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Yao'an Lolo Grammar Sketch

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YAO'AN LOLO GRAMMAR SKETCH

By

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Presented to the Faculty of
the Graduate Institute of Applied Linguistics
in partial fulfillment of the requirements
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ABSTRACT

YAO'AN LOLO GRAMMAR SKETCH

Judith Thomas Merrifield

Master of Arts in Applied Linguistics

The Graduate Institute of Applied Linguistics, December 2010

Supervising Professor: Paul Kroeger, Ph.D.

This thesis provides a grammatical sketch of Yao'an Lolo, a language of Yunnan, China. It was motivated by a deep desire to communicate effectively with the Lolo people who live among the mountains of Mayou in the prefecture of Chuxiong. The thesis focuses on explicating word classes, phrases, simple and complex clauses, sentences, and verb sequences. Special attention is given to 1) describing word formation processes, including reduplication processes, 2) explicating deictics, locative words, complex (elaborate) expressions, and certain particles, 3) explaining the structure of the noun phrase and the verb complex, 4) delineating causative and existential constructions, and 5) explaining verb serializations.

DEDICATION

To the One

who inspired me to pursue this study,
who provided insight into the Lolo language,
and who sustained and encouraged me
through years of language learning and analysis

to Jesus Christ

for His glory

and to the Lolo people

whose language is a masterpiece.

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Keith Slater supplied me with numerous linguistic resources. I appreciate his generosity in purchasing whatever I requested.

I also want to thank my husband Scott. He developed the orthography I used throughout this thesis. He also shared his phonology article and data from his Lolo-Chinese-English lexical database.

I am especially grateful to my children—Rachel, Nathan, and Philip—for sacrificing time with me, so that I could pursue these studies.

I deeply appreciate the Lolo, especially members of the extended families of Esther, Asheley, and Kelly, for supplying the Lolo utterances and answering a myriad of questions about the Lolo language. I am indebted to them for their kind hospitality, gracious responses to endless queries, and patience with my language learning. It is a testimony to them that I have written this thesis and can communicate in their language.

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November 18, 2010

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LIST OF ABBREVIATIONS

ADJ	Adjective
ADVLZ	Adverbializer
AND	Andative particle
ASSOC	Associative
ASSUM	Assumptive particle
ASP	Aspect
AUX	Auxiliary
AVC	Auxiliary verb construction
BEN	Benefactive
CAUS	Causative
CL	Classifier
CLP	Classifier phrase
COMP	Complement
COMPL	Completive
CONN	Connector
CONT	Contrastive
CONT.PROM	Contrastive prominence
COS	Change of state
DEM	Demonstrative
DIR	Directional
DM	Developmental marker
DOM	Differential object marking
DUP	Reduplication
EMPH	Emphatic
EMPH.RHQU	Emphatic rhetorical question
EVI	Evidential particle
EXP	Experiential
EXCL	Exclusive
FIN	Final particle
GEN	Genitive
INCOA	Inchoative aspect
IPFV	Imperfective aspect
IMP	Imperative
INCL	Inclusive
INTERJN	Interjection

MIR	Mirative
MOD	Mode
N	Noun
NCES	Noncessative aspect
NEG	Negative
NF	Nonfinal marker
NMLZ	Nominalizer
NP	Noun phrase
O	Object
OBL	Oblique argument
ONOM	Onomatopoeia
PCL	Particle
PFV	Perfective aspect
PL	Plural
POD	Point of departure
PN	Pronoun
PRAG	Pragmatic particle
PROH	Prohibitive
PROM	Prominence word
REA	Realis
REC	Recipient
RES	Resultative
RHQU	Rhetorical question
S	Subject
SENT	Sentential particle
SVC	Serial verb construction
TAM	Tense, aspect, mode
THEM	Thematic
TB	Tibeto-Burman
TM	Thematic prominence marker
TOP	Topicalizer
V	Verb
VAL	Validational
VC	Verb complex
VEN	Venitive particle
VOC	Vocative
1s	1 st person singular
1p	1 st person plural
2s	2 nd person singular
2p	2 nd person plural
3s	3 rd person singular
3p	3 rd person plural

CHAPTER 1

INTRODUCTION

This thesis provides a grammatical sketch of Yao'an Lolo,¹ a language of southwestern China. Like many Tibeto-Burman languages, Lolo is an SOV/SV (subject object verb/subject verb) language with many modifiers that follow the head, but genitive constructions and relative clauses that precede their head. It is characterized by zero anaphora of participants, productive reduplication processes, and a plethora of particles. Of special interest are its diverse sets of deictic demonstratives, classifiers, locative words, idiomatic adjectivals, three and four syllable expressions, and verbal, pragmatic, and sentential particles. Its verb complex with existential verbs, concatenating verbs, directional, aspectual, and modal auxiliaries and particles is fascinating. Lolo's diverse directives and interrogatives are also noteworthy.

1.1 Research Basis

1.1.1 Research Motivation and Objective

This study was motivated by a deep desire to understand the basics of a language, which had never been analyzed, nor even written down, before my husband and I commenced studying it. This study was also motivated by a need to communicate accurately with a group of wonderful people who cannot effectively converse in any

¹ Throughout this thesis, this language will be referred to by its autonym 'Lolo'.

other language. This thesis provides an analysis of Lolo, a previously undescribed and largely unknown Tibeto-Burman language. It also provides a background for other more detailed analyses of the language by laying a foundation for understanding its system of auxiliaries and particles as well as its diverse deictic expressions and its complex expressions.

1.1.2 Research Method

The research upon which this thesis is based was conducted over a period of ten years, from 1999 until the present. During that time, I often lived and worked with Lolo speakers in Yunnan, China, in the Prefecture of Chuxiong in the city of Chuxiong and in the county of Yao'an in the area of Mayou. The analysis is based on data from several sources. Various narrative and hortatory texts were used. All of these were recorded oral texts that were transcribed (by native speakers) for analysis. Spontaneous conversations between native speakers also provided much insight into the language. Elicitation contributed to the analysis by affording opportunities to test and refine hypotheses. All example sentences, whether from texts, spontaneous conversations, or elicitation, have been checked with several native speakers to verify their naturalness and accurate interpretation. Male and female, as well as young and old (between the ages of 18 and 75), speakers from the villages of Mayou provided the data in this thesis and answered copious questions about their language. In all cases, Lolo is the first and dominant language of the language consultant. In many cases, it is his/her only language.

Examples in this study are written in the orthography W. Scott Merrifield (2006) developed for the Lolo language.

1.1.3 Research Premises and Limitations

Studying the Lolo language of Yao'an County has presented special challenges to me. First, the language has no written literature, nor are linguistic descriptions of it available. Second, studies of related languages are usually not comprehensive. Matisoff's Lahu grammar (Matisoff 1973) is an exception. Third, some of the terminology and descriptions provided in studies of related languages are not always easy to decipher. Due to these hindrances, I have realized that it is crucial to present a basic, descriptive overview of the grammar, concentrating on the nature and types of word classes, phrases, clauses, and sentences, so that others do not become lost among details that may elucidate the meaning of one word or rare structure, but not contribute to a better understanding of the language as a whole. It is also my premise that accurate grammatical labels and English glosses are as necessary as clear descriptions. Therefore, much effort has been expended over several years to refine these in order to be as precise as possible.

In order to understand the Lolo language, it is crucial to differentiate between the prototypical and peripheral meanings and functions of words, phrases, and clauses. As Floyd (1999) explains, lexical concepts contain clearly identifiable conceptual centers surrounded by vague boundaries. These should not be treated with equal importance, so core meanings and usages are given precedence, although many extended meanings and unusual applications are also provided.

Due to the limitations of this thesis, it is not possible for me to provide a detailed description of the Lolo auxiliary and particle system or to elucidate the nature and interconnectedness of its deictic expressions and its complex expressions. These are topics which have consumed much of my research efforts and are of keen interest to me. Nor is it possible for me to conduct a historical or comparative study with related languages, though some comments are made concerning their relatedness. I have also chosen not to provide a detailed phonological description of the Lolo language (see Merrifield 2006).

I have adopted “basic linguistic theory” (as defined by Dryer 2006) as the theoretical framework for writing a standard descriptive grammar of Lolo. It is my objective to present the language data as it is in order to provide others with an accurate representation of the Lolo language, regardless of whether it conforms to preconceived notions or not. The nature of the language itself determines the shape of the description.

1.1.4 Organization of Thesis

This thesis has two main parts: chapters 1-2 provide background information, while chapters 3-7 discuss aspects of the grammar. Chapter 1 presents the basis of the research. It also discusses the location of Lolo speakers, usage of the language, and its linguistic/genetic classification within the Tibeto-Burman language family. It reviews the literature that influenced this study. Chapter 2 presents an overview of the phonology and morphology. Chapter 3 describes word classes. Chapter 4 explains the noun phrase and

verb complex. Chapter 5 delineates the structure of clauses and sentences. Chapter 6 explains verb serialization, and chapter 7 is the conclusion.

1.2 Lolo Language

This section introduces the location of the Lolo people, the name of their language, usage of the Lolo language, and its place in the Tibeto-Burman language family.

1.2.1 Location

The Lolo people live across northwestern central Yunnan, especially in the Yi Autonomous Prefecture of Chuxiong. They dwell in scattered villages along mountain ranges about 2000 meters in altitude. Some Han Chinese and Lipo are interspersed among them. They are surrounded by the Nosu (Northern Yi) to the north, by the Nasu (Eastern Yi) on the east, by the Nisu (Southern Yi) on the south, and by the Lalu and Lalo (Western Yi) on the west, hence their classification by the Chinese government as Central Yi (Bradley 2000:103). The Lolo language analyzed in this study is spoken in the northwestern section of the Yi Autonomous Prefecture of Chuxiong (near the border of the Prefecture of Dali), in the county of Yao'an in the area of Mayou.



Map 1: Distribution of the Lolo Language Group within Yunnan, China²

1.2.2 Language Name and Usage

The Lolo people refer to themselves as the “Yi” when interacting with anyone who does not speak their language. Originally this word was a derogatory term meaning barbarian, but it no longer has this negative connotation (among the people of Chuxiong Prefecture), so the term is widely and freely used among both the Han Chinese and the

² This map presents the distribution of the Lolo language group in regions with greater than 30% population density. It was provided by Jamin Pelkey.

Lolo to refer to the Lolo people, without any stigma attached. The Lolo people refer to themselves as *Lolopo* when interacting with others who are familiar with this term. It means ‘people of the tiger’. They do not consider it a derogatory term, though I have heard that non-Lolo people do. The Lolo never refer to the language they speak as *Lolopo*, but as *Lolowu*. The former term refers to the Lolo people, the latter to the language.

The Lolo people speak Lolo from early childhood. It is their mother tongue. They learn it at home and speak it daily with all of their family and friends. They begin to learn Mandarin Chinese at the age of six in the local primary school. The Lolo language is still widely used and is the language of choice, even among young adults who also speak Mandarin Chinese.

1.2.3 Genetic Affiliation

Chinese linguists consider Lolo³ along with Lisu and Lipo to be Central Yi languages. They divide the Yi languages into six subgroups based on their distribution throughout Yunnan and Sichuan; the Central Yi languages form one of these subgroups. The other five subgroups are identified as the Northern, Southern, Eastern, Southeastern, and Western Yi.

Other linguists (e.g., Thurgood 2003) have developed a different system for relating the Loloish languages. They consider Lolo to be one of the Central Loloish

³ This includes all the Lolo languages spoken in Chuxiong prefecture: Yao'an, Nanhua, Dayao, and Shuangbai.

languages of the Loloish subgroup of the Lolo-Burmese branch of the Tibeto-Burman language family. Bradley and Pelkey (personal communication) now refer to the Loloish languages as ‘Ngwi’ languages. Details of this new system are forthcoming.

Exact relationships between the Loloish/Ngwi languages have yet to be determined, but it is clear that the most closely related languages to Yao'an Lolo are first Nanhua Lolo, Dayao Lolo, Shuangbai Lolo, and Yongren Lolo. Lalu,⁴ Lalo, Lipo, Lisu, and Lahu are also related to Lolo. From east to west these languages exist in a language chain.

It is estimated that 380,000 people speak the Lolo languages. It has not been determined how many of these actually speak the variety of Lolo spoken in Yao'an County on which this study is based.

1.3 Literature Review

The Lolo language had not been written down, nor had it been analyzed, until 1999. Since then, Scott Merrifield has developed a Roman based orthography for it and has written an article describing its phonology (Merrifield 2006). He is also creating a trilingual dictionary (Lolo, Chinese, and English). To my knowledge, no other linguistic studies have been conducted on the Yao'an dialect of the Lolo language; however, descriptions of several related Tibeto-Burman languages exist. In addition, insightful

⁴ The Lalu language group lives just west of the Lolo language described in this study. The author conducted an informal survey of the relatedness of these two languages with a Lalu speaker who visited Mayou and determined that they share a number of cognates and some mutual intelligibility.

typological studies have contributed much to the understanding of Tibeto-Burman languages. The significant contributions of both types of research are discussed below.

1.3.1 Related Tibeto-Burman Language Research

The major contributors to the analysis of other Loloish/Ngwi languages are James Matisoff (1973 and 2003) for Lahu, James Fraser (1922), Defen Yu (2007) and David Bradley (1994 and 2003) for Lisu, Susanna BJORVERUD (1998) for Lalo, and Mattias Gerner (2002 and 2008) for Nosu and Yongren Lolo. Randy LaPolla (2003a and 2003b) and David Watters (2002 and 2003) provide descriptions of other Tibeto-Burman languages.

1.3.1.1 Lahu

One of the most well known and extensive linguistic descriptions of any related Loloish/Ngwi language is the research on Lahu by Matisoff. He thoroughly describes various aspects of the Lahu language of SW Yunnan, Burma, northern Thailand, and NW Laos in his writings (Matisoff 1973 and 2003). He delineates the characteristics of Lahu particles by explaining their diverse meanings and functions. He is one of the few linguists who has seriously undertaken to explicate these obscure words. Matisoff's insightful descriptions of the diverse meanings, functions, and groupings of otherwise little studied Loloish particles have helped me to clarify my own understanding of Lolo particles. I have also drawn on his description of the concatenating nature of the Lahu verb. His understanding of word formation, nominalization, reduplication, and causation strategies enabled me to discover Lolo's techniques for expressing similar structures. His

delineation of diverse and complex demonstratives, locatives, and classifiers also guided my analysis of similar Lolo forms.

