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The Sacapultec Language

By

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DISSERTATION

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THE SACAPULTEC LANGUAGE

John W. Du Bois

ABSTRACT

This work describes Sacapultec, a Mayan language spoken by about
10,000 people in the highlands of Guatemala. Sacapultec is one of
the last of the Mayan languages which can be said to have been dis-
covered in this century, and a controversy has remained regarding its
status as a language or dialect. The first part of the dissertation
addresses the historical position of Sacapultec in the Mayan family.
It is shown that Sacapultec is not a dialect of Quiché, but an inde-
pendent language more closely related to Cakchiquel or Tzutujil than
to Quiché. The classification of Sacapultec within a "Cakchiquelan"
subgroup establishes new implications for the prehistory of the Qui-
chean languages, and potential ethnohistoric and archaeological
correlations with this historical revision are examined. The second
part of the dissertation presents a grammatical description of Saca-
pultec, encompassing phonology, morphology, and syntax. Character-
istic Mayan features include: in phonology, a ten-vowel system (with
extensive morphophonemic alternation), a consonantal system with a
full series of glottalic occlusives; in morphology, agglutination and
moderate polysynthesis, with ergative agreement for object and sub-
ject marked in the verb word; in syntax, passive, antipassive, and
instrumental voices. Finally, the implications of text data for
certain discourse patterns are considered.

Wallace L. Chafe

To my parents and T-2

ACKNOWLEDGEMENTS

ABBREVIATIONS AND CONVENTIONS

<u>In morpheme glosses</u>

A1	1sg	Set	A
A2	2sg	Set	A
A3	3sg	Set	A
A4	1pl	Set	A
A5	2pl	Set	A
A6	3pl	Set	A
Agt	agent		
Ap	antipassive		
Art	article		
Asp	tense/aspect		
B1	1sg	Set	B
B2	2sg	Set	B
B3	3sg	Set	B
B4	1pl	Set	B
B5	2pl	Set	B
B6	3pl	Set	B
Clt	clitic		
Cm	completive aspect		
Cs	causative		
Czr	complementizer		
Dat	dative		
Dem	demonstrative		
Dir	directional particle		

form	formal
Foc	focus particle
I	intransitive, intransitivizer
If	intransitive phrase-final marker
Imp	optative-imperative
Impf	Imperative-movement phrase-final marker
Inc	incompletive aspect
Instr	instrumental
Irr	irrealis
Loc	locative
Mv	movement
Mvf	imperative-movement phrase-final marker
N	noun
Neg	negative
Nom	nominalizer
Pat	patient
Part	particle
Pf	perfective aspect
Pff	perfective phrase-final marker
Pl	plural
Poss	possessive
Pre	presentational intransitive
Prep	preposition
Ps	passive
Q	question
Refl	reflexive
Rel	relativizer

Sf	suffix (in general)
Sg	singular
T	transitive, transitivizer
Ta	active voice (transitive)
Tf	transitive phrase-final marker
Vs	versive

Elsewhere

A	adjective root
a	adjective stem
Adv	adverb root
adv	adverb stem
I	intransitive root
i	intransitive stem
N	noun root
n	noun stem
P	positional root
<u>R</u>	(<u>l</u>,<u>r</u>,<u>w</u>,<u>y</u>) resonant which does not devoice
Sp	Spanish loan
T	transitive root
t	transitive stem
<u>V</u>	(i:,e:,a:,o:,u:) long vowel which does not undergo nonfinal shortening
// //	morphophonemic transcription
--	paralinguistic lengthening

PREFACE

It was not until 1973 that modern scholars became aware of the existence of a distinct language spoken in the highland Guatemalan village of Sacapulas. In that year, Terrence Kaufman presented a paper to the American Anthropological Association in Mexico City in which he announced the discovery of several new Mayan languages, among them Saca-pultec. Yet Kaufman's claim of discovery was to remain controversial for years afterward, as some Mayanists remained unpersuaded, given the scar-city of published data, that Sacapultec was something other than a dialect of a previously known language. Some may have thought that the prestige of discovery would appeal to a scholar, and dispose him to assign exaggerated significance to the peculiarities of a new form of speech. Thus for some time now, the status of Sacapultec has remained cloudy.

Shortly after Kaufman's announcement, in 1974, I traveled to Sacapulas to hear the language myself. It was soon clear that it represented a speech variety which was not equivalent to known varieties in the Mayan family, and that a grammatical description of it would cover new ground. Ultimately I took on this project myself, while leaving the language/dialect issue by the side for the time. The initial goal of this investigation, then, has been to present a representative gramma-tical description -- encompassing phonology, grammar and, to some extent, discourse structure -- of the previously undescribed speech of Sacapulas. In pursuit of this goal in the field, however, it soon became clear that it would not be possible to remain equivocal about the dialect status of

Sacapultec. Based on what I have discovered about the language, it now seems clear that the Sacapultec evidence was in no way given a biased reading by Kaufman; that the status of Sacapultec is not to be decided simply by one's taste for lumping or splitting; that Kaufman's skeptics were mistaken -- but that Kaufman as well was not quite correct in his formulation. Thus a second major aim has developed for the present work. I have found it necessary to devote a major portion of this work to a treatment of classificatory issues, including the evidence which led me to conclude that the inhabitants of Sacapulas do indeed speak a language distinct from the other long-recognized languages of the Mayan family -- a language, however, whose closest affiliations are not the expected ones. It is hoped that Mayanists who must evaluate the significance for the field will find that the descriptive information is enhanced by a full treatment of the relation Sacapultec bears to the rest of the family.

Since the descriptive portions of this work must stand as a first reference for the language, an effort has been made to keep close to the most straightforward presentation, while eschewing theoretical quirks which might prevent ready comparison of this otherwise inaccessible language with its better-known sister languages. Some innovative views have, nevertheless, been presented in the final chapter on discourse -- after, it is hoped, the groundwork of the language has been safely laid out.

The dissertation, then, has three components. In the first (Chapters 1 and 2), the position of Sacapultec in the Mayan family is established. In the second (Chapters 3 to 6), the basic facts of Sacapultec grammar are presented. In the third (Chapter 7), some theoretical innovations are developed which contribute to the understanding of the organization of narrative discourse in Sacapultec.

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CHAPTER 1

INTRODUCTION

1.1. Setting.

Sacapultec[1] is spoken in the municipio of Sacapulas (a county-like

unit) in the highlands of Guatemala near the eastern base of the Cuchu-

matan Mountains (Figure 1.1). The town center (pueblo) of Sacapulas

(Figure 1.2), which acts as administrative, market, and ritual center

for the municipio, lies on the Río Chixoy (or Negro), just downstream

of the confluence of the Río Blanco. It was in the pueblo of Sacapulas

-- known in Sacapultec as tuxa:l -- that I carried out the research re-

ported here; the grammar is a description of the speech of the pueblo

of Sacapulas. Other speech varieties -- Sacapultec does show slight

regional dialect variation -- will be touched on only in passing.

Sacapulas lies in a low valley reached by a steep approach, which

one eighteenth century writer characterized as a "bajada violentísima".

The pueblo stands at an elevation of about 1200 meters, while surrounded

by mountains of 2400 meters and higher. As a result it has a warm and

arid climate, with rainfall not uncommonly limited to a dozen inches of

rain a year. The principal occupation is corn farming; other occupations

include saltmaking, metalworking, and trade.

The pueblo of Sacapulas was visited about 1775 by the Spanish priest

Cortes y Larraz who described it in terms which could be applied without

change today:

1
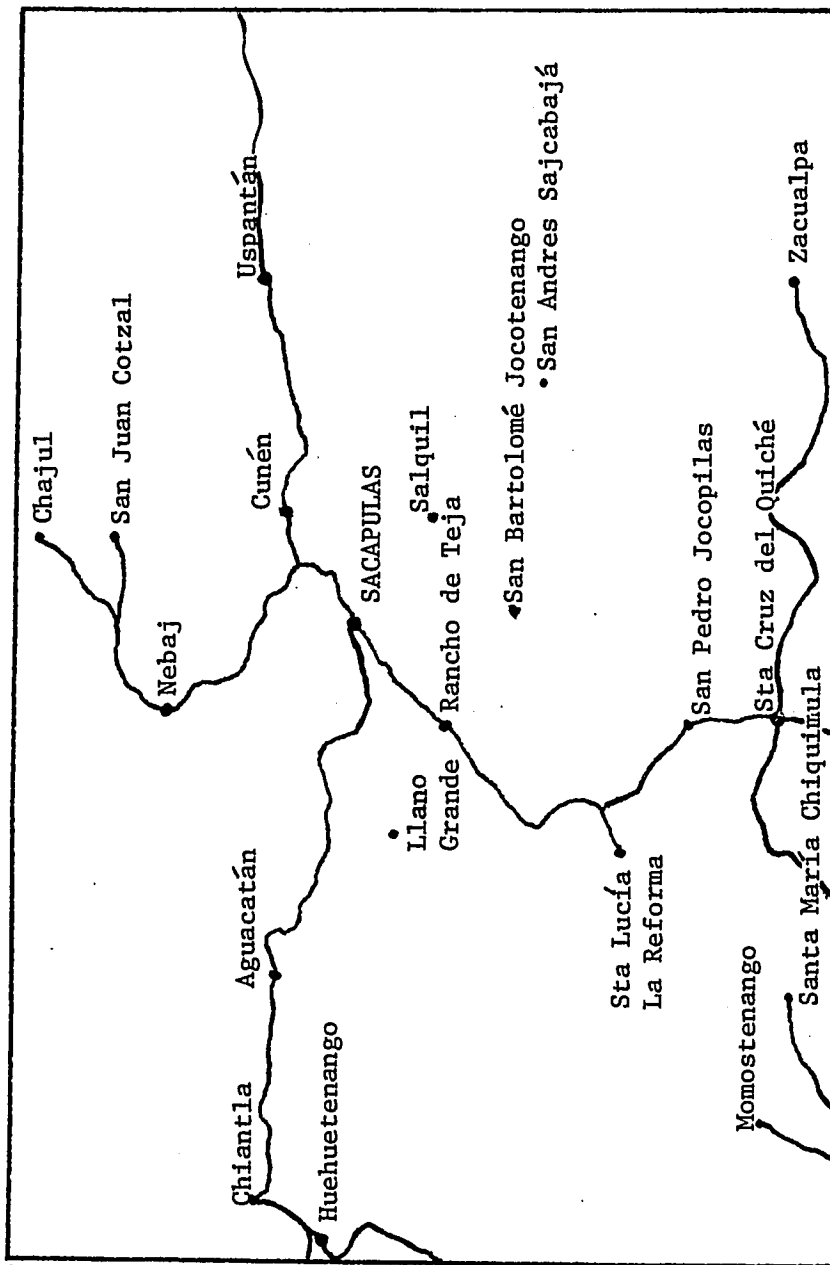
Figure 1.1. Highland Guatemala, Sacapulas Area

(Based on IGN, Map, 1:500,000)
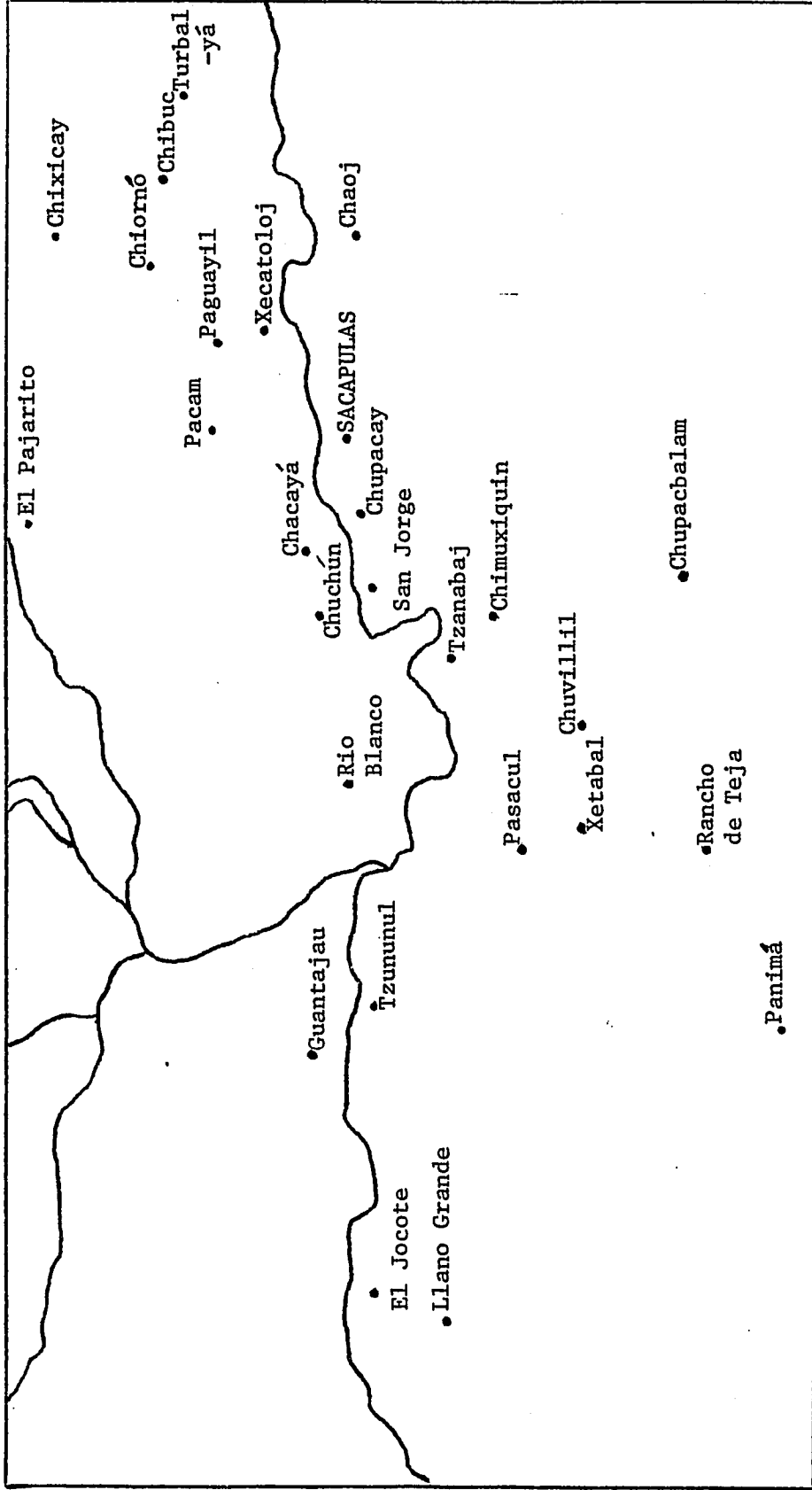
Figure 1.2. Sacapulas. (Based on IGN, Map, 1:50,000)

> Este pueblo está situado en llanura, pero en una
>
> barranca profundísima entre dos cordilleras de
>
> montanas muy elevadas, que corren como de poniente
>
> a oriente y por entre ellas un río caudaloso y
>
> rápido, que lleva el mismo rumbo y sel llama el
>
> río de Sacapuals, y el valle en que esta el
>
> pueblo, tendrá de latitud entre dichas montanas
>
> como un cuarto de hora; con todo es pueblo alegre
>
> y las casas cubiertas de teja... (Cortes y Larraz
>
> [1775] 1958, v. 2, p. 40)

Cortes y Larraz records the population of the pueblo as 368 families
with 1608 persons (1958, v. 2, p. 40); nearly two centuries later
the most recent census reports roughly the same population.

The town of Sacapulas as a political unit is to some extent the
product of Spanish policies:

> Shortly after the conquest the town was established
>
> at its present location by bringing together several
>
> different native settlements of that region, in some
>
> cases by requiring the Indians to abandon their tra-
>
> ditional lands and take up new ones near the town
>
> center. (Carmack 1973:206)

1.1.1. Ethnic Groups.

Sacapultec speakers are in daily contact with speakers of two other
languages. Spanish is spoken by the Ladinos (Spanish-speaking non-Indians);
Quiché is spoken by immigrants from Santa María Chiquimula, who in the

past century have occupied outlying areas of the municipio of Saca-
pulas (§2.8).

Relations between Sacapultecs and local Ladinos are generally
amicable, as there has been no widespread Ladino encroachment on Indian
lands of the sort which has injected much bitterness into ethnic relations
in some nearby areas, such as the Ixil area. Ladinos, however, are often
relatively well-to-do, frequently acting as shopkeepers, tradesmen,
teachers, and government workers, in addition to the more commonplace
Sacapulas occupation of corn farming. Sacapultecs, who are themselves
often well-off by Indian standards (§1.1.4), seem to assume a right
to Ladino respect, and indeed receive it. Ladino shopkeepers who have
much contact with Indians may learn some Sacapultec, which they will
speak if interaction with a monolingual necessitates it. However, a large
proportion of town-living Sacapultecs are fully bilingual in Spanish,
and would always choose to converse in Spanish with Ladinos.

Sacapultecs (ax wura:l 'one from here'), on the other hand, do not mix
freely with the local "Chiquimulas" (ax čikimú:la 'one from (Santa María)
Chiquimula'). They have little admiration for the Chiquimula Quiché
immigrants, who have taken up remote lands which the Sacapultecs had dis-
dained to exploit. Sacapultecs may refer to Chiquimula Quiché as the gente
humilde, and tend not to interact with them except at the twice-weekly
market, and in certain cases, at cofradía (religious brotherhood) fiestas.
Intermarriage is said to be infrequent, though it does occur in areas where
the two populations border on each other. In general the Chiquimula Quiché
residents of the municipio of Sacapulas are looked down on by the Saca-
pultecs for their poverty, their lack of culture, their undue suspicion
of strangers, and their general lack of worldly sophistication.

Were a characterization of the Sacapultecs required, it might be said that they are a small but robust group who have for many centuries lived in close contact with other more numerous peoples, whether Spanish colonizers or other Mayan groups. They seem particularly adept at maintaining a continuity of indigenous tradition while incorporating whatever new cultural elements are useful, at the same time keeping up friendly and even advantageous relations with larger dominating groups from the outside. This adaptibility with continuity may represent an enduring Sacapultec trait: Robert Carmack has contrasted the "provincialism" of the early Quiché folk (of pre-Late Postclassic times) with areas "such as Sacapulas or Huehuetenango, where pre-Quiché cultural patterns continued to dominate down to the Conquest" (1981:53), in spite of their domination by the Quiché (§2.10).

1.1.2. Multilingualism.

The issue of communication between Sacapultecs and local Quiché immigrants is complex, raising as it does the question of whether understanding is reached through simple mutual intelligibility of unshifted varieties, or through bilingualism, or bidialectalism. This issue is taken up in detail below in the context of the language vs. dialect controversy (§2.4.2). For the present it may be noted that there is some linguistic interaction between Sacapultecs and Quichés, though it is less than one might suppose from their occupation of the same area.

Turning to Sacapultec-Ladino interaction, it is found that it is usually the Sacapultec who becomes bilingual, though some Ladinos learn Sacapultec (§1.1.1). For Sacapultecs, three social features can be discerned which correlate with the degree of bilingualism in Spanish. Town-

living Sacapultecs are more likely to know Spanish, and know it better,
than rural Sacapultecs; men are   likely to surpass women in control
of Spanish; and younger individuals tend to know more Spanish than their
elders in the same circumstances, at least after school age. Indeed some
Sacapultec children are being raised to speak nothing but Spanish, though
they usually know Sacapultec passively. This especially applies to chil-
dren of progressive young urban Sacapultecs, particularly converts to
Protestantism, who often tend towards assimilation to Ladino ways. How-
ever, only a small proportion of Sacapultec children are being raised in
this way.

1.1.3. Linguistic Geography.

Sacapulas is in an area which is extremely diverse linguistically,
standing within a day's walk of the Mayan languages Aguacatec, Ixil, Us-
pantec, and Quiché (Figure 1.3). Indeed, Sacapultec traders travel to
many of these language areas, carrying their black salt to the yearly
Ixil fiesta in Chajul, or candy for a special market day in the Quiché
town of Chichicastenango (Bunzel 1952:74). Some Sacapultecs have settled
in the nearby villages of Aguacatán (Aguacatec-speaking) and Cunén (Quiché-
speaking). Except for the local Quiché and Ladinos, however, most Saca-
pultecs do not carry on extended interactions with speakers of other
languages.

It is symptomatic of ethnic relations in Sacapulas, or the lack
thereof, that most settlements are not of mixed composition: the aldeas
and caserios (rural hamlets) tend to be inhabited by either Sacapultecs
or Chiquimula Quiches, but not both. Greater or lesser numbers of Ladinos
may be mixed into these communities, though most of the approximately one
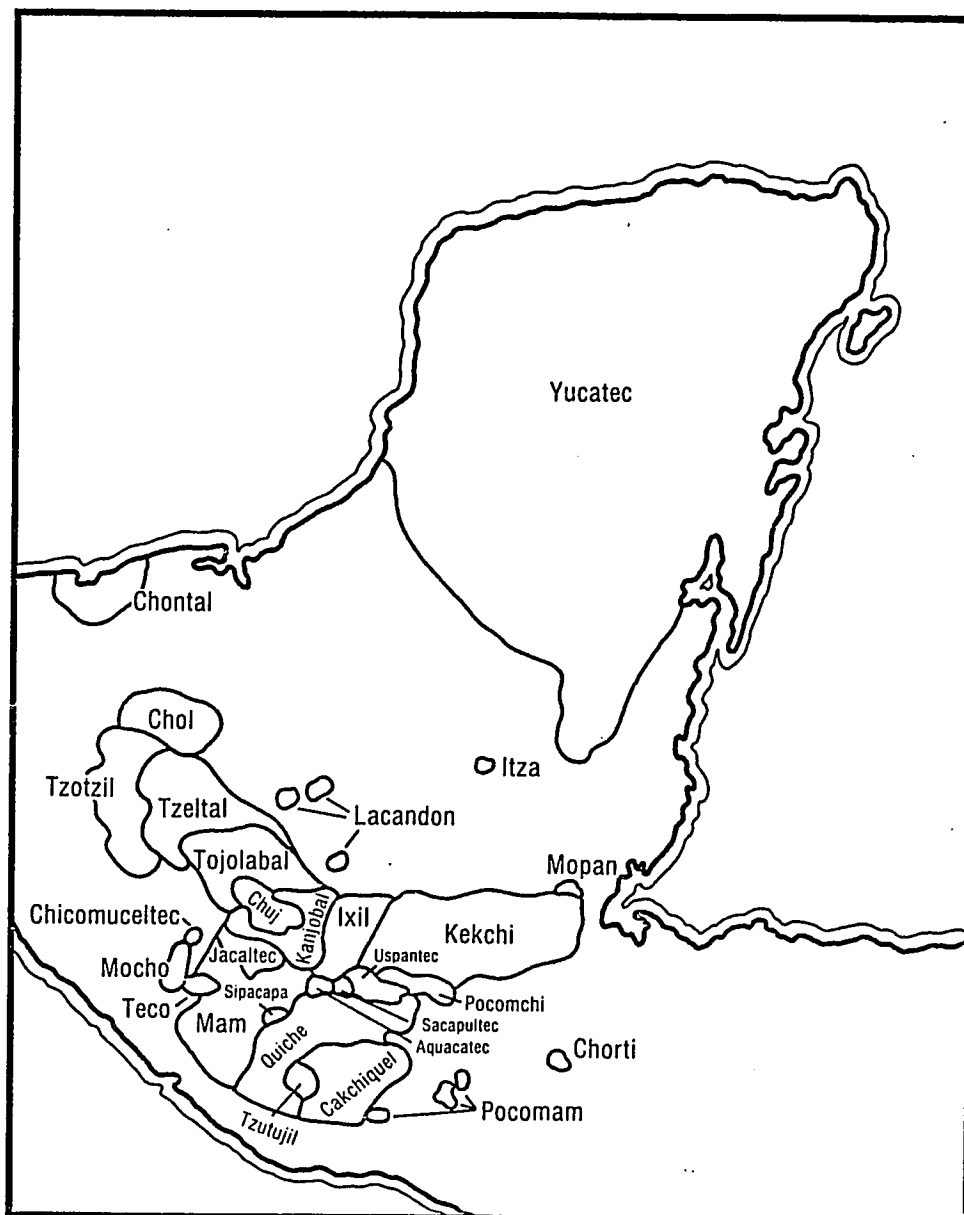
Figure 1.3. Mayan Languages (except Huastec) (adapted from J.A. Fox
          1978:3)

thousand Ladinos of Sacapulas are concentrated in just a few of the largest population centers. The Sacapultec-speaking aldeas and caserios are listed in Table 1.1.

Table 1.1 Sacapultec-Speaking Aldeas and Caserios[2,3]

Place Name		Population	
Spanish	Sacapultec	"Indígena"	Total
Chacaya	č'iqaya?	229	229
Chuchun	ču?ču:n	279	279
Chupacay	ču?paqay	46	46
Chutinamit	ču?tinimet	21	21
Chuvillil	ču?b'iyi:l	226	228
El Tesoro	piya?ilax če:?	107	124
Los Trapichitos	pirčaq ya?	349	354
Pacan	paq'an	61	61
Paguayil	pawayi:l	96	96
Pasaul	pasa?u:l	637	639
Rio Blanco	čukuma?¢	878	883
Sambaj	¢a?mb'ax	135	139
San Jorge	san xó:rxe	227	230
Xecatoloj	šek'atolox	195	218
Xetabal	še?tab'al	417	426

Based on population figures for "indígenas" (Indians) for these areas as reported in the most recent Guatemalan census[3], I estimate, with some extrapolation, that there are approximately 7,500 speakers of

Sacapultec in the municipio of Sacapulas. In addition, there are said to be a large number of Sacapultecs living in Guatemala City, where they have migrated in search of paying work. In all there are perhaps 10,000 speakers -- a small language by Guatemalan standards but nevertheless quite robust. As noted earlier, nearly all Sacapultec children grow up speaking Sacapultec, and a high proportion outside the town center are monolingual at least until school age. Evidence outlined in Chapter 2 suggests that Sacapulas has enjoyed its status as a well-entrenched minority enclave for five centuries at least. There is no reason to think it will not continue to do so.

The degree to which the majority of Sacapultec speakers live in isolation from Spanish speakers can be appreciated from the population figures cited in Table 1.1: for thirteen of the fifteen areas, the population is more than ninety-seven per cent Indian.

The Chiquimula Quichés of Sacapulas reside primarily in the areas listed in Table 1.2. They comprise roughly the same number of speakers as the Sacapultecs, again based on extrapolations from the census figures. Except in the large caserios of El Jocote and Llano Grande, (and the smaller Tierra Blanca), where large Ladino populations are found, most Quiché speakers live virtually isolated from Spanish speakers.

The pueblo of Sacapulas is by far the most cosmopolitan community in the municipio in many respects. It has the largest number of Ladinos in addition to about nine hundred Sacapultecs; yet only a handful of Chiquimula entrepreneurs have gained a foothold in the town. For Sacapultec speakers of outlying areas, tuxa:l or Sacapulas pueblo seems to be a prestige center from which certain linguistic innovations have diffused (p. 89, fn. 3).

Table 1.2. Quiché-Speaking <u>Aldeas</u> and <u>Caserios</u>

Place Name		Population	
<u>Spanish</u>	<u>Sacapultec</u>	<u>"Indígena"</u>	<u>Total</u>
Chaoj	ča?o:x	34	34
Chupacbalam	ču?paqb'a:lam	123	123
Chibuc	ču?b'u:q	182	182
*El Jocote	xokó:te	254	424
Guantajaw	wanta?xa:w	623	624
La Abundancia	salſ:nas la abundánsia	515	515
*Llano Grande	yá:no grá:nde	517	651
Parraxtut	paraštot	1586	1596
Pasaneb	pisane:b'	185	186
Pocomon	pakaman	43	43
Rancho de Teja	prančaŋ	176	201
Salinas Magdalena	salſ:nas magdalé:na	1371	1377
Tierra Caliente	miq'an xyub'	21	21
Turbalya	paturb'al ya?	139	140
Tzampoclaj/ Tierra Blanca	ȼa?m paqala:x	10	47

<u>*Caserios</u> including a large Ladino population

1.1.4. History and Salt-Making.

There is little in Sacapulas today that would alert the visitor to the past importance of the town, or to what the source of this importance might have been. Yet Sacapulas has long been known locally for its pro-

duction of a valued black salt, extracted from mineral hot springs by a complex process occupying several days. This salt, whose color derives from mineral impurities which impart a unique flavor, may have played an important part in the history of Sacapulas. The eighteenth century visitor Cortes y Larraz commented on the products of the parish of Uspantán, which at the time included Sacapulas:

> Los frutos que hay en estos pueblos son maices y
>
> poco ganado, pero en el de Sacapulas hay salinas y
>
> se fabrica bastante sal, de que sacan mucha utili-
>
> dad sus vecinos y las tienen dentro del mismo pueblo,
>
> con lo que se consideran indios ricos. (Cortes y
>
> Larraz [1775] 1958, v. 2, p. 41)

A detailed description of the salt making process had been given in the previous century (Tovilla [1635] 1960:217-219, cited in Carmack 1973:183). The impression remains that Sacapultecs still consider themselves "rich Indians", and they certainly are aware of the uniqueness of Sacapulas' black salt, which receives high prices at neighboring markets and fiestas. The importance of salt for Sacapulas wealth was in early times much greater, due to the scarcity of sources in the highlands. The archaeologist Frans Blom stressed the importance of salt in the Maya area, observing that since

> salt was produced only in limited areas it naturally
>
> became a major trade object. ...In the highlands of the
>
> Maya area we encounter salt wells at Ixtapa in the state
>
> of Chiapas, <u>at Salinas on the Chixoy river</u> in Guatemala
>
> and a few other places. But this production was small and
>
> very localized in distribution. (Blom 1932:535-536; em-
>
> phasis added)

sites from the Early Postclassic Period (about 900-1200 AD) and as early

as the Late Classic Period (about 700-900 AD); Figure 1.5 shows a more

detailed map of the Sacapulas sites. Fox has suggested that during the
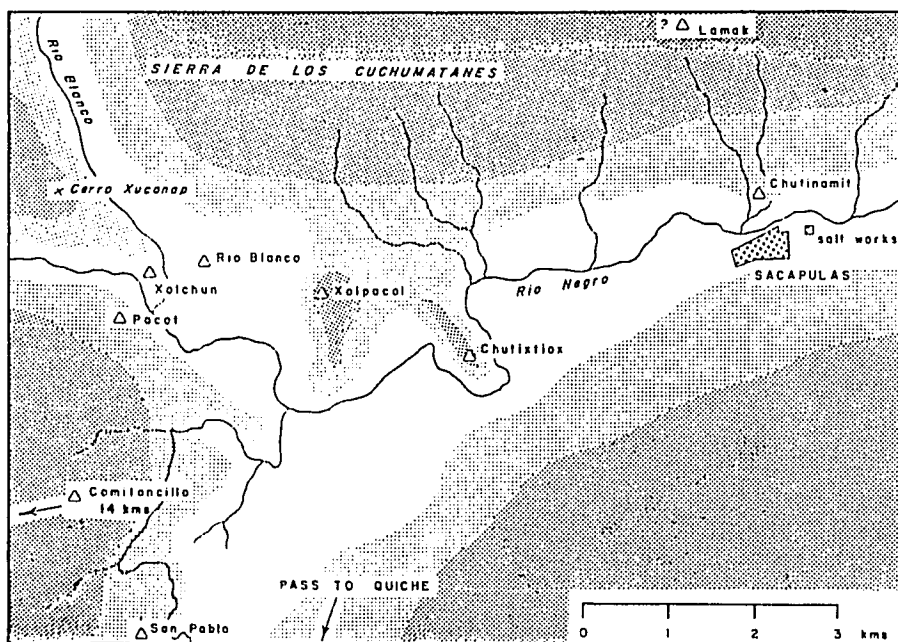
Figure 1.5. Sacapulas Area Sites (J.W. Fox 1978:70)

later period Sacapulas "was an early center of cultural influence in the

Río Negro headwater region" (Fox 1978:137). The special qualities of the

village of Sacapulas were in fact enough to attract the attention of

larger and more powerful neighbors. By the Late Phase of the Late Post-

classic (1200-1524) the militarily and politically ascendant Quiché had

begun to expand. Sacapulas was an attraction for several reasons:

> The conquest of Sacapulas was desirable for the
>
> Central Quiche, for Sacapulas produced such val-
>
> uable commodities as salt, copper, small fish,
>
> and a wide variety of <u>tierra caliente</u> agricultural
>
> produce, all of which were lacking in the Quiche
>
> Basin.   (J.W. Fox 1978:111)

The special resources of Sacapulas have perhaps contributed to the variety of ethnic groups which have met there; and the resulting language contact has had a marked influence on the Sacapultec language (§2.8-2.9).

1.2. Language Name.

The name which is to be applied to the speech of Sacapulas is not widely agreed on, in Sacapulas or out. Sacapultec speakers may use the word kiče: 'Quiché', but this is clearly an unassimilated loan through Spanish: its bare final vowel does not fit the Sacapultec syllable canon, and the lack of glottalization in the initial consonant shows its non-Mayan immediate origin. Sacapultecs may use the Spanish label <u>Quiché</u> because of the prestige of Quiché history and culture in modern Guatemala; in addition, some Sacapultecs have been told by non-Sacapultecs that they speak Quiché (§2.4.1).

Contributing to this use of the available prestige term Quiché is the unavailability of a native name specifically denoting the speech of Sacapulas. As is the case for many languages, the ordinary reference to Sacapultec is simply 'our speech' -- qač'ab'a:l.

In Spanish, the speech of Sacapulas can be referred to as Quiché or simply lengua, a general term applicable to any Indian language. Some Sacapultecs have referred to their language as Cakchiquel (John Monaghan, personal communication), a not unenlightened classification (see Chapter 2).

Kaufman's label Sacapultec (Sacapulteco in Spanish) is derived from the Spanish town name Sacapulas, a word whose etymology is disputed (Arriola 1973:488; Reina and Monaghan 1981:15).
The term Sacapulteco is not applied unbidden to their language by Sacapultecs. The word is associated with the town, however, in such uses as names of sport teams.

In general one must say that Sacapultec as a language is not readily codable; and yet Sacapultecs show a sharp, if linguistically covert, awareness of the special and separate nature of their speech. They never hesitate in classifying a word or a construction as "not of mero Sacapulas".

1.3. Discovery and Classification.

Sacapultec is among the last of the Mayan languages which can be said to have been "discovered" in this century. According to Kaufman, the speech of Sacapulas has been taken to be Quiché since the beginning of the Republican period (1976b:70). The distinctive speech of Sacapulas may have escaped notice for so long in part because of bilingualism: Quiché has indeed been used in Sacapulas, not only by immigrants from Santa María Chiquimula but by some bilingual Sacapultecs as well (§ 2.8). As long as no systematic investigation was undertaken, it would have been easy for casual visitors to assume that Sacapulas shared the language of its immediate neighbors to the south.

In the fall of 1970, a systematic dialect survey of the Guatemalan

Mayan area was initiated by the Proyecto Lingüístico Francisco Marroquín

under the technical direction of Terrence Kaufman. That same year, Lyle

Campbell had collected some words from Sacapulas which did not seem to be

typical of Quiche. Kaufman then followed up on this. In his own words:

> In early 1971, I got an informant from Sacapulas,
>
> interviewed him for a week, and found that his
>
> speech was definitely not Quiche, nor Cakchiquel,
>
> nor Tzutujil, but nevertheless belonged to the
>
> same group. (Kaufman 1976b:70)

Kaufman's view was seconded by Lyle Campbell and Will Norman of the Pro-

yecto following a brief visit two years later to Sacapulas.

What was discovered, of course, was the distinctiveness of the speech

of Sacapulas in the scheme of Mayan dialectology. An American missionary

Bible translator, Ralph McCluggage, and several colleagues had lived in

Sacapulas for some years before the visits of Campbell and Kaufman; he

spoke the language, and had initiated some linguistic field work on the

language (§1.5.1).[5] But it was Kaufman who perceived the diagnostic

criteria which forced recognition of a distinct new Mayan language.

It should be pointed out that the "discovery" in fact represents a

rediscovery. A sophisticated awareness that Sacapultec was one among

the several Mayan languages was at one time part of indigenous knowledge

(§2.8). This knowledge in later centuries was lost to outsiders.

Classification of the newly remarked speech of Sacapulas was at first

debated in terms of whether Sacapultec was a dialect of Quiche or the

closest cognate language of Quiche; it is suggested here (Chapter 2)

that the terms of the debate must be broadened.

1.4. Historical Materials.

The complex historical background of Sacapulas bears significantly
on linguistic developments. Information is available both from early
documents and archaeology.

1.4.1. Early Documents.

The most important early document from Sacapulas is the Título de
Sacapulas (Acuña 1968), composed apparently in 1551. It was written
"by lords of the Canil and Toltecat ruling lines at Sacapulas" (Carmack
1973:38), in part as a claim to the salt springs. It describes migration
of the ancestors of the Sacapultecs, the founding of Sacapulas sites,
and their subjugation in war by their rivals (Carmack 1973:88). Origin-
ally composed in Quiché, most of it is now known only in a Spanish trans-
lation. Carmack speculates that the Quiché original "may still be among
the ancient documents jealously guarded by the cofrades at Sacapulas"
(1973:37, fn. 17), but he was not permitted to see any.

Other documents from Sacapulas record primarily land disputes. Car-
mack·observes that especially in the eighteenth century, "land rights
conflict was endemic between the several ethnic components (parcialidades)
of Sacapulas" (1973:207). Carmack discussed a number of these docu-
ments (1973:149; 206-209) and presented portions of several Sacapulas
documents as appendices (1973:355ff; 368f; 392ff; 399ff). Records
of cofradía (religious brotherhood) business may also be found in
the hands of some Sacapultec individuals, and in the Princeton library.

<u>1.4.2. Archaeology.</u>

Archaeological investigations were carried out for several Sacapulas sites by A. L. Smith (1955). Important analysis of data from Sacapulas has been contributed by John W. Fox (1978). New investigations in Sacapulas have recently been initiated by Charles Ward of the University of Pennsylvania.

<u>1.4.3. Ethnography.</u>

In addition to the information which can be gleaned from the early sources, valuable ethnographic material may soon become available from modern sources. The ethnohistorian and ethnographer Robert Carmack has carried out some investigations in Sacapulas (1973:37, fn. 17), as has Ruben Reina. A full-scale investigation is now under way in the hands of Reina's student John Monaghan of the University of Pennsylvania.

<u>1.5. Field Work.</u>

As one would expect for a newly discovered language, little previous linguistic field work on Sacapultec has been carried out, and less has been published.

<u>1.5.1. Previous Investigations.</u>

The earliest field work in recent times on Sacapultec was carried out by Ralph McCluggage and his colleagues, American missionary Bible translators loosely affiliated with the Summer Institute of Linguistics. After the first year of his stay in Sacapulas, McCluggage prepared a preliminary manuscript sketch of the language. Since that time, he has published translations of portions of the Bible into Sacapultec (1975), as

well as several phonograph records of sermons rendered in Sacapultec. Recently David Henne of the Summer Institute of Linguistics has assisted McCluggage in working on Sacapultec.

Lyle Campbell carried out some brief field work on Sacapultec in 1970 and again in 1973. Some of this is reported in his dissertation (1971); slightly different material appears in the revised published version (1977).

Terrence Kaufman carried out an intensive investigation of Sacapultec during one week in 1971. A small portion of this information was incorporated into his article published a few years later (1976b). The rest of this valuable material remains in manuscript form; a copy can be found in the archives of the Proyecto Lingüístico Francisco Marroquín in Huehuetenango, Guatemala.

William Norman has carried out several days' field work in Sacapulas, but no publication has resulted.

In all, little linguistic investigation had been carried out on Sacapultec and almost nothing had been published prior to the present investigation.

1.5.2. The Present Investigation.

In 1974, I first visited Sacapulas for several days, after becoming aware of the claimed discovery of a new language there. An informant was secured with the help of Ralph McCluggage, and a brief elicitation carried out. Two and a half years later, in January 1977, I returned for an eight-month stay in the pueblo of Sacapulas, with a commitment to preparing a grammar of the language. During the investigation, the usual methods of word, sentence, and text elicitation were employed, with several Sacapultec informants from the pueblo, mostly males. In addition, some preliminary probes into Sacapultec dialects were made

during brief visits to outlying <u>aldeas</u>.

The main informants, with each of whom more than a hundred hours of directed elicitation and text transcription were carried out, are all from Sacapulas <u>pueblo</u>.[6]

1) Jacinto Mutás Lopez, age twenty-two, was mono-
lingual until the age of seven, when he learned Span-
ish upon entering school. He is now fully bilingual
in Spanish, and relatively well-educated, having com-
pleted "tercer básico", the equivalent of ninth grade,
as well as a course for <u>promotores bilingües</u> (a sort
of Indian auxiliary teacher group). He eventually
secured work as a clerk in the town hall. As a con-
vert to Protestantism, he was somewhat assimilated to
Ladino ways. His command of his native language, how-
ever, was impeccable, and the precision of his judg-
ments of nuance was of great value. Jacinto's diplomatic
skills were of great use as he assisted me in working
with other Sacapultecs ($7.2.1).

2) Manuel Lancerio Gomez, age twenty-six, had lived
all his life in the town center. He was fully bilingual
in Spanish, and had the same educational background as
Jacinto Mutás. He was a member of <u>Acción Catolica</u>, a
Catholic social and religious organization. He worked
originally as a tailor and, occasionally, a maker of black
salt; later, he worked as a <u>promotor bilingüe</u> in a Quiché-
speaking hamlet. He was blunt but exact in his linguis-
tic judgments, and after I had taught him to write in a

practical alphabet developed for Sacapultec (§3.8),
he was able to contribute transcriptions and trans-
lations of texts carried out on his own.

    3) Sebastian Mutás Ventura, age fifty-two, is the
father of Jacinto Mutás. He had the least formal ed-
ucation of the main informants, though he was bilin-
gual in Spanish. He worked for the National Police
for eighteen years and as a result has lived in many
parts of the country, including Quiché-speaking towns.
When asked if, in addition to his own language, he
spoke some other "idioma indígena" (Indian language),
he responded that he could speak passably like the
Chiquimulas -- suggesting that he considers their
speech to represent a distinct language. He held a
variety of important posts during a number of years
in Sacapulas cofradías, and achieved the position of
principal (elder) in the indigenous civil-religious
hierarchy.

Other important assistants were Micaela Lopez Mutás, a cousin of
Jacinto Mutás, age about thirty; and Petronila Gomez Alecio, about
thirty-five; both were of the town center. As interviewers they helped
gather large numbers of texts in a film project, discussed below (§7.2.1).

The linguistic sample of Sacapultec is rounded out considerably by
the large number of texts which I have gathered from speakers of both
sexes and all ages, from teenagers to monolinguals over sixty. In all,
I have recorded texts (many in connection with the film project, §7.2.1)
from at least forty town center Sacapultecs. I have transcribed and

translated a large number of these, and draw on their analysis in the present grammar.

A major project was elicitation of a large body of controlled texts, through the showing of a brief film to native Sacapultec speakers, and the subsequent recording of their verbalizations of the story. (The procedure is described in some detail below (§7.2.1); see also Du Bois 1980b). This formed part of a larger investigation into discourse structure (Chafe 1980). The elicitation technique made possible a valuable statistical perspective on Sacapultec grammar and discourse; results are analyzed in §7.3.

After my initial field trip from January to August of 1977, I made briefer visits from December 1977 to January 1978; June to August 1978; June to July 1979; and July 1980.

In the last trip, I carried out a study of Sacapultec color terms with the assistance of Robert McLaury. Five Sacapultec speakers, two of them over the age of seventy, were asked, among other tasks, to provide color names for each of three hundred thirty Munsell color chips presented in random order. The results of this study, however, must await later development.

Tape recordings of Sacapultec which I made in my field work, consisting primarily of texts, have been deposited in the Language Archive of the Language Laboratory at the University of California, Berkeley.

1.6. The Language.

The Sacapultec language shows many of the features which characterize the Mayan languages in general. In phonology, it has a full series of glottalized occlusives, including both ejectives and implosives; it has a

vowel system of ten vowels, with five vocalic qualities and length. Morphologically it is largely agglutinative and moderately polysynthetic, making use of the morphological processes of prefixation, suffixation, reduplication, and vowel ablaut. Person-number agreement clitics for both subject and object are incorporated into the verb word; these clitics pattern ergatively. A distinct form class of bound "positional" roots, common to many Mayan languages, embodies meanings of shape, texture, and so on. In syntax, the basic word order is Verb-Object-Subject, though word order is relatively flexible. The voice system includes the characteristically ergative antipassive in addition to passive, as well as a voice whose function is similar to the "instrumental" voice of other Mayan languages. Contributions to discourse organization are made by a set of articles whose functions include marking of new referents as distinct from indefinite referents.

Notes to Chapter 1

1. Though the dialect/language controversy remains to be decided (see
   Chapter 2), for now we may refer to the speech variety peculiar to
   Sacapulas as Sacapultec. Quiché will refer specifically to the speech
   varieties uncontroversially labeled as such, i.e., those outside
   Sacapulas. The term language may, for convenience, be applied to
   Sacapultec, but this is not intended to prejudge the issues outlined
   in the second chapter.

2. This listing, unfortunately, is not exhaustive; the same is true of
   the Chiquimula Quiché listing (Table 1.2).

3. Census figures for Sacapulas were obtained by the author directly
   from the Dirección General de Estadística in Guatemala City in 1977;
   unfortunately, bibliographical information on the census is no longer
   accessible.

4. In a recent article on Sacapulas salt-making, Reina and Monaghan (1981)
   describe the Sacapultec process in detail, and confirm its social,
   economic, and historical importance.

5. Also, the (then) missionary priest James Mondloch, a fluent speaker of
   Quiché who later became a Mayan linguist, had observed that the speech
   of Sacapulas did not fit into the pattern of what was known as Quiché.

6. Ages are given for when field work began in 1977.

CHAPTER 2

THE POSITION OF SACAPULTEC IN THE MAYAN FAMILY

> The problem of defining what is a language
> and what is a dialect is not a supremely
> rewarding task....
>
> --Terrence Kaufman

2.1. Introduction.

In this chapter I will attempt to shed light on the historical position of the speech of Sacapulas within the Quichean branch of Mayan. It will be necessary to answer the following questions: Is Sacapultec a dialect or a distinct language? If it is a dialect, of what language is it a dialect? If it is a distinct language, with which Quichean languages is it most closely affiliated?

For a long time the speech of Sacapulas has been assumed by outsiders to be Quiché. When Kaufman (1976b) showed that the speech of Sacapulas differed substantially from Quiché, a controversy arose as to whether the divergences were sufficient to warrant recognition of Sacapultec as a distinct Quichean language. If Sacapultec is simply a dialect, as some feel, one must decide which language it is a dialect of. While this may seem trivially obvious, I believe the question has not actually been addressed. Since Sacapultec was long thought to be a dialect of Quiché, it was assumed that, if the arguments in favor of its status as a separate language fail, it must revert to its former position as a dialect

of Quiché. As a reflection of this view, a linguist, specialized in
Mayan languages but with no special knowledge of the languages discussed
in this chapter, might suppose that the burden of evidence lay upon
any claim that Sacapultec was not a dialect of Quiché. Such an atti-
tude would no doubt be considered as a healthy skepticism. Yet this
"skepticism" turns out on inspection to represent quite the opposite --
for acceptance of a premise that Sacapultec must be Quiché if no evi-
dence is forthcoming must be recognized, once expressed in these terms,
as more credulous than skeptical. The linguistic folklore that circu-
lates locally about the speech of a distant village surely cannot estab-
lish an a priori "default" classification which may be invoked if nothing
better is found. If a speech variety has not been subjected to scien-
tific methods of classification, it is, simply, unclassified. It is
clear that there can be no classification without argumentation. Once
that the speech of Sacapulas is approached with no initial presumption
as to its classification, a full presentation of evidence and arguments
will allow the issue to be evaluated directly.

When I first looked into the questions outlined, my intention was
simply to discover the position which Sacapultec occupies in the Mayan
family. This is basically a linguistic issue; but the process of sift-
ing through the linguistic evidence led to a quite unanticipated sub-
grouping of the Quichean languages. This new linguistic classification
demanded some inquiry in order to establish the plausibility of its his-
torical implications; for if the classification was compatible only with
a historically impossible set of events, it should certainly be called
into question.

In any case, the linguistic evidence should stand on its own. The first portion of the chapter will consider the language status of Sacapultec and its place in a new classification; the latter portion will address the implications for prehistory.

2.2. Statement of the Issue.

The dialect vs. language question has arisen several times before for languages of the Quichean branch: it has been debated seriously for Pocomam and Pocomchí, and, more close to home, for Cakchiquel and Tzutujil, and differing views still exist in the former case. It will be instructive to examine the history of these controversies and consider the types of facts which have been called into evidence.

The ethnohistorian Susan W. Miles (1957) suggested that Pocomam and Pocomchí were not different languages, but that different political structures imposed after the Conquest caused them to be seen as different groups. A few years later, Marvin K. Mayers, in an article ambiguously titled "The linguistic unity of Pocomam-Pocomchí" (1960), argued on the basis of phonological isoglosses and shared retention that Pocomam and Pocomchí were indeed distinct languages. His glottochronological analysis indicated a separation of eight to sixteen minimum centuries. But Carlos Robles U. (1962) suggested that Mayers' unfamiliarity with Pocomchí had led him to miss cognates that did in fact exist. Robles' recalculation indicated only 1.2 to 3.5 minimum centuries of divergence. In his 1971 dissertation, Campbell sided with Miles and Robles, suggesting that Pocomam and Pocomchí, though well defined as dialects, were probably not different enough in grammar to be considered separate languages (1977:33). He reiterated Miles' observations, and pointed out that etymologically

the terms Pocomam and Pocomchí need not suggest separate languages, as
they are both derived from pokom : in the first case, by adding the
plural marker -ab' [-aʔm] (hence 'Pocoms'), in the second by adding
the word for language (thus 'Pocom language') (1977:33). (However, in
Campbell's recent classification (1979:932) Pocomam and Pocomchí are
listed as separate languages.) Kaufman has sometimes treated Pocomam
and Pocomchí as dialects (1968), but more often and most recently as sep-
arate languages (1964, 1969, 1972, 1974a, 1974b, 1976a, 1976b).

The Cakchiquel/Tzutujil question was debated on similar grounds dur-
ing the same period, though the result has been more conclusive. James
L. Grimes proposed, largely on the basis of shared lexical retentions,
that Cakchiquel and Tzutujil were not distinct languages (Grimes 1968).
This point of view was supported by Sheldon A. Sper (1970) with arguments
based on similar evidence. Both the data and the validity of the argu-
ments of Grimes and Sper were attacked effectively by Campbell (1977:26-
30). Campbell has strongly questioned the general validity of the lexi-
costatistical method, particularly in matters of classification. He
reports that he managed to find five minimum centuries of separation
between two Quiché-speaking cousins from the same town, using a "naive
application" of the method (1977:63-65). Turning to the sounder evidence
of converging isoglosses for innovations, Campbell concludes that Cak-
chiquel and Tzutujil are, separate languages (1974a, 1974b, 1976a, 1976b).
Though no one now actively argues that they are dialects, still it is
recognized that as languages they are quite similar.

The fact that such dialect controversies arise so frequently is
related to the difficulty in subgrouping closely related languages,
especially when these languages have had long and substantial contact, as

have the Quichean languages. Quichean languages have continued to exert considerable influence on each other even after they have become unquestionably distinct languages. Their structural similarity in phonology and grammar and lexicon has allowed an easy adoption of innovations from one language to the next. This has been true of Quichean languages to such an extent that it is difficult to adequately subgroup even such distinct languages as Uspantec, Pocom, and Kekchí. After a discussion of grammatical features distinguishing these languages, Campbell was led to remark:

> In these and other grammatical differences it is impossible to know whether common innovation, diffusion within Quichean, diffusion from other subgroups, or retention is the explanation for shared similarities. Therefore, subgrouping becomes very difficult within the Quichean group. (1977:72)

These cautions must be kept in mind in evaluating any discussion of Quichean subgrouping, including that offered below.

In the end one must admit that, given that distinct Quichean languages exhibit much of the same mutual influence as is found between dialects of a single language, the dialect vs. language question becomes ultimately less important. This view seems consonant with the approach of Kaufman, who in a similar controversy over the dialect status of Acatec argued simply that whatever status is accorded to Jacaltec and Kanjobal must be accorded to Acatec (1976b:71, 89). And Campbell implicitly minimized the importance of the dialect/language distinction in Quichean Proper, stressing the fact that in any case overlapping isoglosses show continued mutual influences. Speaking of Quiché, Cakchiquel, Tzutujil,

Sacapultec and Sipacapa, he said:

> These five entities (be they languages or dialects)
>
> obviously split off from the other Quichean languages
>
> as a single language that later split up, and as
>
> such may have constituted an old "dialect area" with
>
> overlapping isoglosses.   (1977:19)

From all this it might be supposed that it is in the nature of

Mayan dialect controversies to remain inconclusive even after the appro-

priate evidence has been found and evaluated; and that the status of

Sacapultec as a possible dialect of Quiché will likely remain in just

such a haze.   But I will suggest that the case is intrinsically different

for Sacapultec; that, unlike other controversies in Quichean, this is not

simply a matter of a dispute over the degree of divergence one chooses to

allow between speech varieties before one must call them languages; and

that, once the proper evidence has been evaluated, a view of Sacapultec

as a dialect of Quiché is decidedly out of the question.

2.3. Previous Treatments of Sacapultec.

Let us now consider where Kaufman and others have placed the speech

of Sacapulas in the scheme of Mayan classification.

