

A GRAMMAR OF LAGUNA KERES

BY

JORDAN LACHLER

B.A., Linguistics, SUNY-Buffalo, 1993

M.A., Linguistics, SUNY-Buffalo, 1996

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

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Jordan Lachler

Candidate

Linguistics

Department

**This dissertation is approved, and it is acceptable in quality
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Approved by the Dissertation Committee:

Melissa Riebold

Chairperson

Jan L. Bybee

Shun Whof

Jule Gómez de García

Accepted:

Amy B. Wohlet

Dean, Graduate School

APR 15 2006

Date

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ABSTRACT

The Laguna Keres language is spoken by approximately 1,000 people at Laguna Pueblo, west of Albuquerque, New Mexico. It is a member of the small Keresan language family, one of the most under-documented language families in North America.

Laguna is a polysynthetic, split-intransitive tonal language, with discourse-driven constituent order. It is typologically interesting in several ways, including the presence of a series of phonemic voiceless vowels, the grammaticization of mood as an obligatory inflectional category for verbs, and the use of an obviation-like system for tracking and disambiguating reference in transitive clauses.

This dissertation, based on fieldwork with fluent speakers as well as a very large corpus of texts collected by Franz Boas in the 1920's, provides a basic description of the major phonological, morphological and syntactic patterns in the language. Much of the terminology used in earlier works on Keresan is updated and clarified, and revised analyses are offered for several important grammatical phenomena.

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Chapter 1

The Laguna Keres Language

1.1 The Language Setting

The Laguna Keres language, *K'awaigame Dzeenyi*, is spoken by several hundred residents of Laguna Pueblo, located roughly 45 miles west of Albuquerque, New Mexico.

At the present time, there are approximately 1,000 speakers and understanders of Laguna Keres, representing for the most part the oldest quarter of the population of 4,000 or so Pueblo residents. There are another 4,000 enrolled tribal members who live outside the Pueblo, mostly in Albuquerque or in other communities across the state. The Pueblo itself is composed of six villages: Encinal, Laguna, Mesita, Pagate, Paraje and Seama.

The most fluent speakers -- those who are fluent both in conversational styles of the language as well as its ceremonial use -- most likely number in the low hundreds, and are for the most part in their seventies or older. Very few middle-aged or younger residents of the Pueblo have conversational ability in the language. It is still possible to hear Laguna being spoken conversationally within the community, and in some households (without children) it is still the dominant daily language. And in ceremonial contexts, Laguna is still the preferred language. However, on any given day, nearly all the speakers of the language will speak more English than Laguna.

As such, Laguna Keres can be classified as an endangered language. Without a new generation of speakers, the language will likely no longer be spoken in another 30 years.

Laguna Keres forms part of the Keresan dialect chain. Versions of Keres are spoken at Acoma, Laguna, Santa Ana, Santo Domingo, San Felipe, Cochiti, and Zia Pueblos, all within the state of New Mexico. Most speakers and researchers alike recognize two clusters in the chain. The dialects spoken at the five eastern Pueblos along the Rio Grande -- Santa Ana, Santo Domingo, San Felipe, Cochiti, and Zia -- can be grouped together as Eastern Keres, while the two remaining dialects of Acoma and Laguna, which are far from the Rio Grande, can be grouped together as Western Keres.

All fluent speakers of Western Keres, whether they are from Acoma or Laguna, can understand each other. While speakers find it easy to recognize particular features which characterize someone as being from Laguna or from Acoma, they have no difficulty in conversing with one another. There are probably another 1,000 - 1,500 or so speakers and understanders of Acoma Keres, so we could say that the total number of speakers of Western Keres would be 2,000 to 2,500.

Western Keres speakers, however, do report difficulty in understanding Eastern Keres speakers. The degree of difficulty varies quite a bit, due in large part to how familiar the speaker is with the Eastern dialects. Some speakers who have had occasion in their life to spend time in the eastern Pueblos have relatively little trouble understanding Eastern

Keres, while others who have had only limited exposure to those dialects report that they often cannot follow all of what is being said. Ethnologue estimates 4,580 speakers for Eastern Keres.

From a linguistic standpoint, then, it would be possible to speak of a single Keresan language, spoken in a range of more-or-less mutually intelligible dialects. From a sociolinguistic perspective, however, it often makes more sense to think of these as seven separate languages (Acoma Keres, Laguna Keres, Santa Ana Keres, Santo Domingo Keres, San Felipe Keres, Cochiti Keres and Zia Keres) which together form the Keresan language family.

Whether Keresan is conceived of as one, two or seven languages, it is widely agreed that it is an isolate, with no known close relatives. The nearby language families within New Mexico include the Apachean branch of Athabaskan (Navajo, Western Apache, Jicarilla Apache) and Tanoan (Northern Tiwa, Southern Tiwa, Tewa, Towa), as well as the isolate Zuni. In neighboring states we also find Uto-Aztecan and Yuman languages. In terms of lexicon, phonology and grammar, it is clear that Keresan is not demonstrably related to any of these nearby families.

Keresan was listed as its own family as early as Powell's 1891 list of fifty-eight North America language families. Sapir (1929) lumped Keresan into his Hokan-Siouan stock, along with Hokan (Karuk, Pomoan family, Washo, Yuman, Salinan, Chumash, Seri,

Chontal, Tonkawa, Karankawa among others), Yuki, Tunican (including Atakapa and Chitimacha), Iroquois-Caddoan, and Siouan-Yuchi-Muskogean. Greenberg (1987) and Ruhlen (1991) both have Keresan in the megafamily Almosan-Keresiouan which includes Algic, Salish, Wakashan, Caddoan, Iroquoian, Siouan and Kutenai, as well as Keresan.

Comparing the classifications, the main overlap is with Siouan, Caddoan and Iroquoian, which themselves are now often thought of as forming a large and distantly related family (Chafe 19XX). This would seem to be the most promising direction for future work, and indeed there do seem to be at least some similarities between Keresan and Iroquoian in the areas of verbal structure.

1.2 Previous Research

Despite having a large number of speakers located within an hour or two's travel of a fairly large city, Keresan remains perhaps the least well-documented of the living language families of North America. To date, there have been four major works on Keresan, by Franz Boas (1925, 1928), Irvine Davis (1964), Wick Miller (1965), and Hilaire Valiquette (1990).

Boas's '*Keresan Texts*' was published in two parts as Volume VIII of the Publications of the American Ethnological Society. "Part I", which contained only the English

translations of the texts, was published in 1928. Somewhat surprisingly, "Part II", which contained only the original Keresan texts with no English translation, had been published three years earlier in 1925, roughly four years after the end of Boas's fieldwork for the volume. The series editor for the AES was Franz Boas, himself. Both parts were republished by AMS Press in 1974.

Although the volume is entitled *Keresan Texts*, Boas makes it clear that all of the texts were collected from members of the Pueblo of Laguna, speakers of Western Keres. This is further borne out by an examination of the texts themselves, which clearly show that they were told by speakers from Laguna. In total there are 75 texts, which cover 216 pages in typewritten English translation. As Boas noted in the preface, "The accompanying volume of texts is given without a vocabulary which it is expected will be published with a series of Cochiti texts." Neither the Cochiti texts nor the vocabulary were ever published, however.

This volume, in two parts, has the potential to be a tremendous resource for community members, fluent speakers, second language learners, anthropologists and linguists. However, even 30 years after it was republished by AMS, and nearly 80 after it first appeared, Boas's work has received surprisingly little attention. Because of this, I made an effort to include Boas's work as a primary data source for this dissertation. I will discuss this more in section 1.3 below.

Several decades passed before the next major work on Keresan would appear, Irvine Davis's (1964) *Grammar of Santa Ana Keres*. Davis's work, based on several years of fieldwork with one speaker from Santa Ana Pueblo, provides a reasonably thorough and detailed treatment of the major parts of Eastern Keres grammar. It also includes a small lexicon at the back, which, even today, remains the only published lexicon of any size on any Keresan dialect. Anything which Davis's sketch lacks in scope or detail is more than made up for by its clarity and accessibility, allowing the reader to develop a clear picture of the language in just the first reading.

Working at the same time as Davis, Wick Miller published his *Acoma Grammar and Texts* in 1965. Miller conducted his fieldwork with a variety of different speakers in the San Francisco Bay area while working at UC Berkeley. Along with a remarkably detailed and intricate analysis of the grammar, Miller also includes 37 texts with sentence-by-sentence translations, and 1 text with a word-by-word translation. Miller notes (165:189), "it is hoped the reader can provide his own analysis of the remaining texts by using the grammar in conjunction with a forthcoming dictionary." Much like Boas's dictionary, Miller's dictionary never made it to publication.

Miller's work is perhaps more thorough and detailed than Davis's, but his analyses were also significantly more abstract, relying on multiple interweaving layers of derivation and inflection, dozens of complex morphophonemic rules which interacted in subtle ways, and an overall style of presentation that was extremely analytical. As a result, Miller's

work can be nearly impenetrable at first, and even upon subsequent readings it is difficult to come away with a clear impression of how the language works. Nonetheless, Miller's grammar still stands, nearly a half century later, as the most detailed and sophisticated treatment of Keresan grammar.

Another quarter-century would pass before the next major work on Keresan was done, Hilaire Valiquette's (1990) University of New Mexico dissertation, *A Study for a Lexicon of Laguna Keresan*. Although it includes a lot of data from Valiquette's own fieldwork with Laguna speakers, this work is not a grammar, nor is it a lexicon. Rather, it is more of an assessment of the state-of-the-art in Keresan linguistics. It includes a sketch of Laguna grammar (pps. 8-159), a brilliantly thorough treatment of all the preceding work on Keresan languages up to that point in time, including a nearly page-by-page treatment of both Davis and Miller (pps. 160-337), a chapter on issues in the phonetics and phonology of Laguna (pps 437-504), and a chapter on "Word, Word Categories and Word Formation" (pps 505-680), among others.

Valiquette discusses all of the most important and vexing issues in Keresan grammar, including the role of tone, the structure of the verb, word class membership, the distinction between inflection and derivation, and many others. Rather than providing answers to any of these questions, Valiquette's work serves more often to clarify and crystalize the questions themselves, showing how the complexity of the data confounds various late 1980's models of phonology and morphology.

Like Miller's grammar, Valiquette's work is not inviting to the uninitiated reader, with its many hundreds of endnotes and confusing cross-references and indenting. However, both works are heartily rewarding for the reader who is willing to revisit a section several times, working through the examples and following the cross-references. I have benefited greatly from both of their works, as well as Davis's, as I hope will be clear in the chapters to follow.

1.3 This Dissertation

This dissertation has two main goals. The first is to provide a clear and accessible account of the major features of Laguna Keres grammar. The second is to offer an improved analysis of certain important features, such as the pronominal prefix system, verb subtyping and word order.

Work on this dissertation began in 2000 and was greatly aided by a Dissertation Improvement grant from the National Science Foundation, whose support I gratefully acknowledge. My fieldwork continued over a two year period from the fall of 2000 through the fall of 2002. During this time I was fortunate enough to work with several gracious and talented native speakers, including Ms. Clara Green, her husband Mr. Al Green, and their friends Mr. Virgil Reeder and Mr. Al Aragon. Their generosity, patience and good humor made our time together both enjoyable and memorable. I hope I have been able to do justice to their efforts here.

Along with working with present-day native speakers, I also assembled a database of Boas's texts from the 1920's. I was able to include 38 of the 75 texts, totalling 6965 sentences. Working with the Boas texts posed several challenges from the start. To begin with, the Keresan text is in one book and the English text is in another. While Boas did an admirable job of keying one text to another through the use of line numbering and other devices, integrating the two versions into a single database proved to be a non-trivial task.

Beyond this, the main challenge lay with Boas's transcription. Although he was able to record a huge amount of text during his fairly short visit to the region, he did not spend enough time with the language to grasp the full inventory of contrastive sounds. For instance, Boas failed to distinguish between the alveopalatal fricative /sh/ and the retroflex fricative /sr/, writing them both as <c>, and he also failed to recognize the glottalized series of nasals and glides. More importantly, however, Boas failed to note many of the voiceless vowels found so commonly in Laguna words. In some cases he wrote them with a superscript vowel; other times he simply noted aspiration on the preceding consonant; while other times he made no record of them at all. Vowel length and tone were also problematic areas.

Despite any of these transcriptional shortcomings, in most cases once the Laguna sentence had been matched up with its corresponding English sentence, it became relatively easy to fill in the missing pieces of Boas's transcription at least enough to make

it intelligible to modern day speakers.

In preparing this dissertation, then, I have used a combination of elicited data from modern speakers, and textual data from Boas's corpus from the 1920's. Wherever possible in this dissertation, I have used examples drawn straight from Boas's corpus to illustrate a point. These examples have been rechecked with current speakers as to their meanings, though not all of them were fully retranscribed, so there may be some remaining transcriptional errors carried over from the original texts. In other cases, I have used data from my own field sessions, or, where needed, forms from Valiquette and/or Miller's work.

1.4 Language Overview

Laguna's phoneme inventory is rather large, with several areally and cross-linguistically rare segments such as a set of retroflex fricatives and affricates, as well as a series of glottalized fricatives. Most notable is a set of phonemic voiceless vowels. Laguna also has somewhere between two and five tones, depending on one's analysis.

In terms of word classes, Laguna has distinct noun and verb categories, although it also has a fairly large number of roots which can serve as the basis for either nouns or verbs. Nouns do not distinguish case or number, but they can be inflected for a possessor, with distinct constructions for alienable and inalienable possession.

Verbs distinguish all of the following categories affixally: person, role, number, evidentiality, mood, polarity and aspect. The five categories of person, role, evidentiality, polarity and mood are expressed in a single portmanteau morpheme affixed to the front of the verb theme. The morphophonemics involved in the combination of the prefix with the verb theme are remarkably complex, and result in a large number of conjugation classes.

Laguna distinguishes three persons, plus an indefinite. There are two roles, actor and undergoer, and five moods: direct, negative direct, indirect, negative indirect and imperative. Person, role and mood are obligatorily marked on all finite verbs. Tense and aspect are much less central components of the verb system, and are never obligatory.

Argument marking is based on a split-intransitive pattern, with some subjects being marked as actors and others as undergoers. There is also a topicality hierarchy, where only the most topical argument(s) will receive overt coding in the morphosyntax.

In number, Laguna makes a consistent distinction between singular, dual and plural. Depending on the verb, number is expressed either by a prefix, a suffix or both. Note that number marking is completely separate from person marking in Laguna. Many verbs, especially intransitives, have suppletive forms for different numbers.

Along with the main class of verbs which typically take inflectional prefixes, there are

also several classes of verbs which always require inflectional suffixes. These suffixes evolved from a variety of different auxiliary verbs which have now cliticized with their bound complements, creating new subclasses of verbs. These classes are generally quite small and closed. Beyond these two types, Laguna also has four auxiliary verbs and a series of classificatory handling verbs.

Although Laguna lacks noun incorporation of any sort, the sheer amount and complexity of the verbal morphology mean that Laguna is best characterized as a polysynthetic language.

Word order within the phrase and phrase order within the sentence are quite free in Laguna. Adjectives, demonstratives, quantifiers and relative clauses can all occur either before or after their head noun. Adverbs tend to occur before the verb, but subjects and objects can appear either before or after the verb, with newer information occurring pre-verbally and older information occurring post-verbally.

Chapter 2

Phonology

2.1. Introduction

In this chapter, we will look at the sound system of Laguna Keres. In §2.2 we discuss the phonemic inventory, in §2.3 the phonotactics, in §2.4 the syllable structure and finally in §2.5 the accentual system.

2.2 Segmental Inventory

Laguna has a large phonemic inventory, with a total of 52 phonemes – 37 consonants and 15 vowels.

2.2.1 Consonants

The consonant inventory for Laguna Keres is shown below in Table 2.1.

		BILABIAL	ALVEOLAR	PALATAL	RETROFLEX	VELAR	GLOTTAL
STOPS	<i>plain</i>	b	d	dy		g	'
	<i>aspirated</i>	p	t	ty		k	
	<i>glottalized</i>	p'	t'	ty'		k'	
FRICATIVES	<i>plain</i>		s	sh	sr		h
	<i>glottalized</i>		s'	sh'	sr'		
AFFRICATES	<i>plain</i>		dz	(j)	dr		
	<i>aspirated</i>		ts	ch	tr		
	<i>glottalized</i>		ts'	ch'	tr'		
NASALS	<i>plain</i>	m	n	(ny)			
	<i>glottalized</i>	m'	n'	(ny')			
GLIDES	<i>plain</i>	w		y			
	<i>glottalized</i>	w'		y'			
FLAPS	<i>plain</i>		r				
	<i>glottalized</i>		(r')				

Table 2.1: Consonant Inventory

The symbols used in Table 2.1, and throughout this grammar, are the orthographic symbols commonly used by community members writing in Keres.

2.2.1.1 Stop Consonants

Laguna has a total of 13 distinctive stop consonants, occurring in three series: plain,

aspirated and glottalized.

The plain stops are voiceless and unaspirated. There are five of them in Laguna, occurring at the bilabial /b/, alveolar /d/, palatal /dy/, velar /g/ and glottal /ʔ/ points of articulation.

- | | | |
|----------------|---------------|------------------------|
| (1a) Bilabial: | binyi | <i>'from the west'</i> |
| (1b) Alveolar: | damu | <i>'flea'</i> |
| (1c) Palatal: | dyaami | <i>'eagle'</i> |
| (1d) Velar: | guw'aa | <i>'how?'</i> |
| (1e) Glottal: | (ʔ)ee | <i>'and'</i> |

Glottal stops do occur in word-initial position phonemically, but they are not written in that position in the popular Laguna orthography. We follow that practice here.

All five plain stops are also found in word-medial position.

- | | | |
|----------------|---------------------|-----------------------------|
| (2a) Bilabial: | ubewi | <i>'food'</i> |
| (2b) Alveolar: | n'aishjiya | <i>'father!'</i> (vocative) |
| (2c) Palatal: | adyeemasidye | <i>'I'm dirty'</i> |
| (2d) Velar: | m'aagidra | <i>'stepdaughter'</i> |
| (2e) Glottal: | ga'ashji | <i>'their (dl) feet'</i> |

Aspirated stops are also voiceless, but have a significantly delayed voice onset time. They occur at the bilabial /p/, alveolar /t/, palatal /ty/ and velar /k/ places of articulation. There is no aspirated stop corresponding to the plain glottal stop.

- (3a) Bilabial: **piguya** *'set it down!'*
- (3b) Alveolar: **taama** *'five'*
- (3c) Palatal: **tyidyyaha** *'northeast'*
- (3d) Velar: **kacha** *'it rained'*

All four aspirated stops are found in word-medial position.

- (4a) Bilabial: **dyuupi** *'badger'*
- (4b) Alveolar: **gataaya** *'moonlight'*
- (4c) Palatal: **dyaatya** *'cottontail rabbit'*
- (4d) Velar: **kayukayuka** *'it keeps breaking'*

Glottalized stops are those stops which are accompanied by a glottal closure and release. They occur at the bilabial /p', alveolar /t', palatal /ty' and velar /k' places of articulation.

- (5a) Bilabial: **P'ashayaanyi** (name)
- (5b) Alveolar: **t'uutyiitra** *'he/she used it all up'*
- (5c) Palatal: **ty'e'eyu** *'they (dl) went'*

(5d) Velar: **k'ats'i** *'it is deep'*

All four glottalized stops are found in word-medial position.

(6a) Bilabial: **y'aap'eetyidyunyi** *'icicle'*

(6b) Alveolar: **hait'a** *'whence? where from?'*

(6c) Palatal: **sity'e'eyu** *'we (dl) went'*

(6d) Velar: **kuk'umishu** *'eight'*

While many of the Native languages of the American southwest have a series of glottalized stops, from my own field experience there is rather marked variation in how these sounds are produced. While the glottalization of stops in Athabaskan languages such as Navajo and Jicarilla Apache is quite strong and perceptually salient, the glottalization of stops in the Puebloan languages of the Keresan and Tanoan families appears to be much weaker -- that is, the delay between the oral and glottal release in the Athabaskan languages is impressionistically much longer than in the Puebloan languages.

This phenomenon may be what is behind the following quote from Miller (1965:12):

Acoma is a lenis language. This feature is characteristic in the speech of Acomas whether speaking Acoma or English. The principal objection to my pronunciation of Acoma was that I spoke with too much force.

To my knowledge, no comparative phonetic studies have been carried out on this issue, but it seems likely that the weaker glottalized stops may be an areal feature common to the language families with a longer period of shared contact in the region, while the stronger glottalized stops are found only in the more recently arrived Athabaskan languages.

2.2.1.2 Fricative Consonants

There are seven fricative phonemes in Laguna occurring in two series: plain and glottalized. Note that there are no phonemically voiced fricatives in Laguna.

The first series, the plain fricatives, are voiceless. They occur at the alveolar /s/, palatal /sh/, retroflex /sr/ and glottal /h/ places of articulation. All four plain fricatives are found word-initially.

- | | | |
|-----------------|----------------|-----------------------|
| (7a) Alveolar: | seech'a | <i>'I'm warm'</i> |
| (7b) Palatal: | shina | <i>'louse'</i> |
| (7c) Retroflex: | sraami | <i>'correctly'</i> |
| (7d) Glottal: | hanu | <i>'clan, people'</i> |

All four are likewise found word-medially.

- | | | |
|----------------|-----------------|--------------|
| (8a) Alveolar: | shch'isa | <i>'six'</i> |
|----------------|-----------------|--------------|

- (8b) Palatal: **ruunyishi** *'Monday'*
 (8c) Retroflex: **dyiisra** *'elk'*
 (8d) Glottal: **srkuhima** *'I believe'*

The three remaining fricatives are glottalized. They occur at the alveolar /s'/, palatal /sh'/ and retroflex /sr'/ places of articulation. There is no glottalized counterpart for /h/.

- (9a) Alveolar: **s'iupi** *'my forehead'*
 (9b) Palatal: **sh'ee** *'so then...'*
 (9c) Retroflex: **sr'aguya** *'I sat you down'*

Glottalized fricatives also occur word-medially.

- (10a) Alveolar: **maaginas'a** *'I got the car'*
 (10b) Palatal: **chush'uwi** *'he put on his shoes'*
 (10c) Retroflex: **dyiisr'atra** *'he named him'*

Glottalized fricatives are a typologically rare class of sounds (Ladefoged and Maddieson 1996:178), although they have an interestingly wide geographical spread, including North America (Tlingit, Laguna), Africa (Hausa, Amharic) and the Pacific (Yapese).

2.2.1.3 Affricate Consonants

There are nine affricates in Laguna. They are divided into three series, analogous to those found with stops: plain, aspirated and glottalized.

The three plain affricates are voiceless and unaspirated. They are found at the alveolar /dz/, palatal /j/ and retroflex /dr/ places of articulation.

(11a) Alveolar: **dzaasrk'a** *'his/her jaw'*

(11b) Palatal: **jiiri** *'chile'*

(11c) Retroflex: **driisishu** *'it's small'*

The plain affricates also occur word-internally.

(12a) Alveolar: **dzaadzi** *'not'*

(12b) Palatal: **kujaaru** *'spoon'*

(12c) Retroflex: **amuu-awadrumany'i** *'prayer'*

The status of /j/ deserves some comment. Aside from its occurrence in the cluster /shj/ (see below), the only examples of /j/ seem to occur in loanwords such as **jiiri** *'chile'*. As such, /j/ was most likely missing from the native phonemic inventory, even though it fits in quite symmetrically with the rest of the consonant system.

There are three aspirated affricates at the same places of articulation: alveolar /ts/, palatal

/ch/ and retroflex /tr/. All three are found word-initially.

- (13a) Alveolar: **t**saamusha *'his beard'*
(13b) Palatal: **ch**ama *'first light (before sunrise)'*
(13c) Retroflex: **tr**idraasrka *'are you (pl) having a nice day?'*

Likewise, all three occur word-internally.

- (14a) Alveolar: **k**ayukayutsa *'he/she broke it deliberately'*
(14b) Palatal: **w'**achinyi *'tongue'*
(14c) Retroflex: **iy**atra *'children'*

The remaining three affricates are glottalized, again at the same places of articulation:

alveolar /ts'/, palatal /ch'/ and retroflex /tr'/.

- (15a) Alveolar: **ts'**iy'aama *'door'*
(15b) Palatal: **ch'**uguya *'sit down!'*
(15c) Retroflex: **tr'**anaaya *'do you have a mother?'*

All three also occur word-medially.

- (16a) Alveolar: **k'**ashjaats'i *'rainbow'*

- (16b) Palatal: **dzach'a** *'his/her tooth/teeth'*
 (16c) Retroflex: **hauhaukitr'a'a** *'you (dl) yawned'*

2.2.1.4 Nasal Consonants

There are four nasal consonants in Laguna. There are two plain, voiced nasals, occurring at the bilabial /m/ and nasal /n/ places of articulation. Both can occur word-initially.

- (17a) Bilabial: **miisru** *'already'*
 (17b) Alveolar: **nupegu** *'he/she will eat'*

They likewise can occur word-medially.

- (18a) Bilabial: **s'amaaka** *'my daughter'*
 (18b) Alveolar: **dyaana** *'four'*

There are two corresponding glottalized nasals, one bilabial /m'/ and one alveolar /n'/. Both can occur word-initially.

- (19a) Bilabial: **m'iishchai** *'ashes'*
 (19b) Alveolar: **n'aaya** *'mother!' [vocative]*

Both also occur word-medially.

(20a) Bilabial: amuusrgum'a 'he loves me'

(20b) Alveolar ty'aan'a 'he said'

Furthermore, /n/ and /n'/ have palatal allophones /ny/ and /ny'/ which occurs before the front vowels /i/ and /e/, and which are written in the orthography used here.

(21a) anyee 'nice, pleasing'

(21b) ee-ny'idraagu 'he will do thus'

The glottalization on the nasal consonants is typically realized as a glottal stop [ʔ] before the nasal itself, similar to the glottalized nasals found in Montana Salish and !Xóǝ (Ladefoged and Maddieson 1996:109-110). For example:

(22a) taam'a [tʰá:ʔma] 'five'

(22b) ty'aan'a [c'á:ʔna] 'he said'

Nonetheless, I choose here to follow the current popular orthography for Laguna and write these sounds as <m'> and <n'>, with the apostrophe following the nasal.

2.2.1.5 Glide Consonants

There are four glide consonants in Laguna. The two plain, voiced glides occur at the bilabial (or, better, labiovelar) /w/ and palatal /y/ places of articulation. Both plain glides can occur word-initially.

(23a) Labiovelar: **wiityisrk'aatsi** *'I'm angry'*

(23b) Palatal: **yuunyi** *'song'*

Both also occur word-medially.

(24a) Labiovelar: **tamawa** *'five times'*

(24b) Palatal: **dyuya** *'twice, two times'*

The two glottalized glides occur at the same places of articulation as their plain counterparts: labiovelar /w'/ and palatal /y'/. Both can occur word-initially.

(25a) Labiovelar: **w'its'inyi** *'chest (unattached)'*

(25b) Palatal: **y'aasi** *'shell'*

Both also occur word-medially.

(26a) Labiovelar: **dyuch'aw'a** *'you stole mine'*

(26b) Palatal: **kuguy'ani** *'they (dl) sat'*

Just as with the nasals, the glottalized glides are typically realized as a glottal stop [ʔ] followed by the glide. For example:

(27a) dyuch'aw'a [cu•ʔáʔwa] 'you stole mine'

(27b) kuguy'ani [kʰukúʔyan•ʔ] 'they (dl) sat'

Like all the other glottalized sounds, however, they are written with the apostrophe following the consonant.

2.2.1.6 Flap Consonants

There are two flap consonants in Laguna, both quite infrequent. The plain, voiced alveolar flap /r/ occurs in word-initial position.

(28) Alveolar: ramushi 'earthworm'

It also occurs word-medially.

(29) Alveolar: rurasi 'peach'

Valiquette (1990) reports the existence of a glottalized alveolar flap /rʔ/. He notes that it is quite rare, and I have not found it in the speech of any of my consultants so far.

2.2.1.7 Consonant Clusters

The possibilities for consonant clusters in Laguna are quite limited. The only type of cluster which occurs is that of a plain fricative followed by a stop or an affricate. Table 3.2 shows the attested clusters.

FRICATIVE + BILABIAL	FRICATIVE + ALVEOLAR	FRICATIVE + PALATAL	FRICATIVE + VELAR
srb, srp, srp'	shd, sht, sht'	shj, shch, shch'	srg, srk, srk'

Table 2.2: Consonant Clusters

Note that where we would expect the fricative + stop sequences /shdy/, /shty/ and /shty'/, we find the fricative + affricate sequences /shj/, /shch/ and /shch'/ instead. Valiquette notes that this is a fairly recent phonetic development in the language, one which is not shared by the other Keresan languages.

All clusters occur word-initially.

- (30a) **srbiga** *'woodpecker'*
- (30b) **srpeemutri** *'snakeweed'*
- (30c) **srp'eruru** *'it's full to the brim'*
- (30d) **shduusru** *'bluebird'*

(30e)	shtuwishtuwiga	<i>'sandpiper'</i>
(30f)	sht'itsi	<i>'true, right'</i>
(30g)	shjatra	<i>'one's horn'</i>
(30h)	shchaamusha	<i>'one's beard'</i>
(30i)	shch'isa	<i>'six'</i>
(30j)	srgayach'ayuma	<i>'we (pl) are tired'</i>
(30k)	srkuhima	<i>'I believe'</i>
(30l)	srk'uumishchitsa	<i>'I blacked out'</i>

All clusters are also found in word-medial position.

(31a)	y'aasrbidranyi	<i>'brains'</i>
(31b)	k'unasrpidyuma	<i>'(in the) shade'</i>
(31c)	dyiwaisrp'a	<i>'it sprinkled'</i>
(31d)	dzaawishduutsa	<i>'he pinched her'</i>
(31e)	dzeishtaya	<i>'it's windy'</i>
(31f)	gusht'aanyi	<i>'pour it for me'</i>
(31g)	k'ashjaats'i	<i>'rainbow'</i>
(31h)	mishchitsi	<i>'it is black'</i>
(31i)	gushch'i	<i>'give me [a cup of] liquid'</i>
(31j)	ganasrgai	<i>'his/her head'</i>
(31k)	isrka	<i>'the other, another'</i>

(311) **tsiisrk'a** *'it is grey'*

Both Valiquette and Miller treat these clusters as having the underlying form /sC/, capitalizing on the fact that the place of articulation of the fricative can be wholly determined by the place of articulation of the following consonant. From an orthographic standpoint, however, nothing is gained by obscuring the actual pronunciation of the fricatives in these clusters, so I have chosen to spell them as they are actually pronounced, following current community practices.

2.2.2 Vowels

Phonemically, Laguna has both voiced and voiceless vowels.

2.2.2.1 Voiced Vowels

There are five basic voiced vowels:

/i/ high front unrounded

/e/ mid front unrounded

/ɨ/ high central unrounded

/a/ low back unrounded

/u/ high back rounded

Each of these vowels can occur either short or long, for a total of 10 voiced vowel phonemes. Since all words begin with a phonemic consonant, vowels do not occur word-initially in Laguna. However, all five short vowels are found word-medially.

- | | | |
|-------|-----------------|-----------------------------|
| (33a) | hama | <i>'when?'</i> |
| (33b) | hek'u | <i>'where to?'</i> |
| (33c) | shch'isa | <i>'six'</i> |
| (33d) | shupise | <i>'I spit'</i> |
| (33e) | suw'a | <i>'I killed them (pl)'</i> |

All five short vowels can also occur word-finally.

- | | | |
|-------|------------------|----------------------------|
| (34a) | dyiukacha | <i>'you saw me'</i> |
| (34b) | maame | <i>'very'</i> |
| (34c) | baanyi | <i>'sash'</i> |
| (34d) | idii'i | <i>'hot'</i> |
| (34e) | s'ekasru | <i>'hopefully, surely'</i> |

Likewise, all five long vowels can occur word-medially.

- | | | |
|-------|--------------------|-----------------------|
| (36a) | guwaachinyi | <i>'orange'</i> |
| (36b) | nyeechagu | <i>'it will rain'</i> |

- (36c) hiisrgai 'flint) knife'
 (36d) k̄isenyi 'I am red, blushing'
 (36e) pishuun'adze 'it's purple'

Long vowels are generally not found in word-final position with nouns and verbs in Laguna. This pattern does not hold for particles, several of which occur with word-final long vowels.

- (37a) dawaa 'good'
 (37b) guw'aa 'how?, in some manner'
 (37c) dzii 'what?, something'
 (37d) shchee 'because'

2.2.2.2 Voiceless Vowels

As Ladefoged and Maddieson (1996:315) note, "For vowels, the status of phonological contrasts between voiced and voiceless possibilities is not always clear." In the majority of languages which have voiceless vowels, it is uncontroversial that these are the result of low-level phonetic processes, typically serving to devoice short, unaccented, reduced vowels which occur between two voiceless consonants (e.g. the first vowel in English '*petunia*'). In such languages, it is clear that only the voiced vowels are phonemic, and that the voiceless vowels are allophonic (cf. the devoicing of high vowels between voiceless consonants in Japanese).

