handbook of Middle American Indians, vol. 5 – Linguistics*; Norman McQuown (ed.): 179-199. Middle American Research Institute, Tulane University. Austin: University of Texas Press

Newmeyer, Frederick J.
1998 *Language Form and Language Function*. Language, speech, and communication. A Bradford book. Cambridge, Mass., London, England: The MIT Press

Olson, James S.
1991 *The Indians of Central and South America: An Ethnohistorical Dictionary*. Westport, Conneticut: Greenwood Press.

Onishi, Masayuki
2001 Introduction: Non-canonically marked subjects and objects: Parameters and properties. In *Non-Canonical Marking of Subjects and Objects*; Alexandra Aikhenvald, R.M.W. Dixon and M. Onishi (eds.): 1-47. Typological Studies in Language; 46. Amsterdam/Philadelphia: John Benjamins

Orellana, Sandra L.
1973 Ethnohistorical and archaeological boundaries of the Tzutujil Maya. *Ethnohistory* 20(2): 125-142

1995 *Ethnohistory of the Pacific Coast*. Labyrinthos: Lancaster, Calif.

Otzoy, Simon
1999 *Memorial de Sololá*. Transcripción y traducción de Simón Otzoy. Introducción de Jorge Luján Muñoz. Guatemala: Comisión Interuniversitaria Guatemalteca de Conmemoración del Quinto Centenario del Descubrimiento de América.

Oxlajuuj Keej Maya' Ajtz'iib'
1993 *Maya' Chii': los idiomas mayas de Guatemala*. Guatemala: Cholsamaj

Palmer, F.R.
2001 *Mood and Modality*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.

Payne, Thomas E.
1997 *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge: Cambridge University Press

2007 A Grammar as a Communicative Act or What Does a Grammatical Description Really Describe? In *Perspectives on Grammar Writing*; Thomas E. Payne & David J. Weber (eds.): 127-142. Benjamins Current Topics; 11: Amsterdam, Philadelphia: John Benjamins.

Payne, Thomas E. & David J. Weber (ed.)
2007 *Perspectives on Grammar Writing*. Benjamins Current Topics; 11. Amsterdam, Philadelphia: John Benjamins

Penny, Ralph J.
1991 *A History of the Spanish Language*. Cambridge: Cambridge University Press

Pineda, Juan de [1594]
1925 Descripción de la provincia de Guatemala. *Anales de la Sociedad de Geografía e Historia de Guatemala*; 1(4): 327-363.

Pineda Pivaral, Eduardo
1969 *Monografía Santa Cruz Chiquimulilla*. Guatemala.

1977 *Relatos de Chiquimulilla*. Guatemala: Editorial Pineda Pivaral.

Quilis, Antonio
1980 Estudio. In *Antonio de Nebrija: Gramática de la lengua castellana [1492]*: 1-89. Madrid: Editora Nacional.

Rambo, A. Terry
1965 Urgent research in Guatemala. Xinca indian villages and Xinca language recommended for intensive study. *Bulletin of the International Commitee on Urgent Anthropological and Ethnological Research*, 7: 105. Vienna.

Robins, Robert H. & Eugenius M. Uhlenbeck (ed.)
1991 *Endangered Languages*. Oxford: Berg Publishers Ltd.

Sachse, Frauke
1998 Analyse de kolonialzeitlichen Beschreibung einer Xinka-Sprache des Maldonado de Matos von 1770. 2 vols. Master Thesis. Rheinische Friedrich-Wilhelms-Universität Bonn

2002 Describing Xinka grammar: methodological remarks and aspect of structural change in a dying language from Southeast Guatemala. Paper read at the Linguistic Colloquia of Leiden University on 6 December 2002.

2004 *Maldonado de Matos: Arte de la lengua szinca*. Editor. Fuentes Mesoamericanas; 5. Markt Schwaben: Saurwein

Sapir, Edward
1949 Central and North American languages. In *Selected Writings in Language, Culture, and Personality*; David G. Mandelbaum (ed.): 169-196. Berkeley, Los Angeles, London: University of California Press.

Sapper, Karl
1904 Der gegenwärtige Stand der ethnographischen Kenntnis von Mittelamerika. *Archiv für Anthropologie*; N.F. 3: 1-38. Braunschweig.

Sasse, Hans-Jürgen
1990 *Theory of language death & Language decay and contact-induced change: similarities and differences'*. Arbeitspapier Nr. 12 (N.F.) Köln: Institut für Sprachwissenschaft der Universität Köln

1992a Theory of language death. In *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*; Matthias Brenzinger (ed.): 7-30. Contributions to the Sociology of Language. Berlin, New York: Mouton de Gruyter

1992b Language decay and contact-induced change: similarities and differences. In *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*; Matthias Brenzinger (ed.): 59-80. Contributions to the Sociology of Language. Berlin, New York: Mouton de Gruyter

Saville, Marshall. H.
1918 A grammar and vocabulary of the Szinca language of Guatemala. *American Anthropologist*, 20: 339-340

Schladt, Mathias
2000 Typology and grammaticalization of reflexives. In *Reflexives: Forms and Function*; vol. 1; Zygmunt Frajzyngier & Tracis S. Walker-Curl (eds.): 103-124. Typological Studies in Language; 40. Amsterdam, Philadelphia: John Benjamins

Schumann Galvez, Otto
1966 Fonemica del dialecto xinca de Chiquimulilla. *Summa antropológica de homenaje a Roberto J. Weitlaner*; Antonio Pompa y Pompa (ed.): 449-454. Mexico: Instituto Nacional de Antropología e Historia (INAH)

1967 *Xinca de Guazacapan*. Tesis. Escuela Nacional de Antropología e Historia. México: Universidad Nacionál Autónoma de México

1973 Los Pocomes y sus vecinos. In *Estudios de cultura Maya*. Publicación anual del Centro de Estudios Mayas; 9: 313-320. México: Universidad Nacionál Autónoma de México

Shibatani, Masayoshi
2004 Voice. In *Morphologie/Morphology*: Ein internationales Handbuch zur Flexion und Wortbildung / An International Handbook on Inflection and Word-Formation, vol. 2; Geert E. v. Booij, Geert E., C. Lehmann, J. Mugdan, S Skopeteas (eds.): 1145-1164. Berlin: de Gruyter.

Shook, Edwin M
1965 Archaeological survey of the Pacific coast of Guatemala. In *Handbook of Middle American Indians; vol. 2 - Archaeology of Southern Mesoamerica*; Gordon R. Willey (ed.): 180-194. Austin: University of Texas Press.

Shopen, Timothy (ed.)
1985 *Language Typology and Syntactic Description*; vols. 1-3. Cambridge: Cambridge University Press

Siewierska, Anna
2008 Third person zero of verbal person marking. In *The World Atlas of Language Structures Online*; Martin Haspelmath & Matthew S. Dryer, David Gil, Bernard Comrie (eds.). Chapter 103. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/103

Siglo XXI
1996 Reestructurar el idioma xinka. In *Iximulew – oficialización de los idiomas mayas – retos y perspectivas*. No. 11; 10 de noviembre 1996: 8. CECMA/Cholasamaj.

Smailus, Ortwin
1973 *Das Maya-Chontal von Acalan - Sprachanalyse eines Dokumentes aus den Jahren 1610/12*. Dissertation. Hamburg.

1989a *Gramática del Maya Yucateco colonial*. Wayasbah; 9. Hamburg: Wayasbah.

1989b *Vocabulario en lengua castellana y guatemalteca que se llama Cakchiquel Chi. Análisis gramatical y Lexicológico del Cakchiquel colonial según un antiguo diccionario anónimo* (Bibliothèque Nationale de Paris - Fonds Américaine No. 7). Wayasbah; 14. (3 volumes). Hamburg: Wayasbah

Smith, Carol
1990 *Guatemalan Indians and the State, 1540-1988*. Austin: University of Texas Press.

Solano, Francisco de
1974 *Los Mayas del siglo XVIII - pervivencia y transformacion de la sociedad indígena guatemalteca durante la administracion Borbonica*. Ediciones Cultura Hispanica. Madrid.

Spicknall, Gayla
1975 Some modern Xinca ceramics. In *Papers on the Xinca of Eastern Guatemala*, Lyle Campbell *et al.* (ed.): 32-37. Columbia: University of Missouri.

Stassen, Leon
1985 *Comparison and Universal Grammar*. Oxford: Basil Blackwell

Stoll, Otto
1886 *Guatemala - Reisen und Schilderungen aus den Jahren 1878-1883*. Leipzig: F.A. Brockhaus.

1958 *Etnografía de Guatemala.* Seminario de Integracion Social Guatemalteca; 8. Guatemala: Editorial del Ministerio de Educacion Publica.

Suárez, Jorge A.
1983 *The Mesoamerican Indian Languages*. Instituto de Investigaciones Filológicas. Universidad Nacional Autonoma de México. Cambridge: Cambridge University Press

Swadesh, Maurice
1967 Lexicostatistic classification. In *Handbook of Middle American Indians, Vol. 5 - Linguistics*, Norman McQuown (ed.): 79-115. Middle American Research Institute, Tulane University. Austin: University of Texas Press.

Taracena Arriola, Arturo (with G. Gellert, E. Gordillo Castillo, T. Sagastume Paiz, K. Walter)
2002 *Etnicidad, estado y nación en Guatemala, 1808-1944*. Colección ¿Por qué estamos como estamos? Guatemala: Nawal Wuj, CIRMA

Termer, Franz
1944 Ein Besuch bei den Xinca-Indianern in Südostguatemala. *Ethnos*, 9 (3-4): 97-117. Stockholm

1948 *Quauhtemallan und Cuzcatlan - Der erste und zweite Bericht des Pedro de Alvarado über die Eroberung von Guatemala und El Salvador im Jahre 1524*. Hamburger Romanistische Studien, B. Ibero-Amerikanische Reihe; 18. Hamburg: Hansischer Gildenverlag Hamburg.

Thomason, Sarah Grey
2001 *Language Contact: An Introduction*. Washington D.C.: Georgetown University Press

Thomason, Sarah Grey & Terrence Kaufman
1988 *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press

Trask, Robert Lawrence
1996 *Historical Linguistics*. London, New York *et.*: Arnold.

Traugott, Elizabeth C. & Bernd Heine (eds.)
1991 *Approaches to Grammaticalization*. Typological Studies in Language, 19. Amsterdam, Philadelphia: John Benjamins

Tujab, Gloria [1975]
1987 Lenguas indigenas que se encuentran en vias de extinción. *América Indígena* 47(3): 529-533. México

Velasco, Juan López de
1952 Geografía y descripción universal de las Indias y demarcación de los reyes de Castilla. *Anales del Museo Nacional de San Salvador;* 3: 33-62.

Voegelin, C. F. und F. M. Voegelin
1977 *Classification and Index of the World's Languages*. Foundation of Linguistics series. New York, Oxford, Amsterdam: Elsevier.

Vogt, Evon Z. (ed.)
1969 *Handbook of Middle American Indians, vol. 7 - Ethnology, part 1.* Middle American Research Institute, Tulane University. Austin: University of Texas Press.

Warren, Kay B.
1998 *Indigenous Movements and their Critics. Pan-Maya Activism in Guatemala*. Princeton: Princeton University Press.

Weeks, John M.
1990 *Mesoamerican Ethnohistory in United States Libraries: Reconstruction of the William E. Gates Collection of Historical and Linguistic Manuscripts*. Culver City: Labyrinthos

Wichmann, Søren
1995 *The Relationship among the Mixe-Zoquean Languages of Mexico*. Studies in Indigenous Languages of the Americas. Salt Lake City: University of Utah Press.

Wichmann, Søren & Kerry Hull
2009 Loanwords in Q'eqchi', a Mayan language of Guatemala. In *Loanwords in the World's Languages: A Comparative Handbook*; Martin Haspelmath & Uri Tadmor (eds.): 873-896. Berlin/New York: Mouton de Gruyter

Wichmann, Søren & Jan Wohlgemuth
2008 Loan verbs in a typological perspective. In *Aspects of Language Contact. New Theoretical, Methodological and Empirical Findings with Special Focus on Romancisation Processes*; Thomas Stolz, Dik Bakker & Rosa Palomo (eds.): 89-121. Berlin/New York: Mouton de Gruyter.

Wurm, Stephen A.
1991 Language death and disappearance: causes and circumstances. In *Endangered Languages*; Robert H. Robins & Eugenius M. Uhlenbeck (ed.): 1-18. Oxford: Berg Publishers Ltd.

1998 Methods of language maintenance and revival, with selected cases of language endangerment in the world. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 191-211. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo

Yamamoto, Akira Y.
1998 Linguists and endangered language communities: issues and approaches. In *Studies in Endangered Languages*; Kazuto Matsumura (ed.): 213-251. (Papers from the International Symposium on Endangered Languages, Tokyo, 18-20 November 1995). Ichel Linguistic Studies, 1. Tokyo: Hituzi Syobo

Young, Philip D. & T. Givón
1990 The Puzzle of Ngäbére. Grammatical Reconstruction in Chibchan and Misumalpan. In *Studies in Typology and Diachrony: Papers Presented to Joseph H. Greenberg on his 75th birthday*, William Croft, Keith Denning & Suzane Kemmer (eds.): 209-242. Typological Studies in Language; 20. Amsterdam, Philadelphia: John Benjamins

Zavala, Roberto
2006 Serial verbs in Olutec. In *Serial Verb Constructions: A Cross-Linguistic Typology*; Alexandra Aikhenvald and R.M.W. Dixon (eds.): 273-300. Explorations in Linguistic Typology; 2. Oxford, New York: Oxford University Press

Zimmermann, Klaus
1997 *La descripción de las lenguas amerindias en la época colonial*. (ed.) Bibliotheca Ibero-Americana. Frankfurt am Main: Vervuert.

Zúñiga, Fernando
2006 *Deixis and Alignment: Inverse Systems in indigenous languages of the Americas*. Typological Studies in Language; 70. Amsterdam, Philadelphia: John Benjamins

Zwartjes, Otto & Even Hovdhaugen (eds.)
2004 *Missionary Linguistics / Lingüística misionera: Selected Papers from the First International Conference on Missionary Linguistics, Oslo, 13-16 March 2003*. Studies in the History of the Language Sciences; 106. Amsterdam, Philadelphia: John Benjamins

Appendices

1. Systematic outline of Latin categories in the ALS

Descriptive order[184]

Chapter 1	letras caracteristicas	(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)
	axʊé	hic, haec, hoc	(20v)
	mán	ese, esa, eso	(21r)
3p	nagŁic	pl: ille, illa, illud	(20v)
	axʊéŁic	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	ɛiguán	"yo mismo"	(21r-21v)
2s	ɛiguaca, ɛica	"tu mismo"	(21v)
3s	ɛiguág, ɛiquig qui	"aquel mismo"	(22r)
1p	ɛiguác	"nosotros mismos"	(21v)
2p	ɛiguáca ay, ɛica ay	"vosotros mismos"	(21v)
3p	Łic ɛiguàg	"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, -ʊen	(28r-30r)
2s	ca-	-ca	(30r-30v)
3s	mu-	-ag, -eg, -ig, -og, -ug, -ʊeg	(30v-31r)
1p	muc-	-ac, -ec, -ic, -oc, -uc, -ʊec	(31r-31v)
2p	ca- ... –ay	-ca ay	(32r)
3p	mu- ... + *plural*	-ag, -eg, -ig, -og, -ug, -ʊeg + *plural*	(32r-32v)
	primera especie	segunda especie	

Capitulo 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: ɛʊetʊe	(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

pretérito perfecto

indicativo	activa	S-	VI							
			VT					-A		
subjuntivo	activa	S-	VI	+ mà						
			VT					-A	+ mà	
indicativo	pasiva		VT			+ pata-	guà-	-S		
subjuntivo	pasiva		VT	+ mà		+ pata-	guà-	-S		

pretérito plusquamperfecto

indicativo	activa	capa +	S-	VI		+ paŁ	+ nàŁ			
		capa +		VT	-A	+ paŁ	+ nàŁ (+ qui)			
subjuntivo	activa		S-	VI		+ mà	+ ayù			
				VT	-A	+ mà	+ ayù			
indicativo	pasiva	capa +		VT		+ paŁ	+ nàŁ	+ pata-	guà-	-S
subjuntivo	pasiva			VT		+ mà	+ ayù	+ pata-	guà-	-S

futuro imperfecto

indicativo	activa	S/A-	VI/VT		+ pè			
subjuntivo	activa	S/A-	VI/VT	+ pà	+ pè			
indicativo	pasiva		VT		+ pè	+ pata-	-S	
subjuntivo	pasiva		VT	+ pà	+ pè	+ pata-	-S	

futuro perfecto

indicativo	activa	S-	VI		+ pà	+ ayù			
subjuntivo	activa		VT	-A	+ pà (+ ayù)	+ ayù (+ pè)			
indicativo	pasiva		VT		+ pà	+ ayù	+ pata-	guà-	-S

imperativo

2s	Ø-	VT	-Ø			
2p		VT	-ay			
3s	guà +	VT	-ín			
3p	guà +	VT	-ín Łic			
2s	S-	VI		/ VI	-ya	
2p	S-	VI	-ay	/ VI	-ya ay	
3s	a-	VI				
3p	a-	VI	-Łic			

infinitivo

present active	á +	VI/VT					
present passive		VT			+ pata-		-í
perfect active		VI/VT	+ guà				
perfect passive		VT			+ pata-	-gua-	(-ag)
future active	(a) +	VI/VT	+ nàŁ	+ pè			
future passive		VT	+ nàŁ	+ pè	+ pata-		-í

circumloquio segundo

activa	(a) +		VI/VT	+ nàŁ		
pasiva	pata-	nàŁ +	VT			
			VT	+ nàŁ	+ pata	-í

supinum

supinum	VI/VT	+ qui (-que)

gerundios

genitivo

activa	(a) +		VI/VT	
pasiva		*pata*-an +	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 +		*pata*- Łà +	VT

participios

presente y pretérito imperfecto

	-VŁ
VI/VT	-Ła(Ł)
	-quiŁa / -ɛeŁa

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

Capitulo 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"

Capitulo 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, -ʊen
2s	ca-	-ca
3s	mu-	-ag, -eg, -ig, -og, -ug, -ʊeg
1p	muc-	-ac, -ec, -ic, -oc, -uc, -ʊec
2p	ca- ... –ay	-ca ay
3p	mu- ... + Łic, quiŁic	-ag, -eg, -ig, -og, -ug, -ʊeg + Łic, 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 + Łic, quiŁic	-ag + Łic, quiŁic
	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, -ʊen
2s	ca-	-ca
3s	a-	-Ø
1p	muc-	-ac, -ec, -ic, -oc, -uc, -ʊec
2p	ca- ... –ay	-ca ay
3p	a- ... + Łic, quiŁic	- Ø + Łic, quiŁic
	presentes	pretéritos perfectos
	pretéritos imperfectos	pretéritos plusquamperfectos
	futuro imperfecto	futuro perfecto
	futuro subjuntivo	

Capitulo 6 de las partículas verbales (fol. 89r ff.):

Nota	Categoría	Partícula	
1	presente de indicativo	posesiva, antepuesta	(90r)
2	pretérito imperfecto	naŁ	(91r)
3	pretérito perfecto	posesiva, pospuesta	(94r)
4	pretérito plusquamperfecto	capa, paŁ, naŁ	(98r)
5	futuro imperfecto	pè	(99v)
6	futuro perfecto	pa, ayù	(100r)
7	imperativo	-	(101r)
8	presente de subjuntivo	Łan	(101v)
9	pretérito imperfecto de subjuntivo	ma, naŁ	(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)

Capitulo 7 de el participio, preposísion, adverbio, interjecion y conjuncion (fol. 105v)
[This chapter does not contain any further descriptive categories.]

2. Concordance of ALS-forms

1.	(see Appendix 3)	
2.	szurumo	el muchacho
3.	szurumaŁi	los muchachos
4.	tata	el padre
5.	uta	la madre
6.	tata caŁi	padres
7.	uta caŁi	madres
8.	paŁe	padre
9.	paleŁe	padres
10.	cosec	grande
11.	cosecŁe	grandes
12.	pelo	perro
13.	peloŁe	perros
14.	tènan	muchos
15.	tumuqui	todos
16.	giru	el mo[n]o
17.	tènan giru	monos, ó muchos monos
18.	teenan	mucho
19.	tumuqui	todos
20.	jamaguáŁa	el pecador
21.	teenan jamaguaŁa	los pecadores
22.	tumuqui na jamaguaŁa	todos los pecadores
23.	jutu	el palo
24.	jútu	el palo
25.	nana jutu	el palo
26.	neŁa jútu	del palo
27.	tiý jútu	al palo
28.	na jútu	al palo
29.	jútu	palo
30.	aŁi [jútu]	por el palo
31.	aŁparaquiguà jútu	por el palo
32.	jutúŁi	los palos
33.	nana jutúŁi	los palos
34.	neŁa jutúŁi	de los palos
35.	tiy jutúŁi	á, ó para los palos
36.	na jutúŁi	a los palos
37.	jutúŁi	ó los palos
38.	aŁi [jutúŁi]	por los palos
39.	aŁparaquiguà jutúŁi	por los palos
40.	mácu	la casa
41.	nana mácu	la casa
42.	neŁa mácu	de la casa
43.	tiý mácu	á, ó para la casa
44.	nà mácu	á la casa
45.	mácu	ó cassa
46.	aŁi [mácu]	por la casa
47.	aŁparaquiguà mácu	por la casa
48.	mácu	la cassa
49.	nána teènan mácu	las casas
50.	néŁa teenan mácu	de las casas
51.	tiý teènan mácu	á, ó p[ar]a las casas
52.	nà teènan mácu	á las casas
53.	teènan mácu	ó casas
54.	aŁi [teènan màcu]	por las casas
55.	aŁparaquiguà teènan màcu	por las casas
56.	nen	*ego*
57.	nàná nen	yo
58.	neŁa nen	mio, ó de mí
59.	an néŁa	mio, ó de mí
60.	tiý nen	a mi, ó para mi
61.	tiýn	a mi, ó para mi
62.	na nem	a mi
63.	aŁi nem	por mi
64.	aŁparaquiguàn	por mi
65.	neŁec	*nos*
66.	nána neŁéc	nosotros
67.	néŁa neŁéc	de nosotros, ó nuestro
68.	muc néŁa	de nosotros, ó nuestro
69.	tiý neŁéc	a, ó para nosotros
70.	tiýɛ	a, ó para nosotros
71.	na neŁéc	á nosotros
72.	aŁi neŁéc	por nosotros
73.	aŁparaquiguàc	por nosotros
74.	náca	*tu*
75.	náca	tu
76.	nána náca	tu
77.	cá neŁa	tuyo, ó de ti
78.	néŁa náca	tuyo, ó de ti
79.	tiýca	a ti, ó para ti
80.	tiynáca	a ti, ó para ti
81.	na náca	a ti
82.	náca	ó tu
83.	aŁi náca	por tí
84.	aŁparaquiguáca	por tí
85.	náca Áy	*vos*
86.	nána náca ay	vosotros
87.	néŁa náca ay	de vosotros
88.	ca neŁa ay	de vosotros
89.	tiýca ay	á, ó para vosotros
90.	na náca ay	a vosotros
91.	náca ay	ó vosotros
92.	aŁi náca ay	por vosotros
93.	aŁparaquiguàca ay	por vosotros
94.	mu	*sui, sibi, se*
95.	mu neŁa	suyo
96.	tiýg qui	a si, ó para si
97.	neŁa tiýg	a si, ó para si
98.	na mu	a si
99.	na –Vg	a si
100.	aŁparaquiguag	por si
101.	nag	*ille, illa, illud* el
102.	nag	el, ó aquel
103.	nana nag	el, ó aquel
104.	neŁa nag	de aquel
105.	mu neŁa	de aquel
106.	tiýg	á, ó para aquel
107.	neŁa tiyg	á, ó para aquel
108.	na nag	á aquel, ó a el
109.	aŁparaquiguag	por aquel
110.	nana nagŁic	aquellos
111.	neŁa Łic	de aquellos
112.	mu neŁa Łic	de aquellos
113.	tiyg Łic	á, ó para aquellos
114.	na naggŁic	á áquellos
115.	aŁparaquiguaŁic	por aquellos
116.	axʋe	*hic, h[ae]c, hoc* esta
117.	nána axʋé	este
118.	néŁa axʋé	de este
119.	tiý na axʋé	á, ó para este
120.	na axʋé	a este
121.	aŁi na axʋé	por este
122.	aŁparaquiguà na	por este

	axvè	
123.	nana axvé Łic	estos
124.	neŁa axvé Łic	de estos
125.	tiy axvé Łic	a esto, ó para etc.
126.	na axvé Łic	a estos
127.	aŁi na axvéŁic	por estos
128.	aŁparaquiguà na axvéŁic	por estos
129.	man	ese
130.	nána mán	ese ó eso
131.	néŁa na mán	de esse
132.	tiý na mán	á esse, ó para ese
133.	na mán	a esse
134.	aŁi na mán	por ese
135.	aŁparaquìguà na mán	por ese
136.	nana mán Łic	esos
137.	neŁa Łic na mán	de esos
138.	neŁa mánŁic	de esos
139.	tiý Łic na man	á, ó para essos
140.	namán Łic	á essos
141.	aŁi na mán Łic	por esos
142.	ɛiguan	yo mismo
143.	nen ɛiguán	yo mismo
144.	an neŁa ɛiguán	de mi mismo
145.	tiýn ɛiguán	á mi mismo
146.	nen ɛiguán	a mi mismo
147.	aŁparaquiguà nen ɛiguán	por mi mismo
148.	neŁec ɛiguác	nosotros mismos
149.	muc neŁa ɛiguác	de nosotros mismos
150.	tiýc ɛiguác	á, ó para nosotros mismos
151.	na neŁec ɛiguàc	á nosotros mismos
152.	aŁparaquiguác ɛiguác	por nosotros mismos
153.	naca ɛiguac	tu mismo
154.	naca ɛica	tu mismo
155.	náca ɛica	tu mismo nom
156.	naca ɛiguac	tu mismo nom
157.	ca neŁa ɛica	tu mismo gen
158.	ca neŁa ɛiguáca	tu mismo gen
159.	tiýca ɛica	tu mismo dat
160.	tiyca ɛiguáca	tu mismo dat
161.	na náca ɛica	tu mismo acc
162.	náca ɛiguáca	tu mismo acc
163.	aŁparaquiguáca ɛica	tu mismo abl
164.	náca ɛica ay	tu mismo plural nom
165.	náca ɛiguáca ay	tu mismo plural nom
166.	ca néŁa ɛica ay	tu mismo plural gen
167.	ca neŁa ɛiguáca ay	tu mismo plural gen
168.	tiýca ɛica ay	tu mismo plural dat
169.	tiýca ɛiguáca ay	tu mismo plural dat
170.	na náca ɛica ay	tu mismo plural acc
171.	náca ɛiguáca ay	tu mismo plural acc
172.	aŁi náca ɛica ay	tu mismo plural abl
173.	aŁparaquiguà náca ɛica ay	tu mismo plural abl
174.	nag ɛiguag	aquel mismo
175.	nána nag ɛiguág	aquel mismo nom
176.	nána nag ɛiqúig qui	aquel mismo nom
177.	munéŁa ɛiguág	aquel mismo gen
178.	tiýg ɛiguág	aquel mismo dat
179.	na nag ɛiguág	aquel mismo acc
180.	aŁparaquiguà ɛiguàg	aquel mismo abl
181.	nag qui Łic ɛiguàg	aquel mismo pl nom
182.	munéŁa Łic ɛiguàg	aquel mismo pl gen
183.	tiýg Łic ɛiguàg	aquel mismo pl dat
184.	na nag Łic ɛiguàg	aquel mismo pl acc
185.	aŁparaquìguà Łic ɛiguág	aquel mismo pl abl
186.	guéna	quien, ó el que
187.	guéna	quien, ó el que nom
188.	guèna neŁa	quien, ó el que gen
189.	guèna tiýg	quien, ó el que dat
190.	guéna na	quien, ó el que acc
191.	guèna aŁi	quien, ó el que abl
192.	nána guéna Łic	quien, ó el que nom
193.	néŁa	quien, ó el que gen
194.	guéna neŁa Łic	quien, ó el que gen
195.	guéna Łic tiy	quien, ó el que dat
196.	guéna Łic	quien, ó el que acc
197.	aŁi guéna Łic	quien, ó el que abl
198.	aŁparaquiguà guéna Łic	quien, ó el que abl
199.	guena qui	el que
200.	nána guéna qui	el que nom
201.	néŁa guéna qui	el que gen
202.	guéna qui munéŁa	el que gen
203.	tiý guéna qui	el que dat
204.	na guéna qui	el que acc
205.	aŁi guéna qui	el que abl
206.	aŁparaquiguà guéna qui	el que abl
207.	nána guéna qui Łic	el que pl nom
208.	néŁa guéna qui Łic	el que pl gen
209.	tiý guéna qui Łic	el que pl dat
210.	tiý Łic guéna qui	el que pl dat
211.	na guéna qui Łic	el que pl acc
212.	aŁi Łic guèna qui	el que pl abl
213.	aŁparaquiguà Łic guèna qui	el que pl abl
214.	guena ayuqui	si alguno
215.	nána guéna ayuqui	si alguno nom
216.	néŁa guéna ayuqui	si alguno gen
217.	guena ayuqui munéŁa	si alguno gen
218.	tiý ayu guéna qui	si alguno dat
219.	na guéna ayuqui	si alguno acc
220.	aŁi guéna ayuqui	si alguno abl
221.	aŁparaquiguà guéna ayuqui	si alguno abl
222.	nána guéna ayuquiŁic	si alguno nom
223.	néŁa ayuŁic guéna qui	si alguno gen
224.	tiý ayu guéna qui Łic	si alguno dat
225.	na guéna ayuquiŁic	si alguno acc
226.	aŁi ayu guèna qui Łic	si alguno abl
227.	aŁparaquiguà ayu guèna qui Łic	si alguno abl
228.	ni guéna maqúi	ninguno
229.	ni guéna maqúí	ninguno nom

230. ni guéna maqúí muneŁa — ninguno gen
231. ni guéna maqúí tiýg — ninguno dat
232. ni guéna maqúí na — ninguno acc
233. ni guéna maqúí aŁi — ninguno abl
234. ni guéna maqúí aŁparaquiguà — ninguno abl
235. ni guèna maqúi Łic — ninguno pl nom
236. ni guéna maqúi Łic muneŁa — ninguno pl gen
237. ni guéna maqúi Łic tiýg — ninguno pl dat
238. ni guèna maqúi Łic nà — ninguno pl acc
239. ni guèna maqúi Łic aŁi — ninguno pl abl
240. ni guèna maqúi Łic aŁparaquiguà — ninguno pl abl
241. an — mi
242. Vn — mi nom
243. Vn neŁa — mi gen
244. neŁa Vn — mi gen
245. tiýn — mi dat
246. tiý Vn — mi dat
247. na Vn — mi acc
248. aŁi Vn — mi abl
249. aŁparaquiguà Vn — mi abl
250. ca — *tuus, tua, tuum*
251. nana ca — tu nom
252. ca néŁa — tu gen
253. néŁà ca — tu gen
254. tiý ca — tu dat
255. na ca — tu acc
256. aŁi cà — tu abl
257. aŁparaquiguà cà — tu abl
258. mu — *suus, sua, suum*
259. nana mu — el nom
260. nana Vg — el nom
261. neŁa mu — el gen
262. neŁa Vg — el gen
263. tiý mu — el dat
264. tiý Vg — el dat
265. na Vg — el acc
266. na mu — el acc
267. aŁi Vg — el abl
268. aŁparaquiguà mu — el abl
269. Łic — plural
270. quigŁic — plural
271. mu tùa — su cacaguatal
272. mutùa Łic — sus cacaguatales
273. mutúa quiŁic — sus cacaguatales
274. mujaszúŁi — sus marranos
275. tumuquí mu guayà — sus milpas o todas sus milpas
276. muc — *noster, nostra, nostrum*
277. nana muc — nuestro nom
278. nana Vc — nuestro nom
279. muc néŁà — nuestro gen
280. néŁa muc — nuestro gen
281. néŁa Vc — nuestro gen
282. tiý muc — nuestro dat
283. tiý Vc — nuestro dat
284. na múc — nuestro acc
285. na Vc — nuestro acc
286. aŁi muc — nuestro abl
287. aŁparaquiguà muc — nuestro abl
288. aŁi Vc — nuestro abl
289. ca ay — *vester, tra, trúm*
290. nána ca ay — vuestro nom
291. ca nèŁa ay — vuestro gen
292. neŁa ca ay — vuestro gen
293. tiý cà ay — vuestro dat
294. na cà ay — vuestro acc
295. aŁi cà ày — vuestro abl
296. aŁparaquiguà cà ày — vuestro abl
297. guapíc
298. poóc
299. tanìc
300. puéɛve
301. anìma — el corazon
302. an anima — mi corazon
303. ucszáya — la muger, consorte
304. an ucszáya — mi muger
305. ca ucszáya — tu muger
306. mu ucszáya — su muger
307. muc ucszayáŁi — nuestras mugeres
308. ca ucszaya Łi ay — vuestras mugeres
309. mu ucszàya Łi quiŁic — sus mugeres
310. nána an ucszáya — mi muger
311. néŁa an ucszáya — de mi muger
312. tiý an ucszàya — á, ó p[ar]a mi muger
313. na an ucszàya — a mi muger
314. an ucszáya — mi muger
315. aŁi an ucszáya — por mi muger
316. aŁparaquiguà an ucszáya — por mi muger
317. an ucszayáŁi — mis mugeres
318. neŁa an ucszayáŁi — de mis mugeres
319. tiy an ucszayáŁi — á, ó p[ar]a mis mugeres
320. na an ucszayáŁi — a mis mugeres
321. an ucszayáŁi — mis mugeres
322. aŁi an uszayáŁi — por mis mugeres
323. aŁparaquiguàan uszayáŁi — por mis mugeres
324. szaja — la voca
325. szaja an — mi voca
326. szeque — la costilla
327. szeque en — mi costilla
328. juszi — la cabeza
329. jusziin — mi cabeza
330. ɛómo, — la rodilla
331. ɛomoón — mi rodilla
332. pu — la mano
333. puún — mi mano
334. ɛverʋé — el hermano menor
335. ɛverʋén — mi hermano menor
336. guápi — el pie
337. táŁi — la garganta
338. mámi — la oreja
339. guapan — mi pie
340. talan — mi garganta
341. maman — mi oreja
342. tita — la pierna
343. titán — mi pierna
344. náu — el hijo
345. naùn — mi hijo
346. narì — la naris

347. narìca tu naris.
348. oszo la tripa
349. oszòca tu tripa
350. jászu el marrano
351. ca jaszu tu marrano
352. tàta el padre
353. tatà ag su padre
354. jurày la cara
355. juraig su cara
356. eŁaja la lengua
357. eŁajaàc nuestra lengua
358. amù el abuelo
359. amuùc n[uest]ro abuelo
360. utà la madre
361. utàc nuestra madre
362. aguà la abuela
363. aguacaay vuestra abuela.
364. szamalì la frente
365. szamalicaay vuestra frente
366. muti el cabello
367. mutiig quiŁic sus cabellos
368. Łapà el nieto, ó nieta
369. Łapaag Łíc sus nietos
370. juraý la cara
371. juraìn mi cara
372. juraìca tu cara
373. jurai ig su cara
374. jurai ic nuestra cara
375. juraica ay vuestra cara
376. jurai ig qui Łíc sus caras
377. nana jurai ic nuestra cara
378. neŁa jurai ic de nuestra cara
379. tiy jurai ic a, ó para nuestra cara
380. na jurai ic a nuestra cara
381. jurai ic nuestra cara
382. aŁi jurai ic por nuestra cara
383. aŁparaquiguà jurai ic por nuestra cara
384. nana teènan jurai ic nuestras caras
385. neŁa teènan juraì ic de nuestras caras
386. tiy teènan jurai ic a, ó para nuestras caras
387. na teènan jurai ic a nuestras caras
388. teènan jurai ic nuestras caras
389. aŁi teènan jurai ic por n[uest]ras caras
390. aŁparaquiguà teènan jurai ic por n[uest]ras caras
391. pùla
392. pulàn
393. an pùla yo hago
394. cà pùla tu hazes
395. mù pùla aquel haze
396. muc pùla nosotros hazemos
397. cà pùla ay vosotros hazeis
398. mù pùla quiŁic aquellos hazen
399. an pùla nàŁ yo hazia
400. cà pùla nàŁ tu hazìas
401. mù pùla nàŁ aquel hazia
402. mùc pùla nàŁ nosotros haciamos
403. cà pùla nàŁ ay vosotros haciais
404. mù pùla nàŁ quiŁic aquellos hazian
405. pulàn yo hize, ò hè hecho
406. pulàcá tu hizistes, ó has hecho
407. pulài aquel hizo, ó ha hecho
408. pulàc nosotros hizimos, ó hemos hecho
409. pulacà ay vosotros hizisteis, ó haveis hecho
410. puláì quiŁic aquellos hicierón, ó han hecho
411. capa pulàn paŁ nàŁ, *vel* nàŁ qui yo havia hecho
412. capa pulacà paŁ nàŁ, *vel* nàŁ qui tu havìas hecho
413. capa pulài paŁ nàŁ, *vel* nàŁ qui aquel havìa hecho
414. capa pulàc paŁ nàŁ, *vel* nàŁ qui nosotros haviamos hecho
415. capa pulacà paŁ nàŁ ay, *vel* nàŁ qui ay vosotros haviàis hecho
416. capa pulày Łic paŁ nàŁ, *vel* nàŁ qui aquellos havian hecho
417. an pùla pè yo harè
418. ca pùla pè tu harás
419. mù pùla pè aquel harà
420. muc pùla pè nosotros haremos
421. cà pùla pè ay vosotros hareis
422. mu pula pè Łic aquellos haran
423. pulàn ayù pè yo avrè hecho
424. pulacà ayù pè tu avras hecho
425. pulài ayù pè aquel avra hecho
426. pulàc ayù pè nosotros avremos hecho
427. pulacà ayù pè ay vosotros avreis hecho
428. pulài pè ayù Łic aquellos avran hecho
429. pùla has tu
430. guà pulaín haga aquel
431. pùla ay hazed vosotros
432. gua pulàin Łic hagan aquellos
433. an pùla Łan yo haga
434. cà pùla Łan tu hagas
435. mù pùla Łan aquel haga
436. mùc pùla Łan nosotros hagamos
437. cà pùla Łan ay vosotros hagais
438. mu pùla Łan qui Łic aquellos hagan
439. an pùla mà nàŁ yo hiciera, haria, y hiciese
440. ca pùla mà nàŁ tu hicieras, harias, y hicieses
441. mù pùla mà nàŁ aquel hiciera, haria, y hiciese
442. muc pùla mà nàŁ nosotros hicieramos, hariamos, y hiciesemos
443. ca pùla mà nàŁ ay vosotros hicierais, hariais, y hicieceis
444. mu pùla mà nàŁ qui Łic aquellos hicieran, harian, y hiciesen
445. pulàn mà yo haya hecho
446. pùlacà mà tu hayas hecho
447. pulài mà aquel haya hecho
448. pulàc mà nosotros hayamos hecho
449. pulàcà mà ay vosotros hayais hecho
450. pulài mà Łic aquellos hayan hecho
451. pulàn mà ayù yo huviera, avria, y huviese hecho
452. pulàn naŁ qui yo huviera, avria, y huviese hecho
453. pulacà mà ayù tu huvieras, avrias, y huvieses hecho
454. pulacà naŁ quí tu huvieras, avrias, y huvieses hecho

455. pulài mà ayù — aquel huviera, avria, y huviese hecho
456. pulài naŁ quí — aquel huviera, avria, y huviese hecho
457. pulàc mà ayù — nosotros huvieramos, avriamos, y huviesemos hecho
458. pulàc naŁ quí — nosotros huvieramos, avriamos, y huviesemos hecho
459. pulacà mà ayù ay — vosotros huverais, avriais, y huvieseis hecho
460. pulacà naŁ qui ay — vosotros huverais, avriais, y huvieseis hecho
461. pulaí mà ayù Łic — aquellos huvíeran, avrian, y huviesen hecho
462. pulaí naŁ qui Łic — aquellos huvíeran, avrian, y huviesen hecho
463. an pulà pà pè — yo hiciere, ó huviere hecho
464. cà pulà pà pè — tu hicieres, o huvieres hecho
465. mu pùla pà pè — aquel hiciere, ò huviere hecho
466. muc pula pà pè — nosotros hicieremos, o huvieremos hecho
467. cà pula pà pè ay — vosotros hiciereis, ò huviereis hecho
468. mu pula pà pè Łic — aquellos hicieren, ò huvieren hecho
469. á pùla — hazer
470. pulà guà — haver hecho
471. a pùla nàŁ pè — haver de hazer
472. pùla nàŁ — que hiciera, ó huviera de aver hecho
473. pùla — de hazer
474. neŁa à pulà — para hazer
475. pulá — à hazer
476. aŁi à pulà — por hazer
477. pulàqui — a hazer
478. pulàŁ — el que haze, ó hazía
479. pulaŁa — el que haze, ó hazía
480. pula quiŁa — el que haze, ó hazía
481. pulaquiŁa pè — el que ha, ó tiene de hazer
482. pùla patàn — yo soy hecho
483. pùla pata cà — tu eres hecho
484. pùla patài — aquel es hecho
485. pùla patàc — nosotros somos hechos
486. pùla patacà ay — vosotros sois hechos
487. pula Łic patai — aquellos son hechos
488. púla naŁ patàn — yo era hecho
489. púla naŁ patacà — tu eras hecho
490. púla naŁ patai — aquel era hecho
491. púla naŁ pataàc — nosotros eramos hechos
492. púla naŁ patacà ay — vosotros erais hechos
493. púla naŁ patai Łic — aquellos eran hechos
494. pulà pataguàn — yo fui, ó he sido hecho
495. pulà pataguacàn — tu fuistes, ó has sido hecho
496. pulà pataguaca — tu fuistes, ó has sido hecho
497. pulà patai — aquel fuè, ó hà sido hecho
498. pulà pataguài — aquel fuè, ó hà sido hecho
499. pulà patac — nosotros fuimos, ó hemos sido hechos
500. pulà pataguàc — nosotros fuimos, ó hemos sido hechos
501. pulà pataguàca ay — vosotros fuisteis, o huvisteis sido hechos
502. pulà Łic pataguà — aquellos fueron, ò han sido hechos
503. capa pulà paŁ nàŁ pataguàn — yo havia sìdo hecho
504. capa pulà paŁ naŁ pataguàc — tu havias sido hecho
505. capa pulà paŁ naŁ pataguà — aquel havia sido hecho
506. capa pulà paŁ naŁ pataguàc — nosotros haviamos sido hechos
507. capa pulà paŁ naŁ pataguacà ay — Vosotros haviais sido hechos
508. capa pulà paŁ naŁ Łic patai — aquellos havian sido hechos
509. pùla pe patàn — yo serè hecho
510. pùla pe patacà — tu seras hecho
511. pùla pe patài — aquel sera hecho
512. pùla pe patàc — nosotros seremos hechos
513. pùla pe patacà ay — Vosotros sereis hechos
514. pùla pe Łic patài — aquellos seran hechos
515. pùla pe ayù pataguàn — yo avrè sìdo hecho
516. pùla pe ayù pataguàc — tu avras sido hecho
517. pùla pe ayù pataguacàn — tu avras sido hecho
518. pula pe ayu pataguà — aquel avrà sido hecho
519. pula pe ayu pataguay — aquel avrà sido hecho
520. púla pe ayù pataguàc — nosotros avremos sìdo hechos
521. púla pe ayù pataguacà ay — vosotros avreis sido hechos
522. púla pe ayu Łic pataguà — aquellos avran sido hechos
523. púla patacà — sed tu hecho
524. púla patai — sea hecho àquel
525. púla patacà ay — sea vosotros hechos
526. púla Łic patai — sean hechos aquellos
527. pùla Làn patàn — yo sea hecho
528. púla Làn patacà — tu seas hecho
529. púla Làn patai — aquel sea hecho
530. púla Làn pataàc — nosotros seamos hechos
531. púla Làn patacà ay — vosotros seais hechos
532. púla Làn Łic patai — aquellos sean hechos
533. púla nàŁ patàn — yo fuera, seria, y fuese hecho
534. púla nàŁ patacà — tu fueras, serias, y fueses hecho
535. púla nàŁ patai — aquel fuera, seria, y fuese hecho
536. púla nàŁ patàc — nosotros fueramos, seriamos, y fuesemos nhechos
537. púla nàŁ patacà ay — vosotros fuerais, seriais, y fueseis hechos
538. púla nàŁ Łic patai — aquellos fueran, serian, y fuesen hechos
539. púla mà pataguàn — yo haya sido hecho
540. pulà mà pataguàcà — tu hayas sido hecho
541. pulà mà patagùa — aquel haya sido hecho
542. pulà mà pataguàc — nosotros hayamos sido hechos
543. pulà mà — Vosotros hayais sido

	patagúacà ay	hechos
544.	pulà mà Łic patai	aquellos hayan sido hechos
545.	pulà mà ayù pataguàn	yo huviera, avria, y huviese sido hecho
546.	pulà mà ayù pataguàca	tu huvieras, avrias, y huvieses sido hecho
547.	pulà mà ayù pataguà	aquel huviera, avria, y huviese sido hecho
548.	pulà mà ayù pataguàc	nosotros huvieramos avriamos, y huviesemos sido hechos
549.	pulà mà ayù pataguàca ay	vosotros huvierais, avriais, y huvieseis sido hechos
550.	pulà mà ayú Łic pataguà	aquellos huvieran, avrian, y huviesen sido hechos
551.	an pula pa pè patàn	yo fuere, ó huviere sido hecho
552.	cà pula pa pè pataca	tu fueres, ó huvieres sido hecho
553.	mu pula pa pè patai	aquel fuere, ó huviere sido hecho
554.	muc pula pa pè patàc	nosotros fueremos, ó huvieremos sido hechos
555.	cà pulá pa pè patacà ay	vosotros fuereis, ó huviereis sido hechos
556.	mu pula pa pè Łic pataí	aquellos fueron, ó huvieren sido hechos
557.	púla pataí	ser hecho
558.	pulà pataguàag	haver sido hecho
559.	pulà nàŁ pè pataí	haver de ser hecho
560.	patà naŁ pulá	que fuera, ó huviera de aver sido hecho
561.	patàn pula	de ser hecho
562.	neŁa á patà pula	para ser hecho
563.	pata pula	a sér hecho
564.	aŁi patàŁà pula	por ser hecho
565.	pulàgua	cosa hecha
566.	pulágua pè patài	cosa que hà ó tiene de ser hecha
567.	púla patai aŁparaquiguàn	es hecho por mi
568.	púla nàŁ patai aŁparaquiguàca	era hecho por ti
569.	pulá pataguà aŁparaquiguàg	fuè hecho por aquel
570.	capa pulá pàŁ nàŁ pataguà aŁparaquiguac	havia sido hecho por nosotros
571.	pùla pe pataí aŁparaquiguáca ay	serà hecho por vosotros
572.	pulà ayú pe pataí aŁparaquiguà Łic	avrà sido hecho por aquellos
573.	mere	romper
574.	an mere	yo rompo
575.	cà mere	tu rompes
576.	mù mere	aquel rompe
577.	muc mere	nosotros rompemos
578.	cà mere ay	vosotros rompeis
579.	mu mere quiŁic	aquellos rompen
580.	an mere nàŁ	yo rompia
581.	cà mere nàŁ	tu rompias
582.	mu mere nàŁ	aquel rompía
583.	muc mere nàŁ	nosotros rompiamos
584.	cà mere nàŁ ay	vosotros rompiais
585.	mu mere naŁ quiŁic	aquellos rompian
586.	merèn	yo rompi ó hè rompido
587.	mere cà	tu rompistes
588.	merei	aquel rompiò
589.	mereèc	nosotros rompimos
590.	merecà ay	Vosotros rompisteis
591.	merèi quiŁic	aquellos rompieron
592.	capa mereèn paŁ naŁ	yo havìa rompido
593.	capa mere ca paŁ nàŁ	tu havias rompido
594.	capa mereí paŁ nàŁ	aquel havia rompido
595.	capa mereèc paŁ nàŁ	nosotros haviamos rompido
596.	capa merè cà paŁ nàŁ ay	vosotros haviais rompido
597.	capa merèi Łic paŁ nàŁ	aquellos havian rompido
598.	an mere pè	yo romperè
599.	cà mere pè	tu romperas
600.	mu mere pè	aquel romperà
601.	muc mere pè	nosotros romperemos
602.	cà merè pè ay	vosotros rompereis
603.	mu merè pè quiŁic	aquellos romperan
604.	merèn ayù pè	yo avrè rompido
605.	mere cà ayù pè	tu avras rompido
606.	merei ayù pè	aquel avrà rompido
607.	mereèc ayù pè	nosotros avremos rompido
608.	mere cà ayù pè ay	vosotros avreis rompido
609.	merei ayú pè quiŁic	aquellos avran rompido
610.	mere	Rompe tu
611.	guà mereín	Rompa áquel
612.	mere ay	Romped vosotros
613.	guà merein Łic	Rompan aquellos
614.	an mere Łan	yo rompa
615.	cà mere Łan	tu rompas
616.	mu mere Łan	aquel rompa
617.	muc mere Łan	nosotros rompamos
618.	cà mere Łan ay	vosotros rompais
619.	mu mere Łan quiŁic	aquellos rompan
620.	an mere mà nàŁ	yo rompiera, romperia, y rompiese
621.	cà mere mà nàŁ	tu rompieras, romperias, y rompieses
622.	mu mere mà nàŁ	aquel rompiera, romperia, y rompiese
623.	muc mere mà nàŁ	nosotros rompieramos, romperiamos, y rompiesemos
624.	cà mere mà nàŁ ay	vosotros rompierais, romperiais, y rompieseis
625.	mu mere mà nàŁ qui Łic	aquellos rompieran, romperían, y rompiesen
626.	merèn mà	yo haya rompido
627.	mere cà mà	tu hayas rompido
628.	merei mà	aquel haya rompido
629.	mereèc mà	nosotros hayamos rompido
630.	mere cà mà ay	vosotros hayais rompido
631.	merei mà qui Łic	aquellos hayan rompido
632.	merèn mà ayù	yo huviera, avría, y huviese rompido
633.	mere cà mà ayù	tu huvieras, avrias, y huvieses rompido
634.	merei mà ayù	aquel huviera, avria, y huviese rompido
635.	mereèc mà ayù	nosotros huvieramos, avriamos, y huviesemos rompido
636.	merecà mà ayu ay	vosotros huvierais, avriais, y huvieseis rompido

637. merei mà ayù Łic — aquellos huvieran, avrian, y huviesen rompido
638. an mere pa pè — yo rompíere, 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 rompieremos, ó huvieremos rompido
642. cà mere pa pè ay — vosotros rompiereis, ó huviereis rompido
643. mu mere pa pè Łic — aquellos rompíeren, ó huvieren rompido
644. a mere — romper
645. mere guà — haver rompido
646. merè nàŁ pè — haver de romper
647. merè nàŁ — que rompiera ó huviera de haver rompido
648. mere — de romper
649. neŁa á mere — para romper
650. merè — á romper
651. aŁparaquíguà merè — por romper
652. merèque — a romper
653. merèŁ, *vel* mere Łà — el que rompe, ó rompíà
654. mèreŁa qui Ła — 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 Łic pataí — aquellos son rotos
661. mère nàŁ patàn — yo era roto
662. mère nàŁ patacà — tu eras roto
663. mère nàŁ pataí — aquel era roto
664. mère nàŁ patàc — nosotros eramos rotos
665. mère nàŁ patacà ay — vosotros erais rotos
666. mère nàŁ pataì Łic — aquellos eran rotos
667. mèrè patan — yo fui, o hè sido roto
668. mèrè pataguàn — yo fui, o hè sido roto
669. mèrè 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 Łic pataguà — aquellos fueron, ó han sido rotos
674. capa mèrè paŁ nàŁ pataguàn — yo havia sido roto
675. capa mèrè paŁ nàŁ pataguàcà — tu havias sido roto
676. capa mèrè paŁ nàŁ pataguàg — aquel havia sido roto
677. capa mèrè paŁ nàŁ pataguàc — nosotros haviamos sido rotos
678. capa mèrè paŁ nàŁ pataguaca ay — vosotros haviais sido rotos
679. capa mèrè Łic paŁ nàŁ pataguà — 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 Łic pè patai — aquellos seran rotos
686. mèrè pè ayù — yo avrè sido roto
687. merè pè ayù pataguàca — tu avras sido roto
688. merè pè ayù pataguàg — aquel avra sido roto
689. merè pè ayù pataguàc — nosotros avremos sido rotos
690. merè pè ayù pataguàca ay — vosotros avreis sido rotos
691. merè pè ayù Łic pataguà — 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 Łic patai — sean aquellos rotos
696. mère Łàn patàn — yo sea roto
697. mère Łàn patacà — tu seas roto
698. mère Łàn pataí — aquel sea roto
699. mère Łàn pataàc — nosotros seamos rotos
700. mère Łàn patacà ay — vosotros seais rotos
701. mère Łàn pataí Łic — aquellos sean rotos
702. mère nàŁ pataan — yo fuera, seria, y fuese roto
703. mère nàŁ patacà — tu fueras, serias, y fueses roto
704. mère nàŁ pataí — aquel fuera, seria, y fuese roto
705. mère nàŁ pataàc — nosotros fueramos, ser[ia]mos, y fuesemos rotos
706. mère nàŁ patacà ay — vosotros fuerais, seriais, y fueseis rotos
707. mère nàŁ Łic pataí — aquellos fueran, serian, y fuesen rotos
708. mèrè 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 ay — vosotros hayais sido rotos
713. merè mà Łic pataguag — aquellos hayan sido rotos
714. merè mà ayù pataguàn — yo huviera, avria, y huviese sido roto
715. merè mà ayù pataguacà — tu huvieras, avrias, y huvieses sido roto
716. merè mà ayù pataguag — aquel huviera, avria, y huviese sido roto
717. merè mà ayù pataguaàc — nosotros huvieramos, avriamos, y huviesemos rotos
718. merè mà ayù pataguàca ay — vosotros huvierais, avriais, y huvieseis sido rotos
719. merè mà ayu Łic pataguaag — aquellos huvieran, avrian, y huviesen sido rotos
720. merè papè patàn — yo fuere, ó huviere sido roto
721. merè pa pè patacà — tu fueres, ó huvieres sido roto
722. merè pa pè patai — aquel fuere, ó huviere sido roto
723. merè pa pè pataac — nosotros fueremos, ó huvieremos sido rotos
724. merè pa pè patacà ày — vosotros fuereis, ó huviereis sido rotos
725. merè pa pè Łic patai — aquellos fueren, ó huvieren sido rotos