In his 1973 paper, Kaufman had classified two Quichean languages,

which he named Sipacapa and Sacapultec after the towns in which they were

spoken, as new.   He provided some thirty "diagnostic criteria" for the

subgrouping of Quichean, many of them representing grammatical innova-

tions (1976b).   His paper was thus the most explicit presentation to date

of useful tools for Quichean subgrouping.   The criteria, however, pointed

to somewhat ambiguous conclusions. There is considerable overlapping
of isoglosses for shared innovations, suggesting extensive mutual in-
fluence among Quiché-Sacapultec-Sipacapa-Cakchiquel-Tzutujil (and even
other Quichean languages as well) after their split into distinct
languages. One could interpret this as a borderline case of five lan-
guages or five dialects. But in any case, Kaufman argued that the status
accorded to Quiché, Cakchiquel and Tzutujil must also be accorded to
Sacapultec. Figure 2.1 illustrates this position: Sacapultec and Sipa-
capa are listed as separate languages along with the rest, but no finer
subgrouping has been specified. That is, Kaufman makes no suggestion
that some subset of these five languages

Quichean complex

Quiché

Sacapultec

Sipacapa

Cakchiquel

Tzutujil

Figure 2.1. Kaufman's Subgrouping of Quichean Proper (1974b:959)

made a clear break from the others and subsequently underwent a period of
independent specialized development. Nevertheless, he does suggest that
certain members of this group are more closely linked than others; but
they are linked by diffusion rather than by common genetic separation.
His map of postulated Quichean dialect distribution for 800 AD, shown
in Figure 2.2, suggests these ties: each line between two dialects
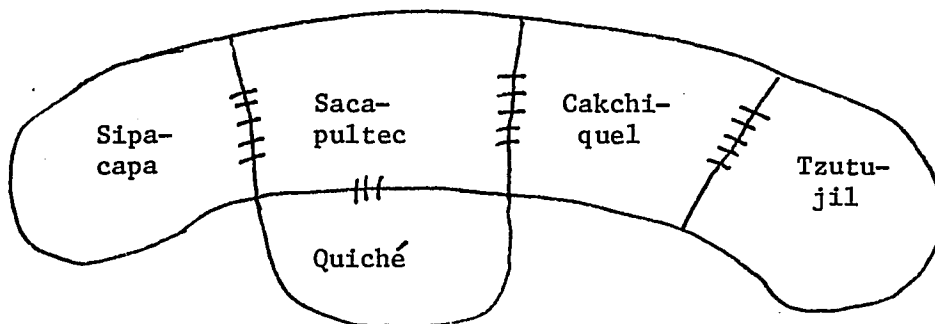
Figure 2.2. Kaufman's Postulation of Quichean Dialect Distribution
(About 800 AD). (Innovations shared between adjacent
dialects are shown by lines drawn across boundaries).
(adapted from Kaufman 1976b:84)

represents one shared innovation. (These "diagnostic criteria" will be taken up in §2.5 and §2.7 below.) Note particularly that in Kaufman's map, as he himself observed, it is Quiché that stands most distinctly apart from the other languages. This picture will be confirmed, and its implications drawn out, in the discussion of the Cakchiquelan hypothesis below.

In his 1971 dissertation (not published until 1977) Campbell at first treated Sacapultec and Sipacapa as dialects of Quiché, though he left open the possibility that they could be distinct languages. After describing innovations in Sacapultec and Sipacapa, including several shared with Cakchiquel and Tzutujil but not Quiché, he stated, "Even if it should be decided that Sipacapa and Sacapulas are best treated as separate languages, they are obviously most closely related to Quiché" (1977:19). This reference to the "obvious" unfortunately exemplifies the "default" classification that has been assumed.

In later treatments Campbell continued to downplay (appropriately) the significance of the dialect/language distinction, although he did ultimately accord separate language status to both the "entities" Sacapultec and Sipacapa (1979:932). However, he kept to his assumption of their closer relation to Quiché than to Cakchiquel and Tzutujil.
His revised subgrouping is presented in Figure 2.3 (Campbell 1976:8; 1979:932). Because this subgrouping appeared in works primarily devoted other issues, no explicit arguments were advanced to support the placement of Sacapultec and Sipacapa.

To summarize, then: in the past linguists have at one time or another placed Sacapultec within Quiché as a dialect; or treated it as a distinct

```
                        Quichean
                        Proper



         Quiché    Sipa-    Saca-      Cakchi-    Tzutu-
                   capa     pultec     quel       jil
```
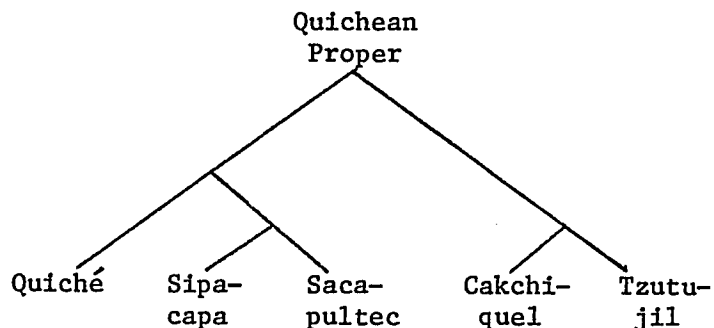
Figure 2.3. Campbell's Subgrouping of Quichean Proper (1976b:8; 1979:932)

language, yet still placing it within a small subgroup consisting of

Quiché, Sacapultec and Sipacapa.

Before attempting to trace out the central argument of this chapter,

it will be useful here to provide an orientation, in the form of an al-

ternative to the two views already outlined. This alternative may be

characterized as the "Cakchiquelan" hypothesis: a subgroup is posited

consisting of Sacapultec and Sipacapa plus Cakchiquel and Tzutujil,

while excluding Quiché. This is illustrated in Figure 2.4. The evidence

```
                        Quichean
                        Proper


                              Cakchiquelan



         Quiché        Saca-    Sipa-    Tzutu-   Cakchi-
                       pultec   capa     jil      quel
```
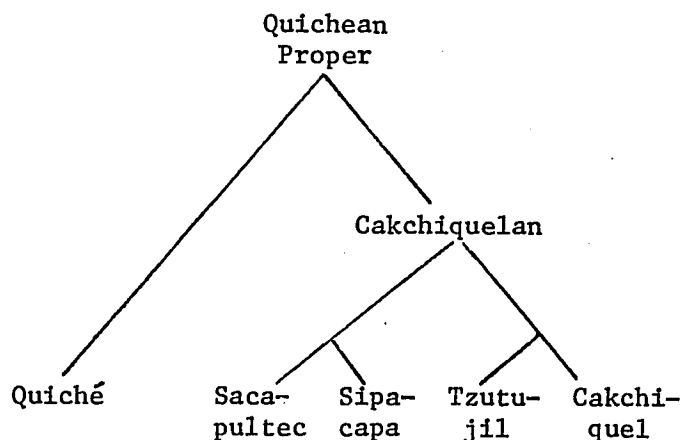
Figure 2.4. The Cakchiquelan Hypothesis

of shared linguistic history that will establish the Cakchiquelan hypothesis is considered in § 2.7 below. At this point, however, it is necessary to step back and consider the view that has been mentioned of Sacapultec as a dialect of Quiché.

2.4. Sacapultec as Quiché Dialect.

In the view of Sacapultec as a dialect, the issues to be considered may be classed into two groups: those which are primarily sociolinguistic, and those which are purely linguistic. Relevant sociolinguistic criteria are language loyalty, mutual intelligibility, and bilingualism. The most important purely linguistic criterion is the presence or absence of transitional speech varieties.

2.4.1. Language Loyalty.

The view is sometimes expressed in the sociolingiustic literature (particularly that dealing with the national languages of Europe) that -- put simply -- the final criterion for whether two people speak different languages is their belief that they do, or do not, speak different languages. The grain of truth in this view rests of the assumption that a speaker of a non-standard dialect may in certain social contexts model his speech on that of an established standard variety which is linguistically similar to his own. In a number of linguistic situations (e.g. Dutch/German, Norwegian/Danish) two alternatives for this "linguistically similar" standard variety may present themselves, each valid on purely linguistic grounds. In this circumstance it is ultimately the speaker's belief that he speaks one or the other language which decides his loyalty to a standard, thus determining, at least for self-conscious

social contexts, the direction of modification of his linguistic behavior.
Justification for an appeal to speakers' belief, then, rests on its ob-
servable effects on concrete linguistic behavior in certain sociolinguis-
tic contexts. And over time, of course, a consistent direction of style-
shifting may lead to permanent effects on the non-standard dialect such
that by objective linguistic criteria it begins to approach the "felt"
standard language, while becoming more distant from the language which
had once been a potential alternative standard. Supposing that this new
state of affairs should come into being, controversy over language boun-
daries disappears, since a clear differentiation on purely linguistic
grounds can be made. Thus a useful appeal to the psychological criterion
of language loyalty will depend on the existence of recognized standard
varieties, and on the power of these standards to effect changes in lin-
guistic behavior: in the short run, style-shifting, and in the long run,
if it comes, permanent historical change toward the chosen standard.

In applying this criterion to Sacapultec, one might argue that since
Sacapultecs sometimes call their language Quiché, they speak Quiché.
The problems with this are many (§1.2.), beyond the cautionary note
that is sounded by the obviously marginal status of the term Quiché it-
self as a Sacapultec word. First, it is not clear that when the Sacapultec
says Quiché he means what the Mayan linguist means by this word. Saca-
pultecs who use the word Quiché clearly believe that they speak "correct"
Quiché; what the Chiquimula immigrants speak lies somewhere in the ill-
defined limbo of poor speech. So the linguist who hears a Sacapultec
apply the label Quiché to his own speech may be

surprised to realize that he will only grudgingly accept that the Chi-
quimulas speak a debased version of this language. One need not look
far for the probable explanation of this appropriation of the Spanish
loan word Quiché to the speech of the Sacapultecs. The word Quiché car-
ries a considerable prestige in modern Guatemala, where the sixteenth
century Quiché captain Tecún Umán is extolled as a potent symbol of
Guatemalan nationhood, and where, on a less assimilated level, the figure
of Rey Quiché (the Quiché king) stands out in the yearly enactment by a
Sacapultec religious brotherhood of the Dance of the Conquest. And one
must not underestimate the influence of outside teachings of language
classification: one of my informants returned from a meeting for bi-
lingual Indian teachers in a distant town with the information that he
spoke "Quiché II" -- a regional dialect of Quiché, in the classification
of his teachers.

The problem of finding what the Sacapultec means by Quiché is
really a symptom of a deeper problem. It has never been established that
Quiché speakers anywhere recognize a consistent standard variety of Quiché.
And it must certainly be said of the Sacapultecs that they admit no variety
outside of Sacapulas as a standard. The mere use of a language label, of
doubtful reference and of marginal status in the language, is meaningless
in light of the fact that Sacapultecs recognize no standard beyond Sacapulas.

Finally, given this refusal to recognize a standard for "Quiché"
outside Sacapulas, one should be able to expect as a corollary that Saca-
pultecs do not modify their linguistic behavior in deference to non-Saca-
pultec norms. In fact, they do not; this is seen in the following sec-
tion, where the issue of bilingualism is addressed.

2.4.2. Bilingualism and Mutual Intelligibility.

A variety of criteria, sometimes conflicting, may be invoked to de-
cide whether two forms of speech represent distinct languages or simply
dialects of a single language. To some extent the criteria used depend
on one's purposes. For practical matters, such as designing practical
orthographies and publishing educational literature, mutual intelligibi-
lity may be an important factor. In the case of Sacapultec, some speakers
can make themselves understood with speakers of at least one Quiché dia-
lect, that of the Santa María Chiquimula Quichés of Sacapulas.

Although some are able to communicate with the Chiquimula Quiché,
some report difficulty in communicating when traveling to other Quiché
communities. Given the contact situation in Sacapulas it is difficult
to determine whether success in communication is due to 1) mutual intelli-
gibility of unshifted speech varieties, 2) bidialectalism, or 3) bilin-
gualism, the latter two presupposing code-switching. While mutual intel-
ligibility is a valid concern in deciding practical matters, it is not
adequate for deciding the question in linguistic terms. Campbell's dis-
cussion of Sacapulas stressed that

> The criterion of mutual intelligibility does not help
>
> to resolve the question because there is both a degree
>
> of intelligibility and non-intelligibility among sev-
>
> eral of the Quichean languages. Sacapultecs all know

regular Quiché from their association with the

many Chiquimula Quichés who live in their area.

(1977:19)

While it is true that the significance of mutual intelligibility is clouded in Sacapulas because of long contact and the potential for language learning -- in one direction or the other, or both -- it is by no means clear that "Sacapultecs all know regular Quiché." One might expect, given the prestige in other parts of Guatemala of a language with perhaps forty times more speakers than Sacapultec, that Quiché would of necessity be learned by Sacapultecs, as the more prestigious majority language. But whatever its status elsewhere, Quiché takes a decided second place to Sacapultec in Sacapulas, where Quiché is counted a minority language, at least in the pueblo. The Quiché speech of the Chiquimulas is looked down upon and actively ridiculed, at least when none are present. Along with distinctive clothing and, to some extent, physical make-up, speech serves to mark the Chiquimula Quiché as separate. The most striking departures from the Sacapultec pattern are consciously imitated, with humorous effect. These imitations are accurate so far as they go, displaying an awareness of the most characteristic Quiché-Sacapultec divergences in phonology and lexicon. But no real attempt is made to give a balanced portrayal of Quiché speech; rather, differences are seized upon and caricatured through repetition and exaggeration.[1] The fortis glottal stop of Quiché is articulated with slapstick savagery, a practice which is especially popular where glottal stop is entirely absent in the corresponding Sacapultec word, as in many Spanish loans. For example, where Sacapultecs say kašti:laŋ 'Castellano' ('Spanish'), Chiquimulas are characterized as saying kaste?l, with an extreme fortis glottal stop. Likewise in morphology,

Sacapultecs remark the frequent appearence of u-as a pronominal prefix where Sacapultec has ri-, or the frequent use of -uh ～-oh for the morpheme for phrase-final marking on transitive verbs, instead of Sacapultec -oŋ ～-aŋ. They have in effect singled out a small set of high-frequency features which immediately make Quiché and Sacapultec sound very different to the ear.

This local view of the hierarchy of linguistic prestige readily translates into an otherwise unexpected framework for code selection which favors Sacapultec. For example, in one conversation I observed between a tradit-onal Chiquimula man in his thirties and a Sacapultec (admittedly an individual of higher status) in his fifties, the Chiquimula man switched to Sacapultec, while the Sacapultec did not shift his speech variety perceptibly. The Quiché speaker demonstrated rather good knowledge of Sacapultec, e.g. by using Sacapultec vocabulary (k'o?š 'stomach' instead of Quiché pa:m, mi:yaŋ 'today' instead of Quiché kamik); by using Sacapultec grammatical affixes (-aŋ for -oh as the transitive verb phrase-final marker); by appropriately lowering short final vowels in the Sacapultec manner (eš 'you (pl.)' instead of Quiché iš); and by attaching ŋ to word-final vowels (where Quiché does not).

Thus, the numerical superiority of Quiché and its greater utility on the national scene is of no consequence in Sacapulas. Though many Sacapultecs would probably understand some Quiché, they will not in general attempt to speak it unless they have special occasion to do so. A Sacapultec informant of about thirty, Manuel Lancerio Gomez, recently employed to teach elementary school children in a distant Chiquimula Quiché hamlet, commented on both the monolingualism of the children and his own concomi-

tant efforts to develop speaking ability in Quiché.

The issue of mutual intelligibility, already cloudy as pointed out by Campbell, is made more complex by the possibility that Sacapultec speakers may be able to achieve some communication with speakers of Mayan languages other than Quiché. A reliable Sacapultec informant, Domingo Uluán Galindo, recounts a trip that he made as a child to Lake Atitlán. He was, he says, unable to communicate in the Tzutujil of Santiago Atitlán, but in San Lucas Tolimán he did communicate with speakers of "Cakchiquel" -- which he observes is very similar to "Quiché" of Sacapulas (meaning Sacapultec).[2] This claim of Sacapultec-Cakchiquel mutual intelligibility, in the absence of previous opportunity for language learning, is suggestive in light of the Cakchiquelan hypothesis treated below. But isolated cases of claimed intelligibility do not, of course, build a positive case for language boundaries. Yet we can observe at this point that the special significance of any claimed mutual intelligibility between Sacapultec and Quiché is neutralized in the face of credible reports of Cakchiquel-Sacapultec intelligibility. Without controlled studies with each of the Quichean languages, the already questionable evidence of mutual intelligibility, founded as it may be on simple bilingualism, must be completely set aside as inconclusive in this case.

2.5. Absence of Transitional Speech Varieties.

In place of the rejected criterion of mutual intelligibility, Kaufman proposes an alternative:

Recognition of isolable forms of speech as independent languages or co-dialects of particular languages depends on the existence or absence of transitional

> forms of speech. Clear breaks imply differ-
>
> entiation. Questions of mutual intelligibility,
>
> while indicative, are not criterial. (1976b:89)

This criterion puts us on surer ground than that provided by mutual in-
telligibility or glottochronological comparison. Widely separated dia-
lects of Quiché may diverge considerably; yet if intervening dialects
display a gradual transition between the extremes, the imposition of a
language boundary becomes arbitrary and indefensible. If Sacapultec is
just one more step in such a chain, it must be accounted a dialect of
Quiché. If, on the other hand, a clear break is found, marked by a com-
plex of features setting Sacapultec off from other Quiché dialects, it
should probably be recognized as a separate language. We are here led
to consider any unique innovations within Sacapultec which set it off from
other languages.

A pervasive innovation which is unique to Sacapultec is its lowering
of short vowels. In final (stressed) syllables, original Proto-Quichean
short vowels are lowered one degree where possible (that is, excluding a),
as illustrated in Figure 2.5 below. Corresponding to Quiché and Cakchiquel
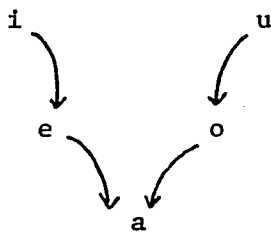
Figure 2.5. Unique Innovation: Sacapultec Short Vowel Lowering

kí? 'sweet' Sacapultec has ke?, with original í lowered to e. Figure 2.6 presents examples of correspondences for all short vowels.

Quiché	Cakchiquel	Sacapultec	Gloss	Sacapultec Innovation
kí?	kí?	ke?	'sweet'	*i > e
k'eI	k'eI.	k'aI	'parrot'	*e > a
č'am	č'am	č'am	'sour'	*(a > a)
íšoq	íšoq	íšaq	'woman'	*o > a
xuI	xuI	xoI	'hole, cave'	*u > o

Figure 2.6. Short Final Vowel Cognate Sets

In non-final (unstressed) syllables, only short mid vowels are generally lowered, while high vowels remain high.[3] The resulting complementary distribution (/i a u/ in nonfinal syllables, /e a o/ in final syllables) suggested to Kaufman that Sacapultec's innovation had left it with only three phonemic vowels (1976b:79,80; but note the writing of five short vowels in Kaufman 1975:117ff). Problems with this view are examined in §3.2.1.2. For present purposes it is enough to say that the Sacapultec innovation of lowering short vowels is unique.

It should be pointed out that several other Quichean languages show a lowering of *i to e, in some cases optionally, in the word for 'dog'. Where Sacapultec has ¢'e?, Quiché, Cakchiquel, and Tzutujil have ¢'i? alternating with ¢'e?; Pocomam has ¢'e?; and Uspantec and Kekchí have ¢'i?. Languages outside Quichean show only ¢'i? (Halpern 1942:61). It is not clear whether the Sacapultec lowering represents a generalization of this change.[4]

As the lowering does not affect long vowels, original vowel quality may sometimes be recovered by internal reconstruction within Sacapultec. This is possible in cases of morphemic length alternations, which arise in the formation of certain passives and possessed forms of nouns (see ₵ 4.2.2.1. below).[5]

A second major unique innovation in Sacapultec is the addition of engma to words which end only in a vowel. Pre-Sacapultec had a handful of forms, including particles, suffixes, and a few nouns, which departed from the typical Mayan CVC root canon in that they did not have any final consonant. The term Pre-Sacapultec is used here to leave open the issue, still debated, of whether the final vowels in question are reconstructable to Proto-Quichean or were simply diffused among various of the languages at a later date; the complex arguments cannot be recapitulated here (see Du Bois 1978:61-91). What is clear, however, is that an earlier stage of Sacapultec did have these final vowels. Subsequently, Sacapultec restored the CVC canonical shape by attaching ŋ to vowel-final words as in the change of Pre-Sacapultec *ču to modern čoŋ 'mother'. Further examples are given in Figure 2.7. This change represented a persistent rule, so that

Pre-Sacapultec		Sacapultec	
*ači	>	ačeŋ	'man'
*ču	>	čoŋ	'mother'
*mi:ye	>	mi:yaŋ	'earlier today'
*-u ~ -o	>	-oŋ ~ -aŋ	'transitive phrase-final marker'

Figure 2.7. Unique Innovation: Sacapultec Alone Adds ŋ to Word-Final Vowels

vowel-final Spanish loans were originally (though not recently) assim-
ilated through the ŋ rule. Figure 2.8 shows a sampling of the num-
erous Spanish loans which have undergone the rule (see also ⸙ 2.9.2.).

Sacapultec			Spanish source
aːnaŋ	'Anna'		Ana
bʼaːkaŋ	'cow'		vaca
bʼaːraŋ	'staff of office'		vara
kapaŋ	'coffee'		café
leːčaŋ	'milk'		leche
loːraŋ	'parrot'		loro
yeːkaŋ	'Diego'		Diego

Figure 2.8. Addition of -ŋ to Vowel-Final Spanish Loans

This addition of a new phoneme is the only historical change in Sacapultec
which affects the total consonant inventory. It is difficult to charac-
terize in the terms of merger and split: it is simply an addition. Note,
however, that a certain phonological framework would allow ŋ to be treated
as no phoneme at all, but simply a redundant vocalic feature; see 3.1.1.5.

Another unique Sacapultec innovation, purely phonetic in character,
affects the Quichean post-velar fricative (see Campbell 1977:15). The
articulation of the characteristically Quichean post-velar x (a heavily
fricated [χ] in most languages) shifts to a very lightly fricated
velar [x̠] or even prevelar [ç] ("almost [h]," according to Campbell 1977:
15). This phonetic change does not, however, modify the total phonemic
inventory; the symbol traditionally used in other Quichean languages

may thus be maintained for Sacapultec, facilitating comparative work. This approach has been adopted by both Campbell (1977) and Kaufman (1975) in writing Sacapultec, and is maintained here as well. I should

point out here that although Campbell has reported (1977:16) that Sacapultec retains preconsonantal *h in non-final syllables (e.g. *b'ahlam > b'ahlam 'tiger') I have not found this to be true for my informants. Rather, preconsonantal *h drops both nonfinally and finally, as in all Quichean Proper languages except Tzutujil, and is replaced by vowel length (*b'ahlam > b'a:lam'tiger'; *pohp > po:p 'mat').

There are several further minor changes which, though they do not clearly militate for one or the other solution to the dialect question, may be taken up here as characterizing Sacapultec.

Sacapultec is in the process of changing q' when it follows another q' with only a vowel intervening, to ʔ; this applies to younger speakers only. For these speakers *q'a:q' becomes q'a:ʔ 'fire'; *kaq'i:q' (ultimately from *kaqʔi:q') becomes kʸiq'i:ʔ 'wind'.

Sacapultec has a morphophonemic sibilant haromny rule, apparently an innovation, which conditions the alternation of the passive marker -š. If there is a phonetic [s] (i.e. in /s/, /¢/, or /¢'/) anywhere in the verb stem, the -š passive is realized as -s (see § 4.1.3). (A similar sibilant harmony rule may exist in Pocom).

Sacapultec avoids word-internal clusters of ¢t or s¢ (phonetic [tˢt] or [stˢ]) by dropping the initial phonetic element. Thus u¢ tax 'not good' becomes ustax, and qas ¢i:x 'true' becomes qa¢i:x.

In summary, a set of major innovations (vowel-lowering, engma-addition) in addition to various minor changes converge to set Sacapultec off, not only from Quiché dialects but from other Quichean languages as well.

Given the criterion of absence of transitional varieties, this already suggests that Sacapultec is not the furthest link in a dialect chain, but a distinct language. Yet more compelling is the evidence of shared innovations which unite Sacapultec with languages other than Quiché, as will emerge in the sections following.

2.6. Sipacapa.

Before turning to the innovations which Sacapultec shares with other Quichean languages, it will be well to seek some background on what is perhaps the least known of these languages, one which moreover may be Sacapultec's closest relative; that is, Sipacapa. Sipacapa was one of the languages discovered by Kaufman (1976b) through his intensive dialect survey efforts; although some brief field work on the language is reported by Robertson (1980)   little further information about the language has appeared from any published source.[6] The town of Sipacapa had in recent times been assumed by outsiders to speak Mam, presumably because of its location within the Mam area. Once the town was surveyed linguistically, however, it was immediately recognized that its speech was not Mam but unquestionably Quichean. Kaufman, as noted, classified it as a new Quichean language. Others have seen it as an out-of-the-way dialect of Quiché (Quiché is the geographically nearest Quichean language). The archaeologist J.W. Fox, apparently basing his view on statements of the missionary linguist David Fox (1973b), counted the inhabitants of Sipacapa as "Quiché" speakers, while observing that their town is "almost entirely surrounded by Mam speakers" (J.W. Fox 1978:139).

But Sipacapa in fact appears to be more closely related to Sacapultec than to Quiché, and that is its special significance for the present prob-

lem. Kaufman implicitly recognized this special link in his Quichean

dialect map (Figure 2.2 above): these two languages are adjacent, and

are shown sharing five innovations (1976b:84). Campbell likewise has

subgrouped Sipacapa with Sacapultec (Figure 2.3 above).[7] Evidence cited

by these authors includes an innovation affecting the perfective marker

(Kaufman 1976b:80; see § 2.7 below) and r- as the third person singular

possessive before consonant-initial stems (Campbell 1977:18; § 2.7).

Campbell also notes certain Sacapultec-Sipacapa affinities in vocabulary

(1977:17).

Looking to the historical background of the town of Sipacapa, we

find several documents which touch on the language in passing, though

the most recent clue turns out to be a red herring. In the mid-nineteenth

century the ubiquitous French missionary priest Charles Etienne Brasseur

de Bourbourg, who was the most knowledgeable specialist of his day in

Quichean languages, was proclaimed by the title page of his Popul Vuh

translation to have been the ecclesiastical administrator "des Mams...

de Zipacapa" (Brasseur 1861). It is inconceivable that Brasseur would

have failed to recognize Sipacapa as Quichean if he had actually heard

it. Perhaps he never visited his charges in Sipacapa; possibly he used

the term "Mam" in a cultural and not a linguistic sense; or the job title

may have been applied by some functionary on the basis of an official

classification of Sipacapa as Mam, rather than on the basis of Brasseur's

first-hand knowledge. One might wish to conclude that "Sipacapa" speakers

arrived in Sipacapa after Brasseur's time, but two earlier documents, one

from the eighteenth century and one from the sixteenth century, preclude

this.

Though in the nineteenth and twentieth centuries, the outside world may have been unaware of Quichean speech in Sipacapa, it has not always been so. In 1775, the itinerant priest Pedro Cortes y Larraz gave an account of his official investigative visit to the town of "Cipacapa", one of six pueblos in the parroquía (parish) of Santiago Texutla. He observed that, "En esta parroquía se hablan dos idiomas, el general es el mam y en el pueblo de Cipacapa el kacchiquel." ([1775] 1958; v. 2, p. 143). If this striking classification of the speech of Sipacapa as Cakchiquel is, as Campbell holds, an error (1978:35), it is nonetheless a most revealing error. Campbell himself noted that the Cakchiquel label for Sipacapa "points out its difference from both Mam and Quiché neighbors" (1978:35). We may go further: it suggests that Sipacapa showed some special similarity to Cakchiquel.

The only other known early reference to the speech of Sipacapa is found, significantly, in a sixteenth century document prepared by a native Sacapulas author, who in an extensive and accurate cataloguing of native languages of Guatemala (see § 2.10) lists "la lengua [de] Sipacapa" (Acuña 1968:15; Acuña's interpolation of de, it may be seen, is unnecessary).

Thus, Sipacapa was known as a distinct language in the sixteenth century, at least in Sacapulas; and its affinity with Cakchiquel was implicitly recognized in the eighteenth century. It was only later that knowledge of it was lost to the outside world, making necessary the later rediscovery of the language. D. Fox has suggested that Quicheans inhabited Sipacapa initially in the colonial period (1973b, cited by J.W. Fox 1978:139; Fox does not specify the evidence) and that the original language of Sipacapa was Mam. That Sipacapa replaced Mam in a recent intrusion seems quite plausible, but below (§ 2.10) I consider

the possibility that the Sipacapa displacement from their original home

occurred somewhat earlier, in Late Post-Classic times.

One can get some idea of the precariousness of the Sipacapa enclave

in Mam-speaking territory by noting that when Cortes y Larraz visited in

the eighteenth century, the pueblo of Sipacapa held just thirty families,

totaling two hundred sixteen persons ([1775] 1958, v. 2, p. 142). Though

the Sipacapa population outside the pueblo is not known, this contrasts

with his figures of three hundred sixty-eight families with one thousand

six hundred and eight persons for Sacapulas (1958, v. 2, p. 40).[8]

2.7. Shared Innovations.

> The discovery of a new daughter language signals the need
>
> to reexamine all previous work in the light of the new
>
> evidence. Unbelievable as it may seem, this is all too
>
> seldom done.
>
> --Mary R. Haas

Section §2.5 presented innovations unique to Sacapultec; I turn now

to innovations which Sacapultec shares with other Quichean languages, in-

cluding Sipacapa as introduced in the previous section. It is the re-

examination of the evidence of innovations which this new daughter language

shares with other Quichean languages which ultimately establishes that

the previous "default" classification of Sacapultec as a dialect of Quiche

is untenable. The features considered are primarily those presented

by Kaufman (1976b:74-80) as diagnostic. These subsume all of the "over-

lapping isoglasses" for Sacapultec, Sipacapa, and the other Quichean Proper

languages presented by Campbell (1977:19). But the evaluation of the evi-

dence, as well as the conclusions drawn, differ from those of Kaufman and

Campbell.

Several innovations have been proposed as shared by Sacapultec and Quiché. According to Kaufman, Quiché and Sacapultec innovated a phrase-final marker for transitive verbs. But Uspantec, outside Quichean Proper, has a probable cognate, suggesting that the phrase-final marker was present in Proto-Quichean (see Figure 2.9.). Though Uspantec e: Quiché o

Quichean Proper

Quiché	Cakchi-quel	Tzutu-jil	Sacapul-tec	Sipa-capa	Uspan-tec
-oh	---	---	-aŋ	---	-e

Figure 2.9. Quichean Transitive Phrase-Final Marker

is not a regular correspondence, the phrase-final suffixal vowel in both Quiché and Sacapultec is variable, showing partial harmony with the root vowel (-uh~-oh and -oŋ~-aŋ respectively). Quiché, Sacapultec and Uspantec probably all reflect a Proto-Quichean suffix consisting of a single short vowel that harmonized with the root vowel.[9] Since this phrase-final suffix was sometimes present and sometimes absent, it is easy to see how Cakchiquel, Tzutujil, and Sipacapa would lose it. Quiché and Sacapultec, then, share only a retention here, and their claimed subgrouping is not supported.

Another proposed Quiché-Sacapultec innovation is the shortening of long vowels in non-final syllables. In the examples given in Figure 2.10, Tzutujil preserves the original length of non-final vowels, while Quiché and Cakchiquel shorten them. Sacapultec, however, only partially shares this innovation, since it sometimes retains original vowel length: Ičaːx 'herb', but siːnaʔx 'scorpion'. In any case, such a collapsing of long and

Quichean Proper

Quiché	Cakchi- quel	Tzutu- jil	Saca- pultec	Pocom- chí	
ičaːx	ičaːx	iːčaːx	ičaːx	ičaːx	'herb'
sinaʔx	sinaʔx	siːnaʔy	siːnaʔx	sinaʔx	'scorpion'

Figure 2.10.   Shortening of Long Vowels in Non-Final Syllables in Quichean

short vowels is commonplace enough that it could occur independently; in fact Pocomchí also has this change, while it lies outside Quichean Proper.

Thus, the two changes discussed fail to provide solid evidence for early Quiché-Sacapultec unity. Other innovations, in contrast, link Sacapultec not with Quiché but with the other members of the Quichean branch. Two important innovations are shared by the proposed "Cakchiquelan" languages. Figure 2.11 illustrates a thoroughgoing change affecting Cakchiquel, Tzutujil, Sacapultec and Sipacapa in which Proto-Quichean final *-h becomes -y. Significantly, Quiché is excluded from this innovation.

Quiché	Cakchi- quel	Tzutu- jil	Saca- pultec	Sipa- capa	
bʼaːh	bʼaːy	bʼaːy	bʼaːy	bʼaːy	'gopher'
čʼoːh	čʼoːy	čʼoːy	čʼoːy	čʼoːy	'mouse, rat'

Figure 2.11.   Shared Innovation: *-h ⟩ -y

In a pervasive morphological innovation, illustrated in Figure 2.12, the Cakchiquelan languages analogically extend the r- alternant of the third person singular ergative clitic from its original prevocalic

Quichean Proper					
Quiché	Cakchi- quel	Tzutu- jil	Saca- pultec	Sipa- capa	Pokom
no (u-)	yes (ru-)	yes (ru-)	yes (ri-)	yes (r-)	yes (rV-)

Figure 2.12. Generalization of r- '3rd. sg. Erg. (prevocalic)' to Precon-
sonantal Environments

environment to preconsonantal environments.[10] Quiché is again excluded from
this innovation.

Two qualifications are relevant to this last change. First, the form
of the innovation differs slightly among the Cakchiquelan languages. Though
all extend r- to preconsonantal environments, Cakchiquel and Tzutujil
compound the r- with original *u-, while Sacapultec and Sipacapa simply
replace *u- with r-.[11] More tellingly, the implication of this development
for a clear genetic split is attenuated by its appearance outside Quichean
Proper as well: Pokom shares this morphological innovation. Nevertheless,
these two Cakchiquelan innovations do entail at least a period of contact;
this has implications for an earlier common speech area involving Sacapultec
(see § 2.10).

There are several further innovations which affect some but not all
of the Cakchiquelan languages. Sacapultec and Tzutujil partially share a
striking morphological innovation affecting distribution of the completive
aspect marker š-. Sacapultec eliminates this marker on intransitive
verbs wherever it would fall immediately before a consonant. Because of
the uniform vowel-initial canon for all non-zero absolutive clitics,
this is equivalent to stating that š- is dropped before the third-person
singular (zero) form of consonant-initial intransitive stems (see §4.1.6).

Thus, where Quiché has š-ȼalîx 'he returned', Sacapultec has just ȼalax, with no overt aspect marker. The rule dropping the š- completive aspect marker before a consonant is shared by Tzutujil (Jon Dayley, personal communication) and Cakchiquel (of Magdalena Milpas Altas) (Thomas Larsen, personal communication); in both of these languages the rule is optional, not obligatory as in Sacapultec.[12]

Various changes supporting the long-recognized affinity of Cakchiquel and Tzutujil have been pointed out (Campbell 1977:69; Kaufman 1976b:80); these need not be repeated here. In addition, certain changes have been recognized as linking Sacapultec and Sipacapa. Both languages innovate by extending the perfect participle marker for monosyllabic transitive verbs (-(V)m) to use in finite verb forms. Both employ the morpheme -ax with perfective -(V)m. In Sacapultec this acts as a phrase-final marker for perfectives; its specific function in Sipacapa is not made explicit. Both languages share essentially the same version of the change affecting third person ergatives (Figure 2.11). And they share a number of lexical items not found elsewhere in Quichean (see Campbell 1977:17). The linking of Sacapultec with Sipacapa (as of Cakchiquel with Tzutujil) seems well supported, and has frequently been recognized in the literature (Kaufman, Figure 2.2; Campbell, Figure 2.3).

There are several features of aspect marking which are shared among various sets of Quichean Proper languages. Sacapultec, Cakchiquel and Tzutujil, but not Quiché or Sipacapa, have t(i)- for optative aspect before third person absolutives. Sipacapa, Tzutujil, and Cakchiquel have št- and šk- as future markers. Quiché, Sacapultec, and Sipacapa have k(V)- rather than ti- for imperfective aspect before third person absolutives (Kaufman 1976b:74f). But the import of these various facts is

vitiated by the difficulty in establishing innovation, retention, or diffusion. Certainly the impression that emerges is not one of sharply delineated genetic groups, but of the overlapping isoglosses of a dialect area.

In summary, the evidence linking Sacapultec with Quiché is much weaker than that linking it with Sipacapa, Cakchiquel, and Tzutujil. Some features held in common by Quiché and Sacapultec do not, on examination, represent innovations; others fail to establish an exclusive link between the languages. Still other shared features, yet to be discussed, are limited to the relatively superficial plane of the lexicon, especially in words of high culture, suggesting nothing so much as diffusion (see § 2.9).

On the other hand, a number of well-founded innovations link Sacapultec with other languages; and several of these converge to define what I have called here the Cakchiquelan languages. While it cannot be maintained that Cakchiquel, Tzutujil, Sacapultec, and Sipacapa have formed a subgroup independent of interaction with other languages, these languages unquestionably do show a strong affiliation.

In light of the facts which have been presented to this point, we may return to the question of whether Sacapultec should be considered a dialect or a distinct language. I have already pointed out the criterial absence of transitional varieties; but in the end, the independence of Sacapultec from the Quiché language is established most securely by its deeper links with other Quichean languages. On the evidence of shared innovation, if Sacapultec were to be a dialect of any previously known language, it would more likely be a dialect of Tzutujil, or perhaps Cakchiquel, than of Quiché. Yet even this is not satisfactory. Tzutujil

indeed shares some innovations exclusively with Sacapultec, but it shares

others exclusively with Cakchiquel. In all, the complex network of inter-

influence leads to three conclusions. First, Sacapultec is as independent

an entity as Cakchiquel, Tzutujil, or Quiché; whatever label is applied

to these entities, whether dialect or language, should be applied to Sacapul-

tec. Second, the dialect/language distinction itself fades in significance

once the strong patterns are acknowledged, of influence between the already

separate, but closely related, languages of the Quichean branch. Whatever

genetic splits there may have been (if indeed there were any), diffusion

has substantially blurred the resulting language boundaries. This is

apparently true of Mayan languages in general. The numerous languages of the

family have remained within a remarkably compact area, with only one lan-

guage (Huastec) substantially separated from the main body of Mayan lan-

guages, allowing for continuing interinfluence. Nearly forty years ago,

A. M. Halpern expressed his conviction "that when the history of the

Mayan languages is finally written, it will contain a long chapter on

dialect mixture" (1942:53). The third conclusion is one that nevertheless

stands out clearly. The Cakchiquelan languages share innovations which

unite them to the exclusion of Quiché. At present, however, they are geo-

graphically separated. This demands postulation of an earlier common

speech area shared by the Cakchiquelan languages; it demands as well an

explanation of the intrusion or migration which split them up. These is-

sues in linguistic prehistory will be taken up in the final section of this

chapter (§ 2.10); but first it will be useful to consider the relevant

(extralinguistic) historical background. The next few sections examine

the ethnohistoric documentary evidence on Sacapultec and its early linguis-

tic interactions with Quiché.

2.8. Language in Sacapulas: The Early Historical Period.

This section and the one following treat evidence regarding the history of linguistic interaction of Sacapultec and Quiché. The present section emphasizes information from early colonial documents on language use in Sacapulas, while § 2.9 employs internal linguistic evidence to shed light on the nature of Quiché-Sacapultec contact.

Although in recent times it has been assumed that the speech of Sacapulas is Quiché and that of Sipacapa is Mam, this has not always been assumed. There is an extraordinary passage expressing a quite different view in the Título de Sacapulas, a document composed in about 1551 by an anonymous resident of Sacapulas (Carmack 1973:37-38). The native author reveals a subtle knowledge of the linguistic geography of the highlands of Guatemala and Chiapas as he recounts how Canil, the ancestor of the Sacapultecs, gave to each of thirteen peoples their respective languages:

> Aquí fue en donde empezó a todos los pueblos a repartir-
> les sus lenguas, de en uno en uno a cada pueblo, el pren-
> cipal nuestro antiguo Canil, dándole a cada uno, a trece
> pueblos, sus lenguas. La primera fue la lengua de Sacapulas,
> y la lengua provinciana nebajeña, y la lengua de San
> Mateo, y la lengua [de] Sipacapa, y la lengua de Pa[t]zún,
> y la lengua de Chiapa, y la tehuantepecana. De allí les
> dió la lengua de la Laguna, y de allí lengua de T[l]axcala,
> y lengua quiché, y la lengua cobanera. (Acuña 1968:15)

This passage accurately lists a number of Mayan languages; Campbell's translation provides an annotation (in brackets) of the modern language names:

>Here is where the giving of their languages to all
>
>the people began, the principal one our ancient Canil,
>
>giving to each of the thirteen peoples their language.
>
>The first was the language of Sacapulas, and the pro-
>
>vincial language of Nebaj [Ixil], and the language of
>
>San Mateo [Chuj], and the Sipacapa language, and the
>
>language of Pa(t)zun [Cakchiquel], and the language of
>
>Chiapa, and the tehuantepecana. And then were given
>
>the language of the Lake [Tzutujil], and then the lan-
>
>guage of Taxcala [Nahuatl], and the Quiché language,
>
>and the language of Coban [Kekchi]. (Campbell 1978:35)
>
>(emphasis added)

The writer has correctly distinguished the Mayan languages Sacapultec, Ixil,

Chuj, Sipacapa, Cakchiquel, Tzutujil, Quiché, and Kekchi. Excluding the

disputed Sacapultec and Sipacapa for a moment, it can be stated that,

in each case, the place name or language name given represents a distinct

language. That is, there are no cases of overdifferentiation, of citing

two dialects of a single language. Although colonial influence on the

listing cannot be excluded, Campbell has emphasized the significance of

naming Sacapultec and Sipacapa as separate languages, as this was "not

part of known Spanish opinion" (1978:35). Given the Título author's

apparent accuracy in assessing the indigenous linguistic geography, the

native view that Sacapultec and Sipacapa were distinct languages, expressed

four centuries before the rediscovery of these languages for Western

scholarship by Kaufman, must be given serious consideration.

A second important fact which may be drawn from the Title of Saca-

pulas is that Sacapultec was not the only language used in Sacapulas in

the sixteenth century. Ironically, the very document that asserts the
separate status of the Sacapultec language is itself not written in this
language but in Quiché; the early documentation of Sacapultec which one
might have hoped for is not forthcoming. Apparently only Quiché was used
as a written indigenous language in Sacapulas in

early times. The possibility that the language of the Title of Saca-
pulas represented the spoken language of Sacapulas, and that the changes
which distinguish Sacapultec from Classical Quiché have arisen since the
writing of that document, can be set aside at once. Sacapultec has for
a long time been cut off from direct contact with Cakchiquel, Tzutujil,
and Sipacapa by a broad intervening area of Quiché speakers (§2.7).
Sacapultec would have had to undergo the *-h > -y change, the spread of
prevocalic r- to preconsonantal environments, and several other changes,
with little or no contact with the other languages that share these in-
novations.[13] Furthermore, if the speech of Sacapulas was simply Quiché,
it is strange that the linguistically sophisticated author of the Título
should list it as a separate language. There is a simpler explanation
than massive coincidental innovation, one which, moreover, is supported
by documentary and linguistic evidence.

Quiché was apparently used in pre-Conquest times as a lingua franca,
and Sacapulas was under Quiché domination (see below). Thus the author
of the Título must have been either a Quiché speaker among the indigenous
Sacapultecs, or, more likely, a Sacapultec speaker who was bilingual in
Quiché and had been taught to write in the lingua franca.

Use of Quiché as the written language for indigenous concerns persis-
ted for several centuries, by the evidence of manuscripts which some Saca-
pultecs have shown to me. In a manuscript record of cofradía (religious
brotherhood) business from the period around 1810, the language used is
clearly Quiché, even though the activities catalogued are those most inti-
mately associated with the religious life of the town, and the surnames
are often the same as those of Sacapultec speakers in Sacapulas
today. The signature of one of the scribes provides the clue necessary

to establish that Sacapultecs kept their written records in Quiché ra-
ther than in their native tongue. The scribe's surname is xay (Cf.
Sacapultec xa:y 'house'), showing the -y reflex characteristic of Saca-
pultec rather than the -h (or -∅) of Quiché.

The present-day Sacapultec attitude toward such early documents,
it may be noted, is distinctly reverential. When I have
read to Sacapultecs from these early documents, there are always some
words which are unknown to them. The explanation given is that
the documents record the way the antiguos ('ancient ones') spoke, and that
some of this speech has been lost. When I have suggested that the
language of the book may be similar to that of the area's Chiquimula Quiché,
the response is usually a mildly offended, "Of course not." The idea
that the language of the lowly Chiquimula may be close to the language
spoken by the people that the Sacapultecs take to be their own ancestors
seems repellent. So Quiché is in the curious position of being looked
up to and looked down on by the Sacapultecs.

Another valuable reference to multilingualism in Sacapulas appears
about one hundred and fifty years after the time of the Título, at the
beginning of the eighteenth century, this time from a Spanish point of
view. The Dominican priest Francisco Ximénez had a great knowledge of the
Quiché and Cakchiquel languages (and to a lesser extent, Tzutujil), hav-
ing produced grammars and dictionaries of these languages; he has been
called "the foremost linguist and ethnographer of Quichean culture during
the colonial period" (Carmack 1973:119). Ximénez knew Sacapulas well,
having spent four years there (Carmack 1973:119). In the preface to
his trilingual Quiché-Cakchiquel-Tzutujil dictionary, an incidental

remark gives important information on the language situation in Saca-

pulas:

> ...esto yndios lla con el comercio con los ᵴaᵴchiqueles,
>
> y 4,utuhiles tienen muchos vocablos trocados unos yndios
>
> con otros y esto principalmente susede en el Puᵒ de Zaca-
>
> pulas donde esta rebuelto el quiche y ᵴaᵴchiquel, y en los
>
> Pueblos de xocotenango, San Lucas Sacatepeques, y cauqueb
>
> que estan poblados de indios ᵴaᵴchiqueles, y quichees, y
>
> asi estan rebueltas estas dos lenguas, ...
>
> (Ximénez n.d., p. VII rev.)

Ximénez gives as his prime example of community bilingualism "the town

of Sacapulas where there are mixed together Quiché and Cakchiquel...".

His further comments on other towns suggest that he is not referring to

a mixed or intermediate language but to a coexistence in the same com-

munity of speakers of two distinct languages, in this case Quiché and

"Cakchiquel". Two points are of interest here. First, there is explicit

statement of indigenous bilingualism in the community of Sacapulas.

Second, one of the languages is labeled "Cakchiquel", the other "Quiché".

Which term, if either, refers to Sacapultec? The best candidate for

the "Quiché" label is, simply, Quiché: the documentary evidence outlined

above points to a long persistence of Quiché in Sacapulas during the

early Colonial period. The remaining label "Cakchiquel", then, is pre-

sumably intended to apply to the language here called Sacapultec.[14] If

so, Ximénez' categorization insightfully prefigures the claim of Saca-

pultec-Cakchiquel affinity which is implicit in the Cakchiquelan hypo-

thesis as formulated through the comparative method. Ximénez' classi-

fication recalls that of Cortes y Larraz, who classified Sacapultec's

closest relative, Sipacapa, as "Cakchiquel" three quarters of a century later (§2.6).

Cortes y Larraz, incidentally, lumps together speech varieties of the parroquía of Uspantan (which at that time encompassed the pueblos of Uspantán, Cunen, and Sacapulas) as Quiché, with the added note that one other language, Musré (Uspantec) is spoken: "El idioma que se habla en esta parroquía es kiché y en uno de ellos otro, que se dice musré, los cuales aunque tienen semejanza, pero tambien bastante diferencia...." ([1775] 1958, v. 2, p. 41). Quiché speakers certainly are found in Cunen and Uspantán, and were perhaps in Sacapulas as well. In any case Sacapultecs would perhaps have been able to muster enough Quiché for a short-term visitor like Cortes y Larraz, given their continued use of Quiché in written documents (p. 60).

The copresence of the Quiché and Sacapultec languages during the early post-Conquest centuries seems established, then, with Quiché employed at least for certain learned functions. The testimony of Ximénez for the early eighteenth century perhaps suggests that this was not just Sacapultecs who knew a second language, but individuals who could be labeled distinctively as Quiché speakers. And from the modern period as well, as has been pointed out (§2.4), there are both Quiché-speaking and Sacapultec-speaking individuals in Sacapulas. The question arises whether this represents a continuous occupation of Sacapulas by generations of Quiché-speakers. According to various ethnohistorical documents, itinerant shepherds from Santa María Chiquimula were getting into the Sacapulas area in the eighteenth century during certain seasons of the year. The first to actually settle in Sacapulas came in the late nineteenth century, and settled in the Sacapulas hamlet of Tzununul (John

Monaghan, personal communication, December 1980). The Chiquimula Quichés often occupied the poorest land, land which Sacapultecs had earlier neglected to occupy; and the low prestige of their language in the eyes of the Sacapultecs (§2.4) may reflect their low economic status. It would appear, then, that there are two distinct phases of Quiché linguistic presence in post-Conquest Sacapulas. In early post-Conquest times the Quiché language was present in Sacapulas, possibly reflecting Quiché domination and a small elite body of Quiché speakers. In any case, the lingua franca function of Quiché was carried over into the new system of writing developed and taught by the Spanish priests. The written records of Sacapulas business were kept in Quiché, at least partly by Sacapultecs, for two and a half centuries. The apparent lack of written records in Quiché past the early nineteenth century, and the seeming unfamiliarity of modern Sacapultecs with the tradition of the Quiché documents in their possession, suggests that this learned Quiché tradition may have faded out in the early nineteenth century. By the end of that century, however, the new wave of Quiché speakers was beginning to settle in, though they and their language took on a completely different position in Sacapultec society. This time it was the Quichés who learned Sacapultec.

A reference to very early Sacapulas may be considered here, though it is difficult to assess given its second-hand nature. Writing in the early eighteenth century, Ximénez tells of the initial introduction of the Christian religion into Sacapulas, just thirteen years after the Conquest. In 1537 the "Cacique" of Sacapulas, having heard about Christianity from a group of Indian merchants, sent his brother to request a Spanish priest. The brother gave the Spaniards a present and offered to guide them back to Sacapulas, whereupon the priests thanked him directly:

> Agradeciéronselo mucho en su propio idioma que
>
> sabían, cosa que atraía mucho a estas gentes el
>
> ver que las hablaban en su lengua, que era una
>
> de los cosas porque ellos tenían poco amor a
>
> los españoles. (Ximénez 1929, v. 1, p. 192)

The language most likely to be known by the priests at this early date

would probably have been Quiché. Though it is stated that the language

was the Sacapultec emissary's "own language", it is certainly not clear

that Spanish priests on this first meeting were concerning themselves

with the possible presence of a Sacapultec-Quiché bilingual. What can

be garnered from Ximénez' second-hand account is that an indigenous lan-

guage, probably Quiché or a language similar to it, was utilized for at

least minimal communication with a native, probably of high standing,

of Sacapulas.

Though we have so far dealt primarily with bilingualism between Quiché

and Sacapultec, this last passage marks the beginning of a new development.

The Spanish priests did indeed soon come to Sacapulas, where they opened

a convent within a few years; contact between Sacapultec and Spanish had

begun. Numerous loans followed, primarily from Spanish into Sacapultec

but, on at least one occasion, in the opposite direction as well (§2.9).

Carmack has suggested that Tlaxcalan auxiliaries had settled in

Sacapulas in the sixteenth century, where they posed a threat to the owners

of the mineral springs (1973:39). However, no strong impact of their

language on Sacapultec has been observed.

Having outlined the facts of language contact in Sacapulas as far as

they can be determined through documentary evidence, we turn now to the

evidence of the languages themselves. The next section treats internal

linguistic evidence of Quiché-Sacapultec contact, and to a lesser extent, of Spanish-Sacapultec contact.

2.9. Language Contact in Sacapulas: Linguistic Evidence.

2.9.1. Quiché-Sacapultec Contact.

In §2.5 above it was argued that the similarities between Quiché and Sacapultec were fewer than had been supposed, and furthermore were outweighed by deeper similarities to other Quichean languages with respect to shared innovations. But it should also be emphasized that there are many features which Sacapultec shares with Quiché. These features fall mainly into the category of lexicon associated with high culture.

Quiché and Sacapultec share the indigenous calendrical system, in which one of a series of twenty day names is combined with a number word from the series one to thirteen, producing a composite denomination for each day which will not recur until the cycle is completed after 260 days (for the Quiché system see Bunzel 1952:275ff). The names for these twenty days in the two languages show striking similarity (Figure 2.13.). The similarity is great enough to suggest borrowing, and indeed the correspondences are not those which would establish a common descent from Proto-Quiché-Sacapultec. The form and meaning of the second day name in particular are indicative:

Quiché	e:h	'tooth; day name'
Sacapultec	e:y	'tooth'
Sacapultec	e:ŋ	'day name'

Figure 2.13. Day Names in the Indigenous Calendar

Quiché[15]	Sacapultec (A)[16]	Sacapultec (B)
b'a:¢'	b'a:¢'	b'a:¢'
e:	e:ŋ	e:ŋ
a:x	a:x	a:x
i?š	e?š	e?š
¢'ikin	¢'iken	¢'ikin
axmaq	axmaq	axmaq
no?x	na?x	no?x
tixa:š	tixa:š	tixa:š
kawoq	k'at[17]	kawaq
axpu	axpu:x	xunaxpu:x
imoš	imaš	imaš
i:q'	i:q'	i:q'
aq'ab'a:l	aq'ab'al	aq'ab'al
k'at	k'at	k'at
ka:n	ka:n	ka:n
kame	kame:ŋ ~ kame:	kame:ŋ
ke:x	ke:x ~ kʸe:x	ke:x
q'ani:l	q'ani:l	q'ani:l
to:x	to:x	to:x
¢'i?	¢'a?	¢'e?