However, in a small minority of languages, the question is more complicated. This is particularly true in Keresan. Ladefoged and Maddieson (1996:315) make the observation about voiceless vowels that, "As a surface phonetic phenomenon they are an important areal feature of the Amerindian languages of the Plains and the Rockies." Besides Keresan, voiceless vowels are also a prominent (and controversial) feature of the phonology in Comanche (Uto-Aztecan), Cheyenne (Algonquian) and Arikara (Caddoan), among others. It's not clear that this quite rises to the level of an areal feature, particularly since none of the other Pueblo languages (Hopi, Zuni, Tanoan) nor the Apachean languages have voiceless vowels of this type. However, given the rarity of voiceless vowel systems, it is still noteworthy that they would be found in four unrelated language families in the same general geographical region.

Miller's (1966) analysis of Acoma and Valiquette's (1990) work on Laguna posit only voiced vowels as part of the underlying phonemic inventory. They both describe voiceless vowels as arising through the application of phonological rules, some of which are fairly complicated in their formulation, some of which are optional in their application, and some of which admit to lexical exceptions. Somewhat surprisingly, though, Miller and Davis (1963) reconstruct a set of phonemic voiceless vowels for Proto-Keresan. As such, the status of these voiceless vowels has been one of the most important outstanding questions in Keresan phonology.

2.2.2.2.1. The Trouble With Voiceless Vowels

The issue of voiceless vowels in Keresan in general, and Laguna specifically, is complicated by several factors. Firstly, the distribution of voiceless vowels is one of the salient differences between the dialects. When asked about the differences between the ways Lagunas and Acomas speak, several of my Laguna consultants offered as examples words which were the same in the two dialects except for the voicing of one of the vowels.

Secondly, as phonetic elements, voiceless vowels are difficult to transcribe. As Valiquette (1990) notes in his discussion on the history of linguistic work on Keresan, most early researchers missed the basic CV nature of the Keresan syllable (see §2.4 below), and as such they failed to record many of the voiceless vowels in their transcriptions.

Even once one recognizes that there is a vowel there, the quality of the vowel can be difficult to determine. All the voiceless vowels in Laguna are quite short, and being voiceless they have very little acoustic energy. As such, the quality of the vowel is most clearly expressed not by the vowel itself, but by its effect on the preceding consonant. Of the five vowels, voiceless /u/ is the easiest to recognize, since it causes lip rounding on the preceding consonant. Voiceless /a/ is also fairly distinct, at least in face-to-face situations, as the jaw is visibly lowered. The three remaining voiceless vowels, /i/, /e/ and /ɨ/, provide fewer acoustic (or visual) cues as to their identity. In practice, the only way to be sure of the vowel quality in such cases is to try to find a related word in which that vowel is not voiceless. Compare:

- (38a) ts'ipe 'he/she ate it'
(38b) ts'iubenyi 'he/she has been eating (at) it'

Note that voiceless syllables are indicated orthographically by underlining, as in (38a).

As noted above, Valiquette treats the voiceless vowels in Laguna as allophonic, derived via phonological rules from underlyingly voiced vowels. In the following sections, I will discuss his account, and provide a revised analysis of my own.

2.2.2.2 Valiquette's Derivational Account

Valiquette (1990) describes the phonological process of vowel devoicing as applying to all short, low tone vowels which are preceded by a non-glottalized obstruent, and which are followed by either another non-glottalized obstruent, or a word boundary. This rule of vowel devoicing then feeds a second rule of obstruent aspiration, which states that any obstruent occurring before a voiceless vowel will become aspirated. (Note that in the examples in this and subsequent sections, I will be including tone marking in the orthography, since it is germane to the topic at hand.)

For example, consider the word *dyúúpi* 'badger'. Under Valiquette's account, this word has an underlying phonemic representation of /dyúúbi/. This form then undergoes the rule of vowel devoicing, since the final /i/ is both short and low tone, is preceded by a non-

glottalized obstruent /b/, and is followed by a word boundary. This leads to an intermediate representation of /dyúúbi/. This form, in turn, is subject to the rule of obstruent aspiration, changing the /b/ into /p/ when it occurs immediately before the voiceless /i/. The combination of these two rules gives us the correct surface form, **dyúúpi**.

These two rules of vowel devoicing and obstruent aspiration, applied in that order, account for the large majority of fully voiceless syllables in Laguna. For example:

- | | | |
|-------|--------------------------------|---|
| (39a) | s'áúpakááwany'i | <i>'my axe'</i> |
| (39b) | kídráyape | <i>'you (pl) ate'</i> |
| (39c) | dyáámíhán<u>ú</u>sida | <i>'I am Eagle clan'</i> |
| (39d) | dziwááhímatyishe | <i>'those who believe, the believers'</i> |
| (39e) | dziú<u>m</u>ishchitsita | <i>'he/she is fainting'</i> |

However, there are a number of problematic cases which do not seem to fit this general pattern. I discuss each of these below.

2.2.2.2.1 The Role of -' in Devoicing

Following the rules given above, the presence of -', a glottal(ized) obstruent, serves to block the application of the vowel devoicing rule. Take for instance the following word

(40) kidra'ány'i 'your (dl) bodies'

Here, we might expect the second syllable /dra/ to devoice and aspirate to /tra/. However, this is blocked by the presence of a /' in the onset of the following syllable. Likewise, consider this example:

(41) káa'ape 'they (dl) ate'

Here again, we might expect the second syllable /'a/ to devoice to /'a/, but this change is blocked by the presence of /'/. Thus, whether before or after the target vowel, /' serves to block the application of the vowel devoicing rule.

An exception to this pattern is found, however, in the case of reduplication. Compare the following forms:

(42a) ésuse 'I sneezed (once)'

(42b) ésu'ésuse 'I sneezed alot'

(42c) ésu'ésusidye 'we sneezed'

In these cases, note that the second syllable /su/ is fully devoiced to /su/, even when the next syllable has a -' in the onset. To accommodate these data, it would appear that we would need to order the rule of reduplication after the rules of vowel devoicing and

Here, in an environment closely analogous to the one seen above for **ganásrgai**, the final diphthong does indeed devoice. There are a couple of possible ways to deal with this example. Firstly, it could simply be treated as a lexical exception. Secondly, it could be that there is some property of the hortative verb construction (or perhaps, more specifically, the prohibitive construction), which allows diphthongs to undergo devoicing. Either way, it is a complication for the basic rule of vowel devoicing.

2.2.2.2.3 Lexical Exceptions

Beyond these two cases discussed above, both of which could arguably be handled in one way or another by appealing to the morphological status of the words involved, there are quite a few other words where the devoicing and aspiration rules simply fail to apply, for no clear reason. For example:

(45a)	srbíga	(not: *srbíka)	<i>'woodpecker'</i>
(45b)	édze	(not: *étse)	<i>'and'</i>
(45c)	guúdyi	(not: *guútyi)	<i>'give it to me'</i>
(45d)	sewínusrka	(not: *sewínusrka)	<i>'my heart'</i>
(45e)	srk'uípe	(not: *srk'uípe)	<i>'my ear'</i>

Valiquette (1990:28) noted that most of the exceptional words are not verbs, but are instead names (e.g. *'woodpecker'*), body parts or function morphemes such as conjunctions.

However, the patterns are not that clear. Compare, for instance, **srbíga** 'woodpecker', which fails to devoice, with **dyúúpi** 'badger', where devoicing does take place.

Valiquette suggests as a possible solution that non-devoicing vowels are actually marked with a "positive low tone", and that it is only vowels which lack any specification for tone whatsoever which are subject to the rule of devoicing. Under this proposal, the phonemic form of the five examples given above would be as follows:

- | | | |
|-------|--------------|-----------------|
| (46a) | /srbígà/ | 'woodpecker' |
| (46b) | /édzè/ | 'and' |
| (46c) | /guúdyì/ | 'give it to me' |
| (46d) | /sewínusrkà/ | 'my heart' |
| (46e) | /srk'uípè/ | 'my ear' |

There are several problems with Valiquette's approach to voiceless vowels in Laguna. In the following section, I outline my own revised proposal for how to deal with them.

2.2.2.2.3. A Revised Account

The basic crux of the problem with voiceless vowels in Laguna is that they are, by and large, quite predictable in their distribution. The basic rule, as formulated by Valiquette, does account for the vast majority of cases of devoiced vowels in the language. However, as seen

above, it still leaves a notable minority of cases where vowels devoice unexpectedly, or unexpectedly fail to devoice. Given these facts, we have to take voiceless vowels as being phonemic in Laguna.

However, a better approach would be to eschew the generative model altogether, and rely on a usage-based framework, such as that put forth by Bybee (2001). Under this approach, instead of relying on a single underlying form for each lexical item, all phonetic variations of an item which the speaker has experienced are included in their lexical representation for that item. The different forms of an item are linked together in a network, with bonds of varying strength. Bonds are also formed between different lexical items and it is from these bonds that phenomena such as phonemes, syllables, phonological rules, and paradigms emerge as schemas. Schemas which are linked to many lexical items are stronger and more rule-like, while schemas that are linked to fewer lexical items are weaker and less rule-like.

Thus, in Laguna, very general schemas, such as the CV syllable pattern, are highly entrenched, and apply to nearly all the words in the entire lexicon. Other schemas, such as the one for a non-glottalized obstruent followed by a voiceless vowel at the end of a word, are less entrenched, as they apply only to a subset of the lexicon (such as *dyúúpi* 'badger', *ts'ipe* 'he/she ate it', and *dziúmishchitsita* 'he/she is fainting'). Still other schemas, such as the one for a non-glottalized obstruent followed by a short, low tone, voiced vowel, are even less entrenched, as they apply only to a handful of words in the entire lexicon (such as *srbíga* 'woodpecker' and *sewínusrka* 'my heart').

In this type of model, the question of the phonemicity of voiceless vowels or the environments for a rule of vowel devoicing, are replaced by questions of how deeply entrenched the various schemas that include voiceless vowels are, and to what extent they overlap with schemas for voiced vowels. While the questions posed in the generative framework only allow for a yes or no answer – "Yes, the voiceless vowels are phonemic." or "No, vowels do not devoice in environment X." – the questions posed in a usage-based framework allow for gradient answers – "The schema for voiceless vowels in environment X is more deeply entrenched than the schema for voiced vowels in the same environment." This approach fits much better with the actual facts of Laguna phonology, particularly in the area of voiceless vowels, which clearly display behavior which is gradient and not categorical.

2.3 Phonotactics

There are several distributional restrictions on the combinations of sounds in Laguna. These are discussed below.

2.3.1 Retroflexes and Front Vowels

Retroflex consonants /dr, tr, tr', sr, sr'/ are not found immediately before front vowels /i, ii, e, ee/.

2.3.2 Neutralization of Alveolars and Palatals

Alveolar consonants are not found before the vowels /i, ii, e, ee/.

In previous work on Laguna, words such as *dyyiya* 'dog', which are pronounced with a palatal consonant followed by a high front vowel, have been written as *diya*, with an alveolar consonant. It has been assumed that the alveolar consonant is in fact there underlyingly, and that it surfaces as a palatal consonant by assimilation to the following vowel.

In this work, I have chosen to use the spelling *dyyiya* for several reasons. First, it is less abstract and more surface-true, reflecting the fact that all speakers pronounce this word with a clearly palatal consonant. Second, it is less misleading for language learners, many of whom have a hard time reading <di> as [dʲi]. While these "extra" <y>'s do have the effect of making the written form of many words longer, it does succeed in imparting to the reader the high token frequencies of palatal consonants in Laguna.

2.3.3 Glide-Vowel Sequences

Glides /y, y', w, w'/ are not found immediately before their corresponding vowels /i, ii, u, uu/.

2.3.4 Obstruents and Voiceless Vowels

Only aspirated stops and affricates, as well as plain fricatives, are found before voiceless vowels. For more on this, see §2.2.2.2 above.

2.3.5 Word-Edge Constraints

Laguna does not permit word-final consonants, nor word-initial vowels. This stems from its fairly rigid CV syllable structure, as discussed in the following section.

2.3.6 Tone and Sonorant Glottalization

For more conservative speakers, there is a rule which glottalizes sonorants in the onset of a low tone syllable if the preceding syllable is high tone. Thus, many speakers pronounce the word *dúwa* 'this' as *dúw'a*. Most younger speakers tend to pronounce it simply as *dúwa*, with no glottalization on the glide.

This pattern can lead to surface alternations in related forms. In (47-49) we see several examples of this type, where the (a) forms have a glottalized sonorant corresponding to a plain sonorant in the (b) forms.

- (47a) **ts'íúkáy'utsi** *'it is broken'*
- (47b) **ts'íúkáyutsi** *'they are broken'*
-
- (48a) **kuk'úm'ishu** *'eight'*
- (48b) **kuk'úmishúwá** *'eight times'*
-
- (49a) **kidráachúw'a** *'he woke up'*
- (49b) **dzi'draachuwa** *'he woke him up'*

On the other hand, there are organic glottalized sonorants that occur in this context, as in (50). Here, we can see that the glottalization of /m'/ is not triggered by the surrounding tonic environment, since the glottalization remains even when the conditioning environment is removed.

- (50a) **táám'a** *'five'*
- (50b) **táám'áwá** *'five times'*

2.4 Syllable Structure

The issue of syllable structure in Laguna presents some interesting challenges. The first challenge is in coming up with a rigorous definition of what a syllable in Laguna is. One common view of the syllable is as a phonological unit centered around a sonority peak, i.e.

a vocalic nucleus. This acoustic definition works well for the majority of syllables in Laguna, but it does not account for the many fully devoiced syllables that are also found in the language. These syllables have voiceless vowels, which do not form sonority peaks. As such, a strictly acoustic definition of the syllable will not work for Laguna.

Instead, the Laguna syllable must be defined in articulatory terms. There are two ways in which this could be done. Vowels, whether voiced or voiceless, share the characteristic of having a fairly wide, open and unobstructed vocal tract, particularly in the oral cavity. Thus, we could say the syllable in Laguna is a phonological unit centered around a relative widening of the vocal tract.

Another thing which vowels have in common, regardless of voicing, is a relatively low steady state of muscular activity among the articulators, compared to relative peaks of muscular activity for the articulation of consonants. As such, the syllable could be defined as phonological units centered around periods of relatively low muscular activity in the articulators.

For most languages, i.e. those which syllables centered around only voiced vowels, these articulatory definitions pick out the same units as the more familiar acoustic definition. However, for Laguna, there is a mismatch between the units selected by the articulatory definitions versus the acoustic one. Speakers are quite consistent, however, in counting syllables, regardless of whether any of the vowels in the word are voiceless. Thus, the

articulatory definitions seem to be the ones which are operative for speakers, and not the acoustic ones.

Having arrived at this articulatory definition for syllables in Laguna, we can examine the inventory of syllable types in the language. The dominant syllable pattern in Laguna is CV, where V can stand for a vowel which is either short or long, monophthong or diphthong. In total, there are five syllable types: CV, CCV, CVC, and CCVC.

2.4.1 CV Syllables

CV syllables are the most common type of syllable in Laguna. Many, if not most words are composed solely of CV syllables, where V can be either short, long, or a diphthong. (Note that in these examples we are including the word-initial glottal stop in the transcription, to make clear that these syllables are really CV, even though the glottal stop would not be written in this position in current orthography.)

- | | | |
|-------|--------------|-------------------------|
| (51a) | 'ii.me | <i>'very, alot'</i> |
| (51b) | 'ee.ch'a.dza | <i>'thus he said'</i> |
| (51c) | 'i.di.ma.dze | <i>'it's sunny'</i> |
| (51d) | sai.dzii | <i>'everything'</i> |
| (51e) | haa.nyi | <i>'from the east'</i> |
| (51f) | dyee.ku | <i>'they (pl) went'</i> |

- (51g) ha.dra.nyi 'horn'
- (51h) kaa.dr̥i.tra 'they (pl) live there'
- (51i) kai.yu.k'a.wa 'nine times'
- (51j) y'aa.p'ee.tyi.dyu.nyi 'icicle'
- (51k) kui.ya.ha.na.mi 'from south to east'

2.4.2 CCV Syllables

As discussed above, Laguna has a very limited inventory of consonant clusters, restricted to combinations of a plain fricative with a following stop or affricate -- and even then, not all possible combinations are found, as the place of articulation of the fricative is wholly determined by the place of articulation of the stop or affricate. As such, it would be possible to view these sequences as complex segments in their own rights, perhaps as a type of "reverse affricate", with the frication preceding the stop closure.

This is essentially the approach taken by Davis (1960) in his treatment of Santa Ana (Eastern) Keres. In that work, Davis provides an inventory of "syllable margins", in lieu of the more traditional inventory of consonant phonemes, treating the small set of consonant clusters in much the same way as simple unit phonemes such as /d/ and /s/.

A good argument can in fact be made for the unit status of these complex sequences, such as /srb/ and /sht'/ and /srk/. Notably, they always occur together in the onset of the

syllable, and never split across a syllable boundary. One piece of evidence for this is that these sequences can occur in word-initial syllables, where they are unambiguously in the onset. But even when they occur word-medially, speakers have very strong intuitions that the syllable boundary occurs before the consonant sequence, and not in the middle of it. For example:

(52) **ga'asht'aanyi** *'pour it for us (dl)'*

Correct syllabification: **ga.'a.sht'aa.nyi**

Incorrect syllabification: ***ga.'ash.t'aa.nyi**

This shows that the distribution of these sequences within the syllable is parallel to that of unit phonemes, such as /m/, /s/ or /k/. Moreover, the fricatives /sh/ and /sr/ never occur word-finally, either. On these grounds, it would be possible to view these CCV syllables as a subtype of CV syllables with more articulatorily complex onsets.

2.4.3 CVC Syllables

The inventory of possible CVC syllables in Laguna is quite limited since only two consonants are permitted in the coda: /n/ and /ʔ/. We will look at each of these in turn below.

The /n/ in the coda is extremely rare, only occurring in a small number of Spanish

loanwords, most notably **ranchu** 'ranch'. It is never found in the coda in words of Keresan origin.

The coda /ʔ/ is somewhat different, in that it is quite common throughout the lexicon. Looking at its distribution, however, leads to the conclusion that this syllable-final /ʔ/ is not actually part of the consonant system of the language, but is rather part of the accentual system. There are several pieces of evidence in favor of this.

Firstly, length distinctions are lost. All vowels before a syllable-final /ʔ/ are short, or a diphthong. Note that this is not the case with vowels occurring before a /ʔ/ which is in the onset of the following syllable; in this environment, length distinctions are maintained, and both long and short vowels are found.

Secondly, tone distinctions are lost. All syllables with a final /ʔ/ are apparently low tone. Again, this is not the case with syllables before a /ʔ/ which is in the onset of the following syllable.

Thirdly, many of the derivational and inflectional processes in the language involve some type of change in accentual patterns. Syllable-final /ʔ/ is affected by these processes, in some cases being added, in other cases being deleted, as seen in the examples below.

- (53a) se't'a *'I opened his'*
- (53b) séét'áwí *'when I opened his'*
- (53c) úya'srbaany'i *'to grind'*
- (53d) úyáásrbáány'i *'grinding stone'*
- (53e) kai'dzúwiita *'he is paying'*
- (53f) káidzúwíita *'taxpayer'*
- (53g) kitse'éta *'dancer'*
- (53h) ka'a'tse'dyíy'a *'dancers'*

2.4.4 CCVC Syllables

CCVC syllables are found when the complex onsets discussed above occur with // codas.

Thus, Laguna can best be described as a fairly rigid CV language, with only minimal consonant clustering or use of codas.

2.5 The Tone System

The most complex and least well-understood area of Laguna phonology, and Keresan

phonology in general, is the tone system.

There are several important points to make about tone in Keresan. Firstly, it is one of the prime variables across the dialects, from community to community. Indeed, when further dialectal work is carried out, it would not be surprising to see notable tone differences even within communities.

Secondly, and probably relatedly, tone has a very low functional load in Laguna. Although there are some derivational processes, such as the creation of instrumental nouns and verbal infinitives, which rely on tonal melodies to a large extent, actual minimal pairs based on tone alone are rather rare. In this regard, Laguna is similar to Cherokee, another polysynthetic language with a complex set of tones which bears little to no functional load. Consider just a few examples, also cited by Valiquette (1990:477).

- (54a) se'ch'a *'my tooth'*
(54b) séech'a *'I'm warm'*
- (54c) háány'i *'from the east'*
(54d) háanyi *'douglas fir tree'*
- (54e) dzáasrk'a *'his jaw'*
(54f) dzáasrk'á *'mine is tingling'*

For Acoma, Miller (1965: 17-18) posited 3 "tonal accents": high, falling and glottal. Other vowels which did not carry a tonal accent had a low pitch, so in total we can say that there are 4 tones. While high and low were clearly distinct for Miller, the falling and glottal accents are much more similar, since both involve a falling pitch over the syllable. The difference between the two is the presence of a "light glottal catch or glottal stricture" with the glottal tone, which is missing from the falling tone.

Valiquette's discussion (1990: 471-492 *inter alia*) of the Laguna tone system focuses on issues of tonal melody and its relationship with vowel devoicing and the predictable glottalization of sonorants. He notes that although the ultimate goal of his analysis is to need to posit only high and low tones, plus a restricted set of tonal melodies which are superimposed on the metrical structure of the word, he nonetheless still needs to posit six tones for Laguna: high, (positive) low, rising, glottal, falling, and then unmarked (or, simply, low).

Valiquette's (1990: 20-21) summary of the distribution of tones across syllable types is summarized here as Table 2.3. I have collapsed his unmarked and positive low tones, based on the discussion on voiceless vowels presented above in §2.2.2.2.

		short vowels	diphthongs	long vowels
high tone	á, áá	yes	yes	yes
low tone	a, aa	yes	yes	yes
glottal tone	a'	yes	no	no
rising tone	aá	no	yes	yes
falling tone	áa	no	yes	yes

Table 2.3: Tonal Distribution Patterns

Based on these patterns, Valiquette makes several notes, including:

1. "It may be possible to analyze the tone system as consisting of only high and low, with falling redefined as high-low and rising defined as low-high."

2. "Almost certainly glottal and rising should be combined in some way, but they may in fact be two different tones."

It is not clear how both of these goals could be met. If we follow his first suggestion and redefine the rising and falling tones as being composites of high and low, then we are left with a three tone system: high (á), low (a) and glottal (a'). If, on the other hand, we combine glottal and rising, since they occur with different syllable types, then we are still left with three tones: high (á), low (a) and glottal/rising (a'/aá).

Valiquette discusses several problems with both approaches, many of which come down to uncertainties of transcription, variation across speakers, and even apparently free variation within speakers. Based on all the work which has been done to date, including my own fieldwork with speakers, the best summary of the Laguna tone system which I can offer is the following:

In heavy syllables -- those with long vowels or diphthongs in their nuclei -- Laguna has two phonemic tones, high (**á**) and low (**a**). These two tones create four different melodies based on how they associate with the timing slots in the syllable: **áá** *high*, **aa** *low*, **áa** *falling* and **aá** *rising*.

In light syllables -- those with short vowels -- Laguna has three phonemic tones: high (**á**), low (**a**) and glottal (**a'**). The glottal tone can be realized as either a short high tone followed by glottal closure, or by a somewhat longer rising tone followed by glottal closure.

This brief statement leaves many important issues unaddressed, including co-occurrence restrictions of different tones, and the relationship between tone, length and voiceless vowels, among others. However, until a thorough phonetic study has been made of tone in Laguna -- taking into account the variation that is found between and within speakers -- and the actual building blocks of the tone system have been established, further work on these other tone-related issues is speculative at best.

Chapter 3

Nouns and Nominal Morphology

In comparison with verbs, nominal morphology in Laguna is quite limited. The only relevant grammatical categories are possessor and, to a much lesser extent, number.

3.1 Noun Types

Nouns in Laguna fall into four main classes, based on how they are marked for number and possession: Natural nouns, Common nouns, Body Part nouns and Kinship nouns.

3.1.1 Natural Nouns

Natural nouns are the most basic, and the most noun-like, of all nouns in Laguna. Natural nouns typically refer to names of living creatures, as in (1), trees and plants, as in (2), or other natural elements, as in (3).

- (1a) **dyetya** *'cottontail rabbit'*
- (1b) **kiitsi** *'pronghorn antelope'*
- (1c) **guu'u** *'beaver'*
- (1d) **yu'upi** *'worm'*
- (1e) **dyiipu** *'Canada goose'*

- (2a) **k'anyi** *'cedar; juniper'*
- (2b) **shch'ami** *'wild celery'*
- (2c) **ibanyi** *'cholla'*
- (2d) **hiishch'i** *'sunflower'*
- (2e) **habanyi** *'oak tree'*

- (3a) **huwak'a** *'sky'*
- (3b) **waaku** *'coal'*
- (3c) **haawe** *'snow'*
- (3d) **ts'itsi** *'water'*
- (3e) **usraatra** *'sun'*

The distinguishing feature of Natural nouns is that they do not occur in a possessed form.

3.1.2. Common Nouns

Common nouns typically refer to things or objects in the world. Many, but not all, Common nouns refer to items which are man-made.

- (4a) **m'ina** *'salt'*
- (4b) **nuushjinyi** *'sausage'*
- (4c) **dyuunyi** *'pottery'*

- (4d) **srk'apa** *'pocket'*
 (4e) **iyatra** *'children'*
 (4f) **m'ak'a** *'dipper, cup'*

There are numerous Spanish loanwords which are treated as Common nouns in Laguna, as seen in (5).

- (5a) **gagawaaty** *'peanut'*
 (5b) **gaasra** *'box'*
 (5c) **meesa** *'table'*
 (5d) **ranchu** *'ranch'*
 (5e) **peshdura** *'pistol'*

While the Common nouns listed in (4) and (5) are all monomorphemic, there are subtypes of Common nouns which share a morphologically complex relationship with verbs, such as Instrumental nouns (6) and Resultative nouns (7).

- (6a) **uuch'ayutsi** *'gun, rifle'*
 (6b) **uupuutsi** *'(musical) horn'*
 (6c) **ubewi** *'food'*
 (6d) **aasrbanashumenyi** *'shampoo'*
 (6e) **uuyaachik'anyi** *'pruning shears'*

- (6f) **uubiinaatsi** *'needle, sewing machine'*
- (7a) **ts'idyaadranyi** *'book, paper'*
- (7b) **ts'iuyaty'isrkumenyi** *'fry bread'*
- (7c) **ts'awaipi** *'war'*
- (7d) **ts'iumaatsi** *'donation'*

While Instrumental and Resultative nouns are related to verbs, Alienated nouns are related to other nouns, specifically Body Part nouns (see below). They refer to a non-possessed instance of a body part, either one that has been severed or otherwise removed from its original owner, or one that never had an owner, such as a drawing of a hand. Examples of Alienated nouns are shown in (8), along with the Body Part nouns they are related to.

- (8a) **huwawinyi** *'a face'*
- (8b) **s'uwawi** *'my face'*
- (8c) **huwawaanyi** *'an eye'*
- (8d) **s'aana** *'my eye'*
- (8e) **huushut'ainyi** *'an elbow'*
- (8f) **s'ushut'aimi** *'my elbow'*

- (8g) **w'iishiiinyi** *'a nose'*
- (8h) **s'iishi** *'my nose'*
-
- (8i) **nasrgainyi** *'a head'*
- (8j) **senasrgai** *'my head'*
-
- (8k) **hamashjiinyi** *'a (severed) hand'*
- (8l) **semashji** *'my hand'*

Note that Miller and Valiquette both used the somewhat misleading term "Absolute" for these nouns.

While many Alienated nouns show a family resemblance -- starting with /h/ and ending with /nyi/ -- this pattern is not consistent. Moreover, the relationships between the Alienated forms and their corresponding Body Part forms are frequently suppletive. Miller (1965:160-161), in his treatment of the subject, found no less than 6 different patterns across a set of 38 forms. For these reasons, we treat Alienateds as their own subclass of Common nouns, and not as a derived form of Body Part nouns.

3.1.3 Body Part Nouns

Body Part nouns, as their name suggests, refer to parts of the body, both of humans and of

animals. The most noticeable characteristic of Body Part nouns is that they always occur in a possessed form -- that is, Body Part nouns are always expressed with reference to whose they are. Some examples are shown below in (9).

- (9a) **senasrgai** *'my head'*
(9b) **siyuumi** *'my arm'*
(9c) **suwaachu** *'my tongue'*
(9d) **sepanatsi** *'the side of my foot'*
(9e) **seedak'a** *'my heel'*

Not all nouns which refer to parts of the body are Body Part nouns; some body parts are expressed with Common nouns and do not require a possessor, such as those in (10).

- (10a) **bumuuna** *'torso, ribcage'*
(10b) **haish'i** *'tonsil(s)'*
(10c) **panatsi** *'lung(s)'*
(10d) **naak'atsi** *'scalp'*

Others have forms that are quite similar to Alienated nouns, such as those in (11).

- (11a) **haadranyi** *'hair'*
(11b) **y'aasrbudranyi** *'brain(s)'*

(11c) **y'a'awaanyi** *'intestine(s)'*

Body Part nouns have an initial element which identifies the possessor, followed by a noun stem which identifies the body part. For example:

(12a) **semashji** *'my hand'*

(12b) **sramashji** *'your hand'*

(12c) **kamashji** *'his/her hand'*

Miller and Valiquette both analyze these noun stems as being vowel initial, and the pronominal prefixes to be formally identical with the actor series pronominal prefixes found on verbs. As with verbs, there is a high degree of unpredictable allomorphic variation across sets, as in (13).

(13a) **g-awits'i** *'his chest'*

(13b) **k-unach'ai** *'his stomach'*

(13c) **dz-aawich'a** *'his fingernail'*

(13d) **k'-aana** *'his eye'*

(13e) **ts'-iik'a** *'his mouth'*

(13f) **ts-aamusha** *'his beard'*

See Valiquette (1990:616-624) for an extended discussion on the allomorphy of pronominal

prefixes on body part nouns and the possible implications for the analysis of verb structure in Laguna.

3.1.4 Kinship nouns

Kinship nouns are used to refer to one's relatives. Some examples are shown in (14).

- (14a) s'anaaya *'my mother'*
(14b) k'aadri *'her husband'*
(14c) s'amīityi *'my son; my uncle'* (FEMALE SPEAKER)
(14d) k'auk'ui *'his wife'*
(14e) k'adyumi *'his brother'* (MALE SPEAKER)

Unlike Body Part nouns, Kinship nouns take a different and consistent set of possessive prefixes. In fact, they are the same set that is found with Common nouns, as described in the next section.

3.2 Possession

As described above, Body Part nouns and Kinship nouns always occur possessed. In the sections below we will discuss how possession is realized with the other two types of nouns, Natural and Common.

3.2.1 Possession and Natural Nouns

Most Natural nouns do not typically occur in any possessive context in Laguna (e.g. 'my river', 'your cholla', etc.).

The only Natural nouns which felicitously occur possessed in Laguna are those which refer to domesticated animals, such as **kawaayu** "horse" or **dyiya** "dog". In this case, possession is expressed indirectly by means of an appositional construction involving the nominalized verb stem **-adyaashe** "someone's pet" along with the name of the animal that is being possessed. So, for example, to say "his horse" -- or, more accurately "his pet horse" -- one says:

- (15) **kawaayu** **k'adyaashe**
 kawaayu **k'-adyaa-she**
 horse 3/3:DIR-have.as.pet-NMNLZ
 '*his (pet) horse*' lit. "horse, the one he has as a pet"

In the example above, the Natural noun occurs first, and then the possessed form of the noun for "pet". While this is a common order, the reverse order also occurs. Two examples, drawn from the same story just a few lines apart, and referring to the same animal, are shown in (16).

(16a) **Sh'ee hats'uma ka'aidraanye hawee ty'ee'eyu k'adyaashe muuk'aitra.**

Then after some time (P'ashayaani) went there with his mountain lion. [Boas 07.062].

sh'ee then; hats'uma a little while; ka'aidraanye when it happened; hawee this way; ty'ee'eyu they (dl) went; k'adyaashe the one he has as a pet; muuk'aitra mountain lion.

(16b) **"Sra'au," dyanaat'a P'ashayaanyi, ee ai' y'aanyi n'i dyiidze muuk'aitra k'adyaashe.**

"Enough," said P'ashayaanyi, then there in front he made lie down his mountain lion. [Boas 07.078]

sra'au enough; dyanaat'a he said; P'ashayaanyi P'ashayaanyi; ee and; ai' there; y'aanyi in front; n'i down; dyiidze he made him lie down; muuk'aitra mountain lion; k'adyaashe the one he has as a pet.

Interestingly, the same nominalized verb is used by pets in stories when they talk about their owners, as in (17).

(17) **"Duu hawee s'iyuutse srgudyaashe, lidiwaisiwa.**

"I brought the one to whom I belong, lidiwaisiwa." [Boas 31.152]

duu this; hawee this way; s'iyuutse I brought him; srgudyaashe the one who has me as a pet; lidiwaisiwa lidiwaisiwa.