726. mère pataí — ser roto
727. merè pataguâg — haver sido roto
728. mère naŁ pè pataí — haver de sèr roto
729. patà naŁ merè — que fuera, ó huviera de aver sido roto
730. patàn mere — de ser roto
731. neŁa patà mère — para ser roto
732. patà mere — á ser roto
733. aŁparaquiguà patałà mere — por ser roto
734. merè gua — cosa rota
735. merègua pè patàí — cosa que hà, ó tiene de ser roto
736. piri — vèr
737. an piri — yo veo
738. cà piri — tu vès
739. mu piri — aquel vè
740. muc piri — nosotros vemos
741. ca piri ay — vosotros veis
742. mu piri qui Łic — aquellos vèn
743. an piri nàŁ — yo veía
744. ca piri nàŁ — tu veias
745. mu piri nàŁ — aquel veía
746. muc piri nàŁ — nosotros veiamos
747. ca piri nàŁ ay — vosotros veiais
748. mu piri nàŁ qui Łic — aquellos veían
749. piriyn — yo vi, ó hè visto
750. piriŁa — yo vi, ó hè visto
751. piriguàn — yo vi, ó hè visto
752. piricà — tu vistes, ó has visto
753. piriguacàn — tu vistes, ó has visto
754. piriiy — aquel vio, ó hà visto
755. piriic — nosotros vimos, ó hemos visto
756. piriguaac — nosotros vimos, ó hemos visto
757. piricà ay — vosotros visteis, ó haveis visto
758. piriguacàn ay — vosotros visteis, ó haveis visto
759. pìriiy qui Łic — aquellos vieron, ó han visto
760. capa pirin paŁ nàŁ — yo havia visto
761. capa piricà paŁ nàŁ — tu havias visto
762. capa piriiy paŁ nàŁ — aquel havia visto
763. capa piriic páŁ nàŁ — nosotros haviamos visto
764. capa piriicà pàŁ nàŁ ay — vosotros haviais visto
765. capa piriiy pàŁ nàŁ — aquellos havian visto
766. an piri pè — yo verè
767. cà piri pè — tu veras
768. mu piri pè — aquel verà
769. muc piri pè — nosotros veremos
770. ca piri pè ay — vosotros vereis
771. mu piri pè qui Łic — aquellos verán
772. pirin pè ayù — yo avrè visto
773. pirijcà pè ayu — tu avras visto
774. piriiy pè ayù — aquel avrà visto
775. piriic pè ayù — nosotros avremos visto
776. piriicà pè ayù ay — vosotros avreis visto
777. piriiy ayupè qui Łic — aquellos avran visto
778. pirij — mira tu
779. guà piri in — mire aquel
780. pirij ay — mirad vosot[ro]s
781. guà Łic piri in — miren áquellos
782. an pirii Łàn — yo vea
783. ca pirii Łàn — tu veas
784. mu pirii Łàn — aquel vea
785. muc pirii Łàn — nosotros veamos
786. ca pirii Łàn ay — vosotros veais
787. mu pirii Łàn qui Łic — aquellos vean
788. an pirii mà nàŁ — yo vìera, veria, y viese
789. cà pirii mà nàŁ — tu vieras, verias, y vieses
790. mu pirii mà nàŁ — aquel viera, veria, y viese
791. muc pirii mà nàŁ — nosotros vieramos, veriamos, y viesemos
792. ca pirii mà nàŁ ay — vosotros vierais, veriais, y vieseis
793. mu pirii mà nàŁ qui Łic — aquellos vieran, verian, y viesen
794. piriin mà — yo haya visto
795. piriicà mà — tu hayas visto
796. piriiy mà — aquel haya visto
797. pirii ic mà — nosotros hayamos visto
798. piriicà mà ay — Vosto[ro]s hayais visto
799. piriiy mà qui Łic — aquellos hayan visto
800. piriin mà ayù — yo huviera, avria, y huviese visto
801. piri cà mà ayù — tu huvieras, avrias, y huvieses visto
802. piriiy mà ayù — aquel huviera, avria, y huviese visto
803. piriiic mà ayù — nosotros huvieramos, avriamos, y huviesemos visto
804. pirii cà mà ayù ay — vosotros huvierais, avriais, y huvieseis visto
805. piriiy mà ayù qui Łic — aquellos huvieran, avrian, y huviesen visto
806. an pirii pa pè — yo vìere, ó huviere visto
807. ca pirii pa pè — tu vìeres, ó huvieres visto
808. mu pirìi pa pè — aquel vìere, ó huvìere visto
809. muc pirii pa pè — nosotros vieremos, ó huvieremos visto
810. ca pirii pa pè ay — vosotros viereìs, ó huviereis visto
811. mu pirii pa pè qui Łic — aquellos vierón, ó huvierén visto
812. á pirií — Vèr
813. piriiguà — haver visto
814. pirii nàŁpè — haver de vèr
815. pirii nàŁ — que viera, ó huviera de aver visto
816. pirii — de vèr
817. nèŁa á pirii — para vèr
818. pirii — a vèr
819. aŁparaquiguà pirii — por vèr
820. pirii qui — a vèr
821. piriiŁ — el que vè, ò veía
822. piriiŁa — el que vè, ò veía
823. piriiquiŁa — el que vè, ò veía
824. piriquiŁa — el que hà, ó tiene de vér
825. pirii pataan — yo soi visto
826. pirii patacà — tu eres visto
827. pirii pataí — aquel es visto
828. pirii pataàc — nosotros somos vistos
829. pirii patacà ay — vosotros sois vistos
830. pirii Łic pataí — aquellos son vistos
831. pirii nàŁ patàn — yo era visto
832. pirii nàŁ patacà — tu eras visto
833. pirii nàŁ pataí — aquel era visto
834. pirii nàŁ pataac — nosotros eramos vistos
835. pirii nàŁ patacà ay — vosotros erais vistos
836. pirii nàŁ Łic patai — aquellos eran vistos

837. pirií pataguàn — yo fui, ó hè sido visto
838. pirii pataguàca — tu fuistes, ò has sido visto
839. pirii pataguàg — aquel fuè, ó ha sido visto
840. pirii pataguàc — nosotros fuimos, ó huvimos sido vistos
841. pirii pataguaca ay — vosotros fuisteis, ó huvisteis sido vistos
842. pirii Łic pataguàg — aquellos fueron, ó huvieron sido vistos
843. capa pirii paŁ nàŁ pataguàn — yo havia sido visto
844. capa pirii paŁ nàŁ pataguacà — tu havias sido visto
845. capa pirii pàŁ nàŁ pataguaag — aquel havia sido visto
846. capa pirii pàŁ naŁ pataguaac — nosotros haviamos sido vistos
847. capa pirii paŁ nàŁ pataguaca ay — vosotros haviais sido vistos
848. capa pirii paŁ nàŁ Łic pataguaag — aquellos havian sido vistos
849. pirii pè patàn — yo serè visto
850. pirii pè pataca — tu seras visto
851. pirii pè patai — aquel serà visto
852. pirii pè pataàc — nosotros seremos vistos
853. pirii pè patacà ay — vosotros sereis vistos
854. pirii pè Łic pataí — aquellos seràn vistos
855. pirii pè ayù pataguaan — yo avrè sido visto
856. pirii pè ayù pataguacà — tu avras sido visto
857. pirii pè ayù pataguaag — aquel avrà sido visto
858. pirii pè ayù pataguaac — nosotros avremos sido vistos
859. pirii pè ayù pataguaca ay — vosotros avreis sido vistos
860. pirii pè ayù Łic pataguaag — aquellos avran sido vistos
861. pirii patacà — sed tu visto
862. pirii pataí — sea visto aquel
863. pirii patacà ay — sed vosotros vistos
864. pirii Łic pataí — sean vistos aquellos
865. pirii Łan pataan — yo sea visto
866. pirii Łan patacà — tu seas visto
867. pirii Łan pataí — aquel sea visto
868. pirii Łan pataàc — nosotros seamos vistos
869. pirii Łan patacà ay — vosotros seais vistos
870. pirii Łan Łic pataí — aquellos sean vistos
871. pirii nàŁ pataan — yo fuera, sería, y fuese visto
872. pirii nàŁ patacà — tu fueras, serias, y fueses visto
873. pirii naŁ pataí — aquel fuera, seria, y fueses visto
874. pirii naŁ pataàc — nosotros fueramos, seríamos, y fuesemos vistos
875. pirii naŁ patacà ay — vosotros fuerais, seriais, y fueseis vistos
876. pirii nàŁ Łic pataí — aquellos fueran, serian, y fuesen vistos
877. pirii mà pataguaan — yo haya sido visto
878. pirii mà pataguacà — tu hayas sido visto
879. pirii mà pataguaag — aquel haya sido visto
880. pirii mà pataguaàc — nosotros hayamos sido vistos
881. pirii mà pataguacà ay — vosotros hayais sido vistos
882. pirii Łic mà pataguaag — aquellos hayan sido vistos
883. pirii mà ayù pataguaan — yo huviera, avria, y huviese sido visto
884. pirii mà ayù pataguacà — tu huvieras, avrias, y huvieses sido visto
885. pirii mà ayù pataguaag — aquel huviera, avria, y huviese sido visto
886. pirii mà ayù pataguaàc — nosotros huvieramos, avriamos, y huviesemos sido vistos
887. pirii mà ayù pataguàca ay — vosotros huvierais, avriais, y huvieseis sido vistos
888. pirii mà ayù Łic pataguaag — aquellos huvieran, avrian, y huviesen sido vistos
889. pirii pa pè pataan — yo fuere, ó huviere sido visto
890. pirii pa pè patacà — tu fueres, ó huvieres sido visto
891. pirii pa pè pataí — aquel fuere, ó huviere sido visto
892. pirii pa pè pataàc — nosotros fueremos, ó huvieremos sido vistos
893. pirii pa pè patacà ay — vosotros fuereis, ó huviereis sido vistos
894. pirii pa pè Łic patai — aquellos fueren, ó huvieran sido vistos
895. pirii pataí — ser visto
896. pirií pataguaag — haver sido visto
897. pirií naŁ pè pataí — haver de ser visto
898. paatà naŁ pirii — que fuera, ó huviera de aver sido visto
899. patàn pirii — de ser visto
900. neŁà a patà pirií — para ser visto
901. patà pirii — á sèr visto
902. aŁparaquiguà pataŁà pirii — por ser visto
903. piriigua — cosa vista
904. pirigua pè pataí — cosa que ha, ò tiene de ser vista
905. oròmo — recoger
906. an oròmo — yo recojo
907. cà oròmo — tu recojes
908. mu oròmo — aquel recoje
909. muc oròmo — nosotros recojemos
910. cà oròmo ay — vosotros recojeis
911. mu oròmo qui Łic — aquellos recojen
912. an oròmo nàŁ — yo recogía
913. cà oròmo nàŁ — tu recogias
914. mu oròmo nàŁ — aquel recogia
915. muc oròmo nàŁ — nosotros recogiamos
916. cà oròmo nàŁ ay — vosotros recogiais
917. mu oròmo nàŁ qui Łic — aquellos recogían
918. òrmoon — yo recogi, ò hè recogido
919. ormo cà — tu recogistes, ó has recogido
920. ormo i — aquel recogiò, ó hà recogido
921. ormo òc — nosotros recogimos, ó hemos recogido
922. òrmo cà ay — vosotros recogisteis, ó haveis recogido
923. ormoí qui Łic — aquellos recogieron, ó han recogido

924. capa ormoon paŁ nàŁ — yo havia recogido
925. capa ormo cà paŁ nàŁ — tu havias recogido
926. capa ormo i paŁ nàŁ — aquel havia recogido
927. capa ormo oc paŁ nàŁ — nosotros haviamos recogido
928. capa ormo cà paŁ nàŁ ay — vosotros haviais recogido
929. capa ormoí paŁ nàŁ qui Łic — aquellos havian recogido
930. an oromo pè — yo recogerè
931. cà oròmo pè — tu recogeràs
932. mu oròmo pè — aquel recogerà
933. muc oròmo pè — nosotros recogeremos
934. cà oromo pè ay — Vosotros recogereis
935. mù oromo pè Łic — aquellos recogeràn
936. ormoon pè ayù — yo avrè recogido
937. ormocà pè ayù — tu avras recogido
938. ormoí pè ayù — aquel avrà recogido
939. ormooc pè ayù — nosotros avremos recogido
940. ormocà pè ayù ay — vosotros avreìs recogido
941. ormoi pè ayù Łic — aquellos avran recogido
942. ormo — Recoge tu
943. guà ormoín — Recoja aquel
944. ormo ay — Recoged vosotros
945. guà Łic ormoín — Recojan aquellos
946. an oròmo Łán — yo recoja
947. cà oròmo Łàn — tu recojas
948. mu oròmo Łàn — aquel recoja
949. muc oròmo Łàn — nosotros recojamos
950. cà oròmo Łàn ay — vosotros recojais
951. mu oròmo Łàn qui Łic — aquellos recojan
952. an oròmo mà nàŁ — yo recogiera, recogeria, y recogiese
953. cà oròmo mà nàŁ — tu recogieras, recogerias, y recogieses
954. mu oròmo mà nàŁ — aquel recogiera, recogería, y recogiese
955. muc oròmo mà nàŁ — nosotros recogieramos, recojeriamos, y recogiesemos
956. cà oròmo mà nàŁ ay — vosotros recogierais, recogeriais, y recogieseis
957. mu oròmo mà nàŁ qui Łic — aquellos recogieran, recogerìan, y recogiesen
958. ormoon mà — yo haya recogido
959. ormocà mà — tu hayas recogido
960. ormoí mà — aquel haya recogido
961. ormooc mà — nosotros hayamos recogido
962. ormocà mà ay — vosotros hayais recogido
963. ormoí mà Łic — aquellos hayan recogido
964. ormoon mà ayù — yo huviera, avría, y huviese recogido
965. ormocà mà ayù — tu huvieras, avrias, y huvieses recogido
966. ormoí mà ayù — aquel huviera, avria, y huviese recogido
967. ormooc mà ayù — nosotros huvieramos, avriamos, y huviesemos recogido
968. ormocà mà ayù ay — vosotros huvierais, avriai, y huvieseis recogido
969. ormoí mà ayù Líc — aquellos huvieran, avrian, y huviesen recogido
970. an oròmo pa pè — yo recogiere, ó huviere recogido
971. cà oròmo pa pè — tu recogieres, ó huvieres recogido
972. mu oròmo pa pè — aquel recogiere, ó huviere recogido
973. mùc oròmo pa pè — nosotros recogieremos, ó huvieremos recogido
974. ca oròmo pa pè ay — vosotros recogíereis, ó huviereis recogido
975. mu oròmo pa pè Łic — aquellos recogieren, ó huvieren recogido
976. a oròmo — Recoger
977. ormo guà — haver recogido
978. a oròmo nàŁ pè — haver de recoger
979. a oròmo nàŁ — que recogiera, ó huviera de aver recogido
980. óròmo — de recoger
981. neŁa a oròmo — para recoger
982. óròmo — á recoger
983. aŁi a óròmo — por recoger
984. ormòque — a recoger
985. ormòŁ — el que recoge, ó recogía
986. ormòŁà — el que recoge, ó recogía
987. ormo εeŁa — el que recoge, ó recogía
988. órmo εeŁa — el que hà, o tiene de recoger
989. oròmo pataan — yo soi recogido
990. oròmo patacà — tu eres recogido
991. oromo pataí — aquel es recogido
992. oromo pataac — nosotros somos recogidos
993. oromo patacà ay — vosotros sois recogidos
994. oromo Łic patai — aquellos son recogidos
995. oromo nàŁ pataan — yo era recogido
996. oromo nàŁ patacà — tu eras recogido
997. oromo nàŁ patai — aquel era recogido
998. oromo nàŁ pataac — nosotros eramos recogidos
999. oromo nàŁ pataca ay — vosotros erais recogidos
1000. oromo nàŁ Łic pataí — aquellos eran recogidos
1001. oromo pataguaan — yo fui, ó he sido recogido
1002. oromo pataguaca — tu fuistes, ó has sido recogido
1003. oromo pataguaag — aquel fue, ó ha sido recogido
1004. oromo pataguaac — nosotros fuimos, ó hemos sido recogidos
1005. oromo pataguaca ay — vosotros fuiste[i]s, ò haveis sido recogidos
1006. oromo Łic pataguaag — aquellos fueron, ó han sido recogidos
1007. capa oromo paŁ nàŁ pataguaan — yo havia sido recogido
1008. capa oromo paŁ nàŁ pataguaca — tu havias sido recogido
1009. capa oromo paŁ nàŁ pataguaag — aquel havia sido recogido
1010. capa oromo paŁ nàŁ pataguaac — nosotros haviamos sido recogidos
1011. capa oròmo paŁ nàŁ pataguaca ay — vosotros haviais sido recogidos
1012. capa oròmo paŁ naŁ Łic pataguaag — aquellos havian sido recogidos
1013. oròmo pè pataan — yo serè recogido
1014. oròmo pè patacà — tu serás recogido
1015. oròmo pè pataí — aquel serà recogido

1016. oròmo pè pataac nosotros seremos recogidos
1017. oròmo pè patacà ay vosotros sereis recogidos
1018. oròmo pè Łic pataí aquellos serán recogidos
1019. oròmo pà ayù pataguaan yo avré sido recogido
1020. oròmo pa ayù pataguaca tu avras sido recogido
1021. oròmo pa ayù pataguaag aquel avra sido recogido
1022. oròmo pa ayù pataguaac nosotros avremos sido recogidos
1023. oròmo pa ayù pataguaca ay vosotros avreis sido recogidos
1024. oròmo pa ayù Łic pataguaag aquellos avran sido recogidos
1025. oròmo patacà sed tu recogido
1026. oròmo pataí sea aquel recogido
1027. oròmo patacà ay sed vosotros recogidos
1028. oròmo Łic pataí sean aquellos recogidos
1029. oròmo Łan pataan yo sea recogido
1030. oròmo Łan patacà tu seas recogido
1031. oròmo Łan pataí aquel sea recogido
1032. oròmo Łan pataac nosotros seamos recogidos
1033. oròmo Łan patacà ay vosotros seais recogidos
1034. oròmo Łan Łic pataí aquellos sean recogidos
1035. oròmo mà naŁ pataan yo fuera, sería, y fuese recogido
1036. oròmo mà naŁ patacà tu fueras, serías, y fueses recogido
1037. oròmo mà naŁ pataí aquel fuera, seria, y fuese recogido
1038. oròmo ma naŁ pataac nosotros fueramos, seriamos, y fuesemos recogidos
1039. oròmo mà naŁ patacà ay Vosotros fuerais, seriais, y fueseis recogidos
1040. oròmo mà naŁ Łic patai aquellos fueran, serian, y fuesen recogidos
1041. oròmo mà pataguaan yo haya sido recogido
1042. oròmo mà pataguaca tu hayas sido recogido
1043. oròmo mà pataguaag aquel haya sido recogido
1044. oròmo mà pataguaac nosotros hayamos sido recogidos
1045. oròmo mà pataguaca ay vosotros hayais sido recogidos
1046. oròmo mà Łic pataguaag aquellos hayan sido recogidos
1047. oròmo mà ayù pataguaan yo huviera, avria, y huviese sido recogido
1048. oròmo mà ayù pataguaca tu huvieras, avrias, y huvieses sido recogido
1049. oròmo mà ayù pataguaag aquel huviera, avria, y huviese sido recogido
1050. oròmo mà ayù pataguaac nosotros huvieramos, avriamos, y huviesemos sido recogidos
1051. oròmo mà ayù pataguaca ay vosotros huvierais, avriais y huvieseis sido recogidos
1052. oròmo mà ayù Łic pataguag aquellos huvieran, avrian, y huviesen sido recogidos
1053. oròmo pa pè pataan yo fuere, ó huvière sido recogido
1054. oròmo pa pè patacà tu fueres, ó huvieres sido recogido
1055. oròmo pa pè patai aquel fuere, ó huviere sido recogido
1056. oròmo pa pè pata ac nosotros fueremos, ó huvieremos sido recogidos
1057. oròmo pa pè patacà ay vosotros fuereis, ó huviereis sido recogidos
1058. oròmo pa pè Łic pataguaag aquellos fuesen, ó huvieren sido recogidos
1059. oròmo pataí ser recogido
1060. oròmo pataguaag haver sido recogido
1061. oròmo nàŁ pe pataí haver de ser recogido
1062. oròmo naŁ pataí que fuera, ó huviera de aver sido recogido
1063. oròmo pataí de ser recogido
1064. neŁa á patà oròmo para ser recogido
1065. a patà oròmo a ser recogido
1066. aŁi pataŁa orómo por ser recogido
1067. órmògua cosa recogido
1068. ormògua pè pataí cosa que hà, ó tiene de ser recógida
1069. samu coger
1070. an sàmu yo cojo
1071. cà sàmu tu coges
1072. mu sàmu aquel coge
1073. muc sàmu nosotros cogemos
1074. cà sàmu ay vosotros cogeis
1075. mu sàmu qui Łic aquellos cogen
1076. an sàmu nàŁ yo cogía
1077. cà samu nàŁ tu cogías
1078. mu sàmu nàŁ aquel cogía
1079. muc sàmu nàŁ nosotros cogíamos
1080. cà sàmu nàŁ ay vosotros cogiais
1081. mu sàmu nàŁ qui Łic aquellos cogían
1082. sàmuun yo cogi, ó hè cogido
1083. sámu cà tu cogistes, ó has cogido
1084. sàmui aquel cogiò, ó hà cogido
1085. sàmuuc nosotros cogimos, ó hemos cogido
1086. sàmucà ay vosotros cogisteis, ó haveis cogido
1087. sàmui qui Łic aquellos cogieron, ó han cogido
1088. capa sàmuun paŁ nàŁ yo havía cogido
1089. capa sàmucà paŁ nàŁ tu havias cogido
1090. capa sàmui paŁ nàŁ aquel havia cogido
1091. capa sàmuuc paŁ nàŁ nosotros haviamos cogido
1092. capa sàmucà paŁ nàŁ ay vosotros haviais cogido
1093. capa sàmuí paŁ nàŁ Łic 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 Łic aquellos cogeràn
1100. sàmuun pà ayù yo avre cogido
1101. sàmucà pa ayù tu avras cogido
1102. sàmuí pa ayù aquel avrà cogido
1103. sàmuuc pa ayù nosotros avremos cogido
1104. sàmuca pa ayù ay vosotros avreis cogido

1105. sàmui Łic pà ayù aquellos avran cogido
1106. sàmu coge tu
1107. gua sàmu ín coja aquel
1108. sàmu ay coged vosotros
1109. gua sàmu in Łic cojan aquellos
1110. an sàmu Łàn yo coja
1111. cà sàmu Łàn tu cojas
1112. mu sàmu Łàn aquel coja
1113. muc sàmu Łàn nosotros cojamos
1114. ca sàmu Łàn ay vosotros cojais
1115. mu sàmu Łàn Łic aquellos cojan
1116. an sàmu mà nàŁ yo cogiera, cogeria, y cogiese
1117. cà sàmu mà nàŁ tu cogieras, cogeria, y cogieses
1118. mu sàmu mà nàŁ aquel cogiera, cogeria, y cogiese
1119. muc sàmu mà nàŁ nosotros cogieramos, cogeriamos, y cogiesemos
1120. cà sàmu mà nàŁ ay vosotros cogierais, cogeriais, y cogieseis
1121. mu sàmu mà nàŁ qui Łic aquellos cogieran, cogerian, y cogiesen
1122. sàmuun mà yo haya cogido
1123. sàmucà mà tu hayas cogido
1124. sàmui mà aquel haya cogido
1125. sàmuuc mà nosotros hayamos cogido
1126. sàmucà mà ay Vosotros hayais cogido
1127. sàmui Łic mà aquellos hayan cogido
1128. sàmuun mà ayù yo huviera, avria, y huviese cogido
1129. sàmucà mà ayù tu huvieras, avrias, y huvieses cogido
1130. sàmuí mà ayù aquel huviera, avria, y huviese cogido
1131. sàmuuc mà ayù nosotros huvieramos, avriamos, y huviesemos cogido
1132. sàmucà mà ayù ay Vosot[ro]s huvierais, avriais, y huvieseis cogido
1133. sàmui Łic mà ayù aquellos huvieran, avrian, y huviesen cogido
1134. an sàmu pà pè yo cogiere, ó huviere cogido
1135. cà sàmu pà pè tu cogieres, ó huvieres cogido
1136. mu sàmu pà pè aquel cogiere, ó huviere cogido
1137. muc sàmu pà pè nosotros cogieremos, y huvieremos cogido
1138. cà sàmu pà pè ay vosotros cogiereis, ó huviereis cogido
1139. mu sàmu pà pè qui Łic aquellos cogieren, ó huvieren cogido
1140. a sàmu coger
1141. sàmuguà haver cogído
1142. sàmu naŁ pè haver de coger
1143. sàmu nàŁ que cogíera, ó huviera de aver cogido
1144. sàmu de coger
1145. neŁa à sàmu para coger
1146. sàmu a coger
1147. aŁi á sàmu por coger
1148. samùquí a coger
1149. sàmùŁ el que coge, o cogía
1150. sàmùŁà el que coge, o cogía
1151. sàmu quiŁa el que coge, o cogía
1152. sàmuquiŁa el que hà, ó tiene de coger
1153. sàmu pataan yo soi cogido
1154. sàmu patacà tu eres cogido
1155. sàmu patai aquel es cogido
1156. sàmu pata ac nosotros somos cogidos
1157. sàmu patacà ay vosotros sois cogidos
1158. sàmu Łic pataí aquellos son cogidos
1159. sàmu nàŁ pataan yo era cogido
1160. sàmu nàŁ patacà tu eras cogido
1161. sàmu nàŁ patai aquel era cogido
1162. sàmu nàŁ pata ac nosotros eramos cogidos
1163. sàmu nàŁ patacà ay vosotros erais cogidos
1164. sàmu nàŁ Łic patai aquellos eran cogidos
1165. sàmù pataguaan yo fui, ó he sido cogido
1166. sàmù pataguacà tu fuistes, ó has sido cogido
1167. samù pataguaag aquel fuè, ó ha sido cogido
1168. sàmù pataguaac nosotros fuimos, ó hemos sido cogidos
1169. samù pataguaca ay vosotros fuisteis, ò haveis sido cogidos
1170. samù Łic pataguaag aquellos fueron, ó han sido cogidos
1171. capà samù páŁ naŁ pataguaan yo havia sido cogido
1172. capa samù paŁ naŁ pataguaca tu havias sido cogido
1173. capa sàmù paŁ naŁ pataguaag aquel havia sido cogido
1174. capa sàmù paŁ naŁ pataguaac nosotros haviamos sido cogidos
1175. capa sàmú paŁ naŁ pataguaca ay vosotros haviais sido cogidos
1176. capa sàmù paŁ naŁ Łic pataguaag aquellos havian sido cogidos
1177. sàmu pè pataan yo serè cogido
1178. sàmu pè patacà tu seras cogido
1179. sàmu pè pataí aquel sera cogido
1180. sàmu pè pataac nosotros seremos cogidos
1181. sàmu pè patacà ay vosotros sereis cogidos
1182. sàmui Łic pè pataí aquellos seran cogidos
1183. samù pa ayù pataguaan yo aver sido cogido
1184. samù pa ayù pataguacà tu avras sido cogido
1185. samù pa ayù pataguaag aquel avrà sido cogido
1186. samù pa ayù pataguaac nosotros avremos sido cogidos
1187. samù pa ayù pataguaca ay vosotros avreis sido cogidos
1188. samù pa ayù Łic pataguaag aquellos avran sido cogidos
1189. sàmu patacà sed tu cogido
1190. sàmu patai sea aquel cogido
1191. sàmu patacà ay sed vosot[ro]s cogidos
1192. sàmu Łic pataí seàn aquellos cogidos
1193. sàmu Łan pataan yo sea cogido
1194. sàmu Łan patacà tu seas cogido
1195. sàmu Łan patai aquel sea cogido
1196. sàmu Łan pata ac nosotros seamos cogidos
1197. sàmu Łan patacà ay vosotros seais cogidos
1198. sàmu Łan Łic pataí aquellos sean cogidos
1199. sàmu mà naŁ pata an yo fuera, seria, y fuese cogido
1200. sàmu mà naŁ pata cà tu fueras, serias, y fueses cogido

1201. sàmu mà naŁ patai — aquel fuera, seria, y fuese cogido
1202. sàmu mà naŁ pata ac — nosotros fueramos, seriamos, y fuesemos cogidos
1203. sàmu mà naŁ patacà ay — vosotros fuerais, serais, y fueseis cogidos
1204. sàmu mà naŁ Łic patai — aquellos fueran, serian, y fuesen cogidos
1205. samù mà pataguaan — yo haya sido cogido
1206. samù mà pataguaca — tu hayas sido cogido
1207. samù mà pataguaag — aquel haya sido cogido
1208. sàmù mà pataguaac — nosotros hayamos sido cogidos
1209. samù mà pataguaca ay — vosotros hayais sido cogidos
1210. samù mà Łic pataguaag — aquellos hayan sido cogidos
1211. samù mà ayù pataguaan — yo huviera, avria, y huviese sido cogido
1212. sàmù mà ayù pataguaca — tu huvieras, avrias, y huvieses sido cogido
1213. samù mà ayù pataguaag — aquel huviera, avria, y huviese sido cogido
1214. samù mà ayù pataguaac — nosotros huvieramos, avriamos, y huviesemos sido cogidos
1215. samù mà ayù pataguaca ay — vosotros huvierais, avriais y huvieseis sido cogidos
1216. samù mà ayù Łic pataguaag — aquellos huvieran, avrian, y huviesen sido cogidos
1217. sàmu pa pè pataan — yo fuere, ó huviere sido cogido
1218. sàmu pa pè patacà — tu fueres, ó huvieres sido cogido
1219. sàmu pa pè patai — aquel fuere, ó huviere sido cogido
1220. sàmu pa pè pataac — nosotros fueremos, ó huvieremos sido cogidos
1221. sàmu pa pè pataca ay — vosotros fuereis, ó huviereis sido cogidos
1222. sàmu pa pè Łic patai — aquellos fueron, ó huvieren sido cogidos
1223. sàmu pataí — ser cogido
1224. samù pataguà — haver sido cogido
1225. sàmu naŁ pè pataí — haver de ser cogido
1226. patà nàŁ sàmu — que fuera, ó huviera de aver sido cogido
1227. patàn sàmu — de ser cogido
1228. neŁa a patà sàmu — para ser cogido
1229. patà sàmu — á ser cogido
1230. aŁi pataŁà sàmu — por ser cogido
1231. samùgua — cosa cogido
1232. samùgua pè pataí — cosa que hà, ò tiene de ser cogida
1233. ɛvɛtvɛ — medir
1234. an ɛvètvɛ — yo mido
1235. cà ɛvètvɛ — tu mides
1236. mu ɛvètvɛ — aquel mide
1237. muc ɛvètvɛ — nosotros medimos
1238. cà ɛvɛtvɛ ay — vosotros medis
1239. mu ɛvɛtvɛ quiŁic — aquellos miden
1240. an ɛvɛtvɛ nàŁ — yo media
1241. cà ɛvɛtvɛ nàŁ — tu medias
1242. mu ɛvɛtvɛ nàŁ — aquel media
1243. muc ɛvètvɛ nàŁ — nosotros mediamos
1244. cà ɛvètvɛ nàŁ ay — vosotros mediais
1245. mu ɛvètvɛ nàŁ qui Łic — aquellos median
1246. ɛvɛtvè ven — yo medi, ó hè medido
1247. ɛvɛtvɛ cà — tu medistes, ó has medido
1248. ɛvɛtvè i — aquel midiò, ó hà medido
1249. ɛvɛtvɛ vèc — nosotros medimos, ó hemos medido
1250. ɛvɛtvecà ay — vosotros medisteis, ó haveis medido
1251. ɛvɛtvei qui Łic — aquellos midieron, ó han medido
1252. capa ɛvɛtvɛven paŁ naŁ — yo havia medido
1253. capa ɛvɛtvecà paŁ naŁ — tu havias medido
1254. capa ɛvɛtvei paŁ naŁ — aquel havia medido
1255. capa ɛvɛtvɛvec paŁ nàŁ — nosotros haviamos medido
1256. capa ɛvɛtvecà paŁ naŁ ay — vosotros haviais medido
1257. capa ɛvɛtvei Łic paŁ naŁ — aquellos havian medido
1258. an ɛvètvɛ pè — yo medirè
1259. cà ɛvètvɛ pè — tu mediras
1260. mu ɛvètvɛ pè — aquel medirà
1261. muc ɛvètvɛ pè — nosotros mediremos
1262. cà ɛvètvɛ pè ay — vosotros medireis
1263. mu ɛvètvɛ pè Łic — aquellos mediràn
1264. ɛvɛtvèven pà ayù — yo avrè medido
1265. ɛvɛtvecà pà ayù — tu avras medido
1266. ɛvɛtvei pà ayù — aquel avrà medido
1267. ɛvɛtvèvec pà ayù — nosotros avremos medido
1268. ɛvɛtvecà pà ayù ay — vosotros avreis medido
1269. ɛvɛtvei pà ayù Łic — aquellos avran medido
1270. ɛvètvɛ — mide tu
1271. guà ɛvɛtvèin — mida aquel
1272. ɛvètvɛ ay — medid vosot[ro]s
1273. guà Łic ɛvɛtvein — midan aquellos
1274. an ɛvètvɛ Łàn — yo mida
1275. cà ɛvètvɛ Łàn — tu midas
1276. mu ɛvètvɛ Łàn — aquel mida
1277. muc ɛvètvɛ Łàn — nosotros midamos
1278. cà ɛvètvɛ Łàn ay — vosotros midais
1279. mu ɛvètvɛ Łan Łic — aquellos midan
1280. an ɛvètvɛ mà nàŁ — yo midiera, medíria, y midiese
1281. ca ɛvètvɛ mà nàŁ — tu midieras, medirias, y midieses
1282. mu ɛvètvɛ mà nàŁ — aquel midiera, mediria, y midiese
1283. muc ɛvètvɛ mà nàŁ — nosotros midieramos, mediriamos, y midiesemos
1284. ca ɛvètvɛ mà nàŁ ay — vosotros midierais, mediriais, y midieseis
1285. mu ɛvètvɛ mà nàŁ qui Łic — aquellos midieran, medirian, y midiesen
1286. ɛvɛtvɛven mà — yo haya medido
1287. ɛvètvɛ cà mà — tu hayas medido
1288. ɛvɛtvei mà — aquel haya medido
1289. ɛvɛtvɛvec mà — nosotros hayamos medido
1290. ɛvɛtvecà mà ay — vosotros hayais medido
1291. ɛvɛtvei Łic mà — aquellos hayan medido
1292. ɛvètvèven mà ayù — yo huviera, avria, y huviese medido
1293. ɛvètvecà mà ayù — tu huvieras, avrias, y huvieses medido

1294. ɛvètʋei mà ayù — aquel huviera, avria, y huviese medido
1295. ɛvetʋeʋèc mà ayù — nosotros huvieramos, avriamos, y huviesemos medido
1296. ɛvetʋecà mà ayù ay — vosotros huvierais, avriais, y huvieseis medido
1297. ɛvetʋei Łic mà ayù — aquellos huvieran, avrian, y huviesen medido
1298. an ɛvètʋe pàpè — yo midiere, ó huviere medido
1299. cà ɛvètʋe pà pè — tu midieres, ó huvieres medido
1300. mu ɛvètʋe pà pè — aquel midiere, ó huviere medido
1301. muc ɛvétʋe pà pè — nosotros midieremos, ó huvieremos medido
1302. cà ɛvétʋe pá pè ay — vosotros midiereis, ó huviereis medido
1303. mu ɛvètʋe pá pè Łic — aquellos midieren, ó huvieren medido
1304. a ɛvetʋe — medir
1305. ɛvetʋèguà — haver medido
1306. a ɛvetʋe nàŁ pè — haver de medir
1307. ɛvètʋe nàŁ — que midiera, ó huviera de aver medido
1308. a ɛvètʋe — de medir
1309. neŁa a ɛvetʋè — para medir
1310. ɛvètʋe — á medir
1311. aŁi a ɛvètʋe — por medir
1312. ɛvetʋèqui — a medir
1313. ɛvetʋèŁ — el que mide, ó medía
1314. ɛvetʋèŁà — el que mide, ó medía
1315. ɛvetʋequiŁa — el que mide, ó medía
1316. ɛvètʋe qui Ła pè — el que hà, ó tiene de medir
1317. ɛvètʋe pata an — yo soi medido
1318. ɛvètʋe pata cà — tu eres medido
1319. ɛvètʋe pataí — aquel es medido
1320. ɛvètʋe pataac — nosotros somos medidos
1321. ɛvètʋe patacà ay — vosotros sois medidos
1322. ɛvètʋe Łic patai — aquellos son medidos
1323. ɛvètʋè nàŁ pataan — yo era medido
1324. ɛvètʋè nàŁ patacà — tu eras medido
1325. ɛvètʋè nàŁ patai — aquel era medido
1326. ɛvètʋè nàŁ pata ac — nosotros eramos medidos
1327. ɛvètʋè nàŁ patacà ay — vosotros erais medidos
1328. ɛvètʋè nàŁ Łic patai — aquellos eran medidos
1329. ɛvètʋè pataguaan — yo fui, ó he sido medido
1330. ɛvètʋè patacà — tu fuistes, ó has sido medido
1331. ɛvètʋè pataguaag — aquel fuè, ó ha sido medido
1332. ɛvetʋè pataguaac — nosotros fuimos, ó hemos sido medidos
1333. ɛvetʋè pataguaca ay — vosotros fuisteis, ò haveis sido medidos
1334. ɛvetʋè Łic pataguaag — aquellos fueron, ó han sido medidos
1335. capa ɛvètʋè paŁ naŁ pataguaan — yo havia sido medido
1336. capa ɛvètʋè paŁ naŁ pataguacà — tu havias sido medido
1337. capa ɛvètʋè paŁ naŁ pataguaag — aquel havia sido medido
1338. capa ɛvètʋè paŁ nàŁ pataguaac — nosotros haviamos medidos
1339. capa ɛvètʋè paŁ nàŁ pataguaca ay — vosotros haviais sido medidos
1340. capa ɛvétʋé paŁ nàŁ Łic pataguaag — aquellos havian sido medidos
1341. ɛvètʋe pè pataan — yo serè medido
1342. ɛvètʋe pè patacà — tu seras medido
1343. ɛvètʋe pè patai — aquel serà medido
1344. ɛvètʋe pè pataac — nosotros seremos medidos
1345. ɛvètʋe pè patacà ay — Vosotros sereis medidos
1346. ɛvètʋe pè Łic pataí — aquellos seran medidos
1347. ɛvetʋè pa ayù pataguaan — yo avrè sido medido
1348. ɛvetʋè pa ayù pataguàca — tu avras sido medido
1349. ɛvetʋè pa ayù pataguaag — aquel avrà sido medido
1350. ɛvetʋè pa ayù pataguàac — nosotros avremos sido medidos
1351. ɛvetʋè pa ayù pataguaca ay — Vosotros avreis sido medidos
1352. ɛvetʋè pa ayù Łic pataguaag — aquellos avran sido medidos
1353. ɛvètʋe patacà — sed tu medido
1354. ɛvètʋe patai — sea aquel medido
1355. ɛvètʋe patacà ay — sed vosotros medidos
1356. ɛvetʋè Łic pataguaag — sean aquellos medidos
1357. ɛvètʋe Łan pataan — yo sea medido
1358. ɛvètʋe Łan patacà — tu seas medido
1359. ɛvètʋe Łan patai — aquel sea medido
1360. ɛvètʋe Łan pata àc — nosotros seamos medidos
1361. ɛvètʋe Łan patacà ay — vosotros seais medidos
1362. ɛvetʋe Łan Łic patai — aquellos sean medidos
1363. ɛvètʋe mà nàŁ pataan — yo fuera, seria, y fuese medido
1364. ɛvètʋe mà nàŁ patacà — tu fueras, serias, y fueses medido
1365. ɛvètʋe mà nàŁ pataí — aquel fuera, seria, y fuese medido
1366. ɛvètʋe mà nàŁ pataac — nosotros fueramos, seriamos, y fuesemos medidos
1367. ɛvètʋe mà nàŁ pataca ay — vosotros fuerais, seriais, y fueseis medidos
1368. ɛvètʋe mà nàŁ Łic patai — aquellos fueran, serían, y fuesen medidos
1369. ɛvètʋe mà pataguaan — yo haya sido medido
1370. ɛvètʋe mà pataguàca — tu hayas sido medido
1371. ɛvètʋe mà pataguaag — aquel haya sido medido
1372. ɛvètʋe mà pataguaac — nosotros hayamos sido medidos
1373. ɛvètʋe mà pataguaca ay — vosotros hayais sido medidos
1374. ɛvètʋe mà Łic pataguaag — aquellos hayan sido medidos
1375. ɛvètʋe mà ayù pataguaan — yo huviera, avria, y huviese sido medido
1376. ɛvètʋe mà ayù pataguàca — tu huvieras, avrias, y huvieses sido medido
1377. ɛvètʋe mà ayù pataguaag — aquel huviera, avria, y huviese sido medido
1378. ɛvètʋe mà ayù pataguaac — nosotros huvieramos avriamos, y huviesemos

		sido medidos
1379.	ɛvètve mà ayù pataguaca ay	vosotros huvierais, avriais, y huvieseis sido medidos
1380.	ɛvètve mà ayù Łic pataguaag	aquellos huvieran, avrian, y huviesen sido medidos
1381.	ɛvètve pà pè pataan	yo fuere, ó huviere sido medido
1382.	ɛvètve pà pè patacà	tu fueres, ó huvieres sido medido
1383.	ɛvètve pà pè patai	aquel fuere, ó huviére sido medido
1384.	ɛvètve pà pè pataac	nosotros fueremos, ó huvieremos sido medidos
1385.	ɛvètve pà pè patacà ay	vosotros fuereis, ó huviereis sido medidos
1386.	ɛvètve pà pè Łic patai	aquellos fueren, ó huvieren sido medidos
1387.	ɛvètve patai	ser medido
1388.	ɛvètve pataguaag	haver sido medido
1389.	ɛvètve nàŁ pè pataí	haver de ser medido
1390.	patà nàŁ ɛvètvè	que fuera, ò huviera de aver sido medido
1391.	patàn ɛvètve	de ser medido
1392.	neŁà á patà ɛvetve	para ser medido
1393.	patà ɛvetve	á ser medido
1394.	aŁi pataŁà ɛvetve	por ser medido
1395.	ɛvetvegua	cosa medida
1396.	ɛvetvegua pè pataí	cosa que há ó tiene de ser medido
1397.	tà	venir
1398.	an tá	yo vengo
1399.	cà tá	tu vienes
1400.	a tá	aquel viene
1401.	muc tá	nosotros venimos
1402.	cà tá ay	vosotros venis
1403.	a tá qui Łic	aquellos vienen
1404.	an tá nàŁ	yo venía
1405.	cà tá nàŁ	tu venias
1406.	a tá nàŁ	aquel venía
1407.	muc tá nàŁ	nosotros veníamos
1408.	cà tá nàŁ ay	vosotros veniais
1409.	a tá nàŁ qui Łic	aquellos venían
1410.	an tá ý	yo vine, ò hè venido
1411.	cà tà ý	tu venistes, ò has venido
1412.	tá ý	aquel vino, ò hà venido
1413.	muc tá ý	nosotros venimos, ó hemos venido
1414.	cà tá ý ay	vosotros venisteis, ó haveis venido
1415.	tá ý qui Łic	aquellos vinieron, ó han venido
1416.	capa an tá ý paŁ nàŁ	yo havía venido
1417.	capa ca tá ý paŁ nàŁ	tu havias venido
1418.	capa tá ý paŁ nàŁ	aquel havía venido
1419.	capa mu tá ý paŁ nàŁ	nosotros haviamos venido
1420.	capa ca tá ý paŁ nàŁ ay	vosotros haviais venido
1421.	capa tá ý Łic paŁ nàŁ	aquellos havian venido
1422.	an tá pè	yo vendrè
1423.	cá tá pè	tu vendras
1424.	a tá pè	aquel vendrà
1425.	muc tá pè	nosotros vendremos
1426.	cà tá pè ay	vosotros vendreis
1427.	a tá pè qui Łic	aquellos vendran
1428.	an tá ý pà ayù	yo avrè venido
1429.	cá tá ý pa ayù	tu avras venido
1430.	tá ý pa ayù	aquel avra venido
1431.	muc ta ý pa ayù	nosotros avremos venido
1432.	ca ta ý pà ayù ay	vosotros avreis venido
1433.	ta ý Łic pa ayù	aquellos avran venido
1434.	cà tà	Ven tu
1435.	tà ca	Ven tu
1436.	a tà	Venga aquel
1437.	cà tà ay	Venid vosotros
1438.	tà cà ay	Venid vosotros
1439.	a tà Łic	Vengan aquellos
1440.	an tà Łàn	yo venga
1441.	cà tà Łán	tu vengas
1442.	a tà Łàn	aquel venga
1443.	muc tà Łàn	nosotros vengamos
1444.	cà tà Łan ay	vosotros vengais
1445.	a tà Łàn Łic	aquellos vengan
1446.	an tà mà nàŁ	yo viniera, vendria, y viniese
1447.	cà tà mà nàŁ	tu vinieras, vendrias, y vinieses
1448.	a tà mà nàŁ	aquel viniera, vendria, y viniese
1449.	muc tà mà nàŁ	nosotros vinieramos, vendriamos, y viniesemos
1450.	cà tà mà nàŁ ay	vosotros vinierais, vendriais, y vinieseis
1451.	a tà mà nàŁ qui Łic	aquellos vinieran, vendrian, y viniesen
1452.	an tà i mà	yo haya venido
1453.	cà tà í mà	tu hayas venido
1454.	tá í mà	aquel haya venido
1455.	muc tà í mà	nosotros hayamos venido
1456.	cà tà í mà ay	vosotros hayais venido
1457.	tà í mà qui Łic	aquellos hayan venido
1458.	an tà í mà ayù	yo huviera, avría, y huviese venido
1459.	cà tà í mà ayù	tu huvieras, avrias, y huvieses venido
1460.	tà í ma ayù	aquel huviera, avria, y huviese venido
1461.	muc tà í ma ayù	nosotros huvieramos, avriamos y huviesemos venido
1462.	cà tà í mà ayù ay	vosotros huvierais, avriais, y huvieseis venido
1463.	tà í Łíc mà ayù	aquellos huvieran, avrian, y huviesen venido
1464.	an tà pà pè	yo viniere, ó huviere venido
1465.	cà tà pà pè	tu vinieres, ó huvieres venido
1466.	a tà pà pè	aquel viniere, ó huviere venido
1467.	muc tà pà pè	nosotros vinieremos, ó huvieremos venido
1468.	cà tà pà pè ay	vosotros viniereis, ó huviereis venido
1469.	a tà pà pè Łic	aquellos vinieren, ó huvieren venido
1470.	mara	descansar
1471.	an màra	yo decanso
1472.	cà màra	tu decansas
1473.	a màra	aquel descansa
1474.	muc màra	nosotros descansamos

1475. cà màra ay vosotros descansais
1476. a màra qui Łic aquellos descansan
1477. an màra nàŁ yo descansaba
1478. cà màra nàŁ tu descansabas
1479. a màra nàŁ aquel descansaba
1480. muc màra nàŁ nosotros descansabamos
1481. ca màra nàŁ ay vosotros descansabais
1482. a màra nàŁ qui Łic aquellos descansaban
1483. an màrà yo descansè, ó hè descansado
1484. an màra Łà yo descansè, ó hè descansado
1485. cà màrà tu descansastes, ó has descansado
1486. cà màra Łà tu descansastes, ó has descansado
1487. màrà aquel descansó, ó ha descansado
1488. màra Łà aquel descansó, ó ha descansado
1489. muc màrà nosotros descansamos, ó hemos descansado
1490. muc màra Łà nosotros descansamos, ó hemos descansado
1491. cà màrà ay vosotros descansasteis, ó haveis descansado
1492. màra qui Łic aq[uellos] descansaron, ó han descansado
1493. màra Łà qui Łic aq[uellos] descansaron, ó han descansado
1494. capa an màrà paŁ nàŁ yo havia descansado
1495. capa cà màrà paŁ nàŁ tu havias descansado
1496. capa màrà paŁ nàŁ aquel havia descansado
1497. capa muc màrà paŁ nàŁ nosotros haviamos descansado
1498. capa cà màrà paŁ nàŁ ay vosotros haviais descansado
1499. capa màrà Łic paŁ nàŁ aquellos havian descansado
1500. an màra pè yo descansarè
1501. cà màra pè tu descansaras
1502. a màra pè aquel descansarà
1503. muc màra pè nosotros descansaremos
1504. cà màra pè ay vosotros descansareis
1505. a màra pè Łic aquellos descansaràn
1506. an màrà pàpè yo avrè descansado
1507. cà màrà pà pè tu avras descansado
1508. màrà pà pè aquel avrà descansado
1509. muc màrà pà pè nosotros avremos descansado
1510. cà màrà pà pè ay vosotros avreis descansado
1511. màra Łic pàpè aquellos avran descansado
1512. màrà Descansa tu
1513. màràya Descansa tu
1514. guà màrà quiin Descanse aquel
1515. màràya ay Descansad vosotros
1516. guaŁic màra quin Descansen aquellos
1517. an màra Łàn yo descanse
1518. cà màrà Łàn tu descanses
1519. a màra Łàn aquel descanse
1520. muc màra Łán nosotros descansemos
1521. cà màra Łàn ay vosotros descanseis
1522. a màra Łàn qui Łic aquellos descansen
1523. an màra mà nàŁ yo descansara, descansaria, y descansase
1524. cà màra mà nàŁ tu descansaras, descansarias, y descansases
1525. a màra mà nàŁ aquel descansara, descansaria, y descansase
1526. muc màra mà nàŁ nosotros descansaramos descansariamos, y descansasemos
1527. cà màra mà nàŁ ay vosotros descansarais, descansariais, y descansaseis
1528. a màrà mà nàŁ qui Łic aquellos descansaran, descansarian, y descansasen
1529. an màrà mà yo haya descansado
1530. cà màrà mà tu hayas descansado
1531. màrà mà aquel haya descansado
1532. muc màrà mà nosotros hayamos descansado
1533. cà màrà mà ay vosotros hayais descansado
1534. màrà Łic mà aquellos hayan descansado
1535. an màrà mà ayù yo huviera, avría, y huviese descansado
1536. cà màrà mà ayù tu huvieras, avrias, y huvieses descansado
1537. màrà mà ayù aquel huviera, avría, y huviese descansado
1538. muc màrà mà ayù nosotros huvieramos avríamos, y huviesemos descansado
1539. cà màrà mà ayù ay vosotros huvierais, avriais, y huvieseis descansado
1540. màra Łic mà ayù aquellos huvieran, avrian, y huviesen descansado
1541. an màra pàpè yo descansare, ó huviere descansado
1542. cà màra pà pè tu descansares, ó huvieres descansado
1543. a màra pàpè aquel descansare, ó huviere descansado
1544. muc màra pà pè nosotros descansaremos, ó huviéremos descansado
1545. cà màra pà pè ay vosotros descansareis, ó huviereis descansado
1546. a màra pà pè Łic aquellos descansaren, ó huvieren descansado
1547. a màra Descansar
1548. màraguà haver descansado
1549. a màra nàŁ pè haver de descansar
1550. màra nàŁ que descansara, ó huviera de haver descansado
1551. màra de descansar
1552. neŁa á màra para descansar
1553. màra á descansar
1554. aŁi màra por descansar
1555. màrà quí a descansar
1556. màrà Łà el que descansa, ó descansaba
1557. màrà Łà pè el que hà, ó tiene de descansar
1558. pataszàma acordarse
1559. an pataszàma yo me acuerdo
1560. cà pataszàma tu te acuerdas
1561. mu pataszàma aquel se acuerda
1562. muc pataszàma nosotros nos acordamos
1563. cà pata szàma ay vosotros os acordais

1564. mu pata Łic szàma — aquellos se acuerdan
1565. an pata nàŁ szàma — yo me acordaba
1566. cà pata nàŁ szàma — tu te acordabas
1567. mu pata nàŁ szàma — aquel se acordaba
1568. muc pata nàŁ szàma — nosotros nos acordabamos
1569. cà pata nàŁ szàma ay — vosotros os acordabais
1570. mu pata nàŁ Łic szàma — aquellos se acordaban
1571. pataan szàma — yo me acordè, ó me hè acordado
1572. pata cà szàma — tu te acordaste, ó te has acordado
1573. pataí 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. pataí Łic szàma — aquellos se acordaron, ó se han acordado
1577. capa pataan paŁ nàŁ szàma — yo me havia ácordado
1578. capa patacà pàŁ nàŁ szàma — tu te havias ácordado
1579. capa pataí pàŁ nàŁ szàma — aquel se havia ácordado
1580. capa pataac pàŁ nàŁ szàma — nosotros nos haviamos acordado
1581. capa patacà paŁ nàŁ szàma ay — vosotros os haviais acordado
1582. capa patai Łic paŁ nàŁ szàma — aquellos se havian 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 Łic szàma — aquellos se acordaran
1589. pataan pà 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 pà ayù szàma ay — vosotros os avreis acordado
1594. patai pa ayùŁic szàma — aquellos se avran acordado
1595. pata szàma — acuerdate tu
1596. guapatain szàma — acuerdese aquel
1597. pata szàma ay — acordaos vosotros
1598. guaŁic patain szàma — acuerdense aquellos
1599. an pata Łan szàma — yo me acuerde
1600. cà pata Łan szàma — tu te acuerdes
1601. mu pata Łan szàma — aquel se acuerde
1602. muc pata Łan szàma — nosotros nos acordemos
1603. ca pata Łan szàma ay — vosotros os acordeis
1604. mu pata Łan szàma Łic — aquellos se acuerden
1605. an pata mà naŁ szàma — yo me acordara, acordaria, y acordase
1606. cà pata mà nàŁ szàma — tu te acordaras, acordarias, y acordases
1607. mu pata mà nàŁ szàma — aquel se acordara, acordaria, y acordase
1608. muc pata mà naŁ szàma — no[sotro]s nos acordamos, acordariamos, y acordasemos
1609. cà pata mà naŁ szàma ay — Vo[sotro]s os acordarais, acordariais, y acordaseis
1610. mu pata mà nàŁ szama Łic — aquellos se acordaran, acordarian, y acordasen
1611. pata an mà szàma — yo me haya acordado
1612. pata ca mà szàma — tu te hayas acordado
1613. pataí mà szàma — aq[uel] 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. pataì ma szàma Łic — aquellos se hayan acordado
1617. pataan mà ayù szàma — yo me huviera, avria, y huviese acordado
1618. pata cà mà ayù szàma — tu te huvieras, avrias, y huvieses acordado
1619. patai mà ayù szàma — aquel se huviera, avria, y huviese acordado
1620. pataac mà ayù szàma — no[sotro]s nos huvieramos avriamos, y huviesemos acordado
1621. patacà mà ayù szàma ay — Vos[otro]s os huvierais, avriais, y huvieseis acordado
1622. patai Łic mà ayù szàma — aquellos se huvieran, avrian, y huviesen acordado
1623. an pata pa pè szàma — yo me acordare, ó me huviere acordado
1624. cà pata pà pè szàma — tu te acordares, ó te huvieres acordado
1625. mu pata pà pè szàma — aquel se acordare, ó se huviere acordado
1626. muc pata pà pè szàma — no[sotro]s nos acordaremos, ó nos huvieremos acordado
1627. cà pata pà pè szàma ay — Vo[sotro]s os acordareis, ú os huviereis acordado
1628. mu pata pàpè szàma Łic — aquellos se acordaren, ó se huvieren acordado
1629. a pata szama — acordarse
1630. patàguà szàma — haver se acordado
1631. a pata nàŁ pè szàma — haver de acordarse
1632. pata nàŁ szàma — que se acordara, ó se huviera de aver acordado
1633. pata szàma — de acordarse
1634. neŁa à pata szàma — para acordarse
1635. pata szàma — à acordarse
1636. aŁi à patà szàma — por acordarse
1637. patàŁ szàma — el que se acuerda, ó se acordaba
1638. pata Łà szàma pè — el que hà, ó tiene de acordarse
1639. yvɐguaszàma
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 Łic — aquellos van
1648. an acù nàŁ — yo iba

1649. cà acù nàŁ tu ibas
1650. a acù nàŁ aquel iba
1651. muc acù nàŁ nosotros ibamos
1652. ca acù nàŁ ay vosotros ibais
1653. a acù nàŁ qui Łic aquellos iban
1654. an acù Ła yo fui, ó hè ido
1655. ca acù Ła tu fuistes, ó has ido
1656. a acù Ła aquel fuè, ó ha ido
1657. muc acù Ła nosotros fuimos, ó hemos ido
1658. cà acù Ła ay Voso[tro]s fuisteis, ó haveis ido
1659. a acùŁa quiŁic aquellos fueron, ó han ido
1660. capa an acùŁa paŁ nàŁ yo havia ido
1661. capa ca acùŁa paŁ nàŁ tu havias ido
1662. capa a acùŁa paŁ nàŁ aquel havia ido
1663. capa muc acuŁa paŁ nàŁ no[sotro]s haviamos ido
1664. capa ca acùŁa paŁ nàŁ ay Vos[otro]s haviais ido
1665. capa a acùŁa paŁ nàŁ qui Łic 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 Łic aquellos iràn
1672. an acuŁa pa ayù yo avrè ido
1673. cà acùŁa pa ayù tu avras ido
1674. a acùŁa pa ayù aquel avrà ido
1675. muc acùŁa pa ayù nos[otro]s avremos ido
1676. ca acùŁa pa ayù ay Vos[otro]s avreis ido
1677. a acùŁa pa ayù Łic aquellos avran ido
1678. acù ya Ve tù
1679. a acù Vaya aquel
1680. acùya ay Ved vosotros
1681. a acù Łic Vayan aquellos
1682. an acù Łan yo vaya
1683. cà acù Łan tu vayas
1684. a acù Łan aquel vaya
1685. muc acù Łan nosotros vayamos
1686. cà acù Łan ay vosotros vayais
1687. a acù Łan Łic aquellos vayan
1688. an acù mà naŁ yo fuera, iria y fuese
1689. cà acù mà nàŁ tu fueras, irias, y fueses
1690. a acù mà nàŁ aquel fuera, iría, y fuese
1691. muc acù mà nàŁ nosotros fueramos, iriamos, y fuesemos
1692. cà acù mà nàŁ ay vosotros fuerais, iriais, y fueseis
1693. a acù mà naŁ qui Łic aquellos fueran, irian, y fuesen
1694. an acùŁa mà yo haya ido
1695. cà acùŁa mà tu hayas ido
1696. a acùŁa mà aquel haya ido
1697. muc acùŁa mà nosotros hayamos ido
1698. ca acùŁa mà ay vosotros hayais ido
1699. a acùŁa mà Łic aquellos hayan ido
1700. an acùŁa mà ayù yo huviera, avria, y huviese ido
1701. cà acùŁa mà ayù tu huvieras, avrias, y huvieses ido
1702. a acùŁa mà ayù aquel huviera, avria, y huviese ido
1703. muc acùŁa mà ayù nosotros huvieramos, avriamos, y huviesemos ido
1704. ca acùŁa mà ayù ay vosotros huvierais, avriais, y huvieseis ido
1705. a acùŁa mà ayù Łic 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 fueremos, ó huvieremos ido
1710. ca acù pà pè ay vosotros fuereis, ó huviereis ido
1711. a acù pà pè Łic aquellos fueren, ó huvieren ido
1712. a acù ir
1713. acùguà haver ido
1714. a acù nàŁ pè haver de ir
1715. a acùŁa nàŁ que fuera, ó huviera de aver ido
1716. acù de ir
1717. neŁa a acù para ir
1718. acù a ir
1719. aŁparaquiguà a acù por ir
1720. acù quí a ir
1721. acùŁa el que và, ó iba
1722. acùŁaŁ el que và, ó iba
1723. acùŁa pè el que hà, ó tiene de ir
1724. guacà irse
1725. guaŁa irse
1726. an guacà nàŁ yo me iba
1727. anguaŁa nàŁ yo me iba
1728. cà guacà nàŁ tu te ibas
1729. cà guaŁa nàŁ tu te ibas
1730. guacà nàŁ aquel se iba
1731. guaŁa nàŁ aquel se iba
1732. muc guacà nàŁ nosotros nos ibamos
1733. muc guaŁa nàŁ nosotros nos ibamos
1734. ca guacà nàŁ ay vosotros os ibais
1735. ca guaŁa nàŁ ay vosotros os ibais
1736. guacà nàŁ qui Łic aquellos se iban
1737. guaŁa nàŁ qui Łic aquellos se iban
1738. an guacà yo me fui, ò me hè ido
1739. anguaŁa yo me fui, ò me hè ido
1740. ca guacà tu te fuistes, ó has ido
1741. caguaŁa tu te fuistes, ó has ido
1742. guacà aquel se fuè, ó ha ido
1743. guaŁa aquel se fuè, ó ha ido
1744. muc guacà nosotros nos fuimos, ó hemos ido
1745. muc guaŁa nosotros nos fuimos, ó hemos ido
1746. ca guacà ay vosotros os fuisteis, ó haveis ido
1747. ca guaŁá ay vosotros os fuisteis, ó haveis ido
1748. guacà qui Łic aquellos se fueron, ó han ido
1749. guaŁá qui Łic aquellos se fueron, ó han ido
1750. capa an guacà paŁ nàŁ yo me havia ido
1751. capa cà guacà paŁ nàŁ tu te havias ido
1752. capa guacà paŁ nàŁ aquel se havia ido