Corresponding to e:h, which in Quiché is both a day name and the word

for 'tooth', Sacapultec has the cognate form e:y, with the regular -y

reflex of Proto-Quichean *-h (§ 2.5). This Sacapultec word, however,

has only the meaning 'tooth', the reconstructible Proto-Quichean meaning.

The Sacapultec day name has -ŋ, suggesting that the form with this mean-

ing was borrowed from Quiché some time after Sacapultec had completed

the change of *-h > -y. There are several possible mechanisms for this.

1) After the original *-h > -y change had eliminated all Sacapultec -h's,

a later rule arose changing (borrowed) -h to -ŋ. 2) The Quiché word was

borrowed from a dialect which no longer pronounced final *-h (there are

several) and thus had simply e:. Sacapultec subsequently added -ŋ to the

final vowel by regular rule (§ 2.5). 3) Since Sacapultec had already

eliminated all h's by various changes including the *-h > -y change,

the -h of the loan word e:h was foreign to Sacapultec phonology and was

simply not perceived; -ŋ was then added to the final vowel. Either the

second or third explanation would be adequate, while the first is doubt-

ful. Other instances of the addition of -ŋ in loans have already been de-

scribed for Spanish (§2.5). In any case, the Sacapultec doublet of e:y

'tooth', e:ŋ 'day name' clearly establishes the direction of borrowing.[18]

The -ŋ in Sacapultec kame:ŋ also reflects this borrowing from Quiché.

In a second case, Quiché influence may have given rise to a greater

linguistic differentiation of status than had previously been explicit

among the Sacapultecs. The Sacapultec second person reverential pronouns

are nearly identical in their form and their allomorphic alternation to

the Quiché pronouns (Figure 2.14). The -ŋ in the Sacapultec singular

(laŋ) is suggestive of borrowing, given the Quiché -h in lah, as has been

seen. However, Quiché h : Sacapultec ŋ may in certain cases reflect an

	SINGULAR	PLURAL
QUICHE	la:l ~ la: ~ la(:)h	alaq
SACAPULTEC	la:l ~ la: ~ laŋ	alaq

Figure 2.14. Second Person Reverential Pronouns

earlier final vowel (see Du Bois 1978:61-91; also § 2.5.). The absence
of other criterial correspondences applicable to these particular words
does not allow us to absolutely rule out cognacy on phonological grounds.
However, the distribution of the reverential pronoun paradigm in the
Quichean languages is restricted to Sacapultec and some but not all Quiché
dialects, making a reconstruction to Proto-Quichean quite tenuous. The
Quiché dialects in question and Sacapultec are all contiguous, suggesting
diffusion. Further, the Quichean dialects are those which are themselves
contiguous to the Mamean languages which have reverential pronouns (though
not phonetically equivalent). This is shown in the map in Figure 2.15
(adapted from Robertson 1980:70 to include Sacapultec and Sipacapa).
Robertson has
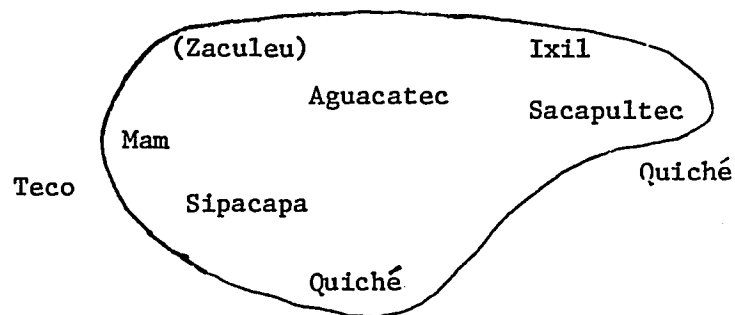
Figure 2.15. Distribution of Second Person Reverential
Pronouns

suggested that this distribution reflects diffusion "which resulted

from probable shared culture contact" (1980:70-71), and Campbell supports

the view that "...Western Quiché seems to have developed reverential

second person pronominal forms ("you" formal or polite, like Spanish

usted) (e.g. la(l), alaq) under Mamean influence; since only western

dialects of Quiché have the forms, and Mamean languages have such rev-

erentials more embedded into the language..." (Campbell 1978:29).[19]

To Campbell's Western Quiché we may add Sacapultec.

If diffusion is indeed responsible, as seems likely, for the shared

Quiché and Sacapultec forms, the likely borrower is Sacapultec. The Saca-

pultec singular respect pronoun |a:| is rarely used, and as for the plural

respect pronoun a|aq, though it is recognized as Sacapultec, speakers are

frequently unable to complete a full paradigm involving this form. The

reverential pronouns, thus, are much less well embedded in Sacapultec

than in Quiché. More tellingly, assuming cognacy is rejected in favor of

borrowing, Sacapultec -ŋ (in laŋ) would regularly be added to a borrowing

of an h-final Quiché word, while Quiché would have no reason to choose -h

rather than -n as a replacement for borrowed Sacapultec -ŋ.[20] Thus the

near-identical morphological alternation in Quiché and Sacapultec, and

the distribution in Quichean limited to contiguous dialects support

borrowing over cognacy; the weaker imbedding in Sacapultec grammar and the

established Sacapultec pattern of phonetic substitution in borrowings pin-

point Sacapultec as the borrower. Once again, Quiché is seen to influence

the Sacapultec lexicon, specifically in the adoption of reverential pro-

nouns as a way of marking status distinctions. Although this constitutes

grammatical influence as well, it is in the relatively superficial domain

of the independent pronouns (as opposed to the agreement clitics imbedded

in the verb word; see §5.2.1).

2.9.2. Spanish-Sacapultec Contact.

Contact between Spanish and Sacapultec has figured Sacapultec as the primary borrower, but in at least one case Sacapultec apparently provided a term for an indigenous animal previously unknown to Spanish. Spanish loans into Sacapultec reveal a stratification according to the degree of assimilation to Sacapultec phonology. This linguistically-defined stratification of loan words seems to correlate with the period in which the culture item was introduced, with words for items introduced in the immediate post-Conquest period showing the greatest assimilation to Sacapultec patterns. It has not yet been possible to systematically establish the period of introduction of all relevant culture elements, however, so that proof of this correlation must be left for another occasion. Some words of Spanish etymology have probably reached Sacapultec via Quiché; these may be characterized by replacement of Spanish final $-\overset{[\prime]}{V_1}CV_2$ sequences with $-\overset{[\prime]}{V_1}?C$, instead of the characteristic Sacapultec treatment as $-V:_1\overset{[\prime]}{C}V_2\eta$. This problem too must be left for a later exposition.

The earliest loans show replacement of Spanish b by b', g by k, s by š, the already-noted addition of final -ŋ and lowering of short vowels, and lengthening of the Spanish stressed vowel if nonfinal. Stress in these early loans is then shifted according to regular Sacapultec rule to final syllable.

b'a:kaŋ	'cow'	(< Sp. <u>vaca</u>)
b'a:raŋ	'staff of office'	(< Sp. <u>vara</u>)
me:šaŋ	'table'	(< Sp. <u>mesa</u>)
ye:kaŋ	'Diego'	(< Sp. <u>Diego</u>)

Later loans may keep the Spanish unstressed final vowel, along with the stress pattern, and leave off the -ŋ; they may keep Spanish s as s; and they may even incorporate otherwise nonoccurring phonemes such as Spanish b, d, g, f.

čuʔglóːriya	'place name'	(< Sp. Gloria + Sac. čuʔ 'atop')
gríːngo	'North American'	(< Sp. Gringo)
berdúːra	'vegetable'	(< Sp. verdura)
góːm(e)s	'Gomez'	(< Sp. Gomez)

Where early loans were almost always restricted to two syllables, rarely three, later loans may keep several syllables.

'Apples' are mansaːnaŋ (< Sp. manzana) while the much rarer 'pears' are simply péːra (< Sp. pera); *peːraŋ is considered ludicrous.

There are some doublets that reflect the distinct stages of loan assimilation. Early colonial documents from Sacapulas suggest that Christian names were introduced before surnames. màːrkoš, with š and regular final stress, is a Christian name derived from Spanish Marcos, while máːrkos, with original s and lexical stress (reflecting Spanish penultimate stress), is a surname derived from the same source. (See also § 3.4.)

Sociolinguistic factors also correlate with degree of loan assimilation. 'Coffee' in traditional speech is kapaŋ (< Sp. café) but a younger and more sophisticated speaker, conscious of the stigma attached to inability to pronounce f, may produce the form kafaŋ.[21] Yet this curious form retains the characteristic -ŋ, perhaps as a token to show that the speaker is still speaking Sacapultec rather than Spanish.

The conditions for the opposite direction of borrowing, from Sacapultec into Spanish, were present in early colonial Sacapulas, given the confrontation of the Spaniards with many new culture elements; and Spanish was in contact with Sacapultec from as early as 1537 (§2.8). As one

instance, the Spaniards needed a word for 'turkey'. In different parts
of New Spain different solutions were found; Mexican Spanish, for example,
borrowed from Nahuatl (guajolote < we?šolotl). The common Guatemalan
word chompipe 'turkey' has as its most probable source, as it turns out,
Sacapultec.[22] Various authors (Tascón 1935, Sandoval 1941-42, Santamaría
1974) have suggested that chompipe is onomatopoetic in origin, but none
has been able to provide a plausible etymological source. Such an ono-
matopoetic source is found in Sacapultec, in which the sound used to call
turkeys is pi: pi: pi:. This root is attested from Colonial times for
Cakchiquel: Ximénez cites a verb root -pi (along with derived forms
-pitah, -pio, -piou, -pion) which meant 'chiflar haciendo pi pi pi'
(Ximénez n.d., 145 obv.). A third Mayan language, Tzotzil of Chiapas,
shows the root pi in pipipi 'call to turkeys' and in derived verbs such
as pipon 'peeping (baby turkey),...calling turkeys (person)' (Laughlin
1975). The indigenous rendition of the turkey call has been adopted into
Guatemalan Spanish as pipí 'Grito del chompipe cuando esta pequeño' (San-
doval 1941-42:245). Thus the onomatopoetic basis of chompipe is estab-
lished. The shift in meaning from bird call to bird name, however, and
the nature of the initial syllable, remain to be explicated. The semantic
shift, as it turns out, took place not in Spanish but in Sacapultec. As
in many Mayan languages the original word for 'turkey', ak', was transferred
in post-Conquest times to 'chicken'. Sacapultec alone filled the result-
ing gap by extending the call pi:pi: to mean 'turkey'. (The phrase-final
variant of pi:pi: undergoes   ŋ-addition and other rules, giving pi:peŋ).
The initial syllable of chompipe probably represents Sacapultec čo:m
'great'. Although Sacapultec does not presently use the locution čo:m pi:pi:,
Quiché shows a parallel phrase in ?ak' čom 'fat hen' (Edmonson 1965; the

normal Quiché order, uninfluenced by Spanish, would be čo:m ak'). Since

Sacapultec is the only known Mayan language with pi:pi: as the nominal

reference for 'turkey', the case seems strong for a sixteenth-century

Sacapultec locution čo:m pi:pi: (roughly, 'great gobble') as the source

for Spanish chompipe; in fact chompipi is a widespread variant of chompipe

(Santamaría 1974). Sacapultec would later drop the modifier čo:m.

So the linguistic evidence suggests   that Sacapultec-Spanish contact

has resulted in diffusion in both directions, although one direction was

of course heavily favored.

2.9.3. Summary.

Sacapulas has apparently been the site of a fairly stable community

trilingualism since the mid-sixteenth century, with Sacapultec, Quiché and

Spanish in daily contact. Sacapultec has undergone heavy influence,

first from Quiché and later from Spanish, and in turn has had at least

slight influence on Spanish.

The association of Quiché with a higher culture than that of Saca-

pulas is reflected in the borrowing of day names for the native calendar

from Quiché (§ 2.9.1.). That the Quiché had a more stratified society

(or, alternatively, that the presence of the Quiché in Sacapulas was it-

self the source of stratification in Sacapulas society) is suggested by

the likely borrowing of the second person reverential pronouns from

Quiché.

It has been established that Sacapultec has had considerable contact

with Quiché in recent times. In addition to contact with speakers of

Quiché in villages to the east and south, there have been Quiché speakers

within Sacapulas itself as far back as documentary evidence extends, i.e.,

more than four centuries. Quiché has probably been viewed, in different

periods and under different circumstances, as both above Sacapultec and

below it socially. The historical circumstances for Quiché influence on

Sacapultec in recent times are well attested, while features shared with

the Cakchiquelan languages must have arisen at an earlier period (§2.10).

2.10. Reevaluation of Subgrouping: Implications for Quichean Prehistory.

In this section we consider the implications for Quichean prehistory,

of the new Quichean classification implicit in the Cakchiquelan hypothesis.

Stated simply, the comparative evidence demands an explanation of the

Quichean linguistic development in which Cakchiquel, Tzutujil, Sacapultec,

and Sipacapa shared a period of common development -- whether as

one language, as an old dialect group, or as a close-knit diffusion area.

This formulation, purely linguistic in its origins, nevertheless neces-

sarily has extralinguistic implications. Kaufman has stressed that

> when we recognize language families we necessarily
>
> postulate, usually correctly, protolanguages (perhaps
>
> at several levels) which were spoken by real people,
>
> mirroring particular cultures, in particular places,
>
> with a realistic amount of internal linguistic varia-
>
> tion, and probably in contact with other languages.
>
> Thus, workers in the historical development of a par-
>
> ticular genetic group of languages, it seems to me,
>
> must inevitably be led to the realization that their con-
>
> tribution has to be fitted into a broad historical
>
> framework involving places, objects, time, and all
>
> the kinds of inferences of which historical disciplines

are capable.

A linguistic classification and reconstruc-

tion is nothing less than a theory or history of

the diversification of a group of languages.

(Kaufman 1976a:101-102)

And Campbell has stressed the inseparability of linguistic reconstruction

and culture history:

...rather than just attempting historical recon-

structions we should want to know what happened.

We can attain neither an accurate reconstruction

nor learn what happened without sufficient refer-

ence to the whole linguistic area and its culture

history.   (1970:10)

An adequate linguistic reconstruction and classification, then, should

withstand the test of correlation with culture history as far as it can

be determined.

The potential for effective correlation of linguistic and ethnohis-

torical evidence has been demonstrated by Campbell in his work on the

Quichean area. At a time depth comparable to that which concerns us,

for example, he was able to establish that

The Eastern Cakchiquel dialect area corresponds exactly

to the area of the Akahal Cakchiquels (and Sacatepéquez

people), those who were not allied with the Quiché. The

Western Cakchiquel dialect area corresponds to the other

Cakchiquels, who were earlier Quiché allies and later

of the "kingdom" of Tecpan-Guatemala (Iximché). This is

a striking correlation of linguistic boundaries with pre-

Conquest political boundaries. (Campbell 1978:31)

After citing several further finds of note, Campbell concludes that

> ...many aspects of Quichean ethnohistory and lin-
> guistics correlate very well, although the original
> research in these areas was conducted independently
> with no particular thought of making such correlations.
> The several startling correspondences between linguis-
> tic boundaries (established dialectologically) and pre-
> Conquest political boundaries in fact enhances the re-
> construction of both.   (Campbell 1978:35)

One early attempt to form conclusions about Quichean population move-
ments was formulated by Kaufman, though apparently founded on a classi-
fication which, it has been argued here, must be superseded. His map
of Quichean dialects around 800 AD ($\S$2.3., Figure 2.2) recognizes re-
latively greater influence between certain languages. Further, he makes
some explicit suggestions about homelands and population movements:

> The Popul Vuh informs us that the Quichés took terri-
> tory away from the Mams in expanding westward, that the
> original homeland of the Quichés was somewhere around
> San Pedro Jocopilas, and that the Quichés also took terri-
> tory away from the Cakchiquels in moving southward....
> Since the Tzutujils and Cakchiquels are generally
> more southerly than the Quichés, it is likely they
> moved south of our line somewhat earlier, and possi-
> bly were pushed as far as they are now by Quiché ex-
> pansion not much later.   (Kaufman 1976b:82-83)

He goes on to suggest that the homeland of Quichean Proper was the

Sacapulas-Cunén area, and that the various Quichean languages gradually

peeled off from the sedentary Sacapultecs, in the order of Tzutujils,

then Cakchiquels, then Sipacapas and Quichés. The Quichés later expand,

pushing the Cakchiquels before them, and the Sipacapas move into Mam

territory. (A similar, if less detailed, account is incorporated into

his later (1976a) treatment of the entire Mayan area.)

Kaufman's view of the movements of Quichean languages has been a-

dopted more or less intact by some ethnohistorians, e.g. Carmack (1981:

53-54). Carmack's map, reproduced in Figure 2.16 , provides a visual

summary of the broader points of Kaufman's (1976a) analysis.

It must be recalled, however, that Kaufman's historical outline is

based on a classification which did not specify any subgrouping within the

five Quichean proper languages (§ 2.3.), and which emphasized the close

affinity of Sacapultec with Quiché. The new classification presented here

has emphasized three points: 1) the separateness of Quiché and Sacapultec;

2) the recent and superficial overlay of Quiché influence on Sacapultec,

especially in the area of high culture; and 3) the deeper affiliation of

Sacapultec with Cakchiquel, Tzutujil and Sipacapa to the exclusion of

Quiché. Historical implications of these three points will be taken up

in turn.

The archaeologist John W. Fox has documented influence on the Saca-

pulas site of Xolchun (Figure 1.5) by hybrid Mexican-Mayan cultural forms

as early as the Late Classic Period (ca. 700-900 AD); he finds that Toltec

influence at the Sacapulas site of Chutinamit dates from the Early Post-

classic Period (ca. 900-1200) (Carmack 1981:53). According to Fox, "the

Sacapulas communities were established prior to the Epi-Toltec Quiché"
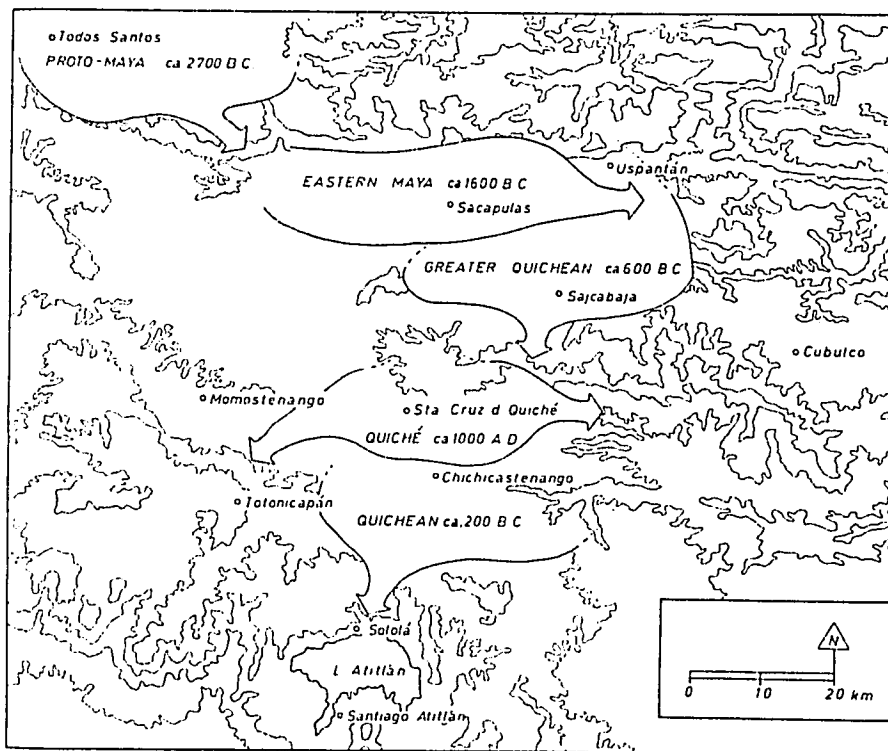
Figure 2.16. History of the "Central Quiché" Languages (Carmack 1981:55)

(1978:76) and had distinct and well-defined ceramic and architectural

patterns, which Fox called the "acropolis" pattern. And the evidence

of distinct Sacapultec identity has been stressed by Campbell: ethno-

historical material, he says, "speaks of 'Toltec' ancestors, wars with

the 'Quichés', etc., indicating at least circumstantially the Sacapultec

difference from the Quiché..." (Campbell 1978:35; Carmack 1973 is cited in support). So Sacapulas sites show a significant occupation since the Late Classic, with communities independent of and prior to the Epi-Toltec Quiché, and with a non-Quiché ceramics and a distinctive "acropolis" pattern in architecture. These extralinguistic facts correlate well with the linguistic finding that Sacapultec and Quiché are separate languages.

The second point is that Quiché influence represents a linguistic overlay on Sacapultec. In archaeology, J.W. Fox (1978) has documented the expansion of Central Quiché (Utatlán) influence throughout the highland Quiché basin during the Late Postclassic (see his map, Figure 2.18 below); the work of Carmack (1981) corroborates this, on a more minute scale. Fox points out that Sacapulas communities underwent significant Central Quiché influence in public architecture and fine ceramics during the Late Phase Late Postclassic (1350-1524), while stressing that "the Sacapulas Quiché[23] had architectural styles independent of the Central Quiché prior to their subjugation and inclusion within the Quiché state" (1978:113). And the domination of Sacapulas by the Quiché is corroborated ethnohistorically in natively authored documents. These refer to "Kumatz", which Fox suggests may have been associated with the site of Chutixtiox (Figure 1.5). Chutixtiox stands not far from the present-day hamlet of Río Blanco, čukuma?č in Sacapultec (ču- 'at', kumač 'snake'), which gives some support to Fox's supposition.

> Kumatz was burned and subjugated by the Central Quiche
> in the early decades of the fifteenth century (Xajil
> 1953:93; Xpantzay II 1957:141). The Late-phase Central
> Quiche influence seen in architecture and ceramics can

> thus be correlated with actual military take-
>
> over recorded ethnohistorically. (J.W. Fox
>
> 1978:76-77)

We may add that both archaeological and ethnohistoric evidence can be correlated with the linguistic evidence, which shows that Quiché speakers were present in Sacapulas (continuing into post-Conquest times) and the Quiché language has influenced the Sacapultec language itself. Moreover, the evidence from archaeology, ethnohistory, and linguistics (specifically, high culture lexical borrowing from Quiché) are all commensurable with the same type of contact situation, one in which a continuing Sacapultec population is overlaid with a new elite.

Turning to the linguistic grouping of Sacapultec, Sipacapa, Cakchiquel, and Tzutujil, we find an unexpected correlation in the archaeological evidence. Fox independently defined an "acropolis pattern" on the basis of architectural features in sites constructed on an acropolis, and a distinctive carved wave (1978). Both are found at the sites of Chutinamit-Sacapulas, Chuitinamit-Atitlan, and Chamac (Figure 1.4). Fox confirms that my Cakchiquelan subgrouping correlates with his Early Postclassic grouping of acropolic peoples, i.e., the Akahal (Eastern Cakchiquel), Sacapultec, and Tzutujil (personal communication, November, 1980). (The site at Sipacapa is not included, but Fox has contended (1978:139) that Mam and not Sipacapa was spoken in Sipacapa during the Late Postclassic Period. For more on Sipacapa, see below.) The Quiché had an archaeological tradition which was both later and completely separate from this acropolis tradition. Thus the linguistic postulation of a non-Quiché Cakchiquelan group (minus Sipacapa) correlates with the archaeological findings.

Fox points out some recurrent features in early native documents from these peoples:

> The founders of the highland acropolis sites had
> names suggestive of the feathered serpent and the
> Toltecs. Thus, the occupants of Chutinamit-Sacapulas
> were called the Toltecat and Canil. Toltecat ob-
> viously refers to the Toltecs, whereas Canil trans-
> lates from the Quiche as "serpent". Neighboring
> Chutixtiox was inhabited by the Kumatz, or again,
> "serpents". Finally the Tzutihil inhabitants of
> Chutinamit-Atitlan were known as the Tz'ikina, or
> "bird" people (Popol Vuh 1971:156). (J.W. Fox
> 1978:120)

This parallel, though far from conclusive in itself, represents an inter-esting strand uniting Sacapultec and Tzutujil.

Regarding Sacapultec's closest relative, the problem of where and when Sipacapa has been spoken has already been broached (§2.6). A further ele-ment is now added: the present Sipacapa area, unlike other language areas, does not show the acropolis pattern. The tiny population of the Sipacapas (Cortes y Larraz [1775] 1958) and their apparent mobility, along with the fact that they probably were not linguistically distinct from Sacapultec until relatively recently, are suggestive. Fox has pointed out possible archaeological links between Sacapulas and the Mams of the Malacatancito area (which is on a line between Sacapulas and present-day Sipacapa, Fig-ure 2.21). He points out that Sacapulas was a center of cultural influence in that area during the Early Phase Late Postclassic (1200-1350) and pro-bably earlier, and suggests that "The Mam at Pueblo Viejo Malacatancito

may thus have incorporated elements of Quiche culture from a Sacapulas power center, or, conceivably, may have had Sacapulas Quiche[23] overlords" (Fox 1978:138). He goes on to observe that "The central Quiche subjugated the eastern Mam in the Malacatancito area in the same campaign as the Sacapulas Quiche, suggesting the possibility of some association between the vanquished groups (e.g. Xpantzay III)" (Fox 1978:138). Given the suggested cultural affinity of Sacapulas and Pueblo Viejo Malacatancito, and the subjugation of the two sites in the same Quiché campaign, one may ask whether a small outpost of speakers of Proto-Sacapultec-Sipacapa were stationed in Pueblo Viejo Malacatancito and fled west before the Quiché expansion of the Late Phase Late Postclassic; they would eventually settle in the Mam area beyond reach of Quiché power, where they become the "thirty families" of Sipacapa. This speculation will of course require much more information than is presently available for its eventual assessment.

For the three points of investigation outlined above, a convergence has been successfully demonstrated between linguistic and extralinguistic facts: 1) Sacapulas is a separate entity from Quiché linguistically, archaeologically, and ethnohistorically; 2) the pattern of Quiché high-culture influence on the Sacapultec language correlates with archaeological evidence of a newly imposed Quiché elite, and ethnohistoric records of a Quiché military takeover; 3) the members (except Sipacapa) of the linguistically-defined Cakchiquelan subgroup are found to share an archaeologically-defined "acropolis pattern". But this leads to a fourth point: how have the Cakchiquelan languages come to be spoken where they now are spoken? We have seen Kaufman's model of population movements (pp.77-78); since his classification has been superseded, however, it is necessary to reevaluate the model of population movements as well.

Consider the present-day distribution of Quichean Proper languages, as indicated in Figure 2.17 (adapted from Kaufman 1976b:81 and J.A. Fox 1978:3). If we accept the old view (e.g. Campbell 1979:932) of Quiché, Sacapultec and Sipacapa as a subgroup, there are essentially no implications for population movements (see Figure 2.18). The three languages are adjacent and could presumably have diversified in place; or, in Kaufman's formulation (1976b:82-83) the languages could simply have moved into adjacent areas, unopposed. But once the Cakchiquelan languages are recognized as a subgroup, quite a different picture emerges (Figure 2.19). Every possible language pairing but that of Cakchiquel-Tzutujil is separated by a wide swath of Quiché territory. If the four Cakchiquelan languages once occupied a common speech area (as indeed the comparative evidence shows they must) while Quiché stood as a separate unit, population movement of some sort is necessarily implied. Many possible movement schemes may be imagined; but the most economical would be the intrusion of Quiché westward into the heart of a unified Cakchiquelan territory, splitting the Cakchiquelan languages into isolated groups at or near the limits of the new Quiché expansion.[24] (Campbell observes that a similar expansion toward the east by the Rabinal Quiché was responsible for splitting Pocomam and Pocomchí (1978:34).) Pressure from the Quiché intrusion may have been what caused Sipacapa to flee into Mam territory. The Cakchiquelan groups that managed to maintain their identify found themselves isolated from each other; eventually the remainders of Cakchiquelan at the fringes of the Quiché dominion became differentiated into the modern Cakchiquel, Tzutujil, Sacapultec, and Sipacapa. This model for Quichean prehistory leads to a postulation of early dialect distribution which differs substantially from that of Kaufman (Figure 2.2). The new postulated proto-distribution is as seen in Figure 2.20.
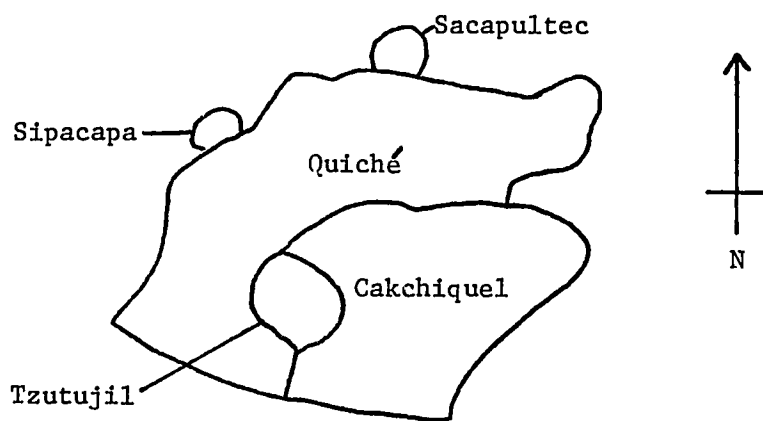
Figure 2.17. Present Distribution of Quichean Proper Languages (adapted from Kaufman 1976b:81 and J.A. Fox 1978)
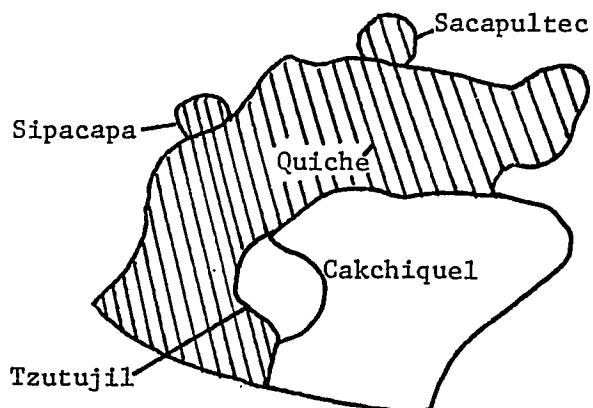
Figure 2.18. Quiché-Sacapultec-Sipacapa as a Subgroup
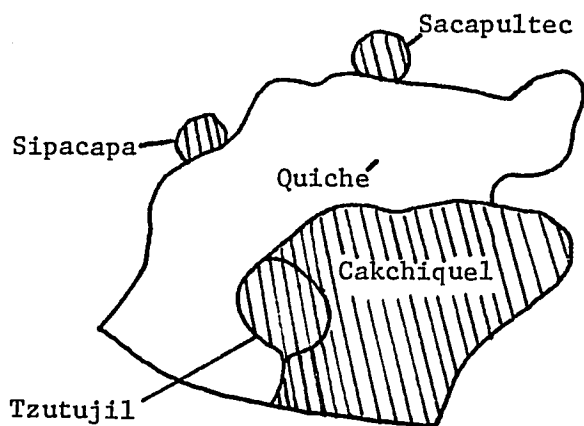
Figure 2.19. "Cakchiquelan" as a Subgroup
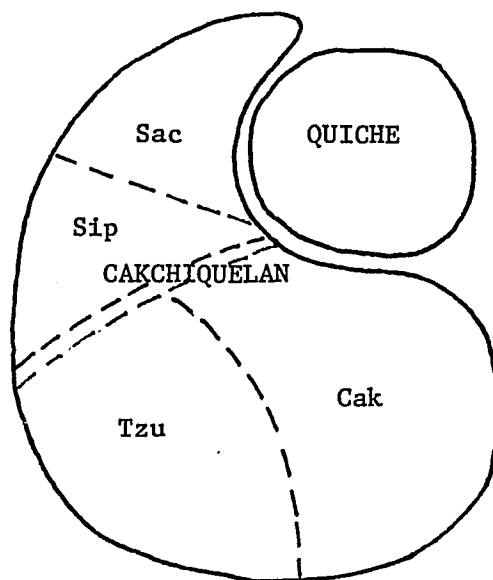
Figure 2.20. Postulated Early Distribution of Quiché and Cakchiquelan Dialects[25]

This linguistic model is reinforced by ethnohistoric findings developed independently by Carmack, J.W. Fox, and others, which have been glimpsed above. Fox summarizes aspects of his findings of Quiché expansion in the map reproduced in Figure 2.21. In this formulation, Quiché influence is shown to radiate out from the Quiché center of Utatlán. Ultimately, the sphere of influence begins to impinge on what now remains as Cakchiquelan territory. Sacapulas falls within the third circle of Quiché influence, reflecting the Utatlán Quiché elite intrusion of archaeological patterns around 1400 AD. Other Cakchiquelan groups fall either just within the ultimate limits of Quiché expansion (Akahal Cakchiquel, Sacapultec) or just outside these limits (Tzutujil, Sipacapa).
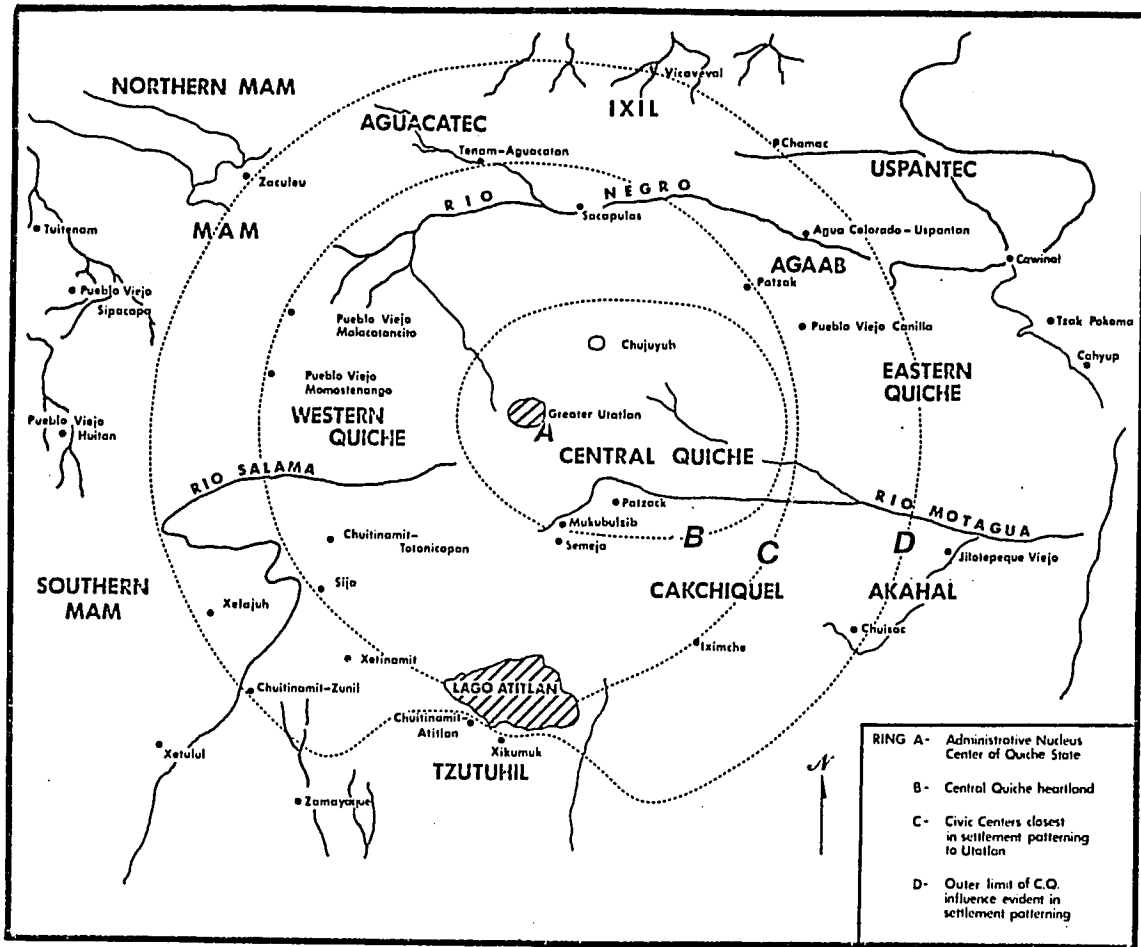
Figure 2.21. The Spread of Central Quiché Influence, Late Post-
Classic (J.W. Fox 1978:285)

2.11. Summary.

It has been argued that Sacapultec, far from being a dialect of Quiché,
is actually most closely affiliated with the geographically distant Cak-
chiquel, Tzutujil, and Sipacapa. Where Quiché and Sacapultec share lin-
guistic history, the contact situation, with its potential for diffusion,
is well established during Colonial and recent pre-Colonial tiems. But
Sacapultec innovations shared with Cakchiquel, Tuztujil and Sipacapa can-
not have taken place in the recent era, and require postulation of an

earlier common speech area. The findings of the linguistic separateness of Sacapultec and of the linguistic unity of Cakchiquelan are corroborated through archaeological and ethnohistoric evidence. To paraphrase the statement cited earlier of Campbell (1978:35), we may say that the remarkable correspondences between linguistic groups (established comparatively) and pre-Conquest political groups "enhances the reconstruction of both".

Notes to Chapter 2

1. This parallels a sociolinguistic situation which has been described
   for Nootka (Sapir 1949:192) and for Rotinese (J.J. Fox 1974:72).

2. San Lucas Tolimán contains Tzutujil speakers and some Cakchiquel
   speakers (Jon Dayley, personal communication).

3. Outlying dialects of Sacapultec (traveling in either direction away
   from the town center) show this version of the short vowel lowering
   rule in both final and nonfinal syllables; that is e and o are low-
   ered to a, while i and u remain everywhere unchanged. These peri-
   pheral dialects apparently preserve an older stage, before the more
   recent town center innovation of extending the lowering to i and u
   in final syllables, where these vowels take up the position of former
   e and o.

4. Sacapultec's lowering of short vowels is partially paralleled else-
   where in the Mayan family: Lacandon lowered Proto-Yucatecan short *o
   to a, while long *o: retained its quality, and shortened to *o
   (Fisher 1972:132, cited in J.A. Fox 1978:59-60). Vowel lowering in
   Tzutujil is discussed in Jon Dayley's 1981 Berkeley dissertation,
   which I have not yet seen.

5. Oddly, Sacapultec has a single example which may represent a change
   directly opposed to the general lowering trend. Though uniquely
   exemplified, this change is compatible with a well-defined rule.
   Short a is rounded and raised to o between two labials (in a stressed
   final syllable). Thus Proto-Quichean *map > Sacapultec mop 'coyol
   palm'. A similar change in this word is found in several other lan-
   guages inside and outside of Quichean (see cognates in J.A. Fox 1978:

183-184). Alternatively, borrowing rather than sound change may be at issue.

6. Informal inspection of unpublished Proyecto Lingüístico Francisco Marroquín notes, plus notes from a brief field visit to Sipacapa kindly turned over to me by Mercedes Hinkson, have contributed to my analysis of this language.

7. Some local American missionary linguists who consider Sacapultec a dialect of Quiché nevertheless remark the special affinity of the speech of Sipacapa and Sacapulas (Ralph McCluggage, personal communication).

8. Of course, non-pueblo population figures might change the apparent imbalance. The pueblos of some quite populous Mayan municipios have relatively low permanent populations, filling up only on market and ceremonial occasions.

9. For support of this reconstruction see Du Bois 1978:87-88.

10. Implicit here is a rejection of Robertson's recent reconstruction of *ru- as the Proto-Mayan preconsonantal alternant (1977, 1980). I would argue that Robertson's own data rather support reconstruction of *u- for the preconsonantal form (as in Kaufman 1976b:74) and *r- as the prevocalic form. Developments in the daughter languages could then be mostly explained as a compounding of the two pronouns, in some languages as r-u- and in others as u-r-. A detailed support of this reconstruction would lead too far afield of the present work. Suffice it to say that in the view of Kaufman, myself, and other comparative Mayanists such as J.A. Fox, the appearance of r- (originally the prevocalic form) in the preconsonantal form of the third singular ergative clitic constitutes a common innovation in

Cakchiquel, Tzutujil, Sacapultec, and Sipacapa.

11. Of course, Sacapultec and Sipacapa may originally have shared pre-
    cisely the Cakchiquel-Tzutujil innovation, later reducing the
    *ru- combination to r plus a reduced vowel.

12. Such a shared deletion is of course not a "positive" innovation,
    and may weigh less heavily in deciding subgrouping.

13. There may have been some contact with a small number of Cakchiquel
    speakers in Sacapulas. Tovilla (who in the 17th century visited
    Sacapulas) was told in Utatlán, the old Quiché capital, that the
    Quiché had sent some conquered Cakchiquel speakers to Sacapulas,
    which was at the time also under Quiché domination. The Cakchiquel
    captives were put to hard labor in the salt works, and reportedly
    were kept in a cave at night (Reina and Monaghan 1981:15). These
    social circumstances, however, are hardly those which would favor
    Sacapultec innovation in imitation of the captive laborers.

14. It is of course conceivable that the cave-confined captive Cakchiquel
    laborers of pre-Conquest times mentioned by Tovilla (see fn. 13
    above) would have descendants who were still around several centur-
    ies later at the time of Ximénez. It seems unlikely, however, that
    a small group of aliens, originally captives and probably all male,
    would maintain a separate language for so many generations. It
    seems more likely that Ximénez' label of Cakchiquel is being used
    like that of Cortes y Larraz (§2.6), to relate a local speech var-
    iety to a larger and better-known language.

15. From the Santa María Chiquimula/Momostenango dialect (Thomas Larsen,
    personal communication).

16. Transcriptions in Column A are those which I gathered, and are
presented in the ordering given by the informant (a Sacapultec woman
about 60). Transcriptions in Column B are from the field notes of
Terrence Kaufman, and show interesting variation (č'ikin vs. č'iken,
na?x vs. no?x, č'a? vs. č'e?). The day names in Column B have been
reordered, as Kaufman's informant supplied them in an order which
does not seem to be the accepted Sacapultec order.

I made the elicitation on July 7, 1980; according to my infor-
mant, the day name for this day in the Sacapultec system was ka:n.
I have not yet been able to check for synchrony with other highland
calendars.

Since the informant began her listing with the actual day's
date (ka:n), the initial date of the series is not known.

17. This informant listed k'at twice; this is apparently an error for
kawaq.

18. An alternative possibility, though I consider it unlikely, is that
the Sacapultec doublet developed entirely within Sacapultec. From
this point of view, the pre-Sacapultec day name e: would have lost
its felt connection with the 'tooth' meaning for e:. Then, given
its specialized association with ritual speech, it would be a cul-
turally governed exception to the *-h > -y change, which would apply
only to the 'tooth' meaning, to give e:y. Later, the day name e:
would undergo the regular sound change of ŋ-addition. This chain of
events is of course difficult to establish; the Quiché loan explana-
tion is simpler and, all things considered, more probable.

19. But note Kaufman's caution that the forms in Mamean and Quiché are
not phonetically equivalent (personal communication); see forms in

Robertson (1980:72).

20. Though if Quiché had borrowed from Sacapultec before Sacapultec underwent the change of adding final -ŋ, this could account for the Quiché h. The geographical position with respect to Mamean languages, however, goes against this direction of diffusion.

21. The stigma is quite conscious for some speakers, as reflected in an innocent joke told me by a Sacapultec informant (whose Spanish was excellent). An unsophisticated countryman (presumably Indian) was offered a prize if he could correctly pronounce the name of the radio manufacturer Philips. Failing in the allotted three tries, he then exclaims: A, la gran futa!

22. The following discussion recapitulates portions of my brief note on the subject (Du Bois 1979).

23. The term "Quiché" in "Sacapulas Quiché" here is due to Fox's acceptance (1978:111) of Campbell's early position, since abandoned, that Sacapultec is a dialect of Quiché. The term is not apparently intended to carry connotations beyond the (erroneous) linguistic ones.

24. A similar splitting of speech areas by invasion is described by Bloomfield for Eastern Europe: in the ninth century, Slavic was split by intruding Hungarian (1933:133, Figure 2).

25. The dotted lines in this figure indicate probable incipient differentiation of the old dialect area.

3.1.   Consonants.

The consonant phonemes of Sacapultec are shown in Table 3.1.[1] Stops

occur in a plain voiceless series /p t kʸ k q/, a glottalic series

Table 3.1. Consonant Phonemes

		bilabial	alveolar	alveolar	alveopalatal	palatovelar	velar	post-velar	laryngeal
occlusives	plain	p	t	¢	č	kʸ	k	q	
	glottalic	b'	t'	¢'	č'	kʸ'	k'	q'	ʔ
	voiced	(b)	(d)				(g)		
	fricatives	(f)	s	š			x		
resonants	nasal	m	n				ŋ		
	lateral		l						
	flap		r						
	glide	w		y					

Note: Parentheses indicate phonemes restricted to loans

/b' t' kʸ' k' q' ʔ/, and a plain voiced series /b d g/ (loan phonemes

only). Affricates are plain /¢ č/ and glottalized /¢' č'/. Fricatives

/f s š x/ are all voiceless plain (/f/ is in loans only), while resonants

/m n ŋ l r w y/ are voiced (in their primary allophones).

3.1.1. Allophonic Distribution.

3.1.1.1. Plain Occlusives.

Aspiration. Plain stops are aspirated syllable-finally, unaspirated elsewhere. (Period (.) indicates syllable boundary.)

/p/ → [pʰ] / _.   /tap/ [tapʰ] 'crab'

   → [p] / elsewhere   /peȼ'/ [peȼ'] 'sparrow'

                                   /kampana?k/ [kàmpaná?ₐ̃kʰ] 'pito

                                                        tree'

                                   /plu:maŋ/ [plu:máŋ] 'feather'

/t/ → [tʰ] / _.   /masa:t/ [masá:tʰ] 'deer'

                                   /šatwarek/ [šatʰwarékʰ] 'you

                                                        slept'

   → [t] / elsewhere   /tap/ [tapʰ] 'crab'

                                   /ato:m/ [?ató:m] 'lizard'

                                   /tyo:š/ [tyo:š] 'thanks'

/k/ → [kʰ] / _.   /ku:k/ [ku:kʰ] 'squirrel'

                                   /šinyaktaxek/ [šinyàkʰtaxékʰ]

                                                        'I arose'

   → [k] / elsewhere   /ku:k/ [ku:kʰ] 'squirrel'

                                   /čikap/ [čikápʰ] 'cattle'

/q/ → [qʰ] / _ .   /a:q/ [?a:qʰ] 'pig'

                                   /saqkawi:n/ [sàqʰkawí:n] 'pumice'

The defective phoneme /kʸ/ has only one allophone (unaspirated) as it occurs only prevocalically, i.e. syllable-initially. For discussion see § 3.1.1.2.1.

Bilabial Glottalization. Between glottal stop and word boundary, final /p/ is optionally glottalized [p�], resulting in an overlap with an allophone of /b'/ (§ 3.1.1.2).

/p/ → [p̊] /ʔ _#   /seʔp/ [séʔp̊]   'Cypriano'

                                              (~ [séʔə̯pʰ])

(Glottalic phonemes, including /b'/, never occur in this environmnet.) Note that no other plain stops are glottalized in this position:

/paʔt/ [páʔə̯tʰ] 'blouse'

/pičaʔk/ [pičáʔə̯kʰ] 'yagual'

/xaʔq/ [x̣áʔə̯qʰ] 'cornhusk'

Plain Affricates. The plain affricates /¢ č/ each have a single allophone.

/¢/ → [¢]   /¢oy/ [¢oyç] 'tortilla gourd'

                 /i¢e:l/ [ʔi¢é:lʝ] 'evil'

                 /o¢/ [ʔo¢] 'good'

/č/ → [č]   /ča:k/ [ča:kʰ] 'work'

                 /ačeŋ/ [ʔačeŋ] 'man'

                 /pi:č/ [pi:č] 'cow foot'

For the voiced series of stops /b d g/, which occur only in loans, see § 3.1.1.7.

3.1.1.2. Glottalic Occlusives.

Occlusives of the glottalic series /bʼ tʼ ¢ʼ čʼ kᵞʼ kʼ qʼ/ all involve glottal constriction, but for a particular phoneme this may be either ejective or implosive, or both in alternation. In Sacapultec as in several other languages (Campbell 1973) the articulation at the front of the oral cavity (bilabial) has an implosive allophone, while the more back articulations are always ejective. Of the entire series, only the bilabial articulation has a voiced allophone.

Ejective Occlusives. The occlusives /tʼ ¢ʼ čʼ kᵞʼ kʼ qʼ/ each have a single allophone, in all environments ejective.

/tʼ/ ⟶ [tʼ]   /tʼoːtʼ/ [tʼoːtʼ] 'excrement'

/ramutʼoŋ/ [ṣəmutʼóŋ] 'he wadded
                                            it up'

/¢ʼ/ ⟶ [¢ʼ]   /¢ʼeʔ/ [¢ʼɛʔ] 'dog'

/pe¢ʼ/ [pe¢ʼ] 'sparrow'

/a¢ʼaːm/ [ʔa¢ʼáːm] 'salt'

/čʼ/ ⟶ [čʼ]   /čʼiːčʼ/ [čʼiːčʼ] 'machete'

/čʼičʼiyaːk/ [čʼičʼiyáːkʰ]

                                            'chilindrón (shrub)'

/kʼ/ ⟶ [kʼ]   /kʼoːy/ [kʼoːyç] 'monkey'

/ruːkʼaːʔ/ [ṣuːkʼáːʔ] 'its horn'

/šiːkʼ/ [šiːkʼ] 'wing'

/q'/ → [q']   /q'u:š/ [q'u:š] 'rusted'

                          /maq'an/ [maq'án] 'hot (water)'

                          /kʸaq'/ [kʸaq'] 'guayaba (fruit)'

/kʸ'/ is discussed in the section on velar palatalization (§3.1.1.2.1).

Glottalic Bilabial. /b'/ is a voiced implosive [ɓ] prevocalically,
a voiceless released ejective [p'] elsewhere.

/b'/ → [ɓ] / _V   /b'a:tek/ [ɓa:tékʰ] 'it was

                                            rolled up'

                          /ya:b'inek/ [ya:ɓinékʰ] 'he be-

                                            came sick'

  → [p'] / elsewhere   /ya:b'/ [ya:p'] 'sick'

                          /lab'ȼe:s/ [lap'ȼé:s] 'wild ama-

                                            ranth'

Younger speakers have a slightly different form of this rule. Instead
of word-final ejective release, these speakers have an unreleased or
nasally released allophone, formed by a voiceless stop with coarticu-
lated glottal closure, [p̚ˀ] or [p̃m̥].

/b'/ → [ɓ] / _V   /b'e:ʔ/ [ɓé:ʔ] 'sheep'

                          /ib'o:y/ [ʔiɓó:yç] 'armadillo'

  → [p̚ˀ]   [p̃m̥] / _#   /xuyob'/ [x̣uyop̚ˀ]   'mountain'

                              (~ [x̣uyop̃m̥])

3.1.1.2.1. Velar Palatalization.

     The pairs of phones [k] and [kʸ], and [k'] and [kʸ'], are in almost
complementary distribution; a rule can be written which nearly accounts
for their distribution. However, they are here maintained as distinct

phonemes because in one environment their distribution cannot be pre-
dicted. Barring this, the rule would be as follows:

$$/k^{(\mathrm{,})}/ \longrightarrow [k^y{}^{(\mathrm{,})}] \ / \ \_V^{-\mathrm{round}} \ q^{(\mathrm{,})}$$

$$/ \ \_V^{\mathrm{front}} \left\{ \begin{matrix} x \\ \mathrm{?} \end{matrix} \right. \left. \begin{matrix} \ \\ \ \\ \ \\ \ \end{matrix} \right] \ \mathrm{optional}$$

$$/ i \_ a$$

$$\longrightarrow [k^{(\mathrm{,})}] \ /\mathrm{elsewhere}$$

Examples which fit this pattern, listed by environment, are cited in a
transcription in which only /k/ and /k'/ would be phonemic:[2]

| $\_V^{-\mathrm{round}}$ q | /kaq/ [k^{y}aq^h] 'red' |
| | /k'aq/ [k^y'aq^h] 'flea' |

| $\_V^{-\mathrm{round}}$ q' | /kaq'/ [k^{y}aq'] 'guayaba (fruit)' |
| | /kiq'i:?/ [k^{y}ɪ̃q'ʃ:?] 'wind' |

| $\_V^{\mathrm{front}}$ x | /ke:x/ [ke:x̰ ~ k^{y}e:x̰] 'horse' |
| | /kixab'/ [k^{y}ixáp̰ᵓ] 'four' |

| $\_V^{\mathrm{front}}$? | /ki?ab'/ [k^{y}i?áp̰ᵓ] 'two' |
| | /ke?ax/ [k^{y}e?áx̰] 'let them leave!' |

i $\_$ a	/ikax/ [?ik^{y}áx̰] 'axe'
	/sika?/ [sik^{y}á?] 'Francisca'
	/čikač/ [čikáč ~ čik^{y}ač] 'basket'
	/sika:r/ [sik^{y}á:r̰ṣ] 'cigarette'
	/ikam/ [?ik^{y}ám] 'east'
	/wika:n/ [wik^{y}á:n] 'my uncle'

/šik'a?y/ [šik'á?ʌ̀ç ~ šikʸ'á?ʌ̀ç] 'twigs'

/sik'ax/ [sikʸ'ax̬] 'apazote (herb)'

elsewhere

/ka:x/ [ka:x̬] 'sky'

/ka:?/ [ka:?] 'grinding stone'

/ko?/ [ko?] 'Domingo'

/kek'/ [kek'] 'blood'

/ka:n/ [ka:n] 'behind'

/šiken/ [šikén] 'ear'

/iškab'/ [?iškáp'] 'beeswax'

/k'ax/ [k'ax̬] 'pinol (cereal meal)'

/k'a?n/ [k'á̰?n̥] 'angry'

/k'o:y/ [k'o:yç] 'monkey'

/ru:k'a:?/ [ṣu:k'á:?] 'its horn'

/šik'ib'al/ [šik'ibáɬ] 'twig broom'

/išk'a?š/ [?išk'a?š] 'fingernail'

However, counterexamples arise to the optional palatalization in the environment between i and a. Although /čikač/ 'basket' has the expected [k ~ kʸ] alternation, /čikap/ 'cattle' is always [čikápʰ]. Similarly, /sik'al/ 'oak' is only [sik'áɬ]. (On the other hand, recall /ikam/ [?ikʸám] 'east'.) No clear exceptionless rule emerges.[3]

At the synchronic level, given the choice between a phonemic rule with lexical exceptions and two pairs of phonemes with defective and largely predictable distributions, I have chosen to retain the palatalized and nonpalatalized velars as distinct phonemes. (The same solution was adopted by Kaufman; see § 3.8.)