3.2.2 Possession and Common Nouns

Possession of Common nouns and Kinship nouns is marked via a series of possessive prefixes. In total, there are 10 such prefixes, as shown in Table 6.1.

Possessive Prefixes			
Singular Possessor	Dual Possessor	Plural Possessor	Indefinite Possessor
s'a- "my"	sa'a- "our (dl)"	saya- "our (pl)"	srk'a- "one's"
kidra- "your"	sra'a- "your (dl)"	sraya- "your (pl)"	
k'a- "his/her/its"	ga'a- "their (dl)"	gaya- "their (pl)"	

Table 3.1: Possessive Prefixes

Full paradigms for the Common nouns *dzeenyi* 'word, language' and *waginyi* 'clothes' are shown below in (18) and (19).

(18a) **s'adzeenyi** 'my word(s), my language(s)'

(18b) **kidradzeenyi** 'your word(s), your language(s)'

(18c) **k'adzeenyi** 'his/her/its word(s), his/her/its language(s)'

- (18d) **sa'adzeenyi** 'our (dl) word(s), our (dl) language(s)'
- (18e) **sra'adzeenyi** 'your (dl) word(s), your (dl) language(s)'
- (18f) **ga'adzeenyi** 'their (dl) word(s), their (dl) language(s)'
- (18g) **sayadzeenyi** 'our word(s), our language(s)'
- (18h) **srayadzeenyi** 'your (pl) word(s), your (pl) language(s)'
- (18i) **gayadzeenyi** 'their word(s), their language(s)'
- (18j) **srk'adzeenyi** 'one's word(s), one's language(s)'
-
- (19a) **s'awaginyi** 'my clothes'
- (19b) **kidrawaginyi** 'your clothes'
- (19c) **k'awaginyi** 'his/her/its clothes'
- (19d) **sa'awaginyi** 'our (dl) clothes'
- (19e) **sra'awaginyi** 'your (dl) clothes'
- (19f) **ga'awaginyi** 'their (dl) clothes'
- (19g) **sayawaginyi** 'our (pl) clothes'
- (19h) **srayawaginyi** 'your (pl) clothes'
- (19i) **gayawaginyi** 'their (pl) clothes'
- (19j) **srk'awaginyi** 'one's clothes'

It is possible to further analyze these possessive prefixes into a pronominal element followed by either *-a-* 'singular possessor', *-a'a-* 'dual possessor' or *-aya-* 'plural possessor'.

Under this analysis, this construction bears a striking resemblance to a simple intransitive

verb in Laguna, with a pronominal prefix followed by a portmanteau voice/number prefix, followed by a verb stem.

3.3 Number

3.3.1 General Number

As Miller (1965:148) notes for Acoma, "Plurality is an optional category". Nouns in Laguna are typically general in number -- meaning that they can be interpreted as either singular or plural as the context dictates, with no change in their form.

For example, a noun such as **kamashji** "*his/her hand(s)*" could refer to either one or both hands, depending on the context. Compare the examples in (20).

(20a) **Kamashji nyiya dyiwatyisha.**

With her hand she stirred it. [BOAS 08.033]

kamashji *her hand*; **nyiya** *with it*; **dyiwatyisha** *she stirred it.*

(20b) **Edyiyu dyuwisrbit'a ts'imashch'a waawa, heeya kashch'i-ee, ee kamashji-ee dyupashchanyi.**

He also unwrapped the pitch medicine and with it he tied her legs and her hands. [BOAS 30.500-501]

edyiyu *then*; dyuwisrbit'a *he unwrapped it*; ts'imashch'a *pitch*; waawa *medicine*; heeya *with it*; kashch'i-ee *on her legs*; ee *and*; kamashji-ee *on her hands*; dyupashchanyi *he tied her up*.

In the (20a), we are led to interpret the noun **kamashji** as referring to just one hand, since that is the most normal way in which things are stirred (if she was really using both of her hands to stir something, it is likely that the speaker would have made a point of drawing our attention to this uncommon situation). Likewise, we are led to interpret **kamashji** as referring to both hands in (20b), since tying up just one hand (or one leg, for that matter) would be rather pointless.

However, when the speaker does want to be specific about how many of something they're referring to, this can be done in several ways. One very common way to accomplish that is by using number marking on the verb, instead of on the noun. For example, compare the following sentences:

- (21a) Dyetya gukacha. *He saw a rabbit.*
(21b) Dyetya gu'ukacha. *He saw (two) rabbits.*
(21c) Dyetya guwakacha. *He saw (three or more) rabbits.*

In all three sentences, the noun **dyetya** "*cottontail rabbit*" remains the same. What changes is the verb: **gukacha** "*he saw one thing*", **gu'ukacha** "*he saw two things*", **guwakacha**

"he saw three or more things". This use of number marking on verbs will be discussed more thoroughly in a later chapter.

3.3.2 Collective

There are, however, two ways in which non-singularity can be marked directly on the noun itself in Laguna. The first is via the Collective suffix **-ty'itra**. This suffix creates nouns that refer to a group or bunch of something.

- | | | |
|-------|--------------------------|-----------------------------|
| (22a) | ch'ayaanyi | 'shaman' |
| (22b) | ch'ayaanyity'itra | '(group of) shamans' |
| (22c) | baaba'a | 'grandchild!' |
| (22d) | baabaty'itra | '(group of) grandchildren!' |
| (22e) | payadyami | 'young man' |
| (22f) | payadyamity'itra | '(group of) young men' |
| (22g) | hashchi | 'old man' |
| (22h) | hashchity'itra | '(group of) old men' |

Sentence examples of the collective suffix are shown in (23).

(23a) "Suu, amuu dya'auty'itra, hawee tyidye'eyu?"

"Oh, poor granddaughters, have you come?" [BOAS 22.428]

*suu oh; amuu poor one(s); dya'auty'itra granddaughters; hawee this way;
tyidye'eyu you (pl?) came.*

(23b) Sh'eesru miisru k'anadyeyaty'itra cha'auyadawa.

There were already the witches inside eating. [BOAS 30.096]

*sh'eesru and then; miisru already; k'anadyeyaty'itra the (group of) witches;
cha'auyadawa they were eating.*

There are also a couple of other nouns which have an inherent collective sense, but which don't contain the -ty'itra suffix.

(24a) **miityi** 'boy'

(24b) **sruyatyi** 'group of (young, unmarried) boys'

(24c) **magi** 'girl'

(24d) **m'aasitra** 'group of (young, unmarried) girls'

Examples can be seen in (25).

(25) "Hina srau'u, hatridze, sruyaty, ee nayeety'itra, ee m'aasitra,"
dyanaat'a.

"Let us go, men, boys and women and girls," he said. [BOAS 16.0905]

*hina srau'u let's go; hatridze man/men; sruyaty boys; ee and; nayeety'itra
women; ee and; m'aasitra girls.*

3.3.3 Plural

Another option, however, is the plural ending *-dyeimishe*. This is composed of a verbalizing suffix *-dyei* 'have several of something' and the general nominalizing suffix *-Cishe*. Miller (1965:148) reports that this ending can occur with both possessed and unpossessed nouns in Acoma (where it has the form *-tyaimishi*), such as:

- (26a) m'ak'a 'dipper(s)'
(26b) m'ak'atyaimishi 'dippers'
(26c) k'am'ak'atyaimishi 'his dippers'

While this ending is quite common in Laguna, it has only been attested with possessed nouns, and not with unpossessed nouns. For example:

- (27a) **k'abaaba'a** 'her grandchild'
- (27b) **k'abaabadyeimishe** 'her grandchildren'
- (27c) **k'anaaya** 'her mother'
- (27d) **k'anaayadyeimishe** 'her mothers'
- (27e) **k'adyumi** 'her brother'
- (27f) **k'adyumidyemishe** 'her brothers'
- (27g) **k'ayatra** 'his child'
- (27h) **k'ayatradyemishe** 'his children'
- (27i) **k'ashiiwana** 'his Storm Cloud'
- (27j) **k'ashiiwanadyemishe** 'his Storm Clouds'

The full plural paradigm is shown for the noun **hanu** "person, people" in (28).

- (28a) **s'ahanudyemishe** 'my people'
- (28b) **kidrahanudyemishe** 'your people'
- (28c) **k'ahanudyemishe** 'his/her people'
- (28d) **sa'ahanudyemishe** 'our (dl) people'
- (28e) **sra'ahanudyemishe** 'your (dl) people'

- (28f) **ga'ahanudyemishe** 'their (dl) people'
 (28g) **sayahanudyemishe** 'our (pl) people'
 (28h) **srayahanudyemishe** 'your (pl) people'
 (28i) **gayahanudyemishe** 'their (pl) people'
 (28j) **srk'ahanudyemishe** 'one's people'

Examples of these forms in context are shown below.

(29a) "Srau n'ake'e puwaaty **kidrahanudyemishe**."

"Go ahead, bring your people." [BOAS 15.194]

srau n'ake'e *go ahead*; **puwaaty** *let them come*; **kidrahanudyemishe** *your people*.

(29b) **Sh'ee ai' dyitya chaadyi Shch'ida Magaana dyaatra**
k'awaashch'idyeimishe.

There on the north hillside lived Crow Magaana and her young ones. [BOAS 24.177]

sh'ee *then*; **ai'** *there*; **dyitya** *north*; **chaadyi** *hillside*; **shch'ida** *crow*;
Magaana *Magaana (a name)*; **dyaatra** *she lived*; **k'awaashch'idyeimishe** *her young ones*.

(29c) **Sh'ee dyuwabe k'anaadyeimishe, "Duwa srau'u duwa kidrayatradeimishe."**

Then he told his mothers, "Here are your sons." [BOAS 24.274]

sh'ee then; dyuwabe he told them; k'anaadyeimishe his mothers; duwa this; srau'u indeed; duwa this; kidrayatradeimishe your sons (lit. your children).

(29d) **"Egu tsaya hauba seiya kidra'adyeimishe nyeyash'uwimidranyi-si," dyanaat'a.**

"But first I shall make shoes for all your sisters," said he. [BOAS 26.185]

egu moreover; tsaya first; hauba everyone; seiya all; kidra'adyeimishe your sisters; nyeyash'uwimidranyi-si I will make shoes for them; dyanaat'a he said.

With Natural nouns, the plural ending **-dyeimishe** is attached to the appositional possessive marker based on the verb **-atya/-adyaa-**.

(30) **k'adyaadyeimishe** 'his/her pets' (lit. the ones he/she has as pets)

k'-adyaa-dyei-mishe

3:DIR-have.as.a.pet-have.several-NMNLZ

For example:

(31) **Gai tsina s'adyaadyeimishe k'ee nidrutse-si.**

I shall take my turkeys from here. [Boas 21:082]

gai *indeed*; **tsina** *turkey*; **s'adyaatradyeimishe** *the ones that I have as pets*; **k'ee** *away*; **nidrutse-si** *I will lead him.*

The one exception to the statement that **-dyeimishe** is only used with possessed nouns is the fact that it does occur with kinship vocatives. This is not a surprising exception, though, since the vocative forms of kinship nouns have an implicit first person possessor, even when such a possessor is not overtly marked.

(32) **Sh'ee ee-ch'adza K'uuyau Srkuuyu, "Hawee n'i draapi, baaba'adyeemishe.**

Then said the Old-Woman-Giantess, "Come (in) down here, grandchildren. [BOAS 18.083]

sh'ee *then*; **ee-ch'adza** *she said*; **K'uuyau Srkuuyu** *Old-Woman-Giantess*; **hawee** *this way, towards here*; **n'i** *down*; **draapi** *enter!*; **baaba'adyeemishe** *grandchildren!*

Chapter 4

Indefinites

I use the term indefinites to cover a range of different particles, most of which can be used both as interrogatives as well as nominals or adverbs. This is a small, closed class whose main members are:

dzii	<i>'something, what'</i>
guwa	<i>'how'</i>
haadyi	<i>'where'</i>
haisa	<i>'which side'</i>
haityi	<i>'which one'</i>
hama	<i>'when'</i>
hats'u	<i>'how many'</i>
hauwi	<i>'someone, who'</i>
heek'u	<i>'which way'</i>
dzeeguma	<i>'why'</i>

Each of these is discussed in turn below.

4.1 The Indefinite Particle dzii

The most common and complex indefinite particle is **dzii**. It can be used as an interrogative or a nominal.

4.1.1 Uses as an Interrogative

As an interrogative, **dzii** means 'what?'. It can be used in cases where the possible answers are open-ended, as in (1).

- (1a) **Dzii duwa?**
what this

What is this?

- (1b) **Emi dzii kidru'uts'ipi?**
that's it what you DL want it DIR

Indeed, what do you (dl) want? [Boas 06.063]

- (1c) **Dzii anyiugu?**
what she likes it DIR

What does she like? [Boas 25.050]

It is also used in cases where the range of possible answers is more limited, and where English might use '*which?*' instead of '*what?*', as in (2).

(2a) Dzii guidzeeshe?
what the color that it is

What color is it? [Boas 09.102-103]

(2b) Dzii hanukida?
what you are (of a) people DIR

To what clan do you belong? [Boas 15.108]

(2c) Dzii he'e kidra'awaginyi?
what that your DL shirt(s)

What kind of shirt have you? [Boas 18.279]

It can be used with **aku** '*I wonder*' in the following expression.

(3) Aku dzii?

I wonder what

I wonder what it might be? [Boas 05.060]

This phrase also occurs as **aku haityi dzii** with much the same meaning.

(4) Aku haityi dzii ai' dyi nayashjigu?

I wonder which what there up he will keep it DIR

I wonder what it may be that he keeps up there? [Boas 19.083-084]

4.1.2 Uses as a Nominal

As an indefinite nominal, **dzii** means 'something'.

(5a) Y'u dzii ai' dyumasawa.

perhaps something there it is cooking IND

Maybe she is cooking something. [Boas 30.020]

(5b) Edze dzii nubegunysishe dyiyeibaatyi
for his own sake something that he will eat he looked for it IND

ee chuwaanye.

and he went hunting IND

He searched for something to eat and he went hunting. [Boas 31.095]

Quite frequently, **dzii** is followed by **haiyi** 'which one?, whichever', with little apparent change in meaning.

(6a) "Dzii haiyi sitsi nyiidrasi?"
what which it is ruined DIR I will make it DIR

dyanaat'a Tsisrki.

he said IND Coyote

"What trouble am I going to make?" said Coyote. [Boas 11.187]

(6b) Dzii haiyi duwa dyetya kidru'uts'ipi?
what which this rabbit you DL want it DIR

What do you (dl) want for this rabbit? [Boas 24.301-302]

- (6c) **Dzii** **haityi** **kidrayabuutsa?**
what which it frightened you PL DIR

What has scared you? [Boas 30.182]

The reverse order is also found.

- (7) "Haa'a, ma'ima, haityi dzii maame srguts'ipitishē
yes indeed which something very that I want it

nyiya duwee dzuuse," dyanaat'a.
for that reason this way I came DIR he said IND

"Yes, indeed, I want something very much, and therefore I come here," said he. [Boas 33.075-076]

4.1.3 Other uses

Besides its use as an interrogative and an indefinite nominal, **dzii** is also frequently used to add a degree of uncertainty to a statement. In such cases, **dzii** may translate as *perhaps, if,*

etc. ', although in many cases there is no appropriate English equivalent.

(8) **Sh'eesru hats'uma ai' dya'a.**

and then a little while there they DL are located IND

Dzii chemi dyaana kisraityi ai'

perhaps three four year there

dya'a.

they DL are located IND

Then some time the two remained there, perhaps three or four years they remained there. [Boas 17.047-050]

In (9), **dzii** is used as a harmonic adverb in conjunction with the conditional verb form **sraushiyau** 'I would win it'.

(9) **...etyu dzii seiyu dzii kitratyiimi sraushiyau,**

...but perhaps all what your clothing I would win it DIR

ee srawinusrka sraushiyau, sh'ee

and your heart I would win it DIR then

nyiumityitsasraum'a," t'aatsiguya.

I will kill you DIR he said to him IND

...*"but if I should win all your clothing, and if I win your heart then I shall kill you,"*
thus he said to him. [Boas 19.136-138]

In other cases, such as (10), there is no English translation.

(10a) Maame dzii k'adyaatyi shch'uyuuna,
very (what) he has a pet DIR mosquito

daukuna, shch'umi.

horsefly bumblebee

He has very many mosquitoes, horseflies and bees. [Boas 21.081]

(10b) ...sh'ee n'i dzii n'i chidya.
...then down (what) down she climbed down IND

Then she climbed down there. [Boas 24.037]

- (10c) Hau' dzii hisrume hait'a kity'e'eyu?
to there (what) you whence you DL came DIR

Where did you come from? [Boas 24.331]

- (10d) Hauwi dzii hisrume?
who (what) you

Who are you? [Boas 33.071]

4.2 The Indefinite Particles *guwa* and *guwa-ee*

This indefinite can be used as an interrogative meaning 'how?'.

- (11a) Guwa nadzagu?
how it will speak DIR

How will it sound? [Boas 22.307]

- (11b) Egu guwa k'uwayaatyu?
moreover how there is room DIR

"How is there room enough?" [Boas 25.083]

In some cases it can also translate as 'why?'.
In some cases it can also translate as 'why?'.

(12) "Guwa dza?" dyanaat'a Huuchanyi.

how no he said IND Chief

"Why not?" said the Chief. [Boas 16.0443]

However, the most common use of **guwa** in an interrogative context is as part of the phrase **Guwaadzi?** 'How are things?'. This is the most common, colloquial greeting in Laguna.

It derives from a combination of **guwa** 'how?' and **dzii** 'what, something'.

It can occur in embedded questions, such as (13).

(13) Sh'ee shch'apiganye Aak'u shji gumi,

then in the evening Acoma upward he went out DIR

sh'ee huuchanyi dyube guwa-ee

then chief he told him IND how

dzii gukachanyishe.
something that he saw him

Then in the evening he went up to Acoma and he told the chief how he had seen him.

[Boas 13.098-101]

The form *guwa-ee* can also be found in interjections, as in (14).

(14) *Guwa-ee duwa amuu'u wa dzyamasht'u.*
how this dear one indeed he is hungry DIR

How this poor one is hungry! [Boas 13.028]

4.3 The Indefinite Particle *haadyi*

This indefinite particle can be used as an interrogative or a nominal.

4.3.1 Uses as an Interrogative

As an interrogative, *haadyi* means 'where?', as seen in (15).

(15a) Sh'ee haadyi niuts'eiyanasidruusa?
then where we PL will find it DIR

Then where shall we find it? [Boas 06.076]

(15b) Haadyi hau' dzii kidrau'u?
where to there something you live DIR

'Where do you live?' [Boas 09.203]

(15c) Sh'ee gayuudze tyibeet'a, "Tudachi
then in the morning he asked IND priest

haadyi ga'apishe?"
where that he is located

Then in the morning he asked, "Where is the priest?" [Boas 17.163]

4.3.2 Uses as an Indefinite Nominal

As an indefinite nominal, *haadyi* means 'where, somewhere, at some place', as seen in

(16).

(16a) Chaityishaanyiguyana haadyi sidranaayashe
they PL discussed IND where our PL mother

si-nyiyeinawaguusaatyishe.

that they will find her again

They here discussed where they might find again our mother. [Boas 06.007]

(16b) Dyiyeibaaty haadyi anyee nau'ugunyishe
he looked for it IND somewhere nice that he will live

k'uutyu dzitridya.

mountain on the top

*He looked for a place where he could live nicely on the mountain top. [Boas
14.002]*

In (17), **haadyi** is elaborated on by a relative clause, **K'awaigadyeisrau** 'where Laguna is', marked with the locative nominalizer **-srau**.

(17) Sh'ee egu weemee ku dzuutsi
then moreover that far south when he went DIR

dyich'ayuma shche egu mina haadyi
 he was tired IND therefore moreover still somewhere

kuya-bi K'awaigadyeisrau tyiyeda.
 southwest where Laguna is it is far IND

When so far south he had gone he became tired, for still somewhere to the southwest where Laguna is, was too far. [Boas 10.065]

When **haadyi** is used with the negative particle **dzaadzi** it means 'nowhere, not anywhere'.

(18a) Wa dzaadzi haadyi haamipaitsidza'anu.
 indeed not anywhere it would be tobacco NEGDIR

There is no tobacco (anywhere). [Boas 06.066]

(18b) Nidziya-sa dzaadzi haadyi hauwi
 down below eastward not anywhere someone

dya'a.

he is located NEGIND

Below in the east nobody lived there. [Boas 08.199]

(18c) Egu dzaadzi di' haadyi n'i
moreover not here somewhere down

chuwayaatyu?

it is a cave NEGIND

Is there not anywhere a cave? [Boas 14.013]

4.4 The Indefinite Particle *haisa*

The particle can most likely also occur as an interrogative as well as a nominal, although no interrogative uses were found in the Boas corpus so far. Examples of its use as an indefinite nominal are seen in (19).

(19) Duu tsaya nyiut'aasi ee nyiukachasi usraatra
this first I will try it DIR and I will see it DIR sun

haisa dyi nyiyuuty'ik'ugu.

which side up it will be fitting DIR

I shall try this first and I shall see on which side the sun will be fitting. [Boas 01.057]

4.5 The Indefinite Particle *haityi*

This indefinite particle can be used as either an interrogative or as a nominal.

4.5.1 Uses as an Interrogative

As an interrogative, *haityi* means 'which?'.

(20a) *Dawaadza, sh'ee haityi nyiyudzeesru yaabaisrinyi?*
it is good DIR then which you will take it DIR altar

Very well, then which altar do you want to take? [Boas 10.055-056]

(20b) *Haityi dzii hanukidaa'apa?*
which what you PL are people DIR

What kind of people are you (pl)? [Boas 08.175]

4.5.2 Uses as a Nominal

As an indefinite nominal, **haityi** means 'which one, whichever one'.

(21a) **Haityi maame nuuyuu kidrusraanu,**
which one very oneself you would approve of it DIR

nautasru.

you will kill it DIR

Whatever [animal] suits yourself, that you will kill. [Boas 16.0871]

(21b) **Wa diisi srayats'ipi wa haityi dzii**
indeed right here I want you PL DIR indeed which something

ee-nadzasi.

thus I will say DIR

I want to tell you (pl) something here. [Boas 13.154]

4.6 The Indefinite Particle hama

This indefinite particle can be used as an interrogative or an adverb.

4.6.1 Uses as an Interrogative

As an interrogative, **hama** means 'when?'.
As an adverb, **hama** means 'long ago'.

- (22a) **Hama Ha-Shuk'u dzusru?**
when Santa Fe you went DIR

When did you go to Santa Fe?

- (22b) **Hama Ts'iimina yeeshta n'aidraagu?**
when Paraje feast day it will happen DIR

When is the next feast day in Paraje?

4.6.2 Uses as an Adverb

As a temporal adverb, **hama** means 'long ago'.

- (23a) **Nuu dzika miisru hama truusht'u.**
oneself also already long ago you died IND

We thought that you were dead long ago. [Boas 30.451]

- (23b) **Tsisrki ee K'aishaatra hama chayagumbanyerudani.**
Coyote and Skunk long ago they DL were companions IND

Coyote and skunk long ago were companions. [Boas 34.003]

Frequently it occurs in the clause-initial collocation **da'aa emi hama** 'thus it was long ago that... '.

- (24a) **Da'aa emi hama ee-cha'aitra.**
thus that's it long ago thus it happened IND

Thus it happened long ago. [Boas 03.032]

- (24b) **Da'aa emi hama di' dyi ha'aashch'iitra**
thus that's it long ago here up town

dawaa cha'aitra.
good it happened IND

Thus long ago this town up here became good. [Boas 17.271]

It frequently occurs in clause-initial position in the collocation **hama ka'aidraanye**, literally '*long ago when it happened*'. This phrase is often used at the beginning of a narrative as a scene-setting device.

(25) **Hama ka'aidraanye wai' dyitya Kasrkadriya**
 long ago when it happened over there north Casa Blanca

ai' shchau'u hanu.
 there one lived IND people

Long ago in the north, in Casa Blanca lived the people. [Boas 08.003-004]

Hama is often found preceded by the negative particle **dzaadzi**. In many cases, the resulting meaning is '*never*', as in (26).

(26a) **Diisi y'aanyi dzaadzi hama dzii anyee**
 right here in front not when something nice

nupesrunu.

you will eat it NEGDIR

From now on you will never eat anything nice. [Boas 11.226-227]

- (26b) **Dzaadzi hama nyiyamasht'usrunu.**
not when you will be hungry NEGDIR

You will never be hungry. [Boas 26.171]

- (26c) **Sh'eesru dzaadzi hama cha'audyime.**
and then not when they PL planted NEGIND

Then they never planted. [Boas 12.005]

- (26d) **Egu dzaadzi hama naawisrguusadyau.**
moreover not when we PL will not die NEGDIR

We are not yet going to die. [Boas 17.218-219]

- (26e) **Sh'ee k'apishu dzaadzi hama ai' ty'iikai.**
then at night not when there she lay down NEGIND

At night she did not lie down for a long time. [Boas 30.006]

4.7 The Indefinite Particle hats'u

This indefinite particle can be used as an interrogative or a quantifier.

4.7.1 Uses as an interrogative quantifier

As an interrogative, **hats'u** means '*how many?*'.

- (27a) **Hats'u kidrayatratyi?**
how many you have children DIR

How many children do you have? [Boas 08.055]

- (27b) **Hats'u di' shaawityi hanutrakidyee'e?**
how many here parrot you PL are of the clan DIR

How many of you here are Parrot Clan? [Boas 08.055]

4.7.2 Uses as a Quantifier

As an indefinite quantifier, **hats'u** occurs before nouns denoting periods of time, and means

'some, a few, an unspecified number of.'

(28) Sh'eesru ai' shchau'u Kasrkadriya,
and then there one lived IND Casa Blanca

y'u dzii hats'u kisraiti.
perhaps something a few year

Then they stopped there at the White-House, maybe for some time. [Boas 05.025-026]

4.8 The Indefinite Particle hauwi

This indefinite particle can be used as an interrogative or a nominal.

4.8.1 Uses as an Interrogative

As an interrogative, *hauwi* (or just *hau*) means 'who?'. This can be used as an utterance unto itself, in which case it is frequently interpreted as 'Who are you?' [Boas 16.0960, 19.119].

Often the predicate in such a question is just a noun or pronoun, either singular or plural, with no verb.

(29a) **Hauwi kidranaaya?**

who your mother

Who is your mother? [Boas 07.018]

(29b) **Hauwi hisrume, hatridze?**

who you man

Who are you, man? [Boas 07.041]

(29c) **Mi, hauwi duwa iyatra?**

look! who this children

Look, who are these children? [Boas 24.228-229]

In the case where there is no noun or pronoun used, the copular auxiliary verb can be used.

(30) **Hauwi-da'a?**

he is who? IND

Who is this? [Boas 06.060]

When there is a verb as a predicate, either transitive or intransitive, **hauwi** can be used to question the identity of either the subject or object, as in (31).

- (31a) **Hauwi dyumitsita?**
who he killed her IND

Who killed her? [Boas 16.0077-0078]

- (31b) **Hauwi kuuwaya?**
who s/he gave orders DIR

Who ordered it? [Boas 16.0207]

- (31c) **Hauwi kidruuch'awa kidrauk'ui?**
who he stole her from you DIR your wife

Who stole your wife from you? [Boas 27.052]

- (31d) **Hau K'awaika srukacha suwa?**
who Laguna you saw him DIR yesterday

Who did you see yesterday at Laguna?

It can occur with **aku** 'I wonder...':

- (32) **Aku hauwi s'ak'uitra dziumityitsa.**
I wonder who my sister other killed her DIR

I wonder who killed my sister. [Boas 16.0047]

4.8.2 Uses as a Nominal

As an indefinite nominal, **hauwi** means 'someone, somebody, whoever'.

- (33a) **Mi, haadyi hauwi katyiguyasi.**
look! somewhere someone s/he is crying DIR

Behold, somebody (somewhere) is crying. [Boas 13.024]

- (33b) **Wa hauwi k'apishu ai' ga'a.**
indeed someone last night there he is located DIR

Somebody was there last night. [Boas 24.181]

(33c) ...hauwi seiyu dzaawaanu, sh'ee
whoever all she would grind the corn DIR then

s'amätyi naadrigu.
my son she will marry him DIR

...whoever grinds all the corn shall marry my son. [Boas 20:310-311]

(33d) Wa hauwi hawee dze'eku.
indeed someone this way they PL came DIR

Someone (pl) is coming. [Boas 07.157]

(33e) Y'u hauwi k'usra ai' cha'aat'a.
perhaps someone last night there they PL sat/camped DIR

Evidently some people camped there last night. [Boas 13.041-042]

If the main verb of the sentence is transitive and **hauwi** is acting as the subject with another third person human as the direct object, the verb will typically carry the appropriate form of the third person patient pronominal prefix, since in this case the direct object will usually be more topical than the unknown and unspecified subject (see Chapter 7).

(34) **Wa haadyi hauwi dziguity'itra.**
indeed somewhere someone other hurt him DIR

Somebody hurt him. [Boas 26.162]

In (35), **hauwi** acts as the head of the relative clause **hauwi k'uuyauda** 'someone who is an old woman DUB', which serves as the direct object of the verb **dyuukacha** 'she saw her DUB', as well as to the subject of the following verb **dya'a** 'she is located DUB'.

(35) **Sh'ee dyuukacha hauwi k'uuyauda,**
then she saw her IND someone she is an old woman IND

aisi dya'a.
right there she is located IND

Then she saw some old woman there sitting. [Boas 16.0924-0925]

A similar structure is seen in (36).

(36a) **Sh'ee ai' haanyi sru aisi dya'a**
then there east just right there he is located IND

hauwi hashchida...

someone he is an old man IND

Then in the east an old man was sitting... [Boas 20.208]

(36b) **Sh'ee hauwi Siinyi miidyeda...**

then someone a Zuni he is a boy IND

Then there was a Zuni boy... [Boas 31.001]

(36c) **Sh'ee hauwi hatridze ee-t'aatsiguya...**

then someone man thus he said to him IND

Some man said to him... [Boas 18.341]

(36d) **...wai' kuya-ha n'i shuk'u hauwi**

over there southeast down corner someone

huuchanyidyeeshe, Kishchira dyanaishjiyashe.

the one who is chief IND Mexican their father IND

...there in the southeast down below there was some chief, the Mexicans' father.

[Boas 17.107]

As the examples in (35) and (36) show, when **hauwi** occurs with a noun or nominalized clause, the result is a construction where **hauwi** functions much like an indefinite determiner with the meaning '*some (or other)*'.

With the negative particle **dzaadzi**, the resulting phrase means '*nobody, no one, not anyone*'.

(37a) **Wagu dzaadzi hauwi dyutuunyi.**
then not someone he knows IND

Nobody knew it. [Boas 05.058]

(37b) **Dzigana dzaadzi hauwi dyiwaashitsi ee**
again not someone he invited them PL NEGIND and

dzaadzi hauwi dayadyiisha.
not someone s/he fed them PL NEGIND

Again nobody invited them, and nobody gave them to eat. [Boas 08.014]

(37c) Sh'ee ai' dyayadruuk'ami sru dyuu-sai',
 then there they PL waited for them PL IND just two days

sh'ee dzaadzina hauwi hau' da'ats'i.
 then not someone to there he arrived NEGIND

Then there they waited two days and nobody came. [Boas 16.720-721]

As an indefinite pronoun, *dzaadzi hauwi* can serve as an argument of the verb, as seen above in (37). However, the same phrase can also serve as a modifier of an argument, with the meaning 'none of us/you/them', as in (38). Note that the argument so modified is marked as singular.

(38a) "Dzaadzi hauwi duwee isrgaya sru
 not someone this way on the other side just

nyiyatisrunu di' hiyaanyi," dyanaat'a.
 you will travel NEGDIR here trail he said IND

"Nobody of you shall go along this trail," he said. [Boas 10.019-021]

- (38b) Dzaadzi hauwi iity'e na'auyatasrunu dyaana-sai'i.
not someone can you will eat NEGDIR four days

None of you can eat any more for four days. [Boas 11.021]

4.9 The Indefinite Particles heek'u, heek'uda, heek'udaasi

This indefinite particle can be used as an interrogative or as a nominal.

4.9.1 Uses as an Interrogative

As an interrogative, heek'u or heek'udaasi means 'which way? where to?'.

- (39a) Heek'u dzuusru?
where to you go DIR

Where are you going? [Boas 25.154]

- (39b) Heek'udaasi dzuuku?
where to it went DIR

Where did it go to? [Boas 21.018]

- (39c) Heek'udaasi dyakudruwai tsiyuunyishe?
 which way butterfly that it flew

Which way did the butterfly fly? [Boas 20.216]

- (39d) Sh'ee heek'udaasi dzyutse?
 then which way he took her DIR

Which way did he take her? [Boas 25.044]

4.9.2 Uses as a Nominal

As an indefinite nominal, **heek'udaasi** also translates as '*which way, to somewhere*'.