1.3.1.2 Lisu

Prior research on Lisu, another Loloish/Ngwi language, has also aided my studies. The Lisu language is one of the most closely related languages to the Lolo. In fact, Lisu speakers live to the east and west of the Lolo.

Fraser (1922) is an early, valiant attempt to describe a language which does not conform to European language patterns. Because his deep understanding of the Lisu language is reflected in descriptions of obscure words that most language students ignore, his grammar provides good examples with which to compare my own understanding of Lolo words. His observations concerning constituent order were also useful. His ethnography is fascinating and remarkably similar to what I have noticed concerning the Lolo.

I have also drawn on Bradley's (1994, 2000, and 2003) research. His knowledge of the genetic affiliation of the Loloish/Ngwi languages has aided me in determining the relationship of Lolo to other languages in the area. I have compared my own findings of Lolo structures with his descriptions of various typological characteristics of the Lisu language. His explanations of pronouns, demonstratives, classifiers, nominalizers, causatives, temporal expressions, manner adverbs, and relative constructions were quite helpful to me.

Yu (2007) provides an interesting ethnography, a comparison of the phonology of five Lisu dialects, and detailed discussions of nominal and verbal categories. I drew upon her delineation of demonstratives, classifiers, and nominalizers. Her description of action verbs, adjectives, and serial verbs confirmed my own hypothesis concerning Lolo equivalents.

1.3.1.3 Lalo

Bjorverud (1998) describes another related Loloish/Ngwi language. The Lalo live in Weishan county of Dali prefecture, just west of the Lolo, so their language is similar to Lolo. Her discussion of many different linguistic structures in the Lalo language provided examples for me to compare my own findings of similar Lolo ones. Her descriptions of quantifier phrases, adverbs, constituent order, and the two subclasses of predicatives (verbs and adjectives) were insightful.

1.3.1.4 Yongren Lolo

Gerner's (2008) discussion of ambiguity-driven differential object marking in Yongren Lolo was useful to me. His explanation helped me to understand that *leil* does not have to be analyzed solely in reference to grammatical relations.

1.3.1.5 Qiang

LaPolla (2003a and 2003b) are descriptions of a Qiangic Tibeto-Burman language in Sichuan province. Although Qiang is not as closely related to Lolo as the Loloish languages mentioned above, it still shares many similarities. I drew upon LaPolla's depictions of causatives and existential verbs. His descriptions of constituent order were

also helpful. His explanations of the verb complex, plus his description of intransitive stative verbs (adjectives) in contrast to other transitive and activity verbs clarified my understanding of these constituents and words.

1.3.1.6 Kham

Watters (2002 and 2003) provides a thorough description of Kham, a Tibetan language spoken in Nepal. Although Kham is significantly different from Lolo, especially in regards to constituent order, I was still able to draw upon certain descriptions that he provided. In particular, Watter's understanding of Kham deictic roots, relator nouns, and locative/directional suffixes were insightful. His depiction of various clause types aided me in identifying Lolo clauses.

1.3.2 Related Typological Research

Other linguistic research has also provided valuable insights for this study. Payne (1997) and Kroeger (2004) furnished parameters for developing a balanced grammar sketch. Aikhenvald (2006) and Kroeger (2004) aided my understanding of verb serialization. Anderson (2006) defined auxiliiation. Other linguists contributed significantly to my understanding and analysis of auxiliaries and particles. Although their contributions are not as obvious since I have not focused on that aspect of the grammar in this thesis, I still desire to credit them, as their research enabled me to develop more precise grammatical labels and English glosses. Xiao and McEnery (2004) delineated typical Chinese aspects. Palmer (Palmer 1986) and Bybee et al. (1994) explained modality. Aikhenvald (2004) and Floyd (1999) clarified the nature of evidentials.

(Levinsohn 2010a and 2010b) clarified various discourse and pragmatic issues for me. First, he explains that variations in constituent order are often caused by information flow and the use of points of departure or focused constituents. Applying this information to the Lolo language enabled me to determine the reasons for the various positions of the (non)arguments in the clause. Second, he differentiates different types of focus from several types of prominence, as I have summarized in Table 1, thereby providing me with the means to distinguish at least ten dissimilar focus and prominence particles and constructions from each other. Third, he explains the roles of pragmatic words and connectors. He differentiates three types of pragmatic connectors: those that constrain an additive interpretation, those that constrain a countering interpretation, and those that constrain a developmental interpretation. This information enabled me to identify and accurately label many pragmatic particles and connectors in the Lolo language.

Table 1: Focus vs Prominence

Focused Constituents	Thematic Prominence	Emphatic Prominence
The most important information in the given setting. Attention is drawn to non-established information.	Attention is drawn to established information.	The speaker feels strongly about a particular item, or feels that an event is unexpected.
Devices		
Phonological features, marked constituent order, <i>be</i> verbs, relative pronouns, demonstratives, spacers, affixation, particles	Emphatic pronouns, demonstratives	Special phonological features, repetition, changes in constituent order, intensive adverbs and adjectives, rhetorical question

CHAPTER 2

OVERVIEW OF PHONOLOGY AND MORPHOLOGY

2.1 Phonology Overview

This section describes the tonal system and vowel and consonant phonemes. See Merrifield (2006) for a detailed description of Lolo phonology. Refer to the Appendix for a comparison of the Lolo orthographic and phonetic representations.

2.1.1 Phonemic Tones

Lolo has three phonemic tones, which occur in single, isolated syllables and contrast in identical environments. They are low tone, mid tone, and high tone. The low tone has a falling pitch, but the mid and high tones are level. If the vowel is tense, all of these tones may be accompanied by laryngealization. A tense vowel will also cause the mid and high tones to raise and the low tone to be accompanied by a syllable final glottal stop. These tones are represented phonetically with numbers: ²¹ for the low tone, ³³ for the mid tone, and ⁵⁵ for the high tone. In the orthography, the low tone is represented by ‘r’ and the high tone is indicated with ‘l’. The mid tone is unmarked.

Table 2: Lolo Tone Types

Tone Type	Phonetic Representation	Orthographic Representation	Meaning
High tone	[li ⁵⁵]	lil	‘rice seedling’
Mid tone	[li ³³]	li	‘want’
Low tone	[li ²¹]	lir	‘heavy’

2.1.2 Syllable Structure

The common syllable structures for Lolo are the V and CV patterns, so all syllables are open, which Matisoff explains is typical of Lolo-Burmese languages, as they are characterized

...by the radical simplification of initial consonant clusters and the disappearance of most syllable-final consonant clusters and the disappearance of most syllable-final consonant contrasts, compensated for by a proliferation of vowels and tones (Matisoff 1973:xxxix).

Table 3: Lolo Syllable Structure

Phonetic Representation	Orthographic Representation	Meaning
[ba ³³]	ba	‘support, carry’
[pe ³³]	bei	‘run’
[ʔa ⁵⁵ me ²¹]	almeir	‘rice’
[de ³³]	ddei	‘possessive’
[ŋo ³³]	ngo	‘I, me’
[ʔa ⁵⁵ t ^h o ²¹]	altor	‘knife, sword’

2.1.3 Phonemic Vowels

Lolo has seven lax vowel phonemes, seven tense counterparts (which are underlined), and five diphthongs. The tense vowels are pronounced with more tension or tightness in the throat. They may also have a harsher sound quality (laryngealization) or slightly higher tone. These vowels are represented in the orthography by seven vowels and five diphthongs; tense vowels are indicated with an ‘x’.

Table 4: Lolo Vowel Phonemes⁵

	Front	Back
Close	<u>/i/</u> , <u>/i/</u> i, ix	<u>/u/</u> , <u>/u/</u> /u/, <u>/u/</u> e, ex u, ux
	<u>/e/</u> , <u>/e/</u> ei, eix	<u>/o/</u> , <u>/o/</u> o, ox
Open-Mid	<u>/æ/</u> , <u>/æ/</u> ae, aex	
Open	<u>/a/</u> , <u>/a/</u> a, ax	
Diphthongs	<u>/iɛ/</u> , <u>/iæ/</u> , <u>/ia/</u> , <u>/io/</u> , <u>/wa/</u> ie, iae, ia, io, ua	

2.1.4 Phonemic Consonants

Lolo has 29 consonant phonemes. Voiceless consonants usually have a contrasting voiced equivalent. Lolo speakers differentiate three types of stops and affricates: voiced, voiceless unaspirated, and voiceless aspirated. They distinguish two types of fricatives: voiced and voiceless. They contrast two varieties of approximants: bilabial and lateral. Their alveolar nasal /n/ can be syllabic. All of their nasals may be uttered syllable initially. Voiced consonants, except the nasals and laterals, are written with two letters (e.g., *bb*, *dd*, *gg*) in the orthography. Voiceless, unaspirated consonants are written with one letter (e.g., *b*, *d*, *g*). Voiceless, aspirated consonants are also written with one letter (e.g., *p*, *t*, *k*).

⁵ Phonemes are provided within slanted lines (e.g., /e/). The orthographic representation is provided under the phoneme (e.g., ei).

Table 5: Lolo Consonant Phonemes⁶

	Bilabial	Labio-dental	Alve-olar	Post-alveo-lar	Palatal	Velar	Glottal
Plosives							
Voiced	/b/ bb		/d/ dd			/g/ gg	
Voiceless unaspirated	/p/ b		/t/ d			/k/ g	/ʔ/
Voiceless aspirated	/p ^h / p		/t ^h / t			/k ^h / k	/h/
Voiced Nasals	/m/ m		/n/ n			/ŋ/ ng	
Fricatives							
Voiced	/v/ v		/z/ ss		/j/ y	/ɣ/ hh	
Voiceless	/f/ f		/s/ s	/ʃ/ x		/x/ h	
Affricates							
Voiced			/dz/ zz	/dʒ/ jʒ			
Voiceless unaspirated			/ts/ z	/tʃ/ j			
Voiceless aspirated			/ts ^h / c	/tʃ ^h / q			
Approximant	/w/ w						
Lateral Approximant			/l~ɭ/ l				

⁶ Phonemes are provided within slanted lines (e.g., /b/). The orthographic representation is provided under the phoneme (e.g., bb).

2.2 Morphology Overview

This section provides a brief sketch of word formation. It also discusses the differences between compound words and phrases.

2.2.1 Word Formation

Most morphemes are monosyllabic. Words may be mono-morphemic, but compounds made up of two or more roots are also common, as are reduplicated morphemes.⁷ Words may also be formed by combining a root morpheme with an affix. Specific word formation strategies are discussed in various subsections of the word class chapter.

The words in (1) consist of one morpheme.

- | | | | |
|-----|--------|-------|-------|
| (1) | seir | ssor | zzor |
| | 'good' | 'son' | 'eat' |

The words in (2) are compounds of two or more morphemes.

- | | | |
|-----|----------------|---------------|
| (2) | sul-zza-ggie | ca-por |
| | book-read-NMLZ | person-people |
| | 'school' | 'man/husband' |

The words in (3) are compounds of reduplicated morphemes.

- | | | |
|-----|--------------|----------------------|
| (3) | piul-piu | bbo-bbol-bbo |
| | white-white | bright-bright-bright |
| | 'very white' | 'very bright' |

The words in (4) have an ABAC structure, while the words in (5) have an AABB structure. Haas refers to words/phrases with ABAC and AABB structures as elaborate

⁷ Predictable tone changes also often occur with these word formations.

expressions (Haas 1964). Watters (2002) also uses the term “expressive” to identify a large class of more than 750 adverbials in Kham. Elaborate expressions are common in Lolo. (See 3.17 on complex expressions for a few examples of these.)

- | | | |
|-----|--|---|
| (4) | cir-se-cir-sil
one-life-one-lifetime
'forever' | bbe-cir-bbe-kol
divide-one-divide-year
'every year' |
| (5) | gge-gge-se-se ⁸

'happy/happily' | za-za-li-li
circle-circle-want-want
'around' |

Words can consist of a root morpheme with an affix. Kinship terms may be formed by adding an *a-* vocative/kinship prefix as in (6). The gender morphemes *-ma/-mo* ‘female’ and *-bbo/-bo* ‘male’ are also commonly used in kinship terms.⁹

- | | | |
|-----|---------------------------------------|--------------------------------------|
| (6) | a-ma
VOC-female
'mother' | ar-bbor
VOC-male
'father' |
| (7) | ni-mo
?-female
'younger sister' | lil-bol
sprout-male
'grandson' |

Words for older people and animals can be formed by adding *mar* ‘old’ to another morpheme. Words for younger people and animals are formed by adding *ssor* ‘son’.

- | | | |
|-----|---|--|
| (8) | arbbor- mar ¹⁰
father-old
'father's older brother' | yi-bol- mar
chicken-male-old
'cock' |
|-----|---|--|

⁸ The individual syllables in this word do not have any meaning.

⁹ The tone of the kinship affix and morphemes may change.

¹⁰ In example sentences, the bold faced Lolo word(s) are the ones that are being discussed. Bold faced English glosses are translations of the bold faced Lolo word(s). Words within parenthesis are added to make free translations more comprehensible and to further specify the meaning.

- (9) ca-leixl-**ssor** ssormaer-leixl-**ssor**
 person-youth-son daughter-youth-son
 ‘young (unmarried) man’ ‘young (unmarried) woman’

Question words are often formed by adding an *a*- prefix to another morpheme.

- (10) ar-seir a-zo ar-ddol-car
 ?-good/still ?-look ?-?-time
 ‘who’ ‘what’ ‘when/what time’

Adverbs can also be formed by adding an *-ala* suffix to reduplicated adjectives.

- (11) seil-seir-**ala**
 good-good-ADV LZ
 ‘well’

Negation can be expressed by adding the negative *nr* ‘not’ in the middle of two-syllable adjectives. Although the negative *nr* ‘not’ can be analyzed as an infix here, it usually occurs between two different morphemes. (See 3.10 for an explanation of negation.)

- (12) Yar ge<**nr**>se.
 3s not.happy
 ‘He is **not** happy.’

2.2.2 Compound Words vs. Phrases

Lolo compounds can be distinguished from phrases according to the following criteria:

1. Phonologically, tone sandhi is common in compounds, but not in phrases.
2. Grammatically, additional morphemes may not be inserted into a compound. The negative *nr* presents an exception to this rule, as it may be uttered in the middle of disyllabic verbs and adjectives.
3. Semantically, the meaning of compounds is often opaque and not fully predictable from the meaning of each morpheme. Although this is the tendency in compounds, this last criterion cannot be applied as stringently as 1 and 2

because different combinations of words are in different phases of grammaticalizing into compounds.¹¹

Tone sandhi is evident in example (13) which is a compound, but not in example (14) which is a phrase. Within compounds, it is possible for the second syllable to raise to a high tone. This is what happens in (13): the 33 tone of the word *ci* ‘arrive to’ changes to 55. (The high tone is represented in the orthography with an ‘/’). None of the tones in the words in (14), however, can be raised to 55 tone.