3.1.1.3. Glottal Stop.

Glottal stop occurs word-finally, before a plain consonant in a cluster, intervocalically, and initially. It contrasts with its absence in all these environments but the last, where it is predictably inserted.

Before non-nasal consonants glottal stop is usually followed by a nonsyllabic laryngealized echo vowel [ʔə̯], the quality of which alternates between schwa and the quality of the preceding vowel. In unstressed or secondarily stressed syllables glottal stop optionally becomes lenis [ʔ̬]. In word-final position it is optionally followed by a voiceless release [ə̥].

/ʔ/ → [ʔə̯] / _C⁻ⁿᵃˢᵃˡ   /siːnaʔx/ [siːnáʔə̯x̣] 'scorpion'

                              /xaʔq/ [x̣áʔə̯qʰ] 'corn husk'

→ [ʔ̬] / _(s)ś   /kʼaʔnarek/ [kʼà̬ʔnarékʰ]

                              's/he became mean'

→ [ʔ ~ ʔə̥] / _#   /bʼeːʔ/ [ɓéːʔə̥ ~ ɓeːʔ] 'sheep'

[ʔ] / elsewhere   /kʸiʔabʼ/ [kʸiʔáɓ˺] 'two'

                              /kʼaʔn/ [kʼáʔn̩] 'mean'

Often before a glottalic consonant, glottal stop is realized simply as laryngealization on the preceding (lengthened) vowel: /laʔkʼaːl/ [la̰ːkʼá̰ːl̩] 'the child'. (It may also simply alternate with vowel length; see §4.1.2.)

<u>Glottal Stop Insertion</u>. Nondistinctive glottal stop is inserted before any word-initial syllabic segment (vowel or resonant).

/aːq/ [ʔaːqʰ] 'pig'

/ačeŋ/ [ʔačéŋ] 'man'

/išiːm/ [ʔišíːm] 'corn'

/l neː?/ [ʔļ néː?] 'the baby'

That this glottal stop is prothetic rather than underlying is confirmed by its undifferentiated application to derived forms, such as syllabic ļ (from the underlying //li//, with nonsyllabic l and no glottal stop).

The inserted glottal stop is ordinarily retained not only when it follows a vowel-final word but also following a consonant-final word even if the vowel it precedes is unstressed.

/ax iːȼ/ [ʔax̣ ʔíːȼ] 'sorcerer'

/naːbʼey ačeŋ/ [naːɓéyç ʔačéŋ] 'first man'

/tʼubʼul išiːm/ [tʼuɓúlļ ʔišíːm] 'piled-up corn'

/kikimuq išiːm/ [kikimúqʰ ʔišíːm] 'they bury corn'

/xar̲pa? axalabʼal qʼiːx/ [xar̆pá? ʔax̣alaɓálļ qʼíːx]

　'What date is today?'

/kimpeː ikʼiːn laŋ/ [kimpé ʔikʼiːn láŋ]

　'I will come with you'

/ya aːnimaš ček/ [ya ʔaːnimáš čék] 'it is the

　hour of the dead'

<u>Cliticization</u>. The insertion of glottal stop does not occur if word boundary has been deleted, as in forming certain phrases through cliticization or compounding. In fluid speech the indefinite article xun (but not the definite article li) is cliticized to a following

word which begins with an unstressed vowel, previous to glottal stop insertion:

/xun íškʸ'aq/ [x̣uníškʸ'áqʰ] 'a scratch'

Compare xun 'a' with íšib' 'three':

/xun ačeŋ/ [x̣unačéŋ] 'a man'

/íšib' ačeŋ/ [ʔišíp̓ ʔačéŋ] 'three men'

Some phrases may be treated as units optionally:

/ax k'íy iší:m/ [ʔáx̣ k'íyç ʔiší:m] 'corn vendor'

or /ax k'íyiší:m/ [ʔáx̣ k'íyiší:m]

The definite article li is not cliticized to following nouns before glottal stop insertion:

/li i:k'/ [lʔi:k'] 'the month'

/li á:was/ [lʔá:was] 'the soft drinks'

However, the definite article, and prepositions as well do cliticize to following possessive prefixes (Set A: see p. 171 and § 5.2.2), while no glottal stop insertion occurs:

li   a: -li:š   [la:lʼ:š] 'your pants'

the your

li   a:w -í¢í:k   [la:wi¢ʼ:kʰ] 'your older brother'

the your

pa   a: -xalo:m   [pa:x̣ló:m] 'in your head'

in   your

The Set A prefixes must be lexically marked as exceptions to word-initial glottal stop insertion. When the Set A prefixes are phrase-initial (not preceded by a potential clitic such as an article or preposition), however, they undergo the more general rule of phrase-

initial insertion as expected:

      a:w -i¢i:k ?   [ʔa:wi¢íːkʰↄ] '(Is he) your older brother?'

      your-older brother

      kimpe a:w -ik'i:n [kimpé ʔa:wik'íːn] 'I will come with you'

      I come your-with

3.1.1.4. Fricatives.

Fricatives /f s š x/ each have a single allophone. /f/ occurs only for some speakers, and then only in Spanish loans; for discussion see §3.1.1.7.

    /s/ →[s]   /si:p/ [si:pʰ] 'tick'

                              /kisey/ [kiséyç] 'skunk'

                              /os/ [ʔɐs] 'fly'

    /š/ → [š]   /ši:k/ [ši:kʰ] 'hawk'

                              /k'ašab'/ [k'ašáp'] '_achiote_ (spice)'

                              /k'oš/ [k'ɐš] 'roasting ear'

The Sacapultec velar fricative is here written /x/, but its pronunciation is quite distinct from that of the Quiché sound usually transcribed with the same symbol (§2.5; Campbell 1977:15). Corresponding to the heavily fricated post-velar [x] of Quiché, Sacapultec has a very lightly fricated sound, with velar or slightly pre-velar articulation [x̞].

    /x/ →[x̞]   /xu:n/ [x̞u:n] 'one'

                              /xe:y/ [x̞e:yç] 'tail'

/k'o:x/ [k'o:x̂] 'mask'

/axi:x/ [ʔax̂í:x̂] 'sugar cane'

<u>3.1.1.5. Nasals.</u>

Nasals /m n ŋ/ are always voiced. /ŋ/ is defective, occurring only word-finally, while /m n/ have full consonantal distribution.

/m/ → [m] /ma:m/ [ma:m] 'male'

/kumat́/ [kumá t́] 'snake'

/n/ is velarized to [ŋ] before velars (including the labiovelar /w/) and post-velars; elsewhere it is [n]. The [ŋ] allophone of /n/ is identical to the primary allophone of /ŋ/; however, /n/ and /ŋ/ contrast word-finally (§3.1.3.), and the most straightforward statement of distribution (see previous paragraph) precludes considering the alternation morphophonemic. Thus I treat nonfinal [ŋ] as /n/. The velarization rule is optional across morpheme boundaries.

$$/n/ \rightarrow [ŋ] \; / \_ \begin{cases} k^{(')} \\ q^{(')} \\ w \end{cases}$$

/pi:nk/ [pi:ŋkʰ] 'plantation'

/šinwilaŋ/ [šìŋwiláŋ] 'I saw it'

→ [n] / elsewhere /na:n/ [na:n] 'mother (vocative)'

/anu:p/ [ʔanú:pʰ] '<u>ceiba</u> (tree)'

/m/ and /n/ are syllabic /m̩ n̩/ between glottal stop and word boundary.

/t́aʔm/ [t́áʔm̩] 'nose'

/k'aʔn/ [k'áʔn̩] 'angry'

/ŋ/ is, as noted, defective in its distribution. It occurs only word-finally, and then only when the word containing it is itself

phrase-final. When /ŋ/ is followed in a phrase by another word, it
is dropped and replaced by vowel length (see §4.1.1.). Because of
its alternation with vowel length (recall its diachronic origin in
vowel-final words, §2.5.) it could be treated not as a consonantal
segment, but as a redundant vocalic feature, to be inserted post-
vocalically by rule. While it may be appropriate for the linguist to
postulate a morphophonemic process of addition of /ŋ/ to underlying
forms without it (see §4.1.1.), at the phonemic level this does not
seem to accord with native intuitions, as far as can be determined
from experiences in teaching a practical orthography. Moreover, /ŋ/
acts as a consonant in forming closed syllables, suggesting that it is
now interpreted as an independent consonantal segment.[4] /ŋ/ is treated
as an independent phoneme, and its alternation with vowel length as the
product of morphophonemic processes (§4.1.1.; §4.2.1.3.). (Kaufman's
phonemic analysis also treated /ŋ/ as a phonemic segment; for discussion
of this and Campbell's analysis see §3.7.)

/ŋ/ → [ŋ]   /ačeŋ/ [ʔačéŋ] 'man'

                                 /eːŋ/ [eːŋ] 'day name'

                                 /naŋ/ [naŋ] 'still'

3.1.1.6. Oral Resonants.

Oral resonants include a lateral /l/ with "light" articulation,
a retroflex flap /r/, and labiovelar and palatal glides /w y/.

Resonant Devoicing. Oral resonants are partially devoiced and
fricated word-finally and before consonants. The segment begins voiced,
but ends as a voiceless fricative with the same articulation. In the
case of the glides /w y/, this devoicing occurs after full labialization

or palatalization, respectively, have been reached. Using R to stand

for a (voiced) oral resonant:

$$/R/ \rightarrow [R\overset{\circ}{R}] \ / \_ \begin{cases} \# \\ C \end{cases}$$

$$\rightarrow [R] \quad /\text{elsewhere}$$

(There are further rules which affect the retroflex resonant /r/; see

below.)

/l/ → [l ɟ] / _ #	/imol/ [ʔimól ̪] 'rabbit'
_ C	/alkaltaŋ/ [al ̪kal ̪táŋ] 'mayor'
→ [l �] / _ #	/lay/ [̍layç] 'nettle'
_ C	/ali:t/ [ʔalf ̍:tʰ] 'girl'
/r/ → [ř ̣ṣ] / _ #	/kar/ [kař ̣ṣ] 'fish'
_ C	/o:rnaŋ/ [ʔo:ř ̣ṣnáŋ] 'oven'
/w/ → [wɸ] / _ #	/te:w/ [te:wɸ] 'cold'
→ [w] / _ V	/way/ [wayç] 'tortilla'
	/k'awaš/ [k'awá ̌š] 'custard-apple
	species'
/y/ → [yç] / _ #	/way/ [wayç] 'tortilla'
_ C	/šik'iytisa:x/ [šik'ìyçtisá:x]
	'he raised it'
→ [y] /elsewhere	/ya?/ [ya?] 'water'
	/b'ayo:m/ [ɓayó:m] 'rich'

Some comments are necessary here, regarding interspeaker variation in allophonic realizations (for /w/), and blocking of the resonant devoicing rule. Where older speakers retain the bilabial articulation for devoiced /w/ in final position [wɸ], some younger speakers shift to a labiodental articulation [wf]: /uleːw/ [ʔuléːwf] 'earth'. (The younger speakers in question know Spanish, which may have contributed to this development, but some other Quichean languages also show labiodental final allophones for /w/; Spanish influence is of course possible in these languages as well.)

The operation of the resonant devoicing rule in the preconsonantal environment is sometimes blocked. In general this reflects a stage in which the resonant was separated from the consonant by an intervening vowel; this vowel often appears in careful speech. For example, in /šaxawub'al/ 'dancing place' the /w/ is never devoiced -- neither with the protecting vowel present, as in [šaxàwuɓ'álɟ], nor without it, as in the alternant [saxàwɓálɟ]. (For deletion of unstressed vowels see §4.2.3.) Another example where preconsonantal devoicing is blocked (for /l/) is [ṣalsáːx̣] from //ralasaːx// 's/he removed it.' In other Mayan languages where this occurs, the expedient has been adopted of overtly indicating these resonants as not subject to devoicing. Kaufman (1976:18) marks resonants which do not devoice as predicted with quotation marks (w" y" l" r"); Norman (1976:42, fn. 22) employs the equivalent notational device, adopted here, of underlining (w̲ y̲ l̲ r̲). Thus, the variant for 'dancing place' in which the unstressed penultimate vowel has been deleted would be written with underlining of the resonant which this vowel originally followed: /šaxaw̲b'al/ [šaxàwɓálɟ] 'dancing place.' To the extent that such resonants are indeed under-

lyingly followed by vowels, this notation implicitly incorporates some information from morphophonemic writing into phonemic writing. But complications arise where no underlying vowel can be established. In some Spanish loans, resonant devoicing is blocked preconsonantally even where no vowel was present:

/sa_lbador/ [sàlβadó:ʳṣ] 'Salvador (last name)'

/ša_lti:n/ [šaltî:n] 'small clay jug'

(< Sp. sarten?)

In other cases, the only evidence for postulating an underlying vowel
may be the lack of devoicing, though independent evidence would of course
be preferable.

It appears that for some younger Sacapultec-Spanish bilinguals,
the resonant devoicing rule has become optional preconsonantally (though
it remains obligatory word-finally):

/walk'a?a:l/ [wal̪k'a?á:l̪ ~ wál̪k'a?á:l̪] 'my child'

In other cases, devoicing applies even where the linguist would ordin-
arily postulate an underlying vowel (§4.2.3):

/alto:m/ [?al̪tó:m] 'girls' (Cf. /ali:t/ 'girl,'

/-o:m/ 'plural')

Resonant Syllabification. Resonants become syllabic when all other
syllabic segments are deleted from the word they occur in. (The forms
which are subject to such deletion are primarily the articles li 'the'
and xu:n 'one.' In rapid speech in non-phrase-final position, the
unstressed vowel of li and the vowel and initial consonant of xun are
optionally deleted.) The single syllabic resonant subsequently under-
goes glottal stop insertion (§3.1.1.3.).

/R/ ⟶ [R̩] / # __ #   /l ne:?/ [?l̩ né:?] 'the baby'

(< //li ne:?//)

/n ax kipre?t/ [?n̩ ax̣ kipré?ɐ̃tʰ]

'a little goat'

(<//xun ax kipre?t//)

Note that resonant devoicing does not apply to the nonconsonantal (syllabic) /l/ in 'the.'

Retroflex Flap. /r/ undergoes other changes in addition to resonant devoicing. It is fricated and fully devoiced [ʂ] word-initially (and optionally after voiceless consonants), and optionally becomes a voiced retroflex fricative [ẓ̌] after homorganic resonants /l n r/. It is a voiced flap [ř] elsewhere.

$$/r/ \rightarrow [ʂ] \ / \ \# \_\_$$
$$C^{-voice} \_\_$$

/raš/ [ʂaš] 'green'

/katrilepe:x/ [katʂilepé:x̂] 'it raises you'

$$\rightarrow [ř̥ʂ] \ / \_\_ \#$$

/kar/ [kář̥ʂ] 'fish'

$$\rightarrow [ẓ̌] \ / \ l \_\_$$
$$n \_\_$$

/lrčoŋ/ [lẓ̌čoŋ] 'his mother'

/šinrač'iyaŋ/ [šinẓ̌əč'iyáŋ] 'he hit me'

$$\rightarrow [ř] \ /elsewhere$$

/warek/ [wařékʰ] 's/he slept'

In addition, /r/ optionally becomes [ẓ̌] between two short vowels.

/karapapek/ [kəẓ̌əpapék] 'it flies'

3.1.1.7. Loan Phonemes.

The voiced series of stops /b d g/, and /f/, appear only in recent Spanish loans. The single exception is a native word containing /b/ (see below). Allophones and distributions of the loan phonemes are similar to those of the Spanish source.

The voiced stops are fricated [β ð ɣ] postvocalically and remain stops [b d g] initially and after /n/. Postvocalically the [β] allophone sometimes alternates with [v]. (Limited instances of the loan phonemes preclude exemplification in all possible environments.)

/b/ →[β] / V __   /qabi:da/ [qaβíːða] 'our lives'

    →[b] / # __   /byen/ [byen] 'well'

/d/ →[ð] / V __   /kompa:dr/ [kompáːðr̩s] 'cofather'

    →[d] / # __   /da:nta/ [dáːnta] 'tapir'

/g/ →[ɣ] / V __   /magdale:na/ [maɣðaléːna]

                               'Magdalena (place)'

    →[g] / { # / n } __   /gri:ngos/ [gr̓íːŋgos] 'North Americans'

/b/ now appears in a single native word, /i:bi:r/ [ʔiːβíːr̩s~ʔiːvíːr̩s] 'yesterday.' This /b/ apparently derives from a [β] or [v] allophone of older /*w/. Note that the San Antonio Palopó and San Martin Jilotepeque dialects of Cakchiquel show [w] ~ [β] alternation in this word, while other Cakchiquel dialects show variously [w], [β], or [v] (Campbell 1977:13).

The labiodental fricative /f/ has a single allophone.

/f/ → [f]   /fru:t/ [fr̓uːtʰ] 'fruit'

                               /kafaŋ/ [kafáŋ] 'coffee'

Some speakers, especially older monolinguals, do not employ all of these loan phonemes freely. The most common difficulty is with /f/, which is replaced by the native phoneme /p/ for conservative speakers: /pru:t/ 'fruit,' /kapaŋ/ 'coffee.'

3.1.2. Minimal Pairs.

Below are given minimal and near-minimal pairs for the most salient consonantal contrasts.

/p/ ≠ /t/		/č'a:p/ 'wooden peg'
		/č'a:t/ 'blanket'
/p/ ≠ /k/		/tap/ 'crab'
		/tak/ 'deaf'
/t/ ≠ /k/		/to?/ 'breast'
		/ko?/ 'Domingo'
/t/ ≠ /¢/		/te?/ 'there'
		/¢e?/ 'laugh'
/č/ ≠ /k/		/ča:x/ 'ashes'
		/ka:x/ 'sky'
/č/ ≠ /kʸ/		/iča:x/ 'herb'
		/ikʸax/ 'axe'

/k/ ≠ /q/   /ku:k/ 'squirrel'

                                                           /ku:q/ 'their skirts'

/p/ ≠ /b'/   /pe¢'/ 'sparrow'

                                                           /b'a¢'/ 'thread'

/t/ ≠ /t'/   /tu:x/ 'sweatbath'

                                                           /t'u:r/ 'drops'

/¢/ ≠ /¢'/   /¢e?/ 'laugh'

                                                           /¢'e?/ 'dog'

/č/ ≠ /č'/   /ča:k/ 'work'

                                                           /č'ak/ '<u>zanate</u> (bird)'

                                                           /pi:č/ 'cow foot'

                                                           /pi:č'/ '<u>chepilla</u> (bird)'

/kʸ/ ≠ /kʸ'/   /kʸaq/ 'red'

                                                           /kʸ'aq/ 'flea'

/k/ ≠ /k'/   /ko:k'/ 'fine'

                                                           /k'o:k'/ 'fragrant'

                                                           /pak/ 'custard-apple (species)'

                                                           /pak'/ '<u>gorgojo</u> (insect)'

/q/ ≠ /q'/   /kʸaq/ 'red'

                                                           /kʸaq'/ '<u>guayaba</u> (fruit)'

/paqan/ 'hot (spicy)'

/paq'an/ (place name)

/¢'/ ≠ /č'/   /po:¢'/ 'blind'

/šo:č'/ 'barn owl'

/¢'/ ≠ /k'/   /¢'i:n/ 'yucca'

/k'i:n/ 'with'

/č'/ ≠ /k'/   /č'o:y/ 'rat'

/k'o:y/ 'monkey'

/a:č'/ 'be quiet!'

/a:k'/ 'toasted corn meal'

/k'/ ≠ /q'/   /k'u:š/ 'fig'

/q'u:š/ 'rusted'

/q'/ ≠ /ʔ/   /poq'/ 'rotten'

/koʔ/ 'Domingo'

/q'os/ 'pretty'

/os/   'fly' [ʔʌs]

/ʔ/ ≠ ∅   /če:ʔ/ 'tree'

/če:/ 'what'

/ne:ʔ/ 'baby'

/ne:/ 'who'

/waʔn/ 'Juana'

/wan/ 'Juan'

/b/ ≠ /bʼ/   /i:bi:r/ 'yesterday'

/i:bʼi:s/ 'your (pl.) sadness'

/k/ ≠ /g/   /ka:n/ 'behind'

/ga:n/ 'desire'

/s/ ≠ /¢/   /os/ 'fly'

/o¢/ 'good'

/s/ ≠ /š/   /seʔl/ 'Cecilia'

/šeʔl/ 'cricket'

/bʼi:s/ 'sadness'

/bʼi:š/ 'song'

/š/ ≠ /č/   /ša:q/ 'wood smoke'

/ča:k/ 'work'

/š/ ≠ /x/   /kʼaš/ 'pain'

/kʼax/ 'pinol (flour)'

/x/ ≠ /k/   /čʼax/ 'plant sp.'

/čʼak/ 'zanate (bird)'

/m/ ≠ /n/   /ma:l/ '<u>jiyote</u> tree'

                                     /na:l/ 'goodbye'

/m/ ≠ /p/   /ma:l/ '<u>jiyote</u> tree'

                                     /pa:l/ 'Gaspar'

/n/ ≠ /ŋ/   /na:n/ 'mother'

                                     /naŋ/ 'still'

/n/ ≠ /l/   /nem/ 'big'

                                     /lem/ 'lady-bug'

                                     /wa?n/ 'Juana'

                                     /wa?l/ 'Manuela'

/l/ ≠ /r/   /q'o:l/ 'pine resin'

                                     /q'o:r/ 'corn dough'

/w/ ≠ /b'/   /wa:q/ 'my pig'

                                     /b'a:q/ 'bone'

/w/ ≠ /b/   /i:wi:b'/ 'yourselves'

                                     /i:bi:r/ 'yesterday'

/y/ ≠ /w/   /ya:b'/ 'sick'

                                     /wa:b'/ 'he stood up'

/y/ ≠ /x/   /yaʔ/ 'water'

                                   /xaʔ/ 'not yet'

In intervocalic position, glottalic stops contrast with

sequences of consonant plus glottal stop:

/t'/ ≠ /tʔ/   /nit'oʔy/ 'my jug'

                                   /weːtʔaːm/ 'I know it'

The reverse sequence of glottal stop plus consonant also contrasts with

the glottalic series:

/t'/ ≠ /ʔt/   /ramut'oŋ/ 'he wadded it up'

                                   /muʔtaxek/ 'it got wet'

In general, the glottalic series contrasts with the plain series in all

positions except word-finally following a glottal stop, where only the

plain series occurs:

    /raʔp/ 'Rafael'

    /imoʔt/ 'hierba mora (herb)'

    /kampanaʔk/ 'pito tree'

    /xaʔq/ 'corn husk'

Geminate consonants (realized by long closure) contrast with simple

consonants.

    /šinak'aŋ/ 'he stuck it'

    /šinnak'aŋ/ 'I stuck it'

3.2. Vowels.

The vowel phonemes of Sacapultec are shown in Table 3.2. There

are five quality distinctions and length.

Table 3.2. Vowel Phonemes

i	u	iː	uː
e	o	eː	oː
a		aː	

3.2.1. Allophonic Distribution.

3.2.1.1. Long Vowels.

Long vowel phonemes have full distribution in final (stressed) and nonfinal (unstressed) syllables, except that they do not occur before nonfinal glottal stop. Unlike the short vowels, they are rarely affected by assimilation rules, and show only slight free variation in quality. Long vowels are distinguished from short vowels by their greater quantity, not by distinct quality (at least in careful speech in stressed syllables).[5]

/iː/ is a high front [iː].

/uː/ is a high back [uː].

/eː/ is a mid front [eː] in free variation with a slightly lower [Eː].

/oː/ is a mid back [oː] in free variation with a slightly lower [ʌː].

/aː/ is a low central [aː].

For all long vowels the allophones remain the same in final and nonfinal syllables.

/iː/ → [iː]   /šiːkʼ/ [šiːkʼ] 'wing'

                    /siːnaʔx/ [siːnáʔʌx] 'scorpion'

/u:/ →[u:]   /su:ȼ'/ [su:ȼ'] 'cloud'

                            /ru:k'a:ʔ/ [ṣu:k'á:ʔ] 'its horn'

/e:/ →[e:]   /b'e:ʔ/ [ɓe:ʔ] 'sheep'

                            /we:tʔa:m/ [we:tʰʔá:m] 'I know it'

/o:/ →[o:]   /ȼ'o:n/ [ȼ'o:n] 'fiancé'

                            /k'o:lek/ [k'o:lékʰ] 'there is'

/a:/ →[a:]   /ka:x/ [ka:x̢] 'sky'

                            /b'a:tek/ [ɓa:tékʰ] 'it was rolled

                                                        up'

The rules of laryngealization and centralized off-glide, which
may apply to long vowels as well as short, will be treated below.

Long vowels very rarely appear word-finally; in this position they
may be partially devoiced (similar to the word-final -h of some Quiché
dialects): /kame:/ [kame:ș] 'day name'.

3.2.1.2. Short Vowels.

In final syllables there are only three short vowels: /e a o/.

/e/ is a mid front [e] in free variation with a lower [E].

/a/ is a low central [a] which varies with a more central [ʌ]
(rarely).

/o/ is a mid back [o] in free variation with a lower [ɔ].

/e/ →[e]   /nem/ [nem] 'big'

/a/ →[a]   /tap/ [tapʰ] 'crab'

/o/ → [o]   /okʼ/ [ʔokʼ] 'louse'

Short vowels in nonfinal (unstressed) syllables are usually re-
stricted to /i a u/. They show considerably more free variation and
are subject to extensive assimilation rules as well.

/i/ is a high front [i] alternating with a lower lax [I] and a
centralized [ɨ].

/a/ in this environment is [a] or a centralized [ə] or [ɨ].

/u/ is a high back [u] alternating with a lower lax [ʊ].

Note the near overlap in some allophones of /i/ and /a/ (i.e.
[ɨ] and [ɨ]). Given the range of variation of short vowels in unstressed
syllables, in rapid speech it is often difficult to assign a vowel to
a particular phoneme. By eliciting careful speech, however, it is some-
times possible to obtain a primary allophone close to a cardinal vowel,
and so determine the phoneme. In other cases, however, these more care-
ful vowels may vary between, for example, [i] and [a]. This suggests
that for many (but not all) unstressed short vowels the oppositions
have been neutralized.

A second issue is the complementary distribution, at least apparently,
of short mid vowels (in final syllables) with short high vowels (in
nonfinal syllables). This distribution led Kaufman (1976b) to conclude
that Sacapultec had only three short vowel phonemes (§3.8.). In this
analysis the non-low vowel phonemes /i u/ would be realized as mid [e o]
in final syllables and as high [i u] in nonfinal syllables, while /a/
remains everywhere [a]. But in nonfinal syllables the complementarity is
not absolute. Although vowels in final syllables of Spanish loans were
generally lowered (/le:čaŋ/ [le:čáŋ] 'milk'< Sp. leche), the appropriate
lowering did not always take place in nonfinal syllables, even in loans

otherwise fully assimilated to Sacapultec phonology: /peli:b'/ [pelíː:p̓ꜜ] 'Felipe'.[6] Moreover, nonfinal mid short vowels also appear in indigenous words:

/xolo:č/ [x̣olóː:č] 'one handful (corn)'

/xonam/ [x̣onám] 'same'

/eskuma:c̦/ [ʔèskumáː:c̦] 'juilín'

/kʸeʔax/ [kʸeʔáx̣] 'let them leave!'

/c̦eʔsek/ [c̦eʔsékʰ] 's/he was laughed at'

Though many of the occurrences of nonfinal mid vowels could be explained as assimilations to following long vowels, not all are predictable in this or other ways. Five vowel qualities must be recognized for nonfinal syllables: /i e a o u/. The extensive alternation between high and mid short vowels (e.g. /nem/ 'big', /nimaq/ 'big (pl.)') is thus treated as morphophonemic (§ 4.2.2.1.).

Vowel Devoicing. Short vowels in open unstressed final syllables are optionally (usually) devoiced. (The conditions for this rule arise exclusively in Spanish loans.)

/ko:sta/ [kóː:st̥ḁ ~ kóː:sta] 'coast'

/ermi:ta/ [ʔeřṣmíː:t̥ḁ ~ ʔeřmíː:ta] 'Guatemala City'

(Optionally, these devoiced vowels may be entirely dropped (especially for conservative speakers); see § 4.2.3.)

Laryngealization. Vowels optionally receive slight laryngealization [V̰] adjacent to glottal stop or glottalic consonant, especially when surrounded by two glottalic consonants.

/ya:b'/ [ya̰ː:p'] 'sick'

/ak'/ [ʔʌ̰k'] 'chicken'

/k'aš/ [k'ʌ̰š] 'pain'

<u>Centralized Off-Glide</u>. Front vowels are followed by a centralizing glide [Vɨ] before uvulars /q q'/. (Here /x/ does not act as a uvular, unlike other Quichean languages.)

/se:q'/ [se:ɨq'] 'slap'

/kʸiq'i:ʔ/ [kʸIɨq'i:ʔ] 'wind'

/e:qaʔn/ [ʔe:ɨqaʔŋ] 'cargo'

3.2.2. Minimal Pairs.

The following are minimal and near-minimal pairs for vowels. Note that the high vs. mid contrast for short vowels is marginal.

/i:/ ≠ /e:/   /či:ʔ/ 'mouth'

                     /če:ʔ/ 'tree'

/i:/ ≠ /u:/   /k'i:š/ 'thorn'

                     /k'u:š/ 'fig'

/e:/ ≠ /a:/   /b'e:y/ 'road'

                     /b'a:y/ 'gopher'

/e:/ ≠ /o:/   /b'e:y/ 'road'

                     /ib'o:y/ 'armadillo'

/a:/ ≠ /o:/   /a:x/ 'reed'

                     /o:x/ 'avocado'

/o:/ ≠ /u:/   /so:¢'/ 'bat'

                     /su:¢'/ 'cloud'

/i/ ≠ /e/	/wili:b'/ 'my parent-in-law'
	/peli:b'/ 'Felipe'
	/kʸi?aq'/ 'it cries'
	/kʸe?ax/ 'let them leave!'
/i/ ≠ /u/	/¢i?ek/ 'it was ground fine'
	/¢'u?ek/ 'it was sucked'
/i/ ≠ /a/	/šitixaŋ/ 's/he ate it'
	/šitaxaŋ/ 's/he paid it'
/e/ ≠ /a/	/k'ey/ 'many'
	/k'ay/ 'bitter'
/e/ ≠ /o/	/seb'/ 'smoke'
	/sob'/ 'tamalito'
/a/ ≠ /o/	/ak'/ 'chicken'
	/ok'/ 'louse'
/i:/ ≠ /i/	/ti:wila?/ 'Look(pl.) at it!'
	/tiwila?/ 'Look(sg.) at it!'
	/šin¢i:x išq'aq/ 'I was lit last night'
	/šin¢ix išq'aq/ 'I lit it last night'

/e:/ ≠ /e/   /b'e:ʔ/ 'sheep'

                                    /b'eʔ/ 'name'

/a:/ ≠ /a/   /a:k'/ 'toasted corn meal'

                                    /ak'/ 'chicken'

                                    /šinra:q išq'aq/ 'I was found last
                                                         night'

                                    /šinraq išq'aq/ 'I found it last
                                                         night'

/o:/ ≠ /o/   /o:č'/ 'ripe (corn)'

                                    /oč'/ 'possum'

/u:/ ≠ /u/   /šinyu:q išq'aq/ 'I was stretched
                                                         last night'

                                    /šinyuq išq'aq/ 'I stretched it
                                                         last night'

3.3 Juncture.

Juncture (#) is primarily marked by the segmental allophones it conditions (§3.1-2.), but may be marked in careful speech by potential pause.

/wa: b'e:k/ [wa:ɓéːkʰ ~ wa: ɓéːkʰ] 'if s/he left'

/wa:b'ek/ [wa:ɓékʰ] 's/he stood up'

3.4. Stress.

Stress is realized as higher pitch and loudness on the stressed syllable. Primary stress (´) in native words is nondistinctive, falling predictably on the final syllable. For some unassimilated Spanish loans, however, stress must be lexically marked in underlying (morphophonemic) forms.

/šululu:/ [šùlulú:] 'flute'

/ašlaxu:x/ [ʔàšlaxú:x] 'thirteen'

/išeb'/ [ʔišép'] 'three'

/kó:sta/ [kó:stạ] 'coast'

A secondary stress (`) often falls on alternating stem syllables counting back from the primary stress, and frequently on the first stem syllable.

/yoʔxab'al/ [yòʔᵃ̱xaɓáll] 'gift'

/t'ab'ab'arek/ [t'aɓàɓařěkʰ] 'it has thickened'

Note that pre-stem vowels remain unstressed. Thus where the initial vowel of /kawarek/ [kàwařěkʰ] 'it became hard' receives secondary stress as a stem vowel (Cf. kaw 'hard'), the initial vowel of /kuwarek/ [kuwařěkʰ] 's/he is sleeping' receives no stress, as it occurs in the prefix (incompletive aspect /ku-/ < //ka-//) rather than the stem (/war/ 'sleep'). (The rule of secondary stress assignment applies before vowel assimilation and deletion rules, which affect unstressed vowels; see §§4.2.2-3.)

Taking into account the application of the morphophonemic rule which inserts final /ŋ/ (§4.1.1.), stress in almost all Spanish loans becomes predictable: primary stress falls on a final long vowel, or, if none occurs, on the last vowel followed by a consonant. By this rule stress in /ko:sta/ [kó:sta] 'coast' and /mu:laŋ/ [mu:láŋ] 'mule' is predictable. In a few cases

however, stress is not predictable even by this rule, and must be marked in phonemic as well as morphophonemic forms. Among Spanish-derived doublets some near-minimal pairs for stress exist:

/ra:moš/ [ṣa:mǒš] 'branch for Palm Sunday'

/rá:mos/ [ṣá:mos ∼ ṣa:ms] 'Ramos (last name)'

/a:nimaš/ [ʔa:nimáš] 'hour of the dead'

/á:nimas/ [ʔá:nimas] 'spirits of the dead'

(Recall also the doublet derived from Spanish <u>Marcos</u>, §2.9.2.)

<u>Unstressed Words.</u> Some classes of words do not ordinarily receive word stress. These are often monosyllables which do not follow the CVC canon (that is, they are CV or VC), and generally occur in non-final position in a phrase. They include articles, prepositions, and particles (indicated below by interlinear gloss).

Articles

/xun ¢'iken/ [x̯un ¢'ikén] 'a bird'
    a

/li ¢'iken/ [li ¢'ikén] 'the bird'
the

Prepositions

/kimb'ek pa karnisereʔy/ [kimɓékʰ pə kàrnìseréʔ⁻ç]
        to
                                'I'm going to the butcher shop'

/yuqub' ča: xun če ʔ/ [yuqúpˀ ča: x̯un čé:ʔ] 'It was tied to a
      to   a
                                         tree'

Particles

/in ta e:laq'o:m/ [?ín tə ?e:laq'ó:m] 'I am not a thief'
    Neg

/kišimim   či   ka:n/ [kišimím či ká:n] 'They had been
      completive behind
                                    tied up'

But when these same morphemes occur phrase-finally, they receive sentence

stress:

/pe: xu:n/ [pé: xú:n] 'One came'
   one

/k'o: tax/ [k'ó: táx] 'There isn't'
   Neg

/čaq' ček / [čáq' čékʰ] 'It's ripened up'
    completive

(Note the alternation between phrase-final forms (stressed, with final

consonant) and phrase-medial forms (unstressed, without) for some particles,

as described in §4.1.8.)

3.5. Intonation.

A minimal analysis of Sacapultec intonation patterns would distin-

guish four final contours: falling [↘] (sentence-final); level [→]

("comma" intonation); rising [↗] (polar question); and high-falling

[↑↘] (nonpolar question).

    kinwilaŋ↘ 'I see it.'

    si:→ kinwilaŋ↘ 'Yes, I see it.'

    ni ka: wilaŋ↗   'Do you see it?'

    xarpa?↑ axalab'al q'i:x↘ 'What is the date today?'

3.6. Marginal Sounds.

Sacapultec utterances contain some sounds which, though common, do not fit into the general phonemic pattern; the most frequent appears in the form for 'yes,' which has an obligatorily nasalized vowel without nasal environment, alternating with a vowelless nasal: [ʔũ:ʔ ~ ʔm̩:ʔ].

3.7. Paralinguistic Features.

In addition to the phonemic vowel length that is subject to regular morphophonemic change, Sacapultec vowels may undergo paralinguistic lengthening. (This is indicated by dash following the vowel rather than by colon, to distinguish it from phonemic length.) For expressive purposes a vowel may become phonetically extra long; yet this does not count as phonemic length in applying vowel height changes (§4.2.2.1.). Paralinguistic lengthening commonly applies to the last vowel of a conversational turn, especially in greetings given in passing on the road, and is often accompanied by an extremely exaggerated final intonation contour. While apparently more common among women, it may be used by all in greetings:

/saqarek/ [saqare--kʰ] 'good morning!'

Note that the final mid vowel does not become high as it would if the length were phonemic rather than paralinguistic.

Another expressive feature is tempo. A slow speech tempo is considered more "respectful" than a fast tempo, and is appropriate for speaking to elders. The explicit association of slow tempo with the speech of (though not for) elders has been noted elsewhere in the Mayan area (Stross 1974:274).

3.8. Other Phonemic Analyses and Practical Orthographies.

Analyses of Sacapultec phonemics have been implicit in practical orthographies developed by several linguists. In addition, a few explicit comments on particular problems of phonemic analysis have appeared in technical works. For a comparison of the various orthographies for Sacapultec, including that of the present work, see Table 3.3.

McCluggage developed a nearly phonemic practical orthography for Sacapultec, used in publication of portions of the Bible (e.g. 1975). This orthography did not distinguish /n/ and /ŋ/, however, both phonemes being written n, nor long and short vowels. In his work on Quichean historical linguistics, Campbell (1977) made some observations on Sacapultec, most of them valid. Regarding nasals, however, he said that [ŋ] "is probably phonemically /n/, since virtually all final n's become [ŋ]." (1977:17). This is mistaken: there are absolutely no synchronic alternations of final [n] and [ŋ]. Historically, *-n always remains -n, never becoming -ŋ. Further, there are near minimal pairs establishing the n:ŋ contrast:

/kimpe: naŋ/ 'I'm still coming'

/kimpe: na:n/ 'I'm coming, Mother'

There is no justification for linking final -ŋ with other nasal phonemes in this way, synchronically or diachronically.

Kaufman (1975) treated ŋ as phonemic, noting that it occurs word-finally. In his practical orthography he proposed writing it as nh, apparently because of his opinion at that time that -ŋ was historically derived from -h (1975:117). (I have shown elsewhere that the actual historical source is different (Du Bois 1978).) He wrote palatalized and non-palatalized velars with distinct symbols. Regarding short vowels, he observed:

Table 3.3. Phonemic and Practical Orthographies

This work	McCluggage	Kaufman	McCluggage /Du Bois
p	p	p	p
t	t	t	t
¢	tz	tz	tz
č	ch	ch	ch
kʸ	qui	ky	cy
k	c/qu	k	c
q	k	q	k
b'	b	b'	b'
t'	t'	t'	t'
¢'	tz'	tz'	tz'
č'	ch'	ch'	ch'
kʸ'	qu'i	ky'	c'y
k'	c'/qu'	k'	c'
q'	k'	q'	k'
ʔ	'	7	7
b	b		b
d	d		d
g	g		g
f	f		f
s	s	s	s
š	x	x	x
x	j	j	j
m	m	m	m
n	n	n	n
ŋ	n	-nh	n̈
l	l	l	l
r	r	r	r
w	w	w	w
y	y	y	y
i:	i	i:	ii
i	i	i	i
e:	e	e:	ee
e	e	e	e

Table 3.3 cont'd.

This work	McCluggage	Kaufman	McCluggage/Du Bois
a:	a	a:	aa
a	a	a̱	a
o:	o	o:	oo
o	o	o	o
u:	u	u:	uu
u	u	u	u
–	–	ä̱	–

Básicamente, hay sólo tres vocales cortas /i a u/,

pero /i/ es [e] y /u/ es [o] en la última sílaba de

la palabra; entonces, en general, los sustantivos

tienen [e a o] y los verbos tienen [i a u] (1975:117)

This constitutes a valuable observation on the general distribution of

short vowels. However, I have pointed out above the cases which force

a five-vowel analysis. It should be noted that in his practical ortho-

graphy Kaufman maintained five short vowels (and a nonfinal short mid

vowel appears in one transcribed example, yoqäyik 'long' (1975:119)).

The explanation for Kaufman's interesting observation that substantives

tend to have [e a o] while verbs have [i a u] is that substantives in

Sacapultec (as in other Quichean languages) tend to occur unsuffixed

and at the ends of phrases, while verbs occur either non-phrase-finally

or phrase-finally with a suffix. Since the vowel-lowering rule applies

to syllables at the end of a phrase, verbs in general remain unaffected.

Another interesting aspect of Kaufman's practical orthography is his

proposal of an eleventh vowel symbol, ä̱:

ä es una vocal reducida que se asimila a consonantes

adyacentes y/o a vocales no-reducidas que siguen.

(1975:117)

This in effect amounts to writing a neutral vowel /V/ with no quality

of its own. While this aptly reflects the overlapping of allophones

(§ 3.2.1.2.) and massive neutralization of oppositions in short vowels

for many nonfinal environments, I have found that it is generally pos-

sible to assign each instance of a short vowel to one or another of the

existing phonemes, and so avoid postulation of an extra unit. In some

cases, however, variation in a short nonfinal vowel is so wide as to

lend appeal to the neutral-eleventh-vowel analysis.

For the purposes of a cooperative text-gathering operation in which

native assistants were trained to write, Ralph McCluggage and I developed

a fully phonemic practical orthography in 1977. This orthography shares

some features with the earlier Sacapultec orthographies of McCluggage and

Kaufman, and some with orthographies for other Mayan languages. (For

example, invariant c for /k/ is traditional in Yucatec orthography.)

Of the practical orthographies, the only one which has been used

for publications in Sacapultec is the original one by McCluggage.

Kaufman's has not as yet been used, and the McCluggage/Du Bois orthography

has been used only in connection with the text-gathering project.

Employing this orthography, Manuel Lancerio has transcribed extensive

Sacapultec texts and word lists.

Though it has become common to present grammatical descriptions

of Mayan languages in a practical orthography (especially among linguists

of the Proyecto Lingüístico Francisco Marroquín) I have retained the stan-

dard American Indianist phonemic symbols, in order to make this work more

accessible to general linguists.

Notes to Chapter 3

1. I have chosen to present the discussion of Sacapultec phonetics in
    terms of an autonomous phonemic level, with discussion of morphopho-
    nemic changes reserved for a separate chapter (Chapter 4), as I
    believe this provides the clearest presentation of the necessary
    information.

2. No root k'Vq' occurs, due to characteristic Mayan morpheme structure
    constraints preventing two unlike golttalic consonants (unless one
    is b').

3. Though the synchronic situation is unclear, a consideration of the
    diachronic dimension sheds valuable light. A number of other Quichean
    languages have developed velar palatalization rules, apparently as a
    result of recent diffusion from the west, with the ultimate origin of
    the process in the Mamean branch (Campbell 1974). The rules vary con-
    siderably from language to language, and even within dialects of a
    single language; but in Quichean all reported rules involve essen-
    tially palatalization before a vowel followed by q, q', or x. In
    no case is palatalization conditioned simply by a vocalic environment,
    except in Sacapultec (between i and a). Thus, the environment for
    which the synchronic rule in Sacapultec breaks down is one which pro-
    bably represents a recent innovation unique to Sacapultec. This would
    appear to be a historical change in progress.

    The development of the unusual new environment bears some comment.
    Once a velar had become palatalized in the original environment pre-
    ceding q$^{(')}$, x, or ?, a short unstressed vowel preceding this newly

palatalized velar may have assimilated to it, becoming ɨ (see

example in §4.1.7). Then, given the preponderance of palatalized

velars between ɨ and a, this environment was reanalyzed as a con-

ditioning environment for palatalization. More evidence, including

comparative evidence, will be needed to establish this change in

progress.

4. The syllable-closing function of ŋ is significant for stress assign-

ment; see § 3.4.

5. The vowels which are traditionally called long and short might better

be described as slow and fast (or regular) respectively. Informants

sometimes volunteered that a vowel was mas despacio 'slower'; and

while they found it difficult to answer my questions about length,

questions phrased in terms of tempo were more readily answered. Never-

theless, I retain the traditional terms long and short, with the hypo-

thesis, however, that the "long" vowels are perceived as distinct

because of a slight hesitation in the regular succession of evenly

timed short vowels.

6. Conceivably these could be loans that came in after the vowel-lowering

change, unless it is established that vowel-lowering is a persistent

(if inconsistent) change. In either case, the non-final mid vowels

are a problem for the three-vowel analysis.

CHAPTER 4

MORPHOPHONEMICS

This chapter reports morphophonemic processes with general appli-
cation. In addition to the major changes described by rule here, however,
there are numerous minor changes, often lexically governed and applicable
to only one or a few forms, which are not catalogued in this chapter.
They will be mentioned as necessary in explaining derivations in later
chapters. (Note, for example, the lack of general predictability in
coalescence of vowels in hiatus in Set B - Set A combinations, §5.2.1.2.)

4.1. Consonant Alternations.

4.1.1. ŋ-Addition.

/ŋ/ is inserted following a stressed short vowel in phrase-final
position.

> //ači// /ačeŋ/ 'man'
>
> //ču// /čoŋ/ 'mother'
>
> //le:če// /le:čaŋ/ 'milk'

(Note the general (but not universal) alternation of phrase-final -ŋ
with non-phrase-final vowel length, through the stressed vowel length-
ening rule: //ači čik// /ači: ček/ 'he has become a man'; see §4.2.1.3.)

The ŋ-insertion rule does not apply to long final vowels:

> //šululu:// /šululu:/ 'flute'

Nor does it apply to unstressed final vowels:

> //kó:sta// /ko:sta/ 'coast'

Given the alternation of short stressed vowel plus ŋ with long

vowel, the postulation of underlying forms containing only short stressed

vowel and no -ŋ (in, for example, //ačí// 'man') is supported by evidence

from the transitive phrase-final marker. In phrase-final position,

monosyllabic transitive verbs bear a suffix which is almost always real-

ized as either /-oŋ/ or /-aŋ/:

/šmuqoŋ/ 'he buried it' (-muq 'bury')

/šč'ayaŋ/ 'he hit him' (-č'ay 'hit')

However, when a monosyllabic transitive root of the rare CV shape occurs

in phrase-final position, neither of these alternants appears:

/kinto:/ 'I hear it'

The absence of any ŋ is explained if the phrase-final marker is underlyingly

a simple short vowel //-o// (or //-u//; for the vowel alternation, see

§ 4.2.2.2.). The root //-ta// 'hear' is suffixed with //-o// and,

through vowel coalescence (§4.2.5.) becomes /-to:/. Since the ŋ-addition

rule does not apply to long vowels, no further changes occur. Consonant-

final transitives (e.g. -č'ay 'hit') are likewise suffixed with //-o//,

but the vowel remains short and hence undergoes ŋ-addition: //š-ri-

č'ay-o// /šč'ayaŋ/ 's/he hit him.' (The phrase-final suffix /-aŋ/

never alternates with the expected long vowel /-a:/ because it never

appears in non-phrase-final position.)

We may observe that ŋ has a curious status: though it is treated

as a phonemic segment, it does not appear in any underlying forms,

being inserted by rule. In a theory which did not recognize an auto-

nomous taxonomic phonemic level, ŋ would have no status as a phonological

segment, being simply a predicted phonetic aspect of vowels.

There are several complications to this picture. Though the ŋ-addition

rule is stated in terms of phrase-finality, the determination of what is

phrase-final is not always transparent. In addition, some speakers
have begun to (sometimes optionally) add -ŋ to many if not all long
vowels (not just short vowels), producing for example /kinto:ŋ/ 'I hear
it,' /re:ŋ/ 'his possession', and /kame:ŋ/ 'day name' where other speakers
have /kinto:/, /re:/, and /kame:/, respectively. (No speaker, however,
adds -ŋ to /šululu:/ 'flute,' though some restore the consonant-final
canon in this word by adding glottal stop: /šululu:ʔ/.) In addition,
for some speakers the phrase-final surface form of many nouns and other
stressed words has come to be taken as the invariant form in all environ-
ments. For these speakers ŋ generally no longer varies with vowel length,
and appears in new environments:

> /pi:peŋ tax/ 'it is not a turkey'

> /l xun pi:peŋ laʔ/ 'that turkey there'

The invariant form may even appear in compounds, as in //ači-išaq//
/ačiʔišaq ∼ ačeŋišaq/ 'homosexual' (lit. 'man-woman'). For speakers who
have invariant noun forms with ŋ the underlying form should presumably
include ŋ. Note, however, that all speakers show -V ∼ -Vŋ alternation
in particles like /na ∼ naŋ/ 'still' (< //na//).

4.1.2. Glottal Stop.

Glottal stop is replaced by vowel length before a glottalic con-
sonant in the same word.

> //Vʔ// → /V:/ / __ Cʼ

In the following examples glottal stop appears before a glottalic con-
sonant due to the rule of vowel deletion (§4.2.3.).

> //waʔabʼik// /wa:bʼek/ 's/he stood up'

> //nimuʔubʼumax// /nimu:bʼumax/ 'I have it in water'

(Compare /wa?Iek/''s/he is standing,' /mu?Iek/ 'it is in water.')

Preconsonantal glottal stop is dropped when another glottal stop appears in the following syllable within the word.

//?// →∅ / __ (C)CV?(C)   //wI? Iš-č'I?p-I?y// /wI?šč'Ipe?y/

'little finger'

//xar̲Vpa?-Ia?// /xarpaIa?/

'how much (demonstrative).'

(Compare /č'e?p/ 'little finger,' /xar̲pa?/ 'how much.')

Glottal stop may be inserted between two vowels in hiatus when the second is not word-final, under conditions which are not entirely clear.

// ta - am - ax // /ta?max/ 'it has been heard'
    hear- Sf - Sf

// pre:ša-i:b'// /pre:š?i:b'/ 'prisoners'
    prisoner-Pl

// q'aq- a -i:b'// /q'aq?i:b'/ 'blacks'
    black- Sf - Pl

Note that in other conditions two vowels in hiatus coalesce (§4.2.5.).

For information on vowel-glottal metathesis, see §4.2.4.

4.1.3. Sibilant Harmony.

The alveopalatal sibilant in the passive morpheme //-š// becomes alveolar when an alveolar sibilant (fricative or affricate) appears anywhere in the stem to which it is suffixed.

//sik'i-š// /sik'is/ 'it was read'[1]

//¢ili-š// /¢ilis/ 'it was returned'

//¢'ono-š// /¢'onos/ 'it was asked for'

//ku?um-asa-š// /ku?masas/ 'it was moved'

Compare /xIyiš/ 'it was looked for,' /b'Išiš/ 'it was sung.' This rule

appears to apply only to this morpheme.

4.1.4. Velar Harmony.

The velar stop in the incompletive aspect proclitic //ki-// option-
ally becomes post-velar when a post-velar or /x/ follows within the set
of stem prefixes. (That is, aspectual k optionally becomes q when qa-
1st. pl. erg. or ax- 1st. pl. abs. follow. Note that x appears to act
as a post-velar here, reflecting its reconstructed phonetic quality.)

//ka-q-a:x//   /qaqa:x ∼ kaqa:x/ 'we want it'
Asp-A4-want

// ka-qa-qapu-:x//   /qaqaqapu:x ∼ kaqaqapu:x/ 'we cut it'
Asp-A4-cut- Sf

// k-a:-qa-qapu-:x//   /qa:qaqapu:x ∼ ka:qaqapu:x/
Asp-Mv-A4-cut-Sf

'we will go to cut it'[2]

//k-ax-pe:t-aq//   /qaxpe:taq/ 'let's go!'
Asp-B4-come-Sf

Note that this rule is not applied when the post-velar appears in the stem
itself, even when it is separated from the aspectual k by only a vowel,
as is observed in the nonoccurrence of a post-velar alternant in
verbs having no post-velar among the stem prefixes:

//k-a:-qapu-:x// /ka:qapu:x/ 'you cut it' (*qa:qapu:x)
Asp-A2-cut-Sf

4.1.5. Labialization.

The dental nasal is labialized before a labial stop.