- (40a) Sh'ee dzaadzi diyaina heek'udaasi dzuutyishe.
 then not he found it NEGIND which way that she went

He did not find which way she had gone. [Boas 24.163]

- (40b) Sh'ee ai' sruyana daasrkidaanyiguyana
 then there all around they were tracking her IND

heek'udaasi nyeeshjigunyishe.

which way that she will step

Then they looked all around for her tracks which way her feet went. [Boas 26.066]

(40c) Wa y'u hauwi heek'uda diyutse.

indeed maybe someone to somewhere he took her DUB

Maybe someone took her. [Boas 26.068]

4.10 The Indefinite Particle dzeeguma

This particle can be used as an interrogative meaning 'why?'.

(41a) Dzeeguma shatyiguyasi?

why you cry DIR

Why do you cry? [Boas 09.215]

(41b) Dzeeguma duwa ha'anaanyi srubeuguya?

why this burr you are eating it DIR

Why do you eat these burrs (tumbleweeds)? [Boas 12.021]

- (41c) Dzeeguma dza srgumityitsa?
why not he killed me NEGDIR

Why didn't he kill me? [Boas 19.281-282]

It can occur with the particle **aku** 'I wonder...':

- (42) Aku dzeeguma dzaana hama kacha.
I wonder why not sometimes it rains NEGDIR

I wonder why it is never raining. [Boas 19.016]

While the form **dzeeguma** is used consistently throughout the Boas corpus, modern-day speakers also have a shortened version **dzeema**, as in (43).

- (43a) Dzeema duwa anamatyi sruwiityita?
why this chair you are making it DIR

Why are you making this chair?

(43b) Dzeema dza manyisaana anyiusru?

why not apple you like it NEGDIR

Why don't you like apples?

Chapter 5

Demonstratives

Demonstratives are a small but important class of words in Laguna Keres. There are three main members of this class, each of which can be used as either a demonstrative adjective or a demonstrative pronoun.

duwa	<i>this, this one</i>
he'e	<i>that, that one</i>
we'e	<i>yonder, yonder one</i>

Of the three, **duwa** is by far the most frequent. It also commonly occurs in a shortened form, **duu**.

5.1 Demonstratives as Modifiers

As modifiers, all three demonstratives occur in initial position in the noun phrase, in front of the head noun and any other pre-nominal modifiers.

- (1a) **Miisru kuushch'i duwa kuhaya.**
already it is dead DIR this bear

This bear is already dead. [Boas 18.058]

- (1b) Sh'ee duwa tyiimi seiyu ch'uuchinyi.
then this dress all it is yellow IND

Then this dress was all yellow. [BOAS 20.048]

- (1c) Dzeeguma duwa ha'anaanyi srubeuguya?
why this burr you are eating it DIR

Why do you eat these burrs? [BOAS 12.021]

- (1d) Duwa k'uyaityi kidraama-eesi n'i naidrudzeesru...
this game right to your house down you will take it DIR

You will take this game down to your house... [Boas 16.0835]

- (1e) Hanye srau'u duwa hatridze nyiyubeet'awa.
let's this man let's PL ask him IMP

Let's ask this man. [Boas 17.195-196]

In (2) we see an example of demonstratives modifying conjoined nouns.

- (2) Sh'eesru emi dyicha aadyei'i duwa
and then that's it he sent them IND to carry it this
- hadraminyi ee its'aadyanyi ee wiisrbi
prayer stick and brooch and cigarette

Then they sent him to carry these prayer-sticks and beads and cigarettes. [Boas 05.036]

Demonstratives can also be used with nominalized clauses, as in (3).

- (3) Dzaadzina nuuyu dzii dyit'atyusi
not by herself (what) she was standing up NEGIND
- duwa k'uuyaudzeeshe.
this the one who is an old woman

This old woman could not stand alone. [Boas 09.101]

Demonstratives are also found with possessed nouns, as shown in (4).

(4a) Duwa sidra'ayatradyemishe wa sru
this our DL children indeed just

dzaadzi ka'auts'it'ugaidyu.

not they PL obey us PL NEGDIR

These our children do not obey us. [Boas 03.001]

(4b) Egu sh'ee duwa s'adyu?
moreover then this my jar

What shall I do with my water jar? [Boas 24.012]

Demonstratives can also occur with other nominal modifiers, such as quantifiers, and typically precede them, as in (5).

(5a) Sh'ee duwa saiyu ha'ats'i peet'atsisrau-eesi
then this all land right where it cracked

n'i diyashta.

down she put them PL IND

Then the whole country cracked and down there [our mother Nautsiti] put them.

[Boas 03.026]

- (5b) ...duwa m'iika waawa...
...this other medicine

...this other medicine... [Boas 19:058]

- (5c) Duwa dyaana dyeiyanyi ka'audyimema...
this four piñon nut let me plant it IMP

Let me plant these four piñon nuts... [Boas 30:316-317]

- (5d) "Nutyu duwa dyuuwe dyetya ishaanyi
as for me this two rabbit meat

kube," dyanaat'a.

let me eat it IMP he said IND

"Let me eat the meat of these two rabbits," said he. [Boas 31.105]

As the examples in (5c-d) show, there are no specifically dual or plural forms of the demonstratives.

Finally, in (6), we see examples of demonstratives being used with nouns which are themselves being modified by relative clauses.

(6a) Sh'eesru gai chuyaaseedyumi dzigana
and then well they PL made them PL IND again

duwa hanu shch'amitsishe...
this person the one who is white...

Then they made also these white people... [Boas 05.023-024]

(6b) Duwa k'uuchinyishe y'aak'a
this the one that is yellow corn

seyu kitr'aawanadyau....
all if you grind it DIR

If you grind all the yellow corn... [Boas 22:410-411]

5.2 Demonstratives as Nominals

Demonstratives are also commonly found being used as nominals.

- (7a) Egu duwa shitsi nupesi.
moreover this raw I will eat it DIR

I shall eat these raw. [Boas 28:033]

- (7b) Baami he'e draa'apel
don't that one eat it DL IMP

Don't eat this! [Boas 33:117]

- (7c) Duwa, tsaya bi shinaudanye di' k'uutyu,
this first west when you come to the edge DIR here mountain

sh'ee naumuk'tsisru.
then you will chew it DIR

This, when you first come to the west end of the mountain, then chew it. [Boas

In (8), the demonstrative **duwa** acts as the direct object, and is elaborated by an appositive phrase.

- (8) "Duwa, s'adyaashe dyakudruwai, nyiyudzeekidruusa."
 this my pet butterfly you PL will take it DIR

"This, my butterfly, will take you." [Boas 20.333]

A similar type of appositive construction is shown in (9).

- (9) Duwa haweesi s'uishdaiku dyeiyanyi.
 this back that way I brought it DIR piñon nut

I brought back these piñon nuts. [Boas 30:463]

This could be analyzed as a discontinuous noun phrase, with **duwa** acting as a demonstrative adjective and **dyeiyanyi** as the head of the NP, much as is the case in the English translation Boas provides. However, since **duwa** also acts as a demonstrative pronoun in many cases, the simpler analysis for this sentence is that **duwa** is itself the direct object, and that **dyeiyanyi** is an appositive added after the verb as a reconfirming

elaboration of the demonstrative pronoun. As such, a more literal translation of this sentence might be: *"I brought these back, the piñon nuts."*

A similar analysis holds for the following example:

(10) Sh'ee duwa ch'upe kinaatyi ee meruuni...
then this eat it IMP corn and melon

Then eat [this] corn and melons... [Boas 12.023]

Chapter 6

Quantifiers and Numbers

6.1 Quantifiers

Quantifiers are a group of words which refer to quantities or amounts. Some common quantifiers include:

sai, saiyu	<i>'all'</i>
n'auya	<i>'many, a lot'</i>
hats'u	<i>'some'</i>
k'uimi	<i>'a little'</i>

While this is primarily a semantic grouping, distributional evidence shows that all quantifiers can be used either as modifiers or as pronouns.

6.1.1 Quantifiers as Modifiers

When used as modifiers, quantifiers can occur in a range of locations within the sentence.

In my data, the most common slot is before the noun, as in (1).

- (1a) Sh'ee miisru saiyu hanu Siinyi dyabayu.
 then already all person Zuni they PL fled IND

Then all of the Zuni people had already escaped. [Boas 17.212-213]

- (1b) Sh'ee ai' srku dye'eku saiyu sendaaru.
 then there south they PL went IND all soldier

Then to the south went all the soldiers. [Boas 17.250]

- (1c) Sh'ee gai dzika n'auya kiitsi chuwawaana.
 then well also many antelope they PL killed them PL IND

Then they killed also many antelopes. [Boas 13.128]

The reverse order is also found, as in (2).

- (2) Sh'ee hausi dza'ats'inau, sh'ee dyetya n'auya
 then back there when she arrived then rabbit many

ani chuwiisha.

down there she placed it IND

When she arrived there she put down many rabbits. [Boas 29.054]

A third possibility is for the quantifier to occur pre-verbally, with the noun occur at the end of the sentence, as in the examples in (3).

- (3a) **Atsi gai naachama n'auya kuumasawaatra ishaanyi.**
later well tomorrow much it is cooking DIR meat

Tomorrow we may boil much meat. [Boas 25.204]

- (3b) **Sh'ee n'auya dyiyutra y'aunyi.**
then many he picked them PL up IND stone

Then he picked up many stones. [Boas 35.095-096]

- (3c) **Maame n'auya daiwaana sendaaru.**
very many they PL were killed IND soldier

They killed a great many of the soldiers. [Boas 17.176-177]

As (3c) also demonstrates, the quantifier **n'auya** often occurs with the degree adverb **maame** 'very', giving the meaning 'very many'. Another example is seen in (4).

- (4) Dyuwakachani maame n'auya tyiimi.
they DL saw them PL IND very many dress

They saw many dresses. [Boas 33.301-302]

The quantifier combination **k'uimi n'auya**, literally '*a few many*', has a special meaning of '*not very many*'.

- (5a) K'uimi n'auya cha'aitra.
a few many they PL lived there IND

A few lived there. [BOAS 17.072]

- (5b) Sh'eesru di' dyi gai k'uimi n'auya
and then here up well a few many

cha'aa'adrana.

they PL built it IND

Then also here above not very many erected buildings. [Boas 17.106]

6.1.2 Quantifiers as Pronouns

Quantifiers can also stand alone in the sentence, without any noun to modify. In these cases, the quantifiers themselves act a type of quantificational pronoun, e.g.

sai/saiyu	<i>'all of them'</i>
hats'u	<i>'some of them'</i>
n'auya	<i>'many of them'</i>

Another possible analysis is that they act of modifiers of the pronominal arguments marked on the verb. Examples of this type are shown in (6)

- (6a) **Sh'ee sai n'i cha'aat'a.**
 then all down they PL sat IND

Then they all sat down. [Boas 16.0494]

- (6b) **Srau'u saiyu nuwawaana.**
 let's all let's PL kill them PL IMP

Let's kill all of them. [Boas 17.122]

- (6c) **Sh'ee sai ai' sidye'eku, hats'uma**
 then all there they PL went IND a little while

chuwawanadraana.

they PL rested IND

Then they all went (there) and for a while they took a rest. [Boas 16.0534-0535]

(6d) Maame n'auya haweesi chaatye.

very many back that way she took them PL IND

Very many she brought. [Boas 29.056]

6.1.3 Other Uses of Quantifiers

Some quantifiers have other uses beyond those described above. Some can occur as degree adverbs, describing the extent to which an action was carried out.

sai/saiyu 'completely, entirely'

k'uimi 'somewhat'

For example:

(7) Wa saiyu ny'ishch'itusgum'a.

indeed completely I will melt DIR

I shall melt entirely. [Boas 12.070]

- (7b) Sh'ee sai ku dyumi.
then all south he went out IND

He went out all through the south. [Boas 16.0446-0447]

- (7c) Sh'ee egu maame sru k'uimi hashchiida.
then moreover very just a little he is an old man IND

He was verily a little old. [Boas 10.051]

Hats'u can be used as a question word, meaning 'How many?' or 'How much?'

- (8) Sh'ee ee-dyaadziya dzigana, "Hats'udzaapa?"
then thus they said IND again they PL are how many DIR

Then they spoke again, "How many are there?" [Boas 16.0221]

6.2 Numbers

Numbers are an interesting class of words in Laguna. Like quantifiers, they can be used

either as modifiers or as nominals.

6.2.1 The Basics

The Laguna numbers from 1-10 are listed below in Table 6.1, with their corresponding forms in Acoma (Miller 1965) and Santa Ana (Davis 1960) for comparison.

	Laguna	Acoma	Santa Ana
<i>one</i>	iisrk'e	ísrk'é	ísrka
<i>two</i>	dyuuwe	dyúuw'éé	dyúumíí
<i>three</i>	chami'e	chame'éé	chémi
<i>four</i>	dyaana	dyáana	dyáana
<i>five</i>	taam'a	táam'a	táam'a
<i>six</i>	shch'isa	sh'isa	shch'isa
<i>seven</i>	m'aidyana	m'ái'dyaana	m'àidyana
<i>eight</i>	kuk'umishu	kuk'úmishu	gúk'úmishi
<i>nine</i>	maiuk'a	máyúk'u	máyuk'u
<i>ten</i>	k'atsi	k'átsi	k'átsi

Table 6.1 Keresan Numbers 1-10

Note that the word for 'three', **chami'e** (also pronounced as **chemi'e** by some speakers), is one of the few words in Laguna which has a glottal stop which is not preceded and followed by the same vowel.

The numbers 11-19 are formed with the word **k'atsi** 'ten', followed by the appropriate number 1-9, followed by the verb **dzidra** 'it is more, extra', as shown in (9).

- | | | |
|------|---------------------------------|--------------------|
| (9a) | k'atsi-isrka-dzidra | <i>'eleven'</i> |
| (9b) | k'atsi-dyu-dzidra | <i>'twelve'</i> |
| (9c) | k'atsi-chami-dzidra | <i>'thirteen'</i> |
| (9d) | k'atsi-dyaana-dzidra | <i>'fourteen'</i> |
| (9e) | k'atsi-taam'a-dzidra | <i>'fifteen'</i> |
| (9f) | k'atsi-shch'isa-dzidra | <i>'sixteen'</i> |
| (9g) | k'atsi-m'aidyana-dzidra | <i>'seventeen'</i> |
| (9h) | k'atsi-kuk'umishu-dzidra | <i>'eighteen'</i> |
| (9i) | k'atsi-maiyuk'a-dzidra | <i>'nineteen'</i> |

Note that in the numbers *'eleven'*, *'twelve'* and *'thirteen'*, reduced forms of the numbers *'one'*, *'two'* and *'three'* are found: **isrka** instead of **iisrk'e**, **dyu** instead of **dyuuwe**, and **chami** instead of **chami'e**.

The numbers for twenty and above are formed using the multiplicative adverbs. To form the multiples of ten, the multiplicative adverbs are compounded with **k'atsi** 'ten', as shown in (10).

- | | | |
|-------|---------------------|-----------------|
| (10a) | dyuya-k'atsi | <i>'twenty'</i> |
|-------|---------------------|-----------------|

(10b)	chamiya-k'atsi	<i>'thirty'</i>
(10c)	dyaanawa-k'atsi	<i>'forty'</i>
(10d)	taam'awa-k'atsi	<i>'fifty'</i>
(10e)	shch'isawa-k'atsi	<i>'sixty'</i>
(10f)	m'aidyanawa-k'atsi	<i>'seventy'</i>
(10g)	kuk'umishuwa-k'atsi	<i>'eighty'</i>
(10h)	maiyyuk'awa-k'atsi	<i>'ninety'</i>
(10i)	k'adzawa-k'atsi	<i>'one hundred'</i>

For the numbers in between the multiples of ten, the same construction is used as with the numbers 11-19. The only difference is that the special reduced forms of *'one'*, *'two'* and *'three'* that are found in *'eleven'*, *'twelve'* and *'thirteen'* are not used in these higher numbers. Some examples are seen in (11).

(11a)	dyuya-k'atsi-iisrk'e-dzidra	<i>'twenty-one'</i>
(11b)	chamiya-k'atsi-dyuuwe-dzidra	<i>'thirty-two'</i>
(11c)	dyaanawa-k'atsi-chami'e-dzidra	<i>'forty-three'</i>
(11d)	taam'awa-k'atsi-dyaana-dzidra	<i>'fifty-four'</i>
(11e)	shch'isawa-k'atsi-taam'a-dzidra	<i>'sixty-five'</i>
(11f)	m'aidyanawa-k'atsi-shch'isa-dzidra	<i>'seventy-six'</i>
(11g)	kuk'umishuwa-k'atsi-m'aidyana-dzidra	<i>'eighty-seven'</i>
(11h)	maiyyuk'awa-k'atsi-kuk'umishu-dzidra	<i>'ninety-eight'</i>

6.2.2 Numbers as Modifiers

As with quantifiers, there is a freedom of order with respect to numbers and nouns. In (12) there are examples of the number preceding the noun.

- (12a) **Dyuuwe manyisaana supe.**
two apples I ate it DIR

I ate two apples.

- (12b) **Dyaana kadriitya siuwakacha.**
four horse I see them PL DIR

I see four houses.

- (12c) **...hawee srbi dyuuwe k'akana ts'e'eyu.**
...this way westward two wolf they DL went IND

...there in the west two wolves were going. [Boas 16.0055]

- (12d) **Dyuuwe k'anyi kiwats'a sina-ha.**
two juniper it is a tree DIR middle-east

Two juniper trees were standing there in the middle east. [Boas 21.011]

- (12e) Sh'ee ai' dya'a chemi kisraityi.
then there he was located IND three year

Then he stayed there for three years. [Boas 17.207-208]

- (12f) Chemi ts'aashchi seiyu dyaunauta haash'uwimi.
three day all he finished it IND moccasin

After three days he finished the moccasins. [Boas 22.538]

Examples of the reverse order are shown in (13).

- (13a) Sh'ee hawee dyu'umi iyatra uwaka dyuuwe.
then this way they DL went out IND children baby two

Then out came two baby children. [Boas 24.176]

- (13b) Hats'uma ka'aidraanye edyiyu daiwakuya
a little while when it happened next he gave it to them PL IND

y'aabi shch'isa.

cane of office six

After a while next he gave them six canes of office. [Boas 17.282]

(13c) Sh'ee gawiidze shjiyuugu dyeiyanyi dyaana
then his chest he took it out IND piñon nut four

ee dzika yaachinyi dyaana.
and also grain of corn four

*Then out of his chest he took four piñon nuts and also four grains of corn. [Boas
07.085-086]*

The freedom with which the two orders are found is brought to light by the examples in fourteen. These examples are drawn from the same text, by the same speaker, just a few lines apart, and involve the same phrase 'two priests'. In (14a) we find the order number + noun, while in (14b) we have noun + number.

(14a) Tsaya Aak'u dyi dyi dyu'umi
first Acoma up up they DL came out IND

dyuuwe tudachi.

two priest

First to Acoma came up two priests. [Boas 17.118-119]

(14b) Edyiyu Aak'u hau' dyi dyu'umi

next Acoma to there up they DL came out IND

tudachi dyuuwe.

priest two

Then at Acoma, up there two priests went out. [Boas 17.124]

Just as with quantifiers and demonstratives, we find a third ordering possibility with numbers, namely where the number occurs pre-verbally and the noun occurs at the end of the sentence.

(15a) Sh'ee dyuuwe chuwa dyenye.

then two he killed it IND deer

Then he killed two deer. [Boas 16.0393]

(15b) Wa dyuuwe ai' ga'a uwaka.
indeed two there he is located DIR baby

There are two babies. [Boas 24.189]

6.2.3 Numbers as Nominals

Numbers can also be used as nominals, when there are no nouns in the sentence for them to modify, or, alternatively, as modifiers of the pronominal arguments marked on the verb. Examples are shown in (16).

(16a) Sh'eesru dyuuwe dyuwaya.
and then two she gave birth to them (PL?) IND

Then to two she gave birth. [Boas 23.061]

(16b) Sh'ee chupe huusrumenye. Chemi'e sai chupe.
then he ate it IND sweet corn meal three all he ate it IND

Sh'ee isrga sru daatyu.
then one just it is left over IND

Then he ate the sweet corn meal. He ate three and had one left over. [Boas 30.231-232]

- (16c) Egu . wa miisru s'ayatratyi dyuuwe...
moreover indeed already I have a child DIR two...

I have already two children... [Boas 17.245]

6.2.4 Other Words Built From Numbers

Quite a few other words, including verbs and adverbs, can be built off of numbers in Laguna. Like other nouns, numbers can combine with the copular auxiliary verb *-dza* 'to be something'; the results are verbs meaning 'to be [such-and-such] in number'.

- (17) **dyaana-dzaapa** 'they are four in number, there are four of them'

Those verbs can then take the noun-making suffix *-Cishe*.

- (18) **m'aidyanadzaabaa-tyishe** 'those that are seven in number; the seven of them'

The simple multiplicative adverb form of a number refers to the number of times that some

action or event occurred. It is formed by adding the multiplicative suffix *-ya/-wa* to the numeral base. The form *-ya* occurs in the forms for *'twice, two times'* and *'thrice, three times'*.

(19a) **dyuya** *'twice, two times'*

(19b) **chamiya** *'thrice, three times'*

Note that in both of these examples the numeral occurs in the same truncated form that is found in the numbers **k'atsi-dyu-dzidra** *'twelve'* and **k'atsi-chami-dzidra** *'thirteen'*.

Other multiplicative adverbs, from four through nine, are formed with the suffix form *-wa*, as shown in (20).

(20a) **dyana-wa** *'four times'*

(20b) **tama-wa** *'five times'*

(20c) **shch'isa-wa** *'six times'*

(20d) **m'aidyana-wa** *'seven times'*

(20e) **kuk'umishu-wa** *'eight times'*

(20f) **maiyuk'a-wa** *'nine times'*

(20g) **k'adza-wa** *'ten times'*

These multiplicative adverbs serve as the base for the numerals expressing multiples of ten.

For the numbers ending in **dzidra**, the suffix form **-ya** is used.

- (21a) **k'atsi-isrka-dzidra-ya** *'eleven times'*
(21b) **dyaanawa-k'atsi-chami-dzidra-ya** *'forty-three times'*
(21c) **kuk'umishu-k'atsi-shch'isa-dzidra-ya** *'eighty-six times'*

Examples of the use of multiplicative adverbs are found in (22).

- (22a) **Dyuya sru ee-nadzasru.**
twice just thus you will speak DIR

Twice more you will speak. [Boas 19.222]

- (22b) **Sh'ee hats'uma ka'aidraanye dyaanawa**
then a little while when it happened four times

kuwadrutyiyaaty.

they PL finished singing IND

After a while they finished singing four times. [Boas 16.0618]

(22c) Di' sruyana dyaanawa nyiyusi.
 here all around four times I will fly DIR

I shall fly four times around here. [Boas 31.125]

(22d) Dyuya-k'atsi-dyaana-dzidraya dyiwayaidya,
 twenty-four times they PL brought food IND

ee dzika inaawi dyuya-k'atsi-dyaana-dzidraya.
 and also flour twenty-four times

Twenty-four pieces was the number of what they gave them to eat, and also baskets of flour, twenty-four was their number. [Boas 16.0687-688]

The suffix form *-wa* is also apparently found in the word *isrgaawa*. This looks like it should mean 'once, one time', however, it actually means 'both'.

(23a) Sh'ee isrgaawa hawee ty'ee'eyu Maasewi ee
 then both this way they DL went IND Maasewi and

Uyuuyewi.

Uyuuyewi

Then both went there Maaseewi and Uyuuyewi. [Boas 07.033]

(23b) "Srau'u shchiyukachani isrgaawa k'uidze
let's let's DL see it IMP both what kind

binyiya n'i guwaisrau," dyanaat'a.
southwest down lake he said IND

"Let both of us see how the lake down below is," said he. [Boas 15.180-181]

(23c) Sh'ee ai' shjitya ty'ee'eyu isrgaawa.
then there north they DL went IND both

Then both went to the north. [Boas 25.272]

Chapter 7

Person and Role

The verbal prefix is one of the most complex, yet essential, parts of Laguna grammar.

The prefix carries information from four different grammatical categories: **person**, **role**, **mood** and **polarity**. As such, we have chosen the acronym **PRMP prefix**. Here in chapter 7 we will focus on describing and understanding the categories of person and role, saving mood and polarity for chapter 8.

7.1 The Data and the Issues

7.1.1 PRMP Prefix with Intransitive Verbs

To begin with, let's look at a typical intransitive verb: **-usrp'etrutsa** 'to limp'.

(1a) **Siusrp'etrutsa.** *I am limping.*

si-usrp'etrutsa

1-limp

(1b) **Srusrp'etrutsa.** *You are limping.*

sr-usrp'etrutsa

2-limp

- (1c) **Gusrp'etrutsa.** *He/She is limping.*
g-usrp'etrutsa
 3-limp

This verb takes a first person prefix **si-**, a second person prefix **sr-** and a third person prefix **g-**. We will refer to these as the Set A prefixes. There are many intransitive verbs in Laguna which take the Set A prefixes, including:

- (2a) **-ushch'i** *'to have diarrhea'*
 (2b) **-ausrgitsi** *'to be brave'*
 (2c) **-ausinyitsa** *'to hurry along'*
 (2d) **-umi** *'to leave'*
 (2e) **-uusrbiitsa** *'to whistle'*

However, not all intransitive verbs in Laguna use the Set A prefixes. One such verb is **utyishu** *'to be afraid'*.

- (3a) **Srgutyishu.** *'I am afraid.'*
srg-utyishu
 1-be.afraid

(3b) **Kidrutyishu.** *'You are afraid.'*
kidr-utyishu
2-be.afraid

(3c) **Dziutyishu.** *'He is afraid.'*
dzi-utyishu
3-be.afraid

For this verb, the first person prefix is **srg-**, the second person prefix is **kidr-** and the third person prefix is **dzi-**. We will call these the Set B prefixes. Other intransitive verbs using the Set B prefixes include:

- (4a) **-unu** *'to be selfish'*
(4b) **-unashiya** *'to be in a hurry'*
(4c) **-ubayatsa** *'to burst out laughing'*
(4d) **-uhima** *'to believe'*
(4e) **-udyumidruwi** *'to forget'*
(4f) **-uunawats'i** *'to have a secret'*

We summarize these patterns in Table 7.1 below.

	Set A	Set B
1	si-	srg-
2	sr-	kidr-
3	g-	dzi-

Table 7.1: Set A and Set B prefixes

Each intransitive verb can only occur with prefixes from one of these two sets. As such, we are dealing with a "split-intransitive" or "split-ergative" system (Mithun 1999). While the choice of a Set A prefix or Set B prefix must be lexically specified for each verb stem -- and, hence, must be learned on a verb-by-verb basis -- there are clear general patterns which fall in line with similar splits in other languages. Verbs which refer to states (physical or mental) or involuntary actions overwhelmingly take Set B prefixes, while verbs that refer to activities typically take Set A prefixes.

The examples above in (1)-(4) bear out this pattern, while at the same time showing how there are exceptions and complications. A form such as **gushch'i** 'he has diarrhea' might seem like a good candidate for a state, or, at best an involuntary activity, and yet it requires a Set A prefix. Similarly, **gausinyitsa** 'he hurried along' and **dziunashiya** 'he is in a hurry' both describe very similar scenarios, and yet in the first the subject is coded with a Set A prefix, and in the second with a Set B prefix.

Split intransitivity of this type is fairly common in North America (Mithun 1999:213-222),

being found in Iroquoian, Siouan, Pomoan and other families. Unlike the Iroquoian languages, Laguna has no secondary or cross-cutting splits based on tense or aspect. Moreover, I found no examples of fluidity in the argument marking of the type found in Central Pomo, where speakers have the option to code an argument as either agent or patient, depending on the perceived volitionality of the action.

7.1.2 PRMP Prefixes with Transitive Verbs

While intransitive verbs can only occur with prefixes from either Set A or Set B, transitive verbs use both sets of prefixes. Consider the following examples of the verb stem **-ukacha** 'to see sth.'. In (5a-c), we see this verb used with the Set A prefixes.

(5a) **Siukacha.** *'I see him.'*

si-ukacha

1A-see

(5b) **Srukacha.** *'You see him.'*

sr-ukacha

2A-see

- (5c) **Gukacha.** *'He sees him.'*
g-ukacha
3A-see

Here, the same prefixes which just coded for subject with the intransitive verbs appear to be coding for a combination of subject plus third person object with transitive verbs.

In (5d-f), the Set B prefixes are used.

- (5d) **Srgukacha.** *'He sees me.'*
srg-ukacha
1B-see

- (5e) **Kidrukacha.** *'He sees you.'*
kidr-ukacha
2B-see

- (5f) **Dziukacha.** *'He sees him.'*
dzi-ukacha
3B-see

These examples show the reverse of the earlier ones, with the PRMP prefix now marking an

object combined with a third person subject.

In fact, there is a third set of prefixes -- Set C -- that is also used with transitive verbs, as seen (5g-h).

(5g) **Sraukacha.** *'I see you.'*

sra-ukacha

1/2C-see

(5h) **Dyukacha.** *'You see me.'*

dy-ukacha

2/1C-see

The two prefixes in Set C mark combinations of a first person and a second person. The prefix **sra-** indicates a first person subject and a second person object. The prefix **dy-** indicates just the opposite: a second person subject with a first person object.

7.1.3 PRMP Prefixes with Ditransitive Verbs

Much like transitive verbs, ditransitive verbs use prefixes from Sets A, B and C. Again, the Set A prefixes are used to mark the subject, this time in combination with a third person recipient, as in (6a-c). Note the slightly different allomorph used in (6c).

- (6a) **Siuwiidranyi.** *'I made it for him.'*
si-uwiidranyi
 1A-make.sth.for.sb
- (6b) **Sruwiidranyi.** *'You made it for him.'*
sr-uwiidranyi
 2A-make.sth.for.sb
- (6c) **Kuwiidranyi.** *'He made it for him.'*
k-uwiidranyi
 3A-make.sth.for.sb

The Set B prefixes mark the recipient, combined with a third person subject, as shown in (6d-f)

- (6d) **Srkuwiidranyi.** *'He made it for me.'*
srk-uwiidranyi
 1B-make.sth.for.sb
- (6e) **Kitruwiidranyi.** *'He made it for you.'*
kitr-uwiidranyi
 2B-make.sth.for.sb

- (6f) **Ts'iuwiidranyi.** *'He made it for him.'*
ts'i-uwiidranyi
3B-make.sth.for.sb

The Set C prefixes also mark both the subject and the recipient together.

- (6g) **Sr'auwiidranyi.** *'I made it for you.'*
sr'a-uwiidranyi
1/2C-make.sth.for.sb

- (6h) **Tyuiidranyi.** *'You made it for me.'*
ty-uwiidranyi
2/1C-make.sth.for.sb

7.1.4 PRMP Prefixes with Impersonal Verbs

Impersonal verbs, although they have no syntactic or semantic arguments, also use PRMP prefixes. Specifically, they use the third person prefix from Set A.

- (7a) **Gina.** *'It is very windy.'*
g-ina
3A-be.very.windy

(7b) **Kawetu.** *'It snowed.'*

k-awetu

3A-snow

7.1.5 Summary

The different uses of the Set A, B and C prefixes are summarized in the Table 7.2 below.

	Impersona I	Intransitive	Transitive	Ditransitive
SET A	"subject"	subject	subject + [3 object]	subject + [3 recipient]
SET B	<i>not used</i>	subject	[3 subject] + object	[3 subject] + recipient
SET C	<i>not used</i>	<i>not used</i>	subject + object	subject + recipient

Table 7.2: Summary of the uses PRMP sets A, B and C

There are several issues which this description raises:

1. The Set A prefixes seem to basically be subject prefixes, even in the case of Impersonal verbs which have no subject either syntactically or semantically. Yet, with transitive and ditransitive verbs they also seem to code for a third person argument, either object or recipient.

2. The Set B prefixes do not seem to code any consistent syntactic argument, sometimes marking the subject, sometimes the object, and sometimes the recipient. These prefixes, too, seem to also code for an "extra" third person argument -- specifically, a subject -- with transitive and ditransitive verbs.

3. Another complication, which the table does not show, is the relationship between the third person prefixes from Sets A and B. Note that both of these prefixes can be used with transitive (or ditransitive) verbs, and that the resulting translation is the same in both cases.

(8a) **Gukacha.** *'He sees him.'*

g-ukacha

3A-see

(8b) **Dziukacha.** *'He sees him.'*

dzi-ukacha

3B-see

These issues have been analysed in several different ways by previous researchers. Their analyses are summarized below.

7.2 Previous Analyses

To date, there have been three major analyses of the PRMP prefix system in Keresan: Davis (1960) on Santa Ana, Miller (1965) on Acoma, and Valiquette (1990) on Laguna. Although the facts of the prefix system are analogous in all three varieties of Keresan, each of the researchers has come to a slightly different set of conclusions regarding how that system operates.