1753. capa muc guacà paŁ nàŁ nosotros nos haviamos ido
1754. capà cà guacà paŁ nàŁ ay vosotros os haviais ido
1755. capa guaca Łic paŁ nàŁ aquellos se havian ido
1756. an guacà pà ayù yo me avrè ido
1757. ca guacà pà ayù tu te avras ido
1758. guacà pà ayù aquel se avrà ido
1759. muc guacà pà ayù nosotros nos avremos ido
1760. ca guacà pà ayù ay vosotros os avreis ido
1761. guacà pa ayù Łic aquellos se avran ido
1762. an guacà mà nàŁ yo me fuera, iria, y fuese
1763. ca guacà mà nàŁ tu te fueras, irias, y fueses
1764. guacà mà nàŁ aquel se fuera, iria, y fuese
1765. muc guacà mà nàŁ noso[tro]s nos fueramos, iriamos, y fuesemos
1766. ca guacà mà nàŁ ay vosotros os fuerais, iriais, y fueseis
1767. guacaŁic mà nàŁ aquellos se fueran, irian, y fuesen
1768. an guacà mà yo me haya ido
1769. ca guacà mà tu te hayas ido
1770. guacà mà aquel se haya ido
1771. muc guacà mà nosotros nos hayamos ido
1772. ca guacà mà ay vosotros os hayais ido
1773. guaca Łic mà aquellos se hayan ido
1774. an guacà mà ayù yo me huviera, avria, y huviese ido
1775. ca guacà mà ayù tu te huvieras, avrias, y huvieses ido
1776. guacà mà ayù aquel se huviera, avria, y huviese ido
1777. muc guacà mà ayù nosotros nos huvieramos, avriamos, y huviesemos ido
1778. ca guacà mà ayù ay Vos[otro]s os huvierais, avriais, y huvieseis ido
1779. guaca Łic mà ayù aquellos se huvieran, avrian, y huviesen ido
1780. an guacà pàpè yo me fuere, ó me huviere ido
1781. an guaŁa pàpè yo me fuere, ó me huviere ido
1782. ca guacà pà pè tu te fueres, ó te huvieres ido
1783. guacà pà pè aquel se fuere, ó huviere ido
1784. muc guacà pàpè nosotros nos fueremos, ò huvieremos ido
1785. cà guaŁa pàpè ay vosotros os fuereis, ó huviereis ido
1786. guaŁa pà pè Łic aquellos se fueren, ó huvieren ido
1787. ca guaŁa pà pè tu te fueres, ó te huvieres ido
1788. guaŁa pà pè aquel se fuere, ó huviere ido
1789. muc guaŁa pàpè nosotros nos fueremos, ò huvieremos ido
1790. cà guaŁa pàpè ay vosotros os fuereis, ó huviereis ido
1791. guaŁa pà pè Łic aquellos se fueren, ó huvieren ido
1792. gù ir
1793. an gù yo voi
1794. an gù nàŁ yo iba
1795. an gùŁa yo fui, ó hè ido
1796. capa an guŁa paŁ nàŁ yo havia ido
1797. an gù pè yo irè
1798. an guŁa pà ayù yo avrè ido
1799. an gùŁàn yo vaya
1800. an gù mà nàŁ yo fuera, iria, y fuese
1801. an gùŁa ma yo haya ido
1802. an gùŁa mà ayù yo huviera, avria, y huviese ido
1803. an gù pà pè yo fuere, ó huviere ido
1804. ucà haver, tener
1805. ucà hay
1806. ucà nàŁ havia
1807. ucà pè havrà
1808. ucà pàpè huviese, ó huviere havido
1809. unà haver, ó tener
1810. unà hay
1811. unà nàŁ havia, ó tenía
1812. unà pè havrà, ó tendrìa
1813. unà pàpè huviere, ó huviere havido
1814. ayù haver, ó tener
1815. ayù hay, ó tiene
1816. ayù nàŁ havía, ó tenía
1817. ayù pè havrà, ó tendrà
1818. ayù pàpè huviere, ó huviere havido
1819. ayù, unà, ucà mà huviera, avria, y huviese havido
1820. tà ir, y venir
1821. cun dà Ve, ó anda tu con dios
1822. cun dà id vosotros con dios
1823. cun dà tá Ve, ó anda tu con dios
1824. cun dàtà ay id vosotros con dios
1825. an dà Vamos
1826. an da màŁ Vamonos nosotros
1827. andamaŁ tà Vamonos nosotros
1828. gi decir
1829. gi aquel dice
1830. gi nàŁ aquel decía
1831. gi cangui aquel dixo
1832. gi Łàn aquel diga
1833. mi decir
1834. mi aquel dice
1835. mi nàŁ aquel decía
1836. mi cangui aquel dixo
1837. mi Łan aquel diga
1838. curànbè venir
1839. cúrànbè Ven tu
1840. curànbè ay Venia vosotros
1841. nàpè venir
1842. nà pè Ven acà tu
1843. nà pè ay Venia acà vosotros
1844. guimucàn dejar
1845. guimucàn Dejalo tu
1846. guimucàn ay Dejadlo vosotros
1847. gui Łic mucàn Dejenlo aquellos
1848. màrapè darse priesa
1849. màrapè Ven tu de priesa
1850. màrapè ay Venid vosot[ro]s de priesa
1851. màra pè Łic Vengan aquellos de priesa
1852. ziruya darse priesa, ó abreviar
1853. ziruya abrevia tu
1854. ziruya ay abreviad vosotros
1855. guà ziruquin abrevien aquellos
1856. tonè callar
1857. tonèya callate tu
1858. tonèya ay callaos vosotros

1859. guàŁic tonéquèn callense aquellos
1860. zèŁè torcerse, ó cantearse
1861. zèŁèya ɛica tuersete tu
1862. zèŁè ya ɛica ay torceos vosotros
1863. mʋè tomar
1864. mʋè toma tu
1865. mù ay tomad vosotros
1866. nà decir
1867. cà nà Dice tu
1868. cà nà ay Decidle vosotros
1869. pàra querer
1870. (see Appendix 3)
1871. (see Appendix 3)
1872. (see Appendix 3)
1873. nèn yo soy
1874. [¿]guena nàca [¿]quien?
1875. nèn yo
1876. (see Appendix 3)
1877. patà sér
1878. taana ser
1879. ayà estar
1880. szàta estar
1881. ucà tener, ó haver; defectivo
1882. unà tener, ó haver; defectivo
1883. ayù tener, ó haver; defectivo
1884. taana el verdadero *sum est fui*, que tambien significa sèr
1885. szàta estar
1886. ayà estar
1887. (see Appendix 3)
1888. ayaan yo estoi, ó estube
1889. ayacà tu estas, ó estubistes
1890. agi aquel està, ó estubo
1891. ayaac nosotros estamos, ó estubimos
1892. ayacà ay vosotros estabais, ó estubisteis
1893. agi qui Łic aquellos estan, ó estubieron
1894. nàŁ aýaan yo estaba
1895. nàŁ ayacà tu estabas
1896. nàŁ agí aquel estaba
1897. nàŁ ayaac nosotros estabamos
1898. nàŁ ayacà ay vosotros [es]tabais
1899. nàŁ agi Łic aquellos estaban
1900. capa paŁ nàŁ ayaan yo havia estado
1901. capa paŁ nàŁ ayacà tu havias estado
1902. capa paŁ naŁ agí aquel havia estado
1903. capa paŁ nàŁ ayaac nosotros haviamos estado
1904. capa paŁ nàŁ ayacà ay vosotros haviais estado
1905. capa paŁ nàŁ qui agi Łic aquellos havian estado
1906. pè ayaan yo estarè
1907. pè ayacà tu estaras
1908. pè agí aquel estarà
1909. pè ayaàc nosotros estaremos
1910. pè ayacà ay vosotros estareis
1911. pè agi Łic aquellos estaran
1912. pa ayù ayaan yo avrè estado
1913. pa ayù ayacà tu avras estado
1914. pa ayù agi aquel [a]vrà estado
1915. pà ayù ayaac nosotros avremos estado
1916. pà ayù ayacà ay vosotros avreis estado
1917. pa ayu agi qui Łic aquellos avran estado
1918. szàgù estar sentado
1919. szàgùya estate
1920. guà szàguquin estese aquel
1921. szàgùya ay estad vosotros
1922. gua Łic szàguquin estense aquellos
1923. Łan ayaan yo estè
1924. Łan ayacà tu estès
1925. Łan agi aquel estè
1926. Łan ayaac nosotros estèmos
1927. Łan ayacà ay vosotros esteis
1928. Łan Łic agi aquellos estèn
1929. mà naŁ ayaan yo estubiera, estaría, y estubiese
1930. mà naŁ ayacà tu estubieras, estarias, y estubieses
1931. mà naŁ agì aquel estubiera, estaría, y estubiese
1932. mà nàŁ ayaac nosotros estubieramos, estariamos, y estubiesemos
1933. mà naŁ ayacà ay vosotros estubierais, estariais, y estubieseis
1934. mà nàŁ agi qui Łic aquellos estubieran, estarian y estubiesen
1935. mà ayaan yo haya estado
1936. mà ayacà tu hayas estado
1937. mà agí aquel haya estado
1938. mà ayaac nosotros hayamos estado
1939. mà ayacà ay vosotros hayais estado
1940. mà agi qui Łic aquellos hayan estado
1941. mà ayu ayaan yo huviera, avria, y huviese estado
1942. mà ayù ayacà tu huvieras, avrias, y huvieses estado
1943. mà ayu agí aquel huviera, avria, y huviese estado
1944. mà ayù ayaac nosotros huvieramos, avriamos, y huviesemos estado
1945. mà ayu ayacà ay vosotros huvierais, avriais, y huvieseis estado
1946. mà ayu qui agi Łic aquellos huvieran, avrian, y huviesen estado
1947. pàpè ayaan yo estuviere, ó huviere estado
1948. pà pè ayacà tu estubieres, ó huvieres estado
1949. pà pè agi aquel estubiere, ó huviere estado
1950. pàpè ayaac nosotros estubieremos, ó huvieremos estado
1951. pa pè ayacà ay vosotros estubiereis, ó huviereis estado
1952. pà pè Łic agi aquellos estubieren, ó huvieren estado
1953. (see Appendix 3)
1954. (see Appendix 3)
1955. (see Appendix 3)
1956. upù pararse
1957. (see Appendix 3)
1958. (see Appendix 3)
1959. (see Appendix 3)
1960. ayaan a estar
1961. (see Appendix3)
1962. guena qui agi el que està, ó estaba
1963. (see Appendix 3)
1964. (see Appendix 3)
1965. guaszàta entrar
1966. tà venír
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 guasztà yo entré
1975. ca guasztà tu entraste
1976. guasztà 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. uɛa estar executando, ó haciendo aquello
1986. yguitzi oir
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. ɛaù
2001. ɛaùn
2002. szvèrve
2003. szurven
2004. piri
2005. piriin
2006. pulaguàn
2007. púla Łan
2008. màra descansar
2009. ygui ahogarse
2010. (see Appendix 3)
2011. tai,
2012. yszàca, beber
2013. yszcàn
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)
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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. amaszvequí también
2048. acanszvequí también
2049. nagszvequí también
2050. acú i r
2051. acuŁa ir preterito
2052. acuguà ir preterito
2053. acùya ir imperativo
2054. acùquí ir supino
2055. acuqui andar, ó pasear
2056. acuquiŁa, preterito andar
2057. acuquígua preterito andar
2058. acuquíya imperativo andar
2059. aliya manifestar, demonstrar, ó enseñar
2060. aliyan preterito manifestar, demonstrar, ó enseñar
2061. aliyaŁan preterito manifestar, demonstrar, ó enseñar
2062. alíyaguàn preterito manifestar, demonstrar, ó enseñar
2063. aliya imperativo manifestar, demonstrar, ó enseñar
2064. aliyáqui supino manifestar, demonstrar, ó enseñar
2065. andà vamos; defectivo
2066. andamaŁtà vamonos; defectivo
2067. apàla abrir
2068. aplán preterito abrir
2069. aplaŁan preterito abrir
2070. aplagùan preterito abrir
2071. apla imperativo abrir
2072. apláqui supino abrir
2073. apatà poder; defectivo
2074. ara embiar
2075. aràn preterito embiar
2076. araŁan preterito embiar
2077. araguán preterito embiar
2078. ara imperativo embiar
2079. aráqui supino embiar
2080. araqui mirar
2081. araquin preterito mirar
2082. araquiŁan preterito mirar
2083. araquiguan preterito mirar
2084. araquíya imperativo mirar
2085. araqui supino mirar
2086. ayà estar; anomalo
2087. ayù tener, haver; defectivo
2088. cà particula significativa para ir, ó llevar
2089. ɛaataa acostarse
2090. ɛataŁá preterito acostarse
2091. ɛataguán preterito acostarse
2092. ɛatáya imperativo acostarse
2093. cka ɛára ponerse en quatro pies

2094. cka ɛrán preterito ponerse en quatro pies
2095. cka ɛraŁá preterito ponerse en quatro pies
2096. cka ɛraguan preterito ponerse en quatro pies
2097. an cka ɛrá preterito ponerse en quatro pies
2098. cka ɛráya imperativo ponerse en quatro pies
2099. cáma abrazar, ó cargar en brazos
2100. camaan preterito abrazar, ó cargar en brazos
2101. camaŁan preterito abrazar, ó cargar en brazos
2102. camaguàn preterito abrazar, ó cargar en brazos
2103. cáma imperativo abrazar, ó cargar en brazos
2104. camáqui supino abrazar, ó cargar en brazos
2105. cáma apadrinar bautismo
2106. camaan preterito apadrinar bautismo
2107. camaŁan preterito apadrinar bautismo
2108. camaguán preterito apadrinar bautismo
2109. cáma imperativo apadrinar bautismo
2110. camàqui supino apadrinar bautismo
2111. ɛata poner
2112. ɛataan preterito poner
2113. ɛataŁán preterito poner
2114. ɛataguán preterito poner
2115. ɛata imperativo poner
2116. ɛataqui supino poner
2117. cagui llorar
2118. caguín preterito llorar
2119. caguiŁan preterito llorar
2120. caguiguán preterito llorar
2121. cagui imperativo llorar
2122. caguíqui supino llorar
2123. caguíɛi gritar
2124. caguiɛin preterito gritar
2125. cagui ɛiŁan preterito gritar
2126. cagui ɛiguan preterito gritar
2127. cagui ɛiya imperativo gritar
2128. cagui ɛi supino gritar
2129. ckáu coser cosas de comer
2130. ckáun preterito coser cosas de comer
2131. ckauŁán preterito coser cosas de comer
2132. ckauguan preterito coser cosas de comer
2133. ckáu imperativo coser cosas de comer
2134. ckauqui supino coser cosas de comer
2135. ɛagui lazar, ó enredar
2136. ɛaguín preterito lazar, ó enredar
2137. ɛaguiŁán preterito lazar, ó enredar
2138. ɛaguiguán preterito lazar, ó enredar
2139. ɛagui imperativo lazar, ó enredar
2140. ɛaguiqui supíno lazar, ó enredar
2141. cayi vender
2142. cayín preterito vender
2143. cayiŁan, preterito vender
2144. cayiguán preterito vender
2145. cayi imperativo vender
2146. cayiqui supino vender
2147. ckirgui escoger
2148. ckirguín preterito escoger
2149. ckirguiŁan, preterito escoger
2150. ckirguiguán preterito escoger
2151. ckirgui imperativo escoger
2152. ckirguíqui supino escoger
2153. ckis ɛu sacar niguas
2154. ckis ɛuun preterito sacar niguas
2155. ckis ɛuŁan preterito sacar niguas
2156. ckis ɛuguan preterito sacar niguas
2157. ckis ɛu imperativo sacar niguas
2158. ckis ɛuqui supino sacar niguas
2159. ɛocama hincarse
2160. ɛocmà preterito hincarse
2161. ɛocmaŁa preterito hincarse
2162. ɛocmaya imperativo hincarse
2163. ɛoŁco desocupar
2164. ɛoŁcón preterito desocupar
2165. ɛoŁco imperativo desocupar
2166. ɛólo desollar, ó quitar el vestido
2167. ɛolon preterito desollar, ó quitar el vestido
2168. ɛoloŁán preterito desollar, ó quitar el vestido
2169. ɛologuán preterito desollar, ó quitar el vestido
2170. ɛolo imperativo desollar, ó quitar el vestido
2171. ɛoloquí supino desollar, ó quitar el vestido
2172. coye visitar
2173. coyèn preterito visitar
2174. coyeŁán preterito visitar
2175. coyeguán preterito visitar
2176. coye imperativo visitar
2177. coyeque supìno visitar
2178. cúnu comprar
2179. cunún preterito comprar
2180. cunuŁá preterito comprar
2181. cunuguàn preterito comprar
2182. cunu imperativo comprar
2183. cunúqui supino comprar
2184. cuurù juir
2185. cuurù preterito juir
2186. curuŁà preterito juir
2187. curuguà preterito juir
2188. cùrùya imperativo juir
2189. curúya andar de priesa, ó correr; defectivo
2190. chèŁna desbaratar
2191. cheŁnaan preterito desbaratar
2192. cheŁnaŁan preterito desbaratar
2193. cheŁnaguán preterito desbaratar
2194. cheŁna imperativo desbaratar
2195. chichí exonerar el vientre
2196. chichiŁá preterito exonerar el vientre
2197. chichíguan preterito exonerar el vientre
2198. chichiyá imperativo exonerar el vientre
2199. chichiquí supino exonerar el vientre

2200. choo batir chocolate
2201. choón preterito batir chocolate
2202. choóŁan preterito batir chocolate
2203. chooguán preterito batir chocolate
2204. choo imperativo batir chocolate
2205. choóqué supino batir chocolate
2206. chua júcu golpear, aporrear
2207. ɛvenɔequi alegrarse
2208. ɛvenɔequiŁá preterito alegrarse
2209. ɛvenɔequiguan preterito alegrarse
2210. ɛvenɔequiya imperativo alegrarse
2211. ɛvenɔequi supino alegrarse
2212. ckʋersza peynar
2213. ckʋerszán preterito peynar
2214. ckʋerszaŁan preterito peynar
2215. ckʋerszaguan preterito peynar
2216. ckʋerszá imperativo peynar
2217. ckʋerszaya imperativo peynar
2218. ckʋerszaqui supino peynar
2219. ckʋeri arrancar
2220. ckʋerin preterito arrancar
2221. ckʋeriŁán preterito arrancar
2222. ckʋeríguan preterito arrancar
2223. ckʋeri imperativo arrancar
2224. ckʋeriquí supino arrancar
2225. cʋegua prestar
2226. cʋeguaan preterito prestar
2227. cʋeguaŁaan preterito prestar
2228. cʋeguaguaan preterito prestar
2229. cʋegua imperativo prestar
2230. ckʋeguya secar
2231. ckʋeguyaan preterito secar
2232. ckʋeguyaŁan preterito secar
2233. ckʋeguyaguan preterito secar
2234. ckʋeguya imperativo secar
2235. ɛvɛrʋe ajustar, completar
2236. ɛvɛrʋén preterito ajustar, completar
2237. ɛvɛrʋeŁan preterito ajustar, completar
2238. ɛvɛrʋeguàn preterito ajustar, completar
2239. ɛvɛrʋe imperativo ajustar, completar
2240. ɛvɛtʋe medír
2241. ɛvɛtʋén preterito medír
2242. ɛvɛtʋeŁan preterito medír
2243. ɛvɛtʋeguán preterito medír
2244. ɛvɛtʋe imperativo medír
2245. ɛvɛtʋequi supino medír
2246. ɛvɛya pepenar
2247. ɛvɛyaan preterito pepenar
2248. ɛvɛyáŁan preterito pepenar
2249. ɛvɛyaguaan preterito pepenar
2250. ɛvɛya imperativo pepenar
2251. eŁama prestar la persona como apoderado para alguna diligencia
2252. eŁmán preterito prestar la persona
2253. eŁma Łán preterito prestar la persona
2254. eŁmaguan preterito prestar la persona
2255. eŁgua imperativo prestar la persona
2256. ema coser cosas de costuras
2257. emaan preterito coser cosas de costuras
2258. emaŁa, preterito coser cosas de costuras
2259. emaguán preterito coser cosas de costuras
2260. ema imperativo coser cosas de costuras
2261. emáya imperativo coser cosas de costuras
2262. emaqui supino coser cosas de costuras
2263. epeŁe temer
2264. epleŁa preterito temer
2265. epleguán preterito temer
2266. eple ímperativo temer
2267. epleya ímperativo temer
2268. eréŁa espantar
2269. ereŁán preterito espantar
2270. ereŁaŁan preterito espantar
2271. ereŁaguan preterito espantar
2272. ereŁa imperativo espantar
2273. erŁeque supìno espantar
2274. erŁeque espantarse
2275. erŁequeŁá preterito espantarse
2276. erŁequè preterito espantarse
2277. erŁequéya imperativo espantarse
2278. etaca tapiscar
2279. etcán preterito tapiscar
2280. etcaŁan preterito tapiscar
2281. etcaguán preterito tapiscar
2282. etca imperativo tapiscar
2283. etcaya imperativo tapiscar
2284. etcaqui supino tapiscar
2285. di haver; defectivo
2286. gi decír; defectivo
2287. giŁán preterito decír; defectivo
2288. giri amolar, ó raspar
2289. giriin preterito amolar, ó raspar
2290. giriŁan preterito amolar, ó raspar
2291. giriguan preterito amolar, ó raspar
2292. giri imperativo amolar, ó raspar
2293. giriqui supino amolar, ó raspar
2294. girquí menear cosas de comida, ó rebolver algunas cosas
2295. girquin preterito menear cosas de comida
2296. girquiŁán preterito menear cosas de comida
2297. girquiguaan preterito menear cosas de comida
2298. girqui imperativo menear cosas de comida
2299. giru lamer
2300. giruún preterito lamer
2301. giruŁán preterito lamer
2302. giruguaan preterito lamer
2303. giru imperativo lamer
2304. gú ir; defectivo
2305. an guŁa preterito ir; defectivo
2306. guaca irse; anomalo
2307. guacá preterito irse; anomalo
2308. guaŁá írse; anomalo
2309. guaŁa irse; anomalo
2310. guaaquí jugar
2311. guaquiŁá preteríto jugar
2312. guaquiya imperativo jugar
2313. guaszaɛo tirar con piedras
2314. guaszcuun preterito tirar con piedras
2315. guaszcuŁan preterito tirar con piedras
2316. guaszcuguan preterito tirar con piedras
2317. guaszcu imperatívo tirar con

		piedras
2318.	guaszcuqui	supino tirar con piedras
2319.	guaszaŁi	meter, ó ponerse el vestido
2320.	guaszaŁin	preterito meter, ó ponerse el vestido
2321.	guaszaŁiŁán	preterito meter, ó ponerse el vestido
2322.	guaszaŁiguaan	preterito meter, ó ponerse el vestido
2323.	guaszaŁi	imperativo meter, ó ponerse el vestido
2324.	guaszaŁiqui	supíno meter, ó ponerse el vestido
2325.	guaszata	entrar
2326.	guaszta	preterito entrar
2327.	guasztaguá	preterito entrar
2328.	guasztáya	imperativo entrar
2329.	guara	enrroyar
2330.	guaraan	preterito enrroyar
2331.	guaraŁán	preterito enrroyar
2332.	guaraguaan	preterito enrroyar
2333.	guara	imperativo enrroyar
2334.	guaya	deservar
2335.	guayaan	preterito deservar
2336.	guayaŁán	preterito deservar
2337.	guayaguaan	preterito deservar
2338.	guaya	imperativo deservar
2339.	guayáqui	supino deservar
2340.	gueseque	botar, ó despreciar
2341.	guésquén	preterito botar, ó despreciar
2342.	guesqueŁan	preterito botar, ó despreciar
2343.	guesqueguaan	preterito botar, ó despreciar
2344.	guesque	imperatívo botar, ó despreciar
2345.	guen	particula interogativa
2346.	guilíca	desnudar
2347.	guílican	preterito desnudar
2348.	guilicaŁán	preterito desnudar
2349.	guilicaguaan	preterito desnudar
2350.	guilíca	imperativo desnudar
2351.	guilicaqui	supíno desnudar
2352.	guimucán	dejar; defectivo
2353.	guiri ɛi	hablar
2354.	guiriɛin	preterito hablar
2355.	guiriɛiŁán	preterito hablar
2356.	guiriɛiguaan	preterito hablar
2357.	guiriɛi	imperativo hablar
2358.	guiri ɛiya	imperativo hablar
2359.	guiri ɛiqui	supino hablar
2360.	guíta	tender al sol
2361.	guitaan	preterito tender al sol
2362.	guitaŁán	preterito tender al sol
2363.	guitaguaan	preterito tender al sol
2364.	guita	imperatívo tender al sol
2365.	guita	cazar, tirar con escopeta, ó flecha
2366.	guitaan	preterito cazar
2367.	guitaŁán	preterito cazar
2368.	guitaguaan	preterito cazar
2369.	guita	imperativo cazar
2370.	guitxu	azotar
2371.	guitxuun	preterito azotar
2372.	guitxuŁán	preterito azotar
2373.	guitxuguaan	preterito azotar
2374.	guitxu	imperativo azotar
2375.	guiszu	azotar
2376.	guiszuun	preterito azotar
2377.	guiszuŁán	preterito azotar
2378.	guiszuguaan	preterito azotar
2379.	guiszu	imperativo azotar
2380.	gʋeʋerʋe	enbolver
2381.	gʋerʋeʋen	preterito enbolver
2382.	gʋerʋeŁán	preterito enbolver
2383.	gʋerʋeguaan	preterito enbolver
2384.	gʋeʋerʋe	imperativo enbolver
2385.	ygua	tortear
2386.	iguaan	preterito
2387.	iguaŁán	preterito
2388.	iguaguaan	preterito
2389.	igua	imperativo
2390.	iguaya	imperativo
2391.	Íguatxa	hilar
2392.	úiszaan	preterito hilar
2393.	úiszaŁán	preterito hilar
2394.	úiszaguaan	preterito hilar
2395.	úiszaya	imperativo hilar
2396.	Ígui	ahogarse en el agua
2397.	igui	preterito ahogarse en el agua
2398.	iguíya	imperativo ahogarse en el agua
2399.	iguitxi	oir
2400.	úiszin	preterito oir
2401.	úiszíŁán	preterito oir
2402.	úisziguaan	preterito oir
2403.	úiszi	imperativo oir
2404.	úisziya	imperativo oir
2405.	úisziqui	supino oir
2406.	imá	decir
2407.	imaan	preterito decir
2408.	imaŁán	preterito decir
2409.	imaguaan	preterito decir
2410.	ima	imperativo decir
2411.	ipala	bañar
2412.	iplaan	preterito bañar
2413.	iplaguaán	preterito bañar
2414.	iplaŁán	preterito bañar
2415.	ipla	imperativo bañar
2416.	ipala	bañarse
2417.	iplaŁá	preterito bañarse
2418.	iplaguá	preterito bañarse
2419.	iplaya	imperativo bañarse
2420.	iszaɛa	beber
2421.	iszcaan	preterito beber
2422.	iszcaŁán	preterito beber
2423.	iszcaguaan	preterito beber
2424.	iszcaya	imperativo beber
2425.	iszapa	salir de un lugar á otro
2426.	iszpaan	preterito salir de un lugar á otro
2427.	iszpáŁá	preterito salir de un lugar á otro
2428.	iszpaguà	preterito salir de un lugar á otro
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.	iszapiŁán	preterito sacar, ó quitar
2433.	iszapiguaan	preterito sacar, ó quitar

2434. iszapi imperativo sacar, ó quitar
2435. isziy estar despierto, ó vivo
2436. isziy preterito estar despierto, ó vivo
2437. isziyaŁán preterito estar despierto, ó vivo
2438. isziyaguaan preterito estar despierto, ó vivo
2439. isziya imperatívo estar despierto, ó vivo
2440. jaɔhʋe rascar
2441. jaɔhʋeʋen preterito rascar
2442. jaɔhʋeŁán preterito rascar
2443. jaɔhʋeguaan preterito rascar
2444. jaɔhʋe imperativo rascar
2445. jachʋe pepenar, ó recojer tierra ó basura
2446. jachʋeʋen preterito pepenar, ó recojer tierra ó basura
2447. jachʋeŁán preterito pepenar, ó recojer tierra ó basura
2448. jachʋeguaan preterito pepenar, ó recojer tierra ó basura
2449. jachʋe imperativo pepenar, ó recojer tierra ó basura
2450. jamaya madurar, dar cocimiento y sazonar la comida
2451. jamayaan preterito madurar, dar cocimiento
2452. jamayaŁán preterito madurar, dar cocimiento
2453. jamayaguaan preterito madurar, dar cocimiento
2454. jamáya imperativo madurar, dar cocimiento
2455. japa esperar
2456. japaan preterito esperar
2457. japaŁan preterito esperar
2458. japaguán preterito esperar
2459. japa imperativo esperar
2460. japaya ir delante de otro, ó pasar adelante
2461. japayaan preterito ir delante de otro, ó pasar adelante
2462. japayaŁan preterito ir delante de otro, ó pasar adelante
2463. japayaguan preterito ir delante de otro, ó pasar adelante
2464. japaya imperativo ir delante de otro, ó pasar adelante
2465. jarana enfermarse
2466. jarnaŁá preterito enfermarse
2467. jarnaguan preterito enfermarse
2468. jaraŁa tostar
2469. jaraŁán preterito tostar
2470. jaraŁaŁan preterito tostar
2471. jaraŁaguan preterito tostar
2472. jaraŁa imperativo tostar
2473. jaraŁaqui supino tostar
2474. jargüi rascar la tierra, ó escarbar
2475. jargüin preterito rascar la tierra
2476. jargüiŁan preterito rascar la tierra
2477. jarguiguan preterito rascar la tierra
2478. jargüi imperativo rascar la tierra
2479. jargui ɛi supino rascar la tierra
2480. jari hechar afuera á alguno, ó correrlo de un lugar a otro
2481. jariin preterito hechar afuera á alguno
2482. jariŁan preterito hechar afuera á alguno
2483. jariguán preterito hechar afuera á alguno
2484. jari ìmperatìvo hechar afuera á alguno
2485. jariqui supino hechar afuera á alguno
2486. jaúɛa vaciar
2487. jauɛán preterito vaciar
2488. jauɛaŁan preterito vaciar
2489. jauɛaguan preterito vaciar
2490. jauɛa imperativo vaciar
2491. jayápu recibir
2492. jaypún preterito recibir
2493. jaypuŁan preterito recibir
2494. jaypuguan preterito recibir
2495. jaypu imperativo recibir
2496. jayu limpiar, fregar, ó enjugar
2497. jayuun preterito limpiar, fregar, ó enjugar
2498. jayuŁaan preterito limpiar, fregar, ó enjugar
2499. jayuguaan preterito limpiar, fregar, ó enjugar
2500. jayu ìmperatìvo limpiar, fregar, ó enjugar
2501. jonóa cuidar, ó guardar
2502. jonoaan preterito cuidar, ó guardar
2503. jonóaŁaan preterito cuidar, ó guardar
2504. jonoaguaan preterito cuidar, ó guardar
2505. jonóa imperativo cuidar, ó guardar
2506. jonoo embrìagarse
2507. jonòŁaa preterito embrìagarse
2508. jonoguaan preterito embrìagarse
2509. jonóya imperativo embrìagarse
2510. jóro cuidar, ó tener
2511. joróon preterito cuidar, ó tener
2512. joroŁán preterito cuidar, ó tener
2513. joroguaan preterito cuidar, ó tener
2514. jóro ímperativo cuidar, ó tener
2515. juŁi resurar
2516. juŁin preterito resurar
2517. juŁiŁan preterito resurar
2518. juŁiguaan preterito resurar
2519. juŁi imperatívo resurar
2520. juŁiqui supìno resurar
2521. jumúɛa resistir, esforzarse, ó aguantar
2522. jumuɛan preterito resistir, esforzarse, ó aguantar
2523. jumuɛaŁan preterito resistir, esforzarse, ó aguantar
2524. jumuɛaguaan preterito resistir, esforzarse, ó aguantar
2525. jumuɛa imperativo resistir, esforzarse, ó aguantar
2526. juraɛi parir
2527. jura ɛín preterito parir
2528. jura ɛiŁan preterito parir
2529. juraɛiguan preterito parir
2530. juraɛi imperativo parir
2531. juraɛiya imperativo parir
2532. jurta desocar, ó dislocar

2533. jurtaan preterito desocar, ó dislocar
2534. jurtaŁan preterito desocar, ó dislocar
2535. jurtaguaan preterito desocar, ó dislocar
2536. jurta imperativo desocar, ó dislocar
2537. júta soplar
2538. jutaan, preterito soplar
2539. jutaŁan preterito soplar
2540. jutaguaan preterito soplar
2541. juta imperativo soplar
2542. jʋecka teger
2543. jʋeckaan preterito teger
2544. jʋeckaŁan preterito teger
2545. jʋeckaguaan preterito teger
2546. jʋecka imperativo teger
2547. jʋeckaya imperativo teger
2548. jʋela vaciar agua del cantaro
2549. jʋelaan preterito vaciar agua del cantaro
2550. jʋelaŁan preterito vaciar agua del cantaro
2551. jʋelaguaan preterito vaciar agua del cantaro
2552. jʋela imperativo vaciar agua del cantaro
2553. jʋemʋe remedar
2554. jʋemʋeʋen preterito remedar
2555. jʋemʋeŁan preterito remedar
2556. jʋemʋeguaan preterito remedar
2557. jʋemʋe imperativo remedar
2558. jʋenʋe saber
2559. jʋenʋeʋen preterito saber
2560. jʋenʋeŁan preterito saber
2561. jʋenʋeguaan preterito saber
2562. jʋenʋe imperativo saber
2563. jʋenʋeɛa probar, hacer experiencia, ó analysýs de alguna cosa
2564. jʋenʋeɛaan preterito probar, hacer experiencia
2565. jʋenʋeɛaŁan preterito probar, hacer experiencia
2566. jʋenʋeɛaguaan preterito probar, hacer experiencia
2567. jʋenʋeɛa imperativo probar, hacer experiencia
2568. jʋeya jachear
2569. jʋéyaan preterito jachear
2570. jʋeyaŁaan preterito jachear
2571. jʋeyaguaan preterito jachear
2572. jʋeya imperativo jachear
2573. Łapa ir en por de otro, como siguìendolo de cerca
2574. Łapaan preterito ir en por de otro
2575. ŁapaŁán preterito ir en por de otro
2576. Łapaguaan preterito ir en por de otro
2577. Łapa imperativo ir en por de otro
2578. Łapaya imperativo ir en por de otro
2579. Łapi cargar al hombro
2580. Łapini preterito cargar al hombro
2581. ŁapiŁan preterito cargar al hombro
2582. Łapiguaan preterito cargar al hombro
2583. Łapi imperativo cargar al hombro
2584. Łapi ɛi supino cargar al hombro
2585. Łaarà subir personalmente
2586. Łaaràn preterito subir personalmente
2587. Łaraguaan preterito subir personalmente
2588. Łaráya imperativo subir personalmente
2589. Łaráya subir algo de abajo a arriba
2590. Łarayaan preterito subir algo de abajo a arriba
2591. ŁarayaŁaan preterito subir algo de abajo a arriba
2592. Łarayaguaan preterito subir algo de abajo a arriba
2593. Łara imperativo subir algo de abajo a arriba
2594. Łaraya imperativo subir algo de abajo a arriba
2595. Łiɛa vajarse personalmente
2596. Líɛa preterito vajarse personalmente
2597. ŁiɛaŁaa preterito vajarse personalmente
2598. Łiɛaguaan preterito vajarse personalmente
2599. Łiɛáya imperativo vajarse personalmente
2600. Łiɛaya vajar otra cosa de arriba abajo
2601. Łícayaan preterito vajar otra cosa
2602. ŁicayaŁaan preterito vajar otra cosa
2603. Łicayaguaan preterito vajar otra cosa
2604. Łicaya imperativo vajar otra cosa
2605. Łocama hervir el agua
2606. Łocmaan preterito hervir el agua
2607. Łocmajaan preterito hervir el agua
2608. Łocmaguaan preterito hervir el agua
2609. Łócma imperativo hervir el agua
2610. Łocáma supino hervir el agua
2611. Łomeeca entibiar
2612. Łomecaan preterito entibiar
2613. Łomecaguaan preterito entibiar
2614. ŁomecaŁaan preterito entibiar
2615. Łomeeca imperativo entibiar
2616. Łʋeɛʋe alcanzar
2617. Łʋeɛʋeʋen preterito alcanzar
2618. ŁʋeɛʋeŁaan preterito alcanzar
2619. Łʋeɛʋeguaan preterito alcanzar
2620. Łʋeɛʋe imperativo alcanzar
2621. Łʋecʋe hallar lo perdido, ó lo que se busca
2622. Łʋecʋeʋen preterito hallar lo perdido
2623. ŁʋecʋeŁaan preterito hallar lo perdido
2624. Łʋecʋeguaan preterito hallar lo perdido
2625. Łʋecʋe imperativo hallar lo perdido
2626. Łʋecʋenʋe creer, ó entender
2627. Łʋecnʋeʋen preterito creer, ó entender
2628. ŁʋecnʋeŁaan preterito creer, ó entender
2629. Łʋecnʋeguaan preterito creer, ó entender
2630. Łʋecnʋe imperativo creer, ó entender
2631. Łʋepʋe cargar por detras
2632. Łʋepʋeʋen preterito cargar por detras
2633. ŁʋepʋeŁaan preterito cargar por detras

2634. Łvepveguaan preterito cargar por detras
2635. Łvepve imperativo cargar por detras
2636. Łvepvéqui supino cargar por detras
2637. Łvéta arrimar
2638. Łvetaan preterito arrimar
2639. ŁvetaŁaan preterito arrimar
2640. Łvetaguaan preterito arrimar
2641. Łveta imperativo arrimar
2642. máa su; párticula posesíva
2643. mára descansar
2644. maarà preterito descansar
2645. maraŁaa preterito descansar
2646. maraguaa preterito descansar
2647. maara imperativo descansar
2648. maaraya imperativo descansar
2649. maaráqui supino descansar
2650. mára abreviar, ò darse priesa; defectivo
2651. matxà pegar
2652. matxaan preterito pegar
2653. matxaŁaan preterito pegar
2654. matxáguaan preterito pegar
2655. matxà imperativo pegar
2656. matxi freir
2657. matxiin preterito freir
2658. matxiŁaan preterito freir
2659. matxiguaan preterito freir
2660. matxi imperativo freir
2661. matxiqui supino freir
2662. maszi freir
2663. masziin preterito freir
2664. masziŁaan preterito freir
2665. masziguaan preterito freir
2666. maszi imperativo freir
2667. maszíya imperativo freir
2668. mére romper
2669. mereen preterito romper
2670. mereŁaan preterito romper
2671. mereguaan preterito romper
2672. mére imperativo romper
2673. meereque supino romper
2674. móro mojar
2675. moroon preterito mojar
2676. moroŁaan preterito mojar
2677. moroguaan preterito mojar
2678. móro imperativo mojar
2679. moróque supino mojar
2680. mooroo estar mojado
2681. moorò preterito estar mojado
2682. mòroŁà preterito estar mojado
2683. mooroguaà preterito estar mojado
2684. muuchù cansarse
2685. muuchù preterito cansarse
2686. muuchuguaan preterito cansarse
2687. muuchuya imperativo cansarse
2688. muuchuqui supino cansarse
2689. mvevè tomar; defectivo
2690. mvɛa trabajar, ó servir
2691. mvɛaan preterito trabajar, ó servir
2692. mvɛaguaan preterito trabajar, ó servir
2693. mvɛa imperativo trabajar, ó servir
2694. mvɛaya imperativo trabajar, ó servir
2695. mvemve cantar
2696. mvemvevɛn preterito cantar
2697. mvemvɛŁaà preterito cantar
2698. mvemveguaan preterito cantar
2699. mvemveya imperativo cantar
2700. mvemvequi supino cantar
2701. mvetxa enterrar
2702. mvetxaan preterito enterrar
2703. mvetxaŁaan preterito enterrar
2704. mvetxaguaan preterito enterrar
2705. mvetxa imperativo enterrar
2706. mvetxáqui supino enterrar
2707. mvesza enterrar
2708. mveszaan preterito enterrar
2709. mveszaŁaan preterito enterrar
2710. mveszaguaan preterito enterrar
2711. mvesza imperativo enterrar
2712. mveszaya imperativo enterrar
2713. mveszáqui supino enterrar
2714. mvetaŁcki soñar
2715. mvetaŁckin preterito soñar
2716. mvetaŁckiŁaan preterito soñar
2717. mvetaŁcki imperativo soñar
2718. mvetaŁckiya imperativo soñar
2719. mveya ayudar
2720. mveyaan preterito ayudar
2721. mveyaŁaan preterito ayudar
2722. mveyaguaan preterito ayudar
2723. mveya imperativo ayudar
2724. nama dolerse, ó sentir; defectivo
2725. namaŁaa preterito dolerse, ó sentir; defectivo
2726. nani soltar
2727. naniin preterito soltar
2728. naniŁaan preterito soltar
2729. naniguaan preterito soltar
2730. nani imperativo soltar
2731. naapè venir; defectivo
2732. nariŁá enseñar
2733. nariŁaan preterito enseñar
2734. nariŁaguaan preterito enseñar
2735. nariŁaŁaan preterito enseñar
2736. nariŁa imperativo enseñar
2737. nariŁqui aprehender
2738. nariŁquiŁaà preterito aprehender
2739. nariŁquiguaan preterito aprehender
2740. nariŁquiya imperativo aprehender
2741. netaca rempujar
2742. netcaan preterito rempujar
2743. nétcaŁaan preterito rempujar
2744. netcaguaan preterito rempujar
2745. nétca imperativo rempujar
2746. niguá pedir
2747. niguaan preterito pedir
2748. niguaŁaan preterito pedir
2749. niguaguaan preterito pedir
2750. nigua imperativo pedir
2751. niguaszaà querer; anómalo
2752. niguaanszaa preterito querer; anómalo
2753. niguaŁaanszaa preterito querer; anómalo
2754. niguaguaanszaa preterito querer; anómalo
2755. nuca dar
2756. nucaan preterito dar
2757. nucaŁaan preterito dar
2758. nucaguaan preterito dar
2759. nuca imperativo dar
2760. níci rempujar poco á poco
2761. nuszucu ahumar
2762. nuszcún preterito ahumar

2763. nuszcuŁaan preterito ahumar
2764. nuszcuguaan preterito ahumar
2765. núszcu imperativo ahumar
2766. nuszcuquí supino ahumar
2767. nɒema comer
2768. nɒemaan preterito comer
2769. nɒemaŁaan preterito comer
2770. nɒemaguaan preterito comer
2771. nɒemaya imperativo comer
2772. nɒemaja dar de comer
2773. nɒemajaan preterito dar de comer
2774. nɒemajaŁaan preterito dar de comer
2775. nɒemajaguaan preterito dar de comer
2776. nɒemaja imperativo dar de comer
2777. nɒemajaqui supino dar de comer
2778. orómo recoger, ó pepenar
2779. ormoon preterito recoger, ó pepenar
2780. ormoŁaan preterito recoger, ó pepenar
2781. ormoguaan preterito recoger, ó pepenar
2782. ormo imperativo recoger, ó pepenar
2783. ormooque supino recoger, ó pepenar
2784. óroóca repicar las campanas
2785. orocaan preterito repicar las campanas
2786. orocaŁaan preterito repicar las campanas
2787. orocaguaan preterito repicar las campanas
2788. oróca imperativo repicar las campanas
2789. orocaqui supino repicar las campanas
2790. oròja fiar
2791. orojaan preterito fiar
2792. orojaŁaan preterito fiar
2793. orójaguaan preterito fiar
2794. orója imperativo fiar
2795. orójaqui supino fiar
2796. Óto serrar, ó tapar
2797. otón preterito serrar, ó tapar
2798. otoŁaan preterito serrar, ó tapar
2799. otoguaan preterito serrar, ó tapar
2800. oto imperativo serrar, ó tapar
2801. packa clavar
2802. packaan preterito clavar
2803. packaŁaan preterito clavar
2804. packaguaan preterito clavar
2805. packa imperativo clavar
2806. pauɛuszaja mentir
2807. paɛunszaja preterito mentir
2808. paɛuguanszaja preterito mentir
2809. paɛuszajaca imperativo mentir
2810. pajata pagar
2811. pagtaan preterito pagar
2812. pagtaŁaan preterito pagar
2813. pagtaguaan preterito pagar
2814. pagta imperativo pagar
2815. pára buscar
2816. paraan preterito buscar
2817. paraŁaan preterito buscar
2818. paraguaan preterito buscar
2819. pára imperativo buscar
2820. paraan no querer, ó no haver
2821. paríca menester á otro; defectivo, buscar que no tiene mas de las tres personas de singular del presente de indicativo
2822. paricaan calentar
2823. paricaŁaan preterito calentar
2824. paricaguaan preterito calentar
2825. paríca preterito calentar
2826. paraguíriqui imperativo calentar
2827. paranguiriqui pleitar
2828. paraŁan guiriqui preterito pleitar
2829. paraguaan guiriqui preterito pleitar
2830. paraguiriqui preterito pleitar
2831. paátaa imperativo pleitar
2832. pataszáma poder; anomalo ó defectivo
2833. patanszáma pensar, ó acordarse
2834. pataguánszáma preterito pensar, ó acordarse
2835. pataŁanszáma preterito pensar, ó acordarse
2836. pataszáma preterito pensar, ó acordarse
2837. paaszí imperativo pensar, ó acordarse
2838. paszin moler
2839. pasziŁaan preterito moler
2840. pasziguan preterito moler
2841. paszi preterito moler
2842. pasziya imperativo moler
2843. patxi imperativo moler
2844. patxin moler
2845. patxiŁaan preterito moler
2846. patxiguaan preterito moler
2847. patxi preterito moler
2848. pè imperativo moler
2849. peŁana particula para futuro y significativa de venir
2850. peŁnaan resbalar
2851. peŁnaŁaan preterito resbalar
2852. peŁnaguaan preterito resbalar
2853. peŁna preterito resbalar
2854. peŁnaya imperativo resbalar
2855. pelo imperativo resbalar
2856. peloon descallar, ó descascarar
2857. peloŁan preterito descallar, ó descascarar
2858. peloguaan preterito descallar, ó descascarar
2859. pelo preterito descallar, ó descascarar
2860. pelóque imperativo descallar, ó descascarar
2861. peŁteme supino descallar, ó descascarar
2862. peŁtemè bolver, ó boltearse
2863. peŁtemeŁà preterito bolver, ó boltearse
2864. peŁtemeŁaan preterito bolver, ó boltearse
2865. peŁtemeguaan preterito bolver, ó boltearse
2866. peŁteméya preterito bolver, ó boltearse
preterito bolver, ó boltearse
imperativo bolver, ó boltearse

2867. piŁca componer, adornar, ó remudar
2868. piŁcan preterito componer, adornar, ó remudar
2869. piŁcaŁaan preterito componer, adornar, ó remudar
2870. piŁcaguaan preterito componer, adornar, ó remudar
2871. pìŁca imperativo componer, adornar, ó remudar
2872. pipiri desmotar
2873. piprin preterito desmotar
2874. pipriŁán preterito desmotar
2875. pipriguaan preterito desmotar
2876. pipríya imperativo desmotar
2877. pipríqui supino desmotar
2878. piri vèr
2879. piriin preterito vèr
2880. piriŁaan preterito vèr
2881. piriguan preterito vèr
2882. piri imperativo vèr
2883. piríqui supino vèr
2884. pitxu exprimir
2885. pitxún preterito exprimir
2886. pitxuŁan preterito exprimir
2887. pitxuguaan preterito exprimir
2888. pitxu imperativo exprimir
2889. pitxúqui supino exprimir
2890. piszáɛu despicar, ó despuntar
2891. piszɛún preterito despicar, ó despuntar
2892. piszɛuŁaan preterito despicar, ó despuntar
2893. piszɛuguaan preterito despicar, ó despuntar
2894. piszɛu imperativo despicar, ó despuntar
2895. pogmóque cegar
2896. pogmóquè preterito cegar
2897. pogmoqueŁa preterito cegar
2898. pogmoquéya imperativo cegar
2899. poò asombrar
2900. poon preterito asombrar
2901. poòŁaan preterito asombrar
2902. pooguaan preterito asombrar
2903. poò imperativo asombrar
2904. poòque supino asombrar
2905. poɛo quebrar
2906. poɛon preterito quebrar
2907. poɛoŁan preterito quebrar
2908. poɛoguaan preterito quebrar
2909. póɛo imperativo quebrar
2910. porána rebentar
2911. pornaan preterito rebentar
2912. pornaŁaan preterito rebentar
2913. pornaguaan preterito rebentar
2914. porna imperativo rebentar
2915. posana brincar, saltar
2916. posnaan preterito brincar, saltar
2917. posnaŁán preterito brincar, saltar
2918. posnaguaan preterito brincar, saltar
2919. posnaya imperativo brincar, saltar
2920. posnáqui supino brincar, saltar
2921. posócko ensartar, ó engarzar
2922. posckon preterito ensartar, ó engarzar
2923. posckoŁan preterito ensartar, ó engarzar
2924. posckoguan preterito ensartar, ó engarzar
2925. poscko imperativo ensartar, ó engarzar
2926. posckóque supino ensartar, ó engarzar
2927. posza labar
2928. poszaan preterito labar
2929. poszaŁaan preterito labar
2930. poszaguaan preterito labar
2931. posza imperativo labar
2932. poszaya imperativo labar
2933. potxa labar
2934. potxaan preterito labar
2935. potxaŁan preterito labar
2936. potxaguaan preterito labar
2937. potxa imperativo labar
2938. poyoŁque reconciliar
2939. poyol ɛè preterito reconciliar
2940. poyol ɛeŁá preterito reconciliar
2941. poyol ɛeguán preterito reconciliar
2942. poyol ɛéya imperativo reconciliar
2943. púla hazer
2944. pulaan preterito hazer
2945. pulaŁaan preterito hazer
2946. púlaguaan preterito hazer
2947. pula imperativo hazer
2948. puláqui supino hazer
2949. puŁi limpiar, fregar etc.
2950. puli limpiar, fregar etc.
2951. pulin preterito limpiar, fregar etc.
2952. puŁin preterito limpiar, fregar etc.
2953. puliŁan preterito limpiar, fregar etc.
2954. puliguaan preterito limpiar, fregar etc.
2955. puŁi imperativo limpiar, fregar etc.
2956. puli imperativo limpiar, fregar etc.
2957. puri responder
2958. puriin preterito responder
2959. púriŁan preterito responder
2960. puriguaan preterito responder
2961. puri imperativo responder
2962. puríya imperativo responder
2963. purí encontrar
2964. purín preterito encontrar
2965. puriŁán preterito encontrar
2966. puriguaan preterito encontrar
2967. purí imperativo encontrar
2968. puriya soplar el fuego
2969. puriyaan preterito soplar el fuego
2970. puriyaŁán preterito soplar el fuego
2971. puriyaguaan preterito soplar el fuego
2972. puriya imperativo soplar el fuego
2973. púriqui casarse
2974. púriqui preterito casarse
2975. puriquiŁá preterito casarse
2976. puriquiguaan preterito casarse
2977. puriquíya imperativo casarse
2978. putxu ordeñar, ó expremir
2979. putxún preterito ordeñar, ó expremir
2980. putxuŁán preterito ordeñar, ó

		expremir
2981.	putxuguaan	preterito ordeñar, ó expremir
2982.	putxu	imperativo ordeñar, ó expremir
2983.	pʋeckʋe	tentar
2984.	pʋeckʋeʋen	preterito tentar
2985.	pʋeckʋeŁán	preterito tentar
2986.	pʋeckʋeguaan	preterito tentar
2987.	pʋeckʋe	imperativo tentar
2988.	pʋeŁta	flechar, ó dar de estocadas, ó tastasos
2989.	pʋeŁtán	preterito flechar, ó dar de estocadas
2990.	pʋeŁtaŁán	preterito flechar, ó dar de estocadas
2991.	pʋeŁtaguaan	preterito flechar, ó dar de estocadas
2992.	pʋeŁta	imperativo flechar, ó dar de estocadas
2993.	pʋeŁtáya	imperativo flechar, ó dar de estocadas
2994.	pʋeŁtaqui	supino flechar, ó dar de estocadas
2995.	pʋépʋe	llenar, ó inchar
2996.	pʋépʋeʋen	preterito llenar, ó inchar
2997.	pʋépʋeŁan	preterito llenar, ó inchar
2998.	pʋépʋeguaan	preterito llenar, ó inchar
2999.	pʋépʋe	imperativo llenar, ó inchar
3000.	pʋelána	bríncar
3001.	pʋérʋé	hartarse
3002.	pʋerʋé	preterito hartarse
3003.	pʋerʋeguan	preterito hartarse
3004.	pʋerʋéya	imperativo hartarse
3005.	pʋésza	heder; anomalo
3006.	pʋeszaŁá	preterito heder
3007.	pʋeszaguán	preterito heder
3008.	pʋetxʋe	aumentar, ó hechar demas sobre otra cosa
3009.	pʋetxʋén	preterito aumentar
3010.	pʋetxʋeŁán	preterito aumentar
3011.	pʋetxʋeguán	preterito aumentar
3012.	pʋetxʋe	imperativo aumentar
3013.	quitxi	azár
3014.	ɛiszi	azár
3015.	quitxiin	preterito azár
3016.	ɛisziŁán	preterito azár
3017.	quitxiguaan	preterito azár
3018.	quitxi	imperativo azár
3019.	ɛiszi	imperativo azár
3020.	quitxu	trocar
3021.	quitxún	preterito trocar
3022.	quitxuŁán	preterito trocar
3023.	quitxuguaan	preterito trocar
3024.	quitxu	imperativo trocar
3025.	sacáya	levantar
3026.	sacayaan	preterito levantar
3027.	sacayaŁán	preterito levantar
3028.	sacayaguan	preterito levantar
3029.	sacaya	imperativo levantar
3030.	saŁáɛa	alzár, guardar, o levantar para arriba
3031.	saŁɛán	preterito alzár, guardar
3032.	saŁɛaŁán	preterito alzár, guardar
3033.	saŁɛaguaan	preterito alzár, guardar
3034.	saŁɛa	imperativo alzár, guardar
3035.	samu	coger
3036.	samuun	preterito coger
3037.	samuŁán	preterito coger
3038.	samuguaan	preterito coger
3039.	samu	imperativo coger
3040.	samuya	imperativo coger
3041.	samúqui	supino coger
3042.	saraŁɛi	enfriar
3043.	saraŁquín	preterito enfriar
3044.	saraŁquiŁan	preterito enfriar
3045.	saraŁquiguaan	preterito enfriar
3046.	saraŁqui	imperativo enfriar
3047.	saraŁquiya	imperativo enfriar
3048.	saraŁquiqui	supino enfriar
3049.	seŁè	cantearse, ó ponerse de lado; defectivo
3050.	seŁeya	imperativo cantearse
3051.	selíca	comulgar
3052.	selicaŁá	preterito comulgar
3053.	selicaguán	preterito comulgar
3054.	selicáya	imperativo comulgar
3055.	símí	apagar
3056.	simiin	preterito apagar
3057.	simiŁan	preterito apagar
3058.	simiguaan	preterito apagar
3059.	simi	imperativo apagar
3060.	simíya	imperativo apagar
3061.	siquí	principiar
3062.	siquí	preterito principiar
3063.	siquiŁá	preterito principiar
3064.	siquíya	imperativo principiar
3065.	siraja	mofar, menospreciar
3066.	siraján	preterito mofar, menospreciar
3067.	sirajaguaan	preterito mofar, menospreciar
3068.	siraja	imperativo mofar, menospreciar
3069.	sirajàqui	supino mofar, menospreciar
3070.	sirú	abreviar; defectivo
3071.	siruya	imperativo abreviar
3072.	soyo	empezar
3073.	soyoon	preterito empezar
3074.	soyoguaan	preterito empezar
3075.	soyo	imperativo empezar
3076.	soyóque	supino empezar
3077.	suckù	atar
3078.	suckún	preterito atar
3079.	suckuŁan	preterito atar
3080.	suckuguaan	preterito atar
3081.	sucku	imperativo atar
3082.	suckuqui	supino atar
3083.	szaɛa	apadrinar matrimonio, ó llevar por delante á otros
3084.	szaɛaan	preterito apadrinar matrimonio
3085.	szaɛaŁan	preterito apadrinar matrimonio
3086.	szaɛaguaan	preterito apadrinar matrimonio
3087.	szaɛa	imperativo apadrinar matrimonio
3088.	szacatxa	hurtar
3089.	szacszaan	preterito hurtar
3090.	szacszaŁan	preterito hurtar
3091.	szacsza	imperativo hurtar
3092.	szaɛari	ahuyentar, espantar y

		correr animales
3093.	szaɛariin	preterito ahuyentar, espantar
3094.	szaɛariŁaan	preterito ahuyentar, espantar
3095.	szaɛariguaan	preterito ahuyentar, espantar
3096.	szaɛari	imperativo ahuyentar, espantar
3097.	szaczi	colar, ó cerrir
3098.	szaczin	preterito colar, ó cerrir
3099.	szacziŁan	preterito colar, ó cerrir
3100.	szacziguaan	preterito colar, ó cerrir
3101.	szaczi	imperativo colar, ó cerrir
3102.	szaczíya	imperativo colar, ó cerrir
3103.	szagú	sentarse
3104.	szagú	preterito sentarse
3105.	szaguŁa	preterito sentarse
3106.	szaguguaan	preterito sentarse
3107.	szaguya	imperativo sentarse
3108.	szaguya	sentar otra cosa, ó ponerla en alguna parte
3109.	szaguyaan	preterito sentar otra cosa
3110.	szaguyaŁán	preterito sentar otra cosa
3111.	szaguyaguan	preterito sentar otra cosa
3112.	szaguya	imperativo sentar otra cosa
3113.	szaŁquiya	componer, ó aliñar
3114.	szaŁɛiyán	preterito componer, ó aliñar
3115.	szaŁɛiyaŁan	preterito componer, ó aliñar
3116.	szaŁɛiyaguaan	preterito componer, ó aliñar
3117.	szaŁɛiya	imperativo componer, ó aliñar
3118.	szapári	desgranar
3119.	szaparíin	preterito desgranar
3120.	szaprin	preterito desgranar
3121.	szapariŁán	preterito desgranar
3122.	szapriŁán	preterito desgranar
3123.	szapariguán	preterito desgranar
3124.	szapriguaan	preterito desgranar
3125.	szapri	imperativo desgranar
3126.	szapari	imperativo desgranar
3127.	szapriya	imperativo desgranar
3128.	szapariya	imperativo desgranar
3129.	szárszi	regar, ó esparar el agua menudamente
3130.	szarszin	preterito regar, ó esparar
3131.	szarsziŁán	preterito regar, ó esparar
3132.	szarsziguán	preterito regar, ó esparar
3133.	szarszi	imperativo regar, ó esparar
3134.	szarsziya	imperativo regar, ó esparar
3135.	szata	estar haciendo, ó repitiendo una misma cosa
3136.	szataan	preterito estar haciendo, ó repitiendo
3137.	szataŁán	preterito estar haciendo, ó repitiendo
3138.	szataguan	preterito estar haciendo, ó repitiendo
3139.	szata	imperativo estar haciendo, ó repitiendo
3140.	szaguatxa	sembrar
3141.	szauszán	preterito sembrar
3142.	szauszaŁan	preterito sembrar
3143.	szauszaguán	preterito sembrar
3144.	szausza	imperativo sembrar
3145.	szauszaya	imperativo sembrar
3146.	szauszaqui	supino sembrar
3147.	szagüi	rascar
3148.	szaguiin	preterito rascar
3149.	szaguiŁan	preterito rascar
3150.	szaguiguan	preterito rascar
3151.	szagui	imperativo rascar
3152.	szína	orinar
3153.	szinaán	preterito orinar
3154.	szinaŁán	preterito orinar
3155.	szinaguan	preterito orinar
3156.	szina	imperativo orinar
3157.	szináya	imperativo orinar
3158.	szipi	cortar hariendo
3159.	szipin	preterito cortar hariendo
3160.	szipiŁán	preterito cortar hariendo
3161.	szipiguan	preterito cortar hariendo
3162.	szipi	imperativo cortar hariendo
3163.	szipiqui	supino cortar hariendo
3164.	sziri	esconder
3165.	sziriin	preterito esconder
3166.	sziriŁán	preterito esconder
3167.	sziriguan	preterito esconder
3168.	sziri	imperativo esconder
3169.	szúɛa	mascar, morder, ó comer
3170.	szuɛaan	preterito mascar, morder, ó comer
3171.	szucaŁan	preterito mascar, morder, ó comer
3172.	szucaguan	preterito mascar, morder, ó comer
3173.	szùɛa	imperativo mascar, morder, ó comer
3174.	szùnuɛà	alargar
3175.	szunuɛán,	preterito alargar
3176.	szunuɛáŁan	preterito alargar
3177.	szunuɛaguan	preterito alargar
3178.	szunùɛa	imperativo alargar
3179.	szugui	barrer
3180.	szuguin	preterito barrer
3181.	szuguiŁan	preterito barrer
3182.	szuguiguan	preterito barrer
3183.	szugui	imperativo barrer
3184.	szuguiquíya	imperativo barrer
3185.	szuguiqui	supino barrer
3186.	szʋérʋe	golpear
3187.	szʋerʋeʋen	preterito golpear
3188.	szʋerʋeŁan	preterito golpear
3189.	szʋerʋeguan	preterito golpear
3190.	szʋérʋe	imperativo golpear
3191.	szʋerʋequi	supino golpear
3192.	szʋeyʋe	bolver
3193.	szʋeyʋeʋen	preterito bolver
3194.	szʋeʋeŁan	preterito bolver
3195.	szʋeyʋeguan	preterito bolver
3196.	szʋeyʋe	imperativo bolver
3197.	taà	particula concursiva
3198.	taà	venir; anomalo
3199.	taayí	preterito
3200.	taɛani	imputar, ó achocar
3201.	taɛanín	preterito imputar, ó achocar
3202.	taɛaniŁan	preterito imputar, ó achocar
3203.	taɛaniguan	preterito imputar, ó achocar