//k-in-pe:t-ik// /kimpe:tik/ 'I come'

//k-in-b'i:n-ik// /kimb'i:nek/ 'I walk'

//k-in-mes-o// /kimmasaŋ/ 'I sweep it'

This rule may apply across word boundary within a phrase:

/ši b'am b'alab'ek/ 'it became thick'

/mi?m po:m/ 'Dominga "Copal"'

(Compare /ši b'anaŋ/ 's/he did it', /me?n/ 'Dominga'.)

4.1.6. Completive Aspect Dropping.

In intransitive verbs, the completive aspect marker š- drops obligatorily before a consonant.

        //š-war-ik//   /warek/ 's/he slept'
          Asp-sleep-Sf

        //š-in-war-ik// /šinwarek/ 'I slept'
            B1

        //š-el-ik//   /šalek/ 's/he left'
          Asp-leave-Sf

(For intransitives, given the consistent -VC shape of all nonzero absolutive prefixes, the rule could be restated in different terms: the completive aspect marker //š-// is realized as zero in the third person singular form of a consonant-initial intransitive verb.)

The rule dropping the š- aspect before a consonant applies obligatorily only to intransitives; for transitives it is optional. Where an initial cluster is not eliminated through application of the š-dropping rule, it is often broken up by insertion of epenthetic i.

        //š-qa-č'it-o// /šiqač'itaŋ ~ qač'itaŋ/ 'we hurt it (past)'
          Asp-A4

        //š-ki-č'it-o// /šikič'itaŋ ~ kič'itaŋ/ 'they hurt it (past)'
          Asp-A6

        //š-r-elaxa:x// /širalasa:x ~ ralasa:x/ 's/he took it out'
          Asp-A3

Application of this rule to š- before the preconsonantal ri- of the third person singular Set A prefix, however, has complications, which divide older and younger speakers. For older speakers a rule of fricative coalescence applies to the combination of the aspect š-

plus the r- of the prefix ri- before consonant-initial stems, obli-

gatorily

reducing the cluster to š. (Recall that /r/ in initial position and

after a voiceless consonant is a voiceless fricative [ṣ].)

       š-ri- → ši / # __ C   //š-ri-kax-o// /šikaxaŋ/ 's/he
                                                  Asp-A3

                                                          used it'

                                     //š-ri-poro:x// /šiparo:x/ 's/he
                                            Asp-A3

                                                       burned it'

Note that for consonant-initial stems this always prevents application

of aspect dropping. For vowel-initial stems fricative coalescence never

applies, so š-dropping can apply optionally.

    Younger speakers have avoided the initial šr cluster by simply

making the š-dropping rule obligatory before the third person singular

Set A prefix (for either consonant or vowel-initial stems).

        //š-ri-b'ax// /rb'ax/ 's/he said it'
        Asp-A3

        //š-r-elaxa:x// /ralsa:x/ 's/he took it out'
        Asp-A3

For younger speakers, then, the š-dropping rule can be stated as follows:

the aspect š- drops obligatorily before a third person singular prefix

(whether the zero absolutive or nonzero ergative) and optionally before

any consonant.

4.1.7. Velar Palatalization.

    Velars are optionally palatalized as described in § 3.1.1.2.1.

Note the following morphophonemic alternation:

        //wičik'// /wiček'/ 'dream (n.)'

        //wičik'-a-:x// /wičikʸ'a:x/ 'dream (v.)'

        //ka:x// /ka:x/ 'sky'

        //či ka:x// /čikʸa:x/ 'in the sky'

//šik'-ib'al// /šik'ib'al/ 'twig broom'

//šik'-a?y// /šik'a?y šikʸ'a?y/ 'twigs'

Velar palatalization is less likely to occur if the environment arises

through inflectional affixation rather than derivational. In

//k-ikʸa:x// /kikʸa:x/ 'their axes'
  A6-axe

the velar is always palatal. But in the following potentially homo-

phonous inflected form, the velar may be either palatalized or not:

//ki-k-a:x// /kika:x kikʸa:x/ 'They want it'
  Asp-A6-want

4.1.8. Consonant Deletion.

The final consonant of certain particles (//čik// 'completive,

iterative;' //tax// 'negative') is deleted when the particle is unstressed.

(Predictable stress is marked in these examples.)

/k'ó: táx/   'There isn't (any)'
    Neg

/k'ó   ta   čék / 'There isn't any more'
    Neg   iterative

/kišimɨm   či   ká:n/ 'They were already left tied up'
    completive behind

4.2. Vowel Alternations.

4.2.1. Quantity Alternations.

Vowel length alternations may be either morphemic (derivational)

or automatic (morphophonemic). They are often accompanied by vowel

height alternations; for this see § 4.2.2. Morphemic vowel length is

used to form passives of transitive roots, to derive possessed forms

of certain nouns, and in other derivations. For discussion of morphemic length, see Chapter 5. Automatic length changes are discussed in the following sections.

4.2.1.1. Non-Final Shortening.

Long vowels are underlyingly of two kinds, those which undergo shortening in non-phrase-final position, and those which do not. The latter class of vowels reflects Proto-Quichean preconsonantal h (or length as a replacement for nonfinal stress in Spanish loans). Synchronically, however, these vowels must be lexically marked as exceptions to the shortening rule: long vowels are shortened in non-phrase-final syllables. (Note that quality alternations frequently attend the shortening in these examples.)

> //xuːn-aːb'// /xunaːb'/ 'year' (Cf. /xuːn/ 'one')
>
> //xuːn-aːb'-iːr// /xunub'iːr/ 'last year'
>
> //š-ri-sipa-ːx-uːl// /rsipuxuːl/ 's/he gave it here'
>
> > (Cf. /rsipaːx/ 's/he gave it')

The shortening rule applies as well to vowels which, though word-final, are not phrase-final.

> /naːb'eːy/ 'first'
>
> /naːb'ey ačeŋ/ 'first man'
>
> /kiːwaːx/ 'You (pl.) want it'
>
> /kiːwax ra eš/ '<u>You</u> (pl.) want it'

The most common source of vowels which are exempt from this rule is the passive of root transitives (formed by infixed -h- in Proto-Quichean) and the second person ergative prefixes (as above) in addition to various other roots. These remain long in both word-internal and phrase-internal

positions.

/mu:ček/ 'it was chopped' (Cf. /mu:č/ 'it was chopped')

/mu:č mi la?čeŋ/ 'it was chopped by the man'

/me:merek/ 's/he became mute' (Cf. /me:m/ 'mute')

/qa:xu:l/ 's/he came down (here)' (Cf. /qa:x/ 's/he came down')

To indicate these long vowels as underlyingly distinct from the other long vowels, they are underlined (e.g. //me:m// 'mute'). (In other Mayan languages (e.g. Quiché) an underlying h, never realized in surface forms, has been written in order to reflect the diachronic origin of such lengthened vowels.) In non-final syllables of a polysyllabic morpheme it is unnecessary to underline vowels, since all long vowels which occur in these syllables have necessarily been excepted from non-final shortening.

4.2.1.2. Pre-Glottal Shortening.

Except in careful speech, all long vowels are shortened before a nonfinal glottal stop.

//ya:?-lk// /ya?ek/ 'it was given'

//na:?-lk// /na?ek/ 'it was tasted'

(Compare /na:xek/ 'it was filled.') Note that a vowel length contrast does exist before glottal stop (though only word-finally):

/ya:?/ 'crown of head'

/ya?/ 'water'

Pre-glottal shortening applies across word boundary to long vowels (including those exempt from nonfinal shortening) which come before inserted word-initial glottal stop within the phrase:

//k-in-pe̱: a:w-ik'i:n// /kimpe a:wik'i:n/ 'I will come with

you' ([kimpé?a:wik'í:n]; compare /pe:tek/

's/he came')

//k-in-čo̱: iši:m// /kinčo iši:m/ 'I will select corn'

[kinčó?iší:m]

(Compare /kinčo: kinaq'/ 'I will select beans'.)

4.2.1.3. Stressed Vowel Lengthening.

A stressed short vowel becomes long in non-phrase-final position.

//qa-ču q-axa:w// /qaču: qaxa:w/ 'our mothers and fathers'

(Cf. /qačoŋ/ 'our mothers')

//mu:la tax// /mu:la: tax/ 'it is not a mule' (Cf. /mu:laŋ/

'mule')

//le:če tax// /le:če: tax/ 'it is not milk' (Cf. /le:čaŋ/

'milk')

//mi:ya ri:?// /mi:ya: ri:?/ 'just earlier today'

(Cf. /mi:yaŋ/ 'earlier today')

Observe that the characteristic alternation of ŋ with vowel length does

not occur if the vowel in question receives no stress:

//k'o: na k-r-a:x ↗// /k'o: na kra:x ↗/ 'Is there something
            still
                                 still lacking?'

//k'o: naŋ ↘// /k'o: naŋ ↘/ 'There still is'

4.2.2. Quality Alternations.

Morphophonemic vowel quality changes affect directly only short

vowels. Alternations arise when a vowel appears in both stressed and

unstressed environments, or when it occurs in short and long forms.

In addition to lowering, short vowels in unstressed syllables are sub-
ject to extensive assimilation to following long vowels and adjacent
consonants, to the point that quality oppositions in short vowels are
widely, though not completely, neutralized.

4.2.2.1. Lowering.

In phrase-final syllables, short vowels are lowered one degree
where possible (that is, high becomes mid, mid becomes low, low remains
low).

//ı// →/e/	//¢'ı?// /¢'e?/ 'dog'
//a// →/a/	//way// /way/ 'tortilla'
//o// →/a/	//čıkop// /čıkap/ 'cattle'
//u// →/o/	//xuı// /xoı/ 'hole, cave'

Given that long vowels are not affected by lowering, the underlying
vowel quality is often recoverable in the lengthened possessed form of
nouns (§5.2.2.3.), even where mid and low vowels in the unpossessed
form have merged into /a/:

/nı¢'ı:?/ 'my dog'

/nıwa:y/ 'my tortilla'

/nıčıko:p/ 'my cattle'

/nıxu:ı/ 'my cave'

Note that the lowering rule applies phrase-finally, so that vowels which
are word-final but not phrase-final may remain unaffected.

//kı? čık// /kı? ček/ 'it has become sweet' (Cf. /ke?/ 'sweet')

//ımuı č'o:y// /ımuı č'o:y/ 'rat' (Cf. /ımoı/ 'rabbit')

//ın tax e:ıaq'o:m// /ın ta e:ıaq'o:m/ 'I am not a thief'

(Cf. /e: ra en/ 'I')

In some cases, however, free variation arises between lowered and unlow-
ered variants phrase-medially.

/nim xa:y ∼nem xa:y/ 'big house'

/xun čik xa:y ∼xun ček xa:y/ 'another room'

Although this could be considered a reanalysis of the lowering rule as
applying word-finally, it seems more likely that the phrase-medial lowered
forms are analogically modeled on the phrase-final forms, for some forms
only.

In a disyllabic root with identical underlying short high vowels
in both syllables, final vowel lowering is usually blocked.

/¢'unun ∼ ¢'unon/ 'sparrow'

/xuyub' ∼ xuyob'/ 'mountain'

/¢'ikin ∼ ¢'iken/ 'bird'

Non-Final Lowering. In nonfinal syllables, mid short vowels only
are lowered.

//e// → /a/   //k-in-ye¢'-o// /kinya¢'aŋ/

                                              'I wring it'

//a// → /a/   //k-in-č'ax-o// /kinč'axaŋ/

                                              'I wash it'

//o// → /a/   //k-in-loq'-o// /kinlaq'aŋ/

                                              'I buy it'

The high vowels are unchanged nonfinally:

//i// → /i/   //š-ri-tix-o// /ritixaŋ/ 's/he ate it'

                               //ki?-ir-ik// /ki?rek/ 'it became

                                                sweet' (Cf. /ke?/ 'sweet')

//u// →/u/   //š-ri-muč-u// /rimučoŋ/ 's/he

chopped it'

//puq'-ur-ik// /puq'urek/ 'it rotted'

(Cf. /poq'/ 'rotten')

Note that the underlying vowel quality is often recoverable in the length-ened · passive of root transitives (§5.3.2.).

/ti:xek/ 'it was eaten'

/ye:¢'ek/ 'it was wrung'

/č'a:xek/ 'it was washed'

/lo:q'ek/ 'it was bought'

/mu:ček/ 'it was chopped'

For transitive verbs with underlying mid vowels, however, there is often a second passive alternant which shows a lengthening of /a/, the same vowel as the active form:

/ya:¢'ek/ 'it was wrung'

/la:q'ek/ 'it was bought'

This suggests two distinct underlying forms, or a secondary rule deriving an alternate passive directly from the active form.[3]

The lowering of nonfinal mid vowels is optionally blocked in a number of derived forms in which a stem with a word-final surface mid vowel has been further derived suffixally. At the same time, high vowels (which are ordinarily lowered only finally) may appear as lowered to mid in nonfinal syllables.

Mid vowels remaining mid nonfinally:

/b'ayomarek ∿ b'ayamarek/ 's/he became rich' (Cf. /b'ayo:m/

'rich')

/ti?oxirib'ek/ 's/he became fat' (Cf. /ti?o:x/ 'fat')

/e:laq'oma:b'/ 'thieves' (Cf. /e:laq'o:m/ 'thief')

High vowels lowered to mid nonfinally:

/č'ite?nerek/ 'it became small' (Cf. /č'ite?n/ 'small')

/oȼalax/ 'good' (attributive) (Cf. /oȼ/ 'good')

What unites these forms is that they appear to be always analogically based on an existing surface form. Parallel to the form /ȼe?nek/ 's/he laughed' (< //ȼi?-in-ik//) with its nonfinal mid vowel, there is a free stem /ȼe?/ 'laugh (n.)' (< //ȼi?//) with the mid vowel in final position. But for //ti?-in-ek// 's/he bit' there is no free form /te?/, and consequently the lowered */te?nek/ is ungrammatical; only /ti?nek/ is possible. (Note also //ȼi:?-ik// /ȼi?ek/ 'it was ground fine,' but, in the absence of any semantically related free form /ȼe?/, */ȼe?ek/.) Many derived forms, of course, have medial vowel qualities not determined by final vowel quality in a related free stem: compare /oȼ/ 'good,' /ustax/ 'bad.'

The third person plural Set B clitic //e?-// is lexically exempted from the nonfinal lowering rule:

//k-e?-ax// /kʸe?ax/ let them leave!'

//š-e?-a:- č'ay-o// /še?a:č'iyaŋ/ 'you hit them'

4.2.2.2. Vowel Harmony.

In addition to quality changes conditioned by syllabic position, changes are conditioned by assimilation to adjacent vowels (this section) and consonants (following section). Assimilation rules for Sacapultec vowels are difficult to formulate without exceptions. In particular it is often impossible to specify which vowels will and which will not undergo a particular change or which of two applicable

changes will prevail. In general, the vowels which are most subject
to assimilation rules are short vowels which receive neither primary
stress nor secondary stress. For example, the rule of assimilation to
palatal consonants (see below) applies to underlying short o in a
penultimate sullable (unstressed) but not in an antepenultimate syl-
lable (secondarily stressed), where only the regular nonfinal lowering
rule applies. (Predictable stress is marked in these examples.)

Assimilation rule applies:

//oš-ĺb'// /išeb'/ 'three' (Cf. /ro:š/ 'third')

No assimilation rule applies:

//òš-laxú:x// /ašlaxu:x/ 'thirteen'

Since short pre-stem vowels generally receive no stress (§3.4.), they
are subject to assimilation (in this case to following /w/). Contrast:

//ki-war-ĺk//   /kuwarek/ 's/he is sleeping'
Asp-sleep-I

//kàw-ar-ĺk//   /kawarek/ 'it became hard'
hard-Vers-I

Long Vowel Assimilation. A short unstressed vowel optionally
assimilates in quality to a long vowel in the following syllable.

Conditioning Vowel	
i:	//š-ri-¢ay-i-:x// /r¢iyi:x/ 's/he salted it'
	(Cf. ¢ay 'salty')
	//ax-i:-čix-im-ax// /ixi:čixmax/ 'you (pl.) have
	taken care of us' (Cf. e: ra ax 'us')
e:	//b'illixe:b' ∼ b'elexe:b'/ 'nine'

o: //axn-V-q'o:r// /axnoq'o:r/ 'corn drink (atolillo)'

        //taq'-o:b'// /taq'o:b ~ toq'o:b'/ 'favor'

        //xu-lo:č// /xolo:č/ 'one handful (grains)'

u: //š-ri-sipa-:x-u:l// /rsipuxu:l ~ rsipxu:l/

                                   's/he gave it (here)'

In some cases assimilation to a following long vowel does not change

the underlying vowel, but prevents it from being lowered when it other-

wise would have undergone nonfinal lowering.

        //šox-o:x// /šoxo:x/ 'dance' (Cf. /šaxawek/ 's/he danced')

Note especially the application to unstressed pre-stem vowels, as in

the prefixes //ni-// '1st. sg. Set A,' //qa-// '1st. pl. Set A,' //ki-//

'incompletive aspect':

        //ni-muʔub'-um-ax// /nimu:b'umax ~ numu:b'umax/ 'I have it in

                                                                water'

        //ka-qa-qapu-:x// /kaqaqapu:x ~ qaqaqapu:x ~ quququpu:x/

                         'we cut it'

Assimilation occurs optionally across word boundary in the case of pre-

positions cliticized to the following word, as in //ča// 'with':

        /kinkY'aq ču u:le/ 'I will hit it with a slingshot'

This rule, however, does not apply freely whenever the phonological

environment is met. From the adjective /č'am/ 'lazy; acid' an abstract noun

may be derived by suffixation of //-i:l//. The unassimilated variant

/č'ami:l/ has both the meanings 'laziness' and 'acidity,' but the

assimilated form /č'imi:l/ means only 'laziness,' indicating lexical-

ization.

Short Vowel Assimilation. In some cases a short unstressed vowel
optionally assimilates to a short vowel in the following syllable.
(This applies especially to prefixal vowels.)

//nɪ-xuyub'-a:l// /nɪxuyub'a:l ～ nuxuyub'a:l/ 'my place of
   A1
                                                    origin'

//nɪ-qul// /noqol/ 'my throat'
   A1

//š-rɪ-kuč-u// /rukučoŋ/ 's/he stopped it up'
    A3

//išmukur// /išmukor ～ išmokor/ 'plant species'

This assimilation is more likely to occur when the vowel in the following

syllable is long underlyingly:

//k-a:-k'am-u:l nɪ-pranse:s// /ka:k'amul nɪpranse:s ～

                                 ka:k'umul nɪpranse:s/

                   'Go bring me a piece of bread'

As with long vowel assimilation, the rule applies to cliticized pre-
positions across word boundary.

//pa xuyub'// /puxuyub'/ 'in the mountains'

Assimilation Across Glottal Stop. A short vowel optionally becomes
mid before a glottal stop followed by a mid vowel.

//ȼ'u:ʔ-ɪk// /ȼ'uʔek ～ ȼ'oʔek/ 'it was sucked'

//čɪk ul// /če ol/ 'here again' [čeʔólɨ]

Note that the rules of assimilation to following long or short vowels,
though optional, are almost always applied across glottal stop:

//š-rɪ-suʔ-u// /rasoʔoŋ/ 's/he cleaned it'

//š-rɪ-ȼ'uʔ-u// /ruȼ'oʔoŋ/ 's/he sucked it'

//čɪk ul// /čo ol ～ če ol/ 'here again'

//xoʔo:b'// /xoʔo:b'/ 'five'

//wa?-ik// /we?ek ~wa?ek/ 's/he ate' (Cf. /wa?/ 's/he ate,'

but not */we?/ with this meaning.)

However, assimilation does not always apply across glottal stop,
especially where the two vowels do not share the specification for
frontness:

//ti?-o:x// /ti?o:x/ 'fat'

Affixal Vowel Assimilation. The vowel quality of the phrase-final
suffix for transitive roots //-u ~ -o// is determined by the preceding
root vowel: //-u// following root //u//, //-o// following all other
root vowels.

//š-in-yuq-u// /šinyuqoŋ/ 'I stretched it'

//š-in-loq'-o// /šinlaq'aŋ/ 'I bought it'

//š-in-yat'-o// /šinyat'aŋ/ 'I grasped it'

//š-in-mes-o// /šimmasaŋ/ 'I swept it'

//š-in-ȼix-o// /šinȼixaŋ/ 'I lit it'

//š-in-ta-o// /šinto: ~šinto:ŋ/ 'I heard it'

4.2.2.3. Assimilation to Consonants.

Palatalization. A short unstressed vowel optionally becomes
palatalized /i/ adjacent to an alveopalatal or palatalized consonant
/y š č(') kʸ(')/.

//ȼay-ar// /ȼayar ~ȼiyir/ 'it became salty' (Cf. ȼay 'salty')

//oš-ib'// /išeb'/ 'three' (Cf. ro:š 'third')

//š-ri-čak-o// /račakaŋ ~rčikaŋ/ 's/he called him'

//š-in-č'ay-o// /šincayaŋ ~ šinc'iyaŋ/ 'I hit him'

//ča ka:x// /čikʸa:x/ 'in the sky'

Labialization. A short unstressed vowel optionally becomes /u/ adjacent to a voiced labial consonant (usually w).

//ni-wa:y// /niwa:y ∿nuwa:y/ 'my tortilla'

//pa w-iča// /puwičaŋ/ 'in my house'

//w-aqan// /wuqan/ 'my foot' (Cf. /raqan/ 'his foot')

//tiw-il-a?// /tiwila? ∿tuwula?/ 'look at it!'

This applies, though less frequently, to other labials:

//xu:n-a:b'-i:r// /xunub'i:r/ 'last year' (Cf. xuna:b' 'year')

//ri-mo:y// /rumo:y/ 'its darkness'

Post-Velar Lowering. A short unstressed vowel is optionally lowered (to mid or low) adjacent to a post-velar consonant /q q'/.

//wi? ni-q'ab'// /wi? niq'ab' ∿wi? naq'ab'/ 'my fingers'

//ax q'i:x-a:b'// /ax q'exa:b'/ 'diviners' (Cf. ax q'i:x

'diviner')

Other. It appears that a short unstressed vowel may become (or remain /o/ adjacent to /x/, sometimes with glottal stop intervening. No definite formulation of this rule is possible at this point.

//xun-am// /xonam/ 'same' (Cf. /xu:n/ 'one')

//š-ri-xo?s-a-:x// /roxo?sa:x/ 's/he deceived him'

(Cf. /xa?s/ 'liar')

//š-ri-ya?-ax-a-:x// /šiyo?xa:x/ 's/he gave a gift to him'

(Cf. /ya:?/ 'it was given')

4.2.3. Deletion.

A noninitial short unstressed vowel is optionally deleted, unless deletion would produce an unacceptable consonant cluster. (Predictable stress is marked here.)

//k-in-tìx-in-ʔk// /kintixinek ~ kintixnek/ 'I am (continually)

doing it'

//š-ri-yaʔ-ó// /riyaʔaŋ ~ riy̯ʔaŋ/ 's/he gave it'

//šox-òw-ib'ál// /šaxawub'al ~ šaxaw̯b'al/ 'dancing place'

//w-è:t-a-ʔá:m// /we:taʔa:m ~ we:t̯ʔa:m/ 'I know it'

//àli:t-ó:m// /alto:m/ 'girls' (Cf. /ali:t/ 'girl')

Note that this rule may apply following the nonfinal shortening rule, as shown by deletion of the underlying penultimate vowel in /alto:m/. Ordinarily it precedes the application of resonant devoicing (§ 3.1.1.6.), as shown by the voiced glides in /riy̯ʔaŋ/ and /šaxaw̯b'al/. A rare exception is /alto:m̥/ [ʔal̯to:m] 'girls.'

. Note the covariance of deletion with absence of stress:

//ki-sùt-in-ʔk// /ksutnek/ 'it is spinning'

//ki-sut-ʔn// /ksutin/ 'it is spinning' (non-phrase-final)

//na:b'é:y k-in-kàw-an-ʔk ča anʔm k-in-kaw-án tax ček// /na:b'e:y kinkawanek ča?nem kinkwan ta ček/ 'Before I could, but now I no longer can'

The rule applies equally to short unstressed vowels in final syllables of Spanish loans. (The stress marked in the following two examples is not predictable.)

//rá:mos// /rá:mos ~ ra:ms/ 'Ramos'

//kó:sta// /ko:sta ~ ko:st/ 'coast'

Vowel dropping applies following cliticization of articles and prepositions.

//l-àx alá:b'// /laxla:b'/ 'the little boy' (Cf. /ala:b'/

'boy')

//pà r-ičá// /parčaŋ/ 'in his house'

Unstressed vowels are not deleted when this would produce a forbidden consonant cluster. This affects primarily initial syllables, where in ordinary speech a cluster of a phonetically nonfricative consonant (i.e. other than /s š x r/) plus an occlusive is forbidden.

//w-ab'áx// /wub'a:x/ 'my rock'

//q-ačáq// /qačaq/ 'our back'

Medially, however, clusters of up to three consonants are not uncommonly produced by vowel deletion, especially where one is a glottal stop:

//wà?-kat-é:m̥// /wa?kate:m ~ wa?kte:m/ 'stroll'

4.2.4. Glottal Metathesis.

When two short unstressed vowels come together across a word boundary, the first vowel is dropped and the remaining vowel metathesizes with the glottal stop.

//li imul// /li?mol/ 'the rabbit'

//li ule:w// /lu?le:w/ 'the earth'

//li ara?// /la?ra?/ 3rd. sg. indep. pron.

//li ačala:l// /la?čala:l/ 'the relatives'

//pa a¢'axa:y// /pa?¢'axa:y/ (place name) (lit. 'at salt house')

Note the inapplicability of metathesis to 'prominent' (i.e. primary-stressed or long) vowels:

//li i:k'// /l?i:k/ 'the month'

//li ak'// /l?ak'/ 'the chicken'

//li a:naŋ// /l?a:naŋ/ '(the) Anna'

//li á:was// /l?á:was/ 'the soft drinks'

//ra in// /ra?en/ 1st. sg. indep. pron.

For some speakers the metathesis rule applies to any unstressed vowel, including long vowels. The long vowel is then shortened by the regular rule of shortening before nonfinal glottal stop ($\S$4.2.1.2.):

//ǐ a:naŋ// /laʔnaŋ/ '(the) Anna'

Because the Aspect-Set B complex acts as a separate word which is eventually cliticized to the verb stem, the rule which inserts word-initial glottal stop may apply to vowel-initial intransitive verbs, with subsequent application of the glottal metathesis rule. This occurs only for the incompletive aspect marker ki-, not the completive š-, since the latter has no vowel and is thus immediately cliticized to a following stem, before application of the glottal insertion rule. Thus, the third person singular form of vowel-initial intransitives in incompletive aspect has an inserted glottal stop, while completive aspect does not.

//š- apan-ik// /šapanek/ 's/he arrived'

//ki apan-ik// /kaʔpanek/ 's/he arrives'

//š-el-ik// /šalek/ 's/he left'

//ki el-ik// /keʔlek/ 's/he left'

This explains how such apparently disparate forms as /šaq'/ 's/he cried' and /ko:q'/ 's/he cries' are related by completely regular processes. In the incompletive aspect //ki oq'//, glottal insertion applies first (*koʔq'), followed by the replacement of glottal stop by length before a glottalic stop: /ko:q'/.[4]

For transitive verbs and for intransitives in other persons than third singular, no such processes apply because no glottal stop is inserted before the vowel-initial prefixes which follow the incompletive aspect marker. The person/number prefixes (Sets A and B) are lexically excepted from the word-initial glottal insertion rule here. (Note the

similar exception mentioned in § 3.1.1.3.).

For some reason, no glottal stop is inserted before an intransitive passive formed by lengthening the root vowel of a vowel-initial transitive (e.g. //-iI// 'see'); possibly the incompletive aspect allomorph is simply //k-// in this environment.

> //š-i:I-ik// /ši:Iek/ 'it was seen'
>
> //k-i:I-ik// /ki:Iek/ 'it is seen'

Some younger speakers have generalized the inserted glottal stop in vowel-initial intransitives to incompletive aspect, producing /ša?panek/ 's/he arrived' on the model of original /ka?panek/ 's/he arrives.'

4.2.5. Vowel Coalescence.

Two short vowels adjacent within a word, of which the second is word-final, coalesce to single long vowel with the quality of the second vowel.

> //k-in-ta-o// /kinto:/ 'I hear it'

Notes to Chapter 4

1. In citing morphemically analyzed forms in this chapter, zero mor-
   phemes or allomorphs have not been included where they are not
   relevant to the morphophonemic processes under discussion. In
   this form, for example, the stem is preceded by a zero morpheme
   marking third singular absolutive agreement (§5.2.1.1.) which is
   in turn preceded by a zero allomorph of the completive aspect
   marker //š-// (§4.1.6.).

2. For explanation of underlined vowels in these forms, see §4.2.1.1.

3. Though the underlying mid vowel in Sacapultec root transitives
   usually reflects the Proto-Quichean surface vowel, in some cases
   the Proto-Quichean e or o is no longer recoverable in any passive
   alternant. This occurs where the vowel of the sole passive form
   has derived diachronically from the vowel of the active form (that
   is, a) as is true in several cases. Similarly, where assimilation
   rules (described below) have produced a surface transitive root
   vowel distinct from the Proto-Quichean vowel, two passive alternants
   may exist (Cf. /č'a:yek ~ č'i:yek/ 's/he was hit,' reflecting Proto-
   Quichean *-č'ay 'hit').

4. Although Sacapultec forms in the following chapters are generally
   written phonemically rather than morphophonemically, it is most
   convenient to write them at a stage in which the rule of glottal
   metathesis has not yet applied. Thus ǀ alǀ:t is to be pronounced
   [laʔlǀ:tʰ] and so on.

CHAPTER 5

MORPHOLOGY

<u>5.1. Morphological Classes and Processes</u>.

This chapter describes the inflectional and derivational processes which form stems and full words. The presentation of inflectional morphology is organized by stem classes, with inflectional categories described in conjunction with the stem class to which they are applied. The presentation of derivational morphology is organized according to categories of derived stem.

Major open word classes are intransitive verbs, transitive verbs, nouns, adjectives, numerals, and adverbs; closed classes are relational nouns, pronouns, articles, demonstratives, prepositions, and particles.

Root classes subject to derivation are intransitive verbs, transitive verbs, adjectives, positionals, nouns, adverbs, numbers, measure words, and articles. For all except positionals a corresponding stem class exists. Root classes not subject to derivation are pronouns, prepositions, adverbs, demonstratives, and particles. Root classes are defined by the derivational affixes which occur with them, as enumerated in §5.3, and the stem class produced.

Inflected stem classes are intransitive verbs, root transitive verbs, derived transitive verbs, adjectives, and nouns. Noninflected stem classes are adverbs, pronouns, numbers, measure words, articles, demonstratives, prepositions, and particles. Stem classes are defined by the inflectional affixes which occur with them, as enumerated in §5.2, and by the word class produced.

Word classes correspond to the stem classes listed above, with the exception that all transitives (whether root or derived) form a single

class. Word classes are defined by syntactic function, as described in Chapter 6.

Morphological processes employed are affixation (prefixation and suffixation), vowel ablaut (quantity change), reduplication, consonant symbolism, and compounding.   Of these the most extensively employed by far are affixation, vowel ablaut, and reduplication.

5.2. Stem Classes and Inflections.

In this section, examples of inflectional categories will be given in the context of the first stem class to which they are applicable.

5.2.1. Verbs.

Verb stems are divided into three major inflectionally distinct. classes: intransitives, root transitives, and derived transitives.

5.2.1.1. Intransitive.

Intransitive stems may be inflected for tense/aspect, mood, movement, person-number agreement, and phrase termination.

Person/Number Agreement. Intransitive verbs agree with the theme (also called subject) in person and number; agreement is marked by absolutive prefixes, known as Set B prefixes, which immediately follow the aspect marker.

Set B prefixes:

1 sg	in-
2 sg	at-
3 sg	ɸ-
1 pl	ax-
2 pl	iš-
3 pl	e: ~ eʔ-

The third person plural allomorph e:- occurs before consonants, and

e?- occurs before vowels. Examples follow for both consonant-initial

and vowel-initial intransitive stems. (š- is an aspect marker, explained

below.)

š-in-war-ek Cm-B1-sleep-If	'I slept'
š-at-war-ek B2	'You (sg.) slept'
∅-∅-war-ek Cm-B3	'He slept'
š-ax-war-ek B4	'We slept'
š-iš-war-ek B5	'You (pl.) slept'
š-e:-war-ek B6	'They slept'
š-in-ak-ek Cm-B1-enter-If	'I entered'
š-at-ak-ek B2	'You (sg.) entered'
š-∅-ak-ek B3	'He entered'
š-ax-ak-ek B4	'We entered'
š-iš-ak-ek B5	'You (pl.) entered'
š-e?-ak-ek B6	'They entered'

There is a formal-informal contrast in the second person (probably

diffused from Quiché; see § 2.9.1). Though the formal second person is

marked by independent pronouns which grammatically act as third person

nouns governing zero agreement, for clarity of presentation it is use-

ful to introduce them along with the associated paradigms of agreement

prefixes. The formal pronouns |a:| ∼ |a: ∼ |aŋ 'you (formal singular)'
and a|aq 'you (formal plural)' are rarely used, and often only the |a:|
form can be produced by informants for a particular construction. |a:|
is the unmarked member of the opposition for number, and is often em-
ployed with plural meaning.

ϕ-ϕ-war | ri la:l   'You (form. sg.) slept'
Cm-B3-sleep the you

ϕ-ϕ-war r alaq   'You (form. pl.) slept'
        the you

š-ϕ-ak   ra la:l   'You (form.) entered'[1]
Cm-B3-enter the you   (singular or plural)

Tense/Aspect. The initial morpheme of the intransitive verb word (preceding the Set B inflection) is a tense/aspect or mood prefix. (Or there may be no prefix, as when tense/aspect is marked suffixally.) 'Completive aspect' (š-) indicates actions already completed and hence necessarily past. (See examples above.) Incompletive aspect (ki- in the third person singular, k- in other persons) indicates actions not completed, and so may be past, present, or future.

k-in-war-ek   'I sleep, was sleeping, will sleep'
Inc-B1-sleep-If

kuwarek   'You (sg.) sleep'   //ki-ϕ-war-ik//
                                               B3

ku-ϕ-war-ek   'He sleeps'
   B3

k-ax-war-ek   'We sleep'
   B4

k-iš-war-ek   'You (pl.) sleep'
   B5

k-e:-war-ek   'They sleep'
   B6

k-in-ak-ek   'I enter'
Inc-B1-enter-If

k-at-ak-ek   'You (sg.) enter'
   B2

ka?kek ~ ko?kek   'He enters'   //ki ϕ-ok-ik//
                                                       B3

k-ax-ak-ek   'We enter'
   B4

k-iš-ak-ek   'You (pl.) enter'
 B5

kʸ-e?-ak-ek   'They enter'
 B6

ko?k ra la:l ~ ka?k ra la:l 'You (form.) enter' (<//ki ∅-ok//)
                      B3

The past perfective tense/aspect for intransitives is indicated by -anaq suffixed to a consonant-final stem, and -naq for a vowel-final stem (at-b'a-naq B2-go-Pf 'You (sg.) were going').

in-war-naq   'I was asleep'
B1-sleep-Pf

at-war-naq   'You (sg.) were asleep'
B2

∅-war-naq   'He was asleep'
B3

ax-war-naq   'We were asleep'
B4

iš-war-naq   'You (pl.) were asleep'
B5

e:-war-naq   'They were asleep'
B6

in-ak-anaq   'I have entered'
B1-enter-Pf

at-ak-anaq   'You (sg.) have entered'
B2

∅-ak-anaq   'She has entered'
B3

ax-ak-anaq   'We have entered'
B4

iš-ak-anaq   'You (pl.) have entered'
B5

e?-ak-anaq   'They have entered'
B6

(Progressive aspect, expressed periphrastically using the auxiliary verb -tixin, is treated in §6.4).

Mood. Mood is grammatically classed with tense-aspect, both occupying the initial morpheme slot. The prefixal aspects (completive and incompletive) are in indicative mood, while optative-imperative is marked by distinct morphemes which occur in place of tense-aspect marking, in positive and negative forms. The positive optative-imperative is marked by the prefix k- before a nonzero prefix and zero before a stem (with only a zero prefix intervening). In phrase-final position the intransitive imperative suffix -aq occurs in addition.

k-in-war-aq*2   'Let me sleep!'
Inc-B1-sleep-Impf

k-at-war-aq   'Sleep (sg.)!'
 B2

ø-war-aq*   'Let him sleep!'
B3

q-ax-war-aq   'Let's sleep!'
 B4

k-iš-war-aq   'Sleep (pl.)!'
 B5

k-e:-war-aq   'Let them sleep!'
 B6

k-in-ak-aq*   'Let me enter!'
Imp-B1-enter-Impf

k-at-ak-aq   'Enter (sg.)!'
 B2

ø-ak-aq   'Let him enter!'
B3

k-ax-ak-aq   'Let's enter!'
 B4

k-iš-ak-aq   'Enter (pl.)!'
 B5

ky-e?-ak-aq   'Let them enter!'
 B6

ø-ak-a-laŋ   'Enter (form.)!'
B3-enter-Clt-you

Note that the phrase-final marker -aq is not necessary to the

optative-imperative sense: k-ax-ak   b'a   la?   'Let's enter, then!'.
                      Imp-B4-enter then part

In the second person singular of the optative-imperative of a

vowel-initial transitive the initial syllable (i.e. ka-) may be deleted,

giving takaq 'Enter (sg.)!'.

The negative optative-imperative is marked by mi- before stems and

m- before nonzero prefixes, plus, in phrase-final position, either the

intransitive imperative phrase-final marker -aq or the unmarked

intransitive -ek. In the latter case, -ek simply replaces -aq in the

paradigm below.

m-im-pe:t-aq Neg-B1-come-Impf	'Let me not come!'
m-at-pe:t-aq B2	'Don't (sg.) come!'
mi-ϕ-pe:t-aq B3	'Let him not come!'
m-ax-pe:t-aq B4	'Let's not come!'
m-iš-pe:t-aq B5	'Don't (pl.) come!'
m-e:-pe:t-aq B6	'Let them not come!'
mi-ϕ-pe: laŋ B3 you (form.)	'Don't (form.) come!'

(For vowel-initial intransitive stems, only -ek, not -aq, is used; see
discussion of phrase termination below.)

m-in-ak-ek* Neg-B1-enter-If	'Let me not enter!'
m-at-ak-ek B2	'Don't (sg.) enter!'
ma?kek ~ mo?kek	'Let him not enter!' //mi ϕ-ok-ik// B3

```
m-ax-ak-ek                          'Let's not enter!'
   B4

m-iš-ak-ek                          'Don't (pl.) enter!'
   B5

m-e?-ak-ek                          'Let them not enter!'
   B6


mo?k na      ra    la:l             'Don't (form.) enter!'   //mi  ∅-ok//
       still  the  you(form.)                                 Neg B3-enter
```

The positive optative-imperative paradigms for 'go'//b'e-// and 'come'//pe:t-//
are irregular.

```
x-at                                'Go (sg.)!'
   B2

∅-ax                                'Let him go!'
B3

x-o?                                'Let's go!'
   B4

x-eš                                'Go (pl.)!'
   B5

ky-e?-ax                            'Let them go!'
   B6

∅-ax laŋ                           'Go (form.)!'
B3    you(form.)


tsa?ax                              'Come (sg.)!'

∅-pe:t-aq                           'Let him come!'
B3

q-ax-pe:t-aq                        'Let's come!'
   B4

t-i:-sa?ax                          'Come (pl.)!'
   A5

k-e:-pe:taq                         'Let them come!'
   B6

tsa?ax laŋ                          'Come (form.)!'
       you(form.)
```

The negative optative-imperative of 'go' is based on b'e:k rather than the positive paradigm. No phrase-final marker occurs.

m-im-b'e:k Neg-B1-go	'Let me not go!'
m-at-b'e:k B2	'Don't (sg.) go!'
mi-∅-b'e:k B3	'Let him not go!'
m-ax-b'e:k B4	'Let's not go!'
m-iš-b'e:k B5	'Don't (pl.) go!'
m-e:-b'e:k B6	'Let them not go!'
mi-∅-b'ek laŋ B3 you (form.)	'Don't (form.) go!'

The negative optative-imperative of č'a?w 'talk' in the second person is irregular: a:č' 'Be quiet!' (~k-at-a:č').

Movement. Intransitive verbs may be inflected for movement with the prefix a:-, which appears between the Set B prefix and the stem. It indicates movement (going or coming) incidental to an action. (It is accompanied by the imperative-movement phrase-final suffix -aq (see below).)

š-in-a:-čukun-aq Cm-B1-Mv-work-Mvf	'I went to work; I came from work'
k-in-a-?e:ȼ'an-aq Inc-B1-Mv-play-Mvf	'I come to play'
k-∅-a-?aq'-aq Inc-B3-Mv-cry-Mvf	'It goes to bark'[3]

Phrase Termination. Intransitive stems with prefixal aspects (i.e. not suffixed with past perfective -anaq) bear a suffix in phrase-final position, -aq if the stem is inflected for optative-imperative

mood or movement, -ek otherwise; -ek is optionally substituted for -aq in the negative optative-imperative (obligatorily in some verbs). No phrase-final suffixes appear with the (irregular) optative-imperative for b'e:k 'go', nor with the irregular second person forms for the optative-imperative of 'come' (see examples above). The phrase-final suffixes do not appear when another word follows in the phrase.[4]

ø-ø-war-ek   'He slept'
Cm-B3-sleep-If

Ø-Ø-war 1 ačeŋ   'The man slept'
        the man

ø-ø-yuqub'-ek   'It's tied up'
     tied.up

ø-ø-yuqub' ča: xun če:?   'It's tied up to a tree'
     tied-up to a   tree

m-iš-ak-ek   'Don't (pl.) enter!'
Neg-B5-enter-If

m-iš-ak naŋ   'Don't (pl.) enter yet!'
        still

q-ax-aq'an-aq   'Let's ascend!'
Inc-B4-ascend-Impf

q-ax-aq'an ču? 1 xuyob'   'Let's ascend the hill!'
           atop the hill

k-ax-a:-b'in-aq   'We will go strolling'
Inc-B4-Mv-stroll-Mvf

k-ax-a:-b'in čuwa?q   'We will go strolling tomorrow'
           tomorrow

An exception is //b'e-// 'go', for which the historical indicative phrase-final marker has fused to the verb in all finite forms except the past perfective (and suppletive positive imperative). The final consonant is not removed when followed by another word in the phrase:

ø-ø-b'e:k   'He left'
Cm-B3-go

ø-ø-b'ek 1 ara?   'He left'
Cm-B3-go the Dem

Note also that the imperative-movement phrase-final marker -aq never

appears: m-at-b'e:k 'Don't (sg.) go!'.

For the vowel-initial intransitive -ak, only the suffix -ek, not

-aq, is allowed in the negative optative-imperative:

m-at-ak-ek Neg-B2-enter-If	'Don't (sg.) enter!' (*matakaq)
m-ax-ak-ek B4	'Let's not enter!' (*maxakaq)

In replacement of the imperative-movement phrase-final suffix -aq,

an unstressed short vowel clitic a follows intransitive verbs before

certain particles (particularly vowel-initial directionals) and before

formal pronouns. (That this is a separate clitic rather than a word-final

suffix is shown by its failure to receive word-final stress.)

ϕ-ak-o-?ol B3-enter-Clt-Dir	'Let him enter!' //ϕ-ok o ul//
ϕ-ak-a-no-?ol Clt-then-Dir	'Let him enter, then!' //ϕ-ok a na ul//
ϕ-ak-aq Impf	'Let him enter!'
ϕ-aq'-a-naŋ B3-cry-Clt-then	'Let him cry, then!' //ϕ-oq' a na//
ϕ-aq'-aq Impf	'Let him cry!'
ϕ-ak-a-laŋ B3-enter-Clt-you	'Enter (form.)!' //ϕ-ak a la//

Given that the prefix k(i)- may indicate either incompletive aspect

or optative-imperative, the phrase-final suffixes may be the sole

distinguishing markers.

wa: k-e:-pe:t-ek, if Inc-B6-come-If	k-e:-pe:t-aq Imp-B6-come-Impf	'If they're coming, then let them come!'

Presentational Intransitive k'o:(1)-. The presentational-existential intransitive k'o:1- 'there is/are' is regular in that it is inflected for person-number agreement with Set B prefixes and for phrase termination with -ek, but it is not inflected for tense/aspect, mood, or movement. (Semantically it is unspecified for tense, and indicative in mood.) The final consonant disappears when not followed by phrase-final -ek.

Ø-k'o:l-ek   'There is'
B3-Pre-If

Ø-k'o: tax   'There isn't'
B3-Pre Neg

in-k'o: pu w-ičaŋ   'I am in my house'
B1-Pre in A1-house

at-k'o: p a:w-ičaŋ   'You (sg.) are in your house'
B2   A2

φ-k'o: pi r-ičaŋ   'He is in his house'
B3   A3

ax-k'o: pa q-ačaŋ   'We are in our house(s)'
B4   A4

iš-k'o: p i:w-ičaŋ   'You (pl.) are in your house(s)'
B5   A5

e:-k'o: pi k-ičaŋ   'They are in their house(s)'
B6   A6

la:l k'o: p xa:y   'You (form.) are in your house'
you   Pre in house

5.2.1.2. Root Transitive.

In addition to the inflectional categories which occur with intransitives, transitives are inflected for agreement with both subject and object. Root transitives are monosyllabic, having the shape CVC or VC.

Person/Number Agreement. Agreement with the transitive object is marked by the Set B (absolutive) prefixes already described, while agreement with the transitive subject is marked by ergative prefixes, known as Set A, which have distinct preconsonantal and prevocalic allomorphs. Set A markers are prefixed to the stem, and are preceded by the cliticized aspect-Set B complex.

Set A Prefixes

Preconsonantal		Prevocalic
1 sg	ni- ~ in-	inw-
2 sg	a:-	a:w-
3 sg	ri-	r-
1 pl	qa-	q-
2 pl	i:-	i:w-
3 pl	ki-	k-

The preconsonantal first person singular allomorph is in- immediately following an aspect marker (i.e. with only the zero third singular absolutive allomorph intervening) and ni- in all other preconsonantal environments. Examples of Set A prefixes below are cited in conjunction with the zero Set B prefix, for consonant-initial and vowel-initial transitive roots.

š-∅-in-č'iy-aŋ Cm-B3-A1-hit-Tf	'I hit him'
š-∅-a:-č'iy-aŋ A2	'You (sg.) hit him'
ši-č'iy-aŋ //š-ri-č'ay-o// A3	'He hit him'
š-∅-qa-č'iy-aŋ A4	'We hit him'
š-∅-i:-č'iy-aŋ A5	'You (pl.) hit him'
š-∅-ki-č'iy-aŋ A6	'They hit him'

```
š-φ-inw-il-aŋ                          'I saw it'
Cm-B3-A1-see-Tf

š-φ-a:w-il-aŋ                          'You (sg.) saw it'
    A2

r-il-aŋ   (<//š-r-il-o//)             'S/he saw it'

š-φ-q-il-aŋ                           'We saw it'
    A4

š-φ-i:w-il-aŋ                         'You (pl.) saw it'
    A5

š-φ-k-il-aŋ                           'They saw it'
```

With the irregular vowel-initial transitive verb -a:x 'want, like'
the prenominal Set A prevocalic allomorphs (w- and niw-: see §5.2 below)
are used with w- after third singular Set B and niw- after other persons:

```
k-φ-w-a:x                             'I like it'
Inc-B3-A1-want

k-at-nuw-a:x                          'I like you'
    B2-A1
```

Combinations of Set B and Set A prefixes are mostly predictable,
but several (involving the third plural set B) are not. The combinations
are listed in Table 5.1 for consonant-initial stems. For vowel-initial
stems the forms are the same, except that preconsonantal Set A allomorphs
are replaced by prevocalic allomorphs (i.e. these exemplified in the
above paradigm for -il 'see').

Tense/Aspect. Completive aspect is marked by š- (Table 5.1).
Incompletive aspect combinations are as in Table 5.1, except that the
incompletive aspect is ki- before consonant-initial prefixes (disregarding
an intervening zero prefix) and k- before vowel-initial prefixes.

```
ki-φ-ri-č'ay-aŋ                       'He hit him'
Inc-B3-A3-hit-If

k-in-a:-č'ay-aŋ                       'You hit me'
    B1-A2

k-φ-a:-č'ay-aŋ                        'You hit him'
    B3-A2
```

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Object	Subject	Aspect-Set // š-	B-Set	A-Stem-Final	č'ay -o//	Surface Form	Gloss
1 sg	2 sg	š-	in	a:-	č'ay –	/šina:č'iyaŋ/	'You (sg.) hit me'
1 sg	3 sg	š-	in	ri-	č'ay –	šinric'iyaŋ	'He hit me'
1 sg	2 pl	š-	in	i:-	č'ay –	šini:c'iyaŋ	'You (pl.) hit me'
1 sg	3 pl	š-	in	ki-	č'ay –	šinkic'iyaŋ	'They hit me'
2 sg	1 sg	š-	at	ni-	č'ay –	satnic'iyaŋ	'I hit you (sg.)'
2 sg	3 sg	š-	at	ri-	č'ay –	satric'iyaŋ	'He hit you (sg.)'
2 sg	1 pl	š-	at	qa-	č'ay –	satqac'iyaŋ	'We hit you (sg.)'
2 sg	3 pl	š-	at	ki-	č'ay –	satkic'iyaŋ	'They hit you (sg.)'
3 sg	1 sg	š-	∅	in-	č'ay –	sinc'iyaŋ	'I hit him'
3 sg	2 sg	š-	∅	a:-	č'ay –	sa:c'iyaŋ	'You (sg.) hit him'
3 sg	3 sg	š-	∅	ri-	č'ay –	ric'iyaŋ	'He hit him'
3 sg	1 pl	š-	∅	qa-	č'ay –	sqac'iyaŋ	'We hit him'
3 sg	2 pl	š-	∅	i:-	č'ay –	si:c'iyaŋ	'You (pl.) hit him'
3 sg	3 pl	š-	∅	ki-	č'ay –	s(i)kic'iyaŋ	'They hit him'
1 pl	2 sg	š-	ax	a:-	č'ay –	saxa:c'iyaŋ	'You (sg.) hit us'

...cont'd.

Table 5.1. Person-Number Agreement for Transitive Stem (Completive Aspect)

Table 5.1 cont'd.

Object	Subject	Aspect-Set	B-Set	A-Stem-Final		Surface Form	Gloss
1 pl	3 sg	// š-	ax	ri-	č'ay -o//	/šaxrič'iyaŋ/	'He hit us'
1 pl	2 pl	š-	ax	i:-	č'ay -o	šixi:č'iyaŋ	'You (pl.) hit us'
1 pl	3 pl	š-	ax	ki-	č'ay -o	šaxkič'iyaŋ	'They hit us'
2 pl	1 sg	š-	iš	ni-	č'ay -o	šišnič'iyaŋ	'I hit you (pl.)'
2 pl	3 sg	š-	iš	ri-	č'ay -o	šisrič'iyaŋ	'He hit you (pl.)'
2 pl	1 pl	š-	iš	qa-	č'ay -o	šisqač'iyaŋ	'We hit you (pl.)'
2 pl	3 pl	š-	iš	ki-	č'ay -o	šiškič'iyaŋ	'They hit you (pl.)'
3 pl	1 sg	š-	e:	ni-	č'ay -o	še:nč'iyaŋ	'I hit them'
3 pl	2 sg	š-	e?	a:-	č'ay -o	še?a:č'iyaŋ	'You (sg.) hit them'
3 pl	3 sg	š-	e:	ri-	č'ay -o	še:rač'iyaŋ	'He hit them'
3 pl	1 pl	š-	e:	qa-	č'ay -o	še:qač'iyaŋ	'We hit them'
3 pl	2 pl	š-	e:	i:-	č'ay -o	ši:č'iyaŋ[1]	'You (pl.) hit them'
3 pl	3 pl	š-	e:	ki-	č'ay -o	šikič'iyaŋ[1]	'They hit them'

[1] Realization not predictable

Perfective aspect is marked by $-V_1m$ suffixed to the stem,[5] with

Set B and Set A markers prefixed to the stem. (-ax is a phrase-final

marker for perfectives; see below.)

at-ni-č'ay-am-ax   'I have hit you'
B2-A1-hit-Pf-Pff

at-r-il-im-ax   'He has seen you'
B2-A3-see-Pf-Pff

The full paradigm of agreement prefixes is as in Table 5.2 (for conso-

nant-initial derived transitive stem) except that the word-initial pre-

vocalic Set A' allomorphs (i.e. those used to mark noun possession, as

in §5.2.2) are w- ~ niw- (the latter from the preconsonantal ni- plus

prevocalic w-): at-w-il-im-ax ~ at-nuw-il-im-ax B2-A1-see-Pf-Pff 'I

have seen you.' Examples below are cited only for third singular object;

the full prefixal paradigm for perfectives is exemplified below in

§5.2.1.3 (Table 5.2).