(13) *vei-cil-vei-ge*
 take-arrive.to?-take-cross.over?
 ‘manner of taking back and forth’

(14) *veixr hazzi pal ar te*
 pig very fat one CL
 ‘one very fat pig’

Example (13) also illustrates that the meaning of a compound is not always fully predictable from the meaning of each morpheme, as it is no longer clear to native speakers what *cil* and *ge* mean.¹² The meanings of all the words within the phrase in (14), however, are clear.

Example (15) demonstrates that morphemes cannot be inserted into the middle of compounds, but (16) shows that words can be inserted into the middle of phrases.

¹¹ This is especially true when analyzing idiomatic adjectivals and complex (ABAC and AABB) expressions. Some idiomatic adjectival and some complex expressions have grammaticalized into compound words, but others still demonstrate phrasal qualities.

¹² Native Lolo speakers could not tell me the meaning of the morphemes *cil* and *ge*. I have assigned these glosses based on their phonological similarities to *ci* ‘arrive.to’ and *ge* ‘cross.over’. These are words that often follow verbs.

- (15) vei-cil-(***yarzi**)-vei-ge
 take-arrive.to?-really-take-cross.over?
 ‘**really** take back and forth’
- (16) veixr hazzi pal **bbierbbielbbier** ar te
 pig very fat shiny one CL
 ‘one very fat, **shiny** pig’

CHAPTER 3

WORD CLASSES

This chapter describes the most salient characteristics of word classes. First, it discusses the word classes within the NP: nouns, pronouns, deictic demonstratives, numerals, and classifiers. (Adjectives also occur within the NP, but are discussed with the other verb complex word classes, since their primary function is to serve as the predicate.) Next, it discusses locative/temporal roots. Then, it discusses the word classes within the VC: verbs, auxiliaries, adjectives, and negators. Finally, it discusses adverbs, postpositions, connectors, verbal particles (which are actually members of the VC), pragmatic particles, sentential particles, and interjections.

3.1 Nouns

Like Lahu nouns (Matisoff 2003:212), Lolo nouns are defined as words which can be modified by a classifier. The classifier always follows the noun as in (17). Classifiers distinguish number as well as class of noun. (See 3.5 for an explanation of classifiers.)

- (17) **Ano** hal-te yarzi wo.
dog that-CL really fierce
N classifier phrase
'That **dog** is really fierce.'

Nouns cannot follow classifier phrases.

- (18) *Hal-te **ano** yarzi wo.
 that-CL dog really fierce
 classifier phrase N
 ‘That **dog** is really fierce.’
- (19) *Yaa nr-nel **ano** zzor ar.¹³
 3p 2-CL dog eat PFV
 classifier phrase N
 ‘They ate two **dogs**.’

Nouns are not marked for gender or number, but classifiers may contribute singular, dual, or plural meaning to a noun. Although abstract nouns exist in Lolo, they are sparse and result from nominalizations. Concrete nouns dominate. Monosyllabic nouns occur, but most nouns are multisyllabic. Compound nouns are formed by combining nouns with other nouns, classifiers, locative roots, adjectives, and verbs. Loan words from Mandarin Chinese are also a source of new nouns. Nouns are also derived from nominalized adjectives and verbs.

Basic nouns consist of just one morpheme as in (20).

- (20) **ssor** **jjiumo** **luldaddur**
 ‘son’ ‘road’ ‘pants’

¹³ In between auxiliaries and particles *ar* is pronounced with the mid tone and is written ‘*a*’. At the end of utterances it is always pronounced with a falling tone and is written ‘*ar*’. See 3.14.3 for an explanation of its function.

Some compound nouns are formed from two nouns as seen in (21).¹⁴

- | | | | |
|------|----------------|---------------|-----------------|
| (21) | biur-vi | so-me | cei-saer |
| | N-N | N-N | N-N |
| | bee-liquid | wheat-powder | rice-fruit |
| | ‘honey’ | ‘wheat flour’ | ‘unhusked rice’ |

Other compound nouns are formed from two nouns and a classifier as in (22).

- | | |
|------|---------------------|
| (22) | mi-paer-bbae |
| | N-N-CL |
| | land-chaff-land.CL |
| | ‘uncultivated land’ |

Other compound nouns are comprised of nouns and adjectives. Each compound in

(23) is formed from only one noun and one adjective.¹⁵

- | | | |
|------|-----------------|-----------------|
| (23) | var-piul | seir-por |
| | N-ADJ | ADJ-N |
| | vegetable-white | good-person |
| | ‘cabbage’ | ‘master’ |

Some compound nouns are composed of two nouns and two verbs as in (24).

- | | |
|------|------------------------|
| (24) | zso-mei-lel-xie |
| | N-V-V-N |
| | rice-do-eat-house/room |
| | ‘kitchen’ |

Many new nouns are formed with Chinese loan words.

- | | | | | |
|------|---------------|----------------|--------------|--------------|
| (25) | dirsir | dilhual | selji | caezi |
| | ‘TV’ | ‘telephone’ | ‘cell phone’ | ‘car’ |

¹⁴ The formation of compound nouns is common among other TB languages (Matisoff 1973, BJORVERUD 1998, YU 2007).

¹⁵ Certain adjectives precede the head N; other adjectives follow it. It is not clear to me why this variable word order exists.

3.1.1 Nominalizations

Another productive way to produce nouns is to add nominalizers to verbs and adjectives. *Labox* ‘thing’ and *ddu* ‘thing’ provide instrumental and patientive meanings. *Su* ‘person who’ is an agentive nominalizer. *Ggie* ‘place’ is a locative nominalizer. *Labox* ‘thing’ and *ddu* ‘thing’ form lexical nominalizations. *Su* ‘person who’ and *ggie* ‘place’ form both lexical nominalizations and nominalized clauses (see 5.5.2.5). Nominalizations formed from these nominalizers and the verb *cux* ‘sit’ are provided in Table 6.

Table 6: Nominalizations

Nominalizer	Meaning	Derived Noun	Meaning
labox	instrumental	cux-labox sit-thing	‘seat’
ddu	patientive	cux-ddu sit-thing	‘seat’
su	agentive	cux-su sit-person	‘seated people’
ggie	locative	cux-ggie sit-place	‘place to sit’

Examples (26) – (29) illustrate the use of these nominalizers in combination with the verb *cir* ‘wash’.

- (26) Ni pia cir ael mel **cir-labox** ji nia.
2s clothes wash NF TOP wash-thing insert need
‘When you wash clothes, (you) need to put in the **detergent**.’
- (27) Eilsenehe **cir-ddu** nr zza.
this.morning wash-object not exist.
‘This morning there is no **wash/laundry**.’
- (28) Zozzorggie **balar-cir-su** hal-ddei yarzi cir jiar.
restaurant bowl-wash-NMLZ that-CL really wash fast
That **dish washer** (at the) restaurant really washes quickly.’

- (29) Eilmaex **pia-cir-ggie** ar ddei zza.
 here clothes-wash-NMLZ one CL exist
 ‘There is a **laundromat** here.’

Nouns formed from verbs and adjectives are easily distinguished from regular verbs and adjectives because verb/adjective-derived nouns are followed by one of these lexical nominalizers and may be modified by classifier phrases and/or postpositions.

Another word formation process combines a deictic demonstrative with a locative or temporal root as demonstrated in Table 7. Together, these morphemes produce locative or temporal compounds, which have nominal properties and fill adjunct slots of the clause as (30) illustrates. (See 3.6 for a discussion of these locative and temporal roots.)

Table 7: Compounds Formed from a Demonstrative and a Locative/Temporal Root

Locative or Temporal Compound	
Deictic Demonstrative	Locative or Temporal Root
<i>eil</i> ‘this’ or <i>hal</i> ‘that’	<i>ni</i> ‘day’ or <i>car</i> ‘time’, etc...
<i>nal</i> ‘above’ or <i>zal</i> ‘below’	<i>bbaer</i> ‘side’ or <i>bbor</i> ‘area’, etc...

- (30) **Eil-ni** bir ar-ni leil gielco.
 this-day compare ?-day at warm
 ‘**Today** is warmer than yesterday.’

Another way to form new compounds is to add locative roots (such as *bbaer* ‘side’) to nouns (such as the relator noun *yarqier* ‘edge’) as (31) illustrates.

- (31) Cahuo eil-peil **yarqier-bbaer** yarzi naex.
 window this-CL edge-side really dirty
 ‘This window’s **edge** is very dirty.’

3.1.2 Relator Nouns

Lolo has many locative nouns that make fine distinctions in space. Matisoff calls these spatial nouns (Matisoff 2003:216). Watters refers to these as relator nouns because

they “...further specify locational relations. Unlike deictic primitives [such as Lolo deictic demonstratives], they get their deictic specification from other nouns, and as such, must either be possessed or immediately follow the noun they relate to. Relator nouns include notions like ‘on top of’, ‘at the foot of’, ‘at the side of’...” (Watters 2002:693). Like Kham, Lolo relator nouns receive their deictic specification from other nouns; unlike Kham, they do not need to immediately follow the noun to which they relate, as long as the noun is clearly understood from the context. The Lolo relator nouns are presented in Table 8.

Table 8: Relator Nouns

ggarsi	‘above’	jjasi	‘below, beneath’
xiemeir	‘in front of’ (location) ‘first’ (time)	giedae	‘behind’ (location) ‘after’ (time)
lamae	‘external’	lawul	‘internal’
teilsil	‘exterior, top most layer’	kukur	‘interior, inner layer’
agala	‘in the center of, in the middle of’	yarqier	‘edge’

In (32) *xielmeir* ‘in front of’ receives its deictic specification from the noun *ake* ‘house’. Sentence (33) illustrates the temporal usage of *xielmeir* ‘in front of/first’. The most exterior and/or topmost of something is expressed with *teilsil(bbor)*. In (34) the deictic specification of *teilsil* ‘exterior’ is understood from the context.

- (32) Yar ake **xielmeir**-(bbaer) vixiur ar ze zza.
3s house front-side stream one CL exist
‘There is a stream **in front of** her house.’
- (33) Ni almeir **xielmeir** zzor saelnei gaggor ssi.
2s food first eat until play AND
‘**First** you eat, then (you) play.’

- (34) Sul vaervaer bbe **teilsil**-(bbor) deix dae.
 book big CL exterior-area put IPFV
 ‘The big book is placed **on the top one**.’

The relator nouns *jiasi* ‘below’ and *ggarsi* ‘above’ obtain their deictic specifications from the noun in the local context, whereas the deictic specifications of the deictic demonstratives *zal* ‘below/further out’ and *nal* ‘above/further in’ are derived from the speaker, not from any other noun in the context. In (35) *ggarsi* ‘above’ and *jiasi* ‘below’ indicate positions above and below, but not in reference to ego. They refer to the upper and lower sides of an entity, like a piece of toast.

- (35) Aba ka **jiasi**-(bbor) piar nael¹⁶ ka zil;
 bread bake below-area side.CL DM bake burn

ggarsi-(bbor) piar nael ka nr zil.
 top-area side.CL DM bake not burn
 ‘(When) baking bread the **bottom** side burns; the **top** side does not burn.’

In contrast, the deictic locative expressions *nalbbor* ‘above’ and *zalbbor* ‘below’ cannot be used to refer to the sides of a piece of bread because they specify positions above and below ego.

- (36) Aba ka ***zalbbor** piar nael ka zil;
 bread bake below.area side.CL DM bake burn

***nalbbor** piar nael ka nr zil.
 above.area side.CL DM bake not burn
 *‘(When) baking bread the **bottom** side burns; the **top** side does not burn.’

Although relator nouns are glossed similarly to postpositions, they are distinct from one another. Relator nouns can serve as the head of NPs as in (37) and (38) and they

¹⁶ *Nael* is a pragmatic particle and a clause connector. See 3.14.2 for an explanation of it.

can also precede classifiers as in (37). Postpositions, however, can never serve as the head of NPs. They follow NPs (and therefore also follow classifiers).

- (37) **Ggarsi**-bbor ddei nr li.
 top-area CL not want
 ‘(I) don’t want the **top** one.’
- (38) Xiezisu mel **lamae** zzael yarzi igazae bei mal ar.
 builder TOP external CONT really pretty make goal PFV
- Lawul** zzael halae bei nr teil seir.
 internal CONT still make not finish still
 ‘Concerning the builder, the **outside** (of the house he) made, on the one hand, is really pretty. The **inside**, on the other hand, is still not done.’

3.2 Pronouns

Lolo personal pronouns replace animate NPs; they do not replace inanimate NPs. The pronoun system distinguishes singular and plural as well as first, second, and third persons. It also differentiates inclusive and exclusive first person plural pronouns. None of the pronouns make a gender distinction. The pronoun system also does not distinguish case. Levels of politeness and relative status are not distinguished in the pronoun system, neither are there distinct possessive forms of the pronouns. The pronouns are presented in Table 9.

Table 9: Pronouns

	Singular	Plural
1 st person	ngo	ngua (EXCL) niul (INCL)
2 nd person	ni	nia
3 rd person	yar	yaa
3 rd person remote	si ‘other’	
Reflexive	armael	
Reciprocal	zzi	

Reflexives are formed by using the reflexive pronoun *armael* by itself.

- (39) Yar **armael** leil¹⁷ dei.
 3s self DOM hit.
 ‘She hit **herself**.’

The reflexive pronoun *armael* ‘self’ is often used for emphasis too.

- (40) Yar **armael** ddei zzirbae sser ael mae vae.
 3s self ASSOC money use NF material buy
 ‘She used her **own** money to buy the material.’

- (41) Ni vaer ho a mel azo miar bei lei
 2s big already PFV TOP what task do also

armael bei ssi nia.
 self do AND need
 ‘You have grown up, whatever work (you) do, (you) also need to go do (it) **yourself**.’

Pronouns can also be emphasized by adding *armael ddei armael* ‘self associative self’.

- (42) Ngo **armael ddei armael** ake ca.
 1s self ASSOC self house wipe
 ‘I **myself** clean the house.’

Emphatic pronouns are also formed by reduplicating a personal pronoun with *ddei* ‘associative’ in between as seen in (43).