3204. taɛani imperativo imputar, ó achocar
3205. tajana nacer
3206. tajnà preterito nacer
3207. tajnaŁà preterito nacer
3208. tajnaguà preterito nacer
3209. tajnaya imperativo nacer
3210. tàla quemár, ó encender
3211. talaan preterito quemár, ó encender
3212. talaŁan preterito quemár, ó encender
3213. talaguan preterito quemár, ó encender
3214. tala imperativo quemár, ó encender
3215. tamptxi torzer
3216. tamptxin preterito torzer
3217. tamptxiŁán preterito torzer
3218. tamptxiguaan preterito torzer
3219. tamptxi imperativo torzer
3220. taana sèr; anomalo
3221. taanà preterito
3222. taari deber
3223. taarín preterito deber
3224. tariŁan preterito deber
3225. tariguán preterito deber
3226. tari imperativo deber
3227. taarí trabar
3228. taarín preterito trabar
3229. tariŁan preterito trabar
3230. tariguan preterito trabar
3231. tári imperativo trabar
3232. tarisza desviar
3233. tariszán preterito desviar
3234. tariszaŁan preterito desviar
3235. tariszaguan preterito desviar
3236. tarisza imperativo desviar
3237. taru prometer
3238. taruun preterito prometer
3239. taruŁan preterito prometer
3240. taruguan preterito prometer
3241. taru imperativo prometer
3242. tarsziqui retirarse
3243. tarsziquí preterito retirarse
3244. tarsziquiŁá preterito retirarse
3245. tarsziquiguan preterito retirarse
3246. tarsziquiya imperativo retirarse
3247. taguaŁɛi bendecir
3248. taguaŁɛin preterito bendecir
3249. taguaŁɛiŁan preterito bendecir
3250. taguaŁɛiguam preterito bendecir
3251. taguaŁɛi imperativo bendecir
3252. táya pisar
3253. tayaan preterito pisar
3254. tayaŁan preterito pisar
3255. tayaguaan preterito pisar
3256. táya imperativo pisar
3257. taya castrear los animales
3258. tayaan preterito castrear los animales
3259. tayaŁan preterito castrear los animales
3260. tayaguan preterito castrear los animales
3261. taya imperativo castrear los animales
3262. táyu ponerse el sombrero, ó qualquiera otra cosa en la cabeza
3263. tayuun preterito ponerse el sombrero
3264. tayuŁan preterito ponerse el sombrero
3265. tayuguan preterito ponerse el sombrero
3266. tayu imperativo ponerse el sombrero
3267. teŁama lamer
3268. teŁmaan preterito lamer
3269. teŁmaŁan preterito lamer
3270. teŁmaguan preterito lamer
3271. teŁma imperativo lamer
3272. téno meter
3273. teenón preterito meter
3274. tenoŁán preterito meter
3275. tenoguan preterito meter
3276. téno imperativo meter
3277. tero matar
3278. terón preterito matar
3279. teroŁán preterito matar
3280. teroguan preterito matar
3281. téro imperativo matar
3282. teróɛe supino matar
3283. teerò morirse
3284. teerò preterito morirse
3285. teroŁá preterito morirse
3286. teeroya imperativo morirse
3287. teeròque pescar
3288. teeròquè preterito pescar
3289. teroqueŁá preterito pescar
3290. teroqueya imperativo pescar
3291. tiɛí dormir
3292. tìɛuí preterito dormir
3293. tiɛiŁá preterito dormir
3294. tíɛiguaan preterito dormir
3295. tiɛiya imperativo dormir
3296. tiszata ventosear
3297. tisztá preterito ventosear
3298. tisztaŁa preterito ventosear
3299. tisztaguaan preterito ventosear
3300. tisztaya imperativo ventosear
3301. tónója engañar
3302. tonojáη preterito engañar
3303. tonojaguan preterito engañar
3304. tonojaŁán preterito engañar
3305. tonoja imperativo engañar
3306. tonojáqui supino engañar
3307. tujámi escupir
3308. tugmín preterito escupir
3309. tugmiŁán preterito escupir
3310. tugmiguán preterito escupir
3311. tugmi imperativo escupir
3312. tugmiqui supino escupir
3313. tuŁtu picar, ó dar estocadas
3314. tuŁtuun preterito picar, ó dar estocadas
3315. tuŁtuŁan preterito picar, ó dar estocadas
3316. tuŁtuguaan preterito picar, ó dar estocadas
3317. tuŁtu imperativo picar, ó dar estocadas
3318. tuŁtuquí supino picar, ó dar

		estocadas
3319.	túmu	acabar
3320.	túmuun	preterito acabar
3321.	tumuŁán	preterito acabar
3322.	tumuguan	preterito acabar
3323.	túmu	imperativo acabar
3324.	tumuqui	supino acabar
3325.	tunáti	tocar instrumento
3326.	tuntín	preterito tocar instrumento
3327.	tuntiŁán	preterito tocar instrumento
3328.	tunatiŁan	preterito tocar instrumento
3329.	tuntiguaan	preterito tocar instrumento
3330.	tunatiguaan	preterito tocar instrumento
3331.	tunti	imperativo tocar instrumento
3332.	tuntiya	imperativo tocar instrumento
3333.	tuntiqui	supino tocar instrumento
3334.	túpa	dejar
3335.	tupán	preterito dejar
3336.	tupaŁan	preterito dejar
3337.	tupaguaan	preterito dejar
3338.	tupa	imperativo dejar
3339.	túra	traher, o llevar
3340.	turaan	preterito traher, o llevar
3341.	turaŁan	preterito traher, o llevar
3342.	turaguaan	preterito traher, o llevar
3343.	tura	imperativo traher, o llevar
3344.	tútu	mamar
3345.	tutuun	preterito mamar
3346.	tutuŁan	preterito mamar
3347.	tutuguáan	preterito mamar
3348.	tutu	imperativo mamar
3349.	tutuya	imperativo mamar
3350.	tutuqui	supino mamar
3351.	tutuja	dar de mamar
3352.	tutujaan	preterito dar de mamar
3353.	tutujaŁan	preterito dar de mamar
3354.	tutujaguaan	preterito dar de mamar
3355.	tutuja	imperativo dar de mamar
3356.	tutujaqui	supino dar de mamar
3357.	tuya	reñir
3358.	tuyaan	preterito reñir
3359.	tuyaŁan	preterito reñir
3360.	tuyaguaan	preterito reñir
3361.	tuya	imperativo reñir
3362.	tuyaquí	supino reñir
3363.	tuyáquí	pleitear
3364.	tuyaquiŁá	preterito pleitear
3365.	tuyáquíguaan	preterito pleitear
3366.	tuyaquiya	imperativo pleitear
3367.	tuyáquí	supino pleitear
3368.	túyu	comenzar
3369.	tuyuun	preterito comenzar
3370.	tuyuŁán	preterito comenzar
3371.	tuyuguaan	preterito comenzar
3372.	tuyu	imperativo comenzar
3373.	túyúɛa	torear, ó provocar
3374.	tuyuɛin	preterito torear, ó provocar
3375.	tuyuɛaŁán	preterito torear, ó provocar
3376.	tuyu ɛaguaan	preterito torear, ó provocar
3377.	tuyuɛa	imperativo torear, ó provocar
3378.	tʋemʋe	teñir
3379.	tʋemʋeʋen	preterito teñir
3380.	tʋemʋeŁán	preterito teñir
3381.	tʋemʋeguaan	preterito teñir
3382.	tʋemʋe	imperativo teñir
3383.	tʋemʋequi	supino teñir
3384.	txaca	*est verbum impurum et inhonestum et significat quod est fornicare*
3385.	txacaan	preterito *fornicare*
3386.	txacaŁan	preterito *fornicare*
3387.	txacaguaan	preterito *fornicare*
3388.	txaca	imperativo *fornicare*
3389.	txajama	espinarse, ó lastimarse hiriendose con algo
3390.	txajmaan	preterito espinarse
3391.	txamaŁaan	preterito espinarse
3392.	txajmaguaan	preterito espinarse
3393.	txajma	imperativo espinarse
3394.	txagmaya	imperativo espinarse
3395.	txajmaquí	supino espinarse
3396.	txaguí	pelliscar, ó arañar
3397.	txaguín	preterito pelliscar, ó arañar
3398.	txaguiŁán	preterito pelliscar, ó arañar
3399.	txaguiguaan	preterito pelliscar, ó arañar
3400.	txagui	imperativo pelliscar, ó arañar
3401.	txúma	besar
3402.	txumaan	preterito besar
3403.	txumaŁán	preterito besar
3404.	txumaguaan	preterito besar
3405.	txúma	imperativo besar
3406.	txʋemʋe	regar todo genero de siembras
3407.	txʋemʋeʋen	preterito regar
3408.	txʋemʋeŁán	preterito regar
3409.	txʋemʋeguaan	preterito regar
3410.	txʋemʋe	imperativo regar
3411.	txʋemʋéqui	supino regar
3412.	txʋeri	trozar
3413.	txʋerin	preterito trozar
3414.	txʋeriŁan	preterito trozar
3415.	txʋeriguaan	preterito trozar
3416.	txʋeri	imperativo trozar
3417.	ucáa	tener, haver; defectivo
3418.	úɛa	poner, ó hechar alguna cosa en algun lugar
3419.	úɛaan	preterito poner
3420.	úɛaŁan	preterito poner
3421.	úɛaguaan	preterito poner
3422.	úɛa	imperativo poner
3423.	úgui	llamar
3424.	úgüin	preterito llamar
3425.	úguiŁan	preterito llamar
3426.	úguiguaan	preterito llamar
3427.	úgui	imperativo llamar
3428.	úŁaɛa	desear
3429.	uŁɛán	preterito desear
3430.	uŁɛaŁan	preterito desear
3431.	uŁɛaguaan	preterito desear
3432.	uŁɛa	imperativo desear
3433.	uŁú	caer
3434.	uŁù	preterito caer
3435.	uŁuguaan	preterito caer
3436.	uŁúya	imperativo caer
3437.	ulúya	derribar
3438.	uluyaan	preterito derribar
3439.	uluyaŁán	preterito derribar
3440.	uluyaguaan	preterito derribar
3441.	uluya	imperativo derribar
3442.	uma	curar

3443. umaan preterito curar
3444. umaŁán preterito curar
3445. umaguaan preterito curar
3446. uma imperativo curar
3447. umaya imperativo curar
3448. umaquí supino curar
3449. unáa tener, ó haver; defectivo
3450. upúu pararse
3451. upúu preterito pararse
3452. upuguan preterito pararse
3453. upuŁan preterito pararse
3454. upuya supino pararse
3455. upuya parar
3456. upuyaan preterito parar
3457. upuyaŁán preterito parar
3458. upuyaguaan preterito parar
3459. upúya imperativo parar
3460. urɛu tragar
3461. urɛuun preterito tragar
3462. urɛuŁan preterito tragar
3463. urɛuguaan preterito tragar
3464. urɛu imperativo tragar
3465. uru cortar fruta
3466. uruun preterito cortar fruta
3467. uruŁan preterito cortar fruta
3468. uruguaan preterito cortar fruta
3469. uru imperativo cortar fruta
3470. utúɛi tardarse
3471. utuɛí preterito tardarse
3472. utuɛiŁá preterito tardarse
3473. utuɛiguaan preterito tardarse
3474. utuɛíya imperativo tardarse
3475. uszaquí chupar tabaco
3476. uszɛín preterito chupar tabaco
3477. uszɛiŁan preterito chupar tabaco
3478. uszɛiguaan preterito chupar tabaco
3479. uszɛiya imperativo chupar tabaco
3480. uszúmu olér
3481. uszmuun preterito olér
3482. uszmuŁan preterito olér
3483. uszmuguaan preterito olér
3484. uszmu imperativo olér
3485. uszmuya imperativo olér
3486. uszmúqui supino olér
3487. uýszɪɛi oir
3488. uyszɪɛiŁá preterito oir
3489. uyszɪɛiguán preterito oir
3490. uyszɪɛiya imperativo oir
3491. uyúmu lastimar
3492. uymuun preterito lastimar
3493. uymuŁan preterito lastimar
3494. úymuguaan preterito lastimar
3495. úymu imperativo lastimar
3496. ɒentɒe espiar
3497. ɒesɒeeɒe desatar
3498. yaɛa hacer
3499. yaɛán preterito hacer
3500. yaɛaŁán preterito hacer
3501. yaɛaguaan preterito hacer
3502. yáɛa imperativo hacer
3503. yámí murmurar
3504. yámiin preterito murmurar
3505. yamiŁán preterito murmurar
3506. yámiguaan preterito murmurar
3507. yámí imperativo murmurar
3508. yamiɛi supino murmurar
3509. yána avergonzarse
3510. yánaŁá preterito avergonzarse
3511. yánaguán preterito avergonzarse
3512. yána imperativo avergonzarse
3513. yánaya imperativo avergonzarse
3514. yáru colgar
3515. yáruun preterito colgar
3516. yaruŁan preterito colgar
3517. yaruguaan preterito colgar
3518. yáru imperativo colgar
3519. yászi estender
3520. yászin preterito estender
3521. yasziŁán preterito estender
3522. yásziguaan preterito estender
3523. yaszi imperativo estender
3524. yáyu arroyar
3525. yayuun preterito arroyar
3526. yayuŁán preterito arroyar
3527. yayuguaan preterito arroyar
3528. yáyu imperativo arroyar
3529. yoŁana desbarrancarse
3530. yoŁnaa preterito desbarrancarse
3531. yoŁnaŁá preterito desbarrancarse
3532. yoŁnaguaan preterito desbarrancarse
3533. yoŁnáya imperativo desbarrancarse
3534. yóŁe desparramar
3535. yoŁén preterito desparramar
3536. yoŁeguaan preterito desparramar
3537. yoŁe imperativo desparramar
3538. yúlu alizar, pisar la masa para las tortillas, ó moler sutilmente alguna cosa; *et est verbum impurum ad coitum*
3539. yuluun preterito alizar, pisar
3540. yuluŁan preterito alizar, pisar
3541. yuluguaan preterito alizar, pisar
3542. yulu imperativo alizar, pisar
3543. yɒeckɒesza remecer
3544. yɒeckɒeszaan preterito remecer
3545. yɒeckɒeszaŁán preterito remecer
3546. yɒeckɒeszaguaan preterito remecer
3547. yɒeckɒesza imperativo remecer
3548. yɒeckɒeszaɛi supino remecer
3549. yɒegua perder
3550. yɒeguaan preterito perder
3551. yɒeguaŁan preterito perder
3552. yɒeguaguan preterito perder
3553. yɒegua imperativo perder
3554. yɒeguaŁi perder
3555. yɒeguaŁin preterito perder
3556. yɒeguaŁiŁan preterito perder
3557. yɒeguaŁiguaan preterito perder
3558. yɒeguaŁi imperativo perder
3559. yɒeguaszáma olvidar
3560. yɒeguaan szàma preterito olvidar
3561. yɒeguaŁán szama preterito olvidar
3562. yɒeguaguaan száma preterito olvidar
3563. yɒegua száma imperativo olvidar
3564. yɒeŁɒeeɒe acusar
3565. yɒeŁɛɒeɒen preterito acusar
3566. yɒeŁɛɒeŁan preterito acusar
3567. yɒeŁɛɒeguaan preterito acusar
3568. yɒeŁɛɒe imperativo acusar
3569. yɒepɒe vomitar
3570. yɒepɒeɒen preterito vomitar
3571. yɒepɒeŁan preterito vomitar
3572. yɒepɒeguaan preterito vomitar

3573. yvepve imperativo vomitar
3574. yvepveya imperativo vomitar
3575. aa si
3576. a particula verbal
3577. ac nuestro; particula posesiva
3578. aɛaŁ tambien, así
3579. aɛaŁ todavia
3580. acha 1. la jacha
3581. achca abierto de piernas
3582. acaní asi
3583. acan canguí asi és
3584. acán szvequi también, asi también
3585. acuysz refran, con lo que quieren significar, disque
3586. acero el eslabon, ó azero
3587. acúŁa el que se va huido
3588. aculaŁi el que se va huido; plural
3589. acuquiŁa vagamúndo
3590. acuquilaŁi vagamúndo; plural
3591. acúsza la abuja
3592. acuszáma la tristeza
3593. aɛveca ayac anic ahora ocho dias
3594. aɛveca ayac yɛál ayapa ahora un año
3595. aɛveca yɛal agua ahora un mes
3596. aɛvepè ayac yɛál pari de aqui a ocho dias
3597. aɛvepè ayac yɛál agua de aqui a un més
3598. aɛvepè ayac yɛál ayapà de aqui a un año
3599. agve si
3600. agua 1. la luna
3601. agua 1. el més
3602. aguà 2. la abuela
3603. aguán no; para oraciones de imperativo negativas
3604. ag sú; particula posesiva
3605. agvé este
3606. aŁ *vel* aŁi por
3607. aŁ *vel* aŁi ensima ó sobre
3608. alú 1. la guacamaya
3609. aŁcalti 1. el alcalde
3610. aŁmúu óy
3611. aŁmucán ayér
3612. aŁmucansvema anoche
3613. aŁmuŁ 1. el almud
3614. aŁpámag los ombros
3615. aŁparaquiguá por
3616. aŁté *verbum impurum et significat membrum virile*
3617. aŁtèpét 1. el pueblo
3618. aŁtepveszve 1. jicara peste
3619. aŁguapi el empeine dèl pie
3620. amaequè refran, con el que quieren significar, oiga ó [¿]que dices?
3621. amaá esta sobrada
3622. amaszán Ácá namán refran
3623. amaszvequi tambien, *et*, y
3624. amú 2. el abuelo
3625. amú 1. la araña
3626. ancumi mi alma, ó mi vida
3627. amùŁ 1. la ortiga, ó chichicastle
3628. amuambuqui 1. el herpis, ó cancro
3629. an mi; particula posesiva
3630. ambuqui 1. la culebra
3631. ambvé ahora
3632. anic oy
3633. anic pari en este dia
3634. anila el anillo
3635. anima 1. el corazon
3636. anima 1. el alma
3637. animasz las animas
3638. animasz las ocho de la noche
3639. anú 2. la tía
3640. apa como; adv[erbi]o interrogatívo
3641. ara 1. la mosca
3642. ara 1. el gusano
3643. araŁa el embiado, ó mensagero
3644. araŁaŁi el embiado, ó mensagero; plural
3645. aranszasz 1. la naranja
3646. araquiŁa 1. mirón
3647. araquiŁaŁi 1. mirón; plural
3648. aratac 1. el obillo, ó maguey
3649. aragua cosa embiada
3650. atác 1. el guepil
3651. aù 1. el maiz
3652. aúc 1. el tizate
3653. auŁác 1. el comál
3654. aszin no
3655. aszinaɛál todavia no
3656. aszinsaŁca cerca
3657. aszintveszɛve no lejos
3658. aszinszaŁ malo, no está bueno
3659. aszve este
3660. ayác como, asi como, parece
3661. ayaŁa 1. la muger
3662. ayaŁaŁi 1. la muger; plural
3663. ayaan 1. mi compañero ó amigo
3664. ayán nau 1. como hermano
3665. ayán uchí 2. mi consuegra
3666. ayán uchiŁi 2. mi consuegra; plural
3667. ayán pandú 2. mi concuño
3668. ayán pandu cáŁi 2. mi concuño; plural
3669. ayapá 1. el año
3670. ayma 1. la masorca
3671. ayú particula optativa
3672. ayúna 1. el ayuno
3673. ayupè particular verbal
3674. ayuguenaqui si alguno
3675. asvec quando
3676. cá tú; particula que sirve de pronom[br]e primitivo
3677. cá particula para ir ó llevar
3678. ca ay vosotros
3679. cácá donde; adverbio para interrogaciones
3680. cachatché refrán
3681. caguayo 1. el caballo
3682. caguayuŁi 1. el caballo; plural
3683. caguic 1. la araypa ó lazo
3684. ɛaguiɛiŁa 1. el que pone la trampa
3685. ɛagui ɛiŁaŁi 1. el que pone la trampa; plural
3686. caguiquiŁa 1. el griton
3687. caguiquiŁaŁi 1. el griton; plural
3688. chagui cosa dura
3689. charrave naŁtè *verbum impurum et significat pendiculus*
3690. chegche 1. voca rota
3691. chichi 2. el excremento

3692. chriszma 1. el bautismo
3693. chogmo 1. cara picada
3694. chooɛec el molinillo
3695. chooɛéŁa 1. el que bate
3696. chooɛeŁaŁi 1. el que bate; plural
3697. chʋerʋeɛʋe chico ó pequeño
3698. chʋerʋeɛʋeŁi chico ó pequeño; plural
3699. churu chʋerʋeɛʋe mas chíco
3700. chʋerʋeɛʋe de una vez: mui chico
3701. chʋey poco
3702. caŁi 1. el humo
3703. cáma 2. la sangre
3704. cama 2. el semen
3705. cama ɛiŁa 1. el que apadrina, carga, ó abraza
3706. cantoreŁé 1. los cantores
3707. capa particula verbal
3708. capè de donde; adverbio para interrogacion
3709. capisayo 1. el chamarron
3710. capil tu 1. el cavìldo
3711. capún 1. el capon
3712. ɛara cosa pesada
3713. ɛaragua 1. el monte
3714. caragua 1. el sacate
3715. caragua jaszu 1. el marráno de monte
3716. cargua cosa separada
3717. carguajumu 1. viudo
3718. carguajaya 1. viuda
3719. ɛatacguiɛic 1. tapesco de moler, que llaman taszmetate
3720. ɛataŁa 1. acostado
3721. ckau 1. tamal blanco
3722. casza 1. la caja
3723. casza 1. el sancudo, ó mosquito
3724. caszcasz 1. la cotusa
3725. caaszic 1. la caña de castilla
3726. casztianú 1. el español
3727. casztianuŁi 1. el español; plural
3728. casztilamapʋe 1. el pan
3729. casztilán 1. la gallina ponedera
3730. cayiɛiŁa 1. el vendedor, ó vendèdora
3731. cayi ɛiŁaŁi 1. el vendedor, ó vendèdora; plural
3732. ckeguesza anona
3733. ɛeneya 1. platano guíneo
3734. ɛigui 3. el patio
3735. ckirguiɛiŁa 1. escogedor, ó escogedora
3736. ckirguiɛiŁaŁi 1. escogedor, ó escogedora; plural
3737. ɛiriguapatxi 1. el atole, ó chilate
3738. coca el cacaste
3739. coséc cosa grande
3740. coséc punic 1. el tambor de moros
3741. coséc Ùy 1. rio grande
3742. ɛoochó cosa sucia
3743. ɛomo 2. la rodilla
3744. coo refran, disque
3745. coorá en fila, ó ringlera
3746. coorère 1. el idolo
3747. cooròro 1. el bejuco
3748. ɛosme 1. el camalote
3749. ckotòro 1. el sompopo
3750. coszco 1. el sópe
3751. ɛoszme 1. cierta caña, ó varilla para hacer tapescos
3752. coszò agua consumida
3753. coyaya 1. el cacaste
3754. coyo 1. cierta varilla con que se hazen tapescos, y vamadas
3755. cozo 1. viruelas
3756. cuchilo 1. el cuchillo
3757. cúcu 1. tasìsco; pueblo
3758. cucúguaŁ 1. la tortola
3759. ɛuŁami 1. la pitafloja
3760. cúŁcu 1. el cajete
3761. culúmac 1. el calzonte
3762. culúmac 1. el bolillo, pálo de tejer
3763. cumbisziun 1. la confesion
3764. ɛúnú 1. las sombras
3765. cunuɛiŁa 1. comprador, ó compradora
3766. cunu ɛiŁaŁi 1. comprador, ó compradora; plural
3767. cúnu ɛigua 3. cosa comprada
3768. cunszi cosa nesna, ó cenicienta
3769. ɛupru szunic oya honda
3770. cuurúc 1. cierta rueda, ó yagual de mecates
3771. cuurúc szʋema 1. el caballete, ó palo que sirve de cumbrera á la casa
3772. curuguí 1. la tortolilla
3773. curugui 1. las partes genitales de las criaturas
3774. curnicapusz 1. el cabo de candela
3775. curni puri 1. cabo de ocote
3776. curuyu 1. la tortilla gruesa, que llaman piszton
3777. cutumi 1. el calambre; enfermedad
3778. cuszcuszpari 1. cierto arbol, que da una flor que llaman barbona
3779. cusztarica 1. cierto cacao, que llaman costarrica
3780. ckʋeguagua 1. cosa prestada
3781. ckʋeguaɛiŁa el que presta
3782. ckʋeguʋe 2. la espinilla
3783. ckʋeguʋe cosa seca
3784. ckʋenʋe ɛi la alegría, ó contento
3785. ckʋenʋe ɛiŁa 3. el que se alegra
3786. ckʋenʋe ɛiŁaŁi 3. el que se alegra; plural
3787. ckʋerguʋe 1. cosa flaca
3788. ɛʋerszac 1. el peine
3789. ɛʋerszaŁa 1. el que peina
3790. ɛʋersza ɛiŁa 1. el peinador, ó peinadora
3791. ɛʋerʋé 2. el hermano menor
3792. ɛʋérʋe 1. la danta
3793. ɛʋetʋe ɛiŁa 1.el medidor
3794. ɛʋetʋe ɛic 1.la medida, ó vara de medír
3795. ɛʋesztamay 1.sinacantan; pueblo
3796. ɛʋesza 1.el morcielago
3797. ɛʋesza 1.nancinta; pueblo
3798. ɛʋésza 1. la mitad, ó pedazo de alguna cosa
3799. ec nuestro; particula posesiva
3800. eg su; particula posesiva
3801. eŁa cosa nueva
3802. eŁactuma 1. lengua de venado; yerva
3803. eŁagua ɛila 1. embarrador
3804. eŁagua ɛiŁaŁi 1. embarrador; plural
3805. eŁaja 2. la lengua

3806. eŁmaŁá 1. el que presta
3807. eŁmaŁaŁi 1. el que presta; plural
3808. emaɛiŁa 1. costurero que cose
3809. emaɛiŁaŁi 1. costurero que cose; plural
3810. en mi; particula posesiva
3811. epét 1. cacos; fruta del mar
3812. eplec cosa espantosa
3813. ereŁaquiŁa 1. espantador
3814. ereŁaquiŁaŁi 1. espantador; plural
3815. erʋe 1. cosa vieja
3816. etaɛaɛiŁa 1. el tapiscador
3817. etaɛaɛiŁaŁi 1. el tapiscador; plural
3818. eyéŁ no; adverbio para *sum est fui*
3819. giní 2. la barriga
3820. giríc 1. la piedra de amolar
3821. gir ɛiŁa 1. el amolador
3822. girɛiŁaŁi 1. el amolador; plural
3823. giru 1. lo mico, ó mono
3824. giruŁi 1. lo mico, ó mono; plural
3825. ténan giru 1. lo mico, ó mono; plural
3826. giruŁa 1. el que lame
3827. giruŁáŁi 1. el que lame; plural
3828. giszi 3. la piedra
3829. giszíŁi 3. la piedra; plural
3830. gona 1. el cerro
3831. gonatau 1. el viento, ó norte
3832. gua que; particula para tiempos de que
3833. guaca 1. la chacha; ave
3834. guacász 1. la carne de réz, y todo genero de ganado maior
3835. guaczi 1. cierta ave parecida al sopilote, que canta á la salida, y puestas del sol
3836. guaɛicszaja 1. el mal nombre
3837. guanin quien
3838. guaŁipè de aqui a tres dias
3839. guapáŁ 1. el banco
3840. guapi 3. el pie
3841. guapíc 1. los caítes, zapatos de los yndios
3842. guapʋéc 1. el horcon
3843. guaru 1. la hamaca
3844. guarúc 1. el matate ó red
3845. guataqui no importa
3846. guatí 1. el barro
3847. guaszác 1. la milpa de regadillo, que llaman apantes
3848. guaszaŁiɛic 1. el vestido, ó ropa
3849. guaszcuŁa 1. el que tira piedras
3850. guaszcuŁaŁí 1. el que tira piedras; plural
3851. guasztaguasʋema la entrada de la noche
3852. guasztaŁa 1. el que entra
3853. guasztaŁaŁi 1. el que entra; plural
3854. guasztacarágua 1. la vispera
3855. guayá 3. la milpa
3856. guéna quien
3857. guénaqui el qué
3858. guéna ayuqui si alguno
3859. guerén 1. el zapo
3860. guesquégua cosa botada
3861. guesza 1. la yguana
3862. guiiɛic 1. la piedra de moler
3863. guiŁaí 1. el tigre
3864. guina 1. la fiesta
3865. gui particula conclusiva
3866. guiriquí 3. la palabra
3867. guiriquiŁa 1. hablador
3868. guiriquiŁaŁi 1. hablador; plural
3869. guirisz 1.travieso
3870. guitágua 1.cosa tendida
3871. guitá jugua 1.platano pasado
3872. guitaŁa 1.el casador, ó tirador
3873. guitaŁaŁi 1.el casador, ó tirador; plural
3874. guitiŁaya 1.la doncella
3875. guitiŁayaŁi 1.la doncella; plural
3876. guitxuc 1.el azote
3877. guitxuquiŁa 1.el azotador
3878. guitxuquiŁáŁi 1.el azotador; plural
3879. guisztác 1.la trompeta, ó clarín
3880. guiszúc 1.el azote
3881. guiszuquiŁa 1.el azotador
3882. guiszuquiŁaŁi 1.el azotador; plural
3883. guiszucnuguí 1.sacudidor de algodon
3884. guíyán 1.la caña dulce
3885. guocŁac 1.el hoyo
3886. guʋejʋé 2.la hermana menor
3887. guʋejʋéɛaŁi 2.la hermana menor; plural
3888. guʋenac 1.el brujo
3889. guʋenacŁi 1.el brujo; plural
3890. ic nuestro; particula posesiva
3891. iɛál uno
3892. iɛalqui solo uno
3893. igua 3. la maza para tortillas
3894. iguáŁa 1. la torteadora
3895. iguaŁaŁi 1. la torteadora; plural
3896. iguatxá 1. el hilo
3897. ig su; particula posesíva
3898. iliguís cosa mala
3899. iliguís jraac el demonio
3900. in particula interrogatíva
3901. in mi; particula posesiva
3902. iplaŁa 1. bañador, ó bañadora
3903. iplaŁaŁí 1. bañador, ó bañadora; plural
3904. iti 1. el tomate
3905. itúŁ 1. las pulgas, ó niguas
3906. iszaɛa 3. el chilate
3907. iszaɛa 3. la bebida
3908. iszcac 1. la jicara de beber
3909. iszcáŁa 1. bebedor, ó bebedora
3910. iszcaŁaŁi 1. bebedor, ó bebedora; plural
3911. iszpaguapari la salida del sol
3912. isztú 1. el giote; enfermedad
3913. isztu 1. la señal
3914. isztu 1. el rebés de todas las cosas
3915. jaɛhʋeckiŁa 1. recogedor de basura
3916. jajŁa cuchilo 1. la cutachilla, instrumento con que desiervan en lugar de azadon
3917. jági 1. el aguacate
3918. jaguá cosa que no esta madura
3919. jaguí 2. el pellejo y piel
3920. jaguí 2. la corteza, ó cascara de todo arbol y fruta
3921. jaamáa cosa madura
3922. jamá 3. el pecado
3923. jamaguàŁa 1. el pecador

3924. jamʋe cosa azéda
3925. japáayʋepʋé vomitos, y evacuaciones
3926. japáginíy 1. evacuaciones
3927. jaapaŁa 1. pasajero, ó forastero
3928. jaapaŁaŁí 1. pasajero, ó forastero; plural
3929. jaraɛu 1. el chipilin; yerva
3930. jaraŁa mapʋe 1. tortilla, tostada, que llaman totopostle
3931. jarána 1. la enfermedad
3932. jarnaŁa 1. el enfermo
3933. jarnaŁaŁi 1. el enfermo; plural
3934. jararí 3. el hueso
3935. jararickómo 3. el hueso de la rodilla
3936. jararickuguʋe 2. el hueso de la espinilla
3937. jarari ʋelʋeg 2. el hueso del espinazo
3938. jari ɛiŁa 1. espantador, ó aventador
3939. jari ɛiŁaŁi 1. espantador, ó aventador; plural
3940. jaaruun 1. la garrapata
3941. jaruun naru 1. el talage
3942. jaz 1. el tercio de sacate
3943. jauszaja 2. los labios
3944. jautuma 1. el cuero para azotar, ó piel de ganado
3945. jászu 3. el marrano
3946. jaszuŁi 3. el marrano; plural
3947. tenan jaszú 3. el marrano; plural
3948. jáya 1. hembra
3949. jaya jaszu 1. la marrana
3950. jaya jaszuŁi 1. la marrana; plural
3951. jaya jumu 1. amugerrado
3952. jaya nací 3. la hija hembra
3953. jayuc szaja paño de chocolate a modo de servilletas
3954. jóɛóguàŁ el doblador, ó cascara de la masorca
3955. jógua 1. el leon
3956. jooroŁ el cuidador
3957. jooroŁ caguayo 1. guarda caballo, sirviente
3958. jooro ɛéŁa 1. el guardian, que tambien llaman tapián
3959. joro ɛeŁaŁi 1. el guardian, que tambien llaman tapián, plural
3960. joroŁ guáyá 2. guardian de milpa
3961. jooroŁ macu 3. guardian, ó cuidador de la casa
3962. joroso 1. el coroso; fruta a modo de coyòl
3963. joroso 1. cierto genero de chile
3964. jugúa el platano
3965. jujúŁ 1. el panál
3966. jujuŁi 1. el panál; plural
3967. juŁic 1. la nabaja de resurar
3968. juŁi ɛiŁa 1. el barbéro
3969. juŁiɛiŁaŁi 1. el barbéro; plural
3970. jumù 1. varón
3971. jumu nau 2. el hijo varon
3972. jurjur mui derecho, ó derecho derecho
3973. jurác 1. el hombre
3974. juracŁi 1. el hombre; plural
3975. jʋeracŁʋeguʋe 1. la miel blanca
3976. jurac pʋepʋe 1. cierta inflamación ó espiecie de abuso que tienen los yndios, que dicen les sale quando padecen alguna verguenza
3977. jura ɛi 2. el parto
3978. jura ɛiŁa 1. la parida
3979. jurá ɛiŁaŁi 1. la parida; plural
3980. jurápí untar, fletar, untara
3981. juraý 2. los ojos
3982. juraý 2. la cara
3983. juray guapi 2. el hueso, que llaman ojo de pie
3984. jurí 2. el orificio
3985. júru 1. el chumpipe, gallo de la tiérra
3986. jururú pari cosa calorosa
3987. jururú lo mismo
3988. jutác 1. el orificio, y propriam[en]te el culo
3989. jutu 1. el palo
3990. jutuŁi 1. el palo; plural
3991. tenan jutu 1. el palo; plural
3992. juutuc 1. el ollin, ó tizne
3993. jututaŁi 3. el hueso del pescuezo
3994. juuszí 2. la cabeza
3995. juszimapí 1. el palmito
3996. jʋeɛa 3. el tegido
3997. jʋeɛaŁa 1. la tejendera; plural
3998. jʋeɛaŁaŁi 1. la tejendera; plural
3999. jʋerʋe 1. el períco, ó papagallo
4000. jʋeyaɛìŁa 1. el jacheador
4001. jʋeya ɛiŁaŁi 1. el jacheador; plural
4002. ŁacmáŁa 1. el que cuenta
4003. Łacma ɛiŁa 1. el contador
4004. Łacma ɛiŁáŁi 1. el contador; plural
4005. Ła ɛugua 2. el yerno
4006. Łamuc 1. el camaron
4007. laamunisz 1. el limon
4008. Łán no
4009. Łán particula verbal optatíva
4010. Łapà el nieto
4011. ŁapaŁa 1. el que va detras de otro como siguiendolo
4012. ŁapáŁaŁi 1. el que va detras de otro como siguiendolo; plural
4013. ŁapiɛiŁa 1. el cargador
4014. ŁapiɛiŁaŁi 1. el cargador; plural
4015. Łara 1. el barbaro
4016. ŁaraŁa 1. el que sube
4017. ŁaraŁaŁi 1. el que sube; plural
4018. Łaraʋemʋéc 1. cierta yerva que sirve a las yndias p[ar]a bañarse
4019. lagui 1. la llave
4020. ŁaurúŁa 1. el bailador
4021. ŁauruŁaŁi 1. el bailador; plural
4022. laúsz 1. el clavo
4023. Łenga 1. el cacao pataste
4024. ŁicaŁa 1. el que vaja
4025. ŁicaŁaŁi 1. el que vaja; plural
4026. Łimic 1. el ocote
4027. Łiná con
4028. Łiná szʋequi también, y
4029. Łómehui 1. agua tibia
4030. lungú 1. manco
4031. Łuri 1. el conejo
4032. Łʋecán quando
4033. Łʋecán Vá entonces
4034. Łʋécu quando; interrogación para futuro

4035. Ɬvɐ ɛun náu 2. mi entenado ó entenada
4036. Ɬvɐguvɐ 1. el ayote
4037. Ɬvɐpvɐc 1. el instrumento, con que sirve para cargar
4038. Ɬvɐpvɐ ɛiŁa 1. el cargador
4039. Ɬvɐsɛvɐgua 2. la cintura y hueso del espinaso
4040. má particula verbal subjuntíva
4041. máca y
4042. mácu 3. la cassa
4043. macuŁa 3. la cassa; plural
4044. tenan macu 3. la cassa; plural
4045. macuŁa 1. el diseño de la cassa
4046. macuŁaŁi 1. el diseño de la cassa; plural
4047. macu mía 1. el gallinero
4048. macu jaszu 1. el chiquero, posilga de marranos
4049. matiusz 1. la yglesia
4050. macu uguaŁ 1. el hormiguero
4051. máchiti 1. el machete
4052. mán pita 1. el señor, ó amo
4053. maŁca aunque, y más que
4054. maŁi 1. la ceniza
4055. maŁiŁa 1. el tamal de frisol
4056. maŁvɐc 1. la leña
4057. máni 3. la oreja
4058. mán ese, esa, ó eso
4059. mapi 1. el coyol
4060. mapvɐ 1. la tortilla
4061. maarác 1. el descansadero, ó lo que lla[ma]n sesteadero
4062. maraŁa 1. el que descansa
4063. maraŁáŁi 1. el que descansa; plural
4064. maza 1. la piña
4065. maazaa cosa pegada
4066. maschvɛrvɐcvɐ pequinito, ó mui chico
4067. mas vɛrrá mas grande
4068. másza 1. el lodo
4069. masziŁa 1. la que fríe
4070. masziŁáŁi 1. la que fríe; plural
4071. masziraa 2. las venas, y nervios del cuerpo
4072. masziraa 1. las raizes de los arboles
4073. masziguá 1. cosa frita
4074. mászígua lugar en que se fríe algo
4075. meé cosa verde
4076. meme 1. loco
4077. meenáqui 1. chile verde
4078. mério 1. medio real
4079. mésza 1. la mesa
4080. miya 1. la gallina
4081. miya la niña del ojo
4082. mina la claridad
4083. mistún 1. e gato
4084. misza 1. la misa
4085. móla la luna, el mes
4086. muu su; particula posesiva
4087. muú 2. todo genero de comida
4088. muú cosa blanca
4089. muc nuestro; particula posesiva
4090. muú quiŁic aquellos; particula posesiva
4091. múchu 2. cojo
4092. muchúŁa 1. cansado
4093. muchuŁaŁi 1. cansado; plural
4094. muŁ cosa blanca
4095. muŁ azúcar 1. la azucar
4096. mula 1. la palma
4097. muŁa may 1. medio maduro
4098. muŁa húy 1. el rayo
4099. múŁasziuc 1. la vivora de cascabel, culebra
4100. muŁckeguesza 1. la anona blanca
4101. muŁ jutu 1. el palo que llaman volador
4102. muŁ náru 1. la tierra blanca
4103. muŁpà amac 1. la paloma de monte
4104. muŁ turi 1. criatura tierna
4105. múmuc 1. la posa de algun río
4106. múra 1. la masorca tierna, que llaman elóte
4107. murchaguiya 1. el algodon amarillo, que llaman cuyuscáte
4108. muti 2. el cabello
4109. músz 1. la pluma
4110. musz aŁtè 1. *est verbum disolutum per quod significatur pilos continentes in partes genitales*
4111. muszcaragua 1. la basura
4112. muszi 1. las barbas, ó pelos del cuerpo
4113. musz juraý 2. las pestañas
4114. muszta 1. la panza
4115. muyi 1. el chico, ó nispero
4116. mvɐɛa 2. el trabajo
4117. mvɐɛa 2. el tributo
4118. mvɐɛaŁa 1. el sirviente
4119. mvɐɛaŁaŁi 1. el sirviente; plural
4120. mvɐemvɐŁa 1. el que canta
4121. mvɐemvɐŁaŁi 1. el que canta; plural
4122. mvɐrra cosa amarga
4123. mvɐtaŁɛigua cosa soñada
4124. mvɐtxaŁa 1. el que entierra
4125. mvɐtxagua 1. la sepultura
4126. mvɐszaŁa 1. el que entierra
4127. muszaŁáŁi 1. el que entierra; plural
4128. mvɐszagua 1. la sepultura
4129. mvɐyaŁa 1. el que ayuda
4130. mvɐyaŁáŁi 1. el que ayuda; plural
4131. mvɐyaɛiŁa 1. el ayudante
4132. mvɐyaɛiŁaŁi 1. el ayudante; plural
4133. ná al, la, ló
4134. naá aqui
4135. náca tu; pronombre primitivo
4136. naca ay vosotros
4137. naca ɛica tu mismo
4138. naca ɛiguaca ay vosotros mismos
4139. naɛi 1. el chile
4140. naɛi chuculát 1. el chile de chocolate
4141. naguacu 1. las naguas
4142. nág aquel
4143. nagqui el és, ó aquel és
4144. nagquiŁic ellos, ó aquellos son
4145. nagquiguagŁic ellos, ó aquellos mismos
4146. nag ɛiguag aquel mismo
4147. nagsziɛi el és, y tambien
4148. naŁ particula verbal
4149. nama 1. el dolor
4150. nana particula nominal, que quiere significar el, la, lo
4151. nangún la tarde
4152. naapè por aquí

4153. nariy 2. la narís
4154. nariy 3. la punta, ó extremo de las cosas
4155. nariŁaɛiŁa 1. el doctrinero, ó maestro
4156. nariŁa ɛiŁaŁi 1. el doctrinero, ó maestro; plural
4157. nariŁɛiŁa 1. el discipulo
4158. nariŁɛiŁaŁi 1. el discipulo; plural
4159. nari uray 1. el tizon
4160. náru 3. la tierra
4161. náu 2. el hijo, ó hija
4162. nauguacász 1. el ternero
4163. nauguapi 2. los dedos de los pies
4164. naupu 2. los dedos de las manos
4165. nauŁa 1. la preñada
4166. natʋe allí
4167. natʋéca allá
4168. natʋepècà por allá
4169. neŁa particula nominal; de
4170. néŁéc nosotros
4171. neŁéc ɛiguac nosotros mismos
4172. nén yo
4173. nen ɛiguán yo mismo
4174. niguaɛiŁa 1. el que pide
4175. niguaɛiŁaŁi 1. el que pide; plural
4176. niguena ninguno
4177. nucagua cosa dada
4178. nucszuc 1. sahumador, ó incensario
4179. nucszucséma 1. pescado azado
4180. nuguí 1. la paja
4181. núnú 1. el mudo
4182. núru 1. la matería, ó podre
4183. nuurú 1. las bubas; enfermedad
4184. nʋemác 1. la servilleta
4185. nʋemajaɛiŁa 1. el sirviente, que llaman tapian
4186. nʋemaŁa 1. el que come, ó comedor
4187. nʋema szama la tristeza, ó cuidados
4188. óc nuestro; particula posesiva
4189. ój su; particula posesiva
4190. ojo 1. la tóz
4191. ojóte 1. cierto mecate que hazen de corteza de arbol
4192. on mi; particula posesiva
4193. òne cosa tierna
4194. onéŁe cosa tierna; plural
4195. ònéŁe 1. los muchachos
4196. óneszinác 1. el ejote, vayna de frisol tierno
4197. óra 1. las doze del día
4198. ormóŁa quien recoje
4199. ormoŁáŁi quien recoje; plural
4200. óro solo
4201. orojáqui cosa fiada
4202. orojaɛiŁa el que fia
4203. orojaɛiŁaŁi el que fia; plural
4204. ootéc 1. el tapesco para dormir
4205. óto 1. el talpetate
4206. ótóc 1. la tapadera, ó tapon de las cosas
4207. ótocszaja 1. la puerta hecha de tapesco
4208. òtógua cosa tapada
4209. ószo 2. las tripas
4210. ószto 1. la ulcera, ó llaga
4211. osztó 1. llaguiento, ó podrido
4212. ószto ambuqui 1. los lamparones, y la crisipéla; enfermedad
4213. pá particula verbal
4214. páayú particula verbal
4215. paɛajutu 1. los palos, que sirven de parales en el bajareque de la cassa
4216. packá 1. la cabeza de negro; fruta
4217. packi 1. la pared
4218. packi 1. la piñuela; fruta
4219. packuszája 1. la mentira
4220. paaguác 1. la selva arbol
4221. paguác 1. el ócóte
4222. pági 1. la barranca
4223. pagníc 1. la estáca, ó barreta de palo, que sirve para escarbar la tierra
4224. pagtáŁa 1. el que paga
4225. pagtaŁáŁi 1. el que paga; plural
4226. pagtaɛiŁa 1. el que paga
4227. pagtaɛiŁaŁi 1. el que paga; plural
4228. pagtágua 1. cosa pagada
4229. pajáyu 1. el guapinol; fruta
4230. páju 1. la cera negra
4231. paŁ ya
4232. paŁa 1. el tercio
4233. paŁama 1. la tortuga marína
4234. paŁamacu 1. la ramada, ó galéra
4235. paalé 1. el sacerdote, y todo genero de padres
4236. paleŁé 1. el sacerdote, y todo genero de padres; plural
4237. paluumász 1. la paloma de castilla
4238. paamáa 2. los brazos
4239. paamáa 2. las alas de las aves
4240. panduu 2. el cuñado ó cuñada
4241. panducáŁi 2. el cuñado ó cuñada; plural
4242. papáa 2. el tio
4243. papacáŁi 2. el tio; plural
4244. papúc 1. el papél
4245. paraquiy por
4246. paraguapi 2. la planta del píe
4247. parapaɛí 1. el rincon de la cassa
4248. parapáamag 2. los senos, ó sobacos de los brazos
4249. paratáŁi 2. el pescuezo
4250. paraszaja 2. los cachetes
4251. pargúa 1. el arbol de madre de cacao
4252. pariaguála 1. la bebida, batido, ó chocolate frio, que usan los yndios de cacáo
4253. pari cosa caliente
4254. parí 1. el sol
4255. pari 1. el dia
4256. paríc 1. la fortuna, ó suerte
4257. pari ɛí 1. el verano
4258. paritili 1. la calentura de tabardillo
4259. parihúy 1. la agua caliente
4260. pati 1. el pañuelo, y la manta
4261. pati chuculá[-] 1. el paño de cholate, a modo de servilleta
4262. patxi 1. la masa para las tortillas
4263. paaszíc 1. la cozina
4264. pasziŁa 1. la molendera
4265. pasziŁaŁi 1. la molendera; plural
4266. payámu 1. el coyote, ó lobo

4267. payí 3. la nuera
4268. pè particula verbal
4269. pè ayù particula verbal
4270. pecotúma 1. el calambre; enfermedad
4271. peeguec 1. el tecomáte
4272. péle 1. patas, ó patójo
4273. peeló 1. el perro
4274. pelógua 1. cosa pelada
4275. peŁteméŁa el que buelve, ó boltéa alguna cosa
4276. peŁtemeŁaŁi el que buelve, ó boltéa alguna cosa; plural
4277. penéc enfadoso, ó ridiculo
4278. penecaragua 1. el órozus; yerva
4279. penejurác 1. el tun instrumento de yndios, que es un palo hueco
4280. pére cosas menudas, ó chicas
4281. peere jutu 1. la varilla para hazer cassas
4282. peere míya 1. los pajarillos, y pollos
4283. pere píya 1. la oja de vijagua
4284. péyu 1. el sonzapote; fruta
4285. péyu 1. la potra del quebrado; enfermedad
4286. péze 1. la lagartija
4287. pi 1. dós
4288. piícan anteayer
4289. picánsʋema antenoche
4290. picína 1. el capulín; arbol
4291. pigi pasado mañana
4292. pijúszíc 1. culebra de dos cabezas
4293. piŁatilí 1. la calamidad, ó necesidad
4294. pima 1. el amáte; arbol
4295. pipi 1. una flor aromatíca a modo de quiebra cajéte
4296. pipi 1. cierto bejuquillo que comen las bestias y llaman flor amarilla
4297. pipi 1. las partes genitales de las criaturas
4298. pipriŁa 1. la que desmóta, ó escarmena el algodon
4299. pipriŁaŁi 1. la que desmóta, ó escarmena el algodon; plural
4300. piriɛiŁa 1. el que míra
4301. pitxuɛiŁa 1. el que aprieta, ó exprime la cosa
4302. pitxuɛiŁaŁi 1. el que aprieta, ó exprime la cosa; plural
4303. piszuctuma 1. cierto bejuco, que lla[ma]n en castellano tripa de vieja
4304. píya 1. todo genero de oja
4305. piya ajaszu 1. la oja, que llaman de puerco de monte
4306. piya szogue 1. la oja con que aforran la sal
4307. piyaguayá 1. la oja de milpa
4308. príma 1. el alva del dia
4309. poóɛ 1. el ocote
4310. pooɛeŁa 1. el que alumbra
4311. pooɛeŁáŁi 1. el que alumbra; plural
4312. pocóco 1. el mapache
4313. poɛogua 1. cosa quebrada
4314. poch poch 1. los bofés
4315. pógmo 1. el ciego
4316. póre pero
4317. poscogua 1. cosa ensartada ó engarzada
4318. poté el guepíl
4319. potxa 1. la ropa que esta pronta para labar y está en jabon
4320. potxaŁa 1. la labandera
4321. potxaŁáŁi 1. la labandera; plural
4322. poszaŁa 1. la labandera
4323. poszaŁaŁi 1. la labandera; plural
4324. poszáguaŁ 1. la sobra del jabon
4325. poszágua 1. la ropa labada
4326. pószo 1. la perdiz
4327. póy la verdad
4328. poy poy de verdad
4329. poyoŁ ɛeŁa 1. el reconcilianse
4330. poyoŁ ɛeŁaŁi 1. el reconcilianse; pural
4331. pýu 2. la mano
4332. puguiɛiɛ 1. la mano de la piedra de moler
4333. pulagua 1. cosa hecha
4334. puŁpu 1. el polvo de la tierra
4335. púmu 1. el copal que sírve para sahumerio aromatíco
4336. punpún 1. la vegíga
4337. punpun Łʋeguʋe 1. el tecolote; ave
4338. púpuc 1. el petate, ó estéra
4339. puri ha; advervio
4340. puríc 1. la caja velica; instrumento
4341. puric 1. la caja del cuerpo
4342. púríci 1. el casamiento
4343. puri ɛiŁa 1. los novios, ó casados
4344. purimapʋe 1. la comída
4345. purimúu 2. la comída
4346. putxu ɛiŁa 1. el que ordeña, ó corralero
4347. putxu ɛiŁaŁi 1. el que ordeña, ó corralero; plural
4348. pʋeckʋe 1. el higado
4349. pʋeckʋe ɛiŁa 1. el que tienta
4350. pʋeŁtaɛ 1. la flecha
4351. pʋeŁtaŁa 1. el flechador
4352. puŁtalaŁí 1. el flechador; plural
4353. pʋeŁʋé aliviarse ó aliviado
4354. pʋepʋéc 1. el pozo
4355. pʋepʋe jaszu 1. el tamal de marrano
4356. pʋepʋe miya 1. tamal de gallina, que llaman de pipián
4357. pʋemʋe el mudo, ó muda
4358. pʋerʋéc enfadoso, necia
4359. pʋetxʋegua cosa que se hecha demas, que llaman ipeguil
4360. pʋesza cosa hedionda
4361. pʋeszajaya 1. la chínche hedionda
4362. pʋeszamaŁi 1. el azufre
4363. puʋeszʋec 1. la jicara peste
4364. pʋeszʋecszína 1. la jicara de orines
4365. puy pari el medio dia
4366. quí particula conclusíva, y afirmatíva
4367. ságuac 1. la campana
4368. saaguác 1. todo genero de fiérro
4369. saŁca distante, ó lejos
4370. saŁcagua cosa guardada