7.2.1 Davis on Santa Ana

For Davis, the Set A and B prefixes which occur on transitive verbs are different morphemes from those which occur on intransitive verbs. He notes, of course, that many of the forms of these morphemes are identical, such as **si-**, which marks a first person subject on an intransitive verb, and the combination of a first person subject with a third person object on a transitive verb. However, he distinguishes between the two types of **si-** based on their allomorphic variation. He notes that (1964:79) "there are more allomorphs of each affix affiliated with intransitive verbs than with transitive verbs." For instance, on transitive verbs, the 1st person prefix only has two different forms, **si-** and **ts'i-**, while on intransitive verbs Davis found 10 different allomorphs: **si-**, **ts'i-**, **s-**, **s'-**, **s'i-**, **sí'-**, **sídr-**, **síd-**, **srg-** and **srku-**.

Part of the issue here is that Davis did not recognize that Santa Ana Keres is a split-intransitive language, and that forms such as **srg-** and **srku-** are not allomorphs of **si-**, but are actually related to the Set B prefix **srg-**. That small discrepancy notwithstanding, there

are still quite a few more allomorphs of the pronominal prefixes found with intransitive verbs than with transitive verbs, so Davis's generalization holds.

As for the status of the two third person prefixes, **g-** and **dzi-**, Davis treats the latter as marking a "fourth person subject with a third person object" (1964:75), or 4/3. He notes that the 4/3 prefix **dzi-** is used instead of the 3/3 prefix **g-**, "when the subject of the action is obscure", or when it is "inferior to the object, as when an animal is the subject and a human being the object" (1964:76).

7.2.2 Miller on Acoma

Miller's analysis of the Acoma prefix system differs from Davis's in some interesting ways. For Miller, the prefixes that occur with intransitive verbs are essentially the same as those that occur on transitive verbs, although he doesn't actually give them all the same treatment.

He treats the prefixes **si-**, **sr-** and **g-** as essentially polysemous, in that they mean 1/3, 2/3 and 3/3 when attached to transitive verbs, and just 1, 2, and 3 when attached to intransitive verbs -- in fact, in his chart of the pronominal prefix (1965:100), he lists them as 1(-3), 2(-3) and 3(-3) respectively.

However, he does not extend that analysis to the other prefixes, **srg-**, **kidr-** and **dzi-**. He says the intransitive verbs that take the Set B prefixes "use the 3-1, 3-2 and obviate prefixes

for the first, second and third persons." In the chart, he does not list these prefixes with the 3 in parentheses, as he did with the other set of prefixes, so it is not clear to what extent he saw a parallel between the two situations.

As for the issue of the *g-* and *dzi-* prefixes, he labels the latter as "obviate". He does not discuss the use of this prefix in Acoma, but he glosses obviate forms such as *ts'aaku* as '*the other one bit him*', as opposed to the form *gaaku*, which he glosses as '*he bit him*'. We will evaluate this claim in a later section.

7.2.3 Valiquette on Laguna

Valiquette (1990), working with data from Laguna, provides a third different analysis of this system. For him, the prefixes that occur on the intransitive verbs are the same as those that occur on transitive verbs, without exception. In fact, under his analysis, those prefixes are not even polysemous. Thus, the *si-* prefix on *siukacha* '*I saw him/her/it*' marks a first person subject and a third person object (or, using his terms, a first person argument 1, and a third person argument 2), while the *si-* prefix on *siudraach'a* '*I fell off*', also marks a first person subject and a third person object. The only difference between the two is that in the latter case the object argument is a dummy.

He takes the same approach with Set B intransitives such as *-uhima* '*believe*', except that in this case, with a form such as *srguhima* '*I believe*', the prefix codes a dummy third

person subject (argument 1) and a (real) first person object (argument 2). He carries this line of argumentation to its logical conclusion by analyzing impersonal verbs such as *kacha* 'it is raining' as having both a dummy third person subject and a dummy third person object. Under Valiquette's analysis, then, all Laguna verbs are morphologically transitive, regardless of their syntactic or semantic valence.

As for *g-* and *dzi-*, Valiquette follows both Davis and Miller in labeling *dzi-* as a 4/3 prefix and calling it the "obviative". Concerning its use, he adds the important observation that (1990:41) "the obviative is used to signal a subject switch," and that, just as in Santa Ana, "it is used when the patient is higher than the agent in the 'hierarchy of beings'."

7.2.4 Summary of Previous Analyses

Davis, Miller and Valiquette take three contrasting positions with regard to the overlap between the intransitive and transitive sets of pronominal prefixes. For Davis, the two sets are similar, but distinct, due to differences in their allomorphic behavior. For Miller, the prefixes sets are apparently the same, but several of the prefixes are polysemous. For Valiquette, there is only one set of prefixes, each with an essentially invariant meaning, used in all cases.

Despite their disagreements on that score, they seem to be in harmony on labeling the *dzi-* prefix as a fourth person or obviative prefix, whose uses seem to resemble those found for

obviatives in other language family, most notably Algonquian (Hockett 1966, among many others).

Although we have focussed on the differences between their analyses, it is interesting to note that Davis, Miller and Valiquette all share one particularly crucial assumption in common. Namely, they assume that the prefix *si-* in a form such as *siukacha* 'I saw him/her/it', codes for both a first person argument and a third person argument. Furthermore, Miller and Valiquette share the assumption that this essentially transitive prefix can also occur on intransitive verbs, with perhaps certain semantic modifications. I will argue that these assumptions, reasonable though they seem, are in fact unwarranted, and that a better analysis of the system is possible if these assumptions are done away with.

7.3 A Revised Account

Rather than starting with the transitive set of prefixes and then then trying to explain the distribution of prefixes on intransitive verbs, as Miller and Valiquette appear to have done, a more revealing analysis is possible if we go in the other direction.

Looking first at intransitive verbs, we find there are two different classes. The first class, including verbs such as *-uudraach'a* 'fall off', uses the prefixes *si-*, *sr-* and *g-* (or their allomorphic variants), to mark first, second and third person arguments, respectively. The second class, including *-uhima* 'believe', uses the prefixes *srg-*, *kidr-* and *dzi-* for the

same purpose.

While we might want to call **si-** a first person subject prefix here, it is clear that **srg-** is not a first person object prefix. Semantic labels such as "agent" and "patient" are better, but they do not necessarily match up well with the semantics of the verbs themselves, e.g. the single argument of "fall off" is most likely not an agent semantically, even though it is marked with the "agent" set of prefixes. Valiquette's system of using "arg1" and "arg2" as labels for these arguments is essentially unrevealing. The best solution seems to be to use the terms "actor" and "undergoer", in the sense of Van Valin and LaPolla (1997).

Thus, we can gloss the six prefixes in question as shown in Table 7.3.

si-	<i>first person actor</i>
sr-	<i>second person actor</i>
g-	<i>third person actor</i>
srg-	<i>first person undergoer</i>
kidr-	<i>second person undergoer</i>
dzi-	<i>third person undergoer</i>

Table 7.3: Redefinition of intransitive set of prefixes

Turning briefly to impersonal verbs, we can note that although they have no semantic or syntactic arguments, they do take third person actor pronominal prefixes. In this sense, they

do take a morphological dummy argument, but only one, and not two, as Valiquette argued.

Having developed an account of those six prefixes, we can now consider transitive and ditransitive verbs. If we follow Valiquette's approach and say that these six prefixes have exactly the same meaning on transitive and intransitive verbs, then we have an apparent problem, since in forms such as **siukacha** 'I saw him/her/it', only the first person actor is coded on the verb, and not the third person undergoer. Likewise, in **srgukacha** 'he/she/it saw me', only the first person undergoer is coded, and not the third person actor. The forms in question are shown in (9), with their morphologically coded arguments shown in bold, and their uncoded arguments in parentheses.

(9a)	siukacha	<i>'I saw him/her/it'</i>	1ACT (3UND)
(9b)	srukacha	<i>'you saw him/her/it'</i>	2ACT (3UND)
(9c)	gukacha	<i>'he/she/it saw him/her/it'</i>	3ACT (3UND)
(9d)	srgukacha	<i>'he/she/it saw me'</i>	(3ACT) 1UND
(9e)	kidrukacha	<i>'he/she/it saw you'</i>	(3ACT) 2UND
(9f)	dziukacha	<i>'he/she/it saw him/her/it'</i>	(3ACT) 3UND

What (9) shows clearly is that the uncoded argument is always a third person. It may be an actor, or it may be an undergoer, but it is always a third person. This implies that argument marking on transitive verbs in Laguna is subject to a person hierarchy of the type shown in (10).

(10) 1, 2 » 3

In this hierarchy, first and second person are of equal rank, and third person ranks below them. Another way of phrasing this would be to say that speech-act participants (SAPs) outrank non-SAPs (Silverstein 1976).

(11) SAPs » non-SAPs

The generalization that is captured by this hierarchy is that while SAP arguments will always receive overt marking on the verb, non-SAP arguments will only be marked if there are no SAP arguments there to outrank them.

This simple hierarchy, then, allows us to understand the pattern of argument marking in six of the eight slots of the basic transitive paradigm, shown in (#).

(12a)	siukacha	<i>'I saw him/her/it'</i>	SAP ACT (<i>non-SAP UND</i>)
(12b)	srukacha	<i>'you saw him/her/it'</i>	SAP ACT (<i>non-SAP UND</i>)
(12c)	srgukacha	<i>'he/she/it saw me'</i>	(<i>non-SAP ACT</i>) SAP UND
(12d)	kidrukacha	<i>'he/she/it saw you'</i>	(<i>non-SAP ACT</i>) SAP UND
(12e)	sraukacha	<i>'I saw you'</i>	SAP ACT, SAP UND
(12f)	dyukacha	<i>'you saw me'</i>	SAP ACT, SAP UND

This leaves only the two third person forms, **gukacha** and **dziukacha**, 'he/she/it saw him/her/it'. According to the hierarchy in (11), we would expect there to be only possible way to say 'he/she/it saw him/her/it', and that it would involve a pronominal prefix that would simultaneously mark both the third person actor and the third person undergoer, similar to the 1/2 prefix **sra-** or the 2/1 prefix **dy-**. Instead, however, there are two ways to express a third person acting on a third person, one with the third person actor prefix **g-**, and the other with the third person undergoer prefix **dzi-**.

In most cases, it is the first form, with the actor prefix, that gets used: this is the "normal" way of expressing an action involving a third person actor and a third person undergoer. The second form, with the undergoer prefix, only gets used in cases where there is a "switch" in the action.

To see how this works, consider the following scenario.

(13) **John Bill gukacha. Sh'ee gudutsa. Sh'ee gudyuwitsa.**

John Bill he saw him then he pushed him then he punched him

John saw Bill. Then he (John) pushed him (Bill). Then he (John) punched him (Bill).

In the first sentence in (13), there are two nouns, **John** and **Bill**, and one verb, **gukacha**, which carries the third person actor prefix **g-**. Since John comes before Bill in the sentence, we know that John must be the actor and that Bill is the undergoer (see Chapter 17), and so

the sentence is interpreted to mean *'John saw Bill.'*

In the next two sentences, we have no nouns, only verbs (and the ever-present connector *sh'ee* 'then'). The verbs in these sentences, *gudutsa* 'he pushed him' and *gudyuwitsa* 'he punched him', both carry that same third person actor prefix *g-*. The choice of the actor prefix tells us to continue to interpret John as the actor and Bill as the undergoer for both of these verbs, even though they are not explicitly mentioned in either sentence.

Next, let's compare that scenario with the one shown in (14).

- (14) John Bill *gukacha*. Sh'ee *gudutsa*. Sh'ee *dziudyuwitsa*.
John Bill he saw him then he pushed him then he punched him
John saw Bill. Then he (John) pushed him (Bill). Then he (Bill) punched him (John).

The first two sentences in (14) are the same as in (13); the difference comes in the third sentence. Here, we have taken the verb *gudyuwitsa* and replaced it with *dziudyuwitsa*, which is the same verb, except with the third person undergoer prefix *dzi-* instead of the third person actor prefix *g-*. The effect this has is to switch who gets interpreted as the actor and who gets interpreted as the undergoer. While John is the actor in the first two sentences, he gets switched to the undergoer role in the third sentence. Likewise, Bill is the undergoer in the first two sentences, but gets switched to being the actor in the third sentence. This speaker signals this switch to their listener by choosing the third person undergoer prefix

dzi- instead of the third person actor prefix **g-**.

If we look closely at the verbs in (14), we'll see that in all three cases it is John's role that is being marked in the PRMP prefix. In the first two sentences he is the actor, and the verb carries a third person actor prefix. In the third sentence he is the undergoer, and the verb carries a third person undergoer prefix. Bill's role in any of these sentences is never made explicit by the prefix -- we simply have to infer Bill's role based on what we're told about John's role. In this way, we can identify John as the topic in this chain of sentences.

Based on this analysis, we can propose a revised version of the hierarchy, shown in (15).

(15) SAPs » topical non-SAPs » non-topical non-SAPs

Under this hierarchy, which is basically identical to the hierarchies seen in many other languages (Filimanova 2005) and first discussed by Silverstein (1976), only the highest ranked argument(s) are marked on the verb. Since, in a transitive verb, a non-topical SAP will always be outranked by some other argument, it never gets marked.

This revised hierarchy allows us to understand the marking found on the final two forms of the paradigm, shown in (16).

(16a) **gukacha** 'he/she/it saw him/her/it' **top ACT (non-top UND)**

(16b) **dziukacha** 'he/she/it saw him/her/it' (non-top ACT) **top UND**

It is important to remember, however, that topicality marking only comes in to play in sentences with transitive and ditransitive verbs. With intransitive verbs, there is no choice between actor and undergoer prefixes -- a given verb will occur with only one type of prefix.

It is for this reason that Laguna cannot be analyzed as having a fourth person or an obviative, as Miller and Valiquette have done. In true obviative systems, such as those in Algonquian languages, the distinction between the third and fourth person is maintained across both (di)transitive and intransitive clauses, which is not the case in Laguna. Since the distinction applies only in transitive and ditransitive clauses, it is not robust enough to be a function as a full-fledged reference-tracking system. Instead, it is simply a topic-tracking device which works across chains of closely tied transitive clauses.

7.4 Summary

In summary, we can describe the person and role system in Laguna as follows.

The grammatical category person distinguishes first, second and third persons. There is no fourth person or obviative in Laguna Keres.

There are no gender distinctions crosscutting the category of person.

Laguna marks two roles morphologically: actor and undergoer. The actor corresponds to the subject in all cases except with impersonal verbs where it is simply a dummy argument. The undergoer corresponds to the subject with intransitive verbs, to the object with transitive verbs, and to the recipient with ditransitive verbs.

Laguna is split intransitive language, with some intransitive verbs marking their subjects with an actor prefix, while others mark them with an undergoer prefix. The choice of prefix is lexically determined and is not subject to issues of volitionality of the subject or viewpoint of the speaker.

With transitive and ditransitive verbs, morphological argument marking in Laguna is governed by a hierarchy, where topical arguments outrank non-topical arguments, and speech act participants outrank non-speech act participants. As a result, most third person arguments, regardless of their syntactic function, are not coded on the verb.

Laguna is a dactylotative (Trask 1993) or primary object language (Dryer 1986), where the recipient in a ditransitive clause outranks the direct object. As a result, while the recipient is frequently coded in the PRMP prefix, the direct object of a ditransitive verb never is.

Chapter 8

Mood and Polarity

Up to this point, we have only been looking at the categories of person and role and how they interact in the PRMP prefix. However, there are still two components to the PRMP prefix that we have not yet discussed, namely mood and polarity.

Bybee (1985:22) says of mood that it is used to "express what the speaker wants to do with the proposition in the particular discourse". Included in this are "expression[s] of assertion (indicative), non-assertion (subjunctive), command (imperative) and warning (admonitive)," as well as "expressions of the speaker's attitude about the truth of the proposition".

The category of mood in Laguna has three values: Direct, Indirect, and Imperative. The Direct mood is evidential in nature, referring to the speaker's firsthand knowledge about the event they are describing. Indirect mood is used to show that the speaker does not have firsthand knowledge of the event. Imperative mood is used to give commands.

The category of polarity in Laguna has the expected two values: Positive and Negative.

Of the six logically possible combinations of mood and polarity values, only 5 are found to be expressed with the PRMP system: Positive Direct, Positive Indirect, Negative Direct, Negative Indirect, and Positive Imperative. The combination of Negative polarity with

Imperative mood is expressed periphrastically with the adverb **baami** 'don't', and the (Positive) Imperative mood form of the verb.

These five combinations of mood and polarity each have their own characteristic set(s) of PRMP prefixes. These combinations have been called "modes" in all the previous literature on Keresan. I have avoided using that term here, and will simply refer to these combinations as moods, for sake of simplicity.

8.1 Direct Mood

The most common mood -- and the one we have been using for all of our examples up to this point -- is the Direct mood. The typical PRMP prefix forms for the Direct mood are the ones shown back in Table 7.3. Valiquette (1990) referred to this mood as the "self-experienced/presupposed" mode, while Miller (1965) called these forms "non-modal". In terms of features, it can be described as a combination of direct evidentiality and positive polarity.

A speaker will use the Direct (DIR) mood when they want to convey to the listener that they are reasonably certain about what they are telling them, as in (1).

- (1) **Suwa Bill siukacha.**
yesterday Bill I saw him DIR

I saw Bill yesterday.

The Direct mood is naturally very common with verbs that have a first person participant (as either actor or undergoer), since people are generally certain about events in which they were personally involved.

The Direct mood is also used for verbs with third person participants, where the speaker is reporting about something they themselves have witnessed, as in (2).

- (2) Randy k'atiririga guparatsa.
Randy his car he dented it DIR

Randy dented his car.

A speaker would use this sentence in (2) if they had actually witnessed the accident and were now reporting back on it to someone else. A different mood, the Indirect (see §8.3), would be used if the speaker had only heard about Randy denting his car, without actually witnessing it.

While the Direct mood is very common with the first person, and fairly common with third person, it is quite rare with second person participants, particularly second person actors. In fact, even under direct elicitation, speakers are sometimes reluctant to produce such

forms, since they sound rather unnatural, especially out of context.

The Direct mood is also used when asking content questions, such as **haadyi** 'where?', **dzii** 'what?', and **hau** 'who?', as in (3):

(3a) **Haadyi srukacha?**

where you saw it DIR

Where did you see it?

(3b) **Dzii srukacha?**

what you saw it DIR

What did you see?

(3c) **Hau srukacha?**

who you saw it DIR

Who did you see?

These are the two basic scenarios in which the Direct mood is used. It is also found, however, in four types of dependent clauses. The first are those clauses which end with the

nominalizing suffix **-Cishe**, such as **kachanyishe** 'that it rains'.

- (4) **Hats'uma ka'aidraanye ty'iyaichu kachanyishe.**
after a while it stopped IND that it rains DIR

After a while it stopped raining. [BOAS 33.457]

The second are those dependent clauses formed with the ending **-Cisrau** 'place where', such as **kachanyisrau** 'where it rains', as in (5).

- (5) **Ted gau'u kachanyisrau.**
Ted he lives there DIR where it rains DIR

Ted lives in a rainy place (lit. where it rains).

Third, the Direct mood is used with dependent clauses formed with the ending **-Ce/-Ci** 'when', such as **kaachanye** 'when it rains', as in (6).

- (6) **Sh'eesru kaachanye heeme nutaanyisru.**
and then when it rains DIR until you will work DIR

Keep working until it starts to rain.

Lastly, the Direct mood is used in dependent clauses that are marked with the Irrealis suffix -u, such as **kachau** 'it would rain', as in (7).

(7) **Dzii naachama kachau, dzaadzi hawee dzuunyeesrgunu.**
if tomorrow it would rain DIR not this.way I won't come NEGDIR

If it rains tomorrow, I won't come.

In all four of these cases, the Direct mood is used because the speaker needs the listener to accept the assertion that the information in the dependent clause is true, before they can interpret the rest of the sentence. For instance, in (4), the listener needs to accept that it was, in fact, raining, before they can accept that the raining stopped. In (5), the listener needs to accept that a rainy place does really exist before they can believe that Ted lives there.

8.2 Negative Direct Mood

While the Direct mood is used for making positive assertions, the Negative Direct mood is used for making denials. The basic forms of the 8 PRMP prefixes in the Negative Direct mood are shown below in Table 8.1.

Both Valiquette and Miller referred to this mood simply as "negative" because they had missed the fact that there are actually two negative moods in Western Keres: the Negative

Direct and the Negative Indirect.

Negative Direct Mood		
PRMP Prefix	Actor role	Undergoer role
srg-	1 st person	
sr-	2 nd person	
g-	3 rd person	
shji-		1 st person
kidr-		2 nd person
dzi-		3 rd person
sra-	1 st person	2 nd person
dy-	2 nd person	1 st person

Table 8.1: Basic Forms of the Negative Direct Prefixes

Note that the prefix forms in the Negative Direct mood are the same as in the Direct Mood, except for the first person actor prefix, which is **srg-** instead of **si-**, and the first person undergoer prefix, which is **shji-** instead of **srg-**.

In fact, these are not the only differences between the Direct and Negative Direct moods. The Negative Direct always occurs with the negative particle **dzaadzi** 'not', as well as the Irrealis suffix **-u**. This is the same suffix that is found in conditional clauses, as shown in (7) above. Although the term Irrealis is problematic cross-linguistically (Bybee 1998), it seems appropriate here as a label for a suffix which shows up in both conditional and

negative contexts.

Compare the differences between the simple Direct forms in (a) and the corresponding Negative Direct forms in (b) in (8)-(15) below.

- | | | |
|-------|------------------------------|-----------------------------------|
| (8a) | si-ukacha | <i>'I saw him'</i> |
| (8b) | dzaadzi srg-ukacha-u | <i>'I didn't see him'</i> |
| (9a) | sr-ukacha | <i>'you saw him'</i> |
| (9b) | dzaadzi sr-ukacha-u | <i>'you didn't see him'</i> |
| (10a) | g-ukacha | <i>'he saw him'</i> |
| (10b) | dzaadzi g-ukacha-u | <i>'he didn't see him'</i> |
| (11a) | srg-ukacha | <i>'he saw me'</i> |
| (11b) | dzaadzi shji-ukacha-u | <i>'he didn't see me'</i> |
| (12a) | kidr-ukacha | <i>'he saw you'</i> |
| (12b) | dzaadzi kidr-ukacha-u | <i>'he didn't see you'</i> |
| (13a) | dzi-ukacha | <i>'the other saw him'</i> |
| (13b) | dzaadzi dzi-ukacha-u | <i>'the other didn't see him'</i> |

- (14a) **sra-ukacha** *'I saw you'*
- (14b) **dzaadzi sra-ukacha-u** *'I didn't see you'*
-
- (15a) **dy-ukacha** *'you saw me'*
- (15b) **dzaadzi dy-ukacha-u** *'you didn't see me'*

8.3 Indirect Mood

The Indirect mood is, in many ways, the opposite of the Direct mood. In general terms, speakers will use the Indirect mood when they are unsure, for one reason or another, about what they are saying, and they don't want to be responsible for the listener taking all of the information at face value. The basic forms of the Indirect PRMP prefixes is shown below in Table 8.2.

Indirect Mood		
PRMP Prefix	Actor role	Undergoer role
tyi-	1 st person	
tr-	2 nd person	
dy-	3 rd person	
tidr-		1 st person
tridr-		2 nd person
dyi-		3 rd person
tra-	1 st person	2 nd person
dy-	2 nd person	1 st person

Table 8.2: Basic Forms of the Indirect Prefixes

Miller used the term "dubitative" for this mood. Valiquette called this mood the "non-self-experienced", in opposition to his "self-experienced/presupposed" mood (my Direct).

One of the main places the Indirect mood gets used is in the asking of yes/no questions, as in (16).

(16a) S'eka dzuunyeetru?
 have to you will go IND

Do you have to go?

(16b) "Kume trukacha k'ashjaats'i?"
QUEST you saw it IND rainbow

"Did you see the rainbow?" [BOAS 15.222]

As these two examples suggest, the Indirect is used quite frequently with second person participants, since speakers often want to ask listeners about themselves (as opposed to telling them, which is what the Direct mood is for). Yes/no questions are also fairly common with third person participants, as in (17).

(17) Larry dyuunyinyi?
Larry he misbehaved IND

Did Larry misbehave?

Indirect forms with first person participants are rather uncommon, for exactly the same reasons that first person participants are common with the Direct mood; namely, most people are fairly certain about actions that they themselves were involved with, so it's rather rare that someone needs to ask someone else a question about them. However, when the need does arise, the Indirect mood is available, as in (18).

(18) Tyiushiya?

I won IND

Did I win?

Speakers also use the Indirect in sentences that express a certain degree of doubt or uncertainty, typically along clausal adverbs such as *y'u* 'perhaps' and *k'augume* 'maybe', as in (19).

(19a) "K'augume edze dzii sidra'anaayashe dyutuunyi."
maybe something our mother she knows it IND

"Maybe our mother knows something." [BOAS 16.0081]

(19b) "Y'u hauwi k'usra ai' cha'aat'a."
perhaps someone last night there they camped IND

"Evidently some people camped there last night." [BOAS 13.041-042]

Most importantly, perhaps, the Indirect mood is also in the telling of traditional stories. All the action which takes place in those stories (though not the dialogue) is expressed through the use of the Indirect mood (or the Negative Indirect Mood), as in (20).

(20) Sh'ee dzigana K'aishaatra chuudyeetyu.
then again Skunk he ran away IND

Then Skunk ran away again. [BOAS 34.053]

In using the Indirect Mood, the storyteller is able to put some distance between themselves and the story. It is as if they are saying, "I did not witness these events myself. This is just how the story was told to me, and so this is how I'm telling it to you now." Note, however, that when characters in these stories speak, they use the full range of moods, including the Direct, just as we would expect in a regular conversation.

8.4 Negative Indirect Mood

Just like the Direct has a negative counterpart, so too does the Indirect. The basic forms of the PRMP prefixes in the Negative Indirect mood are shown below in Table 8.3.

Negative Indirect Mood		
PRMP Prefix	Actor role	Undergoer role
srg-	1 st person	
tr-	2 nd person	
dy-	3 rd person	
shji-		1 st person
tridr-		2 nd person
dyi-		3 rd person
tra-	1 st person	2 nd person
dy-	2 nd person	1 st person

Table 8.3: Basic Forms of the Negative Indirect Prefixes

Neither Miller or Valiquette recognized a separate Negative Indirect, instead lumping it together with the Negative Direct in a plain "negative" mood.

Note that the prefixes of the Negative Indirect mood are like a mixture of those found with the other Moods. The first person actor and undergoer prefixes are the same as in the Negative Direct, while all the others are the same as those found with the regular Indirect mood. Like the Negative Direct, the Negative Indirect mood also requires the negative word **dzaadzi** to occur with it in the sentence. However, the Irrealis suffix **-u** that is required with the Negative Direct does not appear to occur with the Negative Indirect.

Compare the Negative Direct forms in (a) with their corresponding Negative Indirect forms

in (b) in (21)-(28).

- (21a) dzaadzi srg-ukacha-u *'I didn't see him'*
(21b) dzaadzi srg-ukacha *'didn't I see him?'*
- (22a) dzaadzi sr-ukacha-u *'you didn't see him'*
(22b) dzaadzi tr-ukacha *'didn't you see him?'*
- (23a) dzaadzi g-ukacha-u *'he didn't see him'*
(23b) dzaadzi dy-ukacha *'didn't he see him?'*
- (24a) dzaadzi shji-ukacha-u *'he didn't see me'*
(24b) dzaadzi shji-ukacha *'didn't he see me?'*
- (25a) dzaadzi kidr-ukacha-u *'he didn't see you'*
(25b) dzaadzi tridr-ukacha *'didn't he see you?'*
- (26a) dzaadzi dzi-ukacha-u *'the other didn't see him'*
(26b) dzaadzi dyi-ukacha *'didn't the other see him?'*
- (27a) dzaadzi sra-ukacha-u *'I didn't see you'*
(27b) dzaadzi tra-ukacha *'didn't I see you?'*

- (28a) **dzaadzi dy-ukacha-u** 'you didn't see me'
 (28b) **dzaadzi dy-ukacha** 'didn't you see me?'

In (21) and (24) (and, incidentally (28)), the only difference between the Negative Direct and Negative Indirect forms is the presence of the Irrealis suffix **-u**. In the other examples, the form of the PRMP prefix also makes it clear which mood is being used.

Along with negative yes/no questions of the type shown in (21)-(28), the Negative Indirect is also used in the telling of traditional stories for any action that didn't happen.

- (29) **Sh'ee n'i chu'uk'a. Dzaadzi dyiukacha.**
 then down he looked IND not he saw her NEGIND
Then he looked down. He did not see her. [BOAS 25.072-073]

In the first sentence, the plain Indirect mood is used. In the second sentence the switch is made to the Negative Indirect mood to talk about the seeing that didn't happen. Under Valiquette's analysis, which says that the negative mood has the same form as the Direct mood outside of the first person forms, we would have expected **gukacha** in this second sentence.

8.5 Imperative Mood

The fifth and final mood in Laguna is the Imperative. Its basic PRMP prefix forms are shown in Table 8.4.

Imperative Mood		
PRMP Prefix	Actor role	Undergoer role
ka-	1 st person	
p-	2 nd person	
pi-	3 rd person	
nidr-		1 st person
pidr-		2 nd person
pi-		3 rd person
sra-	1 st person	2 nd person
g-	2 nd person	1 st person

Table 8.4: Basic Forms of the Imperative Prefixes

Both Miller and Valiquette referred to this as the "hortative", although Valiquette also sometimes used the term "imperative/hortative". I choose to call it the Imperative because its use is broader than what one would normally expect of a simple hortative.

The Imperative mood is used in giving commands. Typically, commands are directed at the listener, and so the verb will be marked with a second person PRMP prefix, as in (30).

(30a) Duwee pe'ekul
this way you PL come IMP

Come this way! [BOAS 08.056]

(30b) "Mi, gukachani sraami."
look you DL look at me IMP well

"Behold, look at me well." [BOAS 07.145]

(30c) "Mi, puwakacha k'ash'uwimi ee k'aadyishjumi."
look you look at them PL IMP her shoes and her belt

"Behold, see her shoes and her belt." [BOAS 16.0356]

However, the Imperative mood can also be used in the first person (e.g. *'let me...'*) or in the third person (*'let him/her...'*), as seen in (31).

(31a) "Baana'a, egu kau'see'e, atsi s'aama-ee srayutse."
wait moreover I draw water IMP later on to my house I take you IND

"Wait, let me draw water, then I'll take you to my house." [BOAS 09.193]

(31b) "Hanye pudyatra."

COMMAND MARKER he writes IMP

"Let him write." [BOAS 17.228]

8.6 Summary

The full listing of all the basic forms of all 8 PRMP prefixes in all 5 Moods is shown below in Table 8.5.

	DIRECT	NEG DIR	NEG IND	INDIRECT	IMPERATIVE
1 ACT	si-	srgu-		tyi-	ka-
2 ACT	sr-		tr-		p-
3 ACT	g-		dy-		pi-
1 UND	srgu-	shji-		tidr-	nidr-
2 UND	kidr-		tridr-		pidr-
3 UND	dzi-		dyi-		pi-
1A+2U	sra-		tra-		sra-
2A+1U	dy-				g-

Table 8.5: Full Set of Basic PRMP Prefixes in all Five Moods

8.7 Conjugation Classes

At this point, a brief word about the allomorphy of these prefixes is in order. One of the most notable characteristics of the PRMP prefixes in Laguna is their great variety of allomorphic forms. For example, the PRMP prefix which expresses a third person actor in the Direct Mood, which we have shown as **g-** in the tables above, can actually occur as either **g-**, **k-**, **k'-**, **ka'-**, **dz-**, **ts-** or **ts'-**, as the examples in (32) demonstrate.

- | | | |
|-------|----------------------|------------------------------|
| (32a) | g-ukacha | <i>'he saw him'</i> |
| (32b) | k-uwiitra | <i>'he made it'</i> |
| (32c) | k'-adza | <i>'he spoke'</i> |
| (32d) | ka'-auta | <i>'he killed it'</i> |
| (32e) | dz-a'ats'i | <i>'he arrived'</i> |
| (32f) | ts-idyeits'i | <i>'he buried him'</i> |
| (32g) | ts'-iisrk'ata | <i>'he gave him a drink'</i> |

Similar degrees of variation can be found with many of the other prefixes as well.

Both Valiquette (1990:610-634) and Miller (1965:45-105 inter alia) devote large sections of their works to analyzing the morphophonemic alternations of the type shown in (32). Miller's basic hypothesis is that the various different surface forms for each of the prefixes arises through a complex combination of the underlying basic shapes (similar to those seen in Table 8.5) and a variety morphophonemic consonants which occur at the left-edge of the verb theme.

For example, under Miller's analysis, the form in (5b) **kuwiitra** 'he made it' is underlying the prefix **g-** and the verb theme **-'uwiitra**, where ' is a morphophoneme which triggers aspiration of a preceding consonant (where possible). Likewise, (5c) **k'adza** 'he spoke' is composed the prefix **g-** plus the verb theme **-Qadza**, where the Q triggers glottalization of a preceding consonant (where possible).