- (43) Argeni Kunming ssi ael
 tomorrow Kunming go NF
- ni ddei ni ssi; ngo ddei ngo ssi.**
 2s ASSOC 2s go 1s ASSOC 1s go
 ‘Tomorrow (we) go to Kunming, **you yourself** go (alone); **I myself** go (alone).’

¹⁷ For an explanation of this versatile postposition see 3.12 and 5.1.

The reciprocal is expressed with the pronoun *zzi* ‘each.other’. It is usually followed by a postposition.

- (44) ...hherdder yolyol zabbar **zzi** **da** einei gor nia.
 consequently also v.well each.other with this.way live must
 ‘... then you will live very well **together.**’

3.3 Deictic Demonstratives

Lolo has four deictic demonstratives that never occur alone; they always precede classifiers or locative/temporal roots. A numeral may intervene between the deictic demonstrative and classifier. (See 4.1.2 for an explanation of the position of deictic demonstratives within classifier phrases. See section 3.5 for a discussion of the characteristics of classifiers.)

By themselves, deictic demonstratives cannot substitute for nouns. **In combination** with classifiers or locative/temporal roots, however, they often form compounds with nominal characteristics. They, **alone**, do not replace NPs (like pronouns do); nor can postpositions directly follow them, as postpositions follow NPs. But in combination with classifiers or locative/temporal roots they may function as constituents of the clause.

These deictic demonstratives **indicate location or time relative to the speaker**. Like Lisu, these words specify relative height and distance (Bradley 2003:227). *Eil* ‘this/here’ and *hal* ‘that/there’ distinguish a position near (within sight) or far (often out of sight) from ego. *Nal* ‘above/further in’ and *zal* ‘below/further out’ in some cases, differentiate between places above or below ego. In other cases, they point to places

toward or away from a river's source (upstream or downstream) or to a location further in or further out from where ego is.

When these deictic demonstratives are uttered with a long vowel, they indicate that the place is very far away (from the speaker or in the case of *eil* 'here' from the listener).

Table 10: Deictic Demonstratives

<i>eil</i>	'this, here' 'proximal'	The same spatial or temporal domain as ego Can be seen by ego, proximal
<i>hal</i>	'that, there' 'distal'	A different spatial or temporal domain as ego Often cannot be seen by ego, distal
<i>nal</i>	'above' 'further in'	Above the spatial domain of ego Toward the river's source, upstream, further in
<i>zal</i>	'below' 'further out'	Below the spatial domain of ego Away from the river's source, downstream, further out

In (45), the first *hal* 'that' indicates that it is a different time than the present time and the second *hal* 'that' indicates that the hemp is not in proximity to the speaker.

- (45) **Hal**-car nael sol nael
 that-time DM poor DM
- zzir **hal**-zzu nael siyi nael ci sil.
 hemp that-PL.CL DM peel DM rope braid/weave
 'At **that** time (people were) poor, (they) peeled **those** hemp, (and) braided rope.'

In (46), *zal* 'below/further out' indicates that the location is below the speaker.

- (46) **Zal**-bbor yarzi lel no.
 below-area really hot painful
 '**Down there** (outside our house) it is very hot.'

3.4 Numerals

The set of cardinal numerals is simple and systematic. All numbers between 1 and 10,000 are formed from the words in Table 11. Lolo numerals never occur alone; they always precede classifiers or locative/temporal roots. There are no Lolo equivalents for zero.

Table 11: Cardinal Numerals

cir, dil	‘one’	cei	‘ten’
nr,nir	‘two’	xiu	‘hundred’
so	‘three’	du	‘thousand’
li	‘four’	meir	‘ten thousand’
ngor	‘five’		
qiul	‘six’		
sir	‘seven’		
heil	‘eight’		
gel	‘nine’		

- (47) Sir du hei xiu so cei ngor ler
 7 thousand 8 hundred 3 10 5 CL
 ‘7835’

Lolo does not have ordinal numerals. They are expressed analytically with a classifier phrase + *ddei* ‘associative’.

- (48) Acil ssor cexr teil lei so ler ddei bbox dae.
 sheep son born out come 3 CL ASSOC speckle IPFV
 ‘The lamb (that was) born, **the third one**, (was) speckled.’

With some temporal expressions, ordinal numerals are formed with two temporal phrases that both use a temporal word (like *ni* ‘day’), instead of the associative *ddei*.

- (49) Li ni cir ni ci ael
 4 day 1 day arrive NF
 yar no kol ar.
 3s pain heal PFV
 ‘On the **fourth** day, she recovered.’

3.5 Classifiers

Classifiers have been defined as “[s]pecial operators that are used in some or all noun phrases to directly express the class of noun” (Payne 1997:108). While such a definition has its merits, Sino-Tibetan linguists often find the classical/historical sense of this term too restricting and broaden it considerably. For the Kham language, Watters (2002:180-83) includes words that express volume/weight, variable volume, length/distance, and time as classifiers. For Lisu, Yu considers words from eleven semantic domains as classifiers. They include words from general, human, animal, self (nouns), shape, number/portion, temporal, measurement, round number, manner, and metaphoric categories (Yu 2007:151-68). For Lahu, Matisoff posits at least seven types of classifiers: auto (nouns), special (descriptive type), measures, time, group, general, and round numbers, such as 10, 100, and 1000 (Matisoff 2003:215). Bjorverud (1998), LaPolla (2003a and 2003b), and Li & Thompson (1981:103-106) also group classifiers and various types of measure words together. These linguists posit such large and semantically diverse classifier classes because these words share classifying features (Watters 2002) and/or syntactically pattern in the same way (LaPolla 2003a). Li and Thompson (1981) state that Mandarin Chinese classifiers are words that occur with a number and/or a demonstrative, or certain quantifiers before the noun. Matisoff (2003) explains that Lahu classifiers are words that always occur after numerals. From these analyses, it is apparent that in Sino-Tibetan languages, classifiers are not defined solely in terms of their role as a grammatical marker of noun class. Time words, for example, are often assigned to the classifier class, even though they do not modify nouns.

It could also be argued that Lolo descriptive, person, number, and measure classifiers, as well as locative and temporal roots could be assigned to the same class because **all of them can follow deictic demonstratives and/or numerals**. But it is apparent that their distribution is not identical and that the bond between deictic demonstratives and descriptive/person/number/measure classifiers is not as strong as the bond between deictic demonstratives and locative/temporal roots. First, descriptive, person, number, and measure classifiers typically follow nouns. Locative and temporal roots do not. Second, when deictic demonstratives combine with descriptive, person, number, and measure classifiers, they often form classifier phrases. Third, when they form headless NPs (that are composed of a deictic demonstrative + a descriptive/person/number/measure classifier), the meaning of each morpheme is still distinct. But when deictic demonstratives combine with locative/temporal roots, they form locative/temporal compounds whose composite meaning is different from the individual meanings of the morphemes. Because of these differences, these words are assigned to different classes. Descriptive, person, number, and measure words are assigned to the classifier class, while locative and temporal roots are assigned to the locative/temporal root class.

3.5.1 Descriptive Classifiers

Descriptive classifiers specify the shape or type of the object. They are prototypical classifiers that are restricted to certain nouns. Some descriptive classifiers are listed in Table 12. *Baex* ‘knife CL’ and *xiu* ‘clothes CL’ are illustrated in (50) and (51).

Table 12: Descriptive Classifiers

CL	Noun Class	CL	Noun Class
ba	‘stalk (of a plant)’	bbor	‘slice (for food)’
pex	‘stalk (of a flower)’	bbae	‘plot (of land)’
zzei	‘trunk (of a tree)’	ga	‘(for mountain)’
zzir	‘(for house)’	pir	‘(for flat objects)’
zor	‘(for table)’	xiu	‘(for clothes)’
tur	‘(for jug)’	gger	‘furrow (for land)’
bax	‘(for bowl)’	gyaex	‘room (for house)’
baex	‘(for knife)’	tae	‘piece (for candy, etc.)’
bbi	‘(for meal)’	qier	‘statement (for speech)’

(50) Zzomeilelxie gga altor heil **baex** zza.
 kitchen in knife 8 knife.CL exist
 ‘There are eight knives in the kitchen.’

(51) Pia eil-**xiu** arseir ddei ar?¹⁸
 clothes this-clothes.CL who ASSOC FIN
 ‘This dress is whose (dress)?’

3.5.2 Person Classifiers

Person classifiers are restricted to humans. Some person classifiers are listed in

Table 13.

Table 13: Person Classifiers

te	classifier for important participant; often a bad participant
ddo	classifier for unimportant participant; often a child

(52) Capor hal-**te** zozo lei zzibbaer dda, yarzi varyi-ddo.
 man that-CL often also alcohol drink really hate-can
 ‘That man drinks all the time, (it is) really despicable.’

¹⁸ *Ar* ‘final’ indicates that the utterance is complete. See 3.14.3 for an explanation of this particle.

Like Lisu and Lalo, some Lolo classifiers give details related to family members (Bradley 2003:228). The numerals *nr* ‘2’, *so* ‘3’, and *li* ‘4’ cliticize to two-syllable kinship classifiers resulting in forms like those in Table 14.

Table 14: Two Syllable Kinship Classifiers

<i>nr-hieni</i>	‘two siblings’
<i>so-hieni</i>	‘three siblings’
<i>so-bollor</i>	‘father and two children’
<i>so-mollor</i>	‘mother and two children’
<i>li-biller</i>	‘paternal grandparent and three children’

Example (53) illustrates the use of the kinship classifier *hieni* ‘sibling.CL’.

- (53) Yaa capor **nr-hieni** ssormaer **so-hieni** zza.
 3p man two-sibling woman three-sibling exist
 ‘They have **two sons** (and) **three daughters**.’

3.5.3 Number and Measure Classifiers

Some number and measure classifiers are listed in Table 15.

Table 15: Number and Measure Classifiers

<i>pei</i>	‘half’	<i>ddei</i> ¹⁹	‘singular and general’ follows the number 1
<i>zze</i>	‘dual, pair’	<i>nel</i>	follows the number 2
<i>mel</i> ²⁰	‘plural’	<i>ler</i>	follows numbers 3 - 9
<i>zzu</i>	‘plural (esp. for animals)’	<i>mo</i>	follows the number 10
<i>cir</i>	‘group/flock’	<i>zi</i>	‘kilo’
<i>ke</i>	‘group’	<i>lar</i>	‘scoop’
<i>hhexr</i>	‘family’	<i>tor</i>	‘hand span’

¹⁹ *Ddei* is a versatile word. 1) It functions as a general, singular classifier. 2) It indicates specificity in the NP (see 4.1.2). 3) It also follows restricting clauses and 4) links possessive NPs to nouns. In functions 1, 2, and 3 it is glossed as a classifier (CL). In function 4 it is glossed as an associative (ASSOC). See 4.1 and 5.5.2.3 for more explanations of its use in the sentence.

²⁰ *Mel* is also a topicalizer.

Sentences (54) – (56) illustrate the use of several different classifiers: *ddei* ‘general/singular CL’, *nel* ‘two CL’, and ‘*hhexr* family CL’.

- (54) Yaa mel ssormaer ar **ddei** zza.
 3s TOP daughter one general.CL have
 ‘They have a daughter.’
- (55) Hal-car ael ca nr **nel** zza.
 that-time.CL NF person two number.CL exist
 ‘At that time there were two people.’
- (56) Nael casolssor ar **hhexr** ar.
 DM poor.people one family.CL FIN
 (They were) a **family** of poor people.

3.5.4 Reduplication of Classifiers

Certain words which occur after question words, such as the numeral classifier *ler*, when repeated, produce a universal quantifier, e.g., ‘whoever, whenever, whatever’ (Longacre 1996:69).

- (57) azo **ler** **ler** bei dae
 what CL CL do IPFV
 ‘**Whatever** (you) do...’

3.6 Locative and Temporal Roots

Locative and temporal words that follow deictic demonstratives constitute the locative/temporal root class.

3.6.1 Locative Roots

Locative roots clarify where the action is done. They receive their deictic specification from the deictic demonstrative or noun to which they attach, a characteristic that is attested in other TB languages. Watters calls Kham equivalents “second position locative roots” or “landmark locations.” They form compounds (with deictic primitives).

He explains that “[t]he landmark locatives differ from the deictic primitives in that they require an explicit deictic anchor. They have no default discourse or speaker-oriented deixis of their own. Where they combine with the primitives, the primitives provide the deictic anchor. Where they occur immediately following nouns, the nouns are the anchor” (Watters 2002:131). Matisoff refers to Lahu equivalents as locative noun particles. He explains that “Lahu has several noun particles of general locative meaning which are neutral with respect to directionality, and may all follow the equally vague spatial demonstratives” (Matisoff 2003:216). Lolo locative roots also possess these characteristics, so are similar to the Kham second position locative roots/landmark locations and Lahu locative noun particles.

In combination with deictic demonstratives, locative roots make fine distinctions in the concepts of ‘here’ and ‘there’ as Table 16 illustrates.

Table 16: Locative Roots

Locative Root	Meaning	Deictic + Locative Root	Meaning
maex	‘adessive 1’ ‘within the immediate vicinity as ego’	eil-maex ‘this-area’ hal-maex ‘that-area’	‘here (toward ego—but in the same room)’ ‘there (away from ego—but in the same room)’
bbaer	‘adessive 2’ ‘within the same area as ego’ ‘side, border’	eil-bbaer ‘this-area’ hal-bbaer ‘that-area’	‘here (toward ego--in the same house, but different room)’ ‘there (away from ego--in the same house, but different room)’
bbor	‘adessive 3’ ‘within the same large area as ego’ ‘relative height’	eil-bbor ‘this-area’ hal-bbor ‘that area’	‘here’ (toward ego—but in the same region) ‘there’ (away from ego—but in the same region)
zzar	‘inessive’ ‘inside’	eil-zzar ‘this-inside’ hal-zzar ‘that-inside’	‘inside here’ ‘over there’
piar	‘cisative’ ‘side’	eil-piar ‘this-side’ hal-piar ‘that-side’	‘this side’ ‘that side’

Locative roots follow deictic demonstratives and/or numerals like classifiers do, but they do not tend to modify nouns, as classifiers do. It is most typical for them to combine with deictic demonstratives and form locative compounds that can function as locative adjuncts in the clause as in (58) and (59). They also follow numbers as in (61).

- (58) Ni ddei ssormaer sulzzaggie hal-**bbaer** sul zza dae.
 2s ASSOC daughter school.room that-area book read IPFV
 ‘Your daughter is in the school room **there (on the other side of the house from us)** studying.’