4371. salvia — 1. la salvia; yerva medicinal
4372. sáma — la obscuridad
4373. saraŁ huy — 1. la agua fría
4374. sararà — cosa elada
4375. sararà táu — 1. el frío
4376. sasépa — aparte
4377. seŁè — delado, ó torcido
4378. seŁè guapari — 1. la tarde, ó caìda del sol
4379. selicaŁa — 1. camulgantes
4380. seema — 1. el pescado
4381. sicar — 1. el tabaco
4382. siɛigua — cosa comenzada
4383. sigua pati — 1. el ciguapate; yerva medicinal
4384. simigua — cosa apagada
4385. simpóro — 1. el maíz negro
4386. sipani — 1. el ynfierno
4387. siraja ɛiŁa — 1. el mofador, ó burlador
4388. sìraja ɛiŁaŁi — 1. el mofador, ó burlador; plural
4389. sompe — 1. el piñon; arbol
4390. soyugua — 1. cosa empezada
4391. suɛuckiɛ — 1. cosa con que se amarra, ó ata
4392. suɛuckiŁá — 1. el que ata, ó amarra
4393. suɛugua — cosa amarrada
4394. suɛuguaa — el lugar donde se amarra
4395. suɛsin — 1. el jarro de agua caliente
4396. suguinaqui — 1. el chiltepe
4397. surumay — cierta flor nombrada, hilas, ó muñequilla
4398. surúru — el viento sur, ó remolino que haze el ayre
4399. suy — 1. la paba; ave
4400. sʋema — 1. la noche
4401. sʋema — cosa negra
4402. sʋemaya — 1. el cangrejo
4403. sʋen au — 1. el maiz negro
4404. sʋen miya — 1. el paugil; ave
4405. sʋemp sʋemp — cosa tirante
4406. sza — en
4407. szaa — 2. el nombre de cada uno
4408. szaɛackiŁa — 1. el que apadrina matrimonio
4409. szaɛackiŁaŁi — 1. el que apadrina matrimonio; plural
4410. szaɛaŁa — 1. el que lleva por delante, á otro
4411. szaɛalaguisz — 1. los calzones blancos
4412. sza ɛarickiŁa — 1. el aventador, ó espantador
4413. sza ɛarickiŁaŁi — 1. el aventador, ó espantador; plural
4414. sza ɛaayaŁ — 1. la espina
4415. sza ɛiŁaya — 1. buena moza, hermosa ó linda
4416. sza ɛiŁumu — 1. buen mozo, visarro
4417. szac szaŁa — 1. el ladron
4418. szacszaŁaŁi — 1. el ladron; plural
4419. szagua — 3. la sabana, colcha, ó cobija
4420. szagua — el brasil; arbol
4421. szagui — cosa dura
4422. szague — el asiento para sentarse
4423. szaguŁa — 1. el que está sentado, ú ocioso
4424. szaguŁaŁi — 1. el que está sentado, ú ocioso; plural
4425. szaja — 2. la boca
4426. szaja — 2. la puerta de la cassa
4427. szaja — 2. el filo de todo fierro cortante
4428. szaŁ — bueno, perfecto
4429. száma — dentro, en
4430. szamac sʋema — de mañana
4431. számaliy — 2. la frente
4432. szamʋepʋey — 1. atiquipaque; pueblo
4433. szán — [¿]que?; para interrogaciones
4434. szandaa — no se que, y quien sabe que
4435. szanda szʋe aŁi — [¿]y porque?; interrogativo
4436. szanda szʋe paraqui? — [¿]y para que?; interrogativo
4437. szanda szʋe na mán — [¿]y que es esso?
4438. szaani — [¿]como?; interrogativo
4439. szaan paraqui — [¿]porque?; interrogativo
4440. (see Appendix 3)
4441. szampiya — 1. ysguatan; pueblo
4442. szantiguina — arriba, ó en el cielo
4443. szanu — 1. el cojinicuil fiesta
4444. szanszaja — 2. los díentes
4445. szanszana — 2. el vestido, ó ropa de ponerse
4446. szanszaru — abajo el mar, las lagunas, y esteros
4447. szanszeeque — 2. el pecho, y costillas
4448. szanszogue — pasaco; pueblo
4449. szanszʋeʋe — [¿]que?; interrogativo
4450. szapriɛiŁa — 1. el que desgrana
4451. szapriɛiŁaŁí — 1. el que desgrana; plural
4452. szaprígua — cosa desgranada
4453. szápu — 1. el algodon
4454. szápu — el guisquil, ó chayote
4455. szapún — 1. el jabon
4456. szaru — 1. el jarro
4457. szaru — abajo
4458. szarumapi — 1. el guiscoyol
4459. szaug — 2. la uña
4460. szauszagua — cosa sembrada
4461. szauszaŁa — 1. el sembrador
4462. szauszaŁáŁi — 1. el sembrador; plural
4463. szayá — cosa agría
4464. száya naru — 1. la tierra de caparrosa
4465. szeé — 1. el taquazin
4466. széeɛe — 1. la leña menuda, que llaman palitos
4467. szeete — 1. la lombris
4468. szíɛa — 1. el gabilán
4469. szíguúguí — 1. cierto yerva, que sirve a las yndias para labar y bañarse
4470. szila — 1. la silla de sentarse
4471. szína — 3. los orines
4472. szinác — 1. los frisoles
4473. sziná Ła — 1. el orinador
4474. sziná ŁaŁi — 1. el orinador; plural
4475. szinu — 1. la caña brava
4476. szinúla — 1. la señora
4477. szinuŁaŁí — 1. la señora; plural
4478. szipiɛiŁa — 1. cortador
4479. szipiɛiŁaŁí — 1. cortador; plural
4480. sziriŁa — 1. el escondedor

4481. sziriŁaŁi 1. el escondedor; plural
4482. sziúc 1. el cascabel, y chinchin
4483. sziyácu 1. el mecate
4484. sziyácu 1. el ilicito, y torpe amigo, ó amiga
4485. szoɛoy 1. la lechusa
4486. szolco 1. sin dientes
4487. szoto 1. el tiesto
4488. szootóc 1. el tejon, y piedras del fuego, que llaman tenamastes
4489. szuɛagua cosa comida, ó mascada, ó mordida
4490. szucaszamíni 2. dolor de barriga
4491. szuca szan szaja 2. dolor de muelas
4492. szuckimaŁ 1. las brazas
4493. szuguan 1. el palo de laurel *alias* suchicaguite
4494. szuguay 1. el lagarto, ó caimán
4495. szuguay 1. todo genero de razímo
4496. szuguay Łamuc 1. el peje armado
4497. szuguic 1. la escoba
4498. szuguiɛiŁa 1. el que barre
4499. szuguiɛiŁaŁì 1. el que barre; plural
4500. szule cierto pesesio
4501. szuŁtera 1. la muger soltera
4502. szuŁtéru 1. el hombre soltero
4503. szuŁteruŁi 1. el hombre soltero; plural
4504. szúni 1. la estrella
4505. szúni 1. la concha del mar
4506. szúni 1. los jutes, y caracoles de rios de agua dulce
4507. szúníc 1. la ólla
4508. szúunú cosa larga
4509. szúunú la hondura de las pozas, y de toda agua
4510. szuunúc 1. el ombligo
4511. szuunumpati 1. la manta doble, que llaman del rey
4512. szupímaŁ 1. el yscanal, arbol de espina á a modo de cachos
4513. szuraya 1. la muchacha
4514. szurúc 1. el bordon
4515. szurúŁ 1. la ardilla
4516. szurúŁi 1. la ardilla; plural
4517. szurúmu 1. el muchacho
4518. szurumuŁi 1. el muchacho; plural
4519. szutí 1. los jutes, a modo de caracoles de los rios
4520. szuutúc 1. el tizne, hollin, y carbon
4521. szuszí 1. las barbas
4522. szuszumí 1. el pisote
4523. szuyá 2. el hermano maior
4524. szúya 2. primero, ó antes
4525. szvɛɛvél el ténpísque; arbol y su fruta
4526. szvɛja 1. la arena
4527. szvema 1. el raton
4528. szvervéc 1. el golpeador
4529. tá partícula conclusiva
4530. taguaŁ ɛihúy la agua bendita
4531. taguaŁ ɛigua cosa bendita
4532. tàgnagua jumu 2. las partes genitales del hombre
4533. tagnaguajaya 2. las partes genitales de la muger
4534. tagtí 1. la sabána
4535. tagti caragua 1. sacate de sabána
4536. tagti szamipíya 1. tepeaco; pueblo
4537. tagti naru 1. la tierra llana
4538. tajá muchas veses
4539. taŁa tili 1. la calentura
4540. táŁi 2. la garganta
4541. tamatxi 1. la pita flora torcida
4542. taaníc 1. la nuca, ó cerebro
4543. tani ɛiɛ 1. la cabezera, ó almoada
4544. tantxi 1. sordo
4545. táapa 1. el nanze; fruta
4546. táta 2. el padre
4547. tatacaŁi 2. el padre; plural
4548. tatacaŁi 2. los viejos
4549. tatahipi 1. mozeon, ó mancebo
4550. tatamiya 1. el gallo
4551. táu 1. el viento
4552. táuc 1. la tortuga
4553. tautaŁatili 1. frios, y calenturas
4554. taszélász 1. las tixeras
4555. tayúc 1. el sombrero
4556. té 2. *es verbum impurum et significat illa pars mulieris, que constituit eam in suo femineo genere*
4557. téna cosa colorada
4558. teená bastante, mucho
4559. ten au 1. maíz cólorado
4560. ten alú 1. la guacamaya; ave
4561. tenész 1. la cál
4562. tenguiŁay 1. el leon
4563. tenjúszic 1. el quebrantahueso
4564. ten naquí 1. el chile colorado *alias* chileguaque
4565. tenturi 1. la criatura tierna
4566. tenturiŁi 1. la criatura tierna; plural
4567. tenugua 1. el sapóte
4568. tero ɛeŁa 1. el que mata
4569. tero ɛeŁaŁi 1. el que mata; plural
4570. teroguasaguac 1. los dobles de las campanas
4571. tészco 1. cierto pajaro, de que abusan los yndios
4572. teszcoy 1. traviezo, pernícioso
4573. tiɛiɛguaru 1. la hamáca
4574. tiyɛiɛŁa 1. dormilon
4575. tiɛiŁáŁi 1. dormilon; plural
4576. tila 1. la sal
4577. tila séma 1. pescado salado
4578. tiŁtick 1. el negro, ó negra
4579. títa 2. la pierna
4580. titica tata 2. el padríno
4581. titica tatacaŁi 2. el padríno; plural
4582. titica nau 2. el ayjado
4583. titica naucaŁi 2. el ayjado; plural
4584. titica utáa 2. el madrina
4585. titica utacaŁi 2. el madrina; plural
4586. tiszi 1. el haragan
4587. tisziŁi 1. el haragan; plural
4588. tisztaŁa 1. el que ventoséa
4589. tisztaŁáŁi 1. el que ventoséa; plural
4590. toctoc 1. el sensonte de la tierra; ave
4591. tolo cosa amarilla
4592. tolo 1. tamate, ó emboitorío de ropa
4593. tolo 1. el quilate, pito, ó

		dormilon, arbol
4594.	toloau	1. maiz amarillo
4595.	toloszaja	1. el cantil, culebra, ú otra su semejante con la voca amarilla
4596.	tondón	1. la tortuga marina
4597.	tonoja ɛiŁa	1. engañador, ó mentiroso
4598.	tonojaɛiŁaŁi	1. engañador, ó mentiroso; plural
4599.	túa	1. el cacao
4600.	tugcuguá	1. tecoaco; pueblo
4601.	túŁu	1. todo genero de flor
4602.	tuŁu ambuqui	1. la suchicúa; culebra
4603.	tuŁtuc	cosa con que se pica, como lanza, pica etc.
4604.	tuŁtuɛiŁa	1. el que pica
4605.	tuŁtuɛiŁaŁi	1. el que pica; plural
4606.	tuŁtuŁa	1. el que pica
4607.	tuŁtuŁaŁi	1. el que pica; plural
4608.	túma	1. el siervo, ó venado
4609.	tuma ambuqui	1. la masacúa; culebra
4610.	tumín	1. la moneda, y todo genero de dinero
4611.	tumuqui	todo
4612.	tumuguá	cosa acabada
4613.	tuntiŁa	1. el que toca instrumentos
4614.	tuntiŁaŁi	1. el que toca instrumentos; plural
4615.	tupágua	cosa dejada
4616.	tupaŁa	1. el que deja
4617.	tupaŁaŁi	1. el que deja; plural
4618.	tupilili	el calanhilla; yerba
4619.	turagua	cosa traida
4620.	turi	1. el niño
4621.	turiŁi	1. el niño; plural
4622.	turúy	1. la guayaba; fruta
4623.	tutúc	1. los pechos de la muger
4624.	tutuɛiŁa	1. la ama, ó chichigua
4625.	tutuɛiŁaŁi	1. la ama, ó chichigua; plural
4626.	tusztun	1. el tostón
4627.	tuya ɛiŁa	1. regañon
4628.	tuya ɛiŁaŁi	1. regañon; plural
4629.	tuyugua	cosa comenzada
4630.	tuyuja ɛiŁa	1. toreador provocativo
4631.	tuyujaɛiŁaŁi	1. toreador provocativo; plural
4632.	tvɛvemaŁ	1. piojo
4633.	tvemve ɛiŁa	1. el que tiñe, ó tintorero
4634.	tvesz ɛve	lejos, ó distante
4635.	txaguiɛiŁa	1. pelliscador
4636.	txaguiɛiŁaŁi	1. pelliscador; plural
4637.	txáma	bueno, y bien
4638.	txamaverrá	mui grande
4639.	txamachverveɛve	mui chíco
4640.	txamve	cosa agria, ó amarga
4641.	txayá	cosa mojada
4642.	txaya sema	1. pescado fresco
4643.	txege	1. chiquimula; pueblo
4644.	txegeŁé	1. chiquimula; pueblo; plural
4645.	txímaja	1. guasacapan; pueblo
4646.	tximajaŁi	1. guasacapan; pueblo; plural
4647.	txinána	1. el alacrán, sabandija
4648.	txita	1. la petaquilla de caña, ó sombrero de petate
4649.	txoco	1. el sanate; ave
4650.	txuguinaqui	el chiltepe
4651.	txumáŁa	1. el que besa
4652.	txumaŁaŁi	1. el que besa; plural
4653.	txunic	1. la bolsa que usan las yndias en sus naguas
4654.	txvɛɛvɛsvema	la media noche
4655.	txvɛɛsvema	la media noche
4656.	txveguve	1. el maíz tierno, ó camagua
4657.	txveguve mapve	1. la tortilla de maiz tierno que llaman elotászca
4658.	txveguve uyuɛu	1. el atole de maiz tierno
4659.	txvemve ɛiŁa	1. el regador de siembras
4660.	txvemvegua	cosa regada
4661.	txvemvetvɛɛve	1. cierto mecate de corteza
4662.	txveri ɛiŁa	1. el que trueza, ó corta
4663.	txverickiŁaŁi	1. el que trueza, ó corta; plural
4664.	txurigua	cosa trozada
4665.	tzutzupari	1. el sarampion, ó sarpullido; enfermedad
4666.	uc	nuestro; particula posesiva
4667.	ucayun	por
4668.	uchún	la papaya; fruta
4669.	Úɛu	1. la elotesca, tortilla de maiz tierno triangula
4670.	ucszaya	1. la vieja
4671.	ucszayaŁi	1. la vieja; plural
4672.	ucszaya	1. la muger, consorte
4673.	ucszayaŁí	1. la muger, consorte; plural
4674.	ucszumu	1. el viejo
4675.	uszumuŁi	1. el viejo; plural
4676.	ucszumu	1. el marido
4677.	ucszumuŁi	1. el marido; plural
4678.	uguáŁ	1. la ormiga
4679.	uguíg	2. todo genero de carne
4680.	ugui ɛi	1. el ynvierno
4681.	ugui ɛoómo	2. la carnaza de la pastorrilla
4682.	ugui juurig	las nalgas
4683.	ugui titag	2. los muzlos
4684.	ug	su; particula posesiva
4685.	ÚŁcaŁa	1. el que desea
4686.	uŁcaŁaŁi	1. el que desea; plural
4687.	uŁugua	cosa caida
4688.	umaŁa	1. el medico, ó curandero
4689.	un	mi; particula posesiva
4690.	upuguá	cosa particular
4691.	uray	el fuego
4692.	urŁú	entero
4693.	urúŁ	1. el huevo
4694.	urúŁ	1. tacuilula; pueblo
4695.	uruŁ míya	1. el huevo de la gallina
4696.	uruŁta uc	1. el huevo de tortuga
4697.	uruŁ tondon	1. el huevo de la tortuga
4698.	uruŁa	1. el que corta frutas
4699.	uruŁi	1. los campañones
4700.	utáa	2. la madre
4701.	utacaŁi	2. la madre; plural
4702.	uta caguayo	1. la yegua
4703.	utacaguayu Łi	1. la yegua; plural
4704.	utacaŁi	viejas, ó madres
4705.	utackotoro	1. la culebra coral
4706.	uta guaacatz	1. la baca
4707.	uta húy	1. el rio

4708. uti — 1. el pinol de maíz
4709. uti — 1. la harina
4710. utu ɛkiŁa — 1. el que se tarda
4711. utuymag — 2. la cola, ó rabo
4712. utxi — 1. el maiz cosido para las tortillas que llaman nisztamal
4713. utxʋé — en medio
4714. uszckiŁa — 1. humador de tabaco
4715. usztiy — 2. la suegra
4716. usztu — 1. mal de pujido en las criaturas
4717. usztuambuqui — 1. el mal de madre
4718. uszu — 1. el mosquito, gegén
4719. uy — 1. el agua
4720. uy guaacasz — 1. el caldo
4721. uy juraý — 2. las lagrimas
4722. uy Łʋeguʋe — 1. la miel, y todo genero de dulze
4723. uymasza — 1. la agua de lodo
4724. uy naqui — 1. el caldo
4725. uy nariy — 2. los mocos
4726. uy tutuc — 1. la leche
4727. uyszác — 1. el malacate
4728. uy szajáa — 2. la saliba
4729. uy szaŁa — 1. la hilandera, ó hilador
4730. uyúcu — 1. el atol
4731. ʋec — nuestro; particula posesiva
4732. ʋecŁʋec — el cantaro
4733. ʋeg — su; particula posesìva
4734. ʋelʋeʋe — la espalda
4735. ʋelʋemacu — 2. lo de detras de la casa
4736. ʋemʋemí — cosa olorosa
4737. ʋen — mi; particula posesiva
4738. ʋena — 3. el excremento
4739. ʋena[---]ma — 2. los pujos de sangre, y la disintería
4740. ʋeptxʋé — cosa sazona
4741. ʋeptxʋé — cosa crecida
4742. ʋerrá — cosa grande
4743. ʋesza — 1. la sarna; enfermedad
4744. ʋesztú — allí
4745. ʋesztúcá — allá
4746. ʋeszʋeszʋé — cosa sabrosa, y gustosa
4747. yɛaŁ — uno
4748. yɛaŁaɛaŁ — uno falta
4749. yguaŁ — quanto; interrogatívo
4750. yguáŁacáŁ — [¿]quanto falta?; interrogativo
4751. yaɛiɛ — 1. la saguillas, y cuentas
4752. yamí Ła — 1. murmurador
4753. yami ɛiŁa — 1. el murmurador
4754. yamiɛiŁaŁi — 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. yoŁeguá — cosa derramada
4761. yú — hombre, nombre anomalo, que solo tiene el vocativo
4762. yʋeguagua — cosa perdida
4763. yʋeguaŁigua — cosa perdida
4764. yʋeguaŁiɛiŁa — 1. el que pierde
4765. yʋeguaŁiɛiŁaŁi — 1. el que pierde; plural
4766. yʋeŁɛʋeɛiŁa — 1. acusador
4767. yʋema — los jocotes; fruta
4768. yʋepʋegua — cosa vomitada
4769. yʋeguʋeŁ — 1. el coachipilín; arbol
4770. (see Appendix 3)
4771. (see Appendix 3)
4772. (see Appendix 3)
4773. (see Appendix 3)
4774. (see Appendix 3)
4775. (see Appendix 3)
4776. (see Appendix 3)

3. Analysis of phrases and clauses from the ALS

(1.)[185] <nana jautuma axʊe neŁa turiŁi>
nana haw-tuma ʔahɨ neɬa turi-ɬi
FOC skin-deer=whip DEM BEN child-PL
'this whip is for the children'

"este azote o cuero es para los muchachos"

(1870.) <¿szàn para cà nem?>
šan para-kaʔ nem
INT search-2sA PN:1s
'what have you searched me for?'

"¿para qué me quieres?"

(1871.) <a szìn 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.) <¿guena nàca?>
wena naka
INT:who? PN:2s
'who (are) you?'

"¿quién sois vos?"

(1876.) <òro naca ɛica capa jata pè quí>
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 gracía ayaàc asʊec muc terò>
šaɬ ka-n wi šama *gracía* ʔaya:-k
good EXO-SUBJ/IRR DIR? PREP Sp:grace be-1pS$_{DEP}$
'it is good (that) we are in grace'

ʔasɨk 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"

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[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-1sS$_{DEP}$ 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 ɛaŁ paraqui upu ayacà Łinà nà ayàŁa man ca ùɛa condenar naca anima ó catupa ó ca puriqui Łinà>
tuk'aɬ para ki ʔupu ʔaya-kaʔ ɬi-naʔ na ʔayaɬa man
CONJ CONJ stand be-2sS$_{DEP}$ 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 ɬi-naʔ
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 Łinà juicio ayacà asʊec pulaguà nà sermon>
niwa-n naʔɬ ki ša ɬi-naʔ *juicio* ʔaya-kaʔ
ask-1sA IMPFV INTENS PREP PREP-DEM/3s Sp:juicio be-2sS$_{DEP}$
'I asked (for) it (that) you would be sober'

ʔasiɬk pula-waʔ 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.>
ʔaɬ-para kiwa-ʔ harana ʔaya-kaʔ
PREP.CAUS-? INTENS/REFL-? sick be-2sS$_{DEP}$
'because you are/were sick'

ʔašin ʔuyši-kaʔ 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 asʊèc imaguà na miszà ui szicà nàŁqui na doctrina.>
si šama maku-tyuš na(ʔ)ɬ ʔaya-kaʔ
Sp:if PREP house-Sp:god IMPFV be-2sS$_{DEP}$
'if you had been in the church,'

ʔasiɬk ʔima-waʔ na miša
CONJ say-ANT DET Sp:mass
'when one spoke (=was spoken?) the mass,'

ʔuyši-kaʔ naʔɬ 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>
ʔaku ʔ ʔaya:-n *Guatemala*
go be-1sS$_{DEP}$ Guatemala
'I am going to Guatemala'

"me voy a estar a Guatemala"

(1963.) <guenaqui szamà pecado mortal agi yʊeguaŁiy na gracia muneŁa dios>
wena=ki šama *pecado mortal* ʔahi
INT:who-INTENS PREP Sp:deadly sin be+3sS$_{DEP}$
'(the one) who is in deadly sin'

yɨwaɬi-y na *gracia* mu-neɬa *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 aŁa temprano pè acùg.>
wena=ki naʔ peʔ ʔahi ʔaɬa
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.) <guaszàta ayaan>
wašata ʔaya:-n
enter be-1sS$_{DEP}$
'I am entering'

"estoy entrando"

(1969.) <tà ayacà>
taʔ ʔaya-kaʔ
come be-2sS$_{DEP}$
'you are coming'

"estás viniendo"

(1970.) <yszàpa agí>
ʔišapa ʔahi:ʔ
emerge/leave be+3sS$_{DEP}$
'he/she is emerging/leaving'

"está aquel saliendo"

(1977.) <an nariŁa naturiŁi>
ʔan-nariɬa na turi-ɬi
1sA-teach DET child-PL
'I teach the children'

"yo enseño a los muchachos"

(1978.) <nem an nariŁa naturiŁi>
nem ʔan-nariɬa na turi-ɬi
PN:1s 1sA-teach DET child-PL
'I teach the children'

"yo enseño a los muchachos"

(1979.) <nariŁa patai Łic nana turiŁi aŁparaquíguàn>
nariɬa pata-y ɬik nana turi-ɬi
teach *accomplish-3pA 3PL FOC child-PL
'the children are taught'

ʔaɬ-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-ɬi nariɬa ɬik pata-y
FOC child-PL teach 3PL *accomplish-3pA
'the children are taught'

ʔaɬ-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-ɬi nariɬa pata-y ɬik
FOC child-PL teach *accomplish-3pA 3PL
'the children are taught'

ʔaɬ-para kiwa-n
PREP.CAUS-? INTENS/REFL-1sP
'by me'

"los muchachos son enseñados por mí"

(1982.) <an ima naŁ na misza>
ʔan-ima na(ʔ)ɬ 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 ʔan-ʔima na(ʔ)ɬ na miša
PN:1s 1sA-say/speak IMPFV DET Sp:mass
'I said/spoke the mass'

"yo decía misa"

(1984.) <ima nàŁ patai nana misza aŁparaquiguan.>
ʔima naʔɬ pata-y nana miša
say/speak IMPFV *accomplish-3sA FOC Sp:mass
'the mass was spoken'

ʔaɬ-para kiwa-n
PREP.CAUS-? INTENS/REFL-1sP
'by me'

"la misa era dicha por mí"

(1987.) <yguitzi nàŁ u ɛa can na misza>
ʔiwiɻ'i naʔɬ ʔuk'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 ɛa can na misza>
ʔiwiɕ'i naʔɬ 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 ɛa can naca na misza>
ʔiwiɕ'i naʔɬ 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 uɛa can confesar>
ka-taʔ peʔ ʔaɬa 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 uɛa can confesion>
ka-taʔ peʔ ʔaɬa 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 sʊec naŁ pùla uɛan na an oracion ca guaszatà.>
ʔasɨk na(ʔ)ɬ pula ʔuk'a-n na ʔan-*oración* ka-wašata-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.) <¿cà pè taguà na aszʊe?>
kaʔ peʔ ta-waʔ na ʔašɨ
INT:where? CENT come-ANT DET DEM
'from where did this (one) come?'

"¿de dónde vino ésto?"

(2017.) <nana Pedro púlai (na) macùg aŁ mucàn>
nana Pedro pula-y (na) maku-h ʔaɬmu=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 uiszicà paŁ naŁ na misza nana naca ay asʊec uŁù na macu tiusz>
ka=pa ʔuyši-kaʔ paɬ na(ʔ)ɬ 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,'

ʔasɨk Ø-ʔuɬu-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 asʊec uŁù pataguà nana macu tiusz>
ka=pa ʔiwiɕ'i paɬ na(ʔ)ɬ pata-waʔ nana miša
EXO=PFV hear PFV IMPFV *accomplish-ANT FOC Sp:mass
'the mass was already heard'

ʔaɬ-para kiwa-ka ʔay
PREP.CAUS-? INTENS/REFL-2pP 2PL
'by you (pl.)'

ʔasɨk ʔuɬu-ʔ pata-waʔ nana maku tyuš
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 nariŁa pè na doctrina tiy turiŁi>
nana *maestro* mu-nariɬa peʔ na *doctrina* tiːʔ turi-ɬi
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 doctrína nariŁa pè patai ucaìn maestro tiy turiŁi>
nana *doctrina* nariɬa peʔ pata-y
FOC Sp:creed teach FUT *accomplish-3sA
'the creed will be taught to the children'

ʔuka=ʔin *maestro* tiːʔ turi-ɬi
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 aŁparaquiguà á szin pa ayù jʊenʊei na doctrina>
naka ʔayuʔ paʔ wišu-kaʔ na Juan
PN:2s AUX PFV beat-2sA DET Juan
'you will have beaten Juan,'

ʔaɬ-para kiwa-ʔ
PREP.CAUS-? INTENS/REFL-?
'because'

ʔašin pa(ʔ) ʔayuʔ hɨnɨ-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.) <¿uisziy pa ayù misza?>
ʔuyši-y pa(ʔ) ʔayuʔ miša
hear-3sA PFV AUX Sp:mass
'will he have heard the mass?'

"¿habrá oído misa?"

(2024.) <uisziy ayù pa qui na misza>
ʔuyši-y ʔayuʔ pa(ʔ) ki na miša
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 aŁparaquiguàca>
wišu-ʔ peʔ ʔayuʔ pata-y nana Juan
beat-STAT CENT AUX *accomplish-3sA FOC Juan
'(the) Juan will have been beaten'

ʔaɬ-para kiwa-ka
PREP.CAUS-? INTENS/REFL-2sP
'by you'

"Juan habrá sido azotado por ti"

(2026.) <púla penitencia>
pula-Ø *penitencia*
make/do-IMP.VT Sp:penitence
'do penitence!'

"haz penitencia"

(2027.) <púla naca penitencia.>
pula-Ø naka *penitencia*
make/do-IMP.VT PN:2s Sp:penitence
'do (your) pentinence!'

"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 iɛal santo>
ka-ʔiwiɕ'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 pariqui aŁparaquiguaca, catana naŁ iɛal santo>
si ʔiwiɕ'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 Łuèɛuе na perdon>

maɬka	ʔormo-kaʔ	ma	šaɬ	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-ɬik'ɨ	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 consiguiréis el perdón"

(2034.) <maŁca oromo ma pataguag aŁparaquiguaca ay tu muqui na jamaca a szinvaa ca ima tumu qui szamà naca confesión a szinca Łuecuе na perdon>

maɬka	ka-ʔoromo	ma	pata-wa-h
CONJ	2sA-gather	COND	*accomplish-ANT-3sP

'although (they) should have been gathered'

ʔaɬ-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-ɬik'ɨ	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 consiguiréis el perdón"

(2035.) <maŁca uɛaca mà restituir szan gui szac szacà ca jama Łà>

maɬka	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-ɬaʔ
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 uɛa 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'

ʔan-ʔuk'a na(ʔ)ɬ 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

(2037.) <si pulà ma ayù pataguag aŁparaquiguàca na penitencia nucai naca na palè aya pà can pè an uɛa naŁqui absolver naca szamà na pari axʊe>
si pula ma ʔayuʔ pata-wa-h
Sp:if make COND AUX *accomplish-ANT-3sP
'if (it) would have been made'

ʔaɬ-para kiwa-ka na *penitencia*
PREP.CAUS-? 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)ɬ ki *absolver* naka
1sA-do IMPFV INTENS Sp:absolve PN:2s
'I would absolve you'

šamaʔ na pari ʔašɨ
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 uɛa 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-? FUT INTENS Sp:confess PN:2s DET Sp:priest
'the priest (himself) will confess you'

ka-nuka paʔ peʔ tiːʔ-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 uɛa cambequi confesar naca na palè nucà pà pè patai tíyg 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 tiːʔ-h
give PFV FUT *accomplish-3sA IO-3s
'(if) were given (= told) to him'

ʔaɬ-para kiwa-ka na *doctrina*
PREP.CAUS-? 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 uɛa pè castigar naca dios ay>
ʔašin paʔ peʔ ka-ʔakuʔ miša ʔaɬa
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 turiŁi a erŁèque>
ʔaɬi ʔa-wišu-ʔ na turi-ɬi ʔa-ʔerɬeke
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 szàma szàŁ na jamàca>
neɬa ka-pula ka-kumbisyon
BEN 2sA-make 2sP-Sp:confession
'in order to make your confession,'

pata-Ø šama šaɬ 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 Łi>
Ø-ta:-yi-ʔ na *maestro* nariɬa=ʔin na turi-ɬi
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 yguitzí na misza szamà Łi guína a szin ca pùla na jamaà>
ʔaɬi ka-ʔiwiɕ'i-ʔ na miša šama=ɬi 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 paɬ
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 Łàn.>
ʔa *señor* naka ki pula-ɬa-n
AFF Sp:sir PN:2s INTENS make-PAST.ACT-SUBJ
'yes sir, (it is) you yourself (who) did it'

"si señor, tú lo hiciste"

(4772.) <¿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/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 Łàn>
ʔašin *señor* ʔašin nen šakša-ɬa-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 aŁi Pedro>
nana maku pula-ʔ pata-wa-h ʔaɬi 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 aŁparaquiguà Pedro>
nana maku pula-ʔ pata-wa-h
FOC house make-STAT *accomplish-ANT-3sP
'the house was made (= built)'

ʔaɬ-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"

ʔahɨ

ʔahɨ. [ADV]. yes, *affirmative*: <agʊe> "sí"

ʔak(')aɬ

ʔak'aɬ [ADV]. still, yet: <aɛaŁ> "todavía", "también, así"

ʔašin=ʔak'aɬ [NEG=ADV]. not yet: <aszinaɛál> "todavía no"

ʔikaɬ=ʔak'aɬ [NUM=ADV]. one yet = one is still missing: <yɛaŁ aɛaŁ> "uno falta"

ʔiwaɬ=ʔakaɬ [INT=ADV]. how many yet?: <yguáŁ acáŁ> "¿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 šikɨ [ADV EXTEN]. so/like this as well: <acán szʊequi> "también, así también"

ʔaku

ʔakuʔ. [VI]. to go, walk: <acú> "ir, andar"

*ʔaku ʔantaʔ = [kundaʔ]. [VI=VI]. go!: <cun dà> "ve o anda tú con dios", "id vosotros con dios"

*ʔaku ʔantaʔ taʔ= [kundaʔ taʔ]. [VI=VI DIR]. go away!: <cun dà tá> "ve o anda tú con dios"

ʔaku=šama. [VI=PREP]. go inside = sadness: <acuszáma> "tristeza"

ʔaku-ɬa. [VI-AGT]. (the one) who goes/went: <acùŁa> "el que va o iba"

ʔaku-ɬa-ɬ. [VI-PAST-AGT]. (the one) who goes/went: <acùŁaŁ> "el que va o iba"

ʔaku-ki. [VI-REFL?]. go oneself? = walk, go for a walk: <acuqui> "andar o pasear"

ʔaku-ki-ɬa [VI-REFL?-AGT]. (the one) who walks/goes = vagabond: <acuquiŁa> "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'ɨ**

*ak'ɨ. [ADV]. now, *distance in time

*ʔak'ɨ=ka. [ADV=EXO]. until: <aɛʊeca>

ʔak'ɨ=ka ʔaya-k ʔanik. [ADV=EXO VI-VN? ADV]. until: <aɛʊeca ayac anic> "ahora ocho días"

ʔak'ɨ=ka ʔaya-k ʔik'aɬ ʔayapa. [ADV=EXO VI-VN? NUM N]. until: <aɛʊeca ayac yɛál ayapa> "ahora un año"

ʔak'ɨ=ka ʔik'aɬ ʔawa. [ADV=EXO NUM N]. until: <aɛʊeca yɛal agua> "ahora un mes"

*ʔak'ɨ=peʔ. [ADV=CENT]. since: <aɛʊepè>

ʔak'ɨ=peʔ ʔaya-k ʔik'aɬ pari. [ADV=CENT VI-VN? NUM N]. since: <aɛʊepè ayac yɛál pari> "de aquí a ocho días"

ʔak'ɨ=peʔ ʔaya-k ʔik'aɬ ʔayapa. [ADV=CENT VI-VN? NUM N]. since: <aɛʊepè ayac yɛál ayapà> "de aquí a un año"

ʔak'ɨ=peʔ ʔaya-k ʔik'aɬ ʔawa. [ADV=CENT VI-VN? NUM N]. since: <aɛʊepè ayac yɛál agua> "de aquí a un mes"

ʔaɬ-

ʔaɬ-. [PREP]. on top of, over, by: <aŁ> "por, encima o sobre"

ʔaɬi. [PREP]. by, through, over: <aŁi> "por, encima, sobre"

šanta šɨ ʔaɬi. [INT EXTEN PREP]. and why?: <szanda szʊe aŁi> "¿y por qué?"

wena ʔaɬi. [INT PREP]. by/because of whom?: <guèna aŁi> "¿por quién?"

ʔaɬ-pama-h. [PREP-N-3sP]. on top of his arm = shoulder: <aŁpámag> "hombros"

ʔaɬ-para kiwa-X. [PREP-? REFL-1/2/3P]. by X-self: <aŁparaquiguá> "por"

ʔaɬ-te. [PREP-N]. *on top of/over female genitals = male genitals: <aŁté> "*verbum impurum et significat membrum virile*"

ʔaɬte-pɨšɨ. [PREP-N-N]. genital-cup = urinal?: <aŁte pʊeszʊe> "jícara peste"

čaraʔɨn-ʔaɬte. [N-N]. ?-genitals = *penis?: <charraʊen aŁtè> "*verbum impurum et significat pendiculus*"

muš-ʔaɬte. [N-N]. hairs of genitals = pubic hair: <musz aŁtè> "est verbum disolutum per quod significatur pilos continentes in partes genitales"

ʔaɬ-wapi. [PREP-N]. over the foot = dorsum of the foot: <aŁguapi> "empeine del pie"

ʔaɬa

ʔaɬa. [ADV]. tomorrow: <aŁa> "mañana"

***ʔali-**

*ʔali. [VI?/ADJ?]. *to reveal itself / be manifest

ʔali-ya. [VI-TRANS]. to show, demonstrate, present: <aliya> "manifestar, demonstrar o enseñar"

ʔaɬkalti

ʔaɬkalti. [N.]. mayor [L-S]: <aŁcalti> "alcalde"

ʔaɬmuʔ

ʔaɬmuʔ. [ADV]. today: <aŁmúu> "hoy"

ʔaɬmu=ka-n. [ADV=EXO-IRR]. *today ago = yesterday: <aŁ mu cán> "ayer"

ʔaɬmu=ka-n sɨʔma. [ADV=EXO-IRR N]. *today ago night = yesterday night: <aŁ mu can sʊema> "anoche"

ʔaɬmuɬ

ʔaɬmuɬ. [N]. measure (unit for dry capacity) [L-S]: <aŁmuŁ> "almud"

ʔaɬtepet

ʔaɬtepet. [N]. town, village [L-N]: <aŁtèpét> "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?: <amaequè> "refrán, con el que quieren significar, oiga o ¿qué dices?"

ʔama=šan ʔaka naman [ADJ?=INT? ? ?]. *expression* (meaning not understood): <amaszán ácá namán> "refrán"

ʔama=šɨki. [ADJ?=EXTEN]. as well, and: <amaszʊequi> "también, *et*, y"

ʔampɨ

ʔampɨ. [ADV]. now: <ambʊé> "ahora"

ʔampuki

ʔampuki [N]. snake, serpent: <ambuqui> "culebra"

ʔamu-ʔampuki. [N-N]. spider-serpent = cancer: <amu ambuqui> "el herpes o cancro"

ʔošto-ʔampuki. [N-N]. ulcer/rotten-serpent = king's evil, *streptothricosis* (illness): <ószto ambuqui> "los lamparones y la crisipela; enfermedad"

ʔuštu-ʔampuki. [N-N]. *groaning?-serpent = uterine bleeding (*metrorrhagia*): <usztu ambuqui> "el mal de madre"

tuɬu-ʔampuki. [N-N]. flower-serpent = type of snake: <tuŁu ambuqui> "suchicúa; culebra"

tuma-ʔampuki. [N-N]. deer-snake = boa constrictor, *mazacoatl*: <tuma ambuqui> "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: <amu ambuqui> "herpes o cancro"

ʔamuɬ

ʔamuɬ. [N]. nettles [L-M]: <amùŁ> "ortiga o chichicastle"

***ʔanta**

ʔanta. [VI/IMP]. let's go! [L-S]: <ʔandà> "vamos; defectivo"

ʔanta-maɬ=taʔ. [VI-EXH=DIR]. go away!: <andamaŁtà> "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: <aɛʊeca 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]: <apàla> "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-ɬa. [VT-AGT]. (the one) who is sent = envoy, messenger: <araŁa> "enviado, mensajero"

ʔara-ki. [VT-AP]. *to (generally) send = to watch: <araqui> "mirar"

ʔara-ki-ɬa. [VT-AP-AGT]. (the one) who watches: <araquiŁa> "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

muɬ-ʔasukar. [ADJ-N]. white-sugar [L-S]: <muŁ azúcar> "azucar"

ʔašin

ʔašin. [ADV]. no, not, *negative marker*: <aszin> "no"

ʔašin=ʔak'aɬ. [NEG=ADV]. not yet: <aszinaɛál> "todavía no"

ʔašin=paʔ. [NEG=ADV.PFV]. *not yet = if not: <aszin vaa> "sino"

ʔašin=šaɬ. [NEG=ADV]. not good = bad: <aszin szaŁ> "malo, no está bueno"

ʔašin=saɬka. [NEG=ADV]. not distant = close: <aszin saŁca> "cerca"

ʔašin=tɨšk'ɨ. [NEG=ADV]. not far: <aszin tʊeszɛʊe> "no lejos"

ʔašin=ša:n. [NEG=INT]. not-what = (there is) nothing: <aszìn szàn...> "nada"

ʔašɨʔ ~ ʔahɨʔ

ʔašɨ. [DEM]. this, *demonstrative*: <aszʊe> "este"

ʔahɨʔ. [DEM]. this: <agʊé> "este" ; <axʊe>; <axʊé>; <axʊè> "*hic, haec, hoc*", "ésta"

ʔasɨk

ʔasɨk. [ADV]. when, temporal subordinator: <asʊec> "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'ɨ-ka ʔaya-k ʔanik. [ADV-EXO VI-VN? ADV]. in eight days being now = in a week's time: <aɛʊeca ayac anic> "ahora ocho días"

ʔaya (2)

*ʔaya. [N]. brother, companion, friend

ʔaya-n pantu. [N-1sP N]. ?-1sP brother-in-law = father-in-law of my son/daughter: <ayán pandú> "mi concuño"

ʔaya-n ʔuči. [N-1sP N]. ?-1sP mother-in-law = mother-in-law of my son/daughter: <ayán uchí> "mi consuegra"

ʔaya-n naʔu. [N-1sP N]. ?-1sP son/child = *friend, companion: <ayán nau> "como hermano"

ʔayaɬa > haya

ʔayapa

ʔayapa. [N]. year [L-M?]: <ayapá> "año"

ʔakɨ-ka ʔayak ʔik'aɬ ʔayapa [ADV-EXO ADV NUM:1 N]. one year ago: <aɛʊeca ayac yɛál ayapa> "ahora un año"

ʔakɨ-pe ʔayak ʔik'aɬ ʔayapa [ADV-CENT ADV NUM:1 N]. in a year from now: <aɛʊepè ayac yɛál 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, degrained corn (kernels) [L-M]: <aù> "maíz"

sɨn-ʔaʔu. [ADJ-N]. black-corn: <sʊen au> "maíz negro"

ten-ʔaʔu. [ADJ-N]. red-corn: <ten au> "maíz colorado"

tolo-ʔaʔu. [ADJ-N]. yellow-corn: <toloau> "maíz amarillo"

*ʔaʔu-ɬak = ʔawɬak. [N-N]. maize-plate (L-M) = tortilla griddle: <auŁác> "comal"

ʔaʔu-k. [N-INSTR]. corn-instrument = calcium carbonate (used as fertilizer): <aúc> "tizate"

CH

čaraʔɨn

čaraʔɨn-ʔaɬte. [N-N]. ?-genitals = *penis?: <charraʊen aŁtè> "*verbum impurum et significat pendiculus*"

****čawi**

čawi. [ADJ]. hard, stiff [L-M]: <chagui> "cosa dura"

šawi. [ADJ]. hard, stiff: <szagui> "cosa dura"

****čehe**

čehče. [N]. woodpecker (bird) [L-M]: <chegche> "boca rota"

čeɬna > seɬe

čiči

čiči. [VI]. defecate: <chichí> "exonerar el vientre"

čiči-Ø. [VI-NOM]. defecating = excrement: <chichi> "el excremento"

čo:

čo:. [VT]. beat chocolate [L-N]: <choo> "batir chocolate"

čo-k'e-ɬa. [VT-AP-AGT]. (the one) who beats chocolate: <chooɛéŁa> "el que bate"

čo-k'e-k. [VT-AP-INSTR]. chocolate beater: <chooɛec> "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: <naɛi chuculát> "chile de chocolate"

pati-čukula(t). [N-N]. cloth (used for) chocolate: <pati chuculá> "el paño de cholate, a modo de servilleta"

***čɨ-**

čɨy. [ADJ]. small, little [diff.]: <chʊey> "poco"

*čɨrɨ- [ADJ]. small

*čɨrɨ-haya. [ADJ-N]. small-female = girl, young woman: <szuraya> "muchacha"

*čɨrɨ-humu. [ADJ-N]. small-male = boy, young man: <szurúmu>, <szurumo> "muchacho"

čuru-čɨrɨk'ɨ. [ADJ-ADJ]. small-small = smaller: <churu chʊerʊeɛʊe> "más chico"

čɨrɨ-k'ɨ. [ADJ-ADJ.POS]. small, little: <chʊerʊeɛʊe> "chico, pequeño"

čuru-čɨrɨk'ɨ. [ADJ-ADJ]. small-small = smaller: <churu chʊerʊeɛʊe> "más chico"

mas-čɨrɨkɨ. [ADJ/INTENS-ADJ]. more small = very small: <maschʊerʊecʊe> "pequenito, muy chico"

¢'ama-čiriki. [ADJ/INTENS-ADJ]. good/well-small = very small: <txamachʊerʊeɛʊe> "muy chico"

E

ʔeɬa (1)

ʔeɬa. [ADJ]. new: <eŁa> "cosa nueva"

***ʔeɬa- (2)**

ʔeɬa-ha. [N-?]. tongue: <eŁaja> "lengua"

ʔeɬa-k-tuma. [N-?-N]. tongue (of) deer = type of herb: <eŁactuma> "lengua de venado; hierba"

ʔeɬa-wa-ki-ɬa. [N-?-INCH?-AGT]. *(the one) who becomes ? of tongue = lier: <eŁagua ɛila> "embarrador"

ʔeɬama

ʔeɬama. [VT]. to lend sb.: <eŁama> "prestar la persona como apoderado para alguna diligencia"

ʔeɬma-ɬa. [VT-AGT]. (the one) who lends, lender: <eŁmaŁá> "el que presta"

ʔema

ʔema. [VT]. to sew, lace: <ema> "coser cosas de costuras"

ʔema-k'i-ɬa. [VT-AP-AGT]. (the one) sews = tailor: <emaɛiŁa> "costurero, que cose"

ʔepet

ʔepet. [N]. icaco (fruit): <epét> "cacos; fruta del mar"

ʔepeɬe

ʔepeɬe. [VI]. to fear: <epeŁe> "temer"

ʔereɬa

ʔere-ɬa. [*VI-CAUS]. to scare (away), frighten sb.: <eréŁa> "espantar"

ʔerɬe-ke. [VT-AP/INCH]. become scared, frightened: <erŁeque> "espantarse"

ʔereɬa-ki-ɬa. [VT-AP-AGT]. (the one) who scares/frightens: <ereŁaquiŁa> "espantador"

ʔetaka

ʔeta-ka. [*VI-CAUS]. to harvest: <etaca> "tapiscar"

etak'a-k'i-ɬa. [VT-AP-AGT]. (the one) who harvests, harvester: <etaɛaɛiŁa> "tapiscador"

ʔewe

ʔewe. [ADJ]. old: <eue> "cosa vieja"

ʔeyeɬ

ʔeyeɬ. [ADV]. *there is no(thing); *negative existential*: <eyéŁ> "no; adverbio para *sum est fui*"

H

hačɨ

hačɨ. [VT]. to pick up, gather, collect [L-M]: <jachʊe> "pepenar o recoger tierra o basura"

hač'ɨ-k'i-ɬa. [VT-AP-AGT]. (the one) who collects rubbish: <juɛhʊeckiŁa> "recogedor de basura"

hač(')ɨ

hač'ɨ. VT. to scrape, scratch [L-M]: <jaɛhʊe> "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"

muɬ-(h)ama-y. [ADJ-ADJ-?]. white-ripe = half-ripe: <muŁa may> "medio maduro"

hama > yana?

***hama**

hama. [VI]. to sin.

ka-hama-ɬa. [2pS-VI-PAST.ACT]. you have sinned: <ca jamaŁà> "hurtasteis, pecasteis"

hama:-ʔ. [VI-STAT/NOM]. sin, perversity: <jamaà>, <jamá> "pecado"

hama-wa-ɬa. [VI-ANT-AGT]. sinner: <jamaguáŁa> "pecador"

hamɨ > ¢'amɨ

hapa (1)

hapa. [VI]. pass by

hapa-ʔ hini. [VI-STAT N]. passed-stomach = diarrhea: <japá giníy> "evacuaciones"

hapa-ʔ yɨpɨ. [VI-STAT N]. passed-vomit = vomit: <japáa yʊepʊé> "vómitos y evacuaciones"

hapa-ɬa. [VI-AGT]. (the one) who passes by = passenger, outsider: <jaapaŁa> "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-ɬa. [VI-AGT]. (the one) who is ill: <jarnaŁa> "el enfermo"

harawi > šawi

harawi. [VT]. to scratch up the ground: <jargüi> "rascar la tierra o escarbar"

***hara**

*hara. [N]. heat

hara-ɬa. [N-CAUS]. to toast: <jaraŁa> "tostar"

hara-ɬa mapɨ.[N-CAUS N]. toast-tortilla = toasted tortilla: <jaraŁa mapʊe> "tortilla, tostada, que llaman totopostle"

harari

harari. [N]. bone, flesh: <jararí> "hueso"

harari-k'omo. [N-N]. bone of knee: <jarari ckómo> "hueso de la rodilla"

harari-k'ɨwɨ. [N-N]. bone of leg = shinbone: <jararickuguʊe> "hueso de la espinilla"

harari-ʔiɬih. [N-N]. bone of spine = backbone: <jarari ʊelʊeg> "hueso del espinazo"

harak'u

harak'u. [N]. chipilin (spinach-like herb): <jaraɛu> "el chipilín; hierba"

hari

hari. [VT]. to throw sb. out: <jari> "echar afuera a alguno, correrlo de un lugar a otro"

hari-k'i-ɬa. [VT-AP-AGT]. (the one) who scares away, winnower: <jariɛiŁa> "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"

pɨpɨ-hašu. [N-N]. filled/tamal (of) pig/pork = pork tamal: <pʊepʊe jaszu> "tamal de marrano"

hawa

hawa. [ADJ]. green, unripe: <jaguá> "cosa que no está madura"

hawi

hawi(ʔ). [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: <jaúɛa> "vaciar"

***haya (1)**

haya. [N/ADJ]. female: <jáya> "hembra" .