Valiquette demonstrates the complexities and shortcomings of Miller's approach, and advocates for a model in which principal parts of each verb are stored in the lexicon. The rest of the paradigm is then filled in by rules which refer to those principal parts, and not to any underlying representation, such as "if the 3rd person form starts with **k'-**, then the first person form will start with **s'-**." Crucially, though, he does not in fact formulate any of these rules for Laguna. The exceptions to these general patterns, of which there are quite a few, are then simply stored in the lexicon. In the end, Valiquette's analysis takes us back to the conjugation class approach Davis (1960) took in his much less abstract treatment of Santa Ana Keres.

Aside from the fact that there are several allomorphs for each prefix, there is only a low degree of predictability between prefixes, resulting in a large number of conjugation classes. We can get some idea of the complexity by examining the lexicon that Davis appended to the end of his grammatical sketch. In it, Davis provided a two-number code for each verb theme that the reader could use to determine the full conjugation of PRMP prefixes for that stem.

Limiting ourselves strictly to the first, second and third person actor prefixes in the Direct mood, we see that there are at least twelve different conjugation classes, as seen in Table 8.6.

	1 ACT	2 ACT	3 ACT	Davis' Codes
Class 1	s-	sr-	k-	5-8, 5-9, 5-10
Class 2	si-	sh-	dz-	10-6
Class 3	si-	sh-	k-	4-5
Class 4	si-	sr-	ts-	14-4
Class 5	si-	sr-	g-	1-1, 1-3
Class 6	si-	sr-	k-	4-3, 5-2
Class 7	si-	sr-	k'-	6-3
Class 8	sí'-	sh-	dz-	10-21, 10-22
Class 9	s'-	sr'-	ká'-	9-11, 9-12
Class 10	s'i-	sh-	ts-	14-19, 14-20
Class 11	s'i-	sr-	g-	1-16, 1-17, 1-18
Class 12	ts'i-	sh-	dz-	10-7

Table 8.6: A Sample of PRMP Conjugation Classes in Santa Ana Keres

A fuller survey of Davis's sampling of verb stems, including all of the prefixes in all of the moods, finds a total of at least 31 different conjugation classes. While some of these classes include a fairly large number of verb stems, other classes had only a handful of verb stems as members.

Thus, the issue of conjugation classes -- both their quantity and composition -- remains one

of the more important open questions in Keresan morphology, and one which will probably not be well answered until much more lexical work has been done.

8.8 Summary

Bybee (1985:22) notes that mood is "less relevant to the verb than either aspect or tense. Thus we might expect mood to occur less frequently as an inflectional category of verbs than aspect and tense." Although Bybee did not intend that as a statement about any particular language, it is interesting to note that in Laguna tense is all but non-existent as a category, and mood is far more developed than aspect is. Aspect marking is restricted to a small number of verb suffixes denoting various types of imperfectivity, such as the Continuative in (33) and (34), and the Repetitive in (35) (Miller 1965:125-130).

- (33a) **sruwiitra** *'you made it'*
(33b) **sruwiity-ita** *'you were making it'*
- (34a) **srupe** *'you ate'*
(34b) **srubeu-guya** *'you are eating'*
- (35a) **kacha** *'it rained'*
(35b) **kacha-si** *'it kept raining'*

Moreover, mood marking is obligatory on all finite verbs, whereas aspect marking is never obligatory, and is in fact fairly infrequent in running text. This grammaticization of less relevant categories, such as mood and polarity, ahead of more relevant categories such as tense and aspect, is an interesting reversal of the expected pattern.

Chapter 9

Verb Themes

9.1 Introduction

At the heart of the Laguna verb is the verb theme. The theme, as opposed to the root or the stem, has a fully determined argument structure, as well as a specific PRMP conjugation class to which it belongs. In generative models, the theme is taken as the level at which lexical representations of verbs are stored, just as in Athabaskan languages.

The basic structure of the verb theme is shown in Table 9.1, adapted from Miller (1965:114).

Slot 2	Slot 3	Slot 4	Slot 5	Slot 6
Number Prefix	Voice Prefix	Verb Stem	---	Benefactive

Table 9.1 : Basic Structure of the Verb Theme

The only obligatory member of the verb theme is the verb stem. Verbs stems have the canonical shape -VCV(CV). The initial vowel of the verb stem is called the "stem vowel". The stem vowel is frequently fused with, or wholly replaced by, a Number prefix occurring in Slot 2 or a Voice prefix occurring in Slot 3. The other optional component of the verb theme is the Benefactive suffix, which occurs in Slot 6. While Slots 3, 4 and 6 are part of the verb theme, Slot 5, which contains various aspectual suffixes such as the Continuative,

is not. Therefore, it is possible for the verb theme to be discontinuous in the case that both an aspectual suffix and the Benefactive suffix are present in the same form, or if there is a Number prefix in the theme, but no Voice prefix.

Note that neither Miller nor Valiquette included the Slot 2 Number prefixes in the verb theme. For Miller, at least, all number marking is inflectional, and as such is outside the theme. Valiquette is less committal on the topic, but still in the end excludes number from the theme, except in cases of themes which are suppletive for number.

In fact, as the examples below will show, the notions of "Slot 2" and "Number prefix" are convenient fictions as far as Laguna grammar are concerned. In reality, Number is simply marked by semi-regular but largely-lexicalized changes to the stem-vowel, with little if any consistently identifiable segmental or prosodic elements.

While Miller must be credited with working out many of the nitty-gritty details of verb theme structure (1965:113-143), in the end his analysis is so intricate that the structure of the overall system is shrouded from view. Perhaps Valiquette's greatest contribution was to reorganize and re-envision Miller's work into "verb theme categories". Valiquette posited a total of 17 different verb theme categories for Laguna (1990:72), each with their argument structure and pattern of number marking.

Abbreviation	Verb Theme Category
VDT	Direct Transitive
VBT	Benefactive (Direct) Transitive
VAI	Active Intransitive
VBI	Benefactive Intransitive
VST	Syntactic Transitive
VBST	Benefactive Syntactic Transitive
VMI	Middle Intransitive
VRF	Reflexive
VRC	Reciprocal
VBRC	Benefactive reciprocal
VSI	Stative Intransitive
VIM	Impersonal
VPER	Perfective
VPDT	Passive Direct Transitive
VPBT	Passive Benefactive Transitive
VPBI	Passive Benefactive Intransitive
VZP	(Zero Person) Infinitive

Table 9.2: Valiquette's 17 Verb Theme Categories

In the sections that follow, I will build upon Valiquette's insights into the verb theme categories, and their semantic and morphological relationships.

9.2 Verb Theme Classes, Categories and Sets

In order to understand how the Laguna theme system works, we need to define the following four terms.

Verb Theme

A single lexical form, with a particular argument structure and membership in a PRMP conjugation class, which can be inflected to create a complete verb.

Verb Theme Set

A collection of related verb themes which differ only in number, as marked by the Number prefixes of Slot 2.

Verb Theme Category

A collection of verb theme sets all of which share the same basic morphological structure. For example, all the themes that are composed of a Reflexive Voice prefix and a Transitive verb stem belong to the same verb theme category, regardless of which allomorph of the Reflexive prefix they carry, or whether their semantics is non-compositional.

Verb Theme Class

A collection of verb theme categories all of which are built off of verb stems of a

particular type. There are four basic verb stem types in Laguna: Transitive, Active Intransitive, Stative Intransitive and Impersonal.

Based on these definitions, Valiquette's Perfective and Infinitive no longer qualify as verb theme categories of their own, but are rather simple inflectional possibilities of verb themes belonging to a variety of different theme categories.

In the following sections, we will discuss each of the four verb theme classes and their membership.

9.3 Transitive Verb Theme Class

The Transitive verb theme class contains at least the six following verb theme categories.

- Simple Transitive
- Reflexive
- Reciprocal
- Passive
- Simple Benefactive
- Reciprocal Benefactive

All of the verb themes in these categories are built off of transitive verb stems. Each of these

categories is discussed in turn below.

9.3.1 Simple Transitive Themes

Simple transitive themes have the following properties:

- They have no Voice prefix or Benefactive suffix. Their singular forms have no number prefix, either, so in that case the stem and the theme are identical.
- They require both a subject and an object.
- The subject is marked via actor PRMP prefixes, while the object is marked with undergoer PRMP prefixes, following the guidelines described in Chapters 7 and 8.
- Subject number is marked through the number suffixes in Slot 7.
- Simple Transitive themes occur in sets of three, based on their undergoer number: singular, dual or plural

Examples of Simple Transitive theme sets are shown below in (1)-(3).

(1a) **-ukacha** *'see something SG'*

- (1b) **-u'ukacha** *'see something DL'*
- (1c) **-uwakacha** *'see something PL'*
-
- (2a) **-idya** *'catch something SG'*
- (2b) **-a'adya** *'catch something DL'*
- (2c) **-ayadya** *'catch something PL'*
-
- (3a) **-umaatsanyi** *'help someone SG'*
- (3b) **-a'aumaatsanyi** *'help someone DL'*
- (3c) **-aawaamaatsanyi** *'help someone PL'*

Examples of some fully inflected forms are shown in (4).

- (4a) **g-ukacha** *'he saw him'*
 3ACT:DIR-see.sth.SG
- (4b) **g-u'ukacha** *'he saw them DL'*
 3ACT:DIR-see.sth.DL
- (4c) **g-uwakacha** *'he saw them PL'*
 3ACT:DIR-see.sth.PL

- (4d) **g-ukacha-ni** *'they DL saw him'*
 3ACT:DIR-see.sth.SG-DL
- (4e) **g-u'ukacha-ni** *'they DL saw them DL'*
 3ACT:DIR-see.sth.DL-DL
- (4f) **g-uwakacha-ni** *'they DL saw them PL'*
 3ACT:DIR-see.sth.PL-DL
- (4g) **g-ukacha-na** *'they PL saw him'*
 3ACT:DIR-see.sth.SG-PL
- (4h) **g-u'ukacha-na** *'they PL saw them DL'*
 3ACT:DIR-see.sth.DL-PL
- (4i) **g-uwakacha-na** *'they PL saw them PL'*
 3ACT:DIR-see.sth.PL-PL

9.3.2 Reflexive Themes

Reflexive themes built off of transitive verb stems have the following characteristics:

- They carry a Voice prefix in Slot 3, usually either -a- or -uu-. The choice appears to be lexically determined.
- They are intransitive, having only a subject argument and no (distinct) object.
- The subject is marked by actor PRMP prefixes.
- Subject number is marked by the number suffixes in Slot 7.
- Reflexive themes have only a single member in each set, as opposed to the three themes in each set for Simple Transitive verbs.

In (5), we see singular, dual and plural examples of the Reflexive verb theme **-aukacha-** 'see self'.

(5a) **s'-a-ukacha** *'I saw myself'*

1ACT:DIR-RFLX-see

(5b) **s'-a-ukacha-ni** *'we DL saw ourselves'*

1ACT:DIR-RFLX-see-DL

- (5c) **s'-a-ukacha-na** *'we PL saw ourselves'*
1ACT:DIR-RFLX-see-PL

Another common reflexive prefix is **-uu-**, as shown in (6). Note how in this case the reflexive prefix completely replaces the stem vowel.

- (6a) **s'-ibuutsa** *'I frightened him'*
1ACT:DIR-frighten.sb

- (6b) **s-uu-buutsa** *'I frightened myself'*
1ACT:DIR-RFLX-frighten.sb

Note also how in both (5) and (6), the allomorph of the PRMP prefix changes between the Simple Transitive theme and its corresponding Reflexive theme.

9.3.3 Reciprocal Themes

Reciprocal themes built off of transitive verb stems have the following characteristics:

- They are marked by a Voice prefix in Slot 3, typically **-aya-** or **-ayawa-**. The choice appears to be lexically governed. This is the same as Miller's "collective plural" prefix **-aaya-** (1960:120).

- They are intransitive, having only a subject argument and no (distinct) object.
- The subject is marked by actor PRMP prefixes.
- Subject number is marked by the number suffixes in Slot 7.
- Like with Reflexive themes, Reciprocal themes have only one member in their theme sets.

In (7) we see dual and plural examples of the reciprocal verb theme **-ayawakacha** 'see each other'. Naturally, there are no singular forms of reciprocal themes.

(7a) **s-ayawa-kacha-ni** *'we DL saw each other'*
 1ACT:DIR-RCPL-see.sth-DL

(7b) **s-ayawa-kacha-na** *'we PL saw each other'*
 1ACT:DIR-RCPL-see.sth-PL

Compare the following forms of "ask someone", including the Simple Transitive theme **-ubeet'a** 'ask someone' in (8a), and the Reciprocal theme **-ayabeet'a** 'ask each other' in (8b-c).

- (8a) **g-ubeet'a** *'he asked him'*
 3ACT:DIR-ask.sb
- (8b) **k-aya-beet'a-ni** *'they DL asked each other'*
 3ACT:DIR-RCPL-ask.sb-DL
- (8c) **k-aya-beet'a-na** *'they PL asked each other'*
 3ACT:DIR-RCPL-asksb-PL

9.3.4 Passive Themes

Passive themes built off of transitive verb stems have the following characteristics:

- They carry a Voice prefix **-a'a-** / **-a'aa-**, which replaces the stem vowel in most cases.
- They are intransitive, with a subject but no object.
- The subject is marked by undergoer PRMP prefixes.
- They carry an obligatory plural suffix in Slot 7.

There are apparently three themes in each Passive theme set, varying for subject number:

singular, dual and plural. However, Passive forms are of very low frequency in the Boas texts, and even with elicitation I at present am only certain of examples with singular subjects.

- (9) **dzaadzi t'-a'aa-kacha-na** *'she was not seen'* [Boas 23.085]
not 3UND:NEGIND-PASS-see-PL

Note that no external agent phrases are allowed in Passive clauses in Laguna.

9.3.5 Benefactive Themes

Benefactive themes built off of transitive verb stems have the following characteristics:

- They carry the Benefactive suffix -Ci in Slot 6.
- Some Benefactive themes also have a stem vowel which differs from that of the underlying transitive verb stem, and nearly all of them belong to a different PRMP conjugation class than their Simple Transitive verb theme counterparts. This leads us to conclude that at least historically there probably was a Benefactive voice prefix as well, although there now remains no consistent segmental residue to identify it with. Miller set up the morphophoneme -J- (with a bar over the top) to account for these complex correspondences (1960:116).

- They have a subject, a primary object (recipient/benefactee/indirect object) and a secondary object (direct object).
- The subject is marked by actor PRMP prefixes. The primary object is marked by undergoer PRMP prefixes. The secondary object, which is apparently always third person, is not marked by the PRMP prefix.
- Subject number is marked by the number suffixes in Slot 7.
- Benefactive theme sets have three members, depending on the number of the primary object: singular, dual and plural.

Compare (10a) with a Simple Transitive theme, and (10b-c) with the corresponding Benefactive theme.

(10a) **Semiita s-uwiitra.**

bread 1ACT:DIR-make.sth

'I baked some bread.'

(10b) **Semiita s'i-uwiidraa-nyi.**

bread 1ACT:DIR-make.sth-BEN

'I baked some bread for him.'

(10c) **Anamatyi srk-uwiidraa-nyi.**

chair 1UND:DIR-make.sth-BEN

'He made a chair for me.'

Note that the changes between the word-final form **-uwiitra** and the word-medial form **-uwiidraa-** are predicatable, and are driven by the phonotactic constraints of the language (see Chapter 2).

If the stem vowel of the transitive stem is **-i-**, it frequently changes to **-u-** in the Benefactive Transitive theme, as in (11) and (12).

(11a) **dz-inata**

3ACT:DIR-buy.sth

'He bought it.'

(11b) **Ubewi s'i-unada-nyi.**

food 1ACT:DIR-buy.sth-BEN

'I bought some food for him.'

(12a) **Dyiya s-idyiisha**

dog 1ACT:DIR-feed.sb

'I fed the dog.'

- (12b) Dyiya s'i-udyiishaa-nyi.
dog IACT:DIR-feed.sb-BEN
'I fed the dog for him.'

9.3.6 Reciprocal Benefactive Themes

Reciprocal Benefactive themes built off of transitive verb stems have the following characteristics:

- They are marked by a Voice prefix in Slot 3, typically *-aya-* or *-ayawa-*. The choice appears to be lexically governed.
- They are ditransitive, with a subject, a primary object (benefactee), and a secondary (Direct) object.
- The subject is marked by actor PRMP prefixes, while the object is marked with undergoer PRMP prefixes. In all of the naturally occurring examples I have so far, the Direct object is third person and inanimate. However, a first or second person Direct object seems possible, if infrequent.
- Subject number is marked by the Number suffixes in Slot 7.

- There are probably three themes in each set, depending on the number of the Direct object. However, all the naturally occurring examples I have seen involve inanimate direct objects, which are frequently not marked for number.

Some examples are shown in (13).

(13a) **Anamatyi s-aya-wiidraa-nyi-tyi.**

chair 1ACT:DIR-RCPL-make.sth-BEN-DL

'We DL made chairs for each other.'

(13b) **Maagina s-ayaa-nada-nyi-tyi.**

car 1ACT:DIR-RCPL-buy.sth-BEN-DL

'We DL bought cars for each other.'

9.3.7 Other Categories

Valiquette (1990:78) argues for a category of verb themes that he calls "syntactic transitives". They have properties that place them in between regular transitive and intransitive verbs. Like transitive verbs, syntactic transitives take a direct object. However, that direct object is always third person (and apparently always inanimate), and the verb theme does not vary depending on the number of that direct object.

However, the data are actually more complicated than this analysis would predict. First, let us take an example, shown in (14), where there does appear to be a difference between a transitive theme and a syntactic transitive theme.

- (14) **Sh'ee ch-uwiiitra hadraminyi ee dzika dy-ayayeita.**
 then 3ACT:IND-make.sth prayer stick and also 3ACT:IND-paint.sth.PL
Then he made prayer-sticks and he painted them. [Boas 16.0792]

In (14), both verbs, **chuwiiitra** and **dyayayeita**, have **hadraminyi** as their direct object. Although the noun **hadraminyi** carries no plural marking of its own, it is clear that there are several prayer sticks involved because **dyayayeita** means specifically '*he/she painted them PL IND*', based on the transitive verb theme **-ayayeita** '*paint PL*'. If only one prayer stick were being painted, the correct form would have been **dyayeita** '*he/she painted it IND*', based on the transitive theme **-ayeita** '*paint SG*'.

In this sentence, then, we can translate **chuwiiitra** as '*he made them PL IND*', since we know that several prayer sticks were being made. However, this same form, **chuwiiitra**, is also used if only a single direct object is involved, as in (15a), or a mass direct object, as in (15b).

- (15a) **Sh'ee ch-uwiiitra waasi.**
 then 3ACT:IND-make.sth bird snare
Then he made a bird snare. [Boas 25.164-165]

- (15b) Sh'ee ai' chima gaama waawa ch-uwiitra.
 then there downstairs her house medicine 3ACT:IND-make.sth
Downstairs in her house she made medicine. [Boas 22.439-440]

This seems to indicate that the verb theme **-uwiitra** carries no information about the number of its direct object, making it different from the verb theme **-ayayeita** which clearly specifies its direct object as plural. Based on this difference, we could classify "paint" as a transitive verb in Laguna, and "make" as a syntactic transitive. This would also follow with Valiquette's generalization that syntactic transitives only take third person objects, which is almost certainly true of "make".

However, it is not the case that "make" never marks the number of its direct object. Consider the examples in (16).

- (16a) Sh'eesru ch-uwawiidra-na hadraminyi.
 then 3ACT:IND-PL:make.sth-PL prayer stick
Then they made prayer sticks. [Boas 11.019]

- (16b) Sh'ee seiyu ch-uwawiidra-na.
 then all 3ACT:IND-PL:make.sth-PL
Then they finished all of them. [Boas 11.020]

These examples, taken from consecutive sentences in a text, demonstrate that "make" can mark the number of its direct object. How, then, do we reconcile these data with the example show above in (14), where the direct object is clearly plural, but the verb theme used is the same as the one used with singular direct objects? And does this mean that "make" is actually a transitive theme, and not a syntactic transitive theme?

The key to understanding these patterns seems to lie in recognizing that the category of direct object number in Laguna is not a matter of strict inflectional agreement. As such, its use is not entirely dictated by the morphosyntax of the sentence, but is open to influence from discourse and pragmatic factors. At present, the exact nature of these factors and their influence on the use of direct object number marking are not clear. However, it is interesting to note that all of the examples that I have found in the Boas texts of "make" being marked with as having a plural direct object, are also marked as taking a plural subject, as in (16a) and (16b) above. Thus, the plural direct object marking may be serving a harmonic effect in this construction, perhaps more akin to some type of distributive aspect marking.

Given these data, it seems premature to recognize syntactic transitives as a distinct verb theme category. For now, it seems best to class them as transitive themes, and to make the general observation that although transitive themes can specify the number of their direct object, they do not always do so, especially when the direct object is inanimate. This is, in fact, quite similar to the number marking strategy in many Iroquoian languages, where the plurality of a neuter direct object is only optionally expressed on the verb.

9.4 Active Intransitive Verb Theme Class

The Active Intransitive verb theme class contains at least the following two verb theme categories.

- Simple Active Intransitive
- Benefactive Intransitive

9.4.1 Simple Active Intransitive Verb Theme Category

Simple Active Intransitive verb themes have the following characteristics:

- They carry no Voice prefix or Benefactive suffix.
- They have a single argument, a subject.
- Their subject is marked by actor PRMP prefixes.
- The number of themes in a given theme set varies from 1 to 3, depending on how number is expressed.

For instance, the Simple Active Intransitive verb theme *-idraachuwa* 'wake up', has only

a single, number-irrelevant theme in its theme set. For this theme, the number of the subject is marked by the Number suffixes in Slot 7

(17a) **k-idraachuwa** *'he woke up'*
3ACT:DIR-wake.up

(17b) **k-idraachuwa-ni** *'they (dl) woke up'*
3ACT:DIR-wake.up-DL

(17c) **k-idraachuwa-na** *'they (pl) woke up'*
3ACT:DIR-wake.up-PL

Other Simple Active Intransitives have three number-specific themes in their theme sets. This is the case for 'die' and 'run', as shown below. Note that since each of these verbs are built off a different theme, they can differ as to which PRMP conjugation class they belong to (compare 18a and 18b).

(18a) **k-uusht'u** *'he died'*
3ACT:DIR-SG:die

(18b) **g-u'uusht'u** *'they (dl) died'*
3ACT:DIR-DL:die

- (18c) **g-uwaasht'u** *'they (pl) died'*
 3ACT:DIR-PL:die
- (19a) **g-uumiitsa** *'he ran'*
 3ACT:DIR-SG:run
- (19b) **g-uu'umiitsa** *'they (dl) ran'*
 3ACT:DIR-DL:run
- (19c) **g-uwaamiitsa** *'they (pl) ran'*
 3ACT:DIR-PL:run

In other cases, though, there are just two themes in the set. Note how (20a) and (20b), built from the same verb theme *-autyu-*, belong to the same PRMP conjugation class, while the verb theme *-uwaatyu-* seen in (20c) belongs to a different one.

- (20a) **ka'-autyu** *'he is aware'*
 3ACT:DIR-be.aware
- (20b) **ka'-audyu-mi** *'they (dl) are aware'*
 3ACT:DIR-be.aware-DL

(20c) **k-uwaatyu** *'they (pl) are aware'*
3ACT:DIR-PL:be.aware

Here are some further examples of Simple Active Intransitive theme sets, and the different ways in which the category of Number is expressed in them.

(21a) **k-uts'ayawa** *'he is angry'*
3ACT:DIR-be.angry

(21b) **k-uts'ayawa-ni** *'they (dl) are angry'*
3ACT:DIR-be.angry-DL

(21c) **ka'-aats'ayawa-na** *'they (pl) are angry'*
3ACT:DIR-PL:be.angry-PL

(22a) **g-uudyumi** *'he remembered'*
3ACT:DIR-remember

(22b) **g-uudyumi-shtyi** *'they (dl) remembered'*
3ACT:DIR-remember-DL

(22c) **g-uwaadyumi-she** *'they (pl) remembered'*

3ACT:DIR-PL:remember-PL

- (23a) **k-uuch'awa** *'he stole'*
3ACT:DIR-steal
- (23b) **k-uuch'awa-ni** *'they (dl) stole'*
3ACT:DIR-steal-DL
- (23c) **k-uwaach'awa-na** *'they (pl) stole'*
3ACT:DIR-PL:steal-PL
- (24a) **g-isrk'a** *'he had a drink'*
3ACT:DIR-SG:have.a.drink
- (24b) **g-a'asrk'a** *'they (dl) had a drink'*
3ACT:DIR-DL:have.a.drink
- (24c) **k'-a'aasrk'a-ta** *'they (pl) had a drink'*
3ACT:DIR-PL:have.a.drink-PL

9.4.2 Benefactive Intransitive Category

Benefactive Intransitive themes have the following characteristics:

- They are composed of an Active Intransitive verb stem and the Benefactive suffix **-Ci**. Some also have a different stem vowel and/or belong to a different PRMP conjugation class than the corresponding Active Intransitive theme, in much the same way as Benefactives built from transitive verb stems do (see §13.3.5 above).
- They are transitive, taking a subject and a primary object.
- Like all other transitive verbs, the subject is marked with actor PRMP prefixes and the object with undergoer PRMP prefixes.
- Subject number is expressed by the Number suffixes in Slot 7.
- There are three themes per set, varying by number of the object: singular, dual and plural.

Compare the Active Intransitive theme in (25a) with its corresponding Benefactive Intransitive theme in (25b).

(24a) **S'adyumi k-utaanyitra.**
my brother 3ACT:DIR-work

'My brother works.'

(25b) S'adyumi srk-utaanyidra-nyi.

my brother 1UND:DIR-work-BEN

'My brother works for me.'

9.4.3 Other Categories

It seems likely that there would be a Reciprocal Benefactive Intransitive category, as well as a Reflexive Benefactive Intransitive category, to cover phrase such as *'we worked for each other'* or *'I work for myself'*, but I have yet to see any such naturally occurring examples.

Valiquette also describes a Middle Intransitive category, which seems to have the meaning of an action done slowly or purposefully. From his discussion it is not clear how general a category this is, or what its full range of properties might be.

9.5 Stative Intransitive Verb Theme Class

The Stative Intransitive verb theme class has at least the following verb theme categories:

- Stative Intransitive

9.5.1 Stative Intransitive Category

Stative Intransitive verb themes have the following characteristics:

- They do not carry a Voice prefix or a Benefactive suffix.
- They are intransitive.
- Their subject is marked by undergoer PRMP prefixes.
- The number of themes in each theme set ranges from 1-3, due to the same type of complexities in number marking found with Active Intransitive verb themes.

A typical example is shown in (26).

(26a) **dz-iibai** *'he's sleeping'*

3UND:DIR-SG:be.sleeping

(26b) **k'-aibai** *'they (dl) are sleeping'*

3UND:DIR-DL:be.sleeping

(26c) **ts'-eebai**

'they (pl) are sleeping'

3UND:DIR-PL:be.sleeping

9.6 Impersonal Verb Theme Class

The final verb theme class is the Impersonal class. This has only a single verb theme category as a member:

- Impersonal

9.6.1 Impersonal Category

Impersonal verb themes have the following characteristics:

- They carry no Number marking, Voice prefix or Benefactive suffix. The theme is isomorphic with the verb stem.
- They take no complements syntactically.
- Morphologically, they require a third person actor PRMP prefix.

This is a small set of verbs in Laguna, dealing mostly with the weather and other natural

phenomena. Some typical examples include:

- (27a) **Dz-inau.** *'It is cloudy, overcast.'*
3ACT:DIR-be.cloudy
- (27b) **K-awetu.** *'It snowed.'*
3ACT:DIR-snow
- (27c) **K-uch'atsita.** *'There was a bolt of lightning.'*
3ACT:DIR-be.lightning.bolt
- (27d) **G-ina.** *'It's very windy.'*
3ACT:DIR-be.very.windy
- (27e) **Ts-iba.** *'There's a fire.'*
3ACT:DIR-be.fire

10.1 Class 1 Suffixing Verbs

The largest group of suffixing verbs are those belonging to Class 1 (Valiquette's AUX#2). Rather than referring to actions and events, as most prefixing verbs do, Class 1 suffixing verbs are typically stative in nature, and usually correspond to adjectives in English. Some examples of Class 1 verbs are shown in (2), with the third person singular actor direct suffix -tsi..

- | | | |
|------|-----------------------|-----------------------------------|
| (2a) | basi-tsi | <i>'he has fuzzy hair'</i> |
| (2b) | drupi-tsi | <i>'it is cylindrical'</i> |
| (2c) | kitri-tsi | <i>'it is reddish'</i> |
| (2d) | k'aiwashuu-tsi | <i>'it is striped'</i> |
| (2e) | n'uwiwi-tsi | <i>'he is stout, chunky'</i> |
| (2f) | si-tsi | <i>'it is ruined, ugly, evil'</i> |

Note that all Class 1 suffixing verb themes are consonant initial, unlike the verb themes of prefixing verbs which are vowel-initial.

The Direct mood forms of the Class 1 PRMPN suffixes are shown in Table 10.1.

Direct Mood	Class 1 PRMPN Suffixes		
	Singular	Dual	Plural
1 st person actor	-si	-sr'aa'a	-sidye
2 nd person actor	-shi	-kitr'aa'a	-kidye
3 rd person actor	-tsi	-k'aa'a	-dze

Table 10.1: Class 1 Suffixes, Direct Mood

A full Direct paradigm for the Class 1 verb theme **shdak'a-** 'have messy hair' is shown in

(3).

- (3a) **shdak'a-si** *'I have messy hair'*
- (3b) **shdak'a-shi** *'you have messy hair'*
- (3c) **shdak'a-tsi** *'he/she has messy hair'*
- (3d) **shdak'a-sr'aa'a** *'we (dl) have messy hair'*
- (3e) **shdak'a-kitr'aa'a** *'you (dl) have messy hair'*
- (3f) **shdak'a-k'aa'a** *'they (dl) have messy hair'*
- (3g) **shdak'a-sidye** *'we (pl) have messy hair'*
- (3h) **shdak'a-kidye** *'you (pl) have messy hair'*
- (3i) **shdak'a-dze** *'they (pl) have messy hair'*

As Valiquette and Miller note, several Class 1 suffixing verb themes can occur reduplicated, usually indicating plurality of the subject.

- (4a) **para-tsi** *'it is dented'*
(4b) **parara-tsi** *'several are dented'*
- (5a) **ts'epi-tsi** *'it is spotted'*
(5b) **ts'epipi-tsi** *'it has many spots'*

Class 1 verbs are unique in that they can also occur with the PRMPN suffixes usually found with Class 2 verbs, as well. The difference there is that the Class 2 suffixes add an inchoative sense to the Class 1 verb, as shown in (6).

- (6a) **para-ka** *'it got/became dented'*
be.dented-3SG:DIR:CL2
- (6b) **parara-ka** *'several got/became dented'*
several.be.dented-3SG:DIR:CL2

10.2 Class 2 Suffixing Verbs

There are fewer verb themes in Class 2 than in Class 1. The majority of Class 2 verb themes

(Valiquette's AUX #3 and AUX #6) describe actions involving the eyes, nose, mouth or throat. Examples are shown in (7) with the third person singular Direct suffix **-ka**.

- | | | |
|------|---------------------|---|
| (7a) | buusru-ka | <i>'it stinks, it has an odor'</i> |
| (7b) | chuu-ka | <i>'he burped'</i> |
| (7c) | shupi-ka | <i>'he spit'</i> |
| (7d) | k'iichi-ka | <i>'he sighed, groaned'</i> |
| (7e) | shch'uu-ka | <i>'he swallowed'</i> |
| (7f) | esu-ka | <i>'he sneezed'</i> |
| (7g) | hau-ka | <i>'he yawned'</i> |
| (7h) | hii-ka | <i>'he grinned'</i> |
| (7i) | shch'usri-ka | <i>'he coughed'</i> |
| (7j) | tsaa-ka | <i>'he took a deep breath'</i> |
| (7k) | m'uts'i-ka | <i>'he squirted water from his mouth'</i> |
| (7l) | y'ak'u-ka | <i>'he sobbed'</i> |

There are also some other Class 2 verbs that don't fit quite so neatly into that group.

- | | | |
|------|------------------|---|
| (8a) | kiitri-ka | <i>'it is burning, aflame, glowing'</i> |
| (8b) | sh'api-ka | <i>'it is evening'</i> |
| (8c) | tsuu-ka | <i>'he moved'</i> |

Reduplicated forms of some of the Class 2 verbs are also found. In this case, they typically refer to an action being carried out repeatedly, as opposed to the plural subject reduplication found with Class 1 verbs.

- (9a) **hauhau-ka** *'he yawned repeatedly'*
(9b) **esu'esu-ka** *'he sneezed repeatedly'*
(9c) **tsatsa-ka** *'he is breathing repeatedly; he is alive'*

There are also some Class 2 verb stems which appear to always occur reduplicated. They likewise refer to a continuous or repeated action -- typically some type of sound -- as in (10).