- (59) Zal-**bbor** yarzi lel no.
 down-area really hot painful
 ‘Down **there (outside our house)** it is very hot.’
- (60) Ni pia ddei eil-**piar** gga eilne naex hal-**piar** nr naex.
 2s clothes ASSOC this-side in this.way dirty that-side not dirty
 ‘This **side** of your clothes (is) so dirty, that **side** (is) not dirty.’
- (61) Yaa zzaegu vur ael so **maex** li **maex** vur dae.
 3p stuff sell NF 3 place 4 place sell IPFV
 ‘They sell stuff (at) three (or) four **places**.’

3.6.2 Temporal Roots

Temporal roots make fine distinctions in periods of time. Like classifiers, they follow deictic demonstratives and/or numerals (which nouns do not do). Like locative roots, they do not modify nouns and often combine with deictic demonstratives to form temporal compounds that can function as temporal adjuncts in the clause as in (63). Some temporal roots are provided in Table 17.

Despite the fact that temporal roots do not modify nouns, there is a precedence for labeling them as classifiers among TB linguists. Matisoff (1973), Yu (2007), and Watters (2002) identify Lahu, Lalo, and Kham equivalents as time classifiers. Watters explains that Kham “[t]ime classifiers are different again in that they quantify neither nouns or adjectivals. They stand alone” (Watters 1998:368).

Table 17: Temporal Roots

bol	‘point in time’	nehe	‘morning’
car	‘shorter period of time’	xiel	‘evening’
leix	‘longer period of time’	ni ²¹	‘day’
sil	‘lifetime’	xiu	‘month’

(62) Ngo ake jjir ael caezi nr **bol** xiar ar.
 1s house return NF car two time broke FIN
 ‘(While) I was returning home, (the) car broke down two **times**.’

(63) Eil-**leix** mel ca cir hherx lei aniu cir ddo a xiu lol.
 this-period TOP people one family.CL also child one CL ? birth allow
 ‘These **days** each family is permitted to bear one child.’

In summary, classifiers and locative/temporal roots combine with other words to form phrases; they also combine with other morphemes to form compounds as Table 18 illustrates.²²

Table 18: Distribution of Classifiers and Locative/Temporal Roots in Phrases and Words

	In a Phrase	In a Compound	
Classifier			
bbae ‘land.CL’	mi zal ngor bbae land that 5 plot ‘5 plots of land’	mipaer bbae land.chaff.plot ‘wilderness’	
Locative root			
bbaer ‘area/side’	nr bbaer ‘2 sides ’	yarqier bbaer edge.side ‘edge’	zal bbaer out.side ‘outside’
Temporal root			
ni ‘day’	hal so ni that 3 day ‘those 3 days ’	arni ‘yesterday’	eilni this.day ‘today’

²¹ The noun form of ‘day’ is *nixiel*.

²² It is only in combination with other morphemes that locative and temporal roots (such as *bbaer* ‘side/border’ and *ni* ‘day’) can form locative/temporal expressions. They alone cannot function as the head of NPs (as nouns do) and they follow numerals and/or deictic demonstratives (as nouns do not). However, these words may have originally derived from nouns and still retain some nominal characteristics.

3.7 Verbs

Lolo verbs function as the head of the VC. Verbs are not inflected for tense, aspect, modality, voice, or agreement. Many Lolo verbs are monomorphemic, but some compound verbs also exist. (See 6.2 on verb serialization for a discussion of various types of verb combinations.)

- (64) **daer** **vaexr** **bbeix** **mia**
 ‘hit’ ‘write’ ‘speak’ ‘see’

Although they share many qualities with adjectives and auxiliaries, they are not assigned to the same word class, as their differences are significant. (See 3.16 for a comparison of the characteristics of adjectives, auxiliaries, and verbs.)

Lolo verbs are reduplicated to form yes/no questions, to add prominence to the predicate, or to express increased duration or intensity of the activity.

All classes of verbs can be reduplicated to form yes/no questions, including event verbs (65), stative verbs (66) and (67), existential verbs (68), the locative copula *hher* ‘be at’ (69) and the copula *nga* ‘be’ (70) and (71).

- (65) Ni pia **cir** **cir** ho ar?
 2s clothes wash wash REA PFV
 ‘Have you already **washed** the clothes?’

- (66) Ni **cux** **cux** dae?
 2s sit sit IPFV
 ‘Are you sitting?’

- (67) Ni yar arseir ar **saexl** **saexl**?
 2s 3s who FIN know know
 ‘Do you know who she is?’

- (68) Ni zzirbbae **zza** **zza**?
 2s money exist exist
 ‘Do you **have** money?’
- (69) XiaoZi Chuxiong **hher** **hher** dae?
 Esther Chuxiong exist.at exist.at IPFV
 ‘Is Esther **living** in Chuxiong?’
- (70) Yar ddei pia piulpiu **nga** **nga**?
 3s ASSOC clothes white be be
 ‘Her shirt is white, **isn’t it**?’
- (71) Hal-ddei niabbor **nga** **nga**?
 that-CL your.father be be
 ‘He is your father, **isn’t he**?’

Verbs can be reduplicated, with *lei* ‘also/even’ in between them, to add prominence to the VC.

- (72) Halmel nael ni **i** **lei** **i** ssi nr ssa;
 in.that.case DM 2s look also look go not need
 ‘There is no need for you to **even look** at such a man’
- naer** **lei** **naer** ssi nr ssa;
 near also near go not need
 ‘there is no need to **even associate** with him’
- ssi** **lei** **ssi** da nr ssa.
 go also go with not need
 ‘there is no need to **even go** with him.’

Reduplicated verbs with the imperfective *dae* following each one indicate that the action is ongoing and increasing in intensity.

- (73) dder **bei** **dae** **bei** **dae** nael dder hie dae.
 then do IPFV do IPFV DM then quarrel IPFV
 ‘...(as you) are **more and more** (angry you) quarrel.’

3.8 Auxiliaries

Auxiliaries are grammaticalized words that follow verbs. They still retain certain verbal characteristics (such as being reduplicable and negatable), but they cannot stand

alone in the VC; they must follow a verb or adjective. Many of them seem to be historically related to verbs, as they are phonologically and semantically similar. Usually, there is a slight difference in pronunciation between the auxiliary and its related verb. Sometimes, though, the phonetic form of the verb and the auxiliary is exactly the same, but their meaning, role, and position within the VC are different. In addition, when these verbs are used as auxiliaries, they do not add arguments to the clause. Although Lolo does have versatile verbs,²³ the tendency of the language is to grammaticalize its serial verb constructions (SVCs), thereby creating a large class of auxiliaries, which are distinct from verbs. (See 3.16 for a comparison of verbs and auxiliaries.) Typical auxiliaries express directional (74), aspectual (75), or modal (76) meanings, but some auxiliaries communicate quantification (77). There is also a set of verbal particles that express directional, aspectual, and modal meanings. (See 3.14.1 for examples of these.)

- (74) Cirbelde jilabox ddei nalzzar de **dil**.
 trash insert.thing general.CL inside push enter
 ‘Push **in** the trash can.’
- (75) Halngae lei dder si da meil lel **dor** lalnga.
 that.time also then others with beg eat NCES only.be
 ‘Earlier then (we) only/just beg **over and over** from other people.’
- (76) Yel ama zzae miar lei bei jjia nr **xie**.
 then mom CONT task also do finish.all not capable
 ‘Then, mom, on the other hand, is also not **able** to do all the tasks.’
- (77) Ngua mi hal-bbae gyaexl teil **gazi** ar.
 1p land that-plot dig out totally PFV
 ‘We **totally** finished digging out that plot (of land).’

²³ Matisoff refers to verbs with dual functions (that is, verbs which serve as verbs and auxiliaries) as versatile verbs (Matisoff 1973, 2003).

As with verbs, reduplicated auxiliaries form yes-no questions.

(78) Ni ddei beizi vei gel xiel **ddo ddo?**
 2s ASSOC glass take cross.over reverse may may
 ‘**May** (I) take your glass over there?’

(79) Ni yifu vei **xiel xiel** lei?
 2s egg take reverse reverse VEN
 ‘Did you bring the eggs **back**?’

3.9 Adjectives and Adjectivals

Lolo adjectives are distinct from verbs and auxiliaries (see 3.16). They are descriptive words that describe the quality or feelings of an entity. In addition to basic monosyllabic and disyllabic adjectives, other descriptive words, compounds, and phrases are formed through reduplication processes, from idioms, and from complex adjectival expressions.

Adjectives may function as the predicate of the clause.

(80) Lorlorpor mel worga da **naer.**
 Lolo.people TOP mountain with near
 ‘The Lolo (are) **close** to the mountains.’

(81) Yarbbor ddei mel **mar** ar.
 their.father general.CL TOP old FIN
 ‘Their father (was) **old**.’

Adjectives also serve as complements of verbs. *Seir* ‘good’ is a complement of the verb *bei* ‘do’.

(82) Eine saelnei ake ddei bei **seir** ddo.
 this.way only.when family general.CL do good may
 ‘Only when (it is done) this way can (the) family (do/be) **good**.’

Adjectives, such as *hie* ‘dry’, can also modify nouns, although it is not actually common for them to do so, because they are typically introduced in a predicate and then

not mentioned again. While it is possible for adjectives to serve as members of NPs, this is not a structure that the Lolo use nearly as frequently as English speakers do.

- (83) Ggor **hie** ddei nael lir.
 buckwheat dry CL DM heavy
 ‘The **dry** buckwheat (is) heavy.’

3.9.1 Comparatives and Superlatives

Comparisons are formed by adding *leixl* ‘even/more’ after the adjective or using the Chinese loan word *bir* ‘compare’ between the referents that are being compared.

- (84) Ni ngo leil ye **leixl**.
 2s 1s to small even/more
 ‘You are smaller than I.’
- (85) Ni **bir** ngo leil ye.
 2s compare 1s to small
 ‘You are smaller than I am.’
- (86) Ni ngo leil bei jiax **leixl**.
 2s 1s to run quick even/more
 ‘You run quicker than I do.’
- (87) Ni **bir** ngo leil bei jiax.
 2s compare 1s to run quick
 ‘You run quicker than I do.’

Superlatives are formed by adding *zzir* ‘most’ after the adjective.

- (88) Yar mel jilir **zzir** ddei nga ar.
 3s TOP smart most CL be FIN
 ‘S/he is the smartest.’

3.9.2 Reduplication of Adjectives

Adjectives may be reduplicated to form yes/no questions, to draw attention to a certain trait, to increase the intensity of a trait, to express a comparative sense, or to form

adverbs. One syllable adjectives are reduplicated once, with no tone change, to form yes/no questions, just like verbs and auxiliaries.

- (89) Yar ddei elce **neix neix?**
 3s ASSOC hair black black
 ‘Is her hair **black?**’

The second syllable of two syllable adjectives is reduplicated once, with no tone change, to form yes/no questions as in (90).

- (90) Yar ddei elce **narcil-cil?**
 3s ASSOC hair good.quality-DUP
 ‘Is her hair **pretty?**’

Adjectives also reduplicate in other ways. Reduplicated adjectives followed by *mo* draw attention to a certain trait. They communicate that someone/something has a particular characteristic.

- (91) Ca hal-ddei **deilbe-be-mo** yarzi worni.
 person that-CL muscular-DUP-quality.of really strong
 ‘That person is **muscular** (and) very strong.’

Reduplicated adjectives may also indicate increased intensity. In this case, the tone of the first syllable of a two-syllable reduplicated adjective raises to the 55 tone (indicated by ‘/’ in the orthography).

- (92) Yar pia **piul-piu** veir dae.
 3s clothes white wear IPFV
 ‘She is wearing a **really white** shirt.’

The tone of the middle syllable (of three syllables) will also raise to the 55 tone.

- (93) Eilmerxie xiubbo ddux lei ael **bbo-bbol-bbo.**
 this.evening moon exit VEN NF bright-bright-bright
 ‘In the evenings the moon comes out, (it is) **very bright.**’

Reduplicated adjectives may also express a comparative sense, that is, a little more of a certain characteristic.

- (94) **Vaer-vaer** ddei nael ssormaer; **ye-ye** ddei ssor.
 big-big CL DM girl small-small CL son
 ‘The **older** one is a girl; the **smaller** one is a son.’
- (95) Ngo barde **mu-mu** tae cux.
 1s chair tall-tall CL sit
 ‘I sit (on) the **taller** chair.’

3.9.3 Idioms

Various qualities and especially feelings are communicated via idioms. These idioms are often formed with body parts. A variety of idioms are formed with each one of the following: *nixmox* ‘heart’, *meix* ‘eyes’, *meir* ‘mouth’, *nolba* ‘ears’, and *qiarmeix* ‘face’. One example of each type is provided in Table 19.

Table 19: Lolo Idioms

Idiom	Gloss	Meaning
nixmox neixl	heart deep	‘to be greedy’
meix gex	eyes hard	‘does not cry easily’
meir cir	mouth wash	‘endures difficulty well, tough, resilient’
nolba nor	ears soft	‘to be reserved’
qiarmeix zzi tu	face skin thick	‘to be easily swayed by others’ opinions, gullible’
		‘to take advantage’

Some idioms have lexicalized into adjectival compounds, as demonstrated by the fact that the entire idiom (consisting of a noun + adjective) can be modified by a degree adverb as in (96), but the adjective itself can no longer be modified by an adverb as in (97).

- (96) Yar yarzi **nixmox** nor.
 3s really heart soft
 ‘She is really **sympathetic**.’

- (97) *Yar **nixmox** yarzi **nor**.
 3s heart really soft
 ‘She is really **sympathetic**.’

Other idioms have not grammaticalized into adjectival compounds, indicated by the fact that an adverb can still precede the adjective within the idiom as in (98).

- (98) Ca halddei **no**l**ba** hazzi **gex** ael,
 person that.CL ears very hard NF
 arseir ddei ddar lei noni dil nr ddo.
 who ASSOC word also listen in not able
 ‘That person is very **stubborn**, (he is) not able to listen to anyone’s words.’

3.10 Negators

The Lolo negators are the prohibitive *tor* ‘don’t’ and the negative *nr* ‘not’. *Tor* ‘don’t’ prohibits behavior that is often in process. It may cooccur with the negative *nr* ‘not’, in which case the prohibition is intensified, as in (100). *Tor* ‘don’t’ occurs immediately before the verb. When the prohibitive and negative cooccur, the prohibitive always precedes the negative; the opposite ordering is ungrammatical as in (101).