*ʔaya-ɬa. [N-AGT]. *(the one) who is female = woman: <ayaŁa> "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-naʔuʔ. [N/ADJ-N]. female-child = daughter: <jaya nau> "hija hembra"

karwa-haya. [N/ADJ-N]. *wild-female = widow: <carguajaya> "viuda"

pɨša-haya. [N/ADJ-N]. *smell-female = smelly (bed)bug: <pʊeszajaya> "chínche hedionda"

šuraya = *čɨri-(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"

ʔuk-šaya. [ADJ-N]. old/married-female = old/elderly woman / wife: <ucszaya> "la vieja"; "mujer, consorte"

šakiɬ-haya [ADJ-N]. L-M:whiteness/excellent-female = good woman: <szaɛiŁ aya> "buena moza, hermosa o linda"

witiɬ-(h)aya. [ADJ-N]. soft/tender-female = young lady, *virgin: <guitiŁaya> "doncella"

haya (2)

*haya. [N]. crab

sɨm-(h)aya. [ADJ-N]. black-crab = crab: <sʊemaya> "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> "paño de chocolate a modo de servilletas"

hi

hi. [VI]. say: <gi> "decir; defectivo"

hini

hini?. [N]. stomach, belly: <giní> "barriga"

hapa-hini. [VT-N]. pass-stomach = diarrhea: <japá giníy> "evacuaciones"

šuka *šam-(h)ini [VT PREP-N]. bites inside the stomach = stomach pain: <szuca szamíni> "dolor de barriga"

hi:ru

hiru. [N]. monkey: <giru> "mico, mono"

hiru

hiru. [VT]. to lick, lap against: <giru> "lamer"

hiru-ɬa.[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: <giríc> "piedra de amolar"

hir-k'i-ɬa. [VT-AP-AGT]. (the one) who sharpens/grind = grinder: <girɛiŁa> "amolador"

***hiriki**

hir-ki. [?-AP/INCH]. stir (food): <girquí> "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-ɬ. [VT-ANT-AGT]. who/what has bend corn = corn husk: <jóɛóguàŁ> "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-ɬ. [VT-AGT]. (the one) who guards/takes care = caretaker: <jooroŁ> "cuidador"

horo-ɬ kawayu. [VT-AGT N]. (the one) who guards horse = horse guard: <jooroŁ caguayo> "guarda caballo, sirviente"

horo-ɬ maku. [VT-AGT N]. (the one) who guards house = housekeeper: <jooroŁ macu> "guardián, cuidador de la casa"

horo-ɬ waya. [VT-AGT N]. (the one) who guards milpa = guard of the milpa: <joroŁ guáyá> "guardián de milpa"

horo-ke-ɬa. [VT-AP-AGT]. (the one) who guards = guardian: <jooroɛéŁa> "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"

huhuɬ

huhú-ɬ. [?-AGT]. bee, beehive: <jujúŁ> "panal"

huɬi > šuši

huɬi. [VT]. to shave: <juŁi> "resurar"

huɬi-k. [VT-INSTR]. shaving-instrument = razor blade: <juŁic> "la navaja de resurar"

huɬi-k'i-ɬa. [VT-AP-AGT]. (the one) who shaves = barber: <juŁiɛiŁa> "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'iɬ-humu. [ADJ/N-N]: whiteness/excellent-male = good man [L-M]: <sza ɛiŁ 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: <tàgnagua 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: <jumúɛa> "resistir, esforzarse, o aguantar"

***hur**

hur-hur. [ADJ-REDUP]. right, straight: <jurjur> "muy derecho, derecho derecho"

hurak

hurak. [N]. man: <jurác> "hombre"

hurak ꝑiꝑi. [N-N]. man-filled? = inflamation?: <jurac pɔepɔe> "cierta inflamación, o especie de abuso que tienen los indios, que dicen les sale, cuando padecen alguna verguenza"

ʔiliwis-hurak. [ADJ-N]. *bad-man = demon, devil: <iliguís jraac> "demonio"

pene hurak. [N-N]. ?-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: <juraɛi> "parir"

hura-k'i. [N-INCH/VN?]. becoming of man = childbirth: <juraɛi> "parto"

hura-k'i-ɬa. [N-INCH-AGT]. (the one) who gives birth: <juraɛiŁa> "parida"

hurapi

hu-rapi. [VT]. to annoint, smear, make dirty: <jurápí> "untar, fletar, untara"

huray

huray. [N]. eyes, face: <juràỳ>, <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: <pijúszíc> "culebra de dos cabezas"

ten-hu:ši-k. [ADJ-N-INSTR]. red-headed = type of vulture: <ten júszic> "quebrantahueso"

huta

huta. [VT]. to blow, break wind [L-M]: <júta> "soplar"

huta-k. [VT-INSTR]. instrument for blowing = anus: <jutác> "el orificio, y propriamente el culo"

hutu

hutu. [N]. tree, pole: <jutu> "palo"

hutu-taɬi. [N-N]. pole of neck = neck bone: <jutu taŁi> "hueso del pescuezo"

muɬ-hutu. [ADJ-N]. white-tree = *palo volador*: <muŁ jutu> "palo que llaman volador"

pak'a-hutu. [N-N]. nail-poles = wall-poles, wattle: <paɛa 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"

ɦik'a

ɦik'a. [VT]. to weave: <jɔecka> "tejer"

ɦik'a. [N]. weaving: <jɔeɛa> "tejido"

ɦik'a-ɬa. [VT-AGT]. weaver: <juɔeɛaŁa> "tejendera"

hɨɬa

hɨɬa. [VT]. to empty liquid from jug; pour out, effuse: <jʊela> "vaciar agua del cántaro"

ʔɨɬɨ-k. [VT-INSTR]. instrument for pouring liquid = large pitcher: <ʊecŁʊec> "cántaro"

hɨmɨ

hɨmɨ. [VT]. to imitate sb.: <jʊemʊe> "remedar"

hɨnɨ > yamu

hɨnɨ. [VT]. to know: <jʊenʊe> "saber"

hɨnɨ-ka. [VT-CAUS]. to make know = to prove, test, analyse: <jʊenʊeɛa> "probar, hacer experiencia, o análisis de alguna cosa"

hɨrak

hɨrak-ɬiwɨ. [N-N]. **bee-ayote/sugar = white honey: <jʊerac Łʊeguʊe> "la miel blanca"

hɨrɨ

hɨrɨ. [N]. parakeet: <jʊerʊe> "perico, papagallo"

hɨya

hɨya. [VT]. to cut, hew/hack with an axe: <jʊeya> "hachear"

hɨya-ki-ɬa. [VT-AP-AGT]: <jʊeyaɛìŁa> "hacheador"

I

ʔikaɬ

ʔik(')aɬ. [NUM]. one: <iɛál>, <yɛaŁ>, <yɛa> "uno"

ʔik(')aɬ=ʔak'aɬ. [NUM=ADV]. one yet = one is still missing: <yɛaŁ aɛaŁ> "uno falta"

ʔik(')aɬ=ki. [NUM=INTENS]. one-alone: <iɛalqui> "solo uno"

ʔiliwis

ʔiliwis. [ADJ]. bad thing: <iliguís> "cosa mala"

ʔiliwis-hurak. [ADJ-N]. bad-man = demon, devil: <iliguís jraac> "demonio"

ʔima

ʔima. [VT]. say, tell: <imá> "decir"

ʔin

ʔin. [INT]. *interrogative marker*: <in> "partícula interrogativa"

ʔipala

ʔipala. [VI]. to bath: <ipala> "bañarse"

ʔipala. [VT]. to bathe (sb.): <ipala> "bañar"

ʔipla-ɬa. [VT-AGT]. (the one) who bathes: <iplaŁa> "bañador, bañadora"

ʔipi > ʔipɕ'ɬ

*ʔipi. [N]. *unmarried young man, lad

tata-ʔipi. [N-N?]. father/uncle-? = single unmarried young man, lad: <tatahipi> "mozeon, mancebo"

ʔišaka

ʔišaka. [VT]. to drink: <iszaɛa>, <yszàca> "drink"

ʔišaka. [N]. drink: <iszaɛa> "chilate, bebida"

ʔiška-ɬa. [VT-AGT]. (the one) who drinks = drinker: <iszcáŁa> "bebedor, bebedora"

ʔiška-k. [VT-INSTR]. instrument for drinking = calabash cup: <iszcac> "jícara de beber"

ʔišapa

ʔišapa. [VI]. to leave, go out, come out: <iszapa>, <yszàpa> "salir de un lugar a otro"

ʔišpa-wa pari. [VI-ANT N]. (where) has emerged the sun = sunrise: <iszpagua pari> "la salida del sol"

ʔišapi

ʔišapi. [VT]. remove, take away: <iszapi> "sacar, quitar alguna cosa de un lugar"

ʔiši

*ʔiši. [ADJ]. alive, awake

ʔiši-y(a). [ADJ-?]. be alive, be awake: <isziy> "estar despierto, vivo"

ʔištu

ʔištu. [N]. rash, scar (illness): <isztú> "jiote; enfermedad" ; <isztu> "señal" ; <isztu> "revés de todas las cosas"

ʔiti

ʔiti. [N]. tomato: <iti> "tomate"

ʔituɬ

ʔituɬ. [N]. flea, sand flea: <itúŁ> "las pulgas, niguas"

ʔiwa

ʔiwa. [VT]. form/make tortillas [L-M/MZ]: <ygua> "tortear"

ʔiwa. [N]. tortilla dough: <igua> "masa para tortillas"

ʔiwa-ɬa. [VT-AGT]. (the one) who makes tortillas = tortilla baker: <iguáŁa> "torteadora"

ʔiwaɬ

ʔiwaɬ. [INT]. how much?, *question word*: <yguaŁ> "cuánto; interrogativo"

ʔiwaɬ-ʔakaɬ. [INT-ADV]. how much?-yet = how much is still missing?: <yguáŁacáŁ> "¿cuánto falta?; interrogativo"

ʔiwaɕ'a

ʔiwaɕ'a. [VI]. to spin: <íguatxa> "hilar"

ʔiwaɕ'a. [N]. thread: <iguatxá> "hilo"

ʔuyša-ɬa. [VI-AGT]. spinner: <uyszaŁa> "hilandera, hilador"

ʔuyša-k. [VI-INSTR]. spindle: <uyszác> "malacate"

ʔi:wi > ʔuy

ʔi:wi. [VI]. to drown in water: <ígui>, <ygui> "ahogarse en el agua"

ʔiwiɕ'i

ʔiwiɕ'i. [VT]. to hear sth./sb.: <yguitzi> "oir" ; <iguitxi> "oir"

ʔuyši-ki. [VT-AP]. to hear (in general): <uýsziɛi> "oir"

K

kaʔ (1)

kaʔ. [DIR/EXO]. exocentric directional, go away: <cá>, <cà> "partícula para ir o llevar"

ka=paʔ. [EXO=PERF?]. *already ago: <capa> "partícula verbal"

ka-kaʔ. [INT-EXO]. whereto?: <cácá> "dónde; adverbio para interrogaciones"

nati=ka(ʔ). [ADV=EXO]. thereto, over there: <natʊéca> "allá"

nati=peʔ=kaʔ.[ADV=DIR/CENT=EXO]. through there, from over there: <natʊepècà> "por allá"

ʔištu=kaʔ. [ADV=EXO]. thereto = over there: <ʊesztú cá> "allá"

=ka-n. [EXO-IRR]. *ago:

ʔaɬmu=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"

ɬi=ka-n. [?=EXO-IRR]. when: <ŁʊeI 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 canguì> "aquel dijo"

šaɬ=ka-n wi. [ADV=EXO-IRR DIR]. it is good to be: <szàŁ 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. [?]. *expression* (meaning not understood): <cachatché> "refrán"

kaɬi

kaɬi. [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-ɬa. [VT-AP-AGT]. (the one) who embraces, godfather: <camaɛiŁa> "el que apadrina, carga, o abraza"

kantore

kantore-ɬe. [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: <ɛara> "cosa pesada"

karawa

karawa. [N]. bush, woods, wilderness: <ɛaragua> "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> "víspera"

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 mapɨ. [N-N]. Spanish tortilla = bread: <casztilamapʊe> "pan"

kaškaš

kaškaš. [N]. agouti: <caszcasz> "cotuza"

kawáyo

kawayo. [N]. horse [L-S]: <caguayo> "caballo"

ho:ro-ɬ 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: <caguíɛi> "gritar"

kawi-ki-ɬa. [VI-AP-AGT]. (the one) who cries = shouter, screamer: <caguiquiŁa> "gritón"

kayi

kayi. [VT]. sell [L-M]: <cayi> "vender"

kayi-k'i-ɬa. [VT-INCH-AGT]: <cayiɛiŁa> "vendedor, vendedora"

keneya

keneya. [N]. guineo, plantain [L-N]: <ɛeneya> "plátano guíneo"

ki-

ki-(wa). [INTENS]. intensifier-reflexive pronoun

ki-ka. [INTENS/REFL-2sP]. you yourself: <naca ɛica> "tú mismo"

ki-ka ʔay. [INTENS/REFL-2pP 2PL], you yourselves: <náca ɛica ay> "tú mismo plural"

ki-ki-h. [INTENS/REFL-?-3sP]. he himself: <nána nag ɛiqúig qui> "aquel mismo"

ki-wa-n. [INTENS/REFL-?-1sP]. I myself: <ɛiguan> "yo mismo"

ki-wa-h. [INTENS/REFL-?-3sP]. he himself: <nag ɛiguag> "aquel mismo"

ki-wa-ka. [INTENS/REFL-?-2s]. you yourself: <náca ɛiguáca> "tú mismo"

kiriwa

kiriwa-paȼ'i. [N-N]. ?-ground thing = atol: <ɛiriguapatxi> "atole, chilate"

kiȼ'i

kiȼ'i, k'iši. [VT]. to roast, fry [L-M]: <quitxi>; <ɛiszi> "asar"

kiȼu

kiȼ'u. [VT]. to exchange, confuse, distort [L-M]: <quitxu> "trocar"

ko:

ko:. [?]. *expression* (meaning unclear): <coo> "refrán, disque"

ko:čo

ko:čo. [ADJ]. dirty: <ɛoochó> "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: <cooròro> "bejuco"

kosek

kosek. [ADJ]. big: <coséc> "cosa grande"

kosek-ʔuy. [ADJ-N]. big-water = river: <coséc ùy> "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]: <εosme> "camalote"

k(')ošme

košme. [N]. type of reed/sticks for bedframes: <εoszme> "cierta caña o varilla para hacer tapescos"

košo

cošo. [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"

haɬa-cuchilo. [N-N]. raise, guard-L-M:knife = instrument for weeding (= for pulling up weeds): <jajŁa cuchilo> "la cutachilla, instrumento con que deshierban en lugar de azadón"

kuku

kuku. [N]. Taxisco (toponym): <cúcu> "Taxisco; pueblo"

kukuwaɬ

kukuwaɬ. [N]. turtledove [L-M]: <cucúguaŁ> "tortola"

kuɬami

kuɬami. [N]. bromeliad plant (*aechmea magdalenae*): <εuŁami> "pitafloja"

kuɬku

kuɬku. [N]. earthenware bowl, plate [L-M]: <cúŁcu> "cajete"

kulumak > ɬimaki

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 εigua> "cosa comprada"

kunu-k'i-ɬa. [VT-AP-AGT]. (the one) who buys: <cunuεiŁa> "comprador o compradora"

***kup(u)ru**

k'upru-šunik. [ADJ-N]. *deep-pot: <εupru szunic> "olla honda"

kuri-

kura-n pe. [VI-SUBJ CENT]. come (subordinate context): <curànbè> "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: <curuguí> "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]. ?-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]: <cusztaríca> "cierto cacao, que llaman costarrica"

kutumi

kutumi. [N]. cramp (illness): <cutumi> "calambre, enfermedad"

kɨrɨ

kɨrɨ. [VT]. to fit, adjust, complete: <ɛʊerʊe> "ajustar, completar"

ku:ru-k. [VT-INSTR]. wheel, circle, roll (rolled up rope): <cuurúc> "cierta rueda o yagual de mecates"

ku:ru-k-šɨma. [VT-INSTR-N]. *instrument for completing-? = roof-ridge, ridgepole: <cuurúc szʊema> "caballete, palo que sirve de cumbrera a la casa"

k(')ɨrɨ

kɨrɨ [N]. tapir: <ɛʊérʊe> "danta"

kɨwa

kɨwa. [VT]. to lend, to loan: <cʊegua> "prestar"

k'ɨwa-wa. [VT-PART.PF]. lent thing: <ckʊeguagua> "cosa prestada"

k'ɨwa-k'i-ɬa. [VT-AP-AGT]. (the one) who lends: <ckʊeguaɛiŁa> "el que presta"

k(')ɨya

k'ɨya. [VT]. to pick up, collect: <ɛʊeya> "pepenar"

K'

k'ak'ara

k'ak'ara. [VI]. get on all four feet: <cka ɛára> "ponerse en cuatro pies"

k'a:ta:

k'a:ta:. [VI]. lie down [L-M?]: <ɛaataa> "acostarse"

k'ata-ɬa. [VI-PART]. laid down: <ɛataŁa> "acostado"

k'ata

k'ata. [VT]. put: <ɛata> "poner"

k'ata-k wik'i-k. [VT-INSTR N-INSTR]. instrument for putting-stone = mill stone (tasmetate): <ɛatacguiɛic> "tapesco de moler, que llaman taszmetate"

k'awi

k'awi. [VT]. to catch with lasso or trap: <ɛagui> "lazar, enredar"

kawi-k. [VT-INSTR]. instrument for catching with lasso = lasso: <caguic> "araypa, lazo"

k'awi-k'i-ɬa. [VT-AP-AGT]. (the one) who puts out a trap: <ɛaguiɛiŁa> "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"

muɬ-k'eweša. [ADJ-N]. white anona: <muŁ ckeguesza> "anona blanca"

***k'iriwi**

k'irwi. [VT]. choose, select: <ckirgui> "escoger"

k'irwi-k'i-ɬa. [VT-AP-AGT]. (the one) who chooses/selects: <ckirguiɛiŁa> "escogedor, escogedora"

***k'isik'u**

k'isku. [VT]. to take out chiggers: <ckisɛu> "sacar niguas"

k'iwi

k'iwi. [N]. patio, yard [L-N]: <ɛigui> "patio"

k'okama

k'okama. [VI]. to kneel down: <ɛocama> "hincarse"

k'olo

k'olo. [VT]. to flay, skin, strip [L-M]: <ɛólo> "desollar, quitar el vestido"

k'oɬ-ko**.** [VT-?]. clear, empty, vacate: <ɛoŁco> "desocupar"

k'omo

k'omo. [N]. knee: <ɛómo> "rodilla"

harari-k'omo. [N-N]. bone of knee: <jararickómo> "hueso de la rodilla"

ʔuwi-k'omo. [N-N]. flesh of knee = flesh of calf: <ugui ɛoómo> "carnaza de la pantorrilla"

k'otoro

k'otoro. [N]. flying ant (zompopo): <ckotòro> "zompopo"

ʔuta k'otoro. [N]. mother of flying ant = coral snake: <uta ckotoro> "culebra coral"

k'unu

k'unu [N]. cloud, shade, covered [L-M]: <ɛúnú> "las sombras"

k'ɨnɨ

*k'ɨnɨ. [ADJ]. *glad, happy

k'ɨnɨ-ki. [ADJ-INCH]. to become happy: <ɛʊenʊequi> "alegrarse"

kɨnɨ-ki-ɬa. [ADJ-INCH-AGT]. (the one) who becomes happy/is content: <ckʊenʊeɛiŁa> "el que se alegra"

k'ɨnɨ-k'i-Ø. [ADJ-INCH-NOM]. happiness, content: <ckʊenʊeɛi> "alegría, contento"

k'ɨri > ʔuru

k'ɨrɨ. [VT]. pick, pull up: <ckʊeri> "arrancar"

k'ɨrɨ

k'ɨrɨ. [N]. younger brother: <ɛʊerʊé> "hermano menor"

k'ɨrša

k'ɨrša. [VI]. to comb: <ckʊersza> "peinar"

k'ɨrša-ɬa. [VI-AGT]. (the one) who combs: <ɛʊerszaŁa> "el que peina"

k'ɨrša-k. [VI-INSTR]. instrument for combing = comb: <ɛʊerszac> "peine"

k'ɨrša-k'i-ɬa. [VI-AP-AGT]. (the one) who combs: <ɛʊerszaɛiŁa> "peinador, peinadora"

***k'ɨrɨwɨ > k'ɨwɨ**

k'ɨrwi. [N/ADJ]. lean, thin: <ckʊerguʊe> "cosa flaca"

k'ɨsa (1)

k'ɨša. [N]. bat, Nancinta (toponym): <ɛʊesza> "murciélago"

k'ɨša. [N]. *bat (place) = Nancinta: <ɛʊesza> "Nancinta; pueblo"

k'iš-tamay. [N]. bat-? = Sinacantán (toponym): <ɛʊesztamay> "Sinacantan; pueblo"

k'ɨša (2) > k'ɨtɨ

k'ɨša. [N]. half, piece: <ɛʊésza> "mitad o pedazo de alguna cosa"

k'ɨtɨ

k'ɨtɨ. [VT]. measure [L-M]: <ɛʊetʊe> "medir"

k'ɨti-wa. [VT-PART.PF]. measured thing: <ɛʊetʊegua> "cosa medida"

k'ɨti-ɬa. [VT-AGT]. (the one) who measures: <ɛʊetʊèŁà> "el que mide o medía"

k'ɨti-ɬ. [VT-AGT]. (the one) who measures: <ɛʊetʊèŁ> "el que mide o medía"

k'ɨti-ki-ɬa. [VT-AP-AGT]. (the one) who measures: <ɛʊetʊe ɛiŁa> "el medidor" ; <ɛʊetʊequiŁa> "el que mide o medía"

k'ɨti-ki-k. [VT-AP-INSTR]: instrument for measuring = measure: <ɛʊetʊe ɛic> "medida, vara de medir"

k'ɨwɨ (1)

k'ɨwɨ. [ADJ]. dry: <ckʊeguʊe> "cosa seca"

k'ɨwu-ya. [ADJ-TRANS]. to dry sth.: <ckʊeguya> "secar"

k'ɨwɨ (2)

k'ɨwɨ. [N]. shinbone, leg: <ckʊeguʊe> "espinilla"

harari-k'ɨwɨ. [N-N]. bone-leg = shinbone: <jarari-ckuguʊe> "hueso de la espinilla"

ɬis-kɨwa. [N-N]. ?-leg = waist, backbone: <Łʊesɛʊegua> "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"

Ł

ɬan

ɬan. [NEG]. negative marker: <Łán> "no"

***ɬakama**

*ɬak(a)ma. [VT]. to count, tell

ɬakma-ɬa. [VT-AGT]. (the one) who counts/tells: <ŁacmáŁa> "el que cuenta"

ɬakma-ki-ɬa. [VT-AP-AGT]. (the one) who counts/tells: <Łacma ɛiŁa> "el contador"

ɬak'uwa

ɬak'uwa. [N]. son-in-law: <Łaɛugua> "yerno"

ɬamuk

ɬamuk. [N]. shrimp: <Łamuc> "camarón"

šuway ɬamuk. [N]. lizard/cayman-shrimp = sea devil: <szuguay Łamuc> "peje armado"

ɬapa (1)

ɬapa. [VI]. follow one after the other: <Łapa> "ir en por de otro, como siguiéndolo de cerca"

ɬapa-ɬa. [VI-AGT]. (the one) who follows behind: <ŁapaŁa> "el que va detrás de otro como siguiéndolo"

ɬapa (2)

ɬapa. [N]. grandchild, **grandfather: <Łapà> "el nieto, la nieta"

ɬapi

ɬapi. [VT]. to shoulder, carry on shoulder: <Łapi> "cargar al hombro"

ɬapi-k'i-ɬa. [VT-AP-AGT]. (the one) who shoulders/carries on shoulder: <ŁapiɛiŁa> "el cargador"

ɬa:ra

ɬa:ra. [VI]. to ascend: <Łaarà> "subir personalmente"

ɬara-ɬa. [VI-AGT]. (the one) who ascends: <ŁaraŁa> "el que sube"

ɬara-ya. [VI-TRANS]. to ascend sth. = to lift sth.: <Łaráya> "subir algo de abajo a arriba"

ɬara (1)

ɬara. [N]. barbarian, cruel: <Łara> "el bárbaro"

ɬara (2)

ɬara-ʔɨmɨk: [N-N]. **medicine-? = soapwort: <Łaraʋemʋéc> "cierta hierba que sirve a las indias para bañarse"

ɬawaro

ɬawaro. [VI]. dance

ɬawar-ɬa. [VI-AGT]. (the one) who dances = dancer: <ŁaurúŁa> "bailador"

ɬenka

ɬenka. [N]. wild cacao, pataxte: <Łenga> "cacao pataste"

***ɬi-**

ɬi-naʔ. [PREP-DEM]. with him/her/it: <Łiná> "con" ; "con élla"

ɬi-na(ʔ)=šɨkɨ. [PREP-DEM=EXTEN]. and with it = also, as well: <Łiná szʋequi> "también, y"

ɬik'a

ɬik'a. [VI]. to descend: <Łiɛa> "bajarse personalmente"

ɬik(')a-ɬa. [VI-AGT]. (the one) who descends: <ŁicaŁa> "el que baja"

ɬik'a-ya. [VI-TRANS]. to descend sth. = to lower, put down: <Łiɛaya> "bajar otra cosa de arriba abajo"

ɬimik

ɬimik. [N]. pine, ocote: <Łimic> "ocote"

ɬokama

ɬokama. [VT]. to boil (water) [L-M]: <Łocama> "hervir el agua"

ɬome

ɬome-ʔuy. [ADJ-N]. tepid, lukewarm water: <Łóme hui> "agua tibia"

ɬome:-ka. [ADJ-CAUS]. make tepid/lukewarm = to temper, to cool down: <Łomeeca> "entibiar"

ɬuri

ɬuri. [N]. rabbit: <Łuri> "conejo"

***ɬikɨ (1)**

ɬikɨ. [INT]. when?, *question word*: <Łʋécu> "cuándo; interrogación para futuro"

ɬika-n. [INT-SUBJ/IRR]. when: <Łʋecán> "cuando"

ɬika-n paʔ. [INT-SUBJ/IRR ADV]. when already = then: <Łʋecán vá> "entonces"

ɬikɨ (2)

ɬikɨ (1). [VT]. to find, meet (what one has lost): <Łʋecʋe> "hallar lo perdido, o lo que se busca"

ɬik'ɨ (2). [VT]. to reach: <Łʋeɛʋe> "alcanzar"

ɬikɨnɨ

ɬikɨnɨ. [VT]. believe, understand: <Łʋecʋenʋe> "creer, entender"

ɬik(')u

*ɬiku-. [N?]. *step-

ɬiku-n naʔu. [N-1sP N]. my X-child/son = stepchild: <Łʋeɛun náu> "mi entenado, entenada"

ɬipɨ

ɬipɨ. [VT]. carry behind (load on the back): <Łʋepʋe> "cargar por detrás"

ɬipɨ-k. [VT-INSTR]. instrument for carrying = *backrack: <Łʋepʋec> "el instrumento, con que sirve para cargar"

ɬipɨ-ki-ɬa. [VT-AP-AGT]. (the one) who carries = carrier: <ŁʋepʋeɛiŁa> "el cargador"

*ɬisk'ɨwɨ > k'ɨwɨ

ɬis-kɨwa. [N-N]. ?-leg = waist, backbone: <Łʋesɛʋegua> "cintura y hueso del espinaso"

ɬita

ɬita. [VT]. to move up, bring close: <Łʋéta> "arrimar"

ɬiwɨ

ɬiwɨ. [N]. squash = sweet [L-MZ/diff.]: <Łʋeguʋe> "ayote"

hɨrak-ɬiwɨ. [N-N]. **bee-squash/sugar = white honey: <jʋerac Łʋeguʋe> "la miel blanca"

ʔuy-ɬiwɨ. [N-N]. water of ayote = honey, sweets: <uy Łʋeguʋe> "la miel, y todo género de dulce"

***ɬiwɨ > iliwis**

punpun ɬiwɨ. [N-N]. ?-bad = owl: <punpun Łʋeguʋe> "tecolote; ave"

M

ma

ma. [ADV]. conditional TAM-adverbial: <má> "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-ɬa. [N-PL]. houses: <macuŁa> "casa; plural"

maku-ɬa. [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-ʔuwaɬ. [N-N]. house of ants = anthill: <macu uguaŁ> "hormiguero"

maku-tyuš. [N-N]. house of god = church: <macu tiusz> "iglesia"

ma-tyuš. [N-N]. house of god = church: <matiusz> "iglesia"

ho:ro-ɬ maku. [VT-AGT N]. (the one) who guards house = housekeeper: <jooroŁ macu> "guardián, cuidador de la casa"

paɬa-maku. [N-N]. straw-house = covering, market stand: <pałamacu> "ramada, galera"

ʔiɬi-maku. [N-N]. back of house = behind the house: <ʋelʋemacu> "lo de detrás de la casa"

maɬi

maɬi. [N]. ashes: <maŁi> "ceniza"

piša-maɬi. [ADJ-N]. smelling/stinking ashes = sulfur: <pʋesza maŁi> "azufre"

maɬi-k. [N-INSTR]. *instrument for ashes = firewood: <maŁʋec> "leña"

maɬiɬa

maɬiɬa. [N]. tamal with bean filling: <maŁiŁa> "tamal de frisol"

maɬka

maɬ-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 mapí> "palmito"

šaru-mapi. [N-N]. sea/southern-coyol = güiscoyol: <szaru mapi> "guiscoyol"

mapɨ

mapɨ. [N]. tortilla: <mapʋe> "tortilla"

haraɬa-mapɨ. [N-N]. toasted-tortilla = *totopostle*: <jaraŁa mapʋe> "tortilla, tostada, que llaman totopostle"

kaštila-mapɨ. [N-N]. Spanish-tortilla = bread: <casztila mapʋe> "pan"

puri-mapɨ. [N-N]. *burn/fire-tortilla = food (hot), meal: <puri mapʋe> "comida"

ɕ'ɨwɨ-mapɨ. [N-N]. freshcorn-tortilla: <txʋeguʋe mapʋe> "tortilla de maíz tierno que llaman elotaszca"

ma:ra

ma:ra. [VI]. to rest: <màra> "descansar"

ma:ra-ɬa. [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 peʔ. [VI DIR/IMP]. come hurry: <màrapè> "darse priesa; ven tú de priesa"

masa

masa [N]. pineapple [L-N]: <maza> "piña"

maša > maɕ'a

maša. [N]. mud: <másza> "lodo"

ʔuy-maša. [N-N]. water of mud = muddy water: <uymasza> "agua de lodo"

mašira

mašira:ʔ. [N]. root [L-M?]: <masziraa> "las raizes de los árboles, las venas, y nervios del cuerpo"

***maɕ'a**

maɕ'a. [VI]. to stick, paste [L-M]: <matxà> "pegar"

ma:ɕ'a-ʔ. [VI-STAT]. sticky, pasted thing: <maazaa> "cosa pegada"

maȼ'i

maȼ'i. [VT]. fry [L-M?]: <matxi> "freir"

maši. [VT]. fry: <maszi> "freir"

maši-waʔ. [VT-PART.PF]. fried (thing): <masziguá> "cosa frita"

ma:ši:-wa. [VT-LOC]. place where sth. is fried: <mászígua> "lugar en que se fríe algo"

maši-ɬa. [VT-AGT]. (the one) who fries: <masziŁa> "la que fríe"

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-ɬa. [VT-AGT]. (the one) who tears/breaks: <mere Łà> "el que rompe o rompía"

mere-ɬ. [VT-AGT]. (the one) who tears/breaks: <merèŁ> "el que rompe o rompía"

mere-ɬa-ki-ɬa. [VT-CAUS-AP-AGT]. (the one) who is obligated to tear: <mèreŁa qui Ła> "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 míya> "pajarillos y pollos"

sɨm(a)-miya. [ADJ-N]. black-chicken = turkey: <sʋen miya> "pavil; ave"

maku-miya. [N-N]. house of chicken = chicken house: <macu mía> "gallinero"

pɨpi-miya. [N-N]. tamal of chicken = tamal filled with chicken: <pʋepʋe miya> "tamal de gallina, que llaman de pipián"

tata-miya. [N-N]. father-chicken = rooster: <tata miya> "gallo"

ʔuruɬ-miya. [N-N]. egg of chicken = chicken egg: <uruŁ míya> "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"

mɨ:. [VI]. drink: <mʋè> "tomar" ; <mʋeʋè> "tomar; defectivo"

mu: ʔay. [VI + 2PL]. drink (pl.)!: <mù ay> "tomad vosotros"

mu:ču

mu:ču. [VI]. get tired: <muuchù> "cansarse"

muču-ɬa. [VI-AGT]. (the one) who is tired: <muchúŁa> "el cansado"

muču

muču. [ADJ]. lame, crippled, limping: <múchu> "cojo"

mɨɬka

mɨka. [VI]. to work: <mʋeɛa> "trabajar, servir"

mɨka-Ø. [VI-NOM]. work: <mʋeɛa> "trabajo, tributo"

muka-ɬa. [VI-AGT]. worker, servant: <mʋeɛaŁa> "sirviente"

muʔ ~ muɬ

mu:ʔ. [ADJ/N]. white (thing) [L-MZ]: <muú> "cosa blanca"

muɬ. [ADJ/N]. white (thing): <muŁ> "cosa blanca"

muɬ-(h)ama-y. [ADJ-ADJ-ʔ]. white-ripe = half-ripe: <muŁa may> "medio maduro"

muɬa-ʔuy. [ADJ-N]: white-water = ray, lightening, thunderbolt: <muŁa húy> "rayo"

*muɬa-šiyuk. [ADJ-N]. white-snake = viper, ratttlesnake: <múŁasziuc> "víbora de cascabel, culebra"

muɬ-asukar. [ADJ-N]. white-sugar: <muŁ azúcar> "azucar"

muɬ-hutu. [ADJ-N]. white-tree/pole = *palo volador*: <muŁ jutu> "palo que llaman volador"

muɬ-k'eweša. [ADJ-N]. white-anona: <muŁ ckeguesza> "anona blanca"

muɬ-naru. [ADJ-N]. white-earth: <muŁ náru> "tierra blanca"

muɬ-pa:ma-k. [ADJ-N-INSTR]. white-winged = dove: <muŁ pàamac> "paloma de monte"

muɬ-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-ʔaɬte. [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"

mɨmɨ

mɨmɨ. [VI]. sing: <mʊemʊe> "cantar"

mɨmɨ-ɬa. [VI-AGT]. (the one) who sings = singer: <mʊemʊeŁa> "el que canta"

mɨra

mɨra. [ADJ]. bitter: <mʊerra> "cosa amarga"

mɨtaɬki

mɨtaɬ-ki. [ADJ-INCH]. to become ? = to dream: <mʊetaŁcki> "soñar"

mɨtaɬki-wa. [VI-PART.PF]. dreamed thing = dream: <mʊetaŁɛigua> "cosa soñada"

mɨɕ'a

mɨɕ'a, mɨša. [VT]. bury [L-M]: <mʊetxa>, <mʊesza> "enterrar"

mɨɕ'a-ɬa, mɨša-ɬa [VT-AGT]. (the one) who buries: <mʊetxaŁa>, <mʊeszaŁa> "el que entierra"

mɨɕ'a-wa, mɨša-wa. [VT-LOC]. place of burying = grave, tomb: <mʊetxagua>, <mʊeszagua>; "sepultura"

mɨya

mɨya. [VT]. to help: <mʊeya> "ayudar"

mɨya-ɬa. [VT-AGT]. (the one) who helps: <mʊeyaŁa> "el que ayuda"

mɨya-k'i-ɬa. [VT-AP-AGT]. (the one) who generally helps = helper: <mʊeyaɛiŁa> "ayudante"

N

na:(ʔ)

na:ʔ. [ADV]. here: <naá> "aquí"

na:ʔ=peʔ. [ADV=VI/IMP]. come here: <nàpè>; <naapè> "venir; defectivo"

na:ʔ=peʔ. [ADV=DIR]. from here: <naapè> "por aquí"

na

na. [VI]. say: <nà> "decir"

na

na:. [DET/DEM]. the: <ná> "al, la, lo"

na=na. [DET=DEM]. the, *focus determiner*: <nana> "partícula nominal, que quiere significar el, la, lo"

na ʔahɨ. [DET DEM]. this: <na axʊé> "éste"; <na...axʊè> "este"

na ʔašɨ. [DET DEM]. this: <na aszʊe> "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-ɬik. [PN]. they: <nagŁic> "aquellos"

nah=ki. [PN=INTENS]. he/she/it is: <nagqui> "el es, aquel es"

nah=šɨk'i. [PN=ADV]. he (is) also = he is as well: <nag sziɛi> "el es, y también" ; <nag szʊequí> "también"

naka

naka. [PN]. you: <náca> "tú"

naka ʔay. [PN]. you (pl.): <náca ay> "vosotros"

naki

nak'i. [N]. chilli [L-M]: <naɛi> "chile"

naki čukulat. [N-N]. chilli-chocolate = chocolate with chilli: <naɛi 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 chileguaque"

ȼ'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?]: <narì> "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"

nariɬa

*nari-ɬa. [?-CAUS]. make *learn/understand(?) = teach: <nariŁá> "enseñar"

nari-ɬa-ki. [?-CAUS-INCH/REFL]. *become taught / teach oneself = learn: <nariŁqui> "aprehender"

nari-ɬa-k'i-ɬa. [?-CAUS-AP-AGT]. (the one) who generally teaches = teacher: <nariŁaɛiŁa> "doctrinero, maestro"

nari-ɬ-ki-ɬa. [?-PART.ACT-INCH-AGT]. (the one) who becomes *understanding = student: <nariŁɛiŁa> "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"

muɬ-naru. [N-N]. white-earth: <muŁ náru> "tierra blanca"

tahti-naru. [N-N]. plain-earth = plain: <tagti naru> "tierra llana"

natɨ

natɨ. [ADV]. there: <natʊe> "allí"

natɨ=ka. [ADV=EXO]. thereto, over there: <natʊéca> "allá"

natɨ=peʔ=ka.[ADV=DIR=EXO]. through there, from over there: <natʊepècà> "por allá"

nawaku

nawaku. [N]. petticoat [L-S]: <naguacu> "las naguas"

naʔu

naʔu. [N]. child, offspring, son: <náu> "hijo, hija"

naʔu-ɬa. [N-AGT]. (the one) who is pregnant: <nauŁa> "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"

ɬiku-n naʔu. [N-1sP N]. ?-1sP child = stepchild: <Łʊeɛun náu> "mi entenado, entenada"

titika-naʔu. [N-N]. compaternity-child = godchild: <titica nau> "ahijado"

neɬa

neɬa. [PREP]. de: <neŁa> "partícula nominal; de"

neɬa nen. [PREP PN]. mine: <neŁa nen> "mío, de mí"

neɬa ʔahɨ. [PREP DEM]. of/for this: <néŁa axʊé> "de éste"

neɬa wena=ki. [PREP INT=INTENS]. of/for someone: <néŁa guéna qui> "el que, *genitivo*"

ne:ɬek

ne:ɬek. [PN]. we, us: <neŁec> "*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: <níɛi> "rempujar poco a poco"

niwa

niwa. [VT]. to want, ask for: <niguá> "pedir"

niwa-ša:. [VT-PREP]. want/ask inside = wish: <nigua szà>; <niguaszaà> "querer; anómalo"

niwa-k'i-ɬa. [VT-AP-AGT]. (the one) who wants/asks = *begger(?): <niguaɛiŁa> "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"

nušuku

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"

wišu-k-nuwi. [VT-INSTR-N]. instrument for beating cotton: <guiszucnuguí> "sacudidor de algodón"

nɨma

nɨma. [VT]. to eat [L-M]: <nʊema> "comer"

nɨma-šama. [VT-PREP]. eat-inside = sadness, worry: <nʊema szama> "la tristeza, cuidados"

nɨma-ɬa. [VT-AGT]. (the one) who eats = eater: <nʊemaŁa> "el que come, comedor"

nɨma-k. [VT-INSTR]. instrument for eating = napkin: <nʊemác> "la servilleta"

nɨma-ha. [VT-CAUS]. to make sb. eat = to feed: <nʊemaja> "dar de comer"

nɨma-ha-k'i-ɬa. [VT-CAUS-AP-AGT]. (the one) who makes sb. eat = servent (tapian): <nʊemajaɛiŁa> "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:-ɬe. [N-PL]. tender-ones = children: <ònéŁe> "los muchachos"

ʔone-šinak. [ADJ-N]. tender-bean = *ejote*: <óneszinác> "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. [?-CAUS]. to make ? = trust, guarantee: <oròja> "fiar"

ʔoro-ha-ki. [?-CAUS-VN]. trusting = trust: <orojáqui> "cosa fiada"

ʔoro-ha-k'i-ɬa. [?-CAUS-AP-AGT]. (the one) who trusts: <orojaɛiŁa> "el que fía"

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-ɬa. [VT-AGT]. (the one) who picks up: <ormòŁà> "el que recoge, recogía"

ʔormo-ɬ. [VT-AGT]. (the one) who picks up: <ormòŁ> "el que recoge, recogía"

ʔormo-k'e-ɬa. [VT-AP-AGT]. (the one) who picks up/gathers/collects = collector: <ormoɛeŁa> "el que recoge, recogía"

ʔošo

ʔošo-ka. [N-2sP]. your intestines: <oszòca> "tu tripa"

ʔošto > ʔuštu

ʔošto. [N]. ulcer, wound: <ószto> "úlcera, llaga"

ʔošto-ʔ. [VI-STAT]. rotten: <osztó> "llaguiento, podrido"

ʔošto-ʔampuki. [N-N]. ulcer/rotten-serpent = king's evil, *streptothricosis* (illness): <ószto ambuqui> "lamparones, y la crisipela; 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): <òtógua> "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: <ótocszaja> "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"

ɬika-n paʔ. [INT-SUBJ/IRR ADV]. when already = then: <Łυecán vá> "entonces"

*pa-ɬ

paɬ. [ADV]. already, *TAM-adverbial*: <paŁ> "ya"

šam pari paɬ. [PREP N ADV]. it is already day = it is early: <szam pari paŁ> "ya es de día"

pa (2)

pa=kaʔ. [?=2s]. you: <pá ɛa> "ti; partícula verbal"

pahata

pahata. [VT]. to pay [L-S]: <pajata> "pagar"

pahta-wa. [VT-PART.PF]. paid (thing): <pagtágua> "cosa pagada"

pahta-ɬa. [VT-AGT]. (the one) who pays: <pagtáŁa> "el que paga"

pahta-ki-ɬa. [VT-AP-AGT]. (the one) who pays: <pagtaɛiŁa> "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: <packı> "pared"

pak'a hutu. [VT-N]. nail-wood/pole = wall poles, wattle: <paɛa 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 paɛí> "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 ?-mouth = to lie: <pauɛuszaja> "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"

paɬa

paɬa. [N]. bundle of straw [L-S]: <paŁa> "tercio"

paɬa-maku. [N-N]. straw-house = covering, market stand: <paŁamacu> "ramada, galera"

paɬama

paɬama. [N]. sea turtle: <paŁama> "tortuga marina"

pa:ma:

pa:ma:. [N]. arm, wing: <paamáa> "brazos, alas de las aves"

ʔaɬ-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"

muɬ-pama-k. [N-N-?]. white-winged = wild dove: <muŁ pàamac> "paloma de monte"

pantu:

pantu:. [N]. brother/sister-in-law: <panduu> "cuñado, cuñada"

ʔaya-n pantuʔ. [?-1sP N]. my-?-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 paɛí> "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-taɬi. [PREP-N]. below/behind-throat = neck: <para táŁi> "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 šɨ para-ki. [INT EXTEN CONJ]. and because of what?: <¿szanda szʊe 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"

ɕ'uɕ'u-pari. [ADJ-N]. ?-heat = measles: <tzutzupari> "sarampión, sarpullido; enfermedad"

kuškuš-pari [N-N]. ?-sun/day = type of tree (*caesalpinia pulcherrima*): <cuszcuszpari> "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"

seɬe-wa pari. [VT-ANT/LOC-N]. (where) has laid on side-sun = sunset, afternoon: <seŁègua pari> "tarde, caída del sol"

šan pari paɬ. [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: <paríc> "fortuna, suerte"

pari-ka. [N-CAUS]. make hot = heat up: <paríca> "calentar"

pari-k'i-Ø. [ADJ-INCH-NOM]. *becoming hot = summer: <pari ɛí> "verano"

parwa

parwa. [N]. cacaotree: <pargúa> "árbol de madre de cacao"

pari?awa-ɬa. [N-AGT]. *what is from the cacaotree = 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-?. [VI]. accomplished: <patà> "ser" ; <patà mère> "ser roto"

?a-pata?. [3sS-VI]. accomplish, be able: <apatà> "poder; defectivo" ; <a patà oròmo> "a ser recogido"

pata-šama. [VT-PREP]. accomplish-inside = remember: <pataszáma> "pensar, acordarse"

pata-ɬa šama. [VT-AGT PREP]. (the one) who accomplishes inside = (the one) who remembers: <pataŁà szàma pè> "el que ha, tiene de acordarse"

pata-ɬ 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 ofchocolate = 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"

paȼ'i

paȼ'i, pa:ši [VT]. to grind corn, to mill [L-M/MZ]: <patxi>, <paaszí> "moler"

paȼ'i. [N]. corn dough (*nixtamal*): <patxi> "la masa para las tortillas"

paȼ'i-ɬa. [VT-AGT]. (the one) who grinds corn: <paszíŁa> "molendera"

paši-k. [VT-INSTR]. instrument(?) for grinding = kitchen (?): <paaszíc> "cocina"

k'iriwa-paȼ'i. [N-N]. ?-dough = atole: <ɛirigua patxi> "atole, chilate"

pa:wak

pa:wak. [N]. ceiba tree, pine tree: <paaguác> "selva árbol" ; <paguác> "ocote"

payamu

payamu. [N]. coyote: <payámu> "coyote, lobo"

payi?

payi?. [N]. daughter-in-law: <payí> "nuera"

pɐ?

pɐ?. [DIR]. *centric directional*, *future/imperative marker*: <pè> "partícula para futuro y significativa de venir"

?aki-pɐ? ?ayak ?ik'aɬ ?ayapa [ADV-CENT ADV NUM N]. in a year from now: <aɛʊepè ayac yɛál ayapà> "de aquí a un año"

ka=pɐ?. [INT=CENT]. wherefrom?: <capè> "de dónde; adverbio para interrogacion"

nati=pɐ?=ka.[ADV=DIR=EXO]. through there, from over there: <natʊepècà> "por allá"

waɬi=pɐ?. [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:lo?

pe:lo?. [N]. dog [L-S]: <peeló> "perro"

peɬana

peɬana. [VI]. to slide, slip: <peŁana> "resbalar"

peɬe?

peɬe?. [N]. single, unmarried man [L-M]: <péle> "patas, patojo"

peɬteme

peɬteme. [VI]. to turn, return: <peŁteme> "volver, voltearse"

peɬteme-ɬa. [VI-AGT]. (the one) who returns: <peŁteméŁa> "el que vuelve, voltéa alguna cosa"

pene

pene hurak. [N-N]. ?-man = split log drum: <pene jurác> "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 míya> "pajarillos y pollos"

pe:re-piya. [ADJ-N]. small-leaf = leaf of *vijagua* [sic:*vijagua* leafs are not small]: <pere píya> "hoja de vijagua"

peše

peše. [N]. lizard [L-M]: <péze> "lagartija"

pewek

pewe-k. [N-INSTR]. gourd: <peeguec> "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: <pijúszíc> "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-sɨma. [NUM=EXO-IRR-N]. two nights ago = the night before last night: <picánsʊema> "antenoche"

pisina

pisina. [N]. *capulín*, tree: <picína> "capulín; árbol"

piɬa

piɬa-tili [N-N]. ?-ache/hardship = calamity, necessity, want: <piŁatilí> "calamidad, necesidad"

piɬka

piɬ-ka. [?-CAUS]. make ? = compose, adorn: <piŁca> "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-ɬa. [VT-AGT]. (the one) who gins cotton: <pipriŁa> "la que desmota, escarmena el algodón"

piri

piri. [VT]. see: <piri> "ver"

piri:-wa. [VT-PART.PF]. seen (thing): <piriigua> "cosa vista"

piri:-ɬa. [VT-AGT]. (the one) who sees: <piriiŁa> "el que ve o veía"

piri:-ɬ. [VT-AGT]. (the one) who sees: <piriiŁ> "el que ve o veía"

piri-ki-ɬa. [VT-AP-AGT]. (the one) who sees = observer: <pirɪɛiŁa> "el que mira" ; <piriiquiŁa> "el que ve o veía" ; <piriquiŁa> "el que ha o tiene de ver"

pišaku

pišak'u. [VT]. to cut a bird's beak: <piszáɛu> "despicar, despuntar"

piɕ'u ~ puɕ'u

piɕ'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"

piɕ'u-k'i-ɬa. [VT-AP-AGT]. (the one) who squeezes: <pitxuɛiŁa> "que aprieta o exprime la cosa"

puɕ'u (2). [VT]. to milk, squeeze: <putxu> "ordeñar, expremir"

puɕ'u-k'i-ɬa. [VT-AP-AGT]. (the one) who milks: <putxuɛiŁa> "el que ordeña o corralero"

pi:ya

pi:ya. [N]. leaf: <píya> "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-waya?. [N-N]. leaf of milpa: <piyaguayá> "la hoja de milpa"

pe:re-pi:ya. [ADJ-N]. small-leaf = leaf of *vijagua*: <pere píya> "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-ɬa. [VT-AP-AGT]. (the one) who lightens, illuminates: <pooɛeŁa> "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: <poóɛ> "ocote"

pok'o

pok'o. [VT]. break, split [L-M]: <poɛo> "quebrar"

pok'o-wa. [VT-PART.PF]. broken/split (thing): <poɛogua> "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"

poɕa

poɕ'a, poša. [VT]. to wash [L-M]: <potxa>, <posza> "lavar"

poɕ'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-ɬ. [VT-ANT-PART.ACT]. what has washed = leftover soap: <poszáguaŁ> "la sobra del jabón"

poɕ'a-ɬa, poša-ɬa. [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 poy> "de verdad"

poyo-ɬ-ke. [VI-PART.ACT-INCH]. become true = reconcile, put right: <poyoŁque> "reconciliar"

poyo-ɬ-k'e-ɬa. [VI-PART.ACT-INCH-AGT]. (the one) who reconciles: <poyoŁɛeŁa> "el reconcilianse"

prima

prima. [N]. dawn [*Latin*]: <príma> "alba del día"

pu

pu. [N]. hand: <pu>, <pýu> "mano"

pu-wik'i-k. [N-?-INSTR]. hand of millstone = grinding stone, *mano*: <puguiɛiɛ> "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): <pulàgua> "cosa hecha"

pula-ɬa. [VT-AGT]. (the one) who makes sth.: <pulaŁa> "el que hace o hacía"

pula-ɬ. [VT-AGT]. (the one) who makes sth.: <pulàŁ> "el que hace o hacía"

pula-ki-ɬa.[VT-AP-AGT]. (the one) who makes sth.: <pula quiŁa> "el que hace o hacía"

puli

puli. [VT]. to clean, wipe, scrub: <puli>, <puŁi> "limpiar, fregar"

pulpu

pulpu. [N]. dust [L-S]: <puŁpu> "polvo de la tierra"

pumu

pumu. [N]. incense, copal [L-M/MZ]: <púmu> "copal que sirve para sahumerio aromático"

punpun

punpun. [N]. bladder: <punpún> "vejíga"

punpun-ɬiwɨ. [N-N]. *bladder(=drum?)-bad = owl: <punpun Łueguue> "tecolote; ave"

pupuk

pupu-k. [N-INSTR]. mat [L-M]: <púpuc> "petate o estera"

puri (1)

puri. [VT]. to respond: <puri> "responder" ; <purí> "encontrar"

pu:ri-ki. [VT-AP]. get married: <púriqui> "casarse"

pu:ri:-k'i-Ø. [VT-AP-NOM]. wedding: <púríɛi> "casamiento"

puri-k'i-ɬa. [VT-AP-AGT]. (the one) who gets married = groom: <puriɛiŁa> "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-mapɨ. [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]. ?: <puri> "ha; adverbio"

purik

puri-k. [N-INSTR]. drum: <puric> "caja del cuerpo" ; <puríc> "caja velica; instrumento"

kosek-*puri-k. [ADJ N-INSTR]. big drum-instrument = big drum: <coséc punic> "tambor de moros"

puɕ'u > piɕ'u

puy

puy-pari. [ADJ-N]. half/centre-day = midday: <puy pari> "medio día"

pɨkɨ

pɨkɨ. [N]. liver: <pueckue> "hígado"

pɨk'ɨ

pɨk'ɨ. [VT]. to feel, touch: <pueckue> "tentar"

pɨkɨ-k'i-ɬa. [VT-AP-AGT]. (the one) who feels/touchs: <pueckuɛiŁa> "el que tienta"

pɨlana

pɨlana. [VI]. jump up and down: <puelána> "brincar"

pɨ́ɨ

pɨ́ɨ. [VI]. to aleviate, lighten: <pueŁué> "aliviarse, aliviado"

pɨ́ta

pɨ́ta. [VT]. wound/kill with an arrow [L-M]: <pueŁta> "flechar o dar de estocadas o tastasos"

pɨ́ta-ɬa. [VT-AGT]. (the one) who wounds/kills with arrow = archer, bowman: <pueŁtaŁa> "flechador"

pɨ́ta-k. [VT-INSTR]. arrow: <pueŁtaɛ> "flecha"

pɨmɨ

pɨmɨ. [N]. mute person: <puemue> "el mudo o muda"

pɨpɨ

pɨpɨ. [VT]. fill, swell [L-N]: <puépue> "llenar o hinchar"

pɨpɨ-hašu. [N-N]. filled (thing) of pork = pork tamal: <puepue jaszu> "tamal de marrano"

pɨpɨ-miya. [N-N]. filled (thing) of chicken = chicken tamal: <puepue miya> "tamal de gallina, que llaman de pipián"

hurak'-pɨpɨ. [N-N]. man-filling/swelling = inflamation?, *erection?: <jurac puepue> "cierta inflamación o especie de abuso que tienen los indios, que dicen les sale cuando padecen alguna verguenza"

pɨpɨ-k. [VT-INSTR]. instrument/place for filling = well, pool: <puepué́c> "pozo"

pɨrɨ

pɨrɨ. [VI]. to stuff oneself, to satiate: <puérué> "hartarse"

pɨrɨ-k. [VI-INSTR/ADJ]. *"stuffed, satiated" = annoying, foolish: <puerué́c> "enfadoso, necia"

pɬsa

piša. [VI]. stink, annoy [L-M]: <pʊésza> "heder; anómalo"

piša-Ø. [VI-NOM]. stench, stinking (thing): <pʊesza> "cosa hedionda"

piša-haya. [N-N]. stinking-crab = stinking (bed)bug: <pʊesza jaya> "chinche hedionda"

piša-maɬi. [N]. stinking-ashes = sulfur: <pʊesza maŁi> "azufre"

pišɨ-k. [VI-INSTR]. instrument of stench = cup used for excrement: <puʊeszʊec> "jícara peste"

pišɨ-k-šina. [?-INSTR-N]. cup (for) urine = pee-pot: <pʊeszʊec szína> "jícara de orines"

ʔaɬte-pɨšɨ. [N-N]. genital-cup = urinal?: <aŁte pʊeszʊe> "jícara peste"

pɨɕ'ɨ

pɨɕ'ɨ. [VT]. to augment, increase: <pʊetxʊe> "aumentar o echar demás sobre otra cosa"

pɨɕ'ɨ-wa. [VT-PART.PF]. augmented, increased (thing): <pʊetxʊegua> "cosa que se hecha demás, que llaman ipeguil"

S

salvia

salvia. [N]. medicinal herb [L-S]: <salvia> "salvia, hierba medicinal"

saɬaka

saɬa-k'a. [ADJ-CAUS]. to raise, lift: <saŁáɛa> "alzar, guardar, o levantar para arriba"

saɬ-ka-wa. [ADJ-CAUS-PART.PF]. raised, guarded (thing): <saŁcagua> "cosa guardada"

**saɬa-k > haɬa-k. [VT-INSTR]. hoe

haɬa(-k)-*cuchillo*. [N-N]. instrument for pulling weeds-knife = hoe: <jajŁa cuchilo> "la cutachilla, instrumento con que deshierban en lugar de azadón"

saɬka

saɬka. [ADJ]. far, distant: <saŁca> "distante o lejos"

ašin=saɬka. [NEG=ADJ]. not-far/distant = close, near: <aszinsaŁca> "cerca"

sama > sɨʔma

sama. [N]. darkness: <sáma> "la obscuridad"

samu

samu. [VT]. to catch, take: <samu> "coger"

samu-wa. [VT-PART.PF]. caught/taken (thing): <samùgua> "cosa cogido"

sa:mu-ɬa. [VT-AGT]. (the one) who catches/takes = catcher: <sàmùŁà> "el que coge o cogía"

sa:mu-ɬ. [VT-AGT]. (the one) who catches/takes: <sàmùŁ> "el que coge o cogía"

sa:mu-ki-ɬa. [VT-AP-AGT]. (the one) who catches/takes: <sàmuquiŁa> "el que coge o cogía"; "el que ha o tiene de coger"

***sara-**

*sara-. [ADJ]. cold

saraɬ-ʔuy. [ADJ-N]. cold water: <saraŁ huy> "agua fría"

*saraɬ-k'i. [ADJ-INCH]. to make cold = freeze: <saraŁɛi> "enfriar"

sara-raʔ. [ADJ-?]. cold (thing): <sararà> "cosa helada"

sara-raʔ-tawu. [ADJ-?-N]. cold-wind = the cold: <sararà táu> "el frío"

sa:wak

sa:wa-k. [N-INSTR?]. metal, bell: <saaguác> "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]: <selíca> "comulgar"

selika-ɬa. [VI-AGT]. (the one) who administers/takes communion: <selicaŁa> "camulgantes"

seɬe

seɬe. [VT]. to put/lay aside [L-M?]: <seŁè> "cantearse o ponerse de lado; defectivo"; <zèŁè> "torcerse, cantearse"

seɬe-ʔ. [VT-STAT]. put/laid aside: <seŁè> "de lado o torcido"

seɬe-wa pari. [VT-ANT/LOC-N]. (where) has laid on side-sun = sunset, afternoon: <seŁègua pari> "tarde, caída del sol"

čeɬ(e)-na. [VT-?]. mess up, disorder: <chèŁna> "desbaratar"

se:ma

se:ma. [N]. fish: <seema> "pescado"

tila-séma. [ADJ-N]. salted-fish: <tila séma> "pescado salado"

ɕ'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): <siɛigua> "cosa comenzada"

si:mi

si:mi. [VT]. to extinguish, put out (light, fire): <símі> "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-ɬa. [VT-AP-AGT]. (the one) who mocks = joker: <siraja ɛiŁa> "mofador, burlador"

siru

siru. [VI]. to abbreviate, abridge, cut short: <sirú> "abreviar; defectivo"

siru-ya. [VI-IMP]. abbreviate! = hurry up: <ziruya> "darse priesa, 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]: <suɛsin> "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): <suɛugua> "cosa amarrada"

suk'u-wa:. [VT-LOC]. place of tying, fastening: <suɛuguaa> "el lugar donde se amarra"

suk'u-k'i-ɬa. [VT-AP-AGT]. (the one) who ties, fastens: <suɛuckiŁá> "el que ata o amarra"

suk'u-k'i-k. [VT-AP-INSTR]. instrument for tying, fastening: <suɛuckiɛ> "cosa con que se amarra o ata"

sumaya

*sɨm-(h)aya. [ADJ-N]. black-? = crab (from sea): <sʊemaya> "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"

sɨm

sɨm-sɨm. [ADJ-REDUP]. tense, tight (thing) [L-M]: <sʊemp sʊemp> "cosa tirante"

sɨʔma

sɨma. [ADJ/N]. black, dark, night: <sʊema> "cosa negra, noche"

*sɨʔn-ʔaʔu. [ADJ-N]. black-corn = black corn: <sʊen au> "maíz negro"

*sɨm-(h)aya. [ADJ-N]. black-? = crab (from sea): <sʊemaya> "cangrejo"

*sɨʔn-miya. [ADJ-N]. black-chicken = turkey: <sʊen miya> "paugil; ave"

*sɨʔm-ʔoro. [ADJ-N]. black-gold = black corn: <simpóro> "maíz negro"

ȼ'ɨk'(ɨ)-sɨʔma. [ADJ-N]. half/mid-night = midnight: <txʊeɛʊe sʊema>; <txʊeɛsʊema> "media noche"

ʔaɬmu=ka-n sɨʔma. [ADV=EXO-IRR N]. *today ago night = yesterday night: <aŁ mu can sʊema> "anoche"

pi=ka-n-sɨma. [NUM=EXO-IRR-N]. two nights ago = the night before last night: <picánsʊema> "antenoche"

šama-k sɨʔma. [PREP-? N]. in the night = early morning: <szamac sʊema> "de mañana"

wašta-wa sɨʔma. [VI-ANT/LOC N]. (where) entered-night = nightfall, sunset: <guasztagua sʊema> "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 szamíni> "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-ɨpɨy. [PREP-N]. inside-? = Atiquipaque (toponym): <szamʊepʊey> "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 szamipíya> "Tepeaco; pueblo"