- (10a) **pinana-ka** *'there is a continuous thumping sound'*
(10b) **rats'its'i-ka** *'there is a constant banging, slamming sound'*
(10c) **sawawa-ka** *'there is the constant sound of rushing water'*

Recall that Class 2 suffixes can also be used with Class 1 verbs, as in (11).

- (11a) **shch'au-tsi** *'it is open'*
 be.open-3SG:ACT:DIR:CL1

(11b) **shch'au-ka** *'it cracked, popped open'*
 be.open-3SG:ACT:DIR:CL2

- (11c) **shch'aushch'au-ka** *'several cracked, popped open'*
 several.be.open-3SG:ACT:DIR:CL2

The Direct mood forms of the Class 2 PRMPN suffixes are shown in Table 10.2.

Direct Mood	Class 2 PRMPN Suffixes		
	Singular	Dual	Plural
1 st person actor	-se	-sr'aa'a	-sidye
2 nd person actor	-sra	-kitr'aa'a	-kidye
3 rd person actor	-ka	-k'aa'a	-dze

Table 10.2: Class 2 Suffixes, Direct Mood

Note that the Class 2 suffixes are the same as the Class 1 suffixes in the dual and the plural; the only apparent difference between the two sets of suffixes is in their singular forms.

A full Direct mood paradigm for the Class 2 verb stem **shupi-** '*spit*' is shown in (12).

- (12a) **shupi-se** *'I spit'*
 (12b) **shupi-sra** *'you spit'*
 (12c) **shupi-ka** *'he/she spit'*
 (12d) **shupi-sr'aa'a** *'we (dl) spit'*
 (12e) **shupi-kitr'aa'a** *'you (dl) spit'*

- | | | |
|-------|---------------------|-------------------------|
| (12f) | shupi-k'aa'a | <i>'they (dl) spit'</i> |
| (12g) | shupi-sidye | <i>'we (pl) spit'</i> |
| (12h) | shupi-kidye | <i>'you (pl) spit'</i> |
| (12i) | shupi-dze | <i>'they (pl) spit'</i> |

10.3 Class 3 Suffixing Verbs

Class 3 is one of the small and restricted classes of suffixing verbs (Valiquette's AUX #10).

Miller (1960:158) found only four such verbs, all having to do with "spilling":

waka-	<i>'spill, empty; to let fall [Boas 25.191-192]'</i>
waa-	<i>'spill water'</i>
m'ii-	<i>'spill, throw away large granular objects'</i>
wii-	<i>'spill, throw away small granular objects'</i>

The singular Direct mood forms of the Class 3 PRMPN suffixes are shown in Table 10.3.

The full paradigm for these forms is not yet known.

Direct Mood	Class 3 PRMPN Suffixes
	Singular
1 st person actor	-s'e
2 nd person actor	-sha
3 rd person actor	-dza

Table 10.3: Class 3 Suffixes, Direct Mood

Examples are shown in (13).

- (13a) **waa-s'e** *'I spilled it'*
(13b) **waa-sha** *'you spilled it'*
(13c) **waa-dza** *'he spilled it'*

10.4 Class 4 Suffixing Verbs

Class 4 (Valiquette's AUX #8) is also quite small, with only two known members at this time:

- kii-** *'be red'*
dyii- *'be slow'*

The singular Direct mood forms of the Class 4 PRMPN suffixes are shown in Table 10.4.

The full paradigm for these forms is not yet known.

Direct Mood	Class 4 PRMPN Suffixes
	Singular
1 st person actor	-senyi
2 nd person actor	-sranyi
3 rd person actor	-ganyi

Table 10.4: Class 4 Suffixes, Direct Mood

Examples are shown in (14).

(14a) **dyii-senyi** *'I am slow'*

(14b) **dyii-sranyi** *'you are slow'*

(14c) **dyii-ganyi** *'he is slow'*

10.5 Class 5 Suffixing Verbs

Class 5 (Valiquette's AUX #11), appears to have only a single member:

ee- *'be named, called'*

The singular Direct mood forms of the Class 5 PRMPN suffixes are shown in Table 10.5.

The full paradigm for these forms is not yet known.

Direct Mood	Class 5 PRMPN Suffixes
	Singular
1 st person actor	-se
2 nd person actor	-sra
3 rd person actor	-ga

Table 10.5: Class 5 Suffixes, Direct Mood

Basic examples are shown in (15).

(15a) ee-se *'I am named'*

(15b) ee-sra *'you are named'*

(15c) ee-ga *'he is named'*

cf. Acoma ee-gu *'he is named'* [Miller 9.2]

Other attested forms are shown in (16).

(16a) ee-dya *'he is named'* [Boas 27.187]

be.named-3SG:ACT:SBJ:CL5

(16b) **ee-nye-gu** 'she will be named' [Boas 17.159]

be.named-EXP:CL5-3SG:ACT:DIR

(16c) **ee-gaa-srau** 'the named place' [Boas 25.005-007]

be.named-3SG:ACT:DIR:CL5-LOCNOM

(16d) **ee-kidraa-she** 'your names' [Boas 24.219]

be.named-2DL?:ACT:DIR:CL5-NOM

10.6 Class 6 Suffixing Verbs

There is only one suffixing verb in Class 6 (Valiquette's AUX \$14):

dzu- 'SG. go, come'.

This theme is specifically singular; its corresponding dual and plural themes are regular prefixing verbs, **-eyu** 'dl. go, come' and **-eeku** 'pl. go, come'. Note that all three of these themes can be translated as either 'go' or 'come'. Their real meaning is simply motion from one place to another -- the Direction of that motion, whether going away or coming towards, is usually specified by other words in the sentence.

The Class 6 PRMPN suffixes, in all 5 Moods, are shown in Table 10.6.

Class 6 PRMPN Suffixes					
	Direct	Neg Dir	Neg Ind	Indirect	Imperative
1 st person sg. actor	-se	-srku	-srku	-tye	---
2 nd person sg. actor	-sru	-srunu	-tru	-tru	---
3 rd person sg. actor	-ku	-gunu	-tyu	-tyu	-pe

Table 10.6: Class 6 Suffixes

The Direct forms are shown in (17).

- (17a) **dzu-se** *'I went'*
 (17b) **dzu-sru** *'you went'*
 (17c) **dzu-ku** *'he went'*

The Negative Direct forms are shown in (18).

- (18a) **dzaadzi dzu-srku** *'I didn't go'*
 (18b) **dzaadzi dzu-srunu** *'you didn't go'*
 (18c) **dzaadzi dzu-gunu** *'he didn't go'*

The Negative Indirect forms are shown in (19).

- (19a) **dzaadzi dzu-srku** *'didn't I go?'*

- (19b) **dzaadzi dzu-tru** *'didn't you go?'*
 (19c) **dzaadzi dzu-tyu** *'didn't he go?'*

The Indirect forms are shown in (20).

- (20a) **dzu-tye** *'did I go?'*
 (20b) **dzu-tru** *'did you go?'*
 (20c) **dzu-tyu** *'did he go?'*

The Imperative forms are shown in (21).

- (21a) **kaama** *'let me go!'*
 (21b) **iima** *'go!'*
 (21c) **dzu-pe** *'let him go!'*

Note that the first and second person imperative forms are irregular. In fact, they are not built off of the verb theme **dzu-** at all. The imperative forms of *'go/come'* are irregular in the dual and plural as well.

- (22a) **iima** *'go!'*
 (22b) **ty'eema** *'go (dl)!'*
 (22c) **dyeguuma** *'go (pl)!'*

Further examples are shown in (23).

- (23a) **dzuu-s'-eet'a** *'I kept going'*
go-1SG:ACT:DIR-CONT
- (23b) **dzuu-se-srau** *'where I go'* [Boas 22.300]
go-1SG:ACT:DIR-LOCNOM
- (23c) **dzuu-nye-si** *'I will go'*
go-EXP:CL6-1SG:ACT:DIR
- (23d) **dzuu-nye-dyu** *'he will come'*
go-EXP:CL6-3SG:ACT:SBJ
- (23e) **dzaadzi dzuu-nye-srgunu** *'I will not come'*
not go-EXP:CL6-1SG:ACT:NEGDIR
- (23f) **dzuu-nye-si-nyishe** *'that I will go'*
go-EXP:CL6-1SG:ACT:DIR-NOM
- (23g) **dzuu-nye-sru-nyisrau** *'where you will go'*
go-EXP:CL6-2SG:ACT:DIR-LOCNOM

(23h) **dzaadzi dzuu-nye-srgunu** *'I won't go'*
not go-EXP:CL6-1SG:ACT:NEGDIR

(23i) **dzuu-nye-tyi** *'will I go?'*
go-EXP:CL6-1SG:ACT:IND

Note the changes when the temporal subordinator suffix **-i** is added.

(24a) **dzuu-sh-i** *'when you come'* [Boas 31.013]
go-2SG:ACT:DIR:CL6-WHEN

(24b) **dzuu-ts-i** *'when he went'* [Boas 09.194]
go-3SG:ACT:IND:CL6-WHEN

There may also be transitive forms used in a Benefactive construction. Note this example in (25).

(25) **dzuu-srau-tyi** *'I came for you'* [Boas 20.127]
go-1SG/2SG:DIR:CL6-BEN

10.7 Class 7 Suffixing Verbs

Class 7 (Valiquette's AUX #7) has only two known members:

shina- *'have a cold'*

dra- *'have tingling in one's limbs'*.

The singular Direct mood forms of the Class 7 PRMPN suffixes are shown in Table 15.7.

The full paradigm for these forms is not yet known. Valiquette (1990:98) notes the possibility that these suffixes may have originally come from a Passive form of the Class 2 suffixes.

Direct Mood	Class 7 PRMPN Suffixes
	Singular
1 st person undergoer	-srk'a
2 nd person undergoer	-kidra
3 rd person undergoer	-ts'a

Table 10.7: Class 7 Suffixes, Direct Mood

Examples are shown below in (26).

(26a) **shina-srk'a** *'I have a cold'*

(26b) **shina-kidra** *'you have a cold'*

(26c) **shina-ts'a** *'he has a cold'*

Note that unlike the other PRMPN suffixes in Classes 1-6, the suffixes of Class 7 mark the role as undergoer and not as actor. This is clearly seen with examples in the Expective, as shown in (27).

- (27a) **shina-nyee-srguma** *I will have a cold'*
 have.a.cold-EXP-1SG:UND:DIR
- (27b) **shina-nyee-tridrumanityi** *'will you have a cold?'*
 have.a.cold-EXP-2SG:UND:IND
- (27c) **dzaadzi shina-nyee-shjumasaadyau** *'we (pl) won't have colds'*
 not have.a.cold-EXP-1PL:UND:NEGDIR

Note also the following related forms in (28).

- (28a) **srk-ishinatsi** *'I am cold'* [Boas 18.124-126]
 1UND:DIR-be.cold
- (28b) **húúshínányi** *'head cold'* [Miller 1965:150]

10.8 Class 8 Suffixing Verbs

Class 8 (Valiquette's AUX #13) also appears to have only a single member:

w'iityi- *'be angry, sullen'*

The singular Direct mood forms of the Class 8 PRMPN suffixes are shown in Table 10.8. The full paradigm is not yet known, although the forms appear very similar to those of Class 7 followed by (perhaps) the Completive suffix **-tsi**. Note that these are also undergoer prefixes, just like in Class 7.

Direct Mood	Class 8 PRMPN Suffixes
	Singular
1 st person undergoer	-srk'atsi
2 nd person undergoer	-kidratsi
3 rd person undergoer	-ts'atsi

Table 10.8: Class 8 Suffixes, Direct Mood

Some examples are seen in (29).

(29a) **w'iityi-srk'atsi** *'I'm angry'*

(29b) **w'iityi-kidrasi** *'you're angry'*

(29c) **w'iityi-ts'atsi** *'he's angry'*

10.9 Class 9 Suffixing Verbs

The final class of suffixing verbs, Class 9 (Valiquette's AUX #1), uses the same endings as the Expective verb forms outlined in Chapter 9. The majority of verb themes in this class are what Valiquette calls "cue words" -- words which cue the listener into the emotional state of the speaker. Some examples are shown in (30).

- | | | |
|-------|-----------------|---------------------------|
| (30a) | amuu-si | <i>'I love him'</i> |
| (30b) | iyuu-si | <i>'I am cold'</i> |
| (30c) | idii-si | <i>'I am hot'</i> |
| (30d) | anyiu-si | <i>'I like it (food)'</i> |

10.10 Summary

Both Miller and Valiquette treat the endings shown in this chapter as auxiliary verbs, with much the same morphological structure and inflectional patterning as regular verbs. For Valiquette, these auxiliary verbs have no Voice prefixes, and so the stem and the theme are the same. Under this analysis, these auxiliary verbs then attach not to verb themes but to auxiliary complements.

It seems clear from their current form that this wide assortment of verbal suffixes did start off as auxiliary verbs in an earlier form of the language, perhaps even as late as Proto-Keres.

While Miller and Valiquette analyze these forms as still being auxiliary verbs, I choose to treat these simply as suffixes for the following reasons:

1. They do not have the canonical -VCV(CV)- shape of the verb stem/theme found with other (prefixing) verbs. In many cases, the verb theme appears to be simply -a- -- that is, just a stem vowel, and no more stem after it.

For instance, in Class 2 we might have a singular verb theme -a- which takes the prefixes **si-**, **sr-** and **k-**. In Class 3, we could set up another singular verb theme -a-, which takes a different set of prefixes: **s'i-**, **sh-** and **dz-**. In Class 5, we would again have a verb theme -a- with the prefixes **si-**, **sr-** and **g-**. In Class 7, the theme -a- combines with the prefixes **srk'-**, **kidr-** and **ts'-**. It is not clear what would be gained by positing these four homophonous -a- verb themes.

2. Any lexical/semantic content that these auxiliary verbs may have had earlier on has been all but entirely lost, unlike regular verbs.

3. The forms are phonologically bound to their complements, unlike regular verbs, but like other inflectional suffixes.

4. With few exceptions, the forms they attach to are bound and do not occur independently of these endings, which is parallel to the case of regular verb themes which do not occur

independently of their inflectional affixes.

Chapter 11

Copulas

The third and final major type of verb in Laguna is the Copula. Copulas are similar in some respects to the PRMPN suffixes that attach to suffixing verbs. However, whereas the PRMPN attach to bound verb stems, copulas have entire words or phrases as their complements.

There are 4 copulas verbs in Laguna : the Simple Copula (SIMCOP), the Descriptive Copula (DESCCOP), the Locative Copula (LOCCOP), and the Possessive Copula (POSSCOP). These are discussed in turn below.

11.1 Simple Copula

The simple copula is used in making making statements that equate one thing with something else (X is Y), as in the examples in (1)

(1a) **hatridze-sida** *'I am a man'*
man-1SG.ACT.DIR.SIMCOP

(1b) **K'awaigam'e-dza** *'he is a Laguna'*
Laguna.person-3SG.ACT.DIR.SIMCOP

- (1c) **ruunyishii-dza** *'it is Monday'*
Monday-3SG.ACT.DIR.SIMCOP

The Direct mood forms of the simple copula are shown in Table 11.1.

Direct Mood	Simple Copula		
	Singular	Dual	Plural
1 st person actor	-sida	-sidaa'a	-sidaa'apa
2 nd person actor	-kida	-kidaa'a	-kidaa'apa
3 rd person actor	-dza	-dzaa'a	-dzaa'apa

Table 11.1: Direct Mood forms of the Simple Copula

The paradigm with the noun **hatridze** 'man' is shown in (2).

- (2a) **hatridze-sida** *'I am a man'*
(2b) **hatridze-kida** *'you are a man'*
(2c) **hatridze-dza** *'he is a man'*
(2d) **hatridze-sidaa'a** *'we (dl) are men'*
(2e) **hatridze-kidaa'a** *'you (dl) are men'*
(2f) **hatridze-dzaa'a** *'they (dl) are men'*
(2g) **hatridze-sidaa'apa** *'we (pl) are men'*
(2h) **hatridze-kidaa'apa** *'you (pl) are men'*

(2i) **hatridze-dzaa'apa** *'they (pl) are men'*

The expective form of this auxiliary is **-nidaa-**, as in (3).

(3a) **hatridze-nidaa-si** *'I will be a man'*

man-EXP:COPAUX-1SG:ACT:DIR

The simple copula takes the **-nye** allomorph of the temporal subordinator **-Ce** *'when'*, as in (4).

(4) **iyadra-dza'a-nye** *'when he was a child'*

child-3SG:ACT:DIR:COPAUX-WHEN

While the simple copula is most often found with nouns, it can also be used with adjectives, as in (5).

(5a) **dawaa-dza** *'it is good'*

(5b) **dawaa-nidaa-gu** *'it will be good'*

(5c) **naatsi-dza** *'it is new'*

(5d) **naatsi-nidaa-gu** *'it will be new'*

(5e) **hanaami-sida** *'I am naked'*

(5f) **tsaya-sida** *'I am first'*

Within a noun phrase, the adjective can come either before or after the noun. In either case, the simple copula will cliticize onto the final element in the phrase, *pace* Valiquette (1990:96) who claims that the copula will always cliticize to the noun and not the modifier. Compare the examples in (6).

(6a) **ubewi dawaa-dza**
 food good-3SG.ACT.DIR.SIMCOP

'it is good food; the food is good'

(6b) **dawaa ubewi-dza**
 good food-3SG.ACT.DIR.SIMCOP

'it is good food; the food is good'

Textual examples of this variation are shown in (7). In (7a) the copula cliticizes to the phrase-final adjective, while in (7b-c) the copula cliticizes to the phrase-final noun.

(7a) **Shche egu emi heeya ha'ats'i dawaa-nidaagu**
 well by means of this earth good + it will be DIR

ts'aasrgama ts'idyuudze.

every day always

Well, then with this the earth will be good always every day. [Boas 01.137]

(7b) Dawaa kisruumitridza-nidaagu ee

good plants + it will be IND and

dawaa saiyu dzii gawaa'aidyi-nidaagu.

good all (what) crops + it will be DIR

Good the plants will be and all the crops will be good. [Boas 01.138]

(7c) ...ee heeme dawaa ha'ats'i-nidaagu

...and thus good earth + it will be DIR

ee heeme dawaa hanu-nidaagu

and thus good people + it will be DIR

ts'aasrgama ts'idyuudze.

every day always

*...and therefore the earth will be good and therefore the people will be well every day
always.* [Boas 01.148]

Along with nouns and adjectives, the simple copula is also occasionally found with other word classes, as in the examples in (8).

(8a) **Da'aa-nidaagu ...**

thus + it will be DIR

Thus it will be ... [Boas 11.132-136]

(8b) **Hats'u-dzaa'apa?**

how.many-3PL:ACT:DIR:SIMCOP

How many are there? [Boas 16.0221]

(8c) **n'auya-sidaa'apa**

many-1PL:ACT:DIR:SIMCOP

'we are many'

11.2 Descriptive Copula

Unlike the simple copula which has a large number of possible complements, the descriptive copula (Valiquette's AUX #12) has only a small, closed set of complements with which it occurs. Valiquette identified the following four possible complements:

adyeema	'dirty'
idiim'aa	'sunny'
pishuun'a	'purple'
kuusrganu	'resemble, look like'

Miller (1965:159) listed a few more possibilities for Acoma:

kasr'adyiim'a	'chartreuse'
k'ui	'spoiled; strange'
m'aa	'look like'

These forms are basically adjectives, as seen in the examples in (9).

(9a) y'aak'a pishuun'a

corn purple

'purple corn' [Boas 30.035-037]

- (9b) ... **adyeema naidragu ts'itsi.**
 ... dirty he will make it that way DIR water

'... (he) would make dirty the water.' [Boas 15.187]

However, unlike other adjectives that occur with the simple copula, these require the descriptive copula.

- (10a) **adyeema-sidy** *'I am dirty'*
 (10b) **adyeema-kidy** *'you are dirty'*
 (10c) **adyeema-dze** *'he is dirty'*

Beyond the small and closed set of monomorphemic complements listed above, both Miller and Valiquette noted that derived adjectives ending in **-m'a(a)** *'like, similar to'*, also are potential complements for the descriptive copula. Some examples are shown in (11).

- (11a) **Chawaginyi yaisem'aa-dze**
 he wore a shirt IND it was like icicles DIR
- ee haamem'aa-dze ch'aash'uwimi.**
 and it was like ice DIR he wore shoes IND

He wore a shirt like icicles and his shoes were like ice. [Boas 12.062]

- (11b) ...ee chuwadyatyitiya agitritsim'aa-dze
...and he painted them PL IND it is flower-like DIR

...and painted them like flowers. [Boas 26.005]

11.3 Locative Copula

The locative copula (Valiquette's AUX #5) occurs with phrases that specify a location, and basically means *'be located'*. Unlike the other two previous copulas, the locative copula does not cliticize to its complement. The only exception to this is with the locative adverbs *di'* *'here'*, *ai'* *'there'* and *wai'* *'over there'*, which lose their final glottal stops when they join with the copula.

- (12a) *di-ga'a* 'he is here'
(12b) *ai-ga'a* 'he is there'
(12c) *wai-ga'a* 'he is over there'

This copula takes the allomorph *-pishe* of the nominalizer, yielding forms such as in (13).

- (13) **srumik'awaaya ga'apishe**
 right side the one who is located

'the one to the right' [Boas 15.062]

Valiquette (1990:96) notes that he treats this verb as an auxiliary instead of a simple intransitive verb "because of a strict word order constraint: it must immediately follow the LocP [locative phrase]." Examples of this ordering are seen in (14).

- (14a) **Sh'ee aisi dya'a Maaseewi.**
 then right there he was located IND Maaseewi

Then Maaseewi was there. [Boas 07.083]

- (14b) **Sh'ee ediyu ai' binyi-shdyi**
 then next there up in the west

dya'a K'uuchinyinaak'u.
 she was located IND Yellow Woman

Then next there across in the west was Yellow-Woman. [Boas 16.0301]

(14c) **Siiñyiidze ai' dya'a tudachi.**
 Zuni Pueblo there he is located IND priest

At Zuni there is a priest. [Boas 17.202]

(14d) **Sh'ee hausi dza'ats'inye**
 then right to there when he arrived

dzaadzina haadyi dya'a K'uuchinyinaak'u.
 not somewhere she was located NEGIND Yellow Woman

When he arrived, Yellow-Woman was nowhere. [Boas 24.160]

(14e) **"Tudachi haadyi ga'apishe?"**
 priest where that he is located

"Where is the priest?" [Boas 17.163]

Nonetheless, there are several examples in the Boas corpus where the locative copula is not adjacent to the locative phrase, as in (15).

(15) "Kume dzaadzi di' Maaseewi ee
 QUES not here Maaseewi and

dzika Uyuuyewi k'adyumi dya'a?
 also Uyuuyewi his brother he is located NEGIND

"Are not here Maaseewi and also Uyuuyewi his brother?" [Boas 07.028]

11.4 Possessive Copula

The possessive copula (Valiquette's AUX #9) is used with nouns and noun phrases. It has essentially the same meaning as the verb 'get' in English, in the sense of 'come to possess'. Like the locative copula, it does not cliticize to its complement.

The possessive copula bears a striking resemblance to the possessive prefixes found with nouns. Compare the following forms in (16).

- | | | |
|-------|-------------------------|-------------------|
| (16a) | maagina | 'car' |
| (16b) | s'a-maagina | 'my car' |
| | 1SG:POSS-car | |
| (16c) | maagina s'a | 'I got a/the car' |
| | car 1SG:ACT:DIR:POSSCOP | |

Since it has a clearly definable meaning, and is phonologically independent, it could be argued that this is not a copula at all, but simply a regular transitive verb. The main argument against this is that prefixing verb themes have a canonical shape -VCV(CV); that is, they are at least disyllabic. If the possessive auxiliary were a prefixing verb, its theme would be simply -a-, which is unlike the theme for any other verb.

Chapter 12

Spatial and Temporal Adverbs

Adverbs are a large and important class of words in Laguna. There are two main classes of adverbs in Laguna, spatial and temporal, both of which can be divided into several subclasses. Laguna has few real manner adverbs, with their functional load being covered in large part by verbs. The different categories of adverbs are discussed in turn below.

12.1 Spatial Adverbs

There are three main subtypes of spatial adverbs in Laguna: deictic, cardinal and relational.

12.1.1 Deictic Spatial Adverbs

The job of the deictic spatial adverb is to specify where an action took place, in relation to where the speaker is, or to some other reference point. In Laguna there are two subclasses of deictic adverbs: locational and Directional.

12.1.1.1 Locational Deictic Adverbs

Laguna has three basic locational deictic adverbs:

di- ~ di' ~ di'i	<i>'here'</i>
ai- ~ ai' ~ ai'i	<i>'there'</i>
wai- ~ wai' ~ wai'i	<i>'over there, yonder'</i> .

The pronunciation of these words is a complex matter. When said in isolation, they are pronounced as two-syllable words, ending in -i. In the middle of a sentence spoken with fairly careful pronunciation, they are each one-syllable words ending in a glottal stop. However, with more normal, colloquial pronunciation, the final glottal stop is often dropped.

Note that **di'** ~ **di'i** is the only native Laguna word which has an alveolar /d/ instead of a palatal /dy/ before /i/.

Typical examples of locational deictic adverbs are shown in (1).

- (1) **"Wa di' nau'usi," dyanaat'a.**
indeed here I will live DIR he said IND

"Here I shall live," he said. [Boas 14.019]

While the deictic adverbs are very common on their own, they also quite commonly combine with the clitics **-si** *'just, right'* and **-ni** ~ **-ni'i** *'down'* to produce other, complex deictic adverbs, as in (2):

- (2a) **diisi** 'right here'
 (2b) **diisini** 'right down here'
 (2c) **aisi** 'right there'
 (2d) **aisini** 'right down there'
 (2e) **waisi** 'right over there'

Example of these complex deictics are found in (3).

- (3a) **Diisi kidranaishjiya ee kidranaaya**
 right here your father and your mother

ga'ats'inye...

when they DL arrived DIR

When your father and your mother arrive here... [Boas 33.192]

- (3b) **"Duu srguch'ayuma," dyanaat'a. "Diisini niguyasi."**
 now I am tired DIR he said IND right down here I will sit DIR

"Now I am tired," said he. "Right here I shall sit down." [Boas 10.053-054]

(3c) Hawee cha'aiku ut'aanyi driisishu,
this way he brought it IND basket small

aisini dyicha.
right down there he put it IND

He brought a small basket and put it down there. [Boas 16.0794-0795]

(3d) "Haadyi?" dyanaat'a Basitsi Mäityi.
where he said IND his hair is fuzzy boy

"Wa binyi sru guminyisrau emi,
indeed in the west just where there is a spring that's it

waisi kidruch'awa kidrauk'ui,
right over there he stole yours DIR your wife

Hiishch'iyanyi Kuwasityi."
flint wing

*"Where?" said Shock-of-Hair-Youth. "There in the west at the spring, from there
Flint-Wing stole your wife." [Boas 25.043]*

Locational deictic adverbs are frequently found as complements of the locational copula *ga'a* 'be located somewhere' (see Chapter 11).

- (4a) "Di' tra'a, Sra'ats'e Hatridze?"
 here you are located IND abalone man

"Are you here, Abalone-Man?" [Boas 16.0312]

- (4b) Sh'ee dyukacha hauwi k'uuyauda
 then she saw her IND someone she is an old woman IND

aisi dya'a.
 right there she is located IND

Then she saw some old woman there sitting. [Boas 16.0924-0925]

Locational deictic adverbs are frequently followed by other adverbs, nouns or indefinites that elaborate on the intended location, as in (5).

- (5a) "Di' sina dyitya dyinyi huuchanyidze."
 here in the middle north up on top it is the house of the chief DIR

"Here in the middle north is the Chief's house." [Boas 16.0936]

- (5b) "Y'u di' haadyi dyuwai."
perhaps here somewhere there is water IND

"Maybe there is water here somewhere." [Boas 22.295]

- (5c) Ai' y'aanyi n'i dyiidzi
there in front down he made him lie down IND

muuk'aitra k'adyaashe.
mountain lion the one he has as a pet

There in front he made lie down his Mountain-Lion. [Boas 07.078]

- (5d) Ai' srbi n'i daayutse.
there west down he took them PL IND

There west he took them down. [Boas 07.129]

- (5e) Gayuudze wai' ha usraatra gaama
in the morning over there east sun his house

hau' da'ats'i.
to there he arrived IND

In the morning he arrived over there in the east at the sun's house. [Boas 11.160]

(5f) Wai' dyinyi dzitrity'au dyi dya'aya.
over there up on top building up they DL climbed IND

They went up and climbed up to the top of the building. [Boas 30.493]

Frequently, the locational deictic adverbs *ai'* 'there' or *aisi* 'right there' can be used anaphorically, referring back to some previously mentioned location in the discourse, as in (6).

(6a) Hama ka'aidraanye wai' dyitya, Kasrkadriitya,
long ago when it happened over there north White House

ai' shchau'u hanu.
there someone lived IND people

Long ago off in the north, in White House, there lived the people. [Boas 08.003-004]

(6b) Sh'ee hau' dya'aats'i ai' k'ats'aawitsisrau.
then to there they DL arrived IND there where there is danger

Ai' dyiikai kuhaya.
there it was lying IND bear

Then they arrived where the danger was. There lay a bear. [Boas 18.011-012]

(6c) Ai' hiidraa'ai dyik'a nayaa,
there cottonwood with respect to under

aisi dya'a M'aashja.
right there he was located IND fox

There under a cottonwood tree, there was Fox. [Boas 35.081]

12.1.1.2 Directional Deictic Adverbs

The second type of deictic adverb specifies a Direction and/or destination, and so is used predominantly with verbs of motion. The two most common anaphoric Directional deictic adverbs are:

hau' ~ hau'u 'to there'

hausi 'back to there'

These are frequently used with forms of the verb theme -a'ats'i 'arrive', as in (7).

(7) Wai' dyitya haadyi kaa'at'aatye,
over there north somewhere when they PL stopped DIR

sh'eesru hau' da'ats'i K'uuchinyinaak'u.
then to there she arrived IND Yellow Woman

There in the north somewhere, when they stopped, this Yellow-Woman reached there.

[Boas 09.030]

Most of the other Directional deictic adverbs are built from the adverbs k'ee 'away from somewhere' and w'ee ~ wee 'towards somewhere'. Typical examples are seen in (8).

(8a) "Piyuugaityi huuru, wa s'amiiityi
stay here DL IMP donkey indeed my boy

di' k'ee nity'e'eyusidruu'u..."

here away we DL will go DIR

"Stay here with the donkey; my boy and I will go over there..." [Genesis 22:05]

(8b) Dzaadzi dyuwidawana, edze emi
not they recognized him NEGIND but that's it

hashchidzeeshe w'ee dzaidrudzeeshe.
the one who is an old man away the one who led them PL

They did not recognize him, but it was the old man who had brought them there.

[Boas 21.069]

Like *di'*, *ai'* and *wai'*, both *k'ee* and *w'ee* can occur with the clitic *-si* 'back'.

k'eesi 'back away'
w'eesi 'back towards'

An example is shown in (9).

(9) Sh'ee ha k'eesi ty'e'eyu
then east back away they DL went IND

ai' k'anaaya ga'apisrau.

there his mother where she is located

Then they went back outside east there where his mother was sitting. [Boas 09.099]

These two adverbs serve as the bases for a set of twelve other Directional adverbs, shown in (10).

(10a) **hawee** 'this way, towards here'

(10b) **haweesi** 'back this way, back towards here'

(10c) **duwee** 'this way, towards here'

(10d) **duweesi** 'back this way, back towards here'

(10e) **yuwee** 'that/this way, towards (t)here (from far away)'

(10f) **yuweesi** 'back that/this way, back towards (t)here (from far away)'

(10g) **hak'ee** 'away from here'

(10h) **hak'eesi** 'back away from here'

(10i) **duk'ee** 'away from here'

(10j) **duk'eesi** 'back away from here'

- (10k) yuk'ee *'far away from (t)here'*
 (10l) yuk'eesi *'back far away from (t)here'*

The forms duwee(si) and hawee(si) typically refer to motion toward the speaker.

- (11a) "Kidramaaki duwee srkuyuutse."
 your daughter this way she brought me DIR

"Your daughter brought me here." [boas 12.044]

- (11b) "Hats'uma gayuudze dzigana duweesi
 a little while in the morning again back this way

nidye'ekukidruu'usa."

you PL will come DIR

"After a while, in the morning, you will come again." [Boas 16.0533]

- (11c) Hawee n'i dyapi huuchanyi gaama.
 this way down they DL entered IND chief house

Down they entered the chief's house. [Boas 07.034]

- (11d) **Sh'ee waawa hawee chusht'aiku.**
then medicine this way he brought it IND

Then he brought there medicine. [Boas 07.089]

- (11e) **"Chima, haweesi dzuuse."**
downstairs back this way I came DIR

"You, downstairs, I came back." [Boas 13.084]

The form **yuwee(si)** likewise refers to motion towards a reference point, but with a starting point that is far away.