Ø-(nu)w-il-im-ax   'I have seen it'
B3-A1-see-Pf-Pff

(wilimax ~ nuwilimax)

Ø-a:w-il-im-ax   'You (sg.) have seen it'
  A2

Ø-r-il-im-ax   'He has seen it'
  A3

Ø-q-il-im-ax   'We have seen it'
  A4

Ø-i:w-il-im-ax   'You (pl.) have seen it'
  A5

Ø-k-il-im-ax   'They have seen it'
  A6

(In addition to the finite form with transitive inflection marked by Set A and Set B, the suffix $V_1{}^m$ (with phrase-final -ax) forms a perfect participle, inflected with only Set B, corresponding semantically to a passive; see §5.3.3.)

Mood. Optative/imperative may be marked for root transitives with k(i)- (as with incompletive aspect; person-number combinations are as for indicative mood) plus -aʔ (not a phrase-final marker) suffixed to the root.

k-∅-in-č'ay-aʔ Imp-B3-A1-hit-Imp	'Let me hit him!'
k-ax-a:-č'ay-aʔ B4-A2	'Hit (sg.) us!'
k-eʔ-a:-c'ay-aʔ B6-A2	'Hit (sg.) them!'

When the object is third person singular and the subject is non-second-person, the imperative prefix may be omitted:

∅-in-č'ay-aʔ B3-A1-hit-Imp	'Let me hit him!'
∅-ri-c'ay-aʔ A3	'Let him hit him!'
∅-qa-c'ay-aʔ A4	'Let's hit him!'

When the object is third person and the subject second person, the imperative-optative marker t- may take the place of the incompletive aspect marker, and the second person a:(w)- Set A prefix is replaced by i(w)-, or, after third person plural Set B, by zero.

t-∅-i-mas-aʔ Imp-B3-A2-sweep-Imp	'Sweep (sg.) it!'
t-∅-i:-mas-aʔ A5	'Sweep (pl.) it!'
t-∅-iw-il-aʔ A2-see	'Look (sg.) at it!'

| t-∅-i:w-il-a? | 'Look (pl.) at it!' |
| A5 | |

| t-e:-∅-č'iy-a? | 'Hit (sg.) them!' |
| A2-hit | |

| t-e:-∅-b'an-a? | 'Make (sg.) them!' |
| A2-make | |

When the object is third person and subject second person, the initial syllable may be optionally deleted:

masa?	'Sweep it!'
b'ana? taq'o:b'	'Do a favor!'
wila?	'Look at it!'

If the stem ends in -a?, the imperative suffix -a? is dropped in a haplology:[6]

| tiya? ~ ya? //tiya?a?// | 'Give (sg.) it!' |

Movement. Prefixal aspects may be inflected for movement (going or coming), which is marked for root transitive stems by the prefix a:- placed between Set B and Set A, plus -a? suffixed to the stem.

| k-∅-a:-ri-k'am-a? | 'He goes (comes) to carry it' |
| Inc-B3-Mv-A3-carry-Mv | |

| k-∅-a:-qa-tix-a? | 'We go to drink it' |
| A4-drink | |

| k-ax-a:-ri-č'iy-a? | 'He comes to hit us' |
| B4   A3 | |

For vowel initial stems, the first person singular Set A allomorph following movement a:- is nw-:

| k-∅-a:-nw-il-a? | 'I go to see it' |
| Inc-B3-Mv-A1-see-Mv | |

For root transitives, when the Set B prefix is nonzero, the prefix a:- is optionally omitted (though the suffix -a? remains):

k-iš-ri-č'iy-aʔ   'He comes to hit you (pl.)'
Inc-B5-A3-hit-Mv

k-e:-ni-č'iy-aʔ | 'I come to hit them'
  B6-A1

Phrase Termination. For prefixal aspects, root transitives in phrase-final position are suffixed by //-u// if the root vowel is u and //-o// otherwise (§4.2.2.2). The suffix does not appear if the stem is in non-phrase-final position.

k-∅-in-kuč-oŋ   'I stop it up'
Inc-B3-A1-stop-up-If

š-∅-in-tix-aŋ   'I ate it'
Cm-B3-A1-eat-If

š-∅-in-tix   tiʔex   'I ate meat'
          meat

The verbs -b'ax 'say' and -a:x 'want, like' never take the phrase-final suffix for root transitives.[7]

k-∅-im-b'ax   . 'I say it'
Inc-B3-A1-say

k-∅-w-a:x   'I want it'
Inc-B3-A1-want

When the root transitive imperative-movement inflection -aʔ appears, no phrase-final suffix occurs.

mas-aʔ   'Sweep it!'
sweep

k'aš-aʔ   a:w-ic̣'ya:q   'Change your clothes!'
change   A2-clothes

Transitive verbs in perfective aspect (-(V₁)m) are suffixed in phrase-final position by -ax.

∅-ni-kax-am   ček   'I have used it'
B3-A1-use-Pf   completive

∅-ni-kax-am-ax   'I have used it'
B3-A1-use-Pf-Pff

5.2.1.3. Derived Transitives.

Derived transitive stems are inflected for the same categories as root transitives, except that no imperative or movement suffixes occur. A derived transitive always consists of a bound polysyllabic base ending in a vowel.

Person-Number Agreement. Person-number agreement is as for root transitives.

Tense/Aspect. Prefixal aspects are as for root transitives. Perfective aspect is marked by -m suffixed to the transitive base.

ɸ-ni-tuxu-m-ax	'I have taught him'
B3-A1-teach-Pf-Pff	(Cf. tuxu:x 'teach' t)
at-ni-pak'ab'a-m-ax	'I have you placed mouth up'
B2-A1-place.mouth.up-Pf-Pff	(Cf. pak'ab'a? 'place mouth up' t)

For the full paradigm (including non-predictable person-number combinations) see Table 5.2.

Mood. Optative-imperative for derived transitives may be marked with the incompletive aspect marker. No imperative suffix occurs with derived transitives, the base being completed by suffixation of the active voice markers (-:x or -?).

k-ɸ-a:w-e:qa-:x	'Carry (sg.) it!'
Inc-B3-A2-carry-Ta	
k-e?-a:w-akasa-:x	'Make (sg.) them enter!'
Imp-B6-A2-enter(Cs)-Ta	

When the object is third person (singular or plural), the optative-imperative may be marked by t-. Before this prefix the ordinary second person singular Set A prefix a:(w)- is replaced by i(w)-.

t-ɸ-i-xiyi-:x	'Look (sg.) for it!'
Imp-B3-A2-look.for-Ta	
t-ɸ-i-č'anab'a-?	'Strip (sg.) it nude!'
strip.nude-Ta	

Object	Subject	Set B-	Set A-	Stem	-Perf	-Final	Surface Form	Gloss
1 sg	2 sg	//in-	a:-	čixi	-m	-ax//	/ina:čixmax/	'You (sg.) have cared for me'
1 sg	3 sg	in-	ri-	čixi	-m	-ax	inračixmax	'He has cared for me'
1 sg	2 pl	in-	i:-	čixi	-m	-ax	ini:čixmax	'You (pl.) have cared for me'
1 sg	3 pl	in-	ki-	čixi	-m	-ax	inkičiximax	'They have cared for me'
2 sg	1 sg	at-	ni-	čixi	-m	-ax	atnčixmax	'I have cared for you (sg.)'
2 sg	3 sg	at-	ri-	čixi	-m	-ax	atračixmax	'He has cared for you (sg.)'
2 sg	1 pl	at-	qa-	čixi	-m	-ax	atqačixmax	'We have cared for you (sg.)'
2 sg	3 pl	at-	ki-	čixi	-m	-ax	atkičixmax	'They have cared for you (sg.)'
3 sg	1 sg	∅-	ni-	čixi	-m	-ax	ničiximax	'I have cared for him'
3 sg	2 sg	∅-	a:-	čixi	-m	-ax	a:čixmax	'You (sg.) have cared for him'
3 sg	3 sg	∅-	ri-	čixi	-m	-ax	ričixmax	'He has cared for him'
3 sg	1 pl	∅-	qa-	čixi	-m	-ax	qačixmax	'We have cared for him'
3 sg	2 pl	∅-	i:-	čixi	-m	-ax	i:čiximax	'You (pl.) have cared for him'
3 sg	3 pl	∅-	ki-	čixi	-m	-ax	kičiximax	'They have cared for him'
1 pl	2 sg	ax-	a:-	čixi	-m	-ax	axa:čixmax	'You (sg.) have cared for us'

Table 5.2. Person-Number Agreement for Derived Transitive Stem, Perfective Aspect

...cont'd.

Table 5.2. cont'd.

Object	Subject	Set B-	Set A-	Stem	-Perf	-Final	Surface Form	Gloss
1 pl	3 sg	ax-	ri-	čixi	-m	-ax	axričixmax	'He has cared for us'
1 pl	2 pl	ax-	i:-	čixi	-m	-ax	ixi:čixmax	'You (pl.) have cared for us'
1 pl	3 pl	ax-	ki-	čixi	-m	-ax	axkičixmax	'They have cared for us'
2 pl	1 sg	iš-	ni-	čixi	-m	-ax	išničixmax	'I have cared for you (pl.)'
2 pl	3 sg	iš-	ri-	čixi	-m	-ax	išračixmax	'He has cared for you (pl.)'
2 pl	1 pl	iš-	qa-	čixi	-m	-ax	išqačixmax	'We have cared for you (pl.)'
2 pl	3 pl	iš-	ki-	čixi	-m	-ax	iškičixmax	'They have cared for you (pl.)'
3 pl	1 sg	e:-	ni-	čixi	-m	-ax	e:ničixmax	'I have cared for them'
3 pl	2 sg	eʔ-	a:-	čixi	-m	-ax	eʔa:čixmax	'You (sg.) have cared for them'
3 pl	3 sg	e:-	ri-	čixi	-m	-ax	e:račixmax	'He has cared for them'
3 pl	1 pl	e:-	qa-	čixi	-m	-ax	e:qačixmax	'We have cared for them'
3 pl	2 pl	eʔ-	i:-	čixi	-m	-ax	i:čiximax[1]	'You (pl.) have cared for them'
3 pl	3 pl	e:-	ki-	čixi	-m	-ax	e:kičixmax	'They have cared for them'

[1] Not predictable (*eʔi:čiximax); disambiguation from 3sg patient is achieved by using independent pronouns

t-∅-íw-e:qa-:x   'Carry (sg.) it!'
   A2-carry-Ta

t-∅-í:-xíyí-:x   'Look (pl.) for it!'
   A5-look·for

t-e?-a:w-akasa-:x   'Make (sg.) them enter!'
Imp-B6-A2-enter(Cs)-Ta

When the subject is second person and Set B is zero, the initial syllable (e.g. tí-) is optionally dropped:

t-∅-í-xíyí-:x → xíyí:x   'Look (sg.) for it!'

t-∅-íw-e:qa-:x → we:qa:x 'Carry (sg.) it!'

The formal independent pronouns appear without overt prefix. (This may be considered a zero allomorph of the third person Set A prefix.)

ø-ø-alasa-x   laŋ   'Remove (sg. form.) it!'
B3-A3-leave(Cs)-Ta   you(sg.)

ø-ø-alasa-x alaq   'Remove (pl. form.) it!'
         you(pl.)

Movement. Movement is optionally marked, with the prefix a:- as for

root transitives (but no suffix occurs).

š-ø-a:-ra-ɫ'uno-:x   'He came to ask it'
Cm-B3-Mx-A3-ask-Ta

Phrase Termination. No phrase-final marker occurs with derived

transitives in the prefixal aspects, in optative/imperative mood, or in

movement inflection. In perfective aspect the suffix -ax follows perfective

-m in phrase-final position.

ø-ni-pak'ab'a-max   'I have it mouth up'
B3-A1-place.mouth.up-Pf-Pff

ø-a:-pak'ab'a-m   1-ax-a:w-a:l   'You (sg.) have your child mouth up'
B3-A2   the-Dim-A2-child

ø-i:-čixi-m-ax   'You (pl.) have cared for him'
B3-A5-care.for-Pf-Pff

ø-i:-čixi-m   ra   eš   'You (pl.) have cared for him'
       Pf   the   you

5.2.2. Nouns.

Nouns may be inflected for subject of stative predicate, for plural,

and for possession.

Stative Predicate. Nouns acting as stative predicates are inflected

for subject with Set B prefixes.

winaq   'person'

in-winaq   'I am a person'
B1-person

at-winaq   'You (sg.) are a person'
B2

φ-winaq B3	'He is a person'
ax-winaq B4	'We are people'
iš-winaq B5	'You (pl.) are people'
e:-winaq B6	'They are people'

Note that although Set B markers cliticize to a following noun, they may also appear as separate words: in ta e:laq'o:m 'I am not a thief.'

The perfect participle in -(V₁)m (§5.3.3) also is inflected for stative subject with Set B prefixes, and in addition is suffixed with the perfective -ax in phrase-final position. It corresponds semantically to a passive, showing agreement with the patient.

in-il-im-ax B1-see-Pf-Pff	'I have been seen'
φ-il-im-ax B3	'He has been seen'
ax-il-im-ax B4	'We have been seen'
φ-čixi-m-ax B3-care.for-Pf-Pff	'He has been cared for'
ax-čixi-m-ax B4	'We have been cared for'

<u>Plural</u>. The suffix -V:b' marks plural on human nouns and a single non-human animate noun ('ox'). Vowel quality (a or I) is lexically determined. For ačeŋ 'man' the combining allomorph is //ačix//; stem changes which appear in the other forms are in accordance with regular morphophonemic rules.

Singular	Gloss	Plural
ak'a:l	'child'	ak'ala:b'
ačeŋ	'man'	ačixa:b'
išaq	'woman'	išqi:b'
e:laq'o:m	'thief'	e:laq'oma:b'
kamanaq	'dead one'	kamanaqi:b'
ax ča:k	'worker'	ax čaki:b'
ax q'i:x	'diviner'	ax q'exa:b'
maya?s	'teacher'	maya?sa:b'
pre:šaŋ	'prisoner'	pre:š?i:b'
b'o:yeš	'ox'	b'o:yiša:b'

Some animate nouns do not take plural inflection. These, like all in-animate nouns, are unmarked for number: winaq 'person', ma:s winaq 'many people.' Even for those nouns which may take -V:b', the uninflected form can occur with plural meaning (though the inflected form is more common): išib' ačeŋ ~ išib' ačixa:b' 'three men.'

For one deadjectival noun, the plural marker is a separate word, not a suffix, as shown by its word-initial glottal stop: q'aq i:b' 'blacks' [q'aqʰ ?í:ɓ]. One speaker reports an instance of a collective meaning for -i:b', but other speakers reject this form: winaq-i:b' 'group of people' (e.g. a town-hall meeting).

A distinct plural allomorph -o:m occurs with two human nouns:

ali:t	'girl'	alto:m	'girls'
ala:b'	'boy'	al?o:m	'boys'

(The b'~? alternation in 'boy' is irregular.)

Possession. Possessed nouns are inflected with a Set A prefix which indexes the possessor. They are divided into classes according

to their morphological behavior under possession.

Prefixes. The possessive prefixes are the same as for transitive

subject except in the first person singular, where in preconsonantal

position only ni- occurs (not in-),and in prevocalic position the allomorphs are w- ~ niw- instead of inw-. This set may be called A'. (The Set A' allomorphs are generally word-initial, but may occur following an aspect-Set B complex as indicated above.)

		Preconsontal	Prevocalic
1 sg		ni-	w- ~ niw-
2 sg		a:-	a:w-
3 sg		ri-	r-
1 pl		qa-	q-
2 pl		i:-	i:w-
3 pl		ki-	k-

ča:k   'work'

ni-ča:k   'my work'
A1

a:-ča:k   'your (sg.) work'
A2

ri-ča:k   'his work'
A3

qa-ča:k   'our work'
A4

i:-ča:k   'your (pl.) work'
A5

ki-ča:k   'their work'
A6

(In the above paradigm, some speakers ordinarily prefix the definite article li to the second person forms (l-a:-ča:k '(the) your (sg.) work,' l-i:-ča:k '(the) your (pl.) work'), apparently to avoid having a prefixal vowel in word-initial position.)

oč'   'possum'

w-oč'   'my possum'
A1

a:w-oč'   'your (sg.) possum'
A2

r-oč' 'his possum'
A3

q-oč' 'our possum'
A4

i:w-oč' 'your (pl.) possum'
A5

k-oč' 'their possum'
A6

The first person plural Set A prefix q(a)- is used for generic

meaning of inalienably possessed nouns: q-aqan 'legs' (lit. 'our leg(s)').
                                          A4-leg

Some vowel-initial nouns that do not usually have possessors, or are

monosyllables of VC shape, may retain initial glottal stop on possession,

and hence are prefixed with the preconsonantal Set A allomorphs.

utoy 'agouti' [ʔutóyç]

nu-ʔutoy 'my agouti'
A1

l-a:-ʔutoy 'your (sg.) agouti'
the-A2

ru-ʔutoy 'his agouti'
A3

qo-ʔotoy 'our agouti'
A4

l-i:-ʔutoy 'your (pl.) agouti'
the-A5

ki-ʔutoy 'their agouti'
A6

Forms like this one could be considered to have underlying initial glottal

stop //ʔutoy//, whereas a form like //axa:w// 'father', which takes only

prevocalic allomorphs (w-axa:w 'my father', *ni?axa:w) would have an underlying vowel. More commonly, however, speakers vary between a form retaining initial glottal stop and one without it.

am 'spider' [?am]

Preconsonantal	Prevocalic	
ni-?am A1	w-am A1	'my spider'
a:-?am A2	a:w-am A2	'your (sg.) spider'
	r-am A3	'his spider' [8]
qa-?am A4	q-am A4	'our spider'
i:-?am A5	i:w-am A5	'your (pl.) spider'
ki-?am A6	k-am A6	'their spider'

Some speakers in fact split the paradigm, choosing prevocalic markers for second person (singular and plural) and preconsonantal markers for the rest, thereby avoiding monosyllabic possessed forms. This paradigm-splitting precludes analysis in terms of an underlying glottal stop. There is great variation between speakers, and within the same speaker on different occasions, in treatment of many uncommonly possessed or monosyllabic vowel-initial nouns.

The allomorph niw- occurs as a free variant of w-, usually before monosyllabic vowel-initial nouns, possibly also to avoid a monosyllabic possessed form:

es 'body hair'

w-es ~ niw-es 'my body hair'

u:l 'landslide'

w-u:l ~ niw-u:l ~ ni-ʔu:l 'my landslide'

Second person formal possession is marked by the formal pronoun following the uninflected noun; the definite article typically precedes.

ll iȼi:k   laŋ 'your (form.) older brother'
the older brother you (form.)

la awax   ri la:l 'your (form. sg.) animal'
the animal the you (form. sg.)

la awax   r alaq 'your (form. sg.) animal'
the animal the you (form. pl.)

I now present the noun classes:

Class 1. Nouns in this class occur as free stems, and when possessed undergo no change.

weʔ 'head hair'

nu-weʔ 'my head hair'

ča:x 'ashes'

ni-ča:x 'my ashes'

Class 1a. Nouns in this class occur as free stems, and on possession undergo lengthening of the final vowel.[9]

čax 'pine'

ni-ča:x 'my pine'

ak' 'chicken'

w-a:k' 'my chicken'

mulol 'gourd'

ni-mulu:l 'my gourd'

ab'ax 'rock'

w-ub'a:x 'my rock'

ɬiʔb'al 'stinger'

ri-ɬiʔb'a:l 'its stinger'

Class 2. Nouns in this class occur as free stems, but on posses-
sion add the suffix -V:l. Vowel quality is lexically determined.

kek' 'blood'

ni-kik'-e:l 'my blood'
A1-blood-Sf

išaq 'woman'

w-išq-i:l 'my wife' (*išqi:l)

ib'ač' 'veins'

r-ib'ač'-i:l 'his veins'

mu:x 'shadow'

ru-mu:x-a:l 'its shadow'

k'atan 'sweat'

ni-k'atan-a:l 'my sweat'

winaq 'person'

ni-winaq-i:l 'my race'

Although most stems of this class are ordinarily inalienably
possessed semantically, the converse is far from true. Many body parts
and kin terms belong to Class 1, e.g., weʔ 'head hair', es 'body hair',
u:k'a:ʔ 'horn', alawa:l 'body', čoŋ 'mother', ačala:l 'relative'. (Other

inalienably possessed forms occur in Class 3 as well.)

Class 3. Stems in this class ordinarily appear possessed, and the absolute is formed by adding a suffix (-ax or -a¢).

ni-xalo:m 'my head'

xalom-ax 'head'

ni-ču:l 'my urine'

ču l-ax 'urine'

w-ili:b' 'my daughter-in-law'

ilib'-a¢ 'daughter-in-law' (also: ilib'-š-e:l)

In some cases a noun stem may be bivalent, falling into Classes 1 and 3 both, sometimes with a slight difference in meaning. For example, šiken 'ear' occurs as a free form, with possessed ni-šiken 'my ear', whereas šikin-ax means explicitly an ear that is not inalienably possessed. Cf. also e:y ~ ay-ax 'tooth', w-e:y 'my tooth'.

Class 4. In this class fall nouns whose possessed form is related suppletively to the nonpossessed form.

xa:y 'house'

w-ičaŋ 'my house' (*ni-xa:y)

5.2.3. Relational Nouns.

Relational nouns are a small closed set of monosyllabic and disyllabic roots, formally nouns, that are inflected with possessive prefixes (Set A') to express locative or case relations in the sentence.

They fulfill the function of prepositions in many European languages. Some also function as common nouns (e.g., we? 'head hair'). Some relational nouns express primarily location (-ì:x 'back'); these are preceded by one of the small set of prepositional roots. Some express primarily nonlocative case relations (-ìk'ì:n 'with'); these are not preceded by a preposition.

The prefix paradigm for relational nouns differs from the possesive paradigm in the nonoccurrence of the nìw- allomorph for first person singular. When a consonant-initial relational noun is preceded by the preposition čì, the third person singular Set A allomorph is zero. When a vowel-initial relational noun is preceded by čì, the allomorph is zero when the relational noun is followed by its overt possessor, and either zero or r- (usually the latter) when it is not.

> čuwač //čì .∅-wač// 'in front of it, across from it'
>   Loc A3-face
>
> čì-r-ì:x   'on its back, on its surface'
> Loc-A3-back
>
> č-∅-ìx   masikle:ta 'on a bicycle'
> Loc-A3-back bicycle
>
> čì-r-aŋ //čì r-e//   'to him'
>   Loc A3-Dat
>
> č-∅-aŋ   'to him'
> Loc-A3-Dat
>
> č-∅-a   l ačeŋ 'to the man'[10]
> Loc-A3-Dat·the man

The inflectional paradigm for locative relational nouns (consonant-initial stems) is as follows:

Prep.	Set A—Rel. Noun		Surface Form	Gloss
či at	ni- A1-	wač face	činuwač	'in front of me'
či	a:- A2	wač	ča:wač	'in front of you (sg.)'
či	∅- A3	wač	čuwač	'in front of him'
či	qa- A4	wač	čaqawač	'in front of us'
či	i:- A5	wač	či:wač	'in front of you (pl.)'
či	ki- A6	wač	čikiwač	'in front of them'
či		wač laŋ you (sg.form.)	čuwač laŋ	'in front of you (sg. form.)'
či		wač alaq you (pl.form.)	čuwač alaq	'in front of you (pl. form.)'

Other locative relational nouns are:

či-∅-pa:m 'inside it'

či-∅-naqa:x 'near it'

či-∅-či:ʔ 'on the edge of it'

či-∅-šukot 'on the side of it'

ču-∅-wiʔ 'on top of it'

ču-∅-wiʔ 'on top of it' ordinarily occurs in the reduced form čuʔ, which functions as a preposition (see §5.3.9). -wiʔ may also occur preceded by the locative preposition pa, which always requires the nonzero third

singular possessive allomorph: pa-ra-we? 'on top of it.'

The locative relational noun -ša?| 'between' occurs only with

plural inflection, for semantic reasons: ca-qa-ša?| 'between us.'

The relational nouns cited so far express primarily location, al-

though the dative čiraŋ~čaŋ 'to it' may express nonlocative meaning.

Relational nouns that express primarily nonlocative case relations are

listed below. They are not preceded by the preposition či, and take

only the nonzero third person singular Set A allomorphs.

> w-ik'i:n 'with me' (Comitative)
>
> w-e:č ~ w-e: ~w-e:ŋ 'to me, of me, mine' (Dative)
>
> wuma:| //w-ima:|// 'by me' (Agentive)

In expressing case relations for second person formal pronouns, the

formal pronouns may simply be postposed to the uninflected relational

noun, or the formal pronoun may act grammatically as a third person com-

mon noun possessor of the relational noun, with the relational noun

showing agreement (inflected with third person singular Set A markers):

> ik'i:n laŋ 'with you (form.)'
> with   you
>
> e:č ri la:| 'yours (sg. form.)'
> Dat the you
>
> e:č r alaq 'yours (pl. form.)'
>   the you

r-ima:l rl la:l   'by you (sg. form.)'
A3-by   the you

r-ima:l r alaq   'by you (pl. form.)'

Note that several prepositions are derived from relational nouns;
see §5.3.9.

5.2.4. Adjectives.

Certain adjectives may be marked for occurrence (or nonoccurrence)
as attributives, and for plural agreement with the modified noun.

Attributive Inflection. In predicate position nonpositional
adjectives are uninflected.

saq   li xa:y   'the house is white'
white the house

oȼ   li kinaq' 'the beans are good'
good the beans

te:w ček   'it's already cold'
cold completive

In prenominal attributive position, however, some root adjectives are op-
tionally followed by a short unstressed clitic (usually a, but sometimes
i), which joins it to the following noun (in certain adjective-noun com-
binations only).

saq - a - pwaq ~ saq pwaq 'silver'
white-Clt-money

saq-a-laq ~ saq laq 'white cup, fine cup'
        cup

ma:m-a - ȼ'eʔ 'male dog'
male-Clt-dog

teʔt-a-ȼ'eʔ 'bitch'
female

nim-i - ya? ~ nimya? 'water'
big-Clt-water

The same adjective in combination with a different noun, however, may

not receive the epenthetic clitic:

nim xa:y ~ nem xa:y 'big house' (*nimaxa:y)
big house

For some other combinations of nonpositional adjective plus noun, the

suffix -alax, instead of the short vowel clitic, obligatorily marks

attributive adjectives. Although there is no clear semantic distinction

between the two attributive inflections, -alax occurs only with adjec-

tives with gradable meaning.[12]

o¢-alax kinaq' 'good beans' (*o¢ kinaq')
good-Sf bean

o¢-alax winaq 'good person'
person

nem-lax tinimet 'city'
big town

nim-lax aq'ab' 'dawn'
dark

b'ayom-alax winaq 'rich person'
rich person

te:w-alax ya? 'cold water'
cold water

For positional adjectives in $-V_1 I$, the suffix -ek occurs when

the adjective is not in prenominal attributive position.

t'ub'ul-ek 'piled up'

t'ub'ul iši:m 'piled-up corn'

xaqal-ek 'open'

xaqal ripa:m 'it is open'

wa?l-ek 'standing'

wa?l pa b'e:y 'standing in the road'

xun ¢'e? yuqul-ek kamek 'a tied-up dog died'
a   dog tied up died

<u>Number.</u> The root adjective nem 'big' is marked for plural with

the suffix -aq:

nim-aq 'big (pl.)'

Positional-derived adjectives in $-V_1C_1$ are obligatorily marked

for singular with -ek or plural with -aq.

Singular	Plural	
satas-ek	satas-aq	'spherical'
tapat-ek	tapat-aq	'long (cylindrical things)'
parap-ek	parap-aq	'wide'

Note that the singular suffix -ek that occurs with $-V_1C_1$ adjectives

is not a phrase-final suffix.

sanas-ek ri-k'o?š 'he is big-bellied'
fat-Sg A3-stomach

yuquy-ek   ki-qol 'they have long necks'
stretched-Sg A6-neck

5.2.5. Noninflected Stem Classes.

The remaining stem classes are not inflected. With examples, they

are:

<u>Independent Pronouns.</u> en 'I', at 'you'.

Number. íšeb' 'three', kab'laxu:x 'twelve'.

Measure Words. ka?lo:č 'two handfuls'.

Demonstratives. ri:? 'this'.

Adverbs. tiyima:l 'slowly'.

Prepositions. ča 'locative', pa 'locative'.

Particles. ka:n 'behind', naŋ 'still', tax 'not'.

Articles. li 'the', nik^y'a:x 'some'.

5.3. Derivation.
5.3.1. Transitive Verbs.

<u>-V Transitive Base</u>. The suffix -V derives a bound transitive base from nouns, adjectives, verbs, positional roots, and unidentified roots. This base is suffixed in the active voice with -:x (see below). Examples are listed by derivational source.

noun   ki - Ø - ri-k^{y}ex - e-:x 'he rides it (horse)'
        Inc-B3-A3-horse-T-Ta   (k^{y}e:x 'horse')

        sub' - u-:x 'make <u>tamalitos</u>' (sob' '<u>tamalito</u>')
        tamalito-T-Ta

adjective ¢iy - i-:x 'salt' (¢ay 'salty')
           salty-T-Ta

intransitive q'a:š-a-:x 'pass' (q'a:š 'pass' I)
             pass -T-Ta

             rašrab' - e-:x 'make green' (rašrab' 'become green')
             become.green-T-Ta

transitive yo:t' - i-:x 'grasp handful' (-yat' 'grasp handful' T)
            grasp.handful-T-Ta

            qax - i-:x 'scatter' (-qax 'lower' T)
            lower-T-Ta

positional tum - a-:x 'twist' (tum- 'twisted' P)
root   twisted-T-Ta

unidentified   xiy-i-:x   'look for'
root   T-Ta

              wup-u-:x   'puff on'
                 T-Ta

-a Positional Causative Base. The suffix -a derives a bound

causative transitive base from positional-derived versive[13] intransitives

(in $-V_1b'$). In the active voice this base is suffixed with -ʔ (see

below). (This base may be distinguished from the previously described

base as the "positional causative" base.)

       kaȼ'ab'-a-ʔ   'lay down'
       lie-   Cs-Ta

       pak'ab'   -   a - ʔ   'leave mouth up'
       become.mouth.up-Cs-Ta

       lakab'-a - ʔ   'twist' t
       twist - Cs-Ta

(The adjective-derived versive in $-V_1b'$, saqab' 'become white', also

forms a transitive base in -a: saqab'-a-ʔ 'whiten'.)

-isa Causative Base. The suffix -isa derives a bound causative

base from intransitives other than positional-derived versives. Follow-

ing the verbs war 'sleep' and k'iy 'grow' the allomorph -tisa occurs.

       ∅ - ∅ - r -al - asa-:x   'he removed it' (//-el// 'leave' I)
       Cm-B3-A3-leave-Cs-Ta

       kam-sa-:x   'kill'
       die-Cs-Ta

       war - tasa-:x   'cause to sleep'
       sleep- Cs -Ta

       k'iy-tisa-:x   'raise'
       grow- Cs -Ta

paq'pat-sa-:x 'boil' (paq'pat 'boil' i)
boil-Cs-Ta

ki?r-isa-:x   'sweeten' (ki?ir 'become sweet' i)
sweeten-Cs-Ta

<u>-b'e Instrumental Base</u>. The suffix -b'e derives a bound "instru-
mental" transitive base from other transitive bases. It acts to regis-
ter the presence of an instrumental in the sentence, and has some voice-
like functions (see §6.2.4.4).

š-∅-in-qup-u-b'e-:x   'I cut it (with specified instrument)'
Cm-B3-A1-cut-T-Instr-Ta

<u>-:x Active Voice</u>. The suffix -:x forms active voice transitive
verbs from all transitive bases except the positional causative base
(in -a).

Base in -V   ćiy-i-:x   'salt' t
                    salty-T-Ta

Base in -i sa   kam-asa-:x 'kill' t
                    die-Cs-Ta

Base in -b'e   e:ć'-b'e-:x   'play' t

<u>-? Active Voice</u>. The suffix -? forms active voice transitive verbs
from the positional causative base in -a.

kać'ab'-a-? 'lay down'
lie-Cs-Ta

wa:b'-a-?   'stand up' t
stand·up-Cs-Ta

<u>5.3.2. Intransitive Verbs</u>.

<u>Lengthened Vowel Passive</u>. A passive intransitive is formed from
root (monosyllabic) transitives by lengthening the root vowel. (Note
that for a particular root there are often two passive alternants; see
§4.2.2.1.)

ya:x-ek   'he was scolded' //γax// 'scold' T
scold(Ps)-If

b'a:n-ek 'it was done' //-b'an// 'do' T
do(Ps)

¢'u:p - ek   'it was sucked' //-¢'up// 'suck' T
suck(Ps)

b'a:ł - ek ~ b'o:ł - ek   'it was rolled up' //-b'oł// 'roll
roll(Ps)   roll(Ps)   up' T

-š Passive. For derived (polysyllabic) transitive bases the

passive corresponding to the above passive is formed by adding -š.

The sibilant harmony rule conditions an -s allomorph (§4.1.3).

Ø - Ø -e:laq'-a-š -ek   'it was stolen' (e:laq'a:x 'steal' t)
Cm-B3-theft -T-Ps-If

Ø-Ø-par - a-š - ek   'it was burned' (paro:x 'burn' t)
     burn-T-Ps-If

Ø-Ø-kam-asa-s - ek   'he was killed' (kamasa:x 'kill' t)
     die-Cs -Ps-If

q'u:b'išek //Ø - Ø - q'uʔ-ub'-a-š - ik//   'it was ripened' (q'u:b'aʔ
          Cm-B3-ripe-Vs-Cs-Ps-If   'ripen' t)

Ø -Ø -sał -   ab'-a-s -ek   'it was left (discoidal object)'
Cm-B3-discoidal-Vs-T-Ps-If

-(a)łax Completive Passive. The passive in -(a)łax applies to

either transitive roots or derived transitive bases, and differs seman-

tically from the -:- ~ -š passive in that it emphasizes the effects of

a completed action. The passive allows expression of an agent in any

person, marked in a relational noun phrase. The allomorph -łax is used

for derived transitive bases and many root transitives, but some root

transitives take -ałax.

Ø - Ø - kuč - łax-ek   'it is stopped up' (-kuč 'stop up' T)
Cm-B3-stop.up-Ps -If

∅-∅-tax-tax-ek   'it is paid up' .(-tax 'pay' T)
pay

k-∅-e:ta?m-a-tax-ek   'it can be learned' (-e:ta?ma:x 'learn')
Inc-B3-know-T-Ps-If

q'u:b'atax qama:I   //∅-∅-q'u?-ub'-a-tax   q-ama:I//
                    Cm-B3-ripe-Vs-T-Ps   A4-by

   'we've ripened it up' (q'u:b'a? 'ripen' t)

ya: ∅-∅-k'am-atax b'i:k 'it's already been carried away'[14]
already Cm-B3-carry-Ps away

$-V_1w \sim -n$ Focus Antipassive. The suffix $-V_1w$ derives an intransitive
stem from transitive roots while -n marks derived transitives. The
patient is usually removed from direct relation to the verb, leaving the
focussed agent to govern agreement as the intransitive subject. The
patient, however, is not necessarily placed in an oblique case, and under
certain conditions may govern agreement in accordance with a person hier-
archy. This antipassive is used primarily when the agent is a focus of
contrast, or when it is questioned or relativized, but may be used with-
out focus as well (§6.2.4). It is the base for an active infinitive in
-ek, as exemplified below.[15] Note that for derived transitives, the
focus antipassive is homophonous with the absolutive antipassive (see
below). For full exemplification of the syntactic correlates of anti-
passives (i.e. sentence-level focus phenomena) see §6.2.4.

...k-at-iI-iw-ek   'you decide' (lit. 'you see'; -iI 'see' T)
   Inc-B2-see-Ap-If

k-ax-maI-aw-aq   'let's make a collection!' (-maI
.Imp-B4-gather-Ap-Impf
                                                 'gather' T)

Iaq'-aw-ek 'buying' (//-Ioq'// 'buy' T)
buy-Ap-N

...ka-∅-xiyI-n...   '...he looks for (it)'
   Inc-B3-look·for-Ap

<u>-(V)n Absolutive Antipassive</u>. The suffix -(V)n derives an intran-
sitive stem from transitive roots or derived transitive bases. Like the

focus antipassive, it removes the patient from direct relation to the verb, leaving the agent or instrument to govern Set B agreement. When the instrument acts as intransitive subject, the meaning expressed is that of capacity to perform the verbal action. This antipassive can be used for focused and questioned agents (even with transitives), although under more restrictive conditions than for the focus antipassive and without any possibility of patient agreement through the person hierarchy; for discussion see §6.2.4.[16] It forms the base for an active infinitive in -ek and several nominalizations (§5.3.3).

    ka - Ø - sak - an-ek   'it wounds' (e.g., knife; -sak 'wound' T)
    Inc-B3-wound-Ap-If

    ka-Ø-kayi-n-ek   'it bites' (kayi:x 'bite' t)
         bite

    k-Ø-ti? -n-ek   'it barks' (ti? 'bark' T)
         bark

    ti? - n - ek   'barking'
    bark-Ap-N

    kax - an-ek   'believing' (-kax 'believe' T)
    believe

<u>-Vn Intransitivizer (Unproductive)</u>. The suffix -Vn derives intransitives from nouns and adjectives.

    ki - Ø - paxw-an-ek   'it will suppurate' (pax 'pus' N)
    Inc-B3-pus - I -If

    k - e:-č'o?x-en-ek   'they fight' (č'o?o:x 'fight' N)
    Inc-B6-fight-I-If

$\emptyset - \emptyset -$ ya:b'-in-ek   'he became sick' (ya:b' 'sick' A)
Cm-B3-sick- I- If

<u>-Vr Versive</u>.[17] The suffix -Vr derives versive intransitives from
adjectives. Following the adjectives ti$^{\circ}$o:x 'fat' and raš 'green' the
versive is $-V_1 r V_1 b'$ (a compounding of this and the versive suffix fol-
lowing).

š $- \emptyset -$ u¢ $-$ ur-ek   'it became good'
Cm-B3-good-Vs-If

$\emptyset - \emptyset -$ č'ite$^{\circ}$n-er-ek 'it became small'
Cm-B3-small $-$ Vs-If

$\emptyset-\emptyset-$t'ab'ab'-ar-ek 'it became thick'
   thick $-$ Vs

$\emptyset-\emptyset-$to:ntiy-ir-ek $\sim$ to:nte$^{\circ}$erek //tonte-er-ek// 'he became crazy'
   crazy $-$ Vs

$\emptyset-\emptyset-$ti$^{\circ}$ox-irib'-ek 'he became fat'
   fat $-$ Vs

$\emptyset-\emptyset-$raš $-$ rab'-ek 'it became green'
   green-Vs

$-V_1 b'$ Versive. The suffix $-V_1 b'$ derives a versive intransitive
meaning to take on the position or state described by the root, from
positional roots (including bivalent roots) and at least one adjective
root, saq 'white'.[18]

$\emptyset - \emptyset -$ lak $-$ ab'-ek 'it got twisted' (lak 'twisted' P)
Cm-B3-twisted-Vs $-$ If

wa:b'ek //$\emptyset-\emptyset-$wa$^{\circ}$-ab'-ik// 's/he stood up' (wa$^{\circ}$ 'standing' P)

$\emptyset-\emptyset-$yuq-ub'-ek 'it got tied up' (-yuq 'stretch' T, P)

∅-∅-saq - ab'-ek 'it became white, clear, light' (saq 'white,
      white   clear, light' A)

The -V₁b' versive may compound with the -V₁r versive (see above).

-alax Intransitive (Nonproductive). The suffix -alax derives an

intransitive verb from positional and unidentified CVC roots.

∅ - ∅ - wa? - lax-ek 'he stood up' (wa? 'standing' P)
Cm-B3-standing-I - If

∅-∅-k'ab'-lax-ek 'he yawned'

ki-∅-q'ap-alax-ek 'it hurts; it makes a knuckle-cracking sound'

-a?n Intransitive (Nonproductive). The suffix -a?n derives

intransitives from intransitives, with no clear change in meaning. No

phrase-final marker follows.

ki - ∅ - b'i:n-a?n 'he goes' (b'i:n 'go' I)
Inc-B3-go - I

∅ - ∅ - wa? - lax-a?n 'he stood up'
Cm-B3-standing-I - I

-C₁V₁ł Intransitive (Nonproductive). The suffix -C₁V₁ł derives an

intransitive from transitive and unidentified CVC roots.

∅ - ∅ - č'an-č'ał-ek 'it got wet' (-č'an 'wet' T)
Cm-B3-wet - I - If

ki-∅-paq'-pał-ek 'it's boiling'

-V₁C₂ Intransitive (Nonproductive). The suffix -V₁C₂ derives

intransitives from unidentified CVC roots.

rap-ap-ek 'it flies'

xuč'-uč'-ek 'it grinds (teeth)'

Bivalent Intransitive Roots. Although there is no general process

of zero derivation of verbs from nouns or vice versa, a few nouns may

be used as intransitive stems without derivation.

e:laq' 'theft'

š-∅-e:laq'-ek   'he stole it'
Cm-B3-steal-If

5.3.3. Nouns.

Nouns are derived primarily by suffixation, though some prefixation

and compounding occur.

Compound Nouns (Unproductive). A derived noun may be formed by com-

pounding two nouns; however, this process is relatively rare.

ači-ʔišaq ~ ačeŋ-išaq 'homosexual'
man-woman   man-woman.

ax Agent-Origin. The form ax (which phonologically remains a sep-

arate word) derives a noun denoting a person from a noun which defines

that person's social identity, generally through either his characteris-

tic activity (or something associated with it) or his place of origin.

Note that ax may also optionally precede nouns in -e:l (see below),

which are already agentive without ax. It also may precede some prepo-

sition-plus-noun combinations, verb stems, and a type of verb-object

conflation (see last examples).

ax q'i:x 'diviner'
    day

ax č'a:b'al 'Catholic'
    prayer

ax kunune:l 'curer'
   curer

ax čak-i:b' 'workers'
   work-Pl

ax tinimet 'one from town'
   town

ax čikimo?l   'one from (Santa María) Chiquimula (place)'
   Chiquimala

ax pu-xyob' 'one from the aldeas'
   Prep-hill

ax k'iyi:x 'seller'
   sell

ax k'iy-iši:m 'corn seller'
   sell-corn

iš- Diminutive (Unproductive). The prefix iš- derives nouns from nouns, adjectives, and unidentified stems. The meaning produced often refers to a relatively small object, or to a female human. Examples are cited by derivational source.

noun	ka:b' 'honey'	iška:b' 'beeswax'
	kʸ'aq 'flea'	iškʸ'aq 'act of scratching with fingernails'
	kalab' 'rope'	iškolo:b' 'intestines'
	(ni-kalo:b' 'my rope')	
	č'e?p 'little finger'	išč'ipe?y 'little finger'
adjective	q'aq 'black'	išq'aq 'last night'
unidentified		išk'a?š 'fingernail'

unidentified   išmoʔy 'fish species'

                ištu:ȼ' 'frog'

                išpaq'pan 'worm'

                ištoq' 'tadpole'

                išlikʸiq'a:b' 'rainbow'

                išaq 'woman'

                išmaʔlkaʔn 'widow'

                išna:m 'man's sister-in-law; woman's sibling-in-law'

$-(V_1)$b'al Instrumental. The suffix $-(V_1)$b'al derives nouns from transitives and intransitives with the meanings of 'instrument, place, time, indirect causer' of the action indicated in the verb.

Instrument   mas – ab'al 'broom'
               sweep-Instr

               tiʔ – b'al 'stinger'
               sting

               šut'u-b'al q'a:q' 'bellows'
               blow   fire

Place   ltin – ib'al 'bath'
               bathe

               šaxaw-ub'al 'dancing place'
               dance

               k'iyi-b'al 'market'
               sell

Time   pu-wa-q'i:x   ri-pe:t-ab'al 'today is his time of arrival'
               today   A3-come-Instr

Causer   ko:s-b'al l   puq'o:w 'beating tires you'
               tire-Instr the beating

-:- Noun (Unproductive). A noun is derived from some transitive
and positional roots by lengthening the vowel.

    me:s 'trash' (//-mes// 'sweep' T)

    ku:č 'roof-tile supports' (-kuč 'put top on' T)

    b'o:ł 'cotton' (//-b'oł// 'roll up' T)

    se:q' 'slap' (seq'esek 'slap' i)

    ča:k 'work' (čukunek 'work' i)

-e:m Noun. The suffix -e:m derives nouns from intransitives,
including the absolutive antipassive form of transitives, and from
positional adjectives in $-V_1 l$. The meaning is 'act of X-ing'. The
verbal activity must be an institutionalized or characteristic activity,
so that not all verbs undergo this derivation (i.e., there is no
*kamsane:m from kamsa:x 'kill'). Following the verb war 'sleep' the
allomorph -a:m occurs.

    b'i:n -e:m 'strolling'
    stroll-N

    war - a:m 'sleep, sleepiness'
    sleep-N

    kun - u-n - e:m 'curing'
    cure-T-Ap-N

    č'iy-in-e:m 'hitting'
    hit - Ap-N

    ka¢' - al-e:m 'act of lying'
    lying-A - N

-e:l Agentive. The suffix -e:l derives agentive nouns from

intransitives, including the absolutive antipassive form of intransitives.

 itin - e:ɬ 'bather'
 bathe-Agt

 kun - u-n - e:ɬ 'curer'
 cure-T-Ap-Agt

 k'iy-i-n - e:ɬ 'merchant'
 sell-T-Ap-Agt

 e:qa - n - e:ɬ 'carrier'
 carry-Ap-Agt

//-ik// Noun. The suffix //-ik// derives a verbal noun (of Class 1a) from intransitive stems. The form may be further derived by the abstractive suffix -V:ɬ.

 waʔkaɬ-ek 'strolling'
 stroll-N

 ɬaq'-aw-ek 'buying'
 buy - Ap-N

 kax - an-ek 'believing'
 believe-Ap-N

 čo:mi - n - ek 'discussion, meeting'
 take.care.of-Ap-N

 kam-ik-a:ɬ 'death'
 die-N - N

 a:-č'a:y - i:k 'your being hit'
 A2-hit(Ps)-N

 r - ȼ'unu - s - i:k 'its being asked for'
 A3-ask.for-Ps-N

-o:w Noun. The suffix -o:w derives nouns from transitive verbs.

loq'-o:w 'purchasing'

mal-o:w 'collection (money)'

puq'-o:w 'beating'

ki-∅-q-a?n malo:w 'we will make a collection'

-V_1w Agent. The suffix -V_1w derives agent nouns from transitive

roots. It is followed by the incorporated nominal object. Unlike

agent nouns in -V_1l (see below), it cannot be preceded by ax 'agent'.

b'an-aw ša:n 'adobe-makers' (*ax b'anaw ša:n)
make-Agt adobe

lax   -   aw way   'tortilla-makers'
make.tortillas-Agt tortilla

¢aq - aw l:b' 'excrement' (lit. 'self-dropper')
drop-Agt self

-n Agent. The suffix -n derives an agent noun (corresponding

to the previous suffix) from derived transitives. It is followed by

the incorporated object. Like the preceding suffix, it cannot be pre-

ceded by ax 'agent'.

e:qa - n ša:n 'adobe carrier' (*ax e:qan ša:n)
carry-Agt adobe

-(V_1)l Agent. The suffix -(V_1)l derives agent nouns from transi-

tive roots and derived transitive bases. It is followed by the incor-

porated object, and is optionally preceded by ax 'agent'.

(ax) b'an-al ša:n 'adobe-maker' (-b'an 'make' T)

(ax) b'ili-l ša:n 'adobe-carrier' (b'ili:x 'carry' t̓)

-(V₁)m Perfect Participle. The suffix -(V₁)m forms a passive

perfect participle from root transitives and derived transitive bases.

It is inflected as a predicate nominal, with Set B prefix agreement

with the patient. In phrase-final position it bears the perfective

suffix -ax.

in-il - im-ax 'I have been seen'
B1-see-Pf-Pff

∅ - il-im-ax 'he has been seen'
B3

ax-il-im-ax 'we have been seen'
B4

∅ - čixi - m - ax 'he has been cared for'
B3-care.for-Pf-Pff

ax-čixi-m-ax 'we have been cared for'
B4

-V:l Abstractive. The suffix -V:l derives an abstract noun from

adjectives and nouns. The suffix is obligatory in the possessed form of

Class 2 nouns (§5.2.2).

uȼ - i:l 'goodness'
good-N

č'am-i:l   'acidity'
acid-N

i:ȼ - e:l 'evil, devil'
sorcery-N

kam-ik-a:ɬ   'death'
die-N – N

ni-kik'-e:ɬ   'my blood'
A1-blood-Poss

<u>-o:m Noun (Unproductive)</u>. The suffix -o:m derives nouns from
intransitive roots.

e:ɬaq'-o:m   'thief'
steal – N

<u>-:– ... -aʔn Noun (Unproductive)</u>. Lengthening of the root vowel
and addition of the suffix -aʔn derives nouns from transitive and uniden-
tified CVC roots, meaning 'what is produced or affected by the verbal
action'.

ɬi:k-aʔn   'cultivated plants' (-ɬik 'sow' T)

č'a:x-aʔn   'clothes to wash' (-č'ax 'wash' T)

po:r-aʔn   'fire' (paro:x 'burn' t)

mo:y-aʔn   'seed-bed'

<u>-aʔɬ Noun (Unproductive)</u>. The suffix -aʔɬ derives nouns from
intransitive and unidentified CVC roots.

q'ay-aʔɬ   'old things' (q'ay 'rot' I)

sap-aʔɬ   'swelling' (sapax 'swell' i)

šaq'-aʔɬ   'mud'

q'aɬ-aʔɬ   'charcoal'

ɬap-aʔɬ   '<u>nance</u> (fruit)'

-Vˀ† Noun (Unproductive). The suffix -aˀ† derives nouns from unidentified CVC roots.

č'iy-oˀ† 'finicky eater'

sam-aˀ† '<u>xeca</u> (bread)'

-Vˀy Noun (Unproductive). The suffix -aˀy derives nouns from noun and unidentified monosyllabic roots. It apparently refers to thin, cylindrical things that occur in groups.

šik^y'-aˀy 'bunch of twigs' (šik'ib'al 'twig broom')

iš-č'ip-eˀy 'little finger' (č'eˀp 'little finger' N)

¢am-aˀy 'corn silk'

-a† Noun (Unproductive). The suffix -a† derives nouns from unidentified CVC roots.

b'aq-a† 'oak'

sal-a† 'corn pollen'

-C_1an Noun (Unproductive). The suffix -C_1an derives a noun, possibly from an adjective root.

iš-paq'-pan 'worm' (cf. poq' 'rotten' A)

-$C_1V_1C_2$ Noun (Unproductive). Complete reduplication derives nouns from unidentified CVC roots.

č'elč'el 'scrambled eggs with oil'

$-V_1C_1V:_1$ Noun (Unproductive). This onomatopoetic suffix derives a single noun from a noun root. For some speakers the suffix is $-V_1C_1V:_1{}^?$.

šululu: ~ šululu:? 'sound of flute; flute' (šu:l 'flute')

5.3.4. Adjectives.

$-V_1$l Adjective. The suffix $-V_1$l derives positional adjectives meaning 'temporarily in the position described by the root', from positional and bivalent roots. The suffix dissimilates to $-V_1$n optionally when the initial root consonant is l and obligatorily when the final root consonant is l. Adjectives derived with this suffix take the nonprenominal suffix -ek (§5.2.4).

kac'-al-ek 'lying down'

pak'-al-ek 'mouth up'

lak-al-ek 'twisted'

yuq-ul-ek 'tied up' (yuq 'stretch' T)

t'ub'-ul-ek 'piled up'

san-al-ek 'nude'

luq'-ul-ek ~ luq'-un-ek 'drooping'

šul-un-ek 'downward slope'

$-V_1C_1$ Adjective. The suffix $-V_1C_1$ derives positional adjectives meaning 'permanently in the position described by the root'. This

suffix is obligatorily followed by -ek 'singular' or -aq 'plural' (§5.2.4).

> yuq-uy-ek 'stretched out' (e.g., neck)
>
> wan-aw-ek 'spherical'
>
> san-as-ek 'big-bellied'
>
> b'al-ab'-ek 'thick (cylindrical object)'
>
> yap-ay-ek 'empty-stomached'

$-V_1C_2$ **Adjective (Unproductive).** The suffix $-V_1C_2$ derives adjectives from unidentified CVC roots.

> wa¢'a¢' 'toasted'
>
> ƚ'ab'ab' 'thick'

5.3.5. Numbers.

The indigenous system of numbers is vigesimal, with a decimal base for intermediate numbers (i.e., 33=20+3+10). Above 100 the system is a Spanish-based decimal system. (For many younger acculturated speakers, the numbers above 20, and even in the teens, would generally be expressed with Spanish loans.) Derived number forms are cardinal, ordinal, distributive, and measure. The several forms are derived by affixation or compounding, using one of two distinct combining forms for the numbers. The combining forms and derived numerals from 1 through 10 are listed in Table 5.3. (In the listing of combining forms, where no citation is given in Column B, the form is identical to that of Column A.)