šan-šowe. [PREP-N]. at/in-? = Pasaco (toponym): <szanszogue> "Pasaco; pueblo"

adverbs:

šan-pari paɬ. [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 sɨʔma. [PREP-? N]. in the night = early morning: <szamac sʊema> "de mañana"

phrasal verbs:

ʔaku šama. [N-PREP]. go-inside = sadness: <acuszáma> "la tristeza"

nɨma šama. [N-PREP]. eat-inside = sadness: <nʊema szama> "la tristeza o cuidados"

pata šama. [VT-PREP]. accomplish-inside = think, remember: <pataszáma> "pensar, acordarse"

yɨwa šama. [N-PREP]. lose-inside = forget: <yʊeguaszáma> "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> "paño 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" ; <pauɛuszaja> "mentir"

ʔuy-šaha. [N-N]. water of mouth = saliva: "uy szajáa" "saliva"

wak'i-k-šaha. [VI-INSTR-N]. played-mouth = nickname: <guaɛicszaja> "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"

šakaɕ'a

šakaɕ'a. [VT]. to steal: <szacatxa> "hurtar"

šakša-ɬa. [VT-AGT]. (the one) who steals = thief: <szacszaŁa> "el ladrón"

šak'-

*šak'a. [ADJ]. white [L-M]

šak'al-awiš. [N-N]. whiteness-trousers= white trousers [L-M]: <szaɛalaguisz> "calzones blancos"

šak'iɬ-haya [ADJ/N-N]. whiteness/excellent-female = good woman [L-M]: <szaɛiŁ aya> "buena moza, hermosa o linda"

šak'iɬ-humu. [ADJ/N-N]: whiteness/excellent-male = good man [L-M]: <sza ɛiŁ umu> "buen mozo, visarro"

šak-si. [ADJ-POS.VT]. to make white = to bleach, strain: <szaczi> "colar o cerrir"

šak'a

šak'a. [VT]. to lead, be best man at wedding: <szaɛa> "apadrinar matrimonio o llevar por delante a otros"

šak'a-ɬa. [VT-AGT]. (the one) who leads: <szaɛaŁa> "el que lleva por delante a otro"

šak'a-k'i-ɬa. [VT-AP-AGT]. (the one) who leads, sponsors = best man at wedding: <szaɛackiŁa> "el que apadrina matrimonio"

šak'ari > šaka

šak'a-ri. [?-POS.VT]. to put to flight, scare away: <szaɛari> "ahuyentar, espantar y correr animales"

šak'ari-k'i-ɬa. [VT-AP-AGT]. (the one) who scares away: <szaɛarickiŁa> "el aventador, espantador"

šak'ayaɬ

šak'ayaɬ. [N]. thorn, spine: <szaɛaayaŁ> "la espina"

šaɬ

šaɬ. [ADJ]. good, well: <szaŁ> "bueno, perfecto, bien"

ʔašin=šaɬ. [NEG=ADJ]. not good/well = bad: <aszin szaŁ> "malo, no está bueno"

šaɬ-k'i-ya. [ADJ-INCH-TRANS]. to make become good = compose, set, dress: <szaŁquiya> "componer o aliñar"

šamaɬi:

šamaɬi:. [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]: <szaan paraqui> "¿por qué?; interrogativo"

šan šɨ:. [INT ADV]. what? = and what?: <szan szʊeʊe> "¿qué?; interrogativo"

ša:n-i. [INT-INT]. what?-? = how?: <szaani> "¿cómo?; interrogativo"

šan=ta:. [INT=INT]. what?-? = how?: <szandaa> "no se qué, y quien sabe qué"

šan=ta šɨ ʔaɬi. [INT=INT ADV PREP.CAUS]: what?-?-EXTEN because = and because of what?: <szanda szʊe aŁi> "¿y por qué?; interrogativo"

šan=ta šɨ paraki. [INT=INT ADV INT]: what?-?-and for what reason? = and what for?: <szanda szʊe paraqui?> "¿y para qué?; interrogativo"

ʔama=šan ʔaka naman [ADJ?=INT? ? ?]. *expression* (meaning not understood): <amaszán ácá namán> "refrán"

ʔašin=ša:n. [NEG=INT]. not-what = (there is) nothing: <aszìn szàn...> "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"

šapariki

šapari. [VT]. to degrain: <szapári> "desgranar"

šapri-wa. [VT-PART.PF]. degrained (thing): <szaprígua> "cosa desgranada"

šapri-k'i-ɬa. [VT-AP-AGT]. (the one) who degrains: <szaprɛciŁa> "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"

šawaȼ'a

šawaȼ'a. [VT]. to sow: <szaguatxa> "sembrar"

šaw(a)ša-wa. [VT-PART.PF]. sown (thing): <szauszagua> "cosa sembrada"

šaw(a)ša-ɬa. [VT-AGT]. (the one) who sows: <szauszaŁa> "sembrador"

šawi > čawi

šawi. [VT]. to scratch: <szagüi> "rascar"

šawu (1)

šawu. [N]. fingernail, claw: <szaug> "uña"

šawu (2)

šawu. [VI]. to sit down: <szagú> "sentarse"

šawe. [N]. seat: <szague> "el asiento para sentarse"

ša:wu:-ʔ. [VI-STAT]. seated: <szàgù> "estar sentado"

sawu-ya. [VI-TRANS]. put, seat sth.: <szaguya> "sentar otra cosa, ponerla en alguna parte"

šawu-ɬa. [VI-AGT]. (the one) who sits: <szaguŁa> "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 szeeque> "pecho y costillas"

še:k'e

še:k'e. [N]. brushwood, small firewood: <széeɛe> "leña menuda, que llaman palitos"

še:te

še:te. [N]. worm: <szeete> "lombríz"

ši:ka

ši:k'a. [N]. hawk [L-M]: <szíɛa> "gavilán"

šila

šila. [N]. seat, chair [L-S]: <szila> "silla de sentarse"

šiɬik

šiɬik. [N]. cob of the corn, olote [L-M]: <sziŁic> "olote"

šina

šina. [N]. urine [L-M]: <szína> "orines"

šina. [VI]. urinate: <szína> "orinar"

šina-ɬa. [VI-AGT]. (the one) who urinates: <szináŁa> "orinador"

pišik-šina. [N]. cup for urine = pee-pot: <pʊeszʊec 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-ɬa. [VT-AP-AGT]. (the one) who cuts, strikes: <szipiɛiŁa> "cortador"

širi

širi. [VT]. hide: <sziri> "esconder"

širi-ɬa. [VT-AGT]. (the one) who hides: <sziriŁa> "escondedor"

šiwu

šiwu-ʔu:wiʔ. [N-N]. ?-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> "ilicito y torpe amigo o amiga"

šiyuk

šiyuk. [N]. rattlesnake: <sziúc> "cascabel y chinchin"

muɬa-šiyuk. [ADJ-N]. white-rattlesnake = viper, ratttlesnake: <múŁasziuc> "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: <szúɛa> "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 szamíni> "dolor de barriga"

šuk'a-wa. [VT-PART.PF]. eaten/bitten (thing): <szuɛagua> "cosa comida, mascada, mordida"

šuk'imaɬ

šuk'imaɬ. [N]. coal: <szuckimaŁ> "brazas"

šule

šule. [N]. little fish: <szule> "cierto pececico"

šuɬtera ~ šuɬteru

šuɬtera. [N]. single, unmarried (female) = single woman [L-S]: <szuŁtera> "la mujer soltera"

šuɬtero. [N]. single, unmarried (male) = single man [L-S]: <szuŁtéru> "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: <ɛupru szunic> "olla honda"

šu:nu

šu:nuʔ. [ADJ]. long, deep (thing): <szúunú> "cosa larga"

šu:nuʔ. [N]. deepness of pools/water: <szúunú> "la hondura de las pozas y de toda agua"

šunu-k'a. [ADJ-CAUS]. make long = to lengthen: <szùnuɛà> "alargar"

šunu

*šunu- [VT]. darn, strand, join

šu:nu-k. [VT-INSTR]. darn-instrument = navel: <szuunúc> "ombligo"

ȼ'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"

šupimaɬ

šupimaɬ. [N]. izcanal, thorn tree: <szupímaŁ> "izcanal, árbol de espina a modo de cachos"

***šur- > čɨrɨ-**

šuraya > haya

šurumu > humu

šuruk

šuruk. [N]. staff, walking cane: <szurúc> "bordón"

šuruɬi

šuruɬi. [N]. squirrel [diff.]: <szurúŁ> "ardilla"

šuši

šuši. [N]. beard: <szuszí> "barbas"

šušumi

šušumi [N]. coati [L-M]: <szuszumí> "pizote"

šuti

šuti. [N]. freshwater snails, jutes [L-N]: <szutí> "jutes, a modo de caracoles de los ríos"

šu:tuk > hu:tuk

šuwan

šuwan. [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-ɬamuk. [N-N]. lizard-shrimp/fish = armoured fish = sea devil, monkfish: <szuguay Łamuc> "peje armado"

šuwi

šuwi. [VT]. to sweep: <szugui> "barrer"

šuwi-k. [VT-INSTR]. sweeping-instrument = broom: <szuguic> "escoba"

šuwi-k'i-ɬa. [VT-AP-AGT]. (the one) who sweeps: <szuguiɛiŁa> "el que barre"

šuya

šu:ya. [ADJ]. first, older: <szúya> "primero, antes"

šuya-ʔ. [ADJ-?]. older sibling: <szuyá> "hermano mayor"

šɨ ~ šɨki

*šɨ. [ADV]. and

šan=šɨ. [INT=ADV]. and what?: <szanszʊeʊe> "¿qué?; interrogativo"

šan=ta=šɨ. [INT=INT=ADV]. and because of what?: <szanda szʊe aŁi> "¿y por qué?; interrogativo"

*šɨki. [ADV]. and, adverbial of extension

ʔakan=šɨki. [ADV=ADV]. like-also = like this as well: <acan szʊequí> "también" , "así también"

ʔama=šɨki. [ADV=ADV]. in addition-also = and also: <ama szʊequi> "también, *et*, y"

ɬina(ʔ)=šɨki. [ADV=ADV]. with-also = also, and: <Łiná szʊequi> "también, y"

nah=šɨk'i. [PN=ADV]. he (is) also = he is as well: <nag sziɛi> "el es, y también" ; <nag szʊequí> "también"

šɨha

šɨha. [N]. sand [L-M?]: <szʊeja> "arena"

šɨk'ɨɬ

šɨk'ɨɬ. [N]. *tempisque* (type of tree): <szʊeɛʊél> "tenpisque; árbol y su fruta"

šɨma (1)

šɨma. [N]. rat, mouse: <szʊema> "ratón"

šɨma (2)

ku:ruk-šɨma. [VT-INSTR-N]. *instrument for completing-? = roof-ridge, ridgepole: <cuurúc szʊema> "caballete, palo que sirve de cumbrera a la casa"

šɨrɨ

šɨrɨ. [VT]. to strike, hit, beat: <szʊérʊe> "golpear"

šɨrɨ-k. [VT-INSTR]. instrument for striking/beating = striker, beater: <szʊerʊéc> "golpeador"

šɨyɨ

šɨyɨ. [VI]. to return: <szʊeyʊe> "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: <tàgnagua jumu> "partes genitales del hombre"

tahti

tahti. [N]: <tagtí> "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 szamipíya> "Tepeaco; pueblo"

tak'ani

tak'ani. [VT]. to impute, aggravate [L-M]: <taɛani> "imputar, achocar"

taɬa

taɬa. [VT]. to burn, light, set on fire [L-M]: <tàla> "quemar, encender"

taɬa-tili. [VT-N]. burn-ache/hardship = fever: <taŁa tili> "calentura"

tawu taɬa-tili. [N VT-N]. cold burn-ache = shivering, ague: <tau taŁa tili> "fríos y calenturas"

taɬi

taɬi. [N]. throat: <táŁi> "garganta"

hutu-taɬi. [N-N]. pole of throat = neck bone: <jutu taŁi> "hueso del pescuezo"

para-taɬi. [PREP-N]. over/behind-throat = neck: <paratáŁi> "pescuezo"

tamaɕ'i

tam(a)ɕ'i. [VT]. to twist, make rope: <tamptxi> "torcer"

tamaɕ'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 ɛiɛ> "cabecera, almohada"

tanɕ'i

tanɕ'i. [ADJ]. deaf, mute, silent: <tantxi> "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: <taarí> "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: <titica tata> "padrino"

tawaɬk'i

tawaɬ-k'i. [ADJ-INCH]. become blessed = to be blessed: <taguaŁɛi> "bendecir"

tawaɬk'i-ʔuy. [VI-N]. blessing-water = holy water: <taguaŁɛi húy> "la agua bendita"

tawaɬk'i-wa. [VI-PART.PF]. blessed (thing): <taguaŁɛigua> "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"

sarara ʔ-taw. [ADJ-N]. cold-breeze = cold: <sararà táu> "frío"

wona-taw. [N-N]. hill/north-wind = northwind: <gona 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> "castrear 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: <aŁté> "*verbum impurum et significat membrum virile*"

ʔaɬte-piši. [N-N]. genital-cup = urinal?: <aŁte pʊeszʊe> "jícara peste"

čaraʔin-ʔaɬte. [N-N]. ?-genitals = *penis?: <charravɛn aŁtè> "*verbum impurum et significat pendiculus*"

muš-ʔaɬte. [N-N]. hairs of genitals = pubic hair: <musz 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 chileguaque"

ten-turi. [ADJ-N]. red-child = infant, newborn: <ten turi> "criatura tierna"

ten-wiɬay. [ADJ-N]. red-lion = puma: <ten guiŁay> "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-? 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-ɬa. [VT-AP-AGT]. (the one) who kills = killer: <teroɛeŁa> "el que mata"

teško

teško. [N]. type of bird: <tészco> "cierto pájaro, de que abusan los indios"

teškoy. [ADJ]. naughty, pernicious: <teszcoy> "traviezo, pernicioso"

***ti**

ti. [VT]. have: <di> "haber; defectivo"

ti:ʔ

ti:ʔ- [PREP]. to, for (indirect object): <tiý> "para"

ti:ki

ti:ki. [VI]. to sleep: <tiɛí> "dormir"

ti:ki-ɬa. [VI-AGT]. (the one) who sleeps = sleepyhead: <tiɛiŁá> "dormilón"

ti:ki-k waru. [VI-INSTR-N]. instrument for sleeping-net = hammock: <tiɛiɛguaru> "hamáca"

ti:ki-k-ɬa. [VI-REFL?-AGT]. (the one) who (generally) sleeps = sleepyhead: <tiyɛiɛŁa> "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"

piɬa-tili [N-N]. ?-ache/hardship = calamity, necessity, want: <piŁatilí> "calamidad, necesidad"

taɬa-tili. [VT-N]. burn-ache/hardship = fever: <taŁa tili> "calentura"

taw taɬa-tili. [N VT-N]. cold burn-ache = shivering, ague: <tau taŁa tili> "fríos y calenturas"

tiɬtik'

tiɬtik'. [ADJ]. black [L-N]: <tiŁtick> "negro, negra"

tišata

tišata. [VT]. to break wind, fart: <tiszata> "ventosear"

tišta-ɬa. [VT-AGT]. (the one) who breaks winds, farts: <tisztaŁa> "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-ɬa. [VT-AP-AGT]. (the one) who deceives = deceiver, lier: <tonojaɛiŁa> "engañador, mentiroso"

tonton

tonton. [N]. sea turtle [L-N]: <tondón> "tortuga marina"

ʔuruɬ-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"

tuɬtu

tuɬtu. [VT]. to pierce, prick, puncture, punch [L-M]: <tuŁtu> "picar, dar estocadas"

tuɬtu-ɬa. [VT-AGT]. (the one) who pierces, punches: <tuŁtuŁa> "el que pica"

tuɬtu-k. [VT-INSTR]. instrument for piercing, puncturing = lance, pike: <tuŁtuc> "cosa con que se pica, como lanza, pica"

tuɬtu-k'i-ɬa. [VT-AP-AGT]. (the one) who pierces, pricks: <tuŁtuɛiŁa> "el que pica"

tuɬu

tuɬu. [N]. flower (generic term): <túŁu> "todo género de flor"

tuɬu-ʔampuki. [N-N]. flower-serpent = type of snake: <tuŁu ambuqui> "suchicúa; culebra"

tuma

tuma. [N]. deer, stag: <túma> "el ciervo, venado"

tuma-ʔampuki. [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"

ʔeɬak-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-ɬa. [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-ɬa. [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"

muɬ-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-ɬa. [VI-AP-AGT]. (the one) who sucks = nurse: <tutuɛiŁa> "ama, chichigua"

tuwa

tuwa. [N]. cacao: <túa> "cacao"

mu-tuwa. [3sP-N]. his cacao tree: <mu tùa> "su cacaguatal"

tuya

tuya. [VT]. to scold, grumble: <tuya> "reñir"

tuya-ki. [VT-AP]. to scold = to litigate, rail: <tuyáquí> "pleitear"

tuya-k'i-ɬa. [VT-AP-AGT]. (the one) who scolds: <tuyaɛiŁa> "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: <túyúɛa> "torear o provocar"

tuyu-ha-k'i-ɬa. [VT-CAUS-AP-AGT]. (the one) who teases, provokes: <tuyujaɛiŁa> "toreador provocativo"

tyuš

maku-tyux. [N-N]. house of god = church [L-S]: <macu tiusz> "iglesia"

ŧi:maɬ

ŧi:maɬ. [N]. louse: <tʋeʋemaŁ> "piojo"

ŧiɱɨ

ŧiɱɨ. [VT]. to dye, colour: <tʋemʋe> "teñir"

ŧiɱɨ-k'i-ɬa. [VT-AP-AGT]. (the one) who dyes, colours = dyer: <tʋemʋeɛiŁa> "el que tiñe o tintorero"

ŧišk'ɨ

ŧišk'ɨ. [ADJ]. far, distant: <tʋeszɛʋe> "lejos, distante"

ʔašin=ŧisk'ɨ. [NEG=ADJ]. not far = close: <aszin-tʋeszɛʋe> "no lejos"

ɕ'

ɕ'ahama

ɕ'ahama. [VI]. to sting oneself with thorn: <txajama> "espinarse o lastimarse hiriendose con algo"

ɕ'aka

ɕ'aka. [VT]. fornicate: <txaca> "est verbum impurum et inhonestum et significat quod est fornicare"

ɕ'ama

ɕ'ama. [ADJ]. good [L-M/MZ]: <txáma> "bueno y bien"

ɕ'ama čiriki. [INTENS ADJ]. good/well small = very small: <txamachʋerʋeɛʋe> "muy chico"

ɕ'ama ʔiraʔ. [INTENS ADJ]. good/well big = very big: <txamaʋerrá> "muy grande"

ɕ'amɨ

ɕ'amɨ. [ADJ]. sour, bitter [L-M]: <txamʋe> "cosa agria o amarga"

hamɨ. [ADJ]. acidic: <jamʋe> "cosa acida"

ɕ'awi

ɕ'awi. [VT]. to pinch, scratch: <txaguí> "pelliscar o arañar"

ɕ'awi-k'i-ɬa. [VT-AP-AGT]. (the one) who pinches: <txaguiɛiŁa> "pelliscador"

ɕ'aya

ɕ'ayaʔ. [ADJ]. wet [L-M]: <txayá> "cosa mojada"

ɕ'aya-se:ma. [ADJ-N]. wet fish = fresh fish: <txaya sema> "pescado fresco"

ɕ'ehe

ɕ'ehe. [N]. Chiquimulilla (toponym): <txege> "Chiquimula; pueblo"

ɕ'imaha

*ɕ'imaha. [N]. (makers of) guacales/pottery = Guazacapán (toponym) [L-M]: <txímaja> "Guazacapán; pueblo"

ɕ'inaʔna

ɕ'inaʔna. [N]. scorpion [L-M]: <txinána> "alacrán, sabandija"

ɕ'ita

ɕ'ita. [N]. straw hat: <txita> "petaquilla de caña o sombrero de petate"

ɕ'oko

ɕ'oko. [N]. grackle, blackbird [L-M]: <txoco> "zanate; ave"

ɕ'uma

ɕ'uma. [VT]. kiss, suck [L-M]: <txúma> "besar"

ɕ'uma-ɬa. [VT-AGT]. (the one) who kisses: <txumáŁa> "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'ɨy**

**ɕ'ɨy(ku). [VT]. to crush, pound

**čɨ[y]ahuku. [VT]. to bash/batter sb.: <chua júcu> "golpear, aporrear"

ɕ'ɨkɨ

ɕ'ɨk'(ɨ)-sɨʔma. [ADJ-N]. half/mid-night = midnight: <txʊɛɛʊe sʊema>; <txʊɛɛsʊema> "media noche"

ɕ'ɨmɨ

ɕ'ɨmɨ. [VT]. to pour water, irrigate: <txʊemʊe> "regar todo género de siembras"

ɕ'ɨmɨ-wa. [VT-PART.PF]. watered/irrigated (thing): <txʊemʊegua> "cosa regada"

ɕ'ɨmɨ-ki-ɬa. [VT-AP-AGT]. (the one) who waters/irrigates: <txʊemʊeɛiŁa> "regador de siembras"

ɕ'ɨmɨtɨkɨ

ɕ'ɨmɨ-tɨkɨ. [N-N]. ?-? = type of rope made from bark: <txʊemʊe tʊeɛʊe> "cierto mecate de corteza"

ɕ'ɨrɨ

ɕ'ɨrɨ. [VT]. to cut: <txʊeri> "trozar"

ɕ'ɨrɨ:-k'i-ɬa. [VT-AP-AGT]. (the one) who cuts: <txʊeríɛiŁa> "el que trueza o corta"

*ɕ'ɨrɨ-wa. [VT-PART.PF]. cut (thing): <txurigua> "cosa trozada"

ɕ'ɨwɨ

ɕ'ɨwɨ. [N]. fresh/tender/unripe corn: <txʊeguʊe> "maíz tierno o camagua"

ɕ'ɨwɨ-ʔuyuk'u. [N-N]. freshcorn-atole: <txʊeguʊe uyuɛu> "atole de maíz tierno"

ɕ'ɨwɨ-mapɨ. [N-N]. freshcorn-tortilla: <txʊeguʊe mapʊe> "tortilla de maíz tierno que llaman elotászca"

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: <uɛa> "poner, echar alguna cosa en algun lugar"

ʔuk'a. (2). [VT]. do: <uɛa> "estar executando o haciendo aquello"

ʔuka. (3). [VT]. have: <ucà>, <ucáa> "hay; tener o haber; defectivo"

ʔukuʔ

ʔuk'u. [N]. freshcorn tortilla: <uɛu> "elotesca, tortilla de maíz tierno triángula"

ʔuɬaka

ʔuɬa-ka. [VT-CAUS]. to make want = to desire: <úŁaɛa> "desear"

ʔuɬ-ka-ɬa. [VT-CAUS-AGT]. (the one) who makes want = (the one) who desires: <úŁcaŁa> "el que desea"

ʔuɬu

ʔuɬu. [VI]. to fall: <uŁú> "caer"

ʔuɬu-wa. [VI-PART.PF]. fallen (thing): <uŁugua> "cosa caída"

ʔuɬu-ya. [VI-TRANS]. to make fall = to throw/pull down: <ulúya> "derribar"

ʔuma

ʔuma. [VT]. to cure, heal: <uma> "curar"

ʔuma-ɬa. [VT-AGT]. (the one) who cures/heals = healer: <umaŁa> "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]: <urɛu> "tragar"

ʔurɬu

ʔurɬu. [ADJ]. complete, entirely: <urŁú> "entero"

ʔuru > k'i̵ri̵

ʔuru. [VT]. cut fruit from tree: <uru> "cortar fruta"

ʔuru-ɬa. [VT-AGT]. (the one) who cuts fruit: <uruŁa> "el que corta frutas"

ʔuruɬ (1)

ʔuruɬ. [N]. egg: <urúŁ> "huevo"

ʔuru-ɬi. [N-PL]. eggs = testicles:<uruŁi> "los campañones"

ʔuruɬ-miya. [N-N]. egg of hen = chicken egg: <uruŁ míya> "huevo de la gallina"

ʔuruɬ-tawuk. [N-N]. egg of tortoise: <uruŁ tauc> "huevo de tortuga"

ʔurul-tonton. [N-N]. egg of (sea) turtle: <uruŁ tondon> "huevo de la tortuga"

ʔuruɬ (2)

ʔuruɬ. [N]. Tacuilula (toponym): <urúŁ> "Tacuilula; pueblo"

ʔušaki

ʔušaki. [VI]. to smoke tobacco [L-M]: <uszaquí> "chupar tabaco"

ʔušk'i-ɬa. [VT-AGT]. (the one) who smokes tobacco: <uszckiŁa> "humador de tabaco"

ʔušti

ʔušti. [N]. mother-in-law [L-M]: <usztiy> "suegra"

ʔaya-n ʔuči. [N-1sP N]. ?-1sP mother-in-law = mother-in-law of my son/daughter: <ayán uchí> "mi consuegra"

ʔuštu

ʔuštu. [N]. illness of groaning; condition of newborns, similar to evil eye: <usztu> "mal de pujido en las criaturas"

ʔuštu-ʔampuki. [N-N].*groaning?-serpent = uterine bleeding (*metrorrhagia*): <usztu ambuqui> "el mal de madre"

ʔusu

ʔušu. [N]. fly [L-M/MZ]: <uszu> "mosquito, jején"

ʔušumu > ʔi̵mi̵mi̵

ʔušumu. [VT]. to smell, stink [L-M]: <uszúmu> "oler"

ʔuta

ʔuta:. [N]. mother: <utà>, <utáa> "la madre"

ʔuta-kawayo. [N-N]. mother of horse = mare: <uta caguayo> "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 (?): <utúɛi> "tardarse"

ʔutu-k'i-ɬa. [VI-AP-AGT]. (the one) who is late: <utuɛkiŁa> "el que se tarda"

ʔutuymah

utuymah. [N]. tail: <utuymag> "cola, rabo"

ʔuɕ'i

ʔuɕ'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"

ʔuɕ'i̵- > ɕ'i̵k-

ʔuɕi̵-. [ADJ]. half, middle [L-M]: <utxʊé> "en medio"

ʔuwaɬ

ʔuwaɬ. [N]. ant: <uguáŁ> "la hormiga"

maku-ʔuwaɬ. [N-N]. house of ants = anthill: <macu uguaŁ> "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 ɛoómo> "carnaza de la pantorrilla"

ʔuwi-tita-h. [N-N-3sP]. flesh of his leg = thigh: <ugui titag> "muslos"

šiwu-ʔuwiʔ. [N-N]. ?-flesh = soapwort (herb): <szígu úguí> "cierto hierba, que sirve a las indias para lavar y bañarse"

ʔuwiki

ʔuwiki = *ʔuy-ki. [N-INCH/NOM?]. *the watering = winter, rainy season: <ugui ɛi> "invierno"

ʔuy

ʔuy. [N]. water: <uy> "agua"

ʔuy-hurayi. [N-N]. water of eyes = tears: <uy juraý> "lágrimas"

ʔuy-ɬiwɨ. [N-N]. water of squash/sugar = honey, sweets: <uy Ɬυeguυe> "miel y todo género de dulce"

ʔuy-maša. [N-N]. water of mud = muddy water: <uymasza> "agua de lodo"

ʔuy-naki. [N-N]. water of chilli = chilli broth: <uy naqui> "caldo"

ʔuy-nariʔ. [N-N]. water of nose = mucus, snot: <uy nariy> "mocos"

ʔuy-šahaʔ. [N-N]. water of mouth = saliva: <uy szajáa> "saliva"

ʔuy-tutuk. [N-N]. water of breast = milk: <uy tutuc> "leche"

ʔuy-wa:kaš. [N-N]. water of cow = broth: <uy guaacasz> "caldo"

kosek-ʔuy. [ADJ-N]. big-water = river: <coséc ùy> "río grande"

ɬome-ʔuy. [ADJ-N]. tepid, lukewarm water: <Łóme hui> "agua tibia"

muɬa-ʔuy. [ADJ-N]: white-water = ray, lightening, thunderbolt: <muŁa húy> "rayo"

pari-ʔuy. [ADJ/N-N]. heat/hot-water = brandy, rum: <parihúy> "agua caliente"

saraɬ-ʔuy. [ADJ-N]. cold water: <saraŁ huy> "agua fría"

tawaɬ-k'i-ʔuy. [ADJ-INCH-N]. blessing-water = holy water: <taguaŁɛi húy> "la agua bendita"

ʔuta-ʔuy. [N-N]. mother-water = river: <uta húy> "el río"

ʔuyuku

ʔuy-uku. [N-VT]. water of/for drinking? = corn gruel (atol): <uyúcu> "atol"

ɕ'iwɨ-ʔuyuk'u. [N-N]. freshcorn-gruel: <txυeguυe uyuɛu> "atole de maíz tierno"

ʔuyumu

ʔuyumu. [VT]. to hurt: <uyúmu> "lastimar"

ɨ

ʔɨɬi

ʔɨɬi:. [N]. back, rear, spine: <υelυeυe> "espalda"

ʔɨɬi-maku. [N-N]. back of house = behind the house: <υelυemacu> "lo de detrás de la casa"

harari-ʔɨlɨh. [N-N]. bone of spine = backbone: <jarari υelυeg> "hueso del espinazo"

ʔɨɬik > hɨɬa

ʔɨna ~ ʔɨmɨ > ʔušumu

ʔɨna. [N]. excrement: <υena> "excremento"

ʔɨnama. [N]. dysentry: <υenama> "los pujos de sangre y la disintería"

ʔɨmɨmɨ. [ADJ]. smelly, stinking: <υemυemí> "cosa olorosa"

ɬara-ʔɨmɨk: [N-N-INSTR]. medicine-smell? = soapwort (herb): <Łaraυemυéc> "cierta hierba que sirve a las indias para bañarse"

ʔɨntɨ

ʔɨntɨ. [VT]. to spy, lurk: <υentυe> "espiar"

-(ʔ)ɨpɨy

šam-ɨpɨy. [PREP-N]. inside-? = Atiquipaque (toponym): <szamυepυey> "Atiquipaque; pueblo"

ʔɨpɕ'iʔ > ʔipi

ʔɨpɕ'iʔ. [ADJ]. grown, ripe (thing): <υeptxυé> "cosa sazona, cosa crecida"

ʔɨraʔ

ʔɨraʔ. [ADJ]. big: <υerrá> "cosa grande"

ʔerɨ. [ADJ]. old: <erυe> "cosa vieja"

mas ʔɨraʔ. [INTENS ADJ]. more big = bigger: <mas υerrá> "más grande"

ɕ'ama ʔɨraʔ. [INTENS ADJ]. good big = very big: <txama υerrá> "muy grande"

ʔɨša?

ʔɨša. [N]. scabies (illness): <υesza> "sarna; enfermedad"

ʔɨšɨkɨ

ʔɨsɨkɨ. [VT]. make loose: <υesυeɛυe> "desatar"

ʔɨšɨɕ'iʔ

ʔɨšɨšiʔ. [ADJ]. delicious [L-M]: <υeszυeszυè> "cosa sabrosa y gustosa"

ʔɨštu

ʔɨštu. [ADV]. there: <υesztú> "allí"

ʔɨštu=kaʔ. [ADV=EXO]. thereto = over there: <υesztú 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-ɬa. [VI-PAST.ACT?]. to go away; *past-time reference*: <guaŁa> "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 guaacatz> "la vaca"

ʔuy-wa:kaš. [N-N]. water of cow = broth: <uy guaacasz> "caldo"

wa:ki

wa:ki. [VI]. to play: <guaaquí> "jugar"

wak'i-k-šaha. [VI-INSTR-N]. played-mouth = nickname: <guaɛicszaja> "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"

waɬi

waɬi=peʔ. [NUM=DIR]. three (days) from now = in three days: <guaŁi pè> "de aquí a tres días"

wanin

wan-in. [INT-INT]. who?: <guanin> "¿quién?"

wapaɬ

wapaɬ. [N]. bench, seat: <guapáŁ> "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"

ʔaɬ-wapi [PREP-N]. over/on top of foot = dorsum of the foot: <aŁ 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"

wapɨk

wapɨ-k. [N-INSTR]. instrument of foot? = prop, support: <guapʊéc> "horcón"

wara > wɨrɨ

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: <tiɛiɛguaru> "hamaca"

wasaɬi

wašali. [VI]. to dress, put on clothing: <guaszaŁi> "meter, ponerse el vestido"

waša**ɬ**i-k'i-k. [VT-AP-INSTR]. instrument for becoming dressed = dress: <guaszaŁiɛic> "vestido, ropa"

wašak

waša-k. [?-INSTR]. raised field: <guaszác> "la milpa de regadillo, que llaman apantes"

***wašaku**

wašak'o. [VT]. to throw stones, shoot: <guaszaɛo> "tirar con piedras"

wašku-ɬa. [VT-AGT]. (the one) who throws stones: <guaszcuŁa> "el que tira piedras"

wašata

wašata. [VI]. to enter: <guaszàta> "entrar"

wašta karawa. [N-N]. enters-wild(erness) = dusk, nightfall: <guaszta carágua> "víspera"

wašta-wa siʔma. [VI-ANT/LOC N]. (where) entered-night = nightfall, sunset: <guasztagua sʊema> "entrada de la noche"

wašta-ɬa. [VI-AGT]. (the one) who enters: <guasztaŁa> "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-ɬ-waya?. [VT-AGT N]. (the one) who watches over milpa = guard of the milpa: <joroŁ guáyá> "guardián de milpa"

pi:ya-waya?. [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 ? = mill stone, *metate*: <guiiɛic> "piedra de moler"

k'ata-k wik'i-k. [VT-INSTR ?-INSTR]. instrument for putting-stone = mill stone (tasmetate): <ɛatacguiɛic> "tapesco de moler, que llaman taszmetate"

puʔ-wik'i-k. [N-?-INSTR]. hand of millstone = grinding stone, *mano*: <puguiɛiɛ> "mano de la piedra de moler"

wilay

wiɬay. [N]. jaguar: <guiŁaí> "tigre"

ten-wiɬay. [ADJ-N]. red-lion = puma: <ten guiŁay> "león"

wilika

wili-ka. [ADJ-CAUS]. to make naked = undress: <guilíca> "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"

wɨnak

wɨnak'. [N]. witch [L-M]: <guʊenac> "brujo"

wiriki

wirik'i. [VT]. speak, talk: <guiriɛi> "hablar"

wiriki-ʔ. [VT-STAT]. spoken (thing) = word: <guiriquí> "palabra"

para-wiriki. [VT-N]. search-word = plead, litigate, quarrel, fight: <para guíriqui> "pleitar"

wiriki-ɬa. [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"

wiɕ'u

wiɕ'u, wišu. [VT]. to beat, whip, flog: <guitxu>, <guiszu> "azotar"

wiɕ'u-k, wišu-k [VT-INSTR]. instrument for beating/flogging = whip: <guitxuc>, <guiszúc> "el azote"

wišu-k-nuwi. [VT-INSTR-N]. instrument for beating cotton: <guiszucnuguí> "sacudidor de algodón"

wiɕ'u-ki-ɬa, wišu-ki-ɬa. [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-ɬ-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-ɬa. [VT-AGT]. (the one) who hunts = hunter: <guitaŁa> "cazador, tirador"

wiya

murča-wiya. [N-N]. ?-cotton = yellow cotton: <murcha guiya> "algodón amarillo, que llaman cuyuscate"

wi:yan
wi:yan. [N]. sugar cane: <guíyán> "caña dulce"

wɨ:hɨ
wɨ:hɨʔ. [N]. younger sister: <guʊejʊé> "hermana menor"

wɨ:rɨ
wɨ:rɨ. [VT]. to wrap up, to wind: <gʊeʊerʊe> "envolver"
wara. [VT]. to roll/coil up: <guara> "enrroyar"

wokɬak
wokɬak. [N-INSTR]. hole, pit: <guocŁac> "hoyo"

wona
wona. [N]. hill, volcano, hole: <gona> "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: <yaɛa> "hacer"

yak'ik
yak'i-k'. [?-INSTR]. instrument for ? = account?: <yaɛiɛ> "saguillas y cuentas"

yami
yami. [VT]. to murmur, rumour: <yámí> "murmurar"
yami-ɬa. [VT-AGT]. (the one) who murmurs: <yamíŁa> "murmurador"
yami-k'i-ɬa. [VT-AP-AGT]. (the one) who murmurs: <yamiɛiŁa> "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"

yoɬana
yoɬana. [vi]. to fling or fall over a precipice: <yoŁana> "desbarrancarse"

yoɬe
yoɬe. [VT]. to spill, scatter, spread [L-M]: <yóŁe> "desparramar"
yoɬe-wa. [VT-PART.PF]. spilled (thing): <yoŁeguá> "cosa derramada"

yulu
yuɬu. [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"

yɨk'ɨša
yɨkiša. [VT]. to shake [L-M]: <yʊeckʊesza> "remecer"

yɨɬik'ɨ
yɨɬik'ɨ. [VT]. to accuse: <yʊeŁʊeɛʊe> "acusar"
yɨɬk'i-k'i-ɬa. [VT-AP-AGT]. (the one) who accuses = accuser: <yʊeŁɛʊeɛiŁa> "acusador"

yɨma
yɨma. [N]. hog plum (fruit) [L-M]: <yʊema> "jocotes; fruta"

yɨpɨ
yɨpɨ. [VT]. vomit: <yʊepʊe> "vomitar"
yɨpɨ-wa. [VT-PART.PF]. vomited (thing): <yʊepʊegua> "cosa vomitada"
hapa-ʔ yɨpɨ. [VI-STAT N]. passed vomit = vomit: <japáa yʊepʊé> "vómitos, y evacuaciones"

yɨwa
yɨwa. [VT]. to lose sth.: <yʊegua> "perder"
yɨwa-šama. [N-PREP]. tolose-inside = to forget: <yʊeguaszáma> "olvidar"
yɨwa-wa. [VT-PART.PF]. lost (thing): <yʊeguagua> "cosa perdida"
yɨwa-ɬi. [VT-?]. to lose: <yʊeguaŁi> "perder"
yɨwaɬi-wa. [VT-PART.PF]. lost (thing): <yʊeguaŁigua> "cosa perdida"
yɨwaɬi-k'i-ɬa. [VT-AP-AGT]. (the one) who loses = loser: <yʊeguaŁiɛiŁa> "el que pierde"

yɨwɨɬ
yɨwɨɬ. [N]. coachipilin (tree): <yʊeguʊeŁ> "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.

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[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'alan: Chujean + Qanjobal + 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'utujiil; 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, houshold, 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.) / degrained 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 * *ʔə ʔm* 'maize' [C&K-76]; LEN *ʔima*, *ʔema*, *ʔama*; CAC *ʔayma*, MAT *ʔayma*, SUM *ʔama* [diffused]
hoko-wáɬ	"el doblador" (3954.) / corn husk	<	GLL **xoč* ' to harvest, break' [K-03]
ʔiwa	"maza para tortillas" (3893.) / tortilla dough	<	EM **wah* 'food'; *wa ʔ* 'eat' [K-03];
ʔiwa	"tortear" (2385.) / make tortillas		from pMZ **way* "grind corn" [C&K-76]
paɸ'i, pa:ši	"moler" (2843.) / grind, mill	<	GTz **paɸ* 'tamal'; KCH *pa ʔč* [C-77], [K-03]
paɸ'i	"masa para tortillas" (4262.) / corn dough		from pMZ **piɸi* 'nixtamal' [W-95]
šiɬik	"olote" / cob of the corn	<	pM **šil* 'to chop sth.' [K-03]; KCH *šilik* 'to remove sth.' [E-65]
ɸ'ɨwɨ	"camagua" (4656.) / fresh corn tortilla	<	GK **ɸih* 'nixtamal',
ʔuɸ'i	"maíz cocido, nixtamal" (4712.) / nixtamal		POQ *ʔuč* 'cooked corn' [K-03]
ʔuti	"pinol de maíz, harina" (4708.) / corn flour		from pMZ *həɸ* 'to grind' [C&K-76]
waya?	"milpa" (3855.) / maizefield, milpa	<	EM **wah* 'food' [K-03];
waya	"desherbar" (2334.) / to weed, work		?XNK *-ya* transitiviser

(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.) / tobbacco	<	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 ʔp*; pK *tapa ʔ* 'nance' [C-77], [K-03]
ʔučun	"papaya; fruta" (4668.) / papaya	<	WM * *ʔuhčun* 'papaya' [C-77] from pMZ *ʔoɸo* 'papaya' [C&K-76]
yɨma	"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 *šinaʔ* "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 (Kuafman 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 ʔ* '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]
¢'amɨ	"cosa agria, o amarga" (4640.) / sour, bitter	<	EM *č'am 'sour, acidic'; MAM ç̣'am [K-03]
hamɨ	"cosa azéda" (3924.) / acidic		
¢'aya	"cosa mojada" (4641.) / wet	<	pM *¢'ax 'to soak'; CHR ¢'a(x) [K-03]
¢áma	"bueno, y bien" (4637.) / good	<	TZE, CHL *¢am 'good' [C-71], [K-03] from pMZ ¢a:m 'ripe, good' [C&K-76]
ʔišišiʔ	"cosa sabrosa" (4746.) / delicious	<	pM *ʔuɨ¢ 'bueno' [K-03]

(d) Trade and commerce

kayi	"vender" (2141.) / sell	<	pM k'a:y 'to sell' [C-72]
kunu	"comprar" (2178.) / buy	<	WM *koŋ [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

¢'ɨkɨ	"medio" (4654.) / mid-	<	pCh *¢'ok 'break' [K-03] (?)
čiy	"poco" (3701.) / little, few	<	pM *ty'i:n 'small'; CHR č'i(x), KCH č'utin 'small' [K-03] cf. LEN (Salv.) ¢'iris 'small' [C-78]; PIP čupi 'little, few' [C-85]
čiɾiki	"pequeño" (3697.) / small		

(f) Material culture

1. Dishes and containers

kuɬku	"cajete" (3760.) / bowl, plate	<	PQM kulk 'frying pan' [C-77]
pišik	"jícara peste" (4363.) / calabash cup	<	QAN, POP pečan 'cup, dish' [D-97]
suk'sin	"jarro" (4395.) / jug, pitcher	<	pM *¢uhh; POQ suh 'gourd' [C-71]
šu:nik	"olla" (4507.) / instrument for ? = pot	>?	POQ šun 'pot' [C-72]
*¢'imaha	"Guazacapan; pueblo" (4645.) / (makers of) guacales/pottery = toponym	<	pM *¢ima(ʔ); KCH ¢imah, CHR ¢imax 'jug' [K-03] from pMZ *¢imaʔ [C&K-76]

2. Clothings and fabric

pati	"pañuelo, manta" (4060.) / cloth, blanket	<	GK poʔot 'cloth' [K-03],
pote	"el guepíl" (4318.) / blouse (huipil)		pQ *poʔ 'cloth' [C-72]
šakal-awiš	"calzones blancos" (4411.) / white pants	<	KAQ? *saqal 'whiteness', we:š 'trousers' [K-03]

3. Construction

pak'a	"clavar" (2801.) / nail	<	GLL *pahk' ~ *pak' [K-03], [C-77];
pak'i	"pared" (4217.) / wall		TZE pahk', YUK pak'(il) 'wall' [K-03]

4. Other household products

pupúk	"petate, estéra" (4338.) / mat	<	pM *pohp 'mat' [C-71], [C-72]
¢'ɨmɨ tɨk'ɨ	"mecate de corteza" (4661.) / rope	<	pY *sum 'lasso, rope' [K-03]
koka	"cacaste" (3738.) / backrack	<	KCH koʔk '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 *pokok*, POP *ponkon* 'toad' [D-97]
pese	"lagartija" (4286.) / lizard	<	GK * *ʔiš-pa ʔač* 'lizard' from pMZ **pa¢i* [K-03]
ʔušu	"mosquito, jején" (4718.) / fly	<	pM * *ʔus* 'fly, mosquito' [C-71]; from pMZ * *ʔusu* [C&K-76], *ʔu:suk* [W-95]
šušumi	"pizote" (4522.) / coati	<	WM **¢'uc'um* 'coati' [C-71] (not pCh, pY)
wiɬay	"tigre" (3863.) / jaguar	<	Mp *wič*, *wiš* 'cat' [K-03]; LAK *we ʔran k'a* 'ocelot' [D-97]
šuni	"jutes, caracoles, concha" (4505./4506.) / snails, sea shell, crayfish	<	CHL *šun* 'crayfish' [D-97]
¢'inaʔna	"alacrán, sabandija" (4647.) / scorpion	<	pM **si:na ʔŋ* 'scorpion' [C-72]; pCh **sina(m)* [C-71]

(h) Fauna – birds

ʔaluʔ	"guacamaya" (3608.) / macaw	<	?YUK *lo ʔ* 'macaw' [BV-91]
čehče	"boca rota" (3690.) / woodpecker (bird)	<	pM **čexe* 'woodpecker' [K-03] from pMZ **¢ehe* 'woodpecker' [W-95]
kukuwaɬ	"tortola" (3758.) / turtledove	<	LL+WM **kul(ax)te* 'dove' [K-03]; [C-71] cf. pOM **ku:k* 'turtledove' [W-95]
koško	"zope" (3750.) / buzzard	<	EM **kuty*; pK *k'uč* 'buzzard' [C-71], [K-03]
pošo	"perdiz" (4326.) / partridge	<	WM **peč'* 'partridge' [K-03]
ši:k'a	"gavilán" (4468.) / hawk	<	pM **šihk* 'hawk' [C-71, 72]
šok'oy	"lechuza" (4485.) / owl	<	pM **šo:č'* 'owl' [K-03]; PQM *soko'y* 'owl' [C-77]
toktok	"sensonte" (4590.) / mocking bird	<	PQM *tuqtuq* 'mockingbird' [S-73]; KCH *tuktuk* 'woodpecker' [E-65]
¢'oko	"zanate; ave" (4649.) / grackle	<	pM **ty'ok* 'grackle'[C-71], [C-72]; PQM *¢'ok* [K-03]

(i) Flora

ʔamuɬ	"ortiga o chichicastle" (3627.) / nettles	<	KAQ *amula^{h}y* 'nettle' [K-03]
karawa	"monte, zacate" (3713.) / bush, wild	~	YUK, LAK *k'a ʔaš*, Kp *k'ačela:x* 'bushland' [D-97]
ʔohote	"mecate" (4191.) / rope of tree bark	<	?pM **te ʔ* 'tree' [K-03]; cf. pZ * *ʔoho* 'maguey' [W-95]

(j) Environment

kaɬi	"humo" (3702.) / smoke	<	TZE, TZO *č'ail* 'smoke' [D-97]
k'unu	"las sombras" (3764.) / cloud, shade	<	CHL *kun* 'fog, vapor' [C-77]
pahi	"barranca" (4222.) / ravine	<	EM **paš-*, pK **paš-* "split, break" [K-03]
šu:ni	"estrella" (4504.) / star	<	EM **č'umi:l*, KAQ *č'umil* 'star' [K-03]
tawu	"viento" (4551.) / wind, breeze	<	EM **te ʔw* 'cold' [C-71]
šiha	"arena" (4526.) / sand	<	GTz **hi ʔ*, CHR *xi ʔ*, TZO, TZE *hi ʔ* 'sand' [K-03]
sururu	"el viento sur" (4398.) / southwind	<	KCH *šururem* 'whistle, cold' [E-65]
wina	"fiesta" (3864.) / holiday, sky	<	TZO *winahel* 'heaven, sky' [C-77]

(k) Religion and intellectual culture

ʔayapa	"año" (3669.) / year	<	?pM **ha ʔb'* 'year' [K-03]
miša, mi¢'a	"enterrar" (2707.) / bury	<	pM **muq*; IXL *muxa* 'to bury' [K-03]
pumu	"copal" (4335.) / incense, copal	<	pM **po:m* 'incense'; from pMZ **po:mV* [C-71], **po:m(o)* [W-95]
wɨnak'	"brujo" (3888.) / witch	<	EM **winaq* 'person, people' [C-72]

(l) Body

ʔeɬaha	"lengua" (3805.) / tongue	~	?pM **leq'* 'lick'; WAS *lek'a:b* 'tongue' [K-03]
hu:ši	"cabeza" (3994.) / head	~	?GLL **xo ʔ*; YUK *xol*; CHL *xol*, CHR *xor* 'head' [K-03]

mašira	"raizes, venas, nervios" (4071./4072.) / roots, veins, nerves	<	GK *ra:b' ~ *ra:ʔ 'root' [K-03]; YUK *moɸ* 'roots, nervs' [BV-91]
mušta	"panza" (4114.) / belly	<	pM *mus(uʔs)* 'navel' [C-72] cf. LEN (Hon) *musu* 'liver' [C-78]
počpoč	"los bofés" (4314.) / lungs	<	KCH, KAQ *pospoʃy*, ZOQ *pukpuk* 'lungs' [C-77]
šina	"orin, orinar" (4471.)	<	EM *kenaq'*; TEK *če:naq'*, MAM *činaq'* 'kidney' [K-03]
te	"pars mulieris" (4556.) / female genitals	<	KAQ, TZU *teʔ* 'mother' [D-97]
(m) Diseases and human conditions			
koso	"viruelas" (3755.) / smallpox	<	GK *kohs* 'tired'; KCH *kosik* 'get tired' [K-03]
meme	"loco" (4076.) / crazy	<	CM *me:m* 'mute' [C-71], [K-03], pM *me:m* [C-72]
ʔoho	"la tos" (4190.) / cough	<	?pCh * ʃoxob; KCH ʃoxob' 'cough' [diffused, onom.] [K-03]
pohmo	"el ciego" (4315.) / blind	<	pCM *mo:y* 'blind' [K-03]
-tili	*ache, suffering' (e.g. 4258.)	<	pM *til*, pCh *til*, KCH *til* 'burn' [K-03]
(n) People			
ʔone	"cosa tierna" (4193.) / tender, unripe	<	LL+WM * ʃune [K-03]; CHR ʃunen 'child, son/daughter' [H-05]; from pMZ * ʃunak, pZoq * ʃune 'child' [C&K-76]
peleʔ	"patas, patojo" (4272.) / single man	<	YUK *pal* 'bachelor' [D-97]
šakiɬ-umu	"buen mozo, visarro" (4416.) / good man	<	KCH *saqil 'whiteness' [E-65], XNK *humu* 'man'
yu:	"hombre (vocativo)" (4761.) / man!	<	CHR *yum* 'father', CHL *yum* 'grandfather, owner' cf. LEN *yu* "male" [C-78]; ZOQ *yu:m* [diffused] [K-03]
turi	"niño" (4620.) / child	<	GK *-*tošl* 'shoot, offspring'; KCH *u-tuš* [K-03]; CHIK *tušti ʃniq* 'child' [D-97]
ʔušti	"suegra" (4715.) / mother-in-law	<	pM * ʃiš 'woman'; WAS, CHIK ʃušum [K-03], [D-97]
(o) Positionals			
čawi; šawi	"cosa dura" (3688.)/ hard, stiff	<	WM *čaw* 'hard, stiff' [C-71]
hururuʔ	"caloroso" (3987.) / warm, hot	<	KCH *xururux* 'very bright' [E-65]
ko:čo	"cosa sucia" (3742.) / dirty	<	KCH *k'o* 'there is' + *ču* 'smell' [PLFM]
simp simp	"cosa tirante" (4405.) / tense, strained	<	pM *šim* 'to tie up' [K-03]; cf. pZ *siʃn* 'to tie' [W-95]
(p) Motion verbs and directionals			
ʔaku	"ir, andar" (2050.) / go, walk	~	CHL *ku* 'go'; *koʃo* 'gone' [D-97]
peʔ	"venir" (2848.) / come	<	Kp *peht* 'come'; KAQ *pe* [K-03]
taʔ	"ir, y venir" (3198.) / go, come, pass by	<	pM *tal* 'come' [C-71]
(q) Temporal adverbs			
ʔampɨ	"ahora" (3631.) / now	~	?KCH *xam pa* [E-65]; *xani pa* 'when' [K-03] cf. pMZ *ʃamVʔ* 'just now' [W-95]
ʔanik	"hoy" (3632.) / today	~	CHIS *yaʔ*, TOJ *yaʃni* '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]
hačɨ	"pepenar" (2445.) / pick up, gather		
hač'ɨ	"rascar" (2440.) / scrape, scratch	<	pCM *xoč 'scratch', EM *xaʔč 'harvest' [K-03]
hapa	"esperar" (2455.) / to wait	~	pY *pak'- 'wait' [K-03]
huta	"soplar" (2537.) / blow	~	pM *ʔuȼ' ; pYu ʔust 'to blow' [K-03]
kama	"abrazar, cargar" (2099.) / embrace, carry' "apadrinar bautismo" (2105.) / be godfather	<	pM *k'am 'to receive' [K-03]
k'a:ta	"acostarse" (2089.) / lie down	<	GK *koȼ' 'lie down' [K-03]
kiȼ'u	"trocar" (3020.) / to exchange	<	pM *k'eš 'change' [K-03]; CHL kuy [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'ɨtɨ	"medír" (2240.) / measure	<	Kp k'ut- 'show, teach' [K-03]
kiȼ'i, k'iši	"asar" (3018.) / fry		
maši, maȼ'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]
ɬokama	"hervir el agua" (2605.) / to boil (water)	<	pCh *lok 'boiling, froth'; MAM loqan 'it boiled' [K-03] cf. pMZ *hokos-nɨ:ʔ 'tepid water' [W-95]
maȼ'a	"pegar" (2651.) / stick, paste	<	LAK ȼ'ay, CHL ȼ'uy 'adhere' [D-97] cf. pZ *ȼah 'adhere' [W-95]
nɨma	"comer" (2767.) / to eat	<	Kp *nuhm 'hunger' [K-03]; KCH numik 'be hungry' [E-65]
pɨɬta	"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'uʔ-p'uʔs, p'uʔs 'stinking' [D-97] from pMZ *pu:ȼʔ '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]
poȼ'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'
seɬe	"cantearse" (3049.) / put/lay aside	<	KCH ȼer- 'to tear sth.' [PLFM]
čeɬna	"desbaratar" (2190.) / waste		
šaksi	"colar, cerrir" (3097.) / bleach, strain	<	pM *saq 'white' [K-03]
suk'u	"atar, amarrar" (3077.) / to tie, lash, fasten	<	pM *čuq 'to tie up'; CHR čuk [K-03] cf. pMZ *soȼ 'to tie up' [W-95]
tak'ani	"imputar, achocar" (3200.) / impute	<	pM *taq; pCh taq, Kp taq 'order, obligate' [K-03]
taɬa	"quemar, encender" (3210.) / to burn, light, set on fire	<	pM *til 'burn' [K-03]; WAS t'a'i:l; t'a'iya:l 'burn' [D-97]
tuɬtu	"picar, dar estocadas" (3313.) / to pierce, prick, puncture, punch	<	WM *tuhk' 'shoot firearm' [K-03] from pZoq *tuxkuyʔ, pMZ *tuh 'hunt' [W-95]
tutu	"mamar" (3344.) / breastfeed	<	EM *tuʔ 'breastfeed' [diff.] [K-03]
ȼ'imɨ	"regar todo género de siembras" (3406.) / to pour water, irrigate	<	pM *tyem 'pour'; KCH čemow [K-03]
ȼirɨ	"trozar" (3412.) / cut	~	CM *tyur 'cut fruit' [K-03]; CHR šuri 'cut' [H-05]
ȼ'uma	"besar" (3401.) / kiss	<	Kp ȼ'u:m 'tit'; KCH ȼ'umanik 'suck, breastfeed' [K-03]

ʔurk'u	"tragar" (3460.) / to drink	<	pM *ʃuk' 'to drink'; CHL ʃuč [K-03]
ʔušaki	"chupar tabaco" (3475.) / smoke tobacco	<	pM *ʃuɕ' [K-03]; GLL *k'uhɕ 'smoke' [K-03]
ʔušumu	"oler" (3480.) / to smell, stink	<	pCh *ʃuhɕ'i 'smell'; CM *muh 'tasty' [K-03]
ʔimɨmɨ	"cosa olorosa" (4736.) / smelly, stinking		
waka	"irse; anómalo" (2306.) / go away	~	CHL wa'wa'nya; TOJ waj 'to walk' [D-97]
waɬa	"irse; anómalo" (2308.) / go away		
weseke	"botar, despreciar" (2340.) / throw away	<	pCh *weč' 'throw (away)' [K-03]
yoɬe	"desparramar" (3534.) / to spill, scatter	<	LL *yal 'to spill, throw' [K-03] cf. pMZ *yos 'make an offering' [W-95]
yuɬu	"alizar, pisar masa" (3538.) / to smooth	<	pM *yul ~ *yol 'smooth'; QEQ yolyol 'slippery' [K-03]
yɨkɨša	"remecer" (3543.) / to shake	<	pM *yuk 'to shake' [K-03]; cf. pZ *yɨʃk '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 to 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

ʔuɕ'i	"nixtamal" (4712.) / nixtamal	<	pMZ *həɕ 'to grind' [C&K-76], [W-95]
ʔúti	"pinol" (4708.) / corn flour	<	POQ ʃuč 'cooked corn' [K-03]
ʔiwa	"tortear" (2385.) / make tortillas	<	pMZ *way [C&K-76]; *way-e 'to grind corn' [W-95]
pa:ši, paɕ'i	"moler" (2837.) / to grind corn dough	<	pMZ *piɕi 'nixtamal' [W-95]
k'awu	"cocer" (2129.) / to cook	<	pMz *kɨw? 'to cook' [W-95]

(b) Cultigens

muʔ, muɬ	"blanco (en frutas)" (4088./4091.) / white	<	pMZ *mənE 'sweet potato' [C&K-76]
ɬiwɨ	"ayote" (4036.) / squash	<	pMZ *ɕiʃwa 'squash' [C&K-76]; pMi *ɕiʃwa 'calabash' [W-95]
šapu	"guisquil, chayote" (4454.) / chayote	<	pMZ *ɕəpə 'green' [C&K-76]
ɕ'ima	"Guazacapán = alfarero" (4645.) / potter	<	pMZ *ɕima 'gourd' [C&K-76]
ʔučun	"papaya (fruta)" (4668.) / papaya	<	pMZ ʔoɕo 'papaya' [C&K-76]
ʔohote	"mecate" (4191.) / rope of tree bark	<	?pZ *ʔoho 'maguey' [W-95] + ?pM *teʔ 'tree' [K-03]

[189] Note that Wichmann's grapheme *c* is rendered here as *ɕ*.