- (12) **"Yuwee dyidiy dzuuse,**
from far off in the north I came DIR

wai' dyitya Kasrkadriitya."
over there in the north White House

"I came from off in the north, from White-House." [Boas 09.206]

The forms **duk'ee(si)** and **hak'ee(si)** both refer to motion away from some reference point.

- (13a) "Hanye nidye'eku duk'ee binyiya-kuwa."
 let's let's DL go IMP away southwest

"Let us two go from here southwest." [Boas 08.120]

- (13b) "Srau'u hak'ee shjitya nidye'eku huuchanyidze."
 alright away northward let's DL go IMP chief's house

"Now then let us go north to the Chief's house." [Boas 07.151]

The form yuk'ee(si) refers to motion far away from a reference point.

- (14) Sh'ee t'aiyuudze yuk'ee srguwa Mehegu-eesi.
 then he was taken IND far away southward right to Mexico

Then he was taken way off south to Mexico. [Boas 17.187]

12.1.2 Cardinal Adverbs

A second class of spatial adverbs are the cardinal adverbs. They also have two subclasses: locational and Directional.

12.1.2.1 Locational Cardinal Adverbs

The locational cardinal adverbs are those which refer to compass locations, such as **haanyi** 'in the east', **dyidiyiisa** 'on the north side', **kunyi** 'in the south', and **binyi** 'in the west'.

Typical examples are seen in (15).

(15a) **Sh'ee hats'uma ka'aidraanye wai' dyinyiya**
then a little while when it happened over there high up

haanyi dyi k'aiyasru dyeiyanyi cha'aityityiya.
in the east up squirrel piñon nut it was gathering it IND

After a while in the east up above squirrels were picking piñon nuts. [Boas 30.171]

(15b) **Sh'ee ai' dyidiyiisa shdyi chuguya.**
then there on north side upwards he sat down IND

Then up there on the north side he sat down. [Boas 19.211]

(15c) **Haik'ame Kasrkadriitya ai' kunyi**
first White House there in the south

shuuk'u ai' cha'aat'a.
corner there they PL stopped IND

First there in the south region at White-House they stopped. [Boas 09.007]

(15d) Sh'ee ai' binyi dzitridya srbi
then there in the west mountain top westward

dyi dyum'i.
up he came out IND

Then there in the west on top of the mountain up west he came out. [Boas 17.158]

12.1.2.2 Directional Cardinal Adverbs

Directional cardinal adverbs are used with verbs of motion to describe the cardinal direction in which the motion took place.

(16a) Ai' sa dzuutyu, etyu k'adyaashe dyaami
there eastward he went IND but the one he has as a pet eagle

dyinami shdyi tyiiyu.

up above upwards it flew IND

He went eastward, but his eagle flew upward. [Boas 31.310-311]

(16b) Sh'ee gaityisru dyinyiya bi dyi dye'eku.

then really high up westward up they PL went IND

There up westward they went. [Boas 19.239]

(16c) Sh'ee kaatya srbi chuuk'a,

then backward moving westward he looked IND

sh'ee dyukacha nadranyi.

then he saw it IND wind

Then he looked backward [back westward], and he saw the wind. [Boas 27.150-151].

(16d) Hak'ee nayaa bi y'aunyi

away under westward rock

gunaat'ayuma nayaa bi dyupi.
there is a cave DIR under westward she entered IND

That way down west into the cave in the rock she went. [Boas 28.045]

(16e) Yuuna ha dyi dzuutyu.
from here eastward up he went IND

From here eastward up he went. [Boas 16.0953-0954]

(16f) Hanye srau'u yuuna bi n'i.
let's let's go! from here westward down

Let us from here go west [down]. [Boas 17.018]

(16g) Sh'eesru shdyi dyait'atyu,
and then upwards they DL stood up IND

sh'ee yuuna bi ty'e'eyu.
then from here westward they DL went IND

Then they stood up and there to the west they went. [Boas 17.019]

12.1.3 Relational Spatial Adverbs

There are other non-deictic, non-cardinal spatial adverbs, as well. Many, if not most, of these can be used in both a locational and a directional sense. Some common ones are:

ani	<i>'below'</i>
chima	<i>'down, downstairs'</i>
dyinyi	<i>'on top'</i>
dyinyiya	<i>'above'</i>
k'aiya	<i>'inside'</i>
nayaa	<i>'under'</i>
sruyana	<i>'around'</i>
yuuwi	<i>'beside'</i>
y'aanyi	<i>'in front'</i>

Nearly all of these adverbs are the translation equivalents of prepositions in English. However, rather than adjoining to nouns, these words nearly always follow one of the deictic locational adverbs, such as **di** *'here'*, **ai** *'there'*, or **wai** *'over there'*.

Typical examples are shown in (17).

(17a) Sh'ee ai' ani dyaatra hauba.
then there down he lived IND everyone

Then down there they lived together. [Boas 16.0694]

(17b) Maame ai' chima dyuumiitsita.
very there downstairs he was running IND

He was running around downstairs very (fast). [Boas 13.048]

(17c) Ai' dyinyi ganaayashe dya'a.
there above their PL mother she was located IND

There above was their mother. [Boas 22.017]

(17d) Ai' dyinyiya sra hats'uma dya'ayaat'a.
there high up around a little while he was flying IND

There for a while he flew around up above. [Boas 31.134]

(17e) Hau' dyaa'ayats'i, ai' k'aiya dya'a.
to there they DL arrived IND there inside he was located IND

Then they arrived and there inside he was. [Boas 06.056-057]

- (17f) **Sh'ee ai' nayaa y'aunyi dyibinai'i.**
then there under stone he put it IND

Then he put a stone under it. [Boas 17.233-234]

- (17g) **Kume dzeeguma di' nayaasi sra'a?**
QUES why here right under you are located DIR

Why do you sit underneath here? [Boas 25.152]

- (17h) **Sh'ee t'uuyuu ai' sruyana**
then in vain there around

dyiyeibaatyiguya k'auk'ui.
he was looking for her IND his wife

Then he tried to search around there for his wife. [Boas 25.028]

- (17i) **Hawee y'aunyi cha'aityita,**
this way stone he was gathering it from the ground IND

sh'ee ai' yuuwi n'i dyiyaat'a y'aunyi.
then there alongside down he put them PL IND stone

Then he picked up stones and then there alongside he put the stones. [Boas 35.094]

(17j) Ai' y'aanyi ganaayashe ga'apisrau,
there in front their PL mother where she is located

hausi dye'eyats'i.
right to there they DL arrived IND

In front of where there mother was, there they arrived. [Boas 16.0642-0643]

(17k) Sh'ee ani nyibinaimekidruu'usa.
then down you PL will put it in it DIR

Then down you will put it into it. [Boas 06.021]

(17l) Sh'ee ani piitsi cha'aityicha.
then down buckskin he spread it out IND

Then buckskin he spread down. [Boas 16.1027]

(17m) Sh'ee ani tyidyeits'i.
then down he buried her IND

Then below he buried her. [Boas 16.0044]

(17n) Sh'ee aisi yuuk'u dzuutyu gaama-eesi.
then right there away he went IND right to his house

Then he went from there to his house. [Boas 24.173]

(17o) Suu, yuuna chimasini
oh dear from here right down below

s'adyaashe k'aadza srguyuupi.
the one I have as a pet kangaroo rat he left me DIR

Oh dear, from here (down below) my pet kangaroo rat went into the ground (from me). [Boas 16.0919]

Certain combinations of spatial adverbs have idiosyncratic, lexicalized meanings.

Literally "*in front of right here*", *diisi y'aanyi* is used with the temporal meaning of "*from*

now on''.

(18) Diisi y'aanyi dzaadzina hama
from now on not sometime

hauwi niyamasht'agunu.
someone he will be hungry NEGDIR

From now on nobody will ever be hungry. [Boas 33.436]

Chima also occurs as a vocative, '*you, downstairs!*', typically used by people entering a house on the second floor.

(19a) Chima, guwaadzi?
downstairs how are you?

You, downstairs, how are things? [Boas 06.094]

(19b) Chima, haweesi dzuuse.
downstairs back this way I came DIR

You, downstairs, I came back. [Boas 13.084]

(19c) Chima, n'aaya, hawee s'eyadrutse.
 downstairs mother this way I brought him DIR

You down below, mother, I have brought someone here. [Boas 25.184]

Likewise, **k'aiya** can be used as a vocative:

(20) K'aiya, guwaadzi?
 inside how are you?

You, inside, how are things? [Boas 06.058]

K'aiya also occurs frequently as a noun meaning 'room', or other enclosed space, such as a canyon.

(21a) Sh'ee k'aiya dyitya dyupi ganaayashe.
 then room north she entered IND their PL mother

Then into the north room went their mother. [Boas 16.0109]

(21b) Drutyu, k'aiya-ee nayasrk'anikidruu'u.
 as for you in the room you DL will sweep DIR

You, sweep the room! [Boas 22.415]

(21c) Baasrumi wai' kuwa k'aiya-ee ty'eema!
don't over there south in the canyon go DL IMP

Do not go to the south canyon! [Boas 18.005]

12.2 Temporal Adverbs

Temporal adverbs in Laguna can be divided into four main groups, based on their semantics, although there may be some adverbs which have membership in more than one of the groups.

12.2.1 Frequentative adverbs

Frequentative adverbs are used to describe how often an action or event takes place.

Common frequentatives include:

dyitrasru	'always'
ts'idyuudze	'always'
dzaadzi hama	'never'
ts'aasrgama	'every day'

naanumana

'day after day'

Some examples are seen in (22).

(22a) Ts'idyuudze gaishtaaya.

always it is cold DIR

'It is always cold.'

(22b) Diisi y'aanyi dzaadzi hama dzii anye

from now on never something nice

nupesrunu.

you will eat it NEGDIR

From now on you will never eat anything nice. [Boas 11.226-227]

(22c) "Aku dzeeguma dzaana hama kacha."

I wonder why never it is raining NEGDIR

"I wonder why it is never raining." [Boas 19.016]

(22d) Egu emi ts'idyuudze ts'aasrgama dyaina'anyi.
 and so always every day he gambled IND

And so always every day he gambled. [Boas 19.005]

Also included in this group are complex adverbs formed from a temporal adverb plus the suffix **-ts'aama** 'every'.

(23a) Sh'ee naanuuts'aama chituunyisi.
 then early every morning he grew IND

'Then early every morning he had grown.' [Boas 13.045]

(23b) Kisraidyits'aama usraatra haanyiya-shjidya dziyaats'iu,
 every year sun northeast when it arrives

ee haanyiya-srkuwa dziyaats'iu
 and southeast when it arrives

s'eegadza kuwaanyidradye'e.
 always they PL go hunting DIR

'Every year when the sun reaches the northeast and the southeast then they always go hunting.' [Boas 57.013]

12.2.2 Durational Adverbs

Durational adverbs express how long some activity took place for. Common durational adverbs include:

m'aik'u	<i>'for a long time'</i>
k'uimi m'aik'u	<i>'for a little while'</i>
nuyaatru	<i>'all night'</i>
nuyaadrumana	<i>'all night long'</i>
s'echu	<i>'daytime, all day'</i>
s'echuma	<i>'daytime, all day'</i>
s'echumana	<i>'all day long'</i>
ts'iyak'amiidze	<i>'forever, everlasting, eternal'</i>

Some examples are seen in (24).

(24a)	M'aik'u	maaka	cha'aitra.
	for a long time	quiet	it happened IND

For a long time they were quiet. [Boas 05.059]

- (24b) Sh'eesru ai' chau'u k'uimi m'aik'u.
and then there they PL stayed IND for a little while

They stayed there a little while. [Boas 16.0750]

- (24c) Weemee s'edyuma dyibainaat'a ganaaya,
thus during the day she sleeps IND his mother

etyu k'apishu dziichutaanyitra.

but at night she walks around IND

In the daytime slept their mother, but at night she walked about. [Boas 23.064]

- (24d) "S'echumana nyeenyetridiyasru ee nuyaadrumana."
all day long you will walk DIR and all night long

"All day you will walk and all night." [Boas 11.155]

12.2.3 Deictic Temporals

Deictic temporal adverbs make reference to some time with respect to the current time, or some other reference time. Some common deictic temporals include

dyawa	<i>'early'</i>
eena	<i>'earlier (this morning?)'</i>
eesru	<i>'right away, immediately'</i>
haik'ame	<i>'at once, right away, first'</i>
miisru	<i>'already'</i>
k'usra	<i>'last night'</i>
m'enasru	<i>'recently (at that time?)'</i>
gayuudze	<i>'the next day (also, in the morning)'</i>
gayuudze dyawa	<i>'early the next day'</i>
naachama	<i>'tomorrow, the next day'</i>
naachama gayuudze	<i>'tomorrow morning'</i>
naachama gayuudze dyawa	<i>'early tomorrow morning'</i>
naanu	<i>'early in the morning, the next day'</i>
nahaaya	<i>'day before yesterday'</i>
nahaayashi	<i>'day after tomorrow'</i>
naik'usra	<i>'night before last'</i>
suwa	<i>'yesterday'</i>
haamaasru	<i>'afterwards'</i>
w'ei'	<i>'today'</i>

w'ei' k'apishu

'tonight'

Examples are shown in (25).

(25a) Naachama gayuudze dyawa nyeewasru.

tomorrow in the morning early you will grind it DIR

"Tomorrow morning early you will grind it." [Boas 24.027-029]

(25b) Sh'ee m'enasru haamaasru

then at that time afterwards

duwa waawa nyiwisrbif'agu.

this medicine he will untie it DIR

After that he shall untie this medicine. [Boas 30.423]

(25c) Sh'eesru naanu dzigana kiitsi dyawaa'anye.

and then early again antelope he went to herd it IND

Early in the morning he went again to herd antelopes. [Boas 13.094]

(25d) "Shche egu k'usra s'atyimi saiya srguudya."
 ??? last night my clothing all I lost it DIR

"Last night I lost all my clothing." [Boas 31.089]

(25e) Sh'ee miisru saiya hanu Siinyi dyabayu.
 then already all people Zuni they PL escaped IND

Then all the Zuni people had already escaped. [Boas 17.212-213]

(25f) "Wei' dzaadzina t'uuwe iity'e nautasrunu dyenye."
 today not just can you will kill it NEGDIR deer

"Today you cannot kill any deer." [Boas 16.0765]

(25g) "Wei' k'apishu chity'ee ka'aitra."
 tonight ready it becomes DIR

"Tonight everything will be ready." [Boas 16.0595-0598]

Also included are complex expressions involving numbers + days.

(26) Di' shdyi dyaana ts'aasrk'au
 here up four when it is (that many) days

dzuunyegu Aak'u-eesi.
 he will go DIR back to Acoma

In four days he will go back there to Acoma. [Boas 13.061]

12.2.4 Non-Deictic Temporal Adverbs

Most of the remaining non-deictic temporal adverbs refer to parts of the day, such as:

gayuudze	<i>'in the morning'</i>
gayuudze dyawa	<i>'early in the morning'</i>
gayuudze maame dyawa	<i>'very early in the morning'</i>
k'apishu	<i>'at night'</i>
nuwe	<i>'midnight'</i>
nuwe hatyi	<i>'midnight'</i>
sina-bi	<i>'mid-afternoon'</i>
sina-bi-n'i	<i>'mid-afternoon'</i>
sina dyi dziyaadzinye	<i>'mid-morning'</i>
sina-tsidyiya	<i>'noon'</i>

sina-tsidyiya siyuuk'u	'afternoon'
s'edyuma	'during the day'
ts'amuuganye	'dusk, twilight'

Some examples are seen in (27).

- (27a) Naanu gayuudze miisru di' dyi
the next day in the morning already here up
- dyinats'idraatya ee chacha.
it clouded up IND and it was raining IND

Early the next morning already clouds had come up and it was raining. [Boas 15.203]

- (27b) Naanu sina-tsidyiya chidraachuwa Tsisrki.
the next day at noon he woke up IND Coyote

The next day at noon Coyote awoke. [Boas 36.077]

- (27c) Weemee s'edyuma dyiibainaat'a ganaaya,
thus during the day she sleeps IND his mother

etyu k'apishu dziichutaanyitra.
but at night she walks around IND

In the daytime slept their mother, but at night she walked about. [Boas 23.064]

Chapter 13

Constituent Order

The simplest sentences in Laguna are those composed of a single verbal predicate, carrying pronominal elements which specify the verb's arguments. Obviously, in such sentences, constituent order is not an issue. However, once noun phrases start to be added to the sentence, there are twelve logically possible orders that could be found, as summarized below (where A = transitive subject, S= intransitive subject, O = transitive object, V = verb).

Possible word orders:

- (1) AOV
- (2) AVO
- (3) VAO
- (4) VOA
- (5) OAV
- (6) OVA
- (7) AV
- (8) OV
- (9) VA
- (10) VO
- (11) SV

(12) VS

13.1 Previous Analyses

Valiquette (1990: 122) states that, "In the common "word-order" [...] terminology, Laguna has SOV [=AOV] order. [...] More briefly, Laguna is a verb-final language, with an SO [=AO] order." Based on Valiquette's description, we would expect to find only four of the twelve possible patterns, namely:

- (1) AOV
- (7) AV
- (8) OV
- (11) SV

Miller (1960:175) gave a more flexible statement of word order patterns in Acoma: "The order of syntactic elements in the verbal sentences is: subject + object + secondary object; and subject + verb. The verb may be in any position in relation to the two objects." From Miller's description, we would expect to see six of the twelve possible patterns:

- (1) AOV
- (2) AVO
- (7) AV

- (8) OV
- (10) VO
- (11) SV

According to Valiquette and Miller's descriptions, the following word order patterns are not used:

- (3) VAO
- (4) VOA
- (5) OAV
- (6) OVA
- (9) VA
- (12) VS

13.2 Boas' Data

In fact, though, within the corpus of Boas' texts, all twelve word order patterns are found.

In (1) we see examples of the AOV order.

- | | | | | | |
|------|-------|-------------------|------------------|------------|------------|
| (1a) | Sh'ee | hats'uma | ka'aidranye | we' | dyinyiya |
| | then | in a little while | when it happened | over there | high above |

hanyi dyi [k'aiyasru]_A [dyeiyanyi]_O [cha'aityityiya]_V.
in the east up squirrel piñon nuts he gathered it IND

After a while in the east up above squirrels were picking piñon nuts. [Boas 30.171]

(1b) Da'aa emi hama [Ishduwa Miĩtyi]_A
thus long ago arrow youth

[k'auk'ui]_O [dyudunyiyaatra]_V.
his wife he took revenge on her IND

Thus Arrow-Youth took revenge on his wife. [Boas 30.517]

(1c) Sh'ee [K'abuunak'u]_A [duwa ishaanyi]_O
then K'abuunak'u this meat

[chumasawaatra]_V.
he boiled it IND

Then K'abuunaak'u boiled this meat. [Boas 33.401]

The examples in (2) show AVO order.

(2a) Ai' chimasi [ganaayashe]_A [chuwiiityita]_V [adaushi]_O.
 there downstairs their mother she was making it IND jar

Downstairs their mother was making a jar. [Boas 30.179]

(2b) Edyiyu [Tsisrki]_A [cha'aatridyeya]_V [peedra]_O.
 next Coyote he pursued him IND jack rabbit

Next Coyote pursued the jack-rabbit. [Boas 11.121]

(2c) Sh'ee [K'uuyau K'amasrka K'uuya]_A shch'adri
 then old woman spider woman quickly

[chuwiiitra]_V [nabaashchi]_O.
 she made it IND web

Then Old-Woman-Spider-Woman quickly made a web. [Boas 24.144]

The examples in (3) show the order VAO. Note that Boas' English translation in (3b) mirrors the Laguna word order. Note also the similarity between the sentences in (2c) and (3c).

- (3a) [Ty'iyuudze]_v [shuumi nayety'itra]_A [lidiyai]_O.
 they PL took her IND corpse group of girls Iidiyai

The dead girls took Iidiyai. [Boas 31.254]

- (3b) Sh'ee [dyayayeita]_v [k'a'audyeemishe]_A [waawa]_O.
 then they PL rubbed it on her IND her sisters medicine

Then rubbed on her sisters the medicine. [Boas 22.474]

- (3c) Sh'ee [chuwiiitra]_v [K'uuyau K'amasrka K'uuya]_A
 then she made it IND old woman spider woman

[nabaashchi]_O.

web

Then Old-Spider-Woman made a web. [Boas 25.325]

The sentences in (4) show OAV word order.

- (4a) "Kume kii miisru hama
 QUES truly already long ago

[sidra'anaaya K'uuchinyinaak'u]o [Maashchidruwai]A
 our DL mother Yellow Woman Cliff Dweller

[dyiyutse]v?

he killed her IND

"Did not long ago Cliff-Dweller kill our mother, Yellow-Woman? [Boas 24.332]

(4b) ... sh'ee [nabaashchi]o [K'amasrka K'uuya]A
 ... then web spider woman

shji [dyuunitsa]v.

up she pulled it up IND

... and Spider-Woman pulled up the web. [Boas 25.338-339]

(4c) Da'aa emi hama [ga'anana]o [Maaseewi ee
 thus long ago their DL grandfather Maaseewi and

dzika k'adyumi Uyuuyewi]A [dyiyainapi]v
 also his brother Uyuuyewi they DL found him IND

huuchanyi Aak'u.

chief Acoma

Thus long ago Maaseewi and also his brother Uyuuyewi found their grandfather, the Chief of Acoma. [Boas 24.285]

The examples in (5) show OVA order. Note that Boas' English translations of these sentences often used an OVA word order, which can be misleading when the sentences are taken out of context, as in (5b), where it is clear from the story that Mountain Lion Man caught the very large deer, and not the other way around.

(5a) Shch'apiganye haweesi [ishaanyi]_o [cha'aaty]_v
in the evening back this way meat he carried it IND

[Ishduwa Miiityi]_A.

Arrow Youth

In the evening, Arrow-Youth carried the meat home. [Boas 16.1007]

(5b) [Maame tsichinyishe dyeny'e]_o [dyidya]_v
very one that is large deer he caught it IND

[Muuk'aitra Hatridze]_A.

Mountain Lion Man

A very large deer caught Mountain-Lion-Man. [Boas 11.043]

(5c) Sh'ee etyu [hiishch'iyanyi ts'eesrgai]_O

then but flint knife

dyi [dyuk'u]_V [Siurusiwa]_A.

up he took it IND Siurusiwa

Then, however, Siurusiwa took his flint knife. [Boas 33.362]

The examples in (6) show VOA order.

(6a) Sh'ee [chuwanyiyaaat'a]_V [dyetya]_O [K'uuchinyinaak'u]_A.

then she hunted them PL IND rabbit Yellow Woman

Then Yellow-Woman hunted rabbits. [Boas 28.016]

(6b) Sh'ee gaityisru [cha'autyidyinau]_V [dyeny'e]_O

then finally he carried it on his back IND deer

[Muuk'aitra]_A.

Mountain Lion

Then Mountain-Lion-Man carried on his back the deer. [Boas 11.047]

(6c) Hau' chudaatsa. [Dyuwiik'awatsa]_V

to there he caught it IND he knocked him down IND

[srkaasrgu]_O [Sruuhuuna]_A.

mountain sheep Weasel

He started to catch it, and Weasel knocked down the mountain-sheep. [Boas 11.062]

The examples in (1)-(6) all show a transitive verb occurring with two noun phrases. Transitive verbs are found with only a single noun phrase in the same clause, either the subject (A) or the object (O). All four possible orders are found.

The example in (7) show the order AV.

(7) Sh'eesru [k'a'au]_A k'ee n'i [dyiyeibaaty]_V.

and then her sister away down she looked for her IND

Then her sister went down after her to look for her. [Boas 23.030]

The examples in (8) show the order OV. Here, the subject is marked by the pronominal marker on the verb, while the object argument is expressed by means of a noun phrase.

- (8a) Sh'ee ani [piitsi]_o [cha'aityicha]_v.
then down buckskin he spread it out IND

Then buckskin he spread down. [Boas 16.1027]

- (8b) Sh'ee [k'anats'i]_o [dyuwisrbit'a]_v.
then her lunch she untied it IND

Then she untied her lunch. [Boas 28.022]

- (8c) Sh'ee [Srkuuyu]_o [cha'auta]_v.
then giant they PL killed her IND

Then they killed the Giantess. [Boas 29.039]

The examples in (9) show VA order.

- (9a) [Dyayapuutsa]_v [Ishduwa Miityi]_A.
 he blew it on them PL IND arrow youth

Arrow-Youth blew (it) on them. [Boas 27.120]

- (9b) [Cha'aukuya]_v [Ishduwa Miityi]_A.
 he took them PL IND arrow youth

Arrow-Youth took them. [Boas 28.064]

The examples in (10) show the order VO.

- (10a) [Dyuwiik'awatsa]_v [kiitsi]_O.
 he knocked it down IND antelope

He knocked down the antelope. [Boas 11.088]

- (10b) Sh'ee [cha'aukuya]_v [k'ayuuni]_O.
 then he took them PL IND his weapons

The he took his weapons. [Boas 28.063]

- (10c) Sh'ee [dyukacha]_v [K'uuyau Srkuuyu]_o.
 then he saw her IND Old Woman Giant

Then he saw Old-Woman-Giantess. [Boas 28.072]

The examples in (11) show the order SV, with an intransitive verb or copula.

- (11a) Sh'ee dzuutse, [K'uuchinyinaak'u]_s [tyiipityi]_v.
 then when he left Yellow Woman she arose IND

When he had left, Yellow-Woman arose. [Boas 27.008]

- (11b) Ai' dyinyi [ganaayashe]_s [dya'a]_v.
 there high above their mother she was located IND

There above was their mother. [Boas 22.017]

Lastly, the examples in (12) show the order VS.

- (12a) Sh'ee naanu gayuudze dyawa hawee
 then next day in the morning early this way

[dzuutyu]_v duwee dyidyi [gauk'amishe payadyami]_s.
 he came IND this way from north one who is handsome youth

Early in the morning from the north a handsome youth came. [Boas 22.006]

(12b) Hau' bi [da'ats'i]_v [Ishduwa Miiyti]_s.
 to there west he arrived IND Arrow Youth

There in the west arrived Arrow-Youth. [Boas 27.067]

13.3 Word Order Frequency

Despite the fact that all possible word orders are attested in Laguna, we would not expect them to occur with equal frequency. To test this hypothesis, I selected four texts at random from the Boas corpus: #21, #28, #34 and #35. For each of these texts, I counted the number of clauses which contained a verb and at least one overt nominal argument. These clauses were then sorted based on the type of argument(s), and their ordering with respect to the verb. There were a total of 143 candidate clauses. Of the twelve possible word orders shown in 13.2, ten were found in this text sample.

The results are laid out in the following Tables, 13.1 through 13.5.

Intransitive Clauses	
SV	39 (60%)
VS	26 (40%)

Table 13.1 Word Order in Intransitive Clauses

Among intransitive clauses, 60% occur with the order SV, while 40% have the order VS. This fits with Miller and Valiquette's expectations, although the high rate of VS is surprising.

Transitive Clauses with no Overt Object	
AV	3 (50%)
VA	3 (50%)

Table 13.2 Word Order in Transitive Clauses with no Overt Object

Transitive clauses which just have an overt subject but no overt object are rare, and the two possible patterns are equally frequent, at least in this small sample.

Transitive Clauses with no Overt Subject	
VO	36 (54.5%)
OV	30 (45.5%)

Table 13.3 Word Order in Transitive Clauses with no Overt Subject

In transitive clauses with no overt subject, there is a slight preference for VO order. This goes against Miller and Valiquette's claims of a basic OV order.

Transitive Clauses with Two Overt Arguments	
AOV	3 (37.5%)
VOA	2 (25%)
AVO	1 (12.5%)
OAV	1 (12.5%)
OVA	0 (0%)
VAO	0 (0%)

Table 13.4 Word Order in Transitive Clauses with Two Overt Arguments

Lastly, transitive clauses with two overt arguments are also quite rare.

Verb-Final vs. Non-Verb Final Clauses		
Verb Final	SV + AV + OV + AOV + OAV	76 (53.1%)
Non-Verb Final	VS + VA + VO + VAO + VOA + AVO + OVA	67 (46.9%)

Table 13.5: Verb-Final vs. Non-Verb Final Clauses

If we compare all of the clauses which are verb-final with all those which are not, we see that only a very slight majority (53% vs. 47%) of them are verb-final.

13.4 Factors in Word Order Variation

While the data in §13.3 show that word order in Laguna is quite flexible, closer analysis of the texts shows that word order is not free, but is rather constrained by discourse factors.

For example, consider the case of the noun **hadraminyi** 'prayer sticks', in Text 11 *Origin of the Hunting Customs*, as told by Guudye. The noun first occurs in sentence 11.014 as the Direct object. Since this is its first mention, it is new and salient information, and it occurs in pre-verbal position.

(13) Sh'ee ee-ch'adza, "Tsaya hadraminyi
then thus he said IND first prayer sticks

nauwawiidranasidruu'usa.

we PL will make them PL DIR

Then he said, "First we shall make prayer-sticks. [Boas 11.014]

They are next mentioned in sentence 11.018, where again they occur as a pre-verbal Direct object. Note that this is the first time the noun is being used in the narrative of the story, as opposed to in a quotation.

(14) Sh'eesru wa emiyu-ee k'apishinye chity'e
 and then indeed at night ready

cha'aitra hadraminyi uwiidranyi.
 it happened IND prayer sticks to make it

Then that night they were ready to make prayer-sticks. [Boas 11.018]

They are mentioned again in the following sentence, 11.019. At this point, the prayer sticks are no longer new information, and they occur in post-verbal position.

(15) Sh'eesru chuwawiidrana hadraminyi.
 and then they PL made them PL IND prayer sticks

Then they made prayer-sticks. [Boas 11.019]

In the next sentence, the noun *hadraminyi* does not occur at all, since it is by now old information which the hearer can easily retrieve from context. Instead, the quantifier *saiyu* 'all (of them)' is used as a nominal direct object. Since the quantifier is new information, it occurs pre-verbally.

- (16) Sh'ee seiyu chuwawiidrana.
 then all they PL made/finished them PL IND

Then they finished all of them. [Boas 11.020]

Prayer sticks are neither mentioned nor referred to again until sentence 11.026, where they reappear first as a post-verbal Direct object of the verb *chuwawiidrana* 'they made them', and then immediately thereafter as a zeroed argument of *dyiishanye'e* 'they put them down'.

- (17) Dzigana k'apishinye chuwawiidrana hadraminyi
 again at night they pl made them PL IND prayer sticks

ee gayuudze dzigana dyiishanye'e
 and in the morning again they PL put them PL down IND

ee dyuwauts'edrai.
 and they PL sacrificed IND

Again at night they made prayer-sticks and in the morning again they put them down and they sacrificed. [Boas 11.026]

Prayer sticks are not mentioned or referred to again until sentence 11.030, where they re-emerge as a post-verbal Direct object.

(18) Sh'eesru dzigana k'apishinye chuwawiidrana
and then again at night they PL made them PL IND

hadraminyi.

prayer sticks

Then again that night they made prayer-sticks. [Boas 11.030]

In the next sentence, the noun **hadraminyi** does not occur, but prayer sticks are still interpreted as the Direct object.

(19) Sh'ee dzigana gayuudze dyiishanye'e
then again in the morning they PL put them PL down IND

seisra.

all around

Then again in the morning they put them down all around. [Boas 11.031]

Finally, prayer sticks are mentioned one last time, again as a post-verbal Direct object in the next sentence.

(20) Sh'ee dzigana k'apishinye chuwawiidrana
then again at night they PL made them PL IND

hadraminyi hayawaasru.
prayer sticks for the last time

Then again at night they made prayer-sticks for the last time. [Boas 11.032]

That is the last time the noun **hadraminyi** is used, or the idea of prayer sticks is referred to, in Text 11.

Based on these data, we can develop a hypothesis about the relationship between a noun's activation status (CITE) and morphosyntactic status. When a noun is mentioned for the first time, it will tend to occur in pre-verbal position, signalling its maximally unactivated status; this is the case in examples (13) and (14). A noun which has been mentioned recently in the discourse, and therefore is somewhat activated, will tend to occur in a post-verbal position, as in examples (15), (17), (18) and (20). Finally, a noun which has been mentioned very recently and/or often in the discourse, and therefore is highly activated, will not be mentioned at all, and its role in the sentence will be left up to the interpretation of the

listener, as in (16), (17) and (19).

This pattern is summarized in Table 13.6.

Activation Status	Morphosyntax
Unactivated	Pre-Verbal Position
Somewhat Activated	Post-Verbal Position
Highly Activated	<i>not mentioned</i>

Table 13.6: The relationship between activation status and morphosyntax

This hypothesis allows us to account for the full range of word order possibilities in Laguna, including the sentence types not recognized by either Valiquette or Miller. Further research is required to determine the accuracy of this hypothesis, and any refinements that may need to be made to it.

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