- (99) Ni yar leil **tor** hie.
 2s 3s DOM don’t scold
 ‘**Don’t** scold him.’
- (100) Yel yar bbeix ael “Nia ngo leil **tor nr** hie.”
 then 3s say NF 2p 1s DOM don’t not scold
 ‘Then he (the Kingfisher) said, “**Don’t** scold me (anymore)!”
- (101) *Ni yar leil **nr tor** hie.
 2s 3s DOM not don’t scold
 * ‘**Don’t** scold him.’

The negative *nr* ‘not’ precedes verbs (102) – (104), adjectives (105), and auxiliaries (106) and (107). It never negates particles (108) or nominals. Only one *nr* ‘not’ can be used per VC. It precedes the main verb, if no other verbs, adjectives, or

- (107) Yar caomei zzor **nr** gor.
 3s strawberries eat not EXP
 V NEG AUX
 ‘She has **never** eaten strawberries.’

It does not precede fully grammaticalized particles (nonauxiliaries), like the imperfective *dae*.

- (108) Yar ggecir cir ***nr** dae.
 3s body wash not IPFV
 V NEG PCL
 *‘He is **not** bathing.’

It can also precede the second syllable of two syllable words (such as *lesel* ‘like’, *ggesse* ‘happy’, *sirzzi* ‘angry’, *jilir* ‘smart’, and *medeil* ‘dumb’).²⁷ The individual parts of these words do not have distinct meanings; it is only as a complete word that they possess meaning. Historically, these words may have consisted of two different morphemes that have lexicalized, so morphologically they are compounds; or they may consist of only one morpheme with a phonological infix.²⁸

- (109) Ni mel si le<**nr**>sel.
 2s TOP other.people not.like
 ‘You are **not** like other people.’

3.11 Adverbs and Adverbials

Payne has observed that it is common for ‘adverb’ to become a catch-all category.

He says:

²⁷ A similar type of negation is also attested in Mandarin Chinese resultative verb compounds, where the second verb (or syllable) in the compound is negated (Li & Thompson 1981).

²⁸ Bradley also attests to a similar negation strategy in Lisu where the “two-syllable ‘want to’ has negation between its elements” (Bradley 2003:231).

[a]ny word with semantic content (i.e., other than grammatical particles) that is not clearly a noun, a verb, or an adjective is often put into the class of adverb. Semantically, forms that have been called adverbs cover an extremely wide range of concepts (Payne 1997:69).

To avoid assigning semantically diverse and structurally dissimilar words to the same word class, I follow Matisoff (2003), Bjarverud (1998), and Bradley (2003) who define adverbs as a class of words that precede the verb as in (110) or an adjective as in (96) and (98). Thus Lolo adverbs are words that function as degree adverbs or manner adjuncts and their default position is just prior to the VC. They are distinct (in position and in composition) from temporal and locative expressions that fill other nonargument slots within the clause and possess nominal characteristics.²⁹ I also do not consider them to be constituents of the verb complex (VC) like the negators, primarily because a number of them can be fronted **within the clause** for emphasis as in (112), while the negative *nr* cannot be fronted in the clause for any reason; it changes position **within the VC**. (See 4.3 for a discussion of the structure of the VC and 5.1 for an explanation of the order of constituents in the clause.) Like Lahu, Lolo only has a dozen or so ‘simple’ adverbs (Matisoff 1973:265); the rest are formed by the addition of adverbial affixes and/or through reduplication processes with predictable tone changes. Three syllable adverbials and four syllable complex adverbial expressions are common.

²⁹ Bradley (2003) also makes a distinction between Lisu temporal nominal expressions and manner adverbials.

Lolo has a few simple adverbs. Most adverbs are derived.³⁰ *Zabbar* ‘carefully’, *yarzi* ‘truly’, *jiur* ‘quickly’, *hoba* ‘first’, *lal* ‘only’, *la* ‘gently’ are the most common simple adverbs.

- (110) **Zabbar** i dor nia.
carefully look NCES must
‘(You) need to look **carefully/attentively**.’
- (111) Arbbor ama leil lei **yarzi** bejjiu guar zoxr.
father mother DOM also really help manage ought
‘(You) also **really** ought to help care for mom and dad.’

Some adverbs are formed by adding the *-ala* ‘adverbializer’ suffix or the *ar-/cir-* ‘one’ prefix to adjectives, verbs, and auxiliaries. When *-ala* ‘adverbializer’ is added to the adjectives *ver* ‘responsible’ and *seir* ‘good’, it creates the adverbs *vercelala* ‘responsibly’ and *seilseirala* ‘diligently’.

- (112) Nia miarzo ael mel zabbar **vercel-ala** armael zo ssi nia.
2s task look NF TOP carefull responsible-ADVLZ self look go must
‘(When) you look for work, (you) must look carefully and **responsibly**.’
- (113) Nixmox zzar **seil-seir-ala** zabbar bei dae...
heart in good-good-ADVLZ carefully do IPFV
‘In (your) heart very **diligently** doing...’

When *cir-/ar-* ‘one’ is added to the verb *dor* ‘point’ it produces the adverb *cirdor/ardor* ‘a little’. When it is added to the verb *gor* ‘live’ it forms the adverb *cirgor* ‘together’.

³⁰ Wheatley makes a similar claim for Burmese. He says “While a few adverbs may resist a derivational analysis, most words that appear in the adverbial position in clause structure are transparently derived from verbs by processes of repetition, prefixation, rhyme or chime, or combinations thereof:...This is one of many examples of the Burmese predilection for ‘elaborate’, rhythmically matched phrases” (Wheatley 2003:200-201).

- (114) Nolbbaexl ni ama leil **cir-dor/ar-dor** lei zol<nr>nir ael ngo?
 EMPH.RHQU 2s mom DOM one-point also pity.not NF EVI
 ‘Don’t you pity mother even **a little?**’
- (115) Ngua nr nel armeil **cir-gor** gaggor dae.
 1p two CL last.night one-live play IPFV
 ‘Last night the two of us played **together.**’

Some adverbs and adverbials are formed by reduplicating adjectives, auxiliaries, and verbs in AA and AAA patterns. The tone of the first syllable of a two syllable reduplicated adjective or the tone of the second syllable of a three syllable reduplicated word often raises to the 55 tone. AA and AAA adverbials are very common. For a sample of these refer to Table 20.

Table 20: AA and AAA Adverbials

Adverbial	Gloss	Meaning
ver-ver	responsible- responsible	‘responsibly’
zil-zir	cough-cough	‘tightly’
mel-me	dice-dice	‘in a dicing/crushing manner (of cooking)’
ssi-ssil-ssi	leak-leak-leak	‘manner of non-stop leakage of a lot of water’
niar-nial-niar	bear-bear-bear	‘ravenously’
gger-ggel-gger	pass-pass-pass	‘rapidly, swiftly’
bbiex-bbiel-bbiex	onomotapoeia	‘sound of heavy rain’
gguar-ggual-gguar	onomotapoeia	‘sound of running water’
duax-dual-duax	onomotapoeia	‘noise of setting off fire crackers’

One-syllable adjectives (and some verbs) are reduplicated in AA patterns. The adjective *seir* ‘good’ becomes *seilseir* ‘well’.

- (116) Ni miar bei ael zabbar **seil-seir** bei nia.
 2s task do NF carefully well do must
 ‘(When) you do work, (you) must do it **well.**’

One-syllable auxiliaries and verbs are reduplicated in AAA patterns. The verb *niar* ‘bear/produce’ becomes *niarnialniar* ‘rapturously’.

- (117) veixrbol hor **niar-nial-niar** zzor dor dae piar ar.
 boar meat rapturously eat NCES IPFV perhaps FIN
 ‘...(your father) is **rapturously** eating boar meat.’

Adverbs are also formed by reduplicating onomatopoetic morphemes. Words with an AAA or AABB structure are produced.

- (118) ajji ddei **gguar-ggual-gguar** zu ael
 water CL ONOM bubbling NF
 ‘the water **gguarggualgguar** bubbles...’

Another very productive means to form adverbials is to combine four elements in ABCD or ABAC structures. (See 3.17.3 for examples of these complex adverbial expressions.)

3.12 Postpositions

Postpositions follow NPs. They are distinct from relator nouns, locative roots, and directional auxiliaries, despite the fact that they are sometimes glossed similarly. While it is true that all of these words express similar locative meanings, their distribution within the clause is distinct from one another. Relator nouns serve as the head of NPs and precede classifiers. Postpositions, however, follow NPs and follow classifiers. Locative roots follow nouns or deictic demonstratives (which postpositions never do); and they form locative compounds. When they co-occur with postpositions, they always precede the postposition. Directional auxiliaries have verbal characteristics (which postpositions never have) and only follow verbs and adjectives. Directional particles are

grammaticalized morphemes that only follow verbs and adjectives; they never follow NPs. For a summary of these distributional characteristics see Table 21.

Table 21: Distribution of Words with Locative Meanings

NP		Postposition
relator noun	classifier	
noun + locative root		
deictic demonstrative + locative root		
VC		
verb or adjective	directional AUX and/or directional PCL	

Many postpositions do not collocate with animate nouns. To express the location of an animate being a clause formed with a locative adjunct and the verb *hher* ‘to be at’ are often utilized instead.³¹ A list of postpositions is provided in Table 22.

³¹ Watters also observed that Kham postpositions do not collocate with animate nouns, but require a specialized nominalization (a relativization) of the verb ‘to be’ (Watters 1998:134).

Table 22: Postpositions

leil	differential object marker beneficiary/recipient	‘to/for/at/on’
ddeileil ³²	general locative general locative superessive	‘at or on’
teilleil	superessive	‘on top of’ (the top of several layers)
da	comitative	‘with’
curteil		‘except’
cirdae ael	elative	‘from’
worke		‘under’
garne		‘above/over’
gga	locative/inessive	‘at or in’
zaza-lili	adessive	‘around’
ddei ³³	genitive	

The postposition *garne* ‘above/over’ is illustrated in (119).

- (119) Zaezi hal-ddei **garne** vilu gal dae.
 desk that-CL above flower hang IPFV
 ‘A flower (pot) hangs **over** that desk.’

The postposition *leil* ‘DOM/at/on/to/for’ is of special interest because of its wider distribution within the clause; it follows objects as well as obliques. It correlates with animacy on objects, but serves as a beneficiary/recipient/goal marker or locative postposition on obliques. When *leil* ‘on/to/for’ is used to mark an animate object, it is glossed as a differential object marker (DOM). When it is applied to an oblique, it is glossed as ‘at/on/to/for’. (See 5.1 for more discussion of it.)

³² The postposition *ddeileil* is composed of the classifier *ddei* + the postposition *leil*. It can follow other classifiers (see ex. 243).

³³ As a possessive marker, the associative *ddei* can be called a postposition because it follows NPs, but unlike other postpositions, it follows an NP that is modifying another NP.

When the object is animate, *leil* ‘DOM’ is applied to the object and its effect is to help distinguish it from the subject as in (120). It is applied to obliques, whether they are animate or not, as in (121) and (122).

(120) Capor hal-ddei yar maerssor **leil** dei ael, yarzi dei lel.
 man that-CL 3s wife DOM hit NF really hit violent
 S O
 ‘(When) that man hit **his wife**, (he) really hit (her) violently.’

(121) Yarbbor yarma yar **leil** xirzi vae gger ar.
 his.father his.mother 3s to instrument buy give PFV
 ‘His father and mother bought **him** an instrument.’

(122) Ngo pia xiu **leil** vilu naer ngel.
 1s clothes CL on button sew attach.on
 S OBL O
 ‘I sew the flower **onto** the clothes.’

3.13 Connectors

A variety of connectors occur in clause initial, medial, and final positions.³⁴ Clause-initial and clause-medial connectors provide additive, sequential, logical, and developmental conclusions to preceding propositions. Clause-final subordinating connectors communicate conditional, hypothetical, concessive, and temporal concepts. Table 23 provides a list of the most common connectors with their typical glosses and usages. Sentence (123) illustrates the clause-final adverbial connector *a-nar* ‘even though’.

(123) Ngua mermi hal-car sol **a-nar**,
 1p region that-time difficult ?-even.though
 ‘Even though at that time (life was) difficult (in) our region,’

³⁴ I am indebted to Stephen Levinsohn (2010a and 2010b) for my understanding of these words. It can be argued that some of the connectors are also pragmatic particles. A discussion of the most appropriate word class for them is beyond the scope of this thesis.

nael eil-bol ho-bei-ho gor seir ar.
 DM this-time already-do-already live good COS
 ‘now life is better.’

Example (124) illustrates the most common subordinating connector *ael* ‘non-final’. *Ael* ‘non-final’ usually occurs at the end of nonfinal clauses, but sometimes it also functions as a pragmatic particle and follows (non)arguments in the clause as in (129). It indicates that the information in the preceding clause (or (non)argument) is providing some aspect of a situation or some background for the action of the following or final clause to occur. This observation concurs with Longacre’s observation that “[m]any languages have special circumstantial margins with special subordinators and conjunctions to express circumstance” (Longacre 1996:73). *Ael* ‘non-final’ indicates that the utterance is not yet complete, that more must be uttered to complete the thought being expressed.

- (124) Ca seirpor hhexr mel porpor zzu ddux lei zzir dae **ael**
 person master family.CL TOP ancestor PL exit VEN think IPFV NF
 bbeix “Alldur ggapu gger.”
 say door open give
 ‘**Given the situation** (that) the head of the house (was) thinking (that his)
 ancestors (want to) come out, (he) said “Open the door.” ’

Table 23: Connectors³⁵

Clause-initial Coordinating Connectors	
<i>yel</i> ‘therefore/and’	conjoining, associative, sequential connector
<i>nael</i> ‘but, now’	developmental marker
<i>dder</i> ‘then’	default temporal sequence/consequence
<i>hherdder</i> ‘then’	temporal sequence/consequence
<i>nr nga ael</i> ‘otherwise’	
<i>nr nga nael</i> ‘because of that’	
<i>eine nga ael</i> ‘being this way’	
<i>halae</i> ‘still/also’	additive
<i>yol</i> ‘also/again’	marked additive
Clause-final Subordinating Connectors	
<i>ael</i> ‘being the case...’	default subordinator, circumstantial
<i>arddeir (nga) ael</i> ‘if’	conditional
<i>mel</i> ‘if/concerning’	conditional
<i>bbael</i> ‘supposing’	hypothetical
<i>zzorbbeixlei</i> ‘no matter’	hypothetical
<i>(bbeix a) nar</i> ‘although’	concessive
<i>lei</i> ‘even though’	concessive
<i>qie</i> ‘as soon as’	temporal
<i>sael</i> ‘until’	temporal
<i>nei</i> ‘and, not only’	associative conjunction

3.14 Particles

Particles are grammaticalized morphemes, with no verbal qualities, that are added to the **end** of words, phrases, clauses, and/or propositions. They are unstressed morphemes that are phonologically separate from the words that they follow, so particles are written as separate words in this thesis. It can be argued that verbal particles could be treated as special clitics and pragmatic particles as phrasal affixes (Kroeger 2005).