Table 5.3. Numbers

Number	Combining Form A	Combining Form B	Cardinal	Ordinal	Distributive	Measure
1	xu–	xu:wu–	xu:n	na:b'e:y	xo–xon	xu–
2	ka²–	kab'	kʸi²–ab	ri–kab'	ka²–kab'	ka²–
3	aš– //oš–//		iš–eb'	r–o:š	aš–²aš	aš–
4	kax–		kʸix–ab'	ri–kʸa:x	kax–kax	kax–
5	xo²–	o²–	xo²–o:b'	r–o:²	xo²–ɬaq	o²–
6	waxaq–	weq–	waxaq–i:b'		waxaq–aɬaq	
7	wuq–		wuq–u:b'		wuq–uɬaq	
8	waxšaq–		waxšaq–i:b'		waxšaq–aɬaq	
9	b'elex–		b'elex–e:b'		b'elex–eɬaq	
10	laxu:x–		laxu:x		luxux–uɬuq	

<u>Cardinal</u>. Cardinal numbers for 1 (xu:n) and 10 (laxu:x) are nonderived. Numbers from 2 to 9 are derived from combining form A plus the suffix -V(:)b' (related to the plural suffix -V:b'). The vowel is short for the numbers 2 through 4 and long for 5 through 9, and quality is lexically determined. Cardinal numbers containing an intervocalic glottal stop have a shortened attributive form (i.e., not predicative or pronominal) in which the glottal stop and the vowel following have been deleted.

k^{y}i?ab'   'two'

kib' winaq   'two people'

xo?o:b'   'five'

xob' winaq   'five people'

(Note that in this context a shortened final long vowel occurs in other cardinals by regular rule: xun winaq 'one person', waxaqib' winaq 'six people', laxux winaq '10 people'.) Numbers 11 through 19 are formed by prefixing the combining form B to the root laxu:x '10'.

xu:wu-luxu:x   '11'

kab'-laxu:x   '12'

aš-laxu:x   '13'

kax-laxu:x   '14'

o?-laxu:x   '15'

weq-laxu:x   '16'

wuq-laxu:x   '17'

waxšaq-laxu:x '18'

b'elex-laxu:x '19'

Multiples of 20 are formed using the prefixes of the measure para-
digm (see below) plus the root winaq 'person, 20'. Form A is used for
1 through 4 and B for 5, and no higher forms occur. For '20' the pre-
fixal vowel is lengthened, and an alternate compound form with root
xu:n 'one' occurs.

xu:-winaq ~ xu:n-winaq '20'

ka?-winaq '40'

aš-winaq '60'

kax-winaq '80'

o?-winaq '100'

Alternate forms occur for the last three numbers:

aš-k'al '60'

xu-muč' '80'

xun sye:nto '100'

The bound root -k'al '20' occurs only in combination with aš- '3', and
the resulting form has a specialized association with the counting of
days. The root -muč' occurs only with xu- 'one'.

Multiples of 100 are expressed in a numeral phrase composed of an
attributive cardinal plus sye:nto ~ sye:nte '100'.

xun sye:nto '100'

kib' sye:nto '200'

išib' sye:nto '300'

k^yixab' sye:nto '400'

xob' sye:nto '500'

Multiples of 1,000 are expressed with the attributive cardinal plus mi:l '1,000', as in xun mi:l '1,000'.

Intermediate numbers above 20 are expressed by a compound of a vigesimal unit cardinal plus a cardinal from 1 through 19.

xu:-winaq xu:n '21'

xu:-winaq k^yi?-ab' '22'

etc.

ka?-winaq laxu:x '50'

(An alternate form for '50' is nik^y'ax sye:nte 'half a hundred'.) Less commonly, alternate forms of the intermediate numbers are formed with k'i:, a short form of the preposition k'i:n 'with'.

xu:n-winaq k'i: xo?o:b' '25'.[19]

Ordinals. Ordinals consist of third person singular possessed forms of the number root, except na:b'e:y 'first', which is suppletive. Ordinals for 2 through 4 use combining form A; for 5, form B; and no ordinals higher than 5 occur. The roots for 3 and 4 are formally nouns of Class 1a (i.e., they undergo possessive lengthening), whereas 2 is of Class 1 (not lengthened).

Distributive. Distributive numbers ('one by one', 'two by two',

for 1 through 4 are reduplicative, compounded from combining form A

plus combining form B (e.g., kaʔ-kab' 'two by two'). For 5 through 10,

combining form A is suffixed with -V₁ taq (e.g., wuq-utaq 'seven by seven').

(The suffix apparently derives from the adjectival epenthetic vowel

plus the plural particle taq.) Distributive numbers are formally Class

2 nouns, and take the suffix -V:l on possession:

        čuᵘ   ku-xuxun - a:l   'each one'
        Prep A6-one.by.one-Sf

Measure. Measure words (see §5.3.6) are counted with prefixal

numbers for 1 through 5 and independent cardinals for higher numbers.

Combining form A is used for prefixes 1 through 4, form B for 5.

        xu-mo:q' 'one handful (grains)'

        kaʔ-mo:q' 'two handfuls'

        aš-mo:q' 'three handfuls'

        kax-mo:q' 'four handfuls'

        oʔ-mo:q' 'five handfuls'

        waxaqib' mo:q' 'six handfuls'

        wuqub' mo:q' 'seven handfuls'

        etc.

5.3.6. Measure Words.

Measure words[20] are derived from a subclass of nouns of shape CVC

(some of which are also common nouns, e.g., t'u:r 'drops') by adding

number prefixes (previous section). Measure words are also derived from

positional roots by prefixing a number and suffixing -a:x. As noted

in the previous section, independent cardinals are used above 5.

     xu-mo:q' 'one handful (grains)'

     kaʔ-ya̅:k 'two times'

     aš-t'u:r 'three drops'

     xa-wan-a:x 'one mouthful' (wan- 'spherical' P)

     waxaqib' mo:q' 'six handfuls'

Measure nouns (such as ya:k 'time') are distinguished from common nouns

(such as ya:k 'fox') by their occurrence with prefixal rather than

independent numbers for 1 through 5.

     kaʔ-ya:k 'two times'

     kib' ya:k 'two foxes'

5.3.7. Adverbs.

Time Adverbs. Adverbs expressing days in the future (two to four)

are derived by suffixing the combining form of numbers   with -i:x

'day' (-e:x after kax- 'four'). Days in the past (two to four) are

derived by suffixing -ax 'day' plus -i:r 'past'. One day in the future

('tomorrow') and one day in the past ('yesterday') are indicated supple-

tively (see Table 5.4).

Years in the past (one to three) are derived by suffixing -b'

(-ub' following xun 'one') plus -i:r 'past'. Years in the future are

expressed periphrastically (in a prepositional phrase).[21]

Table 5.4. Time Adverbials

	Days		Years	
	Past	Future	Past	Future
1	i:b-i:r	čuwaʔq	xun-ub'-i:r	p xun xuna:b'
2	kab'-ax-i:r	kab'-i:x	ka:-b'-i:r	p kib' xuna:b'
3	aš-ax-i:r	aš-i:x	aš-b'-i:r	p išeb' xuna:b'*
4	kax-ax-i:r	kix-e:x		p kʸixab' xuna:b*

<u>-a:ł Adverb (Unproductive)</u>. The suffix -a:ł derives adverbs from unidentified sources.

    saqaṭaʔn-a:ł 'bit by bit'

    łiyim-a:ł 'slowly'

5.3.8. Articles.

Diminutive forms of the singular articles łi 'the', xun 'a' are derived with the diminutive suffix -ax.

    ł - ax 'the (diminutive)'
    the-Dim

    xun-ax 'a (diminutive)'
    a - Dim

They are used to indicate small size or affection (ł-ax ne:ʔ 'the infant', ł-ax čičoʔ 'the little old woman'). The plural article corresponding to xun is nik^y'ax, which does not take the diminutive suffix. (There is no distinct plural article corresponding to łi.)

5.3.9. Prepositions.

Prepositions may be derived from reduced forms of relational nouns by several unproductive processes. The initial vowel of disyllabic vowel-initial relational nouns is dropped, and the final consonant may be dropped.

Disyllabic Rel. Noun	Monosyllabic Preposition	
ik'i:n	k'i:n ~ k'i:	'with'
-ima:ł	ma:ł ~ mi	'by'

Reduction of the combination of preposition plus relational noun

ču-Ø-wiʔ 'on top of it' derives a monosyllabic preposition čuʔ 'on top'.

Deletion of the final consonant of the relational nouns -wač 'face' and

-paːm 'inside' gives the prepositions waː 'on the surface of' and pa

'locative', respectively.

Other prepositions are derived without change from nouns (with

attendant nonfinal shortening where appropriate).

Noun	Preposition
čiːʔ 'mouth, lip'	čiʔ 'at the periphery of'
maːk 'sin'	maːk 'by (malefactive)'

Finally, some preposition-plus-relational-noun combinations are

used so frequently in the nonovertly inflected third person form that

they may be reanalyzed as independent prepositions (e.g., čix 'on top'

//č-Ø-iːx// Prep-A3-back).

5.3.10. Nonderived Root Classes.

The root classes presented above are those that are subject to

derivational processes. Other root classes are not. They are, with

examples:

Pronoun. en 'I'

Demonstrative. laːʔ 'that'

Particle. b'iːk 'away'

Notes to Chapter 5

1. To express the plural, aɬaq may be used in addition to the |a:| form, resulting in high redundancy of this relatively unused form in some utterances:

aɬaq |aŋ   š-Ø-ak | pa xa:y
you(form.pl.) you(form.sg.) Cm-B3-enter you(form.) in house

     'You(form.pl.) came in the house'

2. The postposed superscript asterisk on this and other forms indicates that the particular form was not elicited, but its probable form is as cited.

3. Passive intransitives apparently employ the movement prefix ax-. In the examples below there is also a short unstressed vowel clitic that appears between movement-inflected verbs and certain particles (see below). The glottal stop in the directional particle //uɩ// is due to word-initial glottal stop insertion prior to cliticization of vowel-initial directionals to the previous word.

      š-Ø-ax-si:k'-o-ʔoɩ   'it was come to be picked up'
      Cm-B3-Mv-pick.up(Ps)-Mv-Dir

      k-at-ax-č'a:y-o-ʔoɩ   'you(sg.) will be gone to be hit'
      Inc-B2-Mv-hit(Ps)-Mv-Dir

4. The matter of what constitutes a "phrase" in Sacapultec is a complex and important one, but is not clear enough to allow a statement at this time. Quite possibly the various phrase-final suffixes relate in some way to the marking of "idea units" as defined by Chafe (1980).

5. The notation -V_1m indicates a suffix consisting of a vowel with the quality of the preceding (usually root) vowel, plus the consonant m.

In general the capital letters C and V, with numeral subscripts, are to be interpreted as follows:

$-C_1$	suffixal consonant is identical to first consonant of preceding CVC root.
$-C_2$	suffixal consonant is identical to second consonant of preceding CVC root
$-V_1$	suffixal vowel is identical to preceding vowel
$-V$	suffixal vowel quality is not predictable (lexically determined)

6. This haplology apparently is morphologically conditioned, and does not apply to the movement suffix -aʔ:

    š-in-a-r-taʔ-aʔ   'He came to help me'
    Cm-B1-Mv-A3-help-Mv

Possibly stress assignment phenomena are also at issue.

7. Possibly these could be considered derived transitives in -(:)x, which take no phrase-final suffix (see §§5.2.1.3, 5.3.1). They would be the only instances of monosyllabic derived transitives, and the only transitives derived from a vowel-final root smaller than CVC.

8. *ri-ʔam was rejected. Presumably the preconsonantal forms are used before a vowel-initial noun only as a last resort, when the prevocalic prefix sounds unfamiliar, which is less likely with the most frequent of the possessive prefixes, the third person; hence r-am 'his spider.'

9. In some cases the lengthened form becomes associated historically with a meaning of inalienable possession. A possessed form of kumaȼ 'snake' with lengthened vowel (nǐ-kuma:ȼ) means 'my snake,' but also 'my tapeworm;' kuma:ȼ, with lengthened vowel, is now 'tapeworm.' At present a second possessed form has developed without lengthened vowel (nǐ-kumaȼ), meaning exclusively 'my snake.' In another case, the possessed form of peš 'tomato,' with lengthened vowel (a:-pǐ:š 'your tomato') has become disfavored because of its obscene meaning of female genitals. In referring to a woman's tomatoes, circumlocutions that avoid the explicitly possessed form, i.e., 'how much are these tomatoes?' rather than 'your tomatoes,' are considered more proper. This results in a secondary association of the long vowel form -pǐ:š with the obscene meaning, whereas the short vowel (unpossessed) form peš is associated only with the literal meaning of 'tomato.' As a final development, some speakers now produce a:-peš for 'your tomatoes,' leaving a:-pǐ:š with the body part meaning. This appears to be an incipient semanticization of the vowel lengthening process, originally lexically conditioned, to mark inalienable possession.

10. Note the parallel collapsing of disyllabic forms to monosyllabic forms in prenominal position for both relational nouns and numbers.

      xoʔo:b 'five'

      xob' winaq 'five people'

      čiri:x 'on it'

      čix masikle:ta 'on a bicycle'

11. The reflexive particle (i:b' 'self') and the contrastive particle

    (tike:l 'only') are similar to the relational nouns in their in-

    flection (and to some extent in their syntactic function). The

    forms are ordinarily prefixed with Set A markers:

    > w-i:b'   'myself'
    > A1-self

    > ni-tike:l 'only me'

    Note that i:b' also occurs as a free root:

    > k'o: mal-aw   i:b' 'there's a gathering'
    > . Pre gather-Ap self

    Second person formal possession of these particles may be marked by

    postposing the formal pronoun to the uninflected particle:

    > tike:l   ri la:l 'just you (sg. form.)'
    > contrastive the you

    > tike:l r alaq ' just you (pl. form.)'

12. The meaning 'very' in other Quichean languages does not character-

    ize Sacapultec -alax, although its etymology in such a meaning pre-

    sumably accounts for the co-occurrence restriction to semantically

    gradable adjectives.

    It happens that -alax usually occurs with polysyllabic nouns,

    whereas the short epenthetic vowel occurs with monosyllabic nouns;

    whether this is significant is not clear.

13. The term _versive_ is used (following Kaufman, e.g. 1976b) to indi-

    cate a verb or verbal suffix with a meaning of 'becoming;' speci-

    fically, 'to take on the characteristic specified in the root.'

14. Note that the short vowel deletion rule may obscure the short vowel

    transitivizer -V, so that the passive of a derived verb such as

ya?taxek 'it was watered,' from //∅-∅-ya?-a-tax-ik//, becomes
Cm-B3-water-T-Ps-If

·homophonous with the passive of a root verb ya?taxek 'it was

given,' from //∅-∅-ya?-tax-ik//.
Cm-B3-give-Ps-If

15. Cf. derivation of verbal nouns from both root and derived transi-
tives using the related suffix $-V_1w$; and derivation of a verbal
noun from root transitives with -o:w (§5.3.3).

16. Its use with focussed agents of root transitives differentiates
it from the cognate antipassive in other Quichean Proper languages,
e.g. Tzutujil.

17. See footnote 13.

18. Note that most other color adjectives use the expected $-V_1r$ ver-
sive: q'aqarek 'it became black.' Compare the dawn greeting
saqarek 'good morning;' ksaqarek 'morning.'

19. In one case compounding of two numbers occurs, giving an approxi-
mative meaning:

kib'-išeb' 'several'
two-three

Traces of the early Mayan "going-on" system for intermediate
cardinals (i.e., 42 = 'two of the third 20') are not found in Saca-
pultec, nor are higher order vigesimal units such as '400' or
'8,000.'

20. Although what are here called "measure words" have some similarity
in function to forms labeled "classifier" in other languages, the
latter term is best reserved, in the context of Mayan linguistics,
for the true classifiers of languages like Jacaltec.

21. The suffixes -i:x ~ -e:x 'day' and -ax 'day' are historically re-
    duced forms of q'i:x 'day.' The -u(b') suffix for counting years
    in the past may be a shortened form of xa:b' 'rain' (for count-
    ing rainy seasons).

CHAPTER 6

SYNTAX

This chapter presents a sketch of sentence formation in Sacapul-tec.

6.1. Phrase Structure.

Sacapultec simple sentences are composed of verb phrases (intransitive and transitive), noun phrases (nominal and pronominal), and adverbial phrases (simple, prepositional, and relational noun).

6.1.1. Noun Phrase.

Noun phrases are either full noun phrases or pronominal phrases. The head of the former is a noun, of the latter an independent (Set B) pronoun or, in the third person, the demonstrative ara? 'that'.

6.1.1.1. Full Noun Phrases.

The immediate constituent structure is as shown in Figure 6.1. Ordering of adjectives is variable, as described below. Constituents are discussed beginning with the head. The position in the noun phrase is indicated by a number in parentheses following the constituent name.

Noun (9). The noun (head) is the only obligatory constituent of the noun phrase.
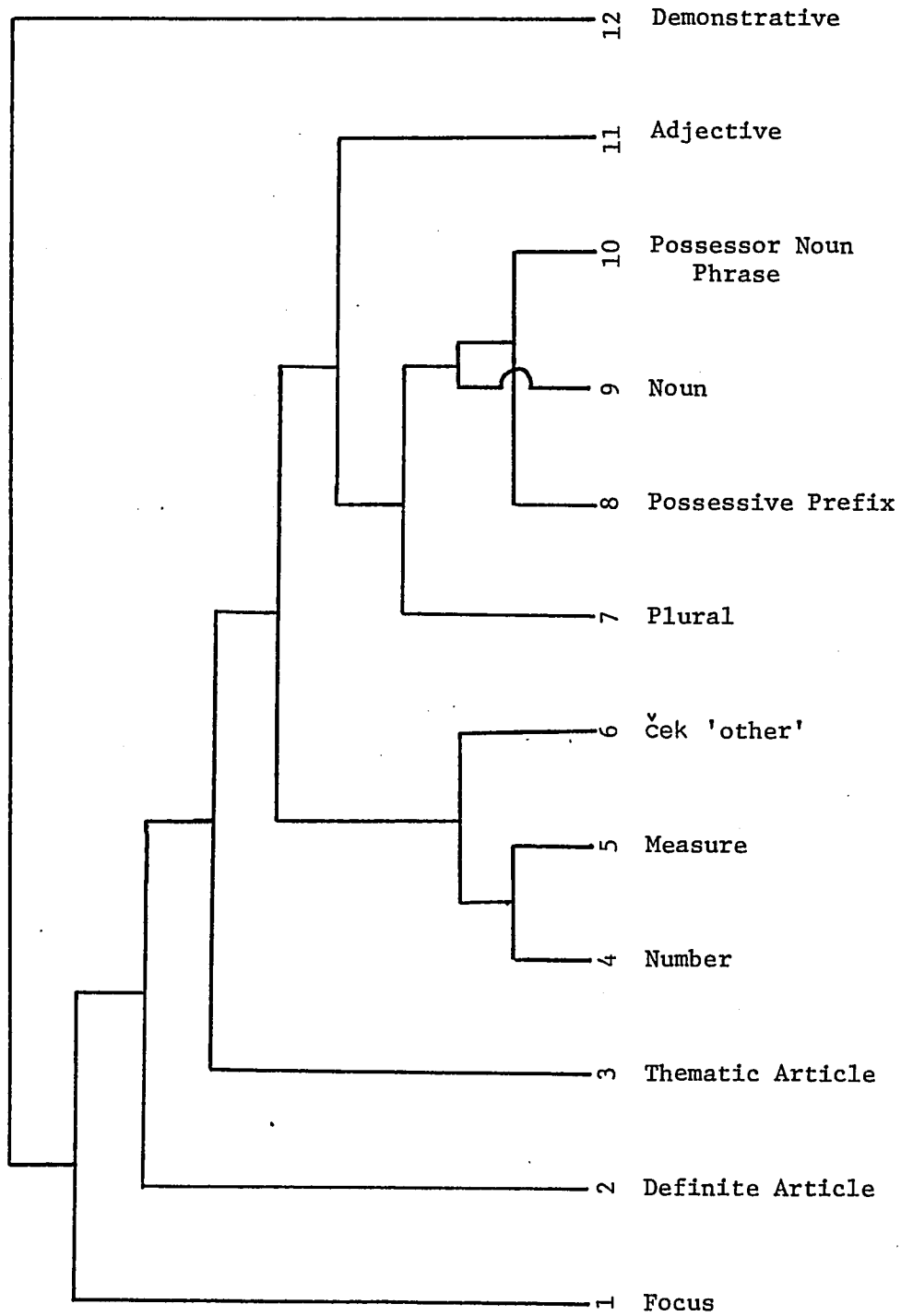
Figure 6.1. Noun Phrase Constituent Structure

š-∅-in-tix   kinaq' 'I ate beans'
Asp-B3-A1-eat bean

∅-∅-pe: č-∅-ix   bisikle:ta 'He came on a bicycle'
Asp-B3-come on-A3-back bicycle

<u>Noun Possessor (8, 10)</u>. If the head noun is possessed it is

prefixed with a Set A possessive prefix (position 8) which agrees with

the possessor, and optionally followed by a noun phrase referring to

the possessor   (position 10).

ri-po:p 'his mat'   ri-po:p | ačeŋ 'the man's mat'
A3-mat   A3-mat Art man

ra-xlo:m xun če:? 'top of a tree'
A3-head   Art tree

w-uma:| ra en 'by me'
A1-by   Art B1

A possessed noun phrase can be in turn possessed, allowing an indefi-

nite number of nested noun phrases.

w-aqan 'my leg'
A1-leg

ri-qol w-aqan 'my ankle' (lit. 'its neck my leg')
A3-neck A1-leg

When a referent denoted by a noun phrase which is formally a third per-

son possessed noun phrase is in turn possessed by a non-third-person

possessor, agreement with the semantic possessor (non-third-person)

replaces agreement with the formal possessor.

ri-xey ak'   'plant (species)' (lit. 'rooster's tail')
A3-tail chicken

ni-xey ak' 'my plant'
A1

<u>Plural Particle (7)</u>. The plural particle ṭaq usually precedes

the noun, though it may follow. For question words ṭaq is always

postposed.

e:-k'o: či? taq suwa:n 'They are at the edges of ravines'
B6-Pre Prep Pl ravine

r-e:ŋ taq r-čib'i:l   'to his companions'
A3-Dat Pl A3-companions

Ø-k'o: ri-ʒa?m taq 'It has fringes'
B3-Pre A3-nose Pl

xarpa? taq 'How many (pl.)?'
how·many Pl

l če: taq 'the things'
Art what Pl

Adjective (11). Adjectives ordinarily precede the noun they mod-
ify. Some (e.g. saq 'white, bright') are optionally postposed. Some
(e.g. lax 'little') are never postposed. Adjectives with attributive
inflection (§5.2.4) are also never postposed.

saq   q'o:?   'white blanket'
white blanket

muč-um sib'o:yeš 'chopped onions'
chop-Pf onion

oʒ-alax kinaq' 'good beans' (*kinaq' oʒalax, *kinaq' oʒ)
good-A bean

saqa?n ni-ya?   'a little water of mine'
little A1-water

xob' xuna:b' Ø-Ø-k'asab' ča q'i:x saq   'He lived five years'
five year   Asp-B3-live Prep sun bright (lit. '...in the
                                         bright sun')
išim ikʸ'a?l 'new corn'
corn new

lax ab'ax 'small rock'
small rock

Measure (5). A measure root always combines with a number (posi-
tion 4), and either modifies a following noun or acts as noun head.
For numbers 1 to 5, the number is prefixal, while for 6 and higher num-
bers it is an independent cardinal (§5.3.6).

ka?-t'u:r ya?   'two drops of water'
two-drop water

ka?-lo:č   pak'   kinaq' 'two handfuls of worm-eaten
two-handful worm-eaten bean   beans'

waxaqib' mo:q' 'six handfuls'

ka?-ya:k 'two times'

Number (4). Numbers either combine with a measure word to modify the following noun (previous section), or occur independently as cardinals or ordinals (§5.3.5) preceding the noun. Cardinals may also occur as head of the noun phrase.

xob' xuna:b' 'five years'
five year

o?|axux ri-šaq wu:x   'fifteen sheets of paper'
fifteen A3-leaf paper

xob' taq k'ala:b' '(the) Five Dark Dwarves'
five Pl children

šink'uš kib' na-xa:wu:š 'I ate a few toasted beans'
I-ate   two A1-bean

na:b'iy a:| 'first-born'
first   child

ri-kab' a:| 'second-born'
A1-two

š-e:-b'e:k | išeb' 'The three left'
Asp-B6-go

kib'-išeb' winaq   'several people'
two-three person

ček 'other' (6). The particle ček 'other' follows the number position and forms a constituent with it to modify the following noun.

xun ček   xa:y   'another house'
one other house

Thematic Article (3). The thematic article (xun, nikʸ'a:x; see §7.3) occurs optionally preceding the number position. The plural

thematic article nɪkʸ'a:x appears optionally before cardinals except

the number one, which no thematic article may precede. Both xu:n and

nɪkʸ'a:x may occur pronominally as head. The meaning and function of

these articles are treated in §7.3.

```
xun alɪ:t  'a girl'
Art girl

nɪkʸ'ax aḻʔ-o:m  'those boys'
Art       boy-Pl

xun lax  b'ax  'a small rock'
Art small rock

xun nɪ-ťaqkɪ:ɪ  'an errand of mine'
Art Al-errand

Ø-Ø-pe:       xu:n  'One came'
Asp-B3-come one
```

Definite Article (2). The definite article lɪ (for nouns) occurs

·preceding the thematic article position, and marks the referent of the

noun phrase as identifiable (§7.3). (A distinct definite article, rɪ,

occurs in first and second person pronominal phrases; see §6.1.1.2.)

```
l  oȼ-alax       taq kɪnaq'  'the good beans'
Art good-attrib. Pl  bean
```

Focus Particle (1). The focus particle e: occurs in initial posi-

tion in the noun phrase. It occurs ordinarily in noun phrases (nom-

inal or pronominal) which appear in the marked prepredicate position.

Additionally, it usually marks a noun phrase which constitutes an entire

utterance. (I use the term 'focus' here as a language-specific label

which subsumes the various packaging statuses marked by e:, including

focus of contrast and prime; see § 6.2.4.1.)

```
e: xun ačɪ: š-Ø-a:q'an    ča: yo:č   'There was a man who
Foc Art man  Asp-B3-ascend Loc ladder    climbed up a ladder'

e: rɑ en š-Ø-ɪnw-ɪl    tax 'I didn't see it'
Foc Art Bl Asp-B3-Al-see Neg
```

e: | xun |a:ʔ   'that one'
Foc Art Art Dem

Demonstrative (12). Demonstratives occur following the noun (in final position in the noun phrase) or as pronominal head.

xun pi:pe:ŋ |a:ʔ   'that turkey'
Art turkey   Dem

ǐšeb' ak'al-a:b' ri:ʔ   'those three children'
three child-Pl   Dem

e: | xun xa:y |a:ʔ   'that house'
Foc Art Art house Dem

e: | xun |a:ʔ   'that one'
Foc Art Art Dem

e: waʔ   'this one'
Foc Dem

6.1.1.2. Pronominal Phrase.

Pronominal phrases fulfill the same functions in the sentence as full nominal phrases. The non-third-person pronominal phrase consists of the Set B pronoun (or formal pronoun in second person), usually preceded by the pronominal definite article ri. The third person singular pronominal phrase consists of the demonstrative araʔ preceded by the nominal definite article |i. The third person plural pronominal phrase is the same as the singular except that the third person plural Set B pronoun eʔ precedes the demonstrative. The pronominal phrase is usually preceded by the focus particle e: in preverbal position, as well as when the phrase stands alone as a full utterance. The full paradigm is given below.

e: ra en š-Ø-inw-il   tax   'I didn't see it'
Foc Art B1 Asp-B3-A1-see Neg

e: ra en   'I; it's me'
Foc Art B1

e: ra at   'you (sg.)'
    B2

e: l   ara? 'he/she/it'
  Art Dem

e: ra ax 'we'

e ra eš 'you (pl.)'

//e: l e?-ara?// /e: le?era?/ 'they'
    B6-Dem

e: ri la:l   'you (form. sg.)'
    you (form. sg.)

e: r alaq   'you (form. pl.)'
    you (form. pl.)

e: l   ara? ∅-∅-ra-č'iy l   ara? 'He hit him'
Foc Art Dem Asp-B3-A3-hit Art Dem

in ta e:laq'o:m 'I am not a thief'
B1 Neg thief

6.1.2. Verb Phrase.

A verb phrase consists of a verb (transitive or intransitive,

§ 5.2.1) followed by an optional directional particle. Vowel-initial

directional particles are cliticized to the preceding verb stem.

∅-∅-qa:x-ek   'He came down'
Asp-B3-descend-If

∅-∅-qa:x-u:l   'He came down here'
      here

š-∅-in-sub'ux   ka:n   'I left the tamalitos made up'
Asp-B3-A1-make·tamalitos behind

ši-∅-r-akasax   b'i:k 'He put it in'
Asp-B3-A3-enter(Cs) away

ši-∅-r-akasax-u:l 'He brought it in'
       here

k-∅-a:-rič'-e:l   'Tear(sg.) it off!'
Asp-B3-A2-tear-apart

k-Ø-in-racˇ'-ok 'I tear it out (from enclosed space)'
Asp-B3-A2-tear-out

6.1.3. Adverbial Phrase.

Adverbial phrases may be simple, prepositional, or relational noun phrases.

Simple. A simple adverbial phrase consists of an adverb stem, a temporal noun phrase, or a locative proper noun.

ani:m k-at-b'e:k 'You're going fast'
running Asp-B2-go

saqata?na:l ki-Ø-ki-tix-aŋ 'Little by little they are
little·by·little Asp-B3-A6-eat-Tf eating'

Ø-Ø-ˇcaqex i:bi:r 'It dried up yesterday'
Asp-B3-dry-up yesterday

ka-Ø-q-il q-i:b' xun ra:t 'We'll see each other in a
Asp-B3-A4-see A4-self one moment minute'

Ø-Ø-k'asab' xob' xuna:b' 'He lived five years'
Asp-B3-live five year

Ø-b'an-am watema:la 'It's made in Guatemala'.
B3-make-Pf Guatemala

Prepositional. Prepositional phrases, which act as adverbials, consist of a preposition followed by a noun phrase (including relational noun phrases; see below).

Ø-k'o: pi ni-k'o?ˇs 'It's in my stomach'
B3-Pre Prep Al-stomach

ku-Ø-ˇcukun ˇc-a:q'ab' 'He works at night'
Asp-B3-work Prep-night

ˇci raˇs-i:l ki-Ø-ti:x-ek 'It is eaten raw'
Prep green-N Asp-B3-eat(Ps)-If

Relational Noun. A relational noun phrase, which acts as adverbial, consists of a relational noun inflected for possession, optionally followed by its formal possessor. Most locative relational nouns

are also preceded by a preposition. (See §5.2.3.)

Ø-Ø-k'a:t   w-uma:l ra en   'It burned because of me'
Asp-B3-burn(Ps) A1-by   Art B1

Ø-k'o: ču-Ø-wač   l   kašo:n 'It is in front of the box'
B3-Pre Prep-A3-face Art box

Ø-k'o: ču-Ø-wač 'It is in front of it'

6.2. Simple Sentences.

Simple sentences may be linking, intransitive, or transitive.

6.2.1. Linking Sentence.

A linking sentence consists of an adjective or noun phrase pre-

dicate, with the subject optionally present. The subject is normally

postposed. The linking sentence optionally has an adverbial phrase.

The meaning is characterizing, locative, or equative.

č'ite?n r-aqan 'He is short' (lit. 'His leg is short')
small   A3-leg

sanasek   ri-k'o?š   'He is big-bellied'
big-bellied A3-stomach

ma:s ni-č'imi:l   'I feel very lazy'
much A1-laziness

r-kolor saq   'Its color is white'
A3-color white

xa:s   pi na-qol   'I have laryngitis' (lit. 'laryn-
laryngitis Prep A1-throat   gitis is in my throat)

ara? 'That's it'
that

e: wa? l un xa:y ri:? 'This is the house'
Foc Dem Art Art house Dem

e?-a:l   'They are siblings'
B6-sibling

at ni-k'iše:l   'You are my namesake'
B2 A1-namesake

Ø-winaq   'He is a person'
B3-person

6.2.2. Intransitive Sentence.

Intransitive sentences consist of an intransitive verb plus an optional noun phrase for subject, and optional adverbial phrases. Though word order is relatively free (in isolation from discourse context), the order is usually verb first, then noun, and then adverbials, except that locative and temporal adverbials frequently precede the verb. The presentational verb k'o:(l), though inflected differently from other intransitives (p. 170), is syntactically intransitive.

Ø-Ø-q'a:š-ek   'It passed'
Asp-B3-pass-If

Ø-Ø-pe: xab' 'It rained'
Asp-B3-come rain

k-at-yupul-aq   'Close your eyes!'
Asp-B2-close.eyes-Imp

Ø-Ø-xatab'-ul   w-ik'i:n 'He moved near me'
Asp-B3-become·near-here A1-with

Ø-k'o: q'a:q' 'It's hot'
B3-Pre fire

iš-k'o: p   l:w-ican 'You (pl.) are in your house(s)'
B5-Pre Prep A5-house

6.2.3. Transitive Sentence.

Transitive sentences consist of a transitive verb plus optional constituents: a subject noun phrase, object noun phrase, and adverbial phrases. In sentences with two full noun phrase arguments, word order is relatively free (in isolation from discourse context). VOS

is the normal order in these circumstances (so-called "basic" word order), but all orders which do not separate verb from object are fully acceptable. VSO is marginally acceptable, while *OSV is not acceptable.[1]

<div>

VOS Ø-Ø-r-tix   kinaq' l ačeŋ 'The man ate beans'
    Asp-B3-A3-eat bean   the man

SVO l ačeŋ Ø-Ø-r-tix kinaq'   "

OVS kinaq' Ø-Ø-r-tix l ačeŋ   "

SOV l ačeŋ kinaq' Ø-Ø-r-tix-aŋ   "
                               Tf

?VSO Ø-Ø-r-tix l ačeŋ kinaq'   "

*OSV (*kinaq' l ačeŋ Ø-Ø-r-tix-aŋ)

</div>

š-in-ri-yo?xa:x   'He gave me a gift'
Asp-B1-A3-give.gift.to

k-Ø-a:-ya?   sa?n ra-we? 'Give(sg.) a little extra!'
Asp-B3-A2-give little A3-top

Ø-Ø-r-a?n   kʸaq 'It became red' (lit. 'It made red')
Asp-B3-A3-make red

k-Ø-in-k'am   qax č-a:w-aŋ 'I'll receive it (from you
Asp-B3-A1-carry Dir Prep-A2-Dat   who are above or below me)'

6.2.4. Modification of Simple Sentences.

This section treats processes which modify the above-described simple sentences, including focus, negation, questions, and voice.

6.2.4.1. Focus.

When a noun phrase argument appears in preverbal position rather than in the more usual postverbal position, it is usually preceded by the focus particle e:. Only definite (identifiable) noun phrases can

be focussed in this way, and non-preposed noun phrases never take e:.

The function labeled "focus" appears to subsume the packaging

statuses (Chafe 1976) of focus of contrast and (marked) "prime" (that

which information is added about, corresponding to what Chafe (1976)

considers the subject function to be).

e: | ačeŋ Ø-Ø-b'e:k 'The man (contrast or topic) left'
Foc Art man Asp-B3-go

e: | ačeŋ ši-Ø-Ø-tix   way   'The man ate tortillas'
              Asp-B3-A3-eat tortilla

(*Ø-Ø-b'e:k e: | ačeŋ)
  Asp-B3-go Foc Art man

e: | way   la:? ši-Ø-Ø-tix | ačeŋ 'That tortilla, the
Foc Art tortilla Dem   man ate'

(*e: way ši-Ø-Ø-tix | ačeŋ)
  Foc

e: | ka:b' e:-satas-aq 'Candies are round'
Foc Art candy B6-round-Pl

e: | mačat   Ø-Ø-r-qopu:x | axi:x 'The machete cut the
     machete Asp-B3-A3-cut Art cane   cane'

e: | nimya? nem 'The river is big'
     river big

nem | k'a:m 'The string is long'
big Art string

e: wa? 'this one'
   Dem

e: ta wa? 'it's not this one'
   Neg

The particle e: may appear before verbs, with less clear function.

This often occurs before the initial verb in a conversational turn,

and is often glossed by native speakers with a pseudo-cleft sentence

in Spanish.

e: š-Ø-ịnw-ịị   ra en, 'What I saw was, ... '
   Asp-B3-A1-see Art B1

e: Ø-Ø-b'e:k ị   ačeŋ 'The man left'
   Asp-B3-go Art man

The marking of preverbal noun phrases with the focus particle is often accompanied by antipassivization; for this see § 6.2.4.4.

Adverbial Focus. When an adverbial phrase is focussed by being placed in preverbal position, the particle wi:ʔ appears postverbally. For use of this particle with questioned adverbials, see §6.2.4.3.

r-k'ị:n   k-ịn-čukun wi:ʔ 'With him I am working'
A3-with   Asp-B1-work Foc

6.2.4.2. Negation.

Negation is expressed by the particle ta(x) (which actually marks irrealis, as does the particle nị introduced below)[2] placed immediately following the negated element. Negation of imperatives is marked by the prefix m(ị)-; see § 5.2.1.1. Rarely, in addition to the postverbal negative ta(x), the preverbal negative nị is used.

še:la: tax 'It is not silk'
silk   Neg

araʔ tax 'That's not it'
that Neg

pi:pe:ŋ ta ị   la:ʔ 'That is not a turkey'
turkey Neg Art Dem

ịn ta e:laq'o:m 'I am not a thief'
B1 Neg thief

Ø-k'o: tax 'There isn't any'
B3-Pre Neg

k-Ø-o:k'   ta ček 'It doesn't smell any more'
Asp-B3-smell Neg Part

```
m-iš-k'iš-ek              'Don't be ashamed'
Neg-B5-be·ashamed-If

e:  ta  wa?   'It's not this one'
Foc Neg Dem

ke?  ta  la? na:b'e:y  'It wasn't like that'
like Neg Dem first

pu-wa:-q'i:x  ri-pe:t-ab'al,  pe:ro   'Today was his time of
Prep-face-day A3-come-Instr  but       arrival, but he
                                        didn't come'
   ni  Ø-Ø-pe:     tax
   Neg Asp-B3-come Neg
```

6.2.4.3. Question.

Questions are either polar or nonpolar.[3] Polar questions are usually marked only by rising intonation, but the sentence-initial question (irrealis) particle ni may be used.

```
a:w-i¢i:k ?        'Is he your older brother?'
A2-older·brother

k-Ø-a:w-a:x ?     'Do you want it?'
Asp-B3-A2-want

ni k-Ø-a:w-il-aŋ ?  'Do you see it?'
Q           see-Tf
```

Nonpolar questions are marked in simple sentences by nonpolar question words in sentence-initial position, optionally followed by a demonstrative, without further change. When an adverbial element (e.g. instrument, locative) is questioned, the adverbial focus particle wi:? appears following the verb. (Questions in complex sentences are treated below; see § 6.4.)

```
xampa? š-at-pe:t-ek   ?  'When did you come?'
when    Asp-B2-come-If

xarpa?   axal-ab'al  q'i:x ?  'What date is it?'
how many count-Instr day
```

na (la?) ši-∅-∅-b'ili:x ? 'Who carried it?'
who Dem Asp-B3-A3-carry

ne: wa? š-in-r-č'iy-aŋ ? 'Who hit me?'
who Dem Asp-B1-A3-hit-Tf

na wa? ra at ? 'Who are you?'
who Dem Art B2

če: la? ka-∅-qa-ti?-aŋ ? 'What will we dine on?'
what Dem Asp-B3-A4-bite-Tf

na či k-e: xa:y ? 'Which house is it?'
what Prep A6-Dat house

če?el ∅-b'an-am wi:? 'Where is it made?'
where B3-make-Pf Foc

če: š-at-pe: wi:? ? 'Where did you come from?'
where Asp-B2-come Foc

ne: r-ik'i:n ∅-∅-k'ulub' wi:? l ara? ? 'With whom did he
who A3-with Asp-B3-marry Foc Art Dem get married?'

Note that agents may be questioned without any voice modifications in the verb. (For optional antipassivization with questioned agents, see the following section.)

6.2.4.4. Voice.

Modifications of the active voice which apply to simple sentences comprise two passive voices, two antipassive voices, and an instrumental voice.

Passives. The simple passive (-:- ∿ -š) and the completive passive (-tax) (§5.3.2) differ slightly in function in that the latter emphasizes the results of completed action, while the former does not. Both passives allow the agent to remain unexpressed, or to be expressed in a relational noun phrase (with -lma:l 'because of') or a prepositional phrase (with mi 'by' or ma:k 'by (malefactive)'). An agent of any person can be expressed with either passive using the relational

noun -ima:l, which allows a reading of indirect causation. But with the preposition mi, which specifies direct causation, the espression of first and second person agents is considered self-aggrandizing or disrespectful in the completive passive, and of doubtful grammaticality in the simple passive.

```
Ø-Ø-ra:q-ek              'It was found'
Asp-B3-find(Ps)-If

Ø-Ø-ra:q mi: l    ax-čo:q'aŋ  'It was found by the owner'
         by  Art owner

e:  l   me:šaŋ Ø-Ø-k'a:t-ek          'The table was burned'
Foc Art table  Asp-B3-burn(Ps)-If

l me:šaŋ Ø-Ø-k'a:t w-uma:l       'The table was burned by/
                   A1-because        because of me'

li xa:y Ø-Ø-k'a:t w-uma:l ra  en  'The house burned because
   house                  Art B1       of me'

Ø-Ø-kunu-š-ek          'He was cured; cured'
Asp-B3-cure-Ps-If

š-in-kunu-š    mi: l   ara?  'I was cured by him'
Asp-B1-cure-Ps by  Art Dem

Ø-Ø-kunu-š mi l    ara?  'He was cured by him'
          by Art Dem

(*Ø-Ø-kunu-š mi ra  en)
               Art B1

(*Ø-Ø-kunu-š mi ra  at)
               Art B2

Ø-Ø-kunu-š ša? w-uma:l      'He was cured just because of me'
           just A1-because       (indirect causation)

Ø-Ø-kunu-š ša? a:w-uma:l 'He was cured just because of you'
               A2                (indirect)

Ø-Ø-kunu-š ša? ma:l       laŋ        'He was cured just be-
               because.of you(form.)     cause of you (form.)'
                                         (indirect)
```

∅-∅-k'am-tax (I) wa xyob' { mi: I ačeŋ
Asp-B3-burn-Ps Art face hill   by Art man

r-ima:I I ačeŋ
A3-because

ma:k I ačeŋ
'by(malefactive)'

'The hillside burned because of the man'

š-in-kun-tax mi ra at   'I was cured by you'
Asp-B1-cure-Ps by Art B2   (without respect)

š-in-kun-tax a:w-uma:I   'I was cured by you' (with respect)
            A2-because

š-at-kun-tax mi ra en   'You were cured by me' (self-
         by Art B1   aggrandizing)

Instrumental. The suffix -b'e derives an "instrumental" tran-
sitive base from transitive bases. Its appearance in the verb is a
sufficient (but not necessary) marker of the fact that an instrument ap-
pears in the sentence. Only when the instrument is questioned or rela-
tivized does -b'e appear to act as a voice marker, allowing the instru-
ment to be questioned or relativized as a direct object. But given
that the original direct object is not demoted to an oblique role (i.e.
in a prepositional or relational noun phrase) the status of -b'e as
a true voice in Sacapultec is questionable.

če: š-∅-a:-qupu-b'e-x   I če:? 'What did you cut the
what Asp-B3-A2-cut-Instr-Ta Art tree   tree with?'

či   č'i:č' š-∅-in-qupu-b'e-x I če:? 'With a machete I cut
Prep machete   A1   the tree'

(*č'i:č' š-∅-in-qupu-b'e-x I če:?)

(*š-∅-in-qupu-b'e-x I če:?)

či č'i:č' š-∅-in-qapu-x I če:? 'With a machete I cut the
            cut-Ta   tree'

$$\check{s}\text{-}\emptyset\text{-in-k'iyi-x} \quad \text{li} \quad \check{c}'\text{i:}\check{c}' \quad \text{(li)} \left\{ \begin{array}{l} \check{s}\text{-}\emptyset\text{-in-qupu-b'e-x} \quad \text{li} \quad \check{c}e\text{:?} \\ \text{Asp-B3-A1-cut-Instr-Ta Art tree} \\ \\ \check{s}\text{-}\emptyset\text{-in-qapu-x} \quad \text{wi? l}\check{c}e\text{:?} \\ \quad\quad\quad \text{cut -Ta Part} \end{array} \right.$$

Asp-B3-A1-sell-Ta Art machete Rel

'I sold the machete that I cut the tree with'

<u>Antipassive</u>. The antipassives in Sacapultec show similarities and differences with those of other Mayan languages, with perhaps the greatest comparability to those of Tzutujil as described by Dayley (1978, 1981).[4] Sacapultec has two antipassives, $-V_1w \sim -n$ focus antipassive and $-(V)n$ absolutive antipassive (p. 200ff).

<u>Focus Antipassive</u>. The focus antipassive is used when an agent is a focus of contrast (with e:), questioned, or relativized. The patient is often removed from direct relation to the verb, in which case it is optionally expressed in a relational noun phrase; or the patient may not be expressed at all.

<div style="margin-left:3em">

e: l wan ∅-∅-čik-aw b'i:k w-e:ŋ   'It was Juan who
Foc Art Juan Asp-B3-call-Ap away A1-Dat   came to call me
                away'

                         (//čak// 'call' T)

e: ra at k-at-il-iw-ek   'You decide' (lit. 'You see')
Foc Art B2 Inc-B2-see-Ap-If

e: ra at š-at-č'iy-iw-ek 'You're the one who hit(him)'
     Cm   hit
              (//-č'ay// 'hit' T)

e: l ara? ∅-∅-č'iy-iw-ek 'He's the one who hit(him)'
Foc Art Dem Asp-B3

ne: wa? ∅-∅-c'iy-iw w-e:ŋ ? 'Who (was it that) hit me?'
who Dem Asp-B3-hit-Ap A1-Dat

ne: wa? $\left\{ \begin{array}{l} \text{∅-∅-č'iy-iw r-e:ŋ ?} \quad \text{'Who hit him?'} \\ \quad\quad\quad\quad \text{A3} \\ \\ \text{∅-∅-č'iy-iw-ek ?} \\ \quad\quad\quad \text{If} \end{array} \right.$

</div>

The focus antipassive is ordinarily used only with a focussed, questioned or relativized argument, and does not appear without an accompanying noun phrase in the indicative mood:[5]

> *∅-∅-čak-aw-ek
> Asp-B3-call-Ap-If

Since in the focus antipassive the patient is only optionally demoted to oblique status, it may be expressed either as part of a relational or prepositional phrase, or directly, as an unmarked argument. (Non-third person patients cannot bear direct relation to the antipassive verb in this way, unless they govern verb agreement through the person hierarchy, as described below.)

$$
\text{e: ra at š-at-č'iy-iw}\quad
\begin{cases}
\text{č-a:} \quad\; \text{l} \quad \text{ak'ala:b'} \\
\text{Prep-Dat Art children} \\[4pt]
\text{r-e:ŋ l ak'ala:b'} \\
\text{A3-Dat} \\[4pt]
\text{l ak'ala:b'}
\end{cases}
$$

e: ra at š-at-č'iy-iw
Foc Art B2 Asp-B2-hit-Ap

'You're the one who hit the children'

However, when the agent and patient are both non-third person, they cannot both bear a direct relation to the antipassive verb, and the patient is obligatorily expressed obliquely.

> e: ra en š-in-č'iy-iw a:w-e:ŋ   'I'm the one who hit you'
> Foc Art B1 Asp-B1-hit-Ap A2-Dat

> e: ra at š-at-č'iy-iw w-e:ŋ   'You're the one who hit me'
>   B2   B2   A1

> (*e: ra en š-in-č'iy-iw ra at)
>   Foc Art B1 Asp-B1-hit-Ap Art B2

> (*e: ra at š-at-č'iy-iw ra en)
>   B2

When the agent is third person and the patient is non-third person, antipassive verb agreement is optionally governed in accordance with a

hierarchy of person rather than by the agent. In the following two
sentences, it is the patient (first and second person, respectively)
which governs agreement, rather than the questioned agent.

> ne: waʔ š-in-č'iy-iw-ek ?   'Who was it that hit me?'
> who Dem Asp-B1-hit-Ap-If

> ne: waʔ š-at-č'iy-iw-ek ?   'Who was it that hit you?'
>   B2

Only if the non-third person patient is expressed obliquely in a rela-
tional noun phrase does the questioned agent rather than the non-third
person referent govern agreement:

> ne: waʔ Ø-Ø-č'iy-iw   w-e:ŋ ?   'Who was it that hit me?'
> who Dem Asp-B3-hit-Ap A1-Dat

However, it is possible for a non-third person patient to govern anti-
passive agreement even if it is explicitly marked as the object of a
dative phrase:

> ne: waʔ š-in-č'iy-iw   w-e:ŋ ?   'Who was it that hit me?'
> who Dem Asp-B1-hit-Ap A1-Dat

The full person hierarchy is:

> 1st pers.
> 2nd pers. } > 3rd pers. plural > 3rd pers. singular

The priority of plural over singular in the third person is illustrated
in the following sentence, where agreement is with the plural patient:

> ne: waʔ š-e:-č'iy-iw-ek ?   'Who hit them?'
> who Dem Asp-B6-hit-Ap-If

Since when two non-third person noun phrases appear they cannot both
bear a direct relationship to the verb, only one, the agent, may appear
as a non-oblique noun phrase. The antipassive verb can only agree with
this agent and not with the patient, since in the case where the person

hierarchy does not decide priority of agreement (i.e. when both are at the same level, both non-third person or both third person singular) agency must govern agreement. Thus the following sentences, where the antipassive verb fails to agree with the non-third person argument, are ungrammatical:

*e: ra en š-at-č'iy-iw-ek
Foc Art B1 Asp-B2-hit-Ap-If

*e: ra at š-in-č'iy-iw-ek
           B2   B1

The above examples illustrate the -V₁w allomorph of the focus antipassive (for root transitives), but the same observations apply to focus antipassive with derived transitives, marked by -n. In the examples below, note the optional patient agreement in accordance with the person hierarchy.

na: Ø-Ø-xiyi-n   q-e:č ?   'Who looked for us?'
who Cm-B3-look·for-Ap A4-Dat
                                    (xiyi:x 'look for' t)

na: ki-Ø-xiyi-n   q-e:č ?
    Inc-B3-look·for-Ap A4-Dat

                                    'Who is looking for us?'

na: k-ax-xiyi-n-ek ?
    Inc-B4-look·for-Ap-If

na: Ø-Ø-lakab'a-n   r-e: l   xun ri ?   '(I wonder) Who made
    Cm-B3-twist-Ap   A3-Dat Art Art Dem   this crooked?'

                                    (lakab'a? 'make crooked' t)

na: Ø-Ø-b'ayi-n   a:w-e:č ?   'Who delayed you?'
    Cm-B3-delay-Ap   A2-Dat
                                    (b'iyi:x 'delay' t)

(For use of the focus antipassive in relative clauses, see p.253.)

The $-V_1w$ focus antipassive described above applies only to root transitives, but there is a (generally homophonous) nominalizer $-(V_1)w$ which applies to both root and derived transitives, and performs some of the same grammatical functions, such as forming questions (though only, apparently, with third person agents). Since this derived form is grammatically a noun, the sentences below are formally equative questions ('Who is the biter of him?' etc.).

na: tiʔ-w r-e:č ? 'Who bit him?' (-tiʔ 'bite' T)
who bite-N A3-Dat

na: kayi-w r-e:č ? 'Who bit him?' (kayi:x 'bite' t)
bite-N

na: bʼayi-w a:w-e:č ? 'Who delayed you?' (bʼiyi:x 'delay' t)
delay-N

Absolutive Antipassive. Where the focus antipassive acts to high-light the agent, and may allow the patient to remain in a more or less direct relation to the verb, the absolutive antipassive (-(V)n) acts primarily to remove the patient from direct relation to the verb, so that emphasis is either on the verb or its agent (or instrument, which often takes the subject role with the absolutive antipassive). The absolutive antipassive does not allow agreement with non-third-person patients in accordance with the person hierarchy (see above). It may be used when the agent is focussed, questioned, or relativized (even with root transitives) as is the focus antipassive, but unlike the focus antipassive, it can also be used when the agent is not focussed.

k-in-čuku-n-ek   'I work' (čuku:x 'work' t)
Inc-B1-work-Ap-If

ka-Ø-kʼaš-an-ek   'It can pound' (-kʼaš 'pound' T)
Inc-B3-pound-Ap-If

la kučï:laŋ ka-∅-sak-an-ek   'The knife wounds'
Art knife   Inc-B3-wound-Ap-If

                            (-sak 'wound' T)

e: ra at š-at-č'ïy-in-ek 'You're the one who hit'
Foc Art B2 Cm-B2-hit-Ap-If

e: ra ax š-ax-č'ïy-in-ek 'We hit'
    B4   B4

ne: wa? ∅-∅-č'ïy-in-ek ? 'Who hit?'
who Dem Cm-B3-hit-Ap-If

ne: wa? š-e:-č'ïy-in-ek ? 'Who-all hit?'
      Cm-B6

Note that although the absolutive antipassive parallels the focus anti-passive in allowing questioned agents, it differs in that it does not allow agreement with patients (non-third person) through the person hierarchy, in keeping with its function of removing patients from direct relation to the verb.