[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 **ɕiʔ* 'opossum' [C&K-76]; pZ **ɕihi* [W-95]
ʔusu	"mosquito" (4718.) / fly	<	pMZ *ʔu:suk* 'fly' [W-95]
muš(i)	"pelo, pluma" (4112.) / hair, feathers	<	pMi **muʔši* 'bird' [W-95]
(d) Environment			
naru	"tierra" (4160.) / earth	~	?pMZ **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			
ɕáma	"bueno, y bien" (4637.) / good	<	from pMZ *ɕa:m* 'ripe, good' [C&K-76], [K-03], [W-95]
(h) Verbs			
tuɬtu	"picar, dar estocadas" (3313.) / to pierce, prick, puncture, punch	<	from pZ **tuxkuyʔ*, pMZ **tuh* 'hunt' [W-95]
wɨ:rɨ	"envolver" (2380.) / to wrap, roll up	~	pZ **woy* 'wrap' [W-95]
wara	"enrroyar" (2329.) / to wrap,		
(i) Function words			
ʔahɨ	"sí" (3599.)	~	pMZ **hɨʔ* 'yes' [W-95] ~ KCH *xeʔ* 'yes'
ʔašɨ, ʔahɨʔ	"éste" (3605.)	~	pMZ **yɨʔ* 'this' [W-95]
ʔampɨ	"ahora" (3631.) / now	<	?from 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 * *ʔəʔm* 'maize' [C&K-76]; LEN *ʔima*, *ʔema*, *ʔama*; CAC *ʔayma*, MAT *ʔayma*, SUM *ʔama* [diffused] [C&K-76]
ɬiwɨ	"ayote" (4036.) / squash	<	pMZ **ɕiʔwa* 'squash' [C&K-76]; pMi **ɕiʔwa* 'calabash' [W-95]; LEN *ɕ'iwaŋ* [C-76]; CAC *ʔiwa* [C-75]
šuwan	"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) *amap* 'snake' [C-78]
weren	"sapo" (3859.) / frog	~	CAC *wari* 'frog' [C-75]
šuruɬ	"ardilla" (4515.) / squirrel	~	LEN *šurih* [C-76], CAC *susu* 'squirrel'[C-75]
punpun ɬiwɨ	"tecolote" (4337.) / owl	~	CAC *paylanpuk* 'owl' [C-75]
tɨ:maɬ	"piojo" (4632.) / louse	~	LEN (Sal) *tem* 'louse' [C-78]
(c) Environment			
šaru	"mar" (4446.) / sea, ocean	~	LEN (Sal) *say* 'sea' [C-78]
(d) Body			
mušta	"panza" (4114.) / belly	~	LEN (Hon) *musu* 'liver' [C-78] (cf. Mayan)
(e) Other			
čɨrɨkɨ	"chico, pequeño" (3607.) / small	~	LEN (Sal) *¢'iris* 'small' [C-78]
yú	"hombre...vocativo" (4761.) / man!	~	LEN (Sal) *yu* 'male' [C-78]; Z **yu:m*; CHR yum 'father'; CHL *yum* 'grandfather, owner'

D. Nahuan

Nahuan loans have entered Xinka from the *lingua franca* Nahuatl as well as directly from neighbouring Pipil.[192] Nahuan 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 *mistun* 'cat' [C-85]
šuti	"jutes, caracoles" (4519.) / freshwater snail	<	PIP *šuti* 'freshwater snail' [C-85]
tonton	"tortuga marína" (4596.) / turtle	<	PIP *tu:ntu:n* 'sea shell (turtle shell)' [C-85]
waksi	"ave parecida al zopilote que canta" (3835.)/ buzzardlike bird	<	NAH *wak¢in* 'large bird with a distinctive call' [K-92]
(b) Flora, fruits & crops			
čukulat	"chocolate" (4261.)/ cacao	<	PIP *čukulat* 'chocolate' [C-85]
čo:	"batir chocolate" (2200.)	<	NAH *čocolatl* 'chocolate' [K-92]
k'eneya	"plátano guíneo" (3733.) / plantain	<	PIP *kiniya(h)* 'banana' [C-85]
k(')osme	"camalote" (3748.) / water hyacinth	<	NAH *kos-* 'sth. yellow'; *mekatl* 'rope' [K-92]
siwapati	"ciguapate" (4383.) / ciguapati	<	NAH *siwapahtli* 'medicinal plant' [K-92]
sompe	"piñon" (4389.) / pinion, pine nut	<	NAH *¢ompamitl* 'coral tree' [K-92]
tupilili	"el calanhilla; hierba" (4618.) / variety of herb	<	PIP *topilli* 'cane, walking stick' [C-85]
(c) Food production			
pɨpɨ	"llenar" (2995.) / to fill	<	PIP *pupu:sah* 'filled corn dough' [C-85]
teneš	"cal" (4561.) / lime	<	Pip *teneš* 'lime' [C-85]
(d) Political, administrative			
ʔaɬtepet	"pueblo" (3617.) / town, village	<	Nah *altepetl* '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↯tik'	"negro, negra" (4578.) / black	<	PIP *tiltik* 'black (man)'; *ti:l* 'charcoal' [C-85]
tolo	"cosa amarilla" (4591.) /yellow	<	PIP *tultik* 'yellow' [C-85]

(f) Diseases

¢'u¢'u pari	"sarampion" (4665.) / wound-heat = measles	<	PIP *tsu:tsu* 'wound' [C-85]

(g) Conditions

tiši	"haragán" (4586.) / idler, lazy person	<	PIP *tiškwit* = *tiš* 'corn dough'; *kwit* 'grab' [C-85]
čiy	"poco" (3701.)	<	PIP *čupi* 'little, few' [C-85]

(h) Other

šipi	"cortar hariendo" (3158.) / strike, cut	<	NAH *šipewa* 'to flay' [K-92]

(i) Nahua terms borrowed via K'iche'an

tunati	"tocar instr." (3325.) / to play an instrument	<	KCH *tuna:x* 'play instr.'
		<	PIP *tuntun* 'shell' [C-85]
masa	"piña" (4064.) / pineapple	<	KCH *masati* 'pineapple'
		<	NAH *ma¢ahtli* '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.) / axt	< Sp. *hacha*
ʔakuša	"la aguja" (3591.) / needle	< Sp. *aguja*
ʔanila	"anillo" (3634.) / ring	< Sp. *anillo*
ʔasero	"el eslabón o acero" (3586.) / metal, steel	< Sp. *acero*
kapisayo	"chamarron" (3709.) / jacket	< Sp. *capisayo*
kaša	"caja" (3722.) / chest, box	< Sp. *caja*
kapuš	"cabo (de candela)" (3774.) / (candle) stub	< Sp. *cabo*
kučila	"cuchillo" (3756.) / knife	< Sp. *cuchillo*
lawš	"clavo" (4022.) / nail	< Sp. *clavo*
lawi	"llave" (4019.) / key	< Sp. *llave*
mačiti	"machete" (4051.) / machete	< Sp. *machete*
meša	"mesa" (4079.) / table	< Sp. *mesa*
nawaku	"las naguas" (4141.) / petticoat	< Sp. *naguas*
pa↯a	"tercio" (4232.) / bundle of straw	< Sp. *paja*
papuk	"papél" (4244.) / paper	< Sp. *papel*
šapun	"jabón" (4455.) / soap	< Sp. *jabón*
šaru	"jarro" (4456.) / pitcher	< Sp. *jarro*
šila	"silla de sentarse" (4470.) / seat	< Sp. *silla*
tašelaš	"tijeras" (4554.) / scissors	< Sp. *tijeras*

(b) Food & crops

ka:šik	"caña de castilla" (3725.) / reed	< Sp. *castilla*
*kaštila mapi↯	"pan" (3728.) / Spanish tortilla = bread	< Sp. *castilla*
ʔaranšaš	"naranja" (3645.) / orange	< Sp. *naranja*
ʔasukar	"azucar" (4095.) / sugar	< Sp. *azucar*
kuštarica	"cierto cacao" (3779.) / costarica = type of cacao	< Sp. *costa rica*

la:muniš	"limon" (4007.) / lemon	< Sp. *limon*
salvia	"salvia, hierba medicinal" (4371.) / medicinal herb	< Sp. *salvia*

(c) Fauna

kaštilan	"gallina ponedera" (3729.) / Spanish = chicken	< Sp. *castillan(o)*
kawayu	"caballo" (3681.) / horse	< Sp. *caballo*
palu:maš	"paloma" (4237.) / Castilian pigeon, dove	< Sp. *paloma*
pe:lo?	"perro" (4273.) / dog	< Sp. *perro*
wakaš	"carne de res, ganado mayor" (3834.) / cow	< Sp. *vaca*
ye:waš	"yegua" (4759.) / mare	< Sp. *yegua*

(d) Christianity, religion

?anima	"corazón" (3635.) / heart, soul	< Sp. *corazón*
?animaš	"ánimas, ocho de la noche" (3637.) / *hour of prayer	< Sp. *ánimas*
?ayuna	"ayuno" (3672.) / fasting, lent	< Sp. *ayuno*
kantoreɬe	"los cantores" (3706.) / singers	< Sp. *cantores*, XNK -*ɬe* (plural)
kapun	"capon" (3711.) / castrate, capon	< Sp. *capon*
ko:ra	"en fila, ringlera" (3745.) / row, line, tier	< Sp. *cola*
krišma	"bautismo" (3692.) / christening, baptism	< Sp. *cristianar*
kumbišyon	"confesión" (3763.) / confession	< Sp. *confesión*
miša	"misa" (4084.) / mass	< Sp. *misa*
?oro:ka	"repicar las campanas" (2784.) / chime the bells	< Sp. *oro*, XNK -*ka* (causative)
pa:le	"padre" (4235.) / father = priest, monk	< Sp. *padre*
prima	"alba del día" (4308.) / dawn	< Latin *prima* 'beginning'
selika	"comulgar" (3051.) / administer/take communion	< Sp. *celico, -a*
tyux	"*dios" (4049.) / god	< Sp. *dios*

(e) Colonial office and authority

?aɬkalti	"alcalde" (3609.) / mayor	< Sp. *alcalde*
kapiltu	"cabildo" (3710.) / council	< Sp. *cabildo*

(f) People

šinula	"señora" (4476.) / lady	< Sp. *señora*
kaštiyanu	"español" (3726.) / Spanish, Spaniard	< Sp. *castellano*
papa:	"tío" (4242.) / uncle	< Sp. *papa*
šuɬtera	"la mujer soltera" (4501.) / single, unmarried woman	< Sp. *soltera*
šuɬteru	"el hombre soltero" (4502.) / single, unmarried man	< Sp. *soltero*

(g) Trade and commerce

?aɬmuɬ	"almud" (3613.) / unit for dry capacity	< Sp. almud
merio	"medio real" (4078.) / half a *real* (Spanish coin)	< Sp. *medio real*
pahata	"pagar" (2810.) / to pay	< Sp. *pagar*
tumin	"moneda, dinero" (4610.) / *tomín* (Spanish coin)	< Sp. *tomin*
tuštun	"tostón" (4626.) / *tostón* (Spanish coin)	< Sp. *tostón*

(h) Grammar and function words

maka	"y" (4041.) / and	< Sp. *mas que*
maɬka	"aunque, y mas que" (4053.) / although	< Sp. *mas que*
niwena	"ninguno" (4176.) / not-who = nobody	< Sp. *ni(nguno)*, XN□ *wena* (int.)
?oro	"sólo" (4200.) / only	< Sp. *sólo*
paraki	"por" (4245.) / by, because	< Sp. *para que*
pore	"pero" (4316.) / but	< Sp. *pero*

(i) Verbs

?anta	"vamos" (1825.) / let's go!	< Sp. *¡anda!*
??apala	"abrir" (2067.) / to open	< Sp. *abrir* (?YUK *jap* 'to open')

?ku:ruʔ	"huir" (2184.) / to flee	< Sp. *correr*
?mo:ro	"mojar" (2674.) / to make wet, soak	< Sp. *mojo*
?pelo	"descallar, descascarar" (2855.) / to peel, shell	< Sp. *pelar* (?Ch'ol *pa:l* 'to peel')
(j) Other terms		
puɬpu	"polvo" (4334.) / dust	< Sp. *polvo*
nari:	"nariz, punta, extremo" (4154.) / nose, tip, end	< Sp. *naríz*

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	naʔu-puʔ: child of hand	<naupu> "dedos" (4164.)
3.	boa constrictor: deer-snake	tuma-ʔampuki: deer-snake	<tuma ambuqui> "masacúa" (4609.)
4.	moon: grandmother	ʔawa: moon, month, grandmother	<agua> "luna, més, 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	ʔuta-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 ʔuray: nose of fire	<nari uray>"tizon" (4159.)
11.	alive: awake	ʔiši-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.

ʔaheɬe	"éstos" (G-SH)
ʔahmukan ¢'uʔmaʔ	"ayer regó (su milpa)" (G-RHG)
ʔahmukan hapawan kaɬ ʔayaɬa ʔimey hin	(G-SH)
ʔahmukan kunun haraku	"ayer compré chipilin" (G-SH)
ʔahmukan mukawaka	"ayer trabajé [sic]" (G-RHG)
ʔahmukan puɬiʔ nanin	"ayer lo lavé" (G-RHG)
ʔahmukan ʔaku:ɬa 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:ɬa ʔayaɬa ʔuka bender	"lo fue a vender élla" (G-SH)
ʔakun paʔaʔ	"ya me voy" (G-SH)
ʔakuy k'iʔ¢'iʔ ša 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)
ʔaɬa peʔ	"mañana" (G-RHG), (G-SH)
ʔaɬa peʔ hin	"mañana no" (G-SH)
ʔaɬa peʔ kuy pokon hiši ʔ	"yo voy a quebrar piedras mañana" (G-SH)
ʔaɬa peʔ kuy ʔimakan	"mañana le vamos a decir" (G-SH)
ʔaɬa peʔ kuy ʔišpan kuyakan waya ʔ	"voy a trabajar mañana" (G-SH)
ʔaɬa peʔ kuy ʔuka ti:ki hiʔ nin	"mañana voy a dormir" (G-SH)
ʔaɬa peʔ kuyan ša po¢'aʔ	"se fue lavar ese montón de ropa" (G-SH)
ʔaɬa peʔ piwan	"pasado mañana" (G-SH)
ʔaɬi naka	"por Usted" (G-SH)
ʔaɬi ware hiŋ kata:yiʔ naka	"por el temporál no vino" (G-SH)
ʔaɬi wari hin kata:yiʔ naka	"por el temporál dos días no vino" (G-SH)
ʔamaniɬka 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)
ʔanhašu	"mi cerdo" (G-SH)
ʔanɬiki naka	"voy a hallar a Usted" (G-SH)
ʔanmakuʔ nin	"mi casa" (G-SH)
ʔanmuču paʔaʔ wiriki	"me cansó hablando" (G-RHG)
ʔanneɬa	"es mío" (G-SH), (G-RHG)
ʔanneɬa makuʔ nin	(G-SH)

ʔanneɬa nin	"ésto es mi banco" (G-SH)
ʔanneɬa	"es mío" (G-SH), (G-RHG)
ʔanpewek	"[mi] tecomate" (G-RHG)
ʔanpuley mal nin ʔaɬiʔ šukan mučo	"ayer comí bastantes tortillas" (G-SH)
ʔanta:yiʔ paʔ kaʔ	"ya vino" (G-RHG)
ʔantamah ša ʔaɬtepet	"vamos para el pueblo" (G-JS)
ʔantamah šawaɕ'a	"vamos ir a sembrar" (G-RHG)
ʔantamah ta šawun man	"entra!" (G-JS)
ʔantamaɬ paʔaʔ	'vamos ya" (G-JAP)
ʔantamaɬta	"vamos" (G-JAP)
ʔantamaɬta šawun man	"entra!" (G-JS)
ʔantamaɬta ʔa ti:ki hiʔ	"vamos a dormir" (G-JS)
ʔantamaɬtaʔ	"vamos" (G-JAP)
ʔanʔabwelo ʔanʔabwela nin	"mis abuelos" (G-SH)
ʔanʔayma	"mi maíz" (G-SH)
ʔanʔo:tek neɬa nin	"mi cama" (G-SH)
ʔanʔuɬuʔ	"me cayí" (G-RHG)
ʔapiriʔ hina naka ʔakuki hiʔ	"te miren andando con élla" (G-SH)
ʔayaɬa neɬa naʔum	"la mujer de su hijo" (G-RHG)
ʔayala	"luna" (G-SH)
ʔeɬa wena: hanta kunukaʔ naka hinaʔ čutiʔ	"como lo compré con un comerciante" (G-SH)
ʔeɬaʔ nana man turakaʔ nin	"es nuevo por eso me lo trajó" (G-SH)
ʔənčučaya	"mi viejita" (G-RHG)
ʔənčuhčumuti paʔaʔ	"es soy muy viejo" (G-RHG)
ʔənčunaʔun	"mi hijo [mío]" (G-RHG)
ʔənčušuruk	"mi bordón" (G-RHG)
ʔənkuɬa ʔipaɬa	"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	"amarrrar" (G-RHG)
dixe ke sə naman wapilin	"dije que me duelen las canillas" (G-JAP)
donde weskeɬaʔ	(G-SH)
ʔerɬekeʔ nin	"me asusté" (G-SH)
hamaʔ paʔaʔ	"ya está maduro" (G-RHG)
hanta ka turakaʔ naka šaɬtepet	"¿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 nahiʔ	"¿quién dejó ésto?" (G-RHG)
hanta ʔaɬi 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 ɋ'ama "no sirve, no es bueno" (G-RHG)
hin hɨnɨkan naka "que no sabes" (G-JAP)
hin kaneɬa nana senyorita man (G-SH)
hin kuɬa 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 ʔakuɬa "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 ʔaɬi hin "que cómo no" (G-JAP)
hin ʔanʔušíki 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 hɨnɨkan naka "que no sabes" (G-JAP)
hin horoka na ki waɬ "tres" (G-JS)
hin horokaʔ ʔima nin neɬa 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 maɬik "no trajistes leña" (G-JAP)
hin kahapaya natiyaʔ "no pasas allí" (G-SH)
hin kanɨʔmaɬa man ʔaɬi ʔukey ʔenfriyar kakomida "se enfrió tu comida porque no quisiste comer luego" (G-SH)

hin kata:yiʔ nahaʔ "no vino" (G-SH)
hin kuɬa ša krawa "no fue para el monte" (G-RHG)
hin kuy laɋ'ay naka "no te va a morder" (G-SH)
hin kuy nɨmaɬan naka "qué no vas a comer vos" (G-JAP)
hin kuyaka naka ša waya? "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:ɬa "no hay ninguno quien me buscó ayer (G-SH)
hin pataka? 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:kiɬaʔ siʔma "no me dejaron dormir" (G-SH)
hin tupan nin naka tupawaʔ "yo no dejé, usted lo dejó" (G-RHG)
hin ʔaɬi hin kuy sawaɋ'aʔ nin "que cómo no iba sembrar" (G-JAP)
hin ʔaɬi hin "cómo no" (G-JAP), (G-RHG)
hin ʔaɬi nana hɨnɨkan nin (G-JAP)
hin ʔaɬi 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 čiɾiɬiʔ	"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 maɬik	"que no trajistes leña" (G-JAP)
hin kaweške 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 muɬiɬka	"que no vas por atrás" (G-RHG)
hiriya	(G-SH)
hiši neɬa muʔiwa ʔayaɬa	"la piedra de moler" (G-SH)
hono heʔ	"está bolo" (G-SH)
honoʔ ʔukaka naka	"está bolo" (G-JS)
horokaʔ ʔikaɬ ču turi man	"… tuvieron un niño" (G-JS)
horoɬaʔ 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 puɬah maɬiɬik heʔ	"el hombre está haciendo leña" (G-SH)
huraɬi	"hombres" (G-PE)
huraʔ ʔaku:ɬa ša sawaɕ'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 čuwapaɬ	"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)
ʔikaɬ	"uno" (G-JAP)
ʔik'aɬ libro man	"un libro" (G-JS)
ʔik'aš	"uno" (G-SH)
ʔima na	"dígale a élla" (G-SH)
ʔiman naka paʔaɬ	"ya te dije" (G-SH)
ʔiman nin hanta kaniʔwa	"decíme que es lo que quieres" (G-SH)
ʔimey na ku senyorita ʔaɬ 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)
ʔiɾɕ'in nin peloʔ	"… que me mordió el perro" (G-JAP)
ʔiɾaʔ hin	"no es grande aquí" (G-SH)
ʔiɾaʔ nahaʔ ʔukey	"hay amplitud" (G-SH)
ʔiɾaʔ paʔaʔ	"ya está grandecito" (G-SH)

ʔiɾi paʔaɬ	"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)
ʔisiči ʔ, ʔusuču ʔ	"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)
kakewaɬaʔ nin	"que me prestás" (G-SH)
kako ša lawaro natiya	"venía bailar" (G-SH)
kaɬ	"uno" (G-SH)
kaɬiki šuraya neɬa kaɬawaro	(G-SH)
kaneɬa ša makun	"es tuyo … aquella casa" (G-JAP)
karaʔ hutu	"el palo pesaba mucho" (G-JAP)
kasawaɕ'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	"dormíte" (G-SH)
kati:kiɬaʔ ʔay	"Vds. están durmiendo" (G-RHG)
katura naka kawapik	"lleva tus caites" (G-JAP)
kawapaɬ	"tu banco" (G-SH)
kawayuɬi	"plebe de caballo" (G-JS)
kawitiɬáya	"tu doncella" (G-JAP)
kawiʔ ʔaɬi šuraya	"yo lloro por esa patoja" (G-SH)
k'awu hiʔ	"está cociendo" (G-RHG)
kawun nanin kaʔ libra de ʔaʔu neɬa 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 paʔaɬ 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 fuí bañar" (G-JS)
kaʔtaʔ hiʔ kamačíte	"¿dónde está tu machete?" (G-SH)
kaʔuka labar karopa	"vas a lavar" (G-SH)
k'aʔuk'ey šinak man ʔaɬi turey maɬik	"mi esposa está cocinando frijol" (G-SH)
ke sə naman wapilin	"dije que me duele las canillas" (G-JAP)
ke sikaki hu:šin	"me duele la cabeza" (G-RHG)
ke šukaki ʔənčuhu:šin	"me duele la cabeza" (G-PE)
ke sukakin 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)
kepɬe hiši	"hay mucha piedra" (G-RHG)

ki kayaya?	"que calor" (G-PE)
ki nama ?enčuwapilin	"me duele la canilla" (G-PE)
kɨrɨn nin tɨɬa ?i ?aku:ɬa ?ayaɬa ?uka bender	"yo arranqué yucca y lo fue a vender élla" (G-SH)
kiša hinin	"duele el estómago" (G-RHG)
kɨsɨma nin kašinak	"regálame tu frijol" (G-JAP)
ki? ?ɨrɨ¢'i? hina ču naki	"que sabroso con chile" (G-JAP)
kɨ?waʔ hiʔ	"está doblando" (G-SH)
kontento ?uka? hina naka	"estoy contento con Usted" (G-JS)
korason naka	"tu corazón" (G-JS)
koʔ ka na ša šaru man	"vamos a la mar" (G-JS)
k'oʔlo hiʔ ?išapa heʔ mukwero takwasin	"yo pelé el tacuazin" (G-SH)
ku ¢'awaka naka ?ayma	"que si no va sembrar maíz" (G-JAP)
ku ču mapu man	"es la tortilla" (G-JS)
ku ču muti paʔaʔ	"ya estoy viejo" (G-RHG)
ku maɬɨk	"vamos a leñar" (G-JS)
ku nakaʔ ču šuráya man	"corte de la mujer" (G-JS)
ku šapun ču miya	"jabón gallo" (G-RHG)
ku šawa¢'a na senyor	"el señor ya sembró" (G-RHG)
ku šawa¢'an ču ?ayma	"vas a sembrar milpa" (G-JAP)
ku šukan nin	"me va comer [dos elotes]" (G-JS)
ku šuwi na ?aɬi	"estaba barriendo" (G-JS)
ku wereke	"el se va poner más fuerte" (G-SH)
kupayaka	"te vas a salir "(G-RHG)
kupayan ¢'ehe	"voy ya a Chiquimulilla" (G-RHG)
kupayan paʔaɬ	"ya me voy" (G-SH)
kupayan paʔaʔ naʔ	"ya me voy" (G-SH)
kupayaʔ	"ya me voy" (G-SH)
kuriya peʔ	"andáte" (G-RHG)
kuriʔa taʔ	"andáte" (G-PE)
kuruki	"que corre" (G-RHG)
kuruy nin ku ?ampuki	"me corrió una culebra" (G-RHG)
kuy hapan turay	"te voy pasar llevando" (G-SH)
kuy kayin wenata mukunu kwerno man	(G-SH)
kuy kunun neɬa nuka naka	"voy comprar para que te lo regalo" (G-SH)
kuy ɬaraʔ hutuʔ	"va subir al palo" (G-SH)
kuy muʔuka gwardar nin	"te voy a esperar [sic]" (G-SH)
kuy nɨmaɬaʔ nin	(G-SH)
kuy nuʔma nin	"voy a comer" (G-SH)
kuy pulan maɬɨk	"voy hacer leña" (G-RHG)
kuy pulaʔ fyesta	"hay una vez fiesta" (G-SH)
kuy puriki šuraya man	(G-SH)
kuy rurun	"voy a cortar" (G-RHG)
kuy samun nin miya mán	"voy agarrar el pollo" (G-JAP)
kuy šawa¢'a	"va a sembrar" (G-RHG)
kuy šuka na ku mura man	"va comer elotes cocidos" (G-JS)
kuy šukakan naka sema	"vas a comer pescado" (G-JAP)
kuy šuwin nin neɬan šawuʔ hinaʔ	"yo voy a barrer para sentarme" (G-SH)
kuy ti:ki hiʔ nin	"yo voy a dormir" (G-SH)
kuy tumuy šuka ¢'oko	"se lo va comer todo el zanate" (G-JAP)
kuy waštay	"él va ir" (G-JAP)
kuy wašta? ša mak'uʔ	(G-SH)
kuy wišuy nak	"te va pegar" (G-SH)
kuy wišuʔ	(G-SH)
kuy ?akun nin ya	"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 ʔiplaɬaʔ na nin	"voy a bañarme" (G-PE)
kuy ʔiplaʔin man	"fue a bañar a la mar" (G-JS)
kuy ʔišpawan nin ša 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 ʔuɬu ʔuy	"lluvia" (G-PE)
kuy ʔurtun nin ku ču ʔuy	"voy a tomar agua" (G-JS)
kuy ʔipala nin	"voy a bañarme" (G-SH)
kuya ɬawaru	"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 čuman wiyan	"voy a chupar caña" (G-RHG)
kuyan honoʔ	"me voy a embolar" (G-RHG)
kuyan nanin ša ʔaɬtepet	"vamos ir al pueblo" (G-PE)
kuyan nin kunun	"que iba comprar" (G-JAP)
kuyan nin ša ʔaɬtepet	"voy ir al pueblo" (G-JAP)
kuyan paʔaʔ	"ya me voy" (G-SH, G-JAP), "ya me fui" (G-SH)
kuyan ša krawa	"que voy ir al monte" (G-RHG)
kuyan ša te:ro tuma	(G-SH)
kuyan šan kuku	"voy a Taxisco" (G-RHG)
kuyan šan montanya	"sube a la montaña" (G-RHG)
kuyan šašaru	"voy al mar" (G-RHG)
kuyan šawaȼ'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 maɬik	"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 ʔikaɬ miya	"el ladrón se llevó mi pollo" (G-SH)
ɬaraya hutu man	"subite al palo" (G-RHG)
ɬikakaʔ nin naka	"me hallaste" (G-SH)
ɬikaya paʔaʔ	"bajate del palo" (G-RHG)
ɬikiɬkaʔ weyša paʔaʔ	"yo maté una iguana" (G-SH)
ɬikin kaʔ gešpo	"hallé una iguana" (G-SH)
mak'uʔ na	"su casa" (G-SH)
mal ʔukaʔ	"está malo" (G-RHG)
man ʔaɬi	"por eso" (G-JAP)
man ʔaɬi hapan turan nin naka	"por eso te pasé a buscar" (G-JAP)
man ʔaɬi mupula nin	"estoy haciendo" (G-JAP)
man ʔaɬi šin šan mura	"que por eso no había elote" (G-JAP)
man ʔaɬi turey maɬik	(G-SH)
manta kamapu hin kanuka nin	(G-SH)
manta kapiri hapaʔ šan tiwina	(G-SH)
manta ladron turey ʔikaɬ 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 šunik' ša ʔuraya heʔ	"la olla está en el fuego" (G-SH)

manta tuɬu man ʔololoʔ	"esa flor es blanca" (G-SH)
manta wiriki hina naka	"el muchacho dice que..." (G-SH)
manta ʔateroʔ čiɾiki ʔ	"el que se muere chiquito" (G-SH)
manta ʔayaɬa man ʔakuki hiʔ hina šurumu	(G-SH)
manta ʔayaɬa ʔaku ša motor paɕ'ikiʔ pulaʔ man	"se fue la mujer hacer su masa" (G-SH)
manta ʔimakaʔ nin	(G-SH)
manta	"ése, el que" (G-SH)
maraʔya	"descanse" (G-SH)
miɾkin ču coreʔo ʔənčuwapik	"me rompió el caite" (G-RHG)
miya ʔuka gorda	"la gallina está gorda" (G-SH)
mok'aɬ	"el trabajador" (G-JS)
muɕ'iwi nahi	"dobló su milpa él" (G-JS)
muɕ'uwe nahi	"¿dobló su milpa él ya?" (G-JS)
muču *ya* nin	"ya me cansé" (G-PE)
muču ʔ nin	"estoy cansado" (G-JS)
muču ʔ ʔukah nin	"estoy cansado" (G-JS)
muču ʔ ʔukaʔ	"viene cansado" (G-JS)
mučuʔayaɬa neɬa naʔu-n	"su mujer de su hijo" (G-RHG)
muhapaya natiya	"pasa y no me habla" (G-SH)
muheɾɬe	"mujeres" (G-JAP)
muhk'u paʔaɬ	"nos vamos" (G-SH)
muhku ša kosta man	"vamos a la costa" (G-SH)
muhku ša merkado	"vamos al mercado" (G-SH)
muk'aɬa, mukaɬa	"trabajador" (G-JS)
mukan ʔaɬi horokaʔ nin kaʔ turi man	(G-JS)
mukara kiki manta mukomestible	"comestible ... élla cargase" (G-SH)
mukunu mapu	"el patojo compra tortillas" (G-SH)
mukwerpo nin	"mi cuerpo" (G-SH)
mumaɬik	"su leña" (G-SH)
mumuk'u hiʔ	"está cantando" (G-SH)
muneɬa	"es de él" (G-RHG)
mura man kuy šukan nin	"me va comer dos elotes" (G-JS)
murtiʔ	"se reventó" (G-SH)
mušuy naka nahiʔ kah pari	"¿cuándo vas a venir? (G-JS)
mutataʔ	"su papá" (G-SH)
mutečo ʔənčumaku	"techo de la casa" (G-RHG)
mutita naʔ	"las piernas suyas" (G-JS)
mututu	"su pecho" (G-JS)
muweriki hina ʔayaɬa pari	"habla la luna con el sol" (G-SH)
muʔayaɬa	"su mujer" (G-RHG)
muʔuka doler muʔestomago	"me duele el estómago" (G-SH)
muʔuka nin desbelar	"zancudos me desvelan" (G-SH)
muʔuka poɕ'aʔ	"se fue lavar la señora" (G-SH)
na ču humu turi maʔ	"el niño" (G-JS)
ná hu milagro	"ese milagro" (G-JS)
na hurak man	"ese hombre" (G-SH)
na huraɬe kiʔ šə muniwa nin waruʔ	"me piden mucho los hombres (el matate)" (G-JAP)
na kah	"hija única" (G-SH)
na man huru	"ese chompipe" (G-JAP)
na man ʔənčuʔermano	"éste es hermano" (G-RHG)
na naka kaʔakuʔ	"vos se fuistes, Usted se fue" (G-SH)
na naka kwatro šurumu	"él tiene cuatro hijos" (G-SH)
na naka mukay na mentir man	"mentir" (G-JS)
na naka simikaʔ ʔuraya	"Usted apagó el fuego" (G-SH)

na naka šukaɬaʔ	"Usted almorzó" (G-SH)
na naka ʔukaʔ harana	"vos tienes enfermedad" (G-JAP)
na nin hapakan terowaʔɬa	"que aquí estaba esperando al muerto" (G-JAP)
na nin hapakay	"yo estoy esperando" (G-SH)
na nin hapan nin ša makuka pero hin ɬikɨn naka	"yo pasé a tu casa" (G-JAP)
na nin hapawan natiya pero ɬikɨy mudwenyo	"yo pasé por allá y como allí andaba el dueño, me halló" (G-SH)
na nin hin ku lawaro man	"yo no bailo" (G-JS)
na nin hin muʔaya ša turan ʔakaniʔ	"no cargo como llevarlo" (G-SH)
na nin hin ʔanpataʔ	"no puedo" (G-SH)
na nin hin ʔapatawa yaʔ	"no puede (mandar a un)" (G-SH)
na nin hin	"yo no" (G-SH)
na nin horon ka hutu man	"tengo un mangal" (G-SH)
na nin horon kaʔ besino ʔi neːɬeke komo ʔenemigo	"tengo un vecino y no vive tranquilo" (G-SH)
na nin horowan ʔikaʔ	(G-JS)
na nin huːšin	"mi cabeza" (G-SH)
na nin kɨniɬka heʔ	"yo estoy contento" (G-SH)
na nin kɨrɨn manta tiɬa	"yo arranqué yucca" (G-SH)
na nin ku mukaɬa nin	"porque soy trabajador" (G-JS)
na nin kuy wašata	"yo voy a entrar" (G-SH)
na nin kuy ʔuka ʔetaka	"mañana yo tapisco …" (G-SH)
na nin kuyan šan ɕ'ehe	"voy ir a Chiquimulilla", "fuimos para Chiquimulilla" (G-JAP)
na nin lɨkakaʔ	"me hallaron" (G-SH)
na nin nukakakey	"puede ser una que lo pongo" (G-SH)
na nin parakakan nuwi	"estoy buscando techo de la casa" (G-SH)
na nin piri naka heʔ	"yo te miré " (G-SH)
na nin pirin wiriki hina ʔayaɬa	(G-SH)
na nin pulakan waruʔ	"yo estoy haciendo matate" (G-JAP)
na nin pulan trabaho manta ʔimakaʔ nin	'yo hice el trabajo" (G-SH)
na nin šawaɕ'an ʔahmukan	"que sembró ayer" (G-RHG)
na nin šukan paʔaʔ	"yo ya comí" (G-JAP)
na nin teːro šukakakan	"tengo hambre" (G-SH)
na nin teːro wiriki ʔaɬi horon nin kaʔ problema hina nin	"yo vine hablar con Usted de mi problema que tengo" (G-SH)
na nin wiriki hiʔ	"estoy platicando" (G-SH)
na nin wirkiɬa hinaʔ	"con élla platiqué" (G-SH)
na nin wirkin hina naʔ	"y yo platiqué con élla" (G-SH)
na nin ʔakuːɬa ʔipaʔɬa	"me fui a bañar" (G-SH)
na nin ʔanneɬa siya man	"ésto es mi banco" (G-SH)
na nin ʔanneɬa wapaɬ man	"ésto es mi banco" (G-SH)
na nin ʔanpobre	"yo soy pobre" (G-SH)
na nin ʔantayuk	"mi sombrero" (G-SH)
na nin ʔantiːki	"yo duermo" (G-SH)
na nin ʔantiːki ša ʔoːtek	"yo duermo en la cama" (G-SH)
na nin ʔantiːkiɬaʔ	(G-SH)
na nin ʔantuyaʔ keʔ	"yo le regaño" (G-SH)
na nin ʔanʔima naka	"le voy a decir" (G-SH)
na nin ʔispaʔ ša makʼuʔ	"yo salí de mi casa" (G-SH)
na nin ʔuka ɬawaro	"quiero ir a bailar" (G-SH)
na nin ʔuka preparar yaʔ neɬan šawaɕ'aʔ wayan	"estoy preparando terreno para sembrar milpa" (G-SH)
na nin ʔukan apagar ʔuray	"yo apagé la llama" (G-RHG)
na nin ʔukay sukuy nin wapiliʔ manta miyaɬe man	"yo amarré a la gallina" (G-SH)
na nin ʔukey ʔipaʔla	"yo me bañé" (G-SH)

na niʔ ʔispa ša mak'uʔ	"yo salí de mi casa" (G-SH)
na pari	"el sol" (G-JAP)
na tupawaʔ	"el lo dejó" (G-RHG)
nah na man	"él" (G-SH)
nah na man šawu hiʔ	"el que está sentado" (G-SH)
naha kuy ʔamuk'a naka	"aquí vas a trabajar" (G-JAP)
nahaʔ heʔ hapun	"allí está jabón" (G-SH)
nahaʔ tupan	"que lo iba dejar" (G-RHG)
nahi ʔimey nin	"el me dijo" (G-RHG)
naka kaču makun	"ésta es tu casa" (G-PE)
naka kuy puɬiki ʔałape	"Ud. va a lavar mañana" (G-RHG)
naka šurumuɬe	"vos, muchachos" (G-SH)
naka ti:kiɬaʔ	"tú dormiste" (G-PE)
naka tupawaʔ	"tú lo dejastes; Usted lo dejó" (G-RHG)
naka wišu nanin	"tú me pegastes" (G-PE)
naka witiɬaya	"tú, doncella" (G-JAP)
naka ʔimakaʔ nin	"Usted me dijo" (G-SH)
naɬa kuʔ ʔuka ʔuy	"para que llueva" (G-SH)
nama heʔ hu:šin man ʔaɬi hin ʔanʔišapa ša pari	"me duele la cabeza" (G-SH)
nama ša hu:ši	"me duele la cabeza" (G-JS)
nama ʔanhu:ši	"me duele la cabeza" (G-SH)
nama ʔanwapilin	"me duelen los pies" (G-SH)
namah	"doler" (G-JS)
naman huru	"ese chompipe" (G-JAP)
nana hɨʔ	"éso" (G-JAP)
nana hiʔ	"ésto está" (G-JAP)
nana hɨʔ kaneɬa	"éste de él, tuyo" (G-RHG)
nana hɨʔ ʔanneɬa	"éste es mío" (G-RHG)
nana kuy kuyaʔ ša mak'uk	"el va ir a tu casa" (G-JAP)
nana man hurak ʔaku domingo	"el va oir misa domingo" (G-SH)
nana man tayuk turan nin	"yo te traje este sombrero" (G-SH)
nana man turey	(G-SH)
nana man ʔannwera	"es mi nuera" (G-SH)
nana maʔ ʔukay ɕ'imiʔ	"el apagó" (G-SH)
nana miku šuraya	"la niña" (G-SH)
nana na man kuy ʔuka šuwik'	"estás barriendo" (G-SH)
nana nanin nukey na naka	"yo te doy algo" (G-JS)
nana nin haranayan	"estoy enfermo" (G-RHG)
nana nin nukey na naka	"yo te doy algo" (G-JS)
nana nin ʔimakan naka	"yo te dije" (G-RHG)
nana nin ʔimakaʔ naka	"te dijo" (G-RHG)
nana nini haranayan	"estoy enfermo" (G-RHG)
nana senyorita man	"esa señorita" (G-SH)
nana ʔuy man klara hiʔ	"el agua está clara" (G-SH)
nanaʔ na nin hapakan	"aquí estaba esperando..." (G-JAP)
nankun paʔaʔ	"ya es tarde" (G-JAP), (G-SH), (G-RHG)
natiya heʔ	(G-SH)
natiya hin ninguno ʔakuki	"allí no hay quien cuida" (G-SH)
natiya kuyan teroʔ	"allí voy a morir" (G-SH)
natiya muɬara manta pari	(G-SH)
natiya muti:ki ša ʔo:tek	"el duerme" (G-SH)
natiya muʔuka kural čiwo	"mandó hacer su coral" (G-SH)
natiya ti:ki hiʔ	"dónde Usted se quedó por la noche" (G-SH)
naʔ hurah man hin ʔapataʔ ʔuka benir	"no pudo venir" (G-SH)

naʔ peʔ na	"veníte (G-RHG), "apuráte" (G-SH)
naʔ peʔ na naka	"venga acá" (G-SH)
naʔ peʔ naʔ	"veníte, apuráte" (G-RHG), (G-SH)
naʔ peʔ naʔ	"allí viene el" (G-RHG)
naʔ peʔ na naka	"venga acá" (G-SH)
naʔ ʔaku:ɬa hiʔ ʔipaʔɬaʔ	"se fue a bañar" (G-SH)
naʔun hin ʔaʔima	"el niño no puede trabajar" (G-SH)
naʔun hin ʔaʔuka mandar	"el niño no puede trabajar (G-SH)
naʔun nin	"mi hijo" (G-SH)
ne:ɬeke kuy sawaȼ'a nin	"nosotros vamos a sembrar" (G-SH)
ne:ɬeke waɬ	"nosotros somos tres" (G-SH)
neła kuʔ nukey	(G-SH)
neɬa mušuka muʔima ʔuta kiȼ'iʔ	"asámelo" (G-SH)
neɬa muʔ sukan nin	"van comer bien" (G-SH)
neɬa muʔišapa paseyo	"para que salga al paseo" (G-SH)
neɬa ʔuka barer ʔayaɬa	"barrer" (G-SH)
nełaka ʔišaka	"Usted mandó hacer atol" (G-SH)
neɬak'aʔ	'yours' (G-SH)
neɬan sawaȼ'aʔ nin	"para sembrar la milpa" (G-SH)
neɬan šawaȼ'aʔ wayan	"para sembrar la milpa" (G-SH)
ney horoy ʔesperansa	"no hay esperanza" (G-SH)
niɬmaɬa paʔaʔ šurumu	"ya comió ya el patojo" (G-JAP)
nin ša mak'uʔ	(G-SH)
niwakakan heʔ	"estás pidiendo" (G-SH)
niwakakan hina nin	"… porque te dirigiste conmigo" (G-SH)
niwey manta pulakey pilares	(G-SH)
niʔmaɬa paʔaʔ	"élla ya comió" (G-RHG)
nuka taʔ naʔ	"dales" (G-JAP)
nukaka mapu na man	"vos le distes una tortilla a el" (G-RHG)
nukan naka kah mapu	"yo te dí una tortilla" (G-RHG)
nuk'an paʔaɬ	"ya te dí" (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)
numaɬan nin hina naʔ	"que comí yo con él" (G-JAP)
numaya peʔ paʔaʔ	"vení almorzar ya" (G-JAP)
nuʔmayan	"estoy comiendo" (G-RHG)
ʔone ʔukah ʔawa	"está pura tiernita la luna" (G-JAP)
pa šahak	"boca" (G-PE)
pari ʔukaʔ	"el sol está muy caliente" (G-JS)
pero hin muʔuka deklarar si na nin ʔo wena=taʔ	(G-SH)
pi:kan ʔukay desgranar ʔanʔayma	"anteayer desgrané" (G-SH)
pikan ʔanti:kiɬaʔ	"anteayer dormí todo el día" (G-SH)
pirikaʔ nin ʔikah ʔawe	"yo veo un pájaro" (G-JS)
pirin hapaʔ šantiwina	"pájarito" (G-SH)
pirin keʔ hapawaʔ ʔaniʔ nahaʔ	"yo lo veo que pasó" (G-SH)
pirin nin maraʔya hiʔ	"yo lo ví descansando el" (G-SH)
pirin paʔaʔ	"ya lo ví" (G-SH)
piriwa naka na nin	"porque yo lo ví a Usted" (G-JS)
piriwan ne naka	(G-JS)
piriʔ nin naka	"tú me mirastes" (G-SH)
piʔ	"dos" (G-JAP)
porke pirikakan naka ke nankun paʔaʔ	(G-JAP)
pu:riki hinaʔ šurumu	"se casaron, están junto" (G-SH)

pula nin kan	"lo estoy haciendo" (G-JAP)
pulan nin paʔaʔ waruʔ	"ya hice el matáte" (G-JAP)
puy pari	"medio día, tarde" (G-JAP), (G-RHG)
puy pari paʔaʔ	"ya es tarde" (G-JAP)
ša hutu man	"en el palo" (G-SH)
ša ku maku man	"en su casa" (G-JS)
ša mak'uʔ nin	"en mi casa" (G-SH)
ša merkado ʔukaʔ	"en [el] mercado [está/hay]" (G-SH)
ša nankun paʔaʔ	"ya es tarde" (G-JAP)
ša sɨʔma	"de noche, en la noche" (G-SH, G-RHG)
ša ʔeskina čumak	"esquina de la casa" (G-RHG)
ša ʔoflak	"en el comal" (G-JAP)
ša ʔuraya heʔ	"está en el fuego" (G-SH)
sama paʔaɬ ʔah naru	"ya es oscuro" (G-JAP)
šamami	"oreja" (G-PE)
šampari paʔaʔ	"ya es tarde" (G-RHG)
šamuy ku pelo ču šurumu	"el chucho agarró al patojo" (G-RHG)
šamuy nin ku ʔampuki	"me mordió una culebra" (G-RHG)
šamuy ʔika ču ku weša ku pelo	"el chucho agarró una iguana" (G-RHG)
šan šaru	"sur, el mar" (G-RHG)
šan tiwina paʔaʔ pari	"el sol ya está hasta arriba" (G-JAP)
san wona	"arriba" (G-RHG)
šanari	"en la naríz" (G-SH)
sararaʔ nanin	"tengo frío" (G-PE)
šawu hiʔ	"está sentado" (G-SH)
šawu nahaʔ	"sentar [aquí]" (G-SH)
šawuya natiya kawapaɬ	"allí es tu banco" (G-SH)
šawuya šaw	"sentáte" (G-PE)
šawuya	"sentáte", "sientase" (G-RHG), (G-JAP)
si ʔukáʔ paʔaʔ	"si todavía hay" (G-JAP)
sɨka ki huːšin	"me duele la cabeza" (G-RHG)
šika ʔay	"cállate!" (G-RHG)
šin kaniwa naka mas kaldo	"no queres más caldo" (G-JAP)
šin šan šinak'	"no hay frijol" (G-PE)
sɨʔma paʔaɬ	"ya es noche" (G-SH)
šukakakan nin	(G-SH)
šukakakan naka	"estás comiendo" (G-SH)
šukakan	"yo lo comí pues" (G-RHG)
šukakey nin	"estoy comiendo" (G-SH)
sukakin ʔančuhuraʔin	"me duelen los ojos" (G-RHG)
šukan	"comamos!" (G-RHG)
šukan nin hina naʔ	"comío junto con el" (G-JAP)
šukay kiʔ ša hinin	"me duele el estómago" (G-RHG)
šuraya ʔuwaka heʔ ša ʔuy	"la niña está jugando entre el agua" (G-SH)
šurumuɬe	"muchachos" (G-SH)
šuwik	"escoba" (G-RHG), (G-JS)
šuwiki	"barrer" (G-RHG)
šuwiʔ ʔukay naʔ	"está barriendo" (G-JS)
suʔmak'ay	"está regando" (G-RHG)
tak'ah	"seis" (G-RHG)
takah	"seis" (G-SH)
takaʔ	"cuatro" (SH)
taɬan muškarawa	"quememos la basura!" (G-RHG)
taɬaʔ ču mak'uʔ	"se quemó la casa" (G-RHG)

taɬaʔ piši?	"se quemó el guacal" (G-RHG)
tamaɕ'iʔ	"torcer pita" (G-RHG)
tamaɕ'iʔ neɬa kuy puɬan k'aʔ waruk	(G-SH)
tataʔ ʔi ʔutaʔ muʔimey šuraya	(G-SH)
tay ti:ki	"está durmiendo" (G-JS)
tayuk siʔmaʔ ʔanneɬa	"mi sombrero es negro" (G-SH)
te:ro niɬma heʔ	"quiero comer, tengo hambre" (G-SH)
te:ro nuʔma paʔaʔ	"ya quiere comer" (G-JAP)
te:ro pirikey	"quieren ver" (G-SH)
te:ro šuka nin kan	(G-JAP)
te:ro ti:ki nanin	"quiero dormir" (G-PE)
te:ro ti:ki paʔ	"tengo sueño" (G-SH)
te:ro ti:kiyan	"tengo sueño" (G-RHG)
te:ro yɨpɨ nin ʔaɬi šukan nak'i	"quiere vomitar por haber comido chile" (G-SH)
te:ro ʔišakayan	"quiero tomar" (G-RHG)
te:naʔ ʔuɕiruka	"que se apuren" (G-JAP)
terowaʔɬa	"(el) muerto" (G-JAP), (G-JS)
teroy kah miya	"mató un pollo" (G-SH)
teroʔ hurak man ʔanbesino nin	"se murió ese vecino" (G-SH)
teroʔ ɬawaro hiʔ	"élla quiere bailar" (G-SH)
teroʔ paʔaʔ	"ya se murió" (G-JS), (G-SH)
teroʔ ʔukaʔ	"se murió" (G-JS)
ti(:ʔ) muteritoriyo man	"extranjero" (G-SH)
ti:ki hiʔ nah na	"el está durmiendo" (G-SH)
ti:ki paʔaʔ	"está durmiendo" (G-JAP)
ti:ki ʔuka hiʔ	"estaban durmiendo" (G-JS)
ti:ki ʔukah nin	"estoy durmiendo" (G-JS)
ti:ki ʔukaʔ	"el está durmiendo" (G-JS)
ti:kiɬaʔ naka	"vos dormiste" (G-SH)
ti:kiɬaʔ šurumu man	"el durmió" (G-SH)
ti:kimah	"dormimos" (G-JS)
ti:kin nin paʔaʔ	"yo dormí" (G-JAP)
ti:kiyan	"estoy durmiendo" (G-RHG)
ti:k'iʔ hiʔ	"está durmiendo" (G-SH)
tupa natiyaʔ	"déjalo" (G-SH), "déjamelo allí" (G-JAP)
tupakaʔ naka mura	"tú lo dejaste" (G-SH)
tupan nin	"lo voy a dejar" (G-SH)
tupawa ʔənčunaʔun	"se quedó sólo mi hijo [mío]" (G-PE)
tupawa naka ʔenčumakum	"quedate aquí" (G-PE)
tupey ʔuruɬ miya	"ya le dejó la gallina el huevo" (G-SH)
tura naka katamaɕ'iʔ	"lleva tu lazo" (G-JAP)
tura peʔ ʔanpewek	"traeme el tecomate" (G-RHG)
turan čupewek ʔay	"traeme mi huacal" (G-RHG)
turan muyiʔ kunu nin	"comprame chico" (G-JAP)
turey kan neɬa para nin	"élla me trajó ésto por es nuevo" (SH)
turey na waruʔ	"el llevó el matáte" (G-JAP)
turey nin ša makuʔ	"me llevó para su casa" (G-JAP)
turiɬe	"patojos" (G-JAP)
ɕ'amuʔ nin	"me picó" (G-SH)
ɕ'aʔkaʔ	"medio día" (G-SH)
ɕ'ehele	"Chiquimultecos" (G-JS)
ɕ'imiʔ nin ʔuraya	"yo apagé el fuego" (G-SH)
ɕ'iʔrey ʔanmutiʔ	"cortáme mi pelo" (G-SH)
ʔuka na ša suniʔ	"hecharlo en la olla" (G-JAP)

ʔuka nanin šamun ʔənčušuruk	"yo agarré mi bordón" (G-RHG)
ʔuka pula hiʔ nin tamaɕ'i	"estoy haciendo matate" (G-SH)
ʔuka remendar yan	"esté remendiendo" (G-RHG)
ʔuka teher yan	"está tejendo" (G-RHG)
ʔuka teher ʔayaɬa man	"aprendió la señora a tejer" (G-SH)
ʔuka ʔuwake hiʔ ku pelo	"está jugando el chucho" (G-RHG)
ʔuka ʔuy	"hay bastante agua" (G-SH)
ʔukah na ku ʔaʔu	"había maíz" (G-JS)
ʔukah šawiʔ	"salió a sentarse" (G-JS)
ʔukah ʔigwana naʔ	(G-SH)
ʔukakan madurar	"para hacerlo madurar" (G-SH)
ʔukakay na mapu	"está echando las tortillas" (G-RHG)
ʔukakay ʔenkontrar	"... me encontré aquí" (G-SH)
ʔukakaʔ naka kosečar wayak	"cuando disponer de tapiscar me dices" (G-SH)
ʔukan mandar ɕ'ɨrɨʔ mutuʔ	"me cortaron el pelo" (G-SH)
ʔukay ɕ'imiʔ	"el apagó" (G-SH)
ʔukay frihol	"hay un frijol" (G-SH)
ʔukay ʔenkontrar ʔuruɬ	"encontró unos huevos" (G-RHG)
ʔukay ʔuɬu ʔuy	"llovió" (G-SH)
ʔukaʔ nahaʔ sararaʔ	"hay mucho frío aquí" (G-SH)
ʔukey ɕ'iriʔ mutíʔ nanin	"me lo quitó" (G-SH)
ʔukey naʔ ša naru	"en la tierra"(G-JS)
ʔukey paʔaɕ'iʔ mumasa	"hechar las tortillas" (G-SH)
ʔuɬaka naʔ	"estoy prestando dinero de el" (G-JS)
ʔuɬu ʔuy	"llovió" (G-SH)
ʔuluʔ na ku ču turi man	"ese niño se caye" (G-JS)
ʔuɬuʔ nanin	"me caí" (G-PE)
ʔupun hiʔ	"estoy parado" (G-JAP)
ʔuray čenoʔ	"se está quemando" (G-JS)
ʔuraya hiʔ	"está ardiendo" (G-SH)
ʔurtuy nay kah trago maʔ	"tomó Usted un trago" (G-JS)
ʔušaki ʔukah naʔ	"fuma mucho" (G-JS)
ʔuwe pe kaʔ	"andar llamarlo" (G-SH)
wa na tawu	"norte" (G-RHG)
wakaʔ manta miya man	"se escapó la gallina" (G-SH)
waɬ	"tres" (G-SH)
waɬa	"muerto" (G-JAP)
wapak	"canilla" (G-RHG)
wapik	"caite" (G-PE)
wapilik'aʔ	"tus pies" (G-SH)
wapiɬin	"canilla" (G-PE), (G-SH)
wašata ša ti:ki	"fue a dormir" (G-RHG)
waštaya naka	"entrá" (G-JAP)
waštaʔ niwaʔ hin ɬiɨkiʔ	"no lo halló el que entró" (G-SH)
waštaʔya ʔakuki hiʔ naka	"pase adelante" (G-SH)
wena kuy ʔuka resar	"no se que santo está rezando" (G-SH)
wena man wiriki? hina naka	"quién habló con Usted" (G-RHG)
wenataʔ	"quién" (G-SH)
wereke ʔukah	(G-JS)
weskeka muškarawa	"tire la basura!" (G-RHG)
weskey šam posa	"se ahogó (en el pozo)" (G-SH)
wišata	"silbar" (G-SH)
wišuya	"pegar" (G-RHG)
wišuʔ	"lo mataron", "le pegó con el" (G-JS)

witiɬaya	"patoja" (G-JAP), (G-RHG)
ya teroʔ paʔaʔ	"ya se murió" (G-SH)
yuwan šaman ʔančusemiya	"está perdida su semilla" (G-RHG)
yuwan šan may su semiya	(G-RHG)
yuwan ʔənčutumin	"yo perdí mi pisto" (G-RHG)
yɨwan šama	"se me olvidó" (G-RHG)
yɨwaʔ	"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	
		2003-03-22	63 min.
	López Peréz, José Antonio	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.
	Soliz, Eliodoro	2000-03-04	30 min.
Chiquimulilla	Chávez, Ricardo	2000-11-10	30 min.
	García, Augustín	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 transitivisation 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 18e-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 uitgestorven 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 werkwoordnominaliseringen 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 toekomende 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 Transitivierung und Detransitivierung 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 Partizipkategorien 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 tán 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 interogativa que se ha gramaticalizado como marcador de subjuntivo/irrealis occur 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.