³⁵ *Halae* ‘still/also’, *yol* ‘again’, *lei* ‘also/even’, and *nei* ‘and’ also occur in clause medial position. *Nael* ‘development marker’ can also occur in clause-final position and after a variety of phrases.

Whatever their exact designation, it is the convention among Loloish linguistic analyses (Matisoff 1973, Bjorverud 1998) to write them as separate words.

Particles are different than adverbs and auxiliaries. Adverbs express degree and manner concepts and fill the adjunct slot right before the verb. Most of them consist of more than one syllable. Particles express many other diverse concepts and follow the words, phrases, clauses, or utterances that they modify. Particles do not occur just before the verb. They are almost always one syllable morphemes. Auxiliaries are words that possess verbal characteristics; they can be reduplicated and negated.

Lolo has three major types of particles: 1) verbal, 2) pragmatic, and 3) sentential. Postpositions and clausal connectors are not included in this group.³⁶ With the exception of a little overlap between the pragmatic particles and clause connectors, these words are distinct from each other. Each set conveys different types of meaning and occurs in different positions within the sentence. The verbal particles follow verbal elements (verbs, adjectives, auxiliaries, and other verbal particles). The pragmatic particles follow NPs, PPs, locative/temporal expressions, and VCs. The sentential particles occur at the end of the sentence, after all other particles. For a summary of these distribution properties see Table 24.

³⁶ Matisoff assigns Lahu postpositions to a nominal particle class and clause connectors to a non-final unrestricted particle class (Matisoff 1973 and 2003).

Table 24: Distribution of Particles

NP Locative Phrase Temporal Phrase	postposition	pragmatic pcl
VC verbal element		pragmatic pcl
Sentence		pragmatic pcl
		sentential pcl

Specific characteristics of verbal, pragmatic, and sentential particles are discussed below.

3.14.1 Verbal Particles

Verbal particles are grammaticalized morphemes that occur within the VC, usually as the last member(s) of it. They contribute directional (125), aspectual (126), and modal meanings (127).

(125) Ni eilni-argeni jjir **lei** lei
2s today-tomorrow return VEN also

ngo zeixleir lei ni leil arbol nr ssi lol ar.
1s again also 2s to one.time not go allow FIN
'In the future when you **come** back, I (will) not allow you to leave anymore.'

(126) Nael yar maerssor ddei xiu mu **dae**.
DM 3s wife CL give.birth do IPFV
'His wife was **doing** her month (resting after the birth of the baby).'

(127) Ngo miar nr bei ael
1s task not do NF

ngama ngo leil hie **lei**.
my.mom 1s DOM scold probable
'Being the case that I (didn't) do the chores, mom (will) **probably** scold me.'

3.14.2 Pragmatic particles

Pragmatic particles constrain the listener to process the modified constituent as topical, circumstantial, thematic, contrastive, or prominent.³⁷ Several of them add prominence to the constituent that precedes them, while at the same time, draw attention to or highlight what follows. The topicalizer *mel*, non-final circumstantial *ael*, and the developmental *nael* occur so often that it is odd for an utterance not to have one of them. The other pragmatic particles are used less frequently. See Table 25 for a list of all the pragmatic particles.

Table 25: Pragmatic Particles

<i>mel</i>	‘concerning...’	default topicalization marker
<i>ael</i>	‘concerning...’	topicalization marker, nonfinal marker
<i>nael</i>	‘concerning...’	contrastive topicalization marker
<i>zzae</i>	‘one the one hand... on the other hand...’	contrastive marker
<i>dol</i>	‘however...’	contrastive thematic prominence marker
<i>giel</i>	‘in contrast...’	counterexpectation marker

Pragmatic particles follow the phrases they modify. With the exception of *giel* ‘in contrast’ (which only follows NPs), the other pragmatic particles follow NPs, PPs, locative/temporal expressions and VCs, so they have a wider distribution in the sentence than other particles and connectors.

³⁷ Matisoff (1973 and 2003) refers to Lahu equivalents as unrestricted nonfinal particles. Bjorverud (1998) refers to Lalo equivalents as topicalizers. Neither term accurately describes Lolo pragmatic particles, as they are not unrestricted in their distribution and not all of them are topicalizers.

Mel ‘topicalizer’ indicates that the preceding constituent is the topic (of at least that clause or sentence). It provides the point of departure (or basis) for the following utterance(s).

- (128) Ni **mel** einei bbeix nr ddo arddeir ar.
 2s TOP this.way say not may CONT.PROM FIN
 ‘As for you, (you) may not speak this way.’

Nael ‘developmental marker (DM)’ is a marked topicalizer after (non)arguments and VCs and is a clause-initial connector that indicates new developments at the beginning of clauses. It has diverse applications. First, it causes preceding constituents to become thematically prominent and draws attention to what follows it. Second, between certain propositions it indicates a progression from less important to more important relevance. Third, within stories it designates important developments in the plot.

The label for *nael* ‘DM’ comes from Dooley and Levinsohn (2001), who state that certain particles constrain a developmental interpretation, which means that they constrain the listener to move on to the next point. They explain that

Particularly in SOV languages that permit several subordinate clauses to precede the main verb, a DM [developmental marker] is often attached to the end of a subordinate clause to (act as a spacer and) mark the transition to the development described in the next clause. The absence of the DM, or its replacement by an additive, indicates that the same point is still being developed....

A developmental marker may also be attached to sentence introducers, to indicate that the sentence concerned represents a new development in the story or argument. It may also be attached to references to participants, to indicate that the next development(s) will involve the participant concerned (Dooley & Levinsohn 2001:93).

Levinsohn (2010a) explains that development particles also indicate a change in the spatial or temporal setting or circumstances, in the participants, or to/from

background comments. Example (129) illustrates *nael* as a marked topicalizer (that follows subject NPs) and as a developmental marker (that precedes the final sentence).

- (129) Hal-car ael capor maerssor ar zze zza.
 that -time NF husband wife a couple exist
 ‘At that time there was a couple.’

Capor ddei **nael** medeil, ssormaer ddei **nael** jilir.
 husband CL DM stupid wife CL DM smart
 ‘The husband was stupid; the wife was smart.’

Nael yar maerssor ddei xiu mu dae.
 DM 3s wife CL give.birth do IPFV
 ‘Now his wife was doing her month (resting after the birth of the baby).’

Zzae ‘on the one hand...on the other hand’ expresses contrast. It makes the constituent which precedes it prominent and draws attention to what follows it.

- (130) Giedae **zzae** piur zei lei **zzae** ael,
 afterwards CONT release down VEN CONT NF
 yarbbor leil nol deil zil jie dae ar.
 their-father DOM in hit dead insert IPFV FIN
 ‘But afterwards, **on the one hand** (they) released (him), (but they) had beaten their father to death.’

Zzirmar mu su ddei leil **zzae**
 king do NMLZ CL DOM CONT

yar piur teil lei ho arddeir nga ar.
 3s release out VEN already CONT.PROM be FIN
 ‘The king, **on the other hand**, he had already been freed.’

3.14.3 Sentential particles

Over thirty sentential particles occur at the end of propositions, after all other particles. They communicate the speaker’s perspective. They contribute evidential (131), mirative (132), validational (133), emotive (134)-(135), and prominence meanings (136)-(137). They have no verbal characteristics.

- (131) Naelnae yar zzaexpor mu ssi **zzor**.
DM 3s thief do AND hearsay
'Therefore he went to be a thief, **so the story teller heard.**'
- (132) Ni ddei ssormaer arsae nr hher dae **leir?**
2s ASSOC daughter how not here IPFV MIR
'**How is it** that your daughter is not here?'
- (133) Ngo ni leil nr gga **mar!**
1s 2s DOM not pull VAL
'**I am certain** I didn't pull you!'
- (134) Almer zzi **mei**.
rain soak upset
'**I am upset that** it rained (on me).'
- (135) Ngo ni leil hormol bol ae
1s 2s DOM how.many time call

ni lae ha nr du-lei **laer**.
2s still move not up-VEN incredulous
'**I can't believe** I have called you several times (and) you still do not get up!'

Neil 'question prominence' communicates that the question is important.

- (136) a Eilni niul zzaegu vae ssi nia.
today 1p stuff buy AND need
'Today we need to go buy stuff.'
- b Eilni niul zalbbaer ddux ael ni azo vae **neil?**
today 1p outside exit NF 2s what buy QUES.PROM
'Today (when) we go out what are you (going to) buy? (**This is important, I need to know.**)'

Arddeir ar (lit. one-classifier FIN) 'contrastive prominence' adds prominence to a declarative proposition usually by contrasting it with another statement.

- (137) a Ngo bei co ael aba ddei pur nr du-lei mei.
1s do wrong NF bread CL rise not up-VEN upset
'I made a mistake and am upset the cake didn't rise.'
- b Eil-ddei mel ni zzi nr nga,
this-CL TOP 2s fault not be

paodafer zzi **arddeir** **ar.**
 baking.powder fault CONT.PROM FIN
 ‘This is not your fault, **it is the baking powder’s fault.**’

Ar ‘perfective/COS/final’ functions as either a verbal perfective particle or as a sentential modal particle. **As a verbal particle** it expresses the perfective aspect in non-stative situations and change of state in stative situations. This is similar to what Smith (1991:346-47) and Xiao & McEnery (2004) report as the typical applications of the Mandarin Chinese post verb *-le*. **As a sentential particle** it does not contribute specific types of evidential, mirative, emotive, emphatic, or prominence meaning, as other sentential particles do. When *ar* modifies the entire utterance, it is a sentential modal particle that communicates that the utterance is complete, so it functions as a period. Native speakers inform me that it must be added to presentational sentences, so that the listener knows that the speaker does not intend to comment further. It is similar to the sentence final Chinese *le* that Li & Thompson describe:

... it is a mark of finality. It completes the sentence; without it, the sentence sounds incomplete, as if the speaker intends to say more. **It is almost as though it were functioning as a sentence-final punctuation marker** [emphasis mine]. When a person tells about something that happened or mentions a state of affairs as his contribution to the conversation and not as a response to some question or comment from another person, he is required to use it to tell the hearer why the proposition has been introduced (Li and Thompson 1981:238-83).

In the following utterance, three types of particles are used: the pragmatic particle *dol* ‘thematic contrast’, the verbal particles *dae* ‘imperfective’ and *piar* ‘perhaps’, and the sentential particle *ar* ‘final’.

- (138) Yar aniu ddo da bbeix
 3s child CL with say
- “Abor niabbor **dol**³⁸ aneipo hher da veixrbol hor niarnialniar
 Son father THEM gr.mom live with boar meat voraciously
- zzor dor **dae** **piar** **ar.**”
 eat NCES IPFV perhaps FIN
 ‘She said to the child, “Son, your father perhaps is voraciously eating fatty boar meat at grandmother's”.’

3.15 Interjections

Several interjections with emotive meanings occur at the beginning of sentences.

The syllable final vowel is lengthened for emphasis. As Watters explains for Kham, it can also be said of Lolo:

Interjections are primarily single word, emotive outbursts that do not enter into syntactic relations with other parts of the grammar. Very often, in fact, they occur in isolation and stand alone as full utterances (Watters 2002:188).

Yil ‘how strange’ and *giel* ‘bummer’ express varying degrees of surprise. *Armor* ‘dismayed’ and *armael* ‘wonderful’ communicate negative and positive reactions, respectively. *Eilaer* ‘disappointed’ is used much like a sigh to indicate that the speaker is disappointed.

Table 26: Interjections

yil	surprise	‘how strange’
giel	surprise	‘bummer’
armor	negative	‘dismayed’
armael	positive	‘wonderful’
eilaer	sigh	‘disappointed’

³⁸ *Dol* is a pragmatic particle that indicates contrastive thematic prominence. It indicates that the preceding constituent (usually a noun or verb) is being highlighted; that it is what the speaker is talking about, and at the same time, that it is being contrasted with something/someone else that follows.

- (139) Ngo pia eil-xiu vaer a nga seir.
 1s clothes this-clothes.CL buy PFV be still
- Giel** dder xiar ar.
 bumper then ruin PFV
 ‘I just bought this outfit. **Bummer!** (it is) ruined.’

Example (140) is uttered by a farmer who really needs the rain for the crops to survive.

- (140) Eilgielggur almer lei nr gor a mel
 for.a.while rain come not EXP PFV TOP
- armael** almer lei ar.
 great rain come COS
 ‘For a while it has not rained, **great** it is raining now.’

3.16 Differentiating Verbs, Adjectives, and Auxiliaries

Lolo verbs, adjectives, and auxiliaries have significant differences. Research in related Tibeto-Burman languages lends support to this division, but linguists disagree on the terminology and the status of adjectives as members of the verb class. LaPolla assigns Qiang intransitive stative verbs (adjectives) to a separate class from transitive and intransitive verbs (LaPolla 2003a:128 and 2003b:580). Bjorverud (1998) also observes for Lalo that there is sufficient variation between the behavior of adjectives and verbs to justify preserving the traditional distinction between them. But she chooses to establish a supergroup of ‘predicatives’ that includes both adjectives and verbs, which is actually similar to Matisoff’s ‘verb class’ that consists of both verbs and adjectives (Matisoff 2003:212). Even though Yu (2007) also treats Lisu adjectives as a type of verb (stative verbs), she identifies many dissimilarities between Lisu stative verbs and action verbs.

In Lahu, the presence of a negative before a word indicates its verbhood (Matisoff 2003). However, in Lolo, not only verbs and adjectives but also auxiliaries can be negated, so a diagnostic with more restrictions needs to be developed in order to properly distinguish these words from each other. First, the similarities and differences between the verb and adjective are presented. Then, the auxiliary is contrasted with the verb.

Both verbs and adjectives possess the following characteristics.

- They may be reduplicated to form yes/no questions.
- They may be negated.
- They may be modified by resultatives, aspects, and mode words (henceforth TAM)
- They may serve as the only element in the VC.
- They may be nominalized.

They differ in the following respects.