*ne: wa? š-at-č'ïy-in-ek
 who Dem Cm-B2-hit-Ap-If

*ne: wa? š-ax-č'ïy-in-ek
      B4

*ne: wa? š-iš-č'ïy-in-ek
      B5

6.3. Compound Sentences.

Compound sentences may be formed by conjoining two or more simple sentences using conjunction particles such as wa: 'if', tïk'ara? 'then', despwe:s 'then', ï 'and', čaqa 'although', pe:ro 'but', sino: 'other-wise', kwa:ndo 'when', xampa? 'when', etc. (In texts, a large propor-tion of conjunction particles are Spanish loans.)

kwa:ndo š-ïn-alaš-ek,   ya   ∅-yak-am   ček ï
when   Cm-B1-be·born-If already B3-raise-Pf Pf Art

xun xa:y la:ʔ
Art house Dem

'When I was born, that house was already built'

in-war-naq kwa:ndo Ø-Ø-pe:t-ek   'I was asleep when he
B1-sleep-Pf when   Cm-B3-come-If   came'

b'i:t   š-im-b'ek, sino: ki-Ø-kamasa-s-ek
fortunately Cm-B1-go   otherwise Inc-B3-kill-Ps-If

'It's good I went, otherwise he would have been killed'

wa: k-iš-ičaqan-ek, k-iš-ičaqan-aq   'If you-all are dying,
If Inc-B5-die-If   Imp-B5-die-Impf   then die'

pu-wa:-q'i:x   ri-pe:t-ab'al, pe:ro ni Ø-Ø-pe: tax
Prep-surface-day A3-come-Instr but   Neg Cm-B3-come Neg

'Today was his time of arrival, but he didn't come'

čaqa   š-at-q-ayʔe-:x   š-at-pe: tax
although Cm-B2-A4-await-Ta Cm-B2-come Neg

'Although we were waiting for you, you didn't come'

xampaʔ naŋ   k-in-xam-atax-ek, k-im-pe   a:w-ik'i:n
when   still Inc-B1-free-Ps-If Inc-B1-come A2-with

'When I get free, I will come to you'

6.4. Complex Sentences.

Relative Clauses. A finite clause, transitive or intransitive, may

be postposed to a noun as modifier, with the definite article li (or

li xun) optionally intervening, to form a definite clause.

Ø-k'o: winaq (li) ki-Ø-ki-tix   ta l yaʔ
B3-Pre person Rel Inc-B3-A6-drink Neg Art liquor

'There are people who don't drink liquor'

Ø-Ø-pe: l ačeŋ li xun š-at-ri-kuna-:x
Cm-B3-come Art man Rel Art Cm-B2-A3-cure-Ta

'The man came who cured you'

When the head noun is coreferential with the patient of the relative

clause, the patient is frequently promoted to subject through passi-

vization, and the agent expressed obliquely. If the head noun is co-

referential with the agent of the relative clause, the agent is fre-

quently focussed (through the focus antipassive) and the patient

demoted to an oblique role. However, neither strategy is necessary

for relativization.

```
Ø-Ø-pe:      I  išaq  Ii  xun  Ø-Ø-kunu-š      r-maI  I  ačeŋ
Cm-B3-come Art woman Rel Art Cm-B3-cure-Ps A3-by Art man
```

'The woman came who was cured by the man'

```
Ø-Ø-pe:      I  ačeŋ  Ii  xu:n  Ø-Ø-kunu-n   ⎧ r-e:    ⎫  I   išaq
Cm-B3-come Art man  Rel Art   Cm-B3-cure-Ap ⎨ A3-Dat  ⎬ Art woman
                                            ⎪        ⎪
                                            ⎪ č-e:    ⎪
                                            ⎩ Prep-Dat⎭
```

'The man came who cured the woman'

```
Ø-Ø-pe: I aceŋ Ii xun Ø-Ø-kunu-n ⎧ a:w-e:ŋ
                                 ⎪ A2-Dat
                                 ⎨
                                 ⎪ a:w-e:č
                                 ⎩ A2-Dat
```

'The man came who cured you'

Complementation. A variety of complementation strategies occur; the

most important are described here.

The intransitive verb -tinix ~ -tin 'do continually' expresses

progressive aspect, and takes as its subject either a nominalized sen-

tence (governing third person singular absolutive agreement), or the

agent of the action, with a complement consisting of the complementiz-

ing preposition ča plus a nominalized form of the embedded verb (see

§ 5.3.3). In the latter case, the possessor of the nominalized embed-

ded verb agrees with the patient (marked with 'Set A' possessive pre-

fixes). If the nominalized verb is not formally possessed, the patient is unspecified.

> ka-Ø-tin ra-qa:x-i:k 'It's going down'
> Inc-B3-continue A3-drop(Ps)-N

> k-in-t(ix)in-ek 'I am (in the middle of) doing it'
> Inc-A1-continue-If

> q-ax-tin ča ra-qupu-š-i:k 'We are cutting it'
> Inc-B4-continue Prep A3-cut-Ps-N

> k-e:-tin ča ti:x-i:k 'They are eating'
> Inc-B6-continue Prep eat(Ps)-N

Other intransitive verbs which take nominalized complements are -ak 'begin', ti:kir 'begin', pe:(t) 'come', and b'e:k 'go'.

> š-in-ak ča ti:x-i:k 'I began eating'
> Cm-B1-begin Prep eat(Ps)-N

> Ø-Ø-ti:kir ča č'iy-in-e:m 'He began to hit'
> Cm-B3-begin Prep hit-Ap-N

> š-im-pe: ča a:-č'i:y-i:k 'I came to hit you'
> Cm-B1-come Prep A2-hit(Ps)-N

> š-im-pe: ča b'i:n-e:m 'I came from a stroll'
>   stroll-N

> k-im-b'e:k ča laq'-aw-ek 'I'm going to make purchases'
> Inc-B1-go Prep buy-Ap-N

An intransitive verb of motion will also allow simple seriation with a second finite verb, where the subject of the second must agree with that of the first, and the second verb is inflected for movement. The two verbs need not agree in aspect. The instransitive kawan 'be able' also occurs with this type of seriation.

> š-im-pe:t-ek š-Ø-a:-n-č'iy-a? 'I came to hit him'
> Cm-B1-come-If Cm-B1-Mv-A1-hit-Mv

> Ø-Ø-pe: wura:l š-Ø-a:-ra-ȼ'uno-:x
> Cm-B3-come here Cm-B3-Mv-A3-ask·for-Ta

> 'He came here to ask (for it)'

k-im-b'e:k k-at-ni-č'iy-aʔ   'I will go to hit you'
Inc-B1-go Inc-B2-A1-hit-Mv

š-im-pe:t-ek k-at-ni-č'iy-aʔ 'I have come to hit you'
Cm-B1-come-If

š-im-pe:t-ek k-in-a-ʔe:ȼ'an-ɜq   'I have come to play'
              Inc-B1-Mv-play-Mvf

∅-∅-kawan-ek   ∅-r-alasa-:x   b'i:k r-i:b'
Cm-B3-be able-If Cm-A3-leave(Cs)-Ta away A3-Refl

'He was able to get out by himself'

Some transitive verbs (-max 'begin', -b'an 'do, make') take nom-
inalized complements as direct objects. The passive infinitive in -ik
allows marking of the patient with possessive prefixes, while the -e:m
infinitive does not. (Note the use of a Spanish loan infinitive as
complement of -b'an 'do'; this is a very common way of incorporating
Spanish verbs into Sacapultec grammar.)

č'iy-in-e:m š-∅-a:-m-b'an-aʔ ra en 'To fight I went'
hit-Ap-N   Cm-B3-Mv-A1-do-Mv the B1

kunu-n-e:m š-∅-a:-m-b'an-aʔ ra en   'To cure I went'
cure-Ap-N

war-a:m š-∅-a:-m-b'an-aʔ ra en 'To sleep I went'
sleep-N

b'i:t š-∅-a:-b'an manca:r 'Why did you stain it?'
Part Cm-B3-A3-do stain

š-im-max   ra-b'a:n-ik   way   'I began to make tortillas'
Cm-B1-begin A3-make(Ps)-N tortilla

š-im-max a:-kunu-š-i:k 'I began to cure you'
         A2-cure-Ps-N

š-im-max a:-kaȼ'ib'i-s-i:k 'I began to lay you down'
         A2-lay.down-Ps-N

Note that the nominalizer -i:k, which ordinarily has a long vowel
under possession, becomes short when the postposed patient (its formal
possessor) is not modified by a demonstrative.

š-∅-im-max   r-ya:k-i:k | xun xa:y la?
Cm-B3-A1-begin A3-raise(Ps)-N Art Art house Dem

   'I began to raise that house'

š-∅-im-max r-ya:k-ik | xa:y   'I began to raise the house'[6]
                N Art house

The passive infinitive in -i:k may have as its possessor/patient a

further embedded sentence (in this case a question):

č   anem k-∅-in-ya?   ra-b'i-š-i:k če   ri-mo:do
Prep now Inc-B3-A1-give A3-say-Ps-N what A3-way

   ka-∅-čuku-š | aȼ'a:m
   Inc-B3-work-Ps Art salt

   'Now I will tell how the salt is worked'

Notes to Chapter 6

1. I have been able to elicit OSV order from one speaker, as an order which exists but is "not so usable," but other speakers reject it unequivocally.

2. The category of irrealis here encompasses negation and question. Thus, note the use of ni as an optional particle in negation (this section) and as an optional sentence-initial particle in the formation of polar questions (§6.2.4.3).

3. These terms are adopted from Halliday. "Polar" questions are those which are often labeled "yes-no" or "nexus" questions. "Nonpolar" questions correspond to what are called "question-word" questions or, in English-oriented grammars, "WH-questions." The use of a question word (ni irrealis) in the formation of Sacapultec polar questions makes the phrase "question-word question" nondistinctive; and Sacapultec nonpolar question words do not, of course, begin with wh-.

4. Much of the following discussion, and of my treatment of voice in general, is guided by Dayley's work. I have also benefited from Thomas Larsen's unpublished grammatical sketch of Cakchiquel.

5. But note that it is possible in the imperative (p. 200).

6. Dayley (1978:32) describes a similar phenomenon in Tzutujil. For the relevant concept of predicate conflation, see Du Bois 1980a: 214ff.

CHAPTER 7

DISCOURSE PATTERNS AND ARTICLE FUNCTION

7.1. Introduction.

While in the previous four chapters I have followed the standard

methodology of using individual examples or sets of examples (either

elicited or taken from texts) to establish the facts of Sacapultec

grammar, in this chapter I additionally make use of statistical gener-

alizations across a corpus of texts, in order to define the otherwise

elusive function of certain forms at the level of discourse. The task

—the description of Sacapultec grammar—remains the same, but the

methods are necessarily changed. As long as one is dealing with the

forced-choice binary evaluations (grammatical/ungrammatical) that

characterize elicitation methodology, there is a bias in the direction

of categorial rules, while noncategorial rules may easily go unnoticed.

For example, a speaker presented with a forced-choice grammaticality

decision regarding certain sentences with and without the article xun

might respond that both were acceptable, creating the impression of

"free variation." Yet it may be crucial for the linguist to know that,

in texts, only one time in ten will xun be used. Thus, to arrive at a

valid description of the function of discourse pragmatic elements such

as articles, a controlled text-based methodology has been adopted.

7.2. Controlled Text Elicitation: Film Experiment.

One of the ways in which it is possible to gain the advantages of naturally-uttered text data while retaining the advantage of comparability of elicited sentences is, simply, to elicit comparable texts from several |speakers. . A practical method of accomplishing such text elicitation is through film. As part of a larger research project on discourse (Chafe 1980), a film was designed to be shown to speakers of different languages, with the idea that afterwards the speakers would be asked by a native interviewer to tell what happened in the film. The tellings would be tape recorded and later transcribed. In order to make the film accessible to speakers of any language, all dialogue was excluded, and plot content was designed to be interpretable in some fashion in any culture. The seven-minute film shows a child's theft of some pears, and subsequent adventures. I took the film to Sacapulas to carry out this experiment; but implementation in the local context required certain adjustments, described briefly below. (For a full discussion see Du Bois 1980b.)

7.2.1. Procedure.

During my 1977 field trip, I made arrangements to show the pear film with the help of my assistant Jacinto Mutás. The plan was to show the film to half a dozen native speakers of Sacapultec in the local Catholic church compound. The speakers invited were all women, to

facilitate comparison with the pear film data for women from other languages (Chafe 1980). We did not tell them in advance that they would later be asked to talk about the film in order to avoid making them conscious of the verbalizing task while receiving the original experience. Following the film, the native interviewer (of the same sex as the interviewees) was to explain that she had not seen the film, and ask the speaker to tell her what happened in it. For the first showing, a small number of women were invited a week in advance to the church compound. After the film had been shown, however, most of the women refused to be recorded, for fear of having their voices stolen, and only one recording was made.

For the second showing, a change in the procedure was adopted, following a valuable suggestion by Mutãs. In order to provide a more hospitable and culturally interpretable environment, the viewers were invited to my home following the film, where they were served traditional bread and coffee while waiting to be interviewed. During this much more successful second session (necessarily final, for practical reasons), more than 30 recordings were made of both male and female speakers, with interviewers of the appropriate sex operating in separate rooms. This completed the initial portion of the pear film project, providing the data discussed below.

A secondary goal of the Chafe project, however, was to investigate how a story is told by a speaker on two separate occasions. To

this end, Mutãs and I and a new interviewer visited speakers in their homes between six and eight weeks after the initial telling, and the interviewer asked them to tell the story once again. These narratives were often told with family members present, the most natural story-telling conditions in Sacapulas. Such retellings were elicited from some but not all original participants; the data from this second phase have not yet been analyzed.

7.2.2. Data and Analysis.

Given that a few of the tape recordings (mostly from older speakers) were immediately and without prompting labeled defective by my native assistant Mutãs, it was necessary to exclude the utterances of some speakers as not constituting a well-formed narrative. Two criteria were applied. First, speakers who had never seen a film before were excluded, because the additional first-time task of learning how to understand a film was found to be excessively difficult for many speakers. Francine Desmarais (personal communication) had informed me that when she showed the pear film in Haiti she found that viewers who had never previously seen a film were generally unable to produce a coherent narrative; the same pattern seems to apply in Sacapulas. The second criterion was minimum length: the speaker had to produce, without prompting from the interviewer, a narrative of at least ten uninterrupted phrases (roughly, clauses). This requirement was considered minimal for a complex film that one speaker retold masterfully

in 95 phrases. The criterion excluded principally speakers who seemed
not to want to perform the task of telling the story.

In analyzing the data, the most valuable technique, oriented
toward referentiality phenomena and nominal categories, was that of
organizing all nominal mentions in a particular narrative of entities
in the film into what I call a Reference Configuration Chart, a type
of chart that I originally developed for analyzing the pear film data
for English (Du Bois 1980a). These charts tabulate, in order, all
mentions of a particular reference, while preserving information about
ordering relative to mentions of other referents. The syntactic role
in the clause of each noun phrase is also recorded, and the initial
mention of each referent is distinctively marked.

The basis of the following study, then, is a set of parallel
narrative texts elicited under controlled conditions from speakers who
had previously seen at least one film, and were able and willing to
produce a text above a minimum length. The data have been subjected
to analysis designed to uncover patterns in the management of informa-
tion in narrative.

7.3. Article Function.[1]

The function of Sacapultec articles is not readily determined
through elicitation. The set of parallel texts described above, how-
ever, allows a more direct approach to determining the nature of ele-
ments whose primary function is at the level of the discourse. In this

section the narratives from the pear film experiment are analyzed in order to elucidate the function of the articles, in the context of the problem of managing the presentation of information throughout a narrative.

The most common articles in Sacapultec are xun and li, which in many elicited sentences appear to correspond to English 'one', 'a' (in elicitation glosses, Spanish 'uno', 'un', 'una') and 'the' (Spanish 'el', 'la'), respectively. The few published comments on articles in other Quichean Proper languages adopt this view. In his teaching grammar of Quiché, David Fox (1973a) equated li with the Spanish equivalent of 'the' and xun with 'one, a'; in the L.A.M.P. grammar of Cakchiquel (1977), the same equation was made. In fact, many text-derived sentences in Sacapultec would seem to accord with this apparent correspondence. In the following instance of xun taken from the pear film narratives, for example, the function appears equivalent to that of an indefinite article. That is, it apparently marks noun phrases whose referent is assumed by the speaker to be not identifiable to the hearer (Chafe 1976, Du Bois 1980a).

1. <u>xun ačeŋ</u> [1st mention] k'o: ču <u>xun če:ʔ</u> [1st] r-e <u>í:go-s</u> [1st]
   Art man   Pre on Art tree   of fig-Pl

   '<u>A man</u> is in <u>a tree</u> of <u>figs</u>;

   ki-<u>Ø</u>-tixin [2nd] če r-šu:l-ik   ra-wač
   Asp-B3-continue   to A3-pick(Ps)-If A3-fruit

   <u>he's</u> picking its fruit' (Speaker 10)

In this example the first mention of the pear-picker is marked by xun, and the second mention is a third person Set B clitic; a later nominal mention (the eighth) is marked by li. This appears to correspond to the English progression from indefinite article plus noun for initial mentions to definite pronoun or definite article plus noun for later mentions. However, in the following example, xu:n (in its pronominal, not article, function) is glossed (by a native informant) as 'the other one' (Spanish 'el otro'):

2. li   Ø-Ø-ȼalax-u:l   xu:n
    and Asp-B3-return-Dir Art

    'And <u>the other one</u> returned' (Speaker 10)

In another case also xun does not act as an indefinite article. In example 3, xun, although in the initial mention of the pear-picker it is glossed as 'a' (Spanish 'un'), appears later glossed as 'the' (Spanish 'el'):

3. š-Ø-aq'an   xun ačeŋ [1st] ču? če:? [1st]
    Asp-B3-climb   Art man   atop tree

    '<u>A man</u> climbed up (a) <u>tree</u>'

    š-Ø-a-r̲-   -č'up-o? [2nd] nikʸ'ax pe:ra-s
    Asp-B3-Mv-A3- ... -pick-Mv   Art   pear-Pl

    '<u>He</u> went to pick some pears'

    [later in the narrative...]

    kwa:ndo Ø-Ø-qa:x-u:l   xun ačeŋ [8th]
    when   Asp-B3-descend-Dir Art man

    '...when <u>the man</u> came down...' (Speaker 1)

Given glosses of 'one', 'a', 'the', and 'the other one', the problem

arises of defining a unified function, if any exists, for xun. In such

a case, direct examination of overall text patterns is more likely to

yield insight than is reliance on glosses, whether from elicited or text-

derived sentences. To this end, the texts of the 10 subjects were

analyzed in terms of potential "packaging" functions (Chafe 1976) in

narrative. It was necessary to categorize the various reference types

into sets that by hypothesis served comparable functions, and to deter-

mine what forms were associated with particular packaging functions

(marking of identifiability, focus, topic, and so on).

Reference types were divided into three classes, named for the

most salient member. In the first class, the ǀi-class, are noun

phrases modified by ǀi or ǀax (diminutive of ǀi); possessed nouns; and

the definite pronominal clitics (Set A and Set B). In the second

class, the xun-class, are noun phrases modified by xun, xunax (diminu-

tive of xun), or nik^y'ax (plural of xun); noun phrases modified by

numerals; and pronominal xu:n. In the third class, the zero-form

class, are noun phrases composed of a noun with no modifiers. The

hypothesis that these constitute natural classes is borne out in the

findings below of unified function for each class. In the following

discussion all mentions of animate and inanimate objects have been

classified according to reference type and such other potentially

significant parameters as semantic class of referent, occurrence on

first, second, etc., mention, and so on. The ǀi-class from the outset

appears to correlate nonproblematically with the pragmatic function

of definiteness (identifiability), whereas the function of the other classes is open to question.

The question arises: what governs the choice among the three classes? One relevant parameter is the semantic class that the referent belongs to, as demonstrated in Figure 7.1. All instances of initial mention were divided into the semantic classes of humans, independent inanimates (i.e., objects that are not part of, or intimately and consistently associated with, something else), and body parts and clothes (i.e., elements included in the "frame" associated with humans). A clear contrast emerges between human frame elements, with 100 percent of initial mentions falling in the II-class of reference types, and
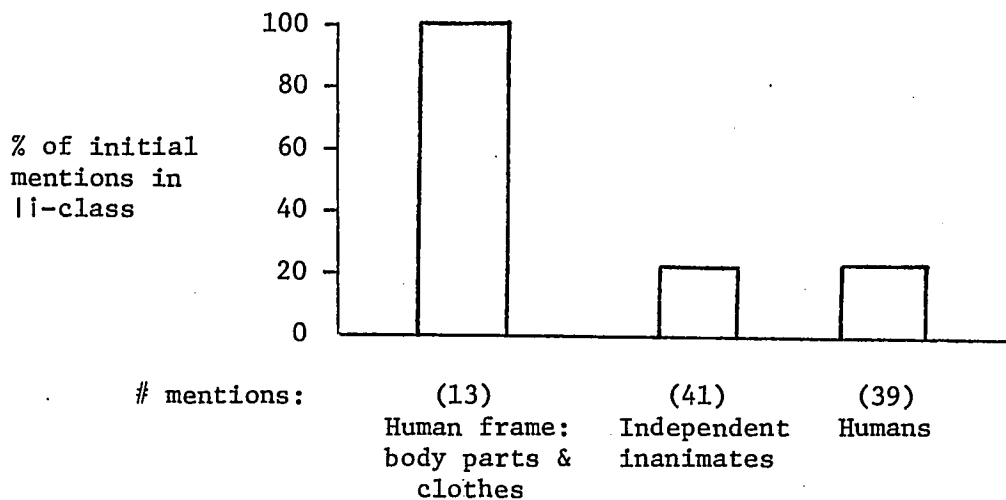
Figure 7.1. Initial Definiteness by Semantic Class:

Influence of Frames

humans and independent objects, with much lower incidence of | |-class
reference types on initial mention. If the | |-class marks identifiable
referents, this confirms the well-known fact that frame membership is a
significant determinant of definiteness on initial mention (compare
English data in Du Bois 1980a).

Another significant parameter that correlates with choice of
reference type is the syntactic role that the mention plays in the
sentence. This is illustrated in Figure 7.2, which shows the percen-
tage of | |-class noun phrases for various syntactic roles on initial
mention. Note, for example, that when a referent is mentioned for the
first time in the syntactic role of direct object, about half of the time it

# of mentions:	(10)	(24)	(17)	(35)	(9)
	Transitive subject	Intrans- itive subject	Direct object	Preposi- tional object	Presenta- tional (k'o:)
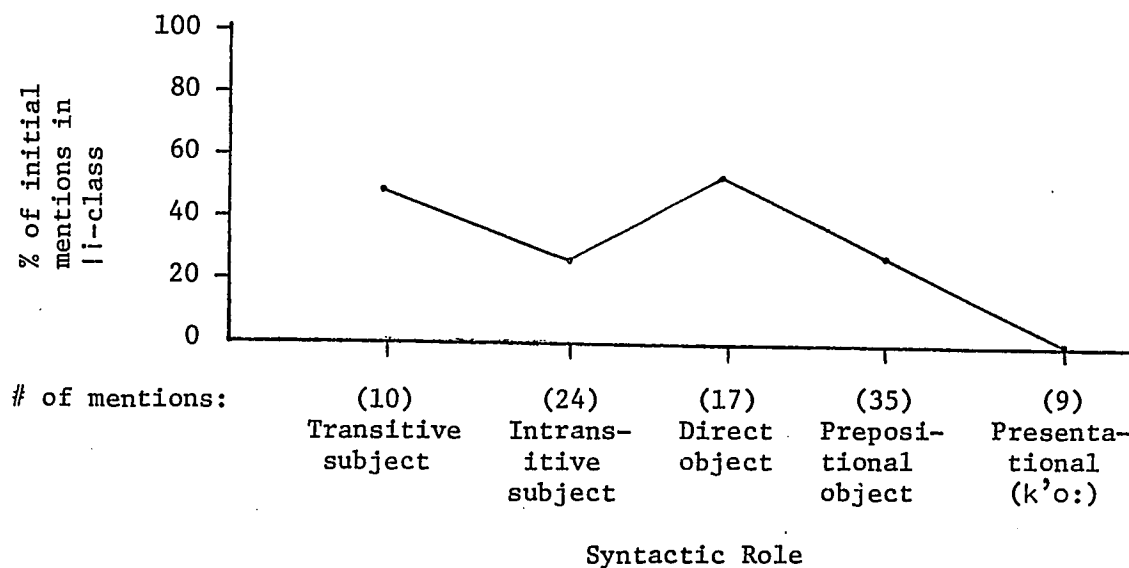
Syntactic Role

Figure 7.2. Initial Definiteness by Syntactic Role

will be a | i-class mention, whereas a referent introduced as subject of
the presentational intransitive k'o: is never in the | i-class. Turning
to zero-form initial mentions, the correlation with syntactic role is
even stronger, as is seen in Figure 7.3. Of referents that we first
mentioned in the syntactic role of prepositional object, nearly 60
percent are zero-form nouns, whereas no initial mentions in subject
position (transitive, intransitive including presentational) are zero-
form nouns. I have pointed out elsewhere the importance of distinguish-
ing nonreferential noun phrases from referential noun phrases. The
latter are, in my terms, noun phrases that are used to speak about an
object (inanimate or animate) as an object, with continuity of identity
over time (Du Bois 1980a:208). I will suggest below that in Sacapultec
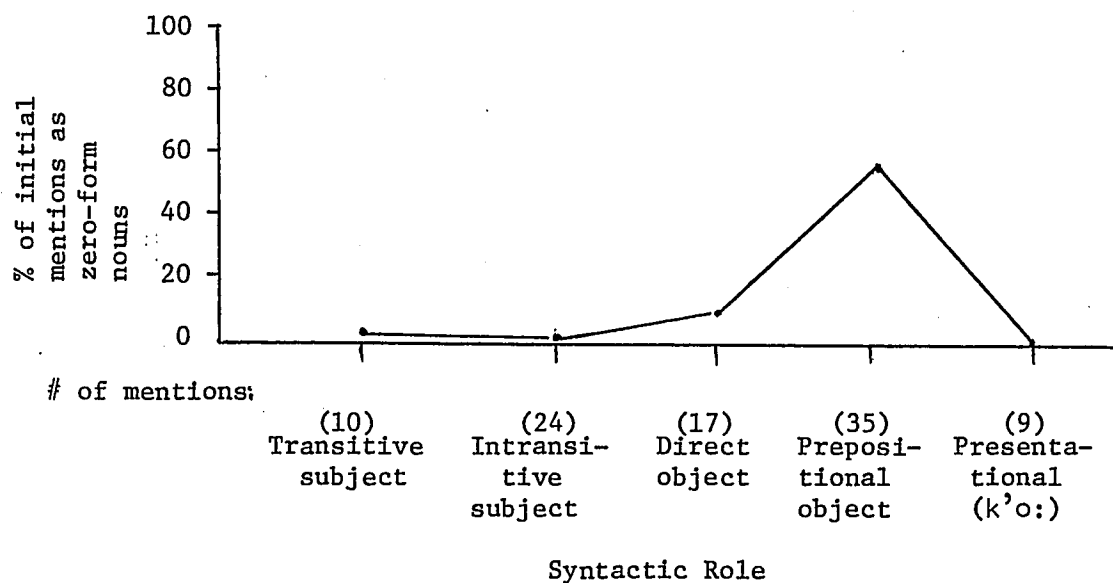
Figure 7.3. Initial Nonreferentiality by Syntactic Role

as in English, nonreferential mentions (i.e., those that do not attempt to trace continuity of identity over time) are often marked by a zero-form reference type. Figure 7.3, then, illustrates the association of nonreferentiality with syntactic nonterms (prepositional object) and, to a lesser degree, direct objects.

Given that determining the syntactic role of an initial mention contributes to predicting the choice of reference type for that mention, it is important to consider what parameters may in turn govern the selection of syntactic role for initial mentions. It has been widely recognized for other languages that the semantic class of a referent is one parameter that correlates with syntactic role choice. In Figure 7.4, this is illustrated for the semantic classes in Sacapultec of humans and inanimates.
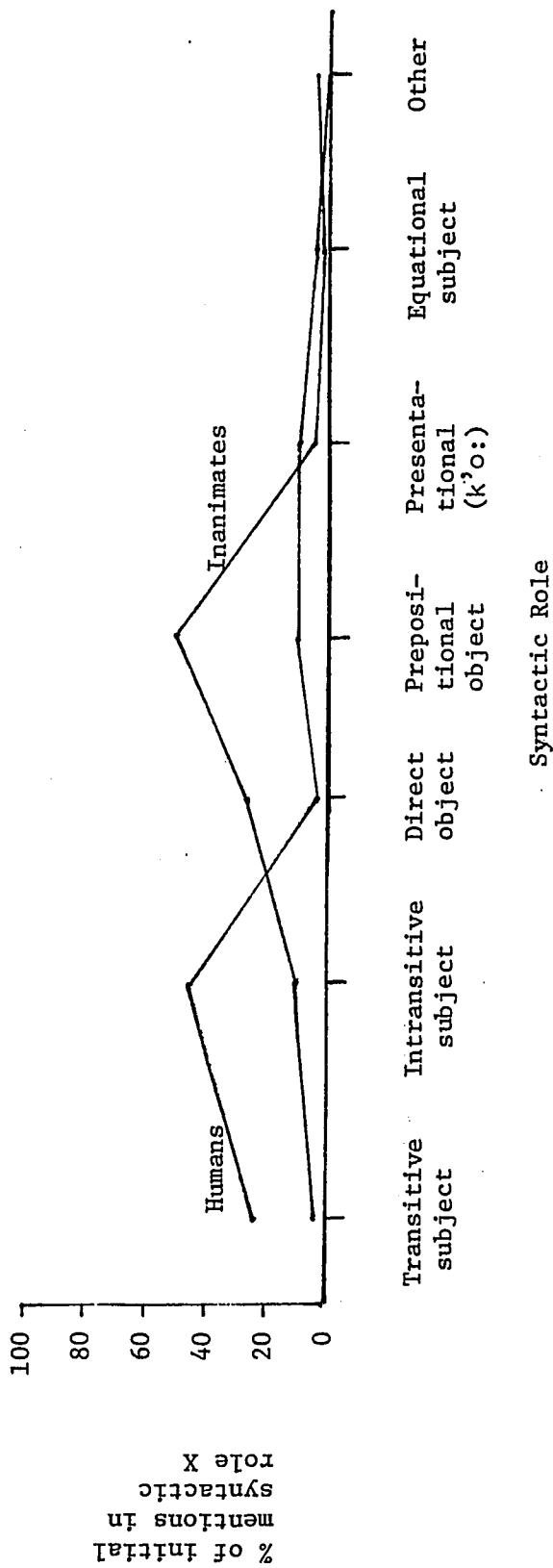
Figure 7.4. Distribution of Initial Mentions by Syntactic Role:

Humans vs. Inanimates

It is seen that humans are most frequently introduced as intransitive subjects (less frequently as transitive subjects), whereas inanimates are most frequently introduced as prepositional objects or direct objects. The picture is generally similar for noninitial mentions, as shown in Figure 7.5, but there are important differences. In particular, noninitial mentions of human referents are more likely to appear as transitive than as intransitive subjects. In other words, humans tend to be introduced as intransitive subjects, and subsequently take on the transitive subject role. This has significance for a "preferred argument structure" in Sacapultec (Du Bois 1981), which in turn has important implications for the discourse basis of ergative morphology in Sacapultec,[3] but this topic must be reserved for another occasion.
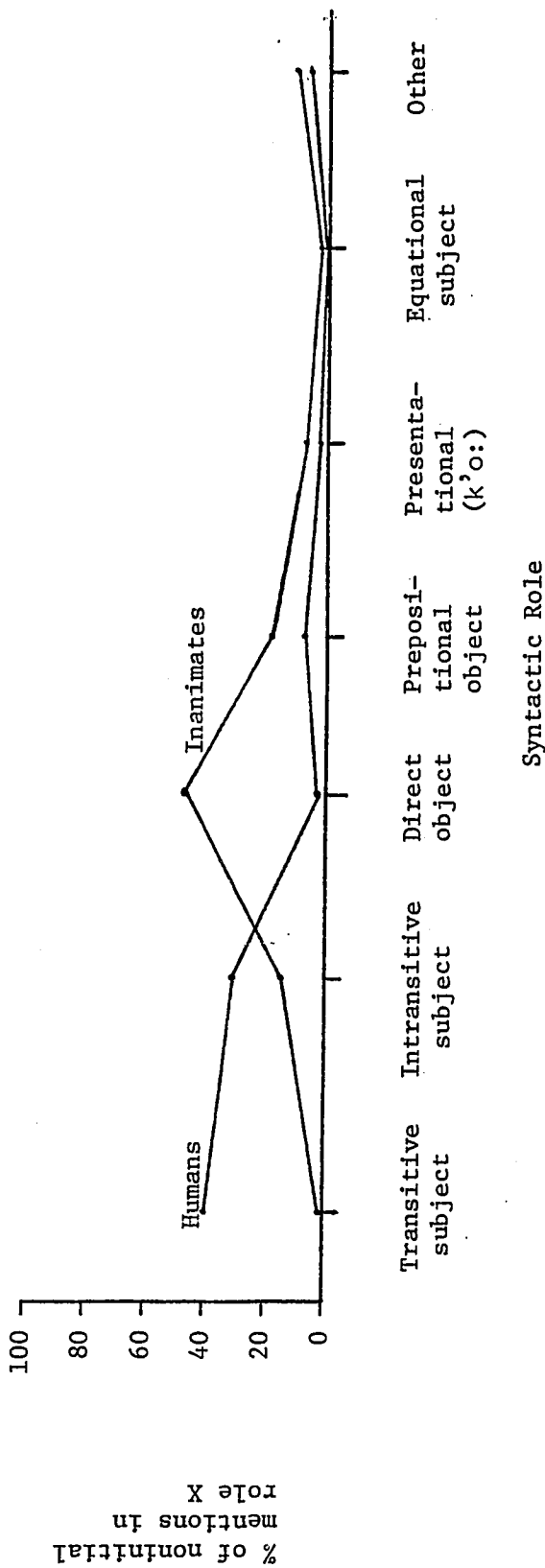
Figure 7.5. Distribution of Noninitial Mentions by Syntactic Role:

Humans vs. Inanimates

The most striking overall difference between humans and inanimates to emerge from Figures 7.4 and 7.5 is in the percentage of mentions occurring as subject. As summarized in Figure 7.6 for initial and noninitial mentions together, humans are about three times as likely as inanimates to occur in subject position. The frequency with which humans appear as subjects may contribute to their nonoccurrence as zero forms on initial mention (Figure 7.3). The intrinsic salience of human referents apparently leads them to be placed in the most prominent syntactic roles, and at the same time demands the marking of their continuity of identity (see below).

Given that the probable function of at least some of the reference types under consideration is the marking of definiteness or new vs. old information, it becomes important to contrast initial vs. non-initial mentions (this being an objectively measurable correlate of
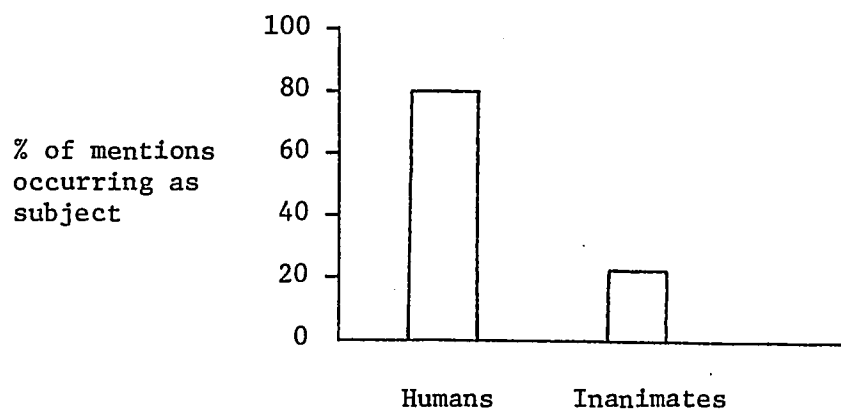

Figure 7.6. Occurrence in Subject Role: Humans vs. Inanimates

such packaging phenomena, although it is of course not equatable with any single packaging status). In Table 7.1, the number (and percentage) of initial mentions falling into each of the three reference type classes is shown, for humans and inanimates.

Table 7.1. Reference Type of Initial Mentions

	Humans		Inanimates	
	#	%	#	%
li-class	9	23	25	41
xun-class	30	77	19	31
∅-form	0	0	17	28
Total	39	100	61	100

Table 7.2 shows the same information for noninitial mentions. Looking at the first table, where the percentage of referents falling into the li-class is substantially higher for inanimates than for humans (41 percent vs. 23 percent), one might expect that a comparable pattern would hold for noninitial mentions (Table 7.2). Here, however, the pattern of li-class mentions is reversed, with a greater frequency among human mentions (92 percent) than among inanimate mentions (73 percent). A similar reversal holds for frequency of xun-class mentions. Only for zero forms is the relative frequency of human vs. inanimate mentions constant across initial and noninitial mentions.

Table 7.2. Reference Type of Noninitial Mentions

	Humans		Inanimates	
	#	%	#	%
li-class	205	92	89	73
xun-class	17	8	19	16
Ø-form	0	0	13	11
Total	222	100	121	100

The significance of the frequency reversals is suggested by comparing Figures 7.7, 7.8, and 7.9. In the first of these figures, which contrasts the percentage of li-class references in initial and noninitial mentions, the slope of the line for humans is much steeper than that for inanimates. This indicates that the tendency to avoid use of li-class references on initial mention, and to require use of them on noninitial mention, is much more consistently maintained for humans than for inanimates. The following example illustrates this:

4. i   taŋ de repente   Ø-Ø-k'utun-ul   xun ak'a:l [1st]
    and all-of-a-sudden Asp-B3-appear-Dir   Art child

    'All of a sudden a child appeared

    Ø-k'o: č-Ø-ix   misiklé:ta [1st]
    B3-Pre on-A3-back   bicycle

    'he was on (a) bicycle' (Speaker 10)

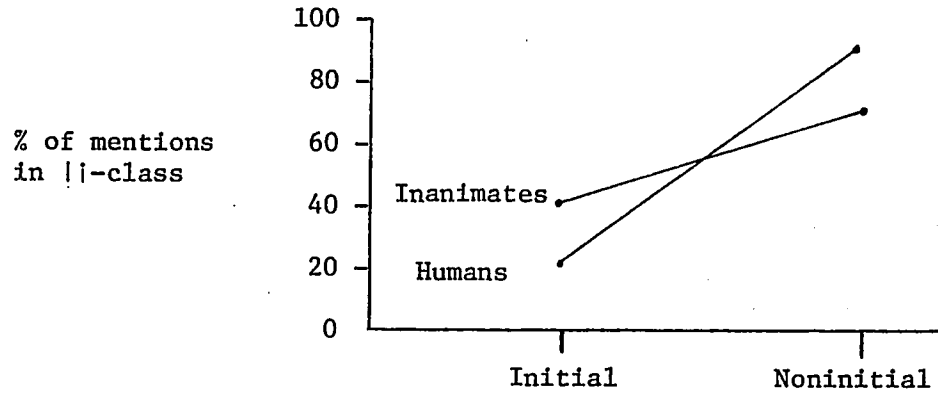In this sentence the speaker makes initial mentions of two new

% of mentions
in |i-class

Figure 7.7. Definiteness: Humans vs. Inanimates

% of mentions
as zero-form
noun
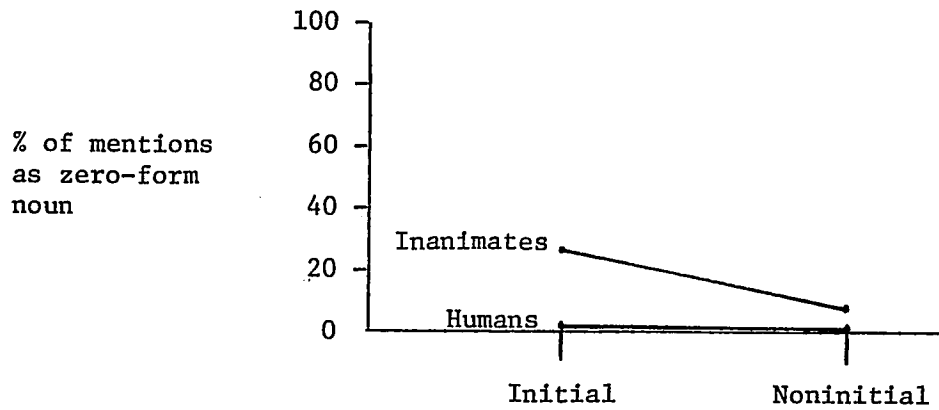
Figure 7.8. Nonreferentiality: Humans vs. Inanimates
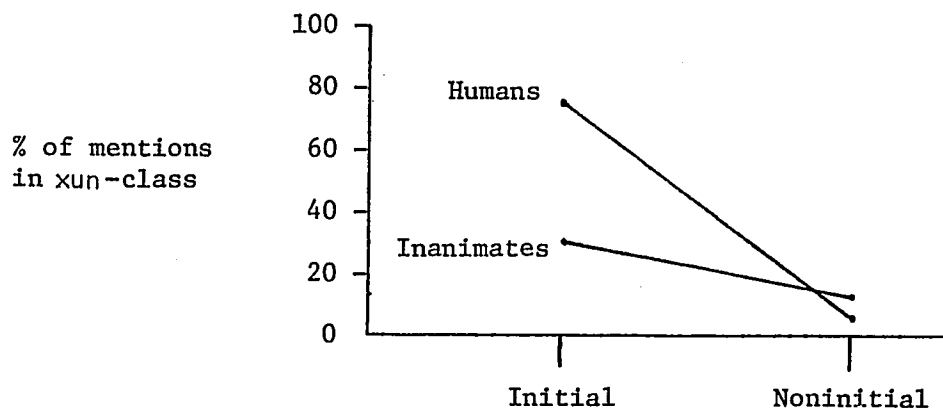
% of mentions
in xun-class

Figure 7.9. xun-Class: Humans vs. Inanimates

participants in the narrative, a boy and his bicycle. The human is

introduced with xun, whereas the inanimate is introduced with a zero-

form. In a later sentence in the narrative, noninitial mentions of the

same two participants occur:

5. ...∅-ri̱-ya²-m [14th] kan bisiklé:ta [3rd]
       B3-A3-put-Pf   Dir bicycle

    '...(where) he had left (the) bicycle'

The human has shifted from xun-class to li-class, whereas the inanimate

has undergone no shift at all, remaining in the zero-form:

Mention #	Bike boy	Bicycle
(First)	xun ak'a:l	misiklé:ta
(Nonfirst)	ri- (def. pro.)	bisiklé:ta

This illustrates the variable salience of continuity of identity. For

more salient narrative participants it is important for the speaker to

let the hearer know whether a particular mention is considered non-

identifiable (as is frequently true of initial mentions), in which case

the hearer will need to open a new cognitive file for the referent, or

identifiable (generally true of noninitial mentions), in which case he

will need to trace it back to a previously opened cognitive file. To

achieve this pragmatic distinction, the difference between initial and

noninitial mentions must be overtly marked. This contrast was marked

for initial and noninitial mentions of the boy in Examples 4 and 5;

Figure 7.7 shows that this is typical for humans. But for less salient

narrative participants, the speaker may consider it unnecessary to mark referents as identifiable or nonidentifiable, even though this will make it difficult for the hearer to determine whether he is faced with a new participant or one whose identity must be traced back to a previously introduced participant. For bicycles, such tracing is not always salient, as Examples 4 and 5 show. The zero-form noun is used for both initial and noninitial mentions and hence cannot mark the contrast of identifiable vs. nonidentifiable. As in English (Du Bois 1980a), the zero-form in Sacapultec is used primarily for inanimates, whose continuity of identity is often not salient enough to trace. As Figure 7.8 shows, only inanimates are mentioned with zero-forms, whether on initial or noninitial mention.

Turning to Figure 7.9, which is roughly the inverse of Figure 7.7, the slope of the line is again much greater for humans than for inanimates. The very clear demarcation of human mentions into initial (xun-class) and noninitial (non-xun-class) allows the hearer to readily distinguish whether a human is considered identifiable or not, and thus to appropriately trace identity. For inanimates, on the other hand, relatively few are xun-class on initial mention and only slightly fewer are so on noninitial mention, so that a xun-class mention does not contribute greatly to the possibility of tracing the identity of inanimates.

Returning to human participants, we observe in Figures 7.7--7.9 that on

initial mention most human referents are marked with xun-class, whereas

the remainder are marked with li-class (never zero-form). Examination

of the li-class mentions shows that these humans are generally identi-

fiable, either through previous mention or contextual information,

allowing use of a li-class mention. For initial mentions of humans,

then, the function of the articles li and xun is seemingly equatable

with a definite-indefinite distinction. If this were so, however, all

mentions after the first introduction should be in the li-class.

Although this is nearly true for humans, a significant 8 percent of

humans remain in xun-class on noninitial mentions. What then is the

function of xun in these residual cases?

Examples of noninitial use of xun occurred above in sentences

2 and 3. In Example 2, xu:n 'the other one' is a noninitial (eighth)

mention. It occurs at the close of a scene involving two boys, one of

whom rewards the other with three pears for returning his lost hat.

The function of xu:n is clear if the context of the immediately pre-

ceding clause is considered:

6. i   Ø-Ø-b'e:k
    and   Asp-B3-go

    'And he left,

    i   Ø-Ø-ȼalax-u:l   xu:n
    and   Asp-B3-return-Dir   Art

    'and the other one returned'   (Speaker 10)

In this example, the noninitial pronominal xu:n reference to a third

person participant immediately follows a definite pronoun reference

(zero Set B) to another third person participant. The function is

apparently to mark a shift to a new referent. In the following example,

the same switching function is attested twice, for the plural xun-class

article nik^y'ax and for the diminutive article xunax. Again, there are

two third person referents in the scene, although in this case one of

the third person referents is a group of boys. The two participants

are distinguished here as P_i and P_{ii}.

7. ∅-∅-b'e:k [P_i:6th]
Asp-B3-go

'He left,

entó:nses <u>nik^y'ax al'-o:m</u> [P_{ii}:4th] š-e:-b'e-k,
then   Art   boy-Pl   Asp-B6-go

'then <u>the other boys</u> left,

i   ∅-∅-b'ek   <u>xun-ax la:b'</u> [P_i:7th]
and Asp-B3-go Art-Dim boy

'and <u>the other boy</u> left.' (Speaker 1)

Schematically, the three successive mentions can be indicated as fol-

lows:

Clause	Referent = P_i	Referent = P_{ii}	Reference Type
1	*		li-class
2		*	xun-class
3	*		xun-class

Although all mentions are noninitial, the two that switch reference

from one participant to another are xun-class, whereas the one that does

not is Ii-class. (Immediately preceding the first reference to P_i

shown in Example 7 is another reference to the same participant.)

Thus both pronominal and article forms of xun-class reference types

act, on noninitial mention, as a type of switch-reference marker.[4]

A third apparent function of xun (in addition to the "indefinite"

and switch reference functions) is illustrated in Example 3, reproduced

in part below. In this speaker's narrative, the pear-picker is intro-

duced with initial xun (xun ačeŋ 'a man'), after which a half-dozen

definite Ii-class mentions follow. After a long period in which the

plot centers on other characters, during which the pear-picker is not

mentioned once in 23 clauses, the plot finally returns to the pear-

picker.

8. kwa:ndo   ∅-∅-qa:x-u:l   <u>xun ačeŋ</u> [8th]
    when   Asp-B3-descend-Dir Art man

    '...when <u>the man</u> came down...' (Speaker 1)

Note that xun cannot be considered to mark a return of the pear-picker

to indefinite (nonidentifiable) status, for this would in effect demand

that the hearer open a new cognitive file for a participant not pre-

viously introduced in discourse. What is marked, rather, is the

resumption of an old topic that has not been mentioned in some time.

The question arises whether a single unified function underlies

the three superficially distinct xun-class functions, which may be

labeled:

    In initial position: (a) "indefinite" introduction

    In noninitial position: (b) topic switch

                            (c) topic resumption

One pragmatic feature that could perhaps unite these is "new," in Chafe's sense of "not presently activated in consciousness" (Chafe 1976). This clearly applies to the "indefinite" and topic resumption functions, for in both cases the referent marked by xun is assumed to be not presently activated in the hearer's consciousness; in the first case because it has not yet been introduced, in the second because it has lapsed from active consciousness as a result of emphasis on other narrative participants. But instances of the topic switch function (e.g. Example 7) are not subsumed under the strict sense of "new," because it is unlikely that a referent should fade from consciousness in the space of a single clause. A more appropriate unifying function would be simply "theme switch" itself.[5] This may apply to initial mention introductions, which represent a change from a previous theme or from no theme at all, and to theme resumption, switching from the most recent theme to an earlier theme.

We began this section by inquiring whether the Sacapultec articles could be equated with articles in languages like English, where an opposition between definite and indefinite is marked by two paired forms. The Sacapultec forms Ii and xun, however, rather than

expressing positive and negative values for the parameter of definiteness, are found to mark values in two distinct parameters. They may be defined as follows:

li + definite

xun + theme switch

The most tangible evidence that these articles mark two distinct parameters is that both may occur in a single noun phrase, each marking a distinct pragmatic function. When a mention represents a switched theme that is identifiable, both parameters are optionally marked, in a double article construction:

li xun N + theme switch
+ definite

(xun alone may also be used, leaving definiteness unspecified). The double article construction of Sacapultec is seen in the following example:

9. i š-∅-∅-k'am [P$_i$:38th] išeb' nik^y'ax pe:ra
   and Asp-B3-A3-take   three Art   pear-Pl

   'And <u>he</u> took three of those pears,

   ∅-∅-r̲-sipax [P$_i$:39th] kan če li xun ala:b' [P$_{ii}$:8th]
   Asp-B3-A3-give   Dir to Art Art boy

   'and <u>he</u> gave them to <u>the boy</u>.' (Speaker 10)

In summary, although the Sacapultec article li marks definiteness, there is no indefinite article opposed to it. The function of

introducing nonidentifiable referents into a narrative is performed by
the thematic article xun, which also performs other functions.
Other members of the li- and xun-classes mark definiteness and theme
switch, respectively, along with other parameters such as diminutive,
plural, and possession. Noun phrases marked solely with xun are
unspecified for definiteness, so that the definite article li may be
nonredundantly added to specify definiteness. The zero-form reference
type, which has roughly the same frequency on initial and noninitial
mentions, does not mark referents for traceable continuity of identity,
and so is used exclusively (in this small corpus) with semantically
and syntactically nonsalient or peripheral referents (that is, inani-
mate nonsubjects), for which the continuity of identity is typically
less salient to the narrative. (Also, to some extent the identity of
such referents is determinable without any marking through identifying
an associated frame). Finally, the semantic class of a referent con-
tributes to the syntactic role chosen for it, and determines the like-
lihood that its continuity of identity will be overtly traced using
li- and xun-class noun phrases.

Notes to Chapter 7

1. Portions of this section were presented in several earlier ver-
   sions at the 79th Annual Meeting of the American Anthropological
   Association in Washington, D.C., on December 6, 1980, and at the
   West Coast Mayan Symposium, held in Santa Barbara, California
   on April 25, 1981. I am thankful for the comments made at those
   meetings.

2. The Ii-class mentions for body parts and clothes were primarily,
   as one would expect, possessed nouns. Since possessed nouns have
   identifiably distinct conditions of occurrence from other Ii-class
   mentions, it would for some purposes be desirable to tabulate them
   separately as a distinct class. For present purposes, however, it
   will be seen that it is most edifying to group possessed nouns with
   other Ii-class mentions.

3. In the briefest possible terms, the connection with the discourse
   basis of ergative morphology is as follows. Text counts show that
   Sacapultec clauses converge on one predominant pattern of overt
   argument occurrence, that of a verb followed by a single noun
   phrase. This pattern holds whether the verb is intransitive or
   transitive; but for intransitives the single argument is most com-
   monly the subject, while for transitives it is the object. These
   arguments together constitute the absolutive category. In Saca-
   pultec (as in Mayan languages generally) the absolutive is the un-
   marked category, represented in the third singular by a zero
   morpheme. Given the principle of economy (demonstrable at least
   for Sacapultec) whereby a referent will tend to have one and only

one nonzero manifestation, the most economical distribution of
agreement morphology is that which assigns the one zero morpheme
available in the paradigm to the absolutive category, whose mem-
bers will in any case tend to occur as overt noun phrases.

The preference of human transitive subjects for noninitial
mentions reflects their definite and hence pronominalizable status,
once they have been introduced with an intransitive verb and a
full noun phrase (plus associated zero third person absolutive
agreement). The typical transitive sentence allows the economy-
of-markedness principle to operate effectively: the agent is human,
given, and definite (having been introduced previously) and is
marked by a (nonzero) third person ergative prefix on the verb; the
patient is inanimate and new, and is marked by a full noun phrase,
with associated (zero) third person absolutive agreement on the
verb. In both cases, there is one and only one nonzero manifesta-
tion of the referent.

4. The switching function discussed in these pages is similar to what
   has been discussed as "switch-reference" (e.g. in Yuman languages);
   however, it is also clear that there are important differences from
   canonical switch reference.

5. The term "theme" here is used in a sense distinct from that of the
   Prague School, Halliday, and others, and more in line with that of
   Johanna Nichols (personal communication), though I cannot guarantee
   equivalence with her usage. "Theme", in my sense, is the partic-
   ular about which knowledge is added over a significant stretch of
   discourse (often over many sentences). This "theme" function is

based on that described by Chafe (1976) for "subjects" (which I call "primes", to avoid confusion with the usual grammatical definition of "subject") but with the additional feature of persevering over a stretch of discourse. One can think of theme as constituting a "hero" slot. The immediate relevance to the matter of Sacapultec articles is that there is a presumption that a theme, once established, will continue. The article xun is used if this presumption must be violated, to signal that a new referent is being established in the theme/hero slot, necessarily displacing the previous one (if there was one).

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