- Adjectives may be intensified; verbs usually are not.
- Adjectives may form comparative and superlative constructions; verbs do not.
- Strings of consecutive verbs are common; strings of consecutive adjectives are not.
- Adjectives may modify nouns; verbs do not.
- When adjectives and verbs co-occur in the same VC, adjectives follow verbs; verbs do not follow adjectives.
- Most verbs may be negated with the prohibitive *tor*, most adjectives may not.

These traits are exemplified in the following example sentences. Verbs and adjectives are reduplicable as seen in (141) and (142).

(141) Ni pia **cir cir** ho ar?
 2s clothes wash wash already PFV
 ‘Have you already washed the clothes?’

(142) Capor hal-ddei **mu mu**?
 man that-CL tall tall
 ‘(Is) that man tall?’

Both verbs and adjectives can be negated by *nr* ‘not’ as seen in (143) .

- | | | | | | | | |
|-------|-----|-----------|-----------------------------------|--|-----|-----------|------------------------------|
| (143) | yar | nr | su | | Yar | nr | mu. |
| | 3s | not | snatch | | 3s | not | tall. |
| | | | ‘...he did not grab (it).’ | | | | ‘She (is) not tall .’ |

Verbs and adjectives can be modified by TAM words. However, directionals do not typically follow adjectives. When they do, the directional usually has an aspectual or metaphorical meaning as in (145), not a directional one as in (144).

- | | | | | | | | |
|-------|----|------------|-----------------------------|--|--|--|--|
| (144) | Ni | vei | du-lei. | | | | |
| | 2s | take | up-come | | | | |
| | | V | DIR | | | | |
| | | | ‘You pick (it) up .’ | | | | |
-
- | | | | | | | |
|-------|--------|-------------------------------|--|---------------|---------------|--|
| (145) | yolyol | zzi-car-zzi-leil | | sirzzi | du-lei | var. |
| | also | each.other-time-each.other-at | | angry | up-come can | |
| | | | | ADJ | INCOA | |
| | | | | | | ‘... (you) can also become angry with one another.’ |

They may serve as the only element in the VC.

- | | | | | | | |
|-------|------|-----------------------|------|------|--------|--------------------------------|
| (146) | Ngua | bbecir-bbeni | | lei | almeir | zzor. |
| | 2p | divide.one-divide.day | also | food | eat | |
| | | | | | V | |
| | | | | | | ‘We eat rice everyday.’ |
-
- | | | | | | |
|-------|----|-------|---------|--------|--|
| (147) | Ni | ddei | pia | yarzi | ssei. |
| | 2s | ASSOC | clothes | really | good.condition |
| | | | | | ADJ |
| | | | | | ‘Your clothes (are) in good condition (though they are old).’ |
-
- | | | | | | | | | |
|-------|---------|------|------|----------------|----------|------|------|---|
| (148) | capor | ddei | nael | medeil; | ssormaer | ddei | nael | jilir. |
| | husband | CL | DM | stupid | wife | CL | DM | smart |
| | | | | ADJ | | | | ADJ |
| | | | | | | | | ‘The husband (was) stupid ; the wife (was) smart .’ |

(153) Yar **bir** **ngo** **leil** **jilir.**
 3s more 1s to smart
 ‘He is **smarter** than I.’

(154) Yar mel **seir** **zzir.**
 3s TOP good most
 ‘He (is) the **best.**’

(155) *Yar **bir** **ngo** **leil** **bei.**
 3s more 1s to do
 *‘He **runs more** than me.’

(156) *Yar mel almeir **bei** **zzir.**
 3s TOP rice do most
 *‘He **most makes** rice.’

Consecutive strings of verbs are common as in (157); consecutive strings of adjectives are not. The adjective string in (158) is ungrammatical. It is not impossible for strings of consecutive adjectives to occur, but adjectives tend to be expressed as members of different VCs as (159) demonstrates. (See 6.2 on verb serialization for more examples and discussion of verb sequences.)

(157) Ngo nia leil **bil** **jjiu** lei bbeix.
 1s 2p DOM carry help VEN say
 ‘“I come to **help** you **carry**,” (he) said.’

(158) *Yar **seir** **igazae** **jilir.**
 3s good pretty smart
 *‘She is **good, pretty, smart.**’

(159) Pia hal-xiu **narcil,** halae **igazae,** yol **sil.**
 clothes that-CL good also pretty also new
 ‘Those clothes are **good quality**, also **pretty**, also **new.**’

Adjectives may modify nouns as in (160); verbs do not as in (161).

(160) **Aniu** **yeye** ake **jjir.**
 Child smallest home return
 ‘(The) **smallest child** returned home.’

- (161) ***Aniu nger** ake jjir
 child cry house return
 *‘The **crying child** returned home.’

Even though both adjectives and verbs can function as predicates, when they occur within the same VC, adjectives always follow verbs as in (162) and (163); verbs do not follow adjectives as in (164).

- (162) ni lei yar da bei **hor** ddo.
 2s also 3s with do compatible may
 V ADJ
 ‘...you should be compatible with him.’

- (163) Ni pia eil-xiu veir ael bixr yar veir leil i **zae**.
 2s clothes this-CL wear NF compare 3s wear DOM look pretty
 V ADJ
 ‘The clothes you are wearing are prettier than the ones she wears.’

- (164) *hor **bei** *zae i dae
 right do pretty look IPFV
 *ADJ V *ADJ V

Most verbs may be negated with the prohibitive *tor* ‘don’t’ as in (165); most adjectives are not, as illustrated in (166).

- (165) **tor** (nr) **hie** (166) ***tor** **medeil**
 don’t not yell don’t stupid
 ‘Don’t yell.’ *‘Don’t be stupid.’

Lolo auxiliaries are also distinct from verbs. They demonstrate verbal qualities in that they are negatable and reduplicable. Like verbs, they may also occur in strings. Otherwise, they act differently. They may not serve as the only element in the VC. They may not be uttered independent of a verb or adjective; they must always follow them. They may not take arguments and may not be nominalized. They are grammaticalized morphemes, whose semantic content is generally more grammatical than it is lexical.

They express directional, aspectual, and modal meanings primarily. Many of them derive from verbs. These traits are summarized below.

Both verbs and auxiliaries possess the following characteristics.

- They may be reduplicated to form questions.
- They may be negated with *nr* ‘not’.
- They may be modified by TAM words.
- They may occur in strings.

Verbs and auxiliaries are different in the following respects:

- Auxiliaries cannot stand alone in the VC.
- Auxiliaries cannot take arguments.
- Auxiliaries cannot be nominalized.
- Auxiliaries cannot be negated with the prohibitive *tor* ‘don’t’.
- The semantic content of auxiliaries is more abstract than that of verbs.

Auxiliaries may be reduplicated to form yes/no questions.

- (167) Yar pia cir **til til** ar.
 She clothes wash finish finish FIN
 ‘Did she finish washing the clothes?’

Auxiliaries may be negated with *nr* ‘not’.

- (168) Yar pia cir **nr til** seir.
 She clothes wash **not finish** still.
 ‘She still did **not finish** washing the clothes.’

But auxiliaries cannot be negated with *tor* ‘don’t’.

- (169) *Pia cir **tor til**.
 clothes wash don’t finish.
 *‘**Don’t finish** washing the clothes.’

Auxiliaries do not function as independent verbs; they cannot stand alone in the VC.

- (170) *Yar pia **til**.
 She clothes finish
 *‘She **finishes** clothes.’

Within the same VC, auxiliaries follow verbs as in (171); verbs cannot follow auxiliaries as in (172).

- (171) Yar pia cir **til** ar.
 She clothes wash finish FIN.
 V AUX
 ‘She **finished** washing the clothes.’

- (172) *Yar pia **til** cir ar.
 She clothes finish wash FIN.
 AUX V
 *‘She **finished** washing the clothes.’

Auxiliaries may not be nominalized as seen in (173).

- (173) ***Til-labox** ***Til-ggie** ***Til-ddu**
 *finish-NMLZ *finish-NMLZ *finish-NMLZ

These characteristics are summarized in Table 28.

Table 28: Characteristics of Verbs, Adjectives, and Auxiliaries

	Verb	Adjective	Auxiliary
Reduplicable	X	X	X
Negatable with <i>nr</i> ‘not’	X	X	X
Negatable with <i>tor</i> ‘don’t’	X		
May take an argument	X	X	
Modified by TAM particles	X	X	X
Only element in VC/ Functions as clause predicate	X	X	
May be nominalized	X	X	
Intensifiable		X	
May form comparative and superlative constructions		X	
May modify nouns within NP		X	
May be concatenated	X		X

3.17 Complex Expressions

Lolo has a vast array of complex nominal, quantifier, adjectival, and adverbial expressions in ABCD, ABAC, or AABB structures. Some linguists, such as Haas (1964) and Mortensen (2003), refer to words/phrases with ABAC and AABB structures as elaborate expressions. Watters (2002) uses the term “expressive.” These are parallel constructions usually characterized by the repetition of some element and consisting of four parts (Mortensen 2003). They are attested in numerous languages of Southeast Asia including Kham (Watters 2002), Lahu (Matisoff 1973), Thai (Haas 1964), and Hmong (Mortensen 2003). Lolo complex expressions are compounds formed from nouns, classifiers, locative/temporal roots, numerals, adjectives, verbs, and/or auxiliaries.

Lolo complex expressions are not rare. They are abundant and diverse, rich in meaning, and frequently used. The propensity to use these kinds of expressions is also attested in other TB languages. Watters (2002) identifies a large class of more than 750 adverbials in Kham. Mortensen observes that “[o]n exposure to Hmong discourse, or that of many other structurally-similar Southeast Asian languages—the speaker of English can hardly help but be impressed by the pervasiveness of parallelism in this discourse tradition. **Almost everything seems to be repeated, often in balanced pairs** [emphasis mine].... parallelism plays a greater role in the grammatical structure of the [Hmong] language than it does in English” (Mortensen 2003:1).

Phonologically, they act like words. Grammatically, they are indivisible compounds that do not allow the insertion of any additional morphemes. Semantically,

their meanings are often not fully predictable from their constituent elements and sometimes their meaning is even opaque as in (174) and (175).

(174) Ngua ake **zzar-vul-zzar-mae** yarzi seibeix.
 1p house in-in-in-area/accompany really clean
 ‘**Every place** (in) our house is really clean.’

(175) Yaa ggucirmi cirbelde **dox-ke-dox-yol,** yarzi cirbbeir.
 3p doorway trash pour-some-pour-kind really dirty
 ‘(At) their doorway (is) **a lot** of trash, (it is) really dirty.’

They can contain fossilized elements as in (176).

(176) goxr-ni-goxr-lael
 ?-red-? -change
 ‘naked’

3.17.1 Complex Nominal Expressions

Four-syllable nominal compounds usually have ABCD or ABAC structures. Many are formed with locative roots, temporal roots, nouns, or adjectives. It is common to add the numeral *cir* ‘one’ to a locative/temporal root to form a complex nominal, as several examples in Table 29 illustrate.

Table 29: Complex Nominal Expressions

Formed w/ locative roots	Gloss	Meaning
zzar-vul-zzar-mae cir- maex -ha-nga	in-in-in-accompany one-place-every-be	‘everyplace, everywhere’ ‘everywhere’
Formed w/ temporal roots		
cir- se -cir- leixr mer- xiel -mer- ni bbe-cir- bbe-ni cir- kol -ha-nga	one-life-one-period sky-evening-sky-day divide-one-divide-day one-year-every-be	‘a life time’ ‘all day all night’ ‘every day’ ‘every year’
Formed w/ adjectives		
mar-mar-leixl-leixl vaer-vaer-ye-ye	old-old-youth-youth big-big-small-small	‘old and young (people)’ ‘big and small (people)’
Formed w/ nouns		
arbor-ama arzzi-nimar	father-mother older.brother- younger.brother	‘parent’ ‘older and younger brothers’

Complex nominal expressions often serve as locative/temporal adjuncts in the clause as (177) and (178) illustrate.

(177) Ake ca ael **cir-maex-ha-nga** ca seixbeix nia.
home wipe NF one-place-every-be wipe clean must
‘(When you) wipe the house, (you) need to clean **everywhere**.’

(178) Yar **mer-xiel-mer-ni** lei miar bei doxr, yarzi sulku.
3s sky-night-sky-day also task do NCES really suffer
‘He works without ceasing **all day and all night**, (he) really suffers.’

Some expressions formed from adjectives can function as nouns in the clause as (179) demonstrates.

(179) Gulsil gor mel **mar-mar-leix-leix** lei pia sil veir.
 New Years live TOP old-old-young-young all clothes new wear
 ‘(When we) celebrate New Years, all the **old and young** (people) wear new
 clothes.’

3.17.2 Complex Adjectival and Quantifier Expressions

Many descriptive words are complex adjectival expressions formed from the combination of nouns, classifiers, verbs, and/or adjectives with other morphemes in ABAC or AABB structures. Several of these are formed with *lil* ‘rice seedling’, which communicates ‘much’ or ‘increased intensity’ within the adjectival expression. A sampling of these complex adjectival expressions is provided in Table 30.

Table 30: Complex Adjectival and Quantifier Expressions

Adjectival Expression	Gloss	Meaning
ol-mi-ol-seir	head-dizzy-head-good	‘carefree’
leix-gger-leix-la	young-give-young-light	‘young’
neix-ssaer-neix-lil	black-?-black-much	‘very black (in color)’
zil-kur-zil-lil	die-?-die-much	‘high degree of burning (pain)’
ddi-ddi-ddu-ddu	?-?-hole-hole	‘ragged, tattered, damaged’
Quantifier Expression		
cir-ddeir-lor-bba	one-sing.CL-become-serve.out	‘whole thing’
cir-yor-ha-nga	one-kind.CL-every-be	‘everykind’

Complex adjectival expressions function in the sentence like regular adjectives do. In (180) the adjectival expression functions as a predicate. In (181) the adjectival

expression modifies the preceding noun. Some complex adjectival expressions can also function as adverbials.⁴⁰

- (180) Ssormaer hal-ddei ddei elce pir **neix-ssaer-neix-lil**, yarzi narcil.
 woman that-CL ASSOC hair braid black-?-black-much really good
 ‘That woman’s braid is **very black** (and) really nice.’
- (181) Ca hal-te pia **ddi-ddi-ddu-ddu-mo** ar xiu veix dae.
 person that-CL clothes ?-?-hole-hole-quality.of one CL wear IPFV
 ‘That person is wearing **ragged** clothes.’

Complex quantifier expressions are often formed with *cir* ‘one’ + a classifier. The complex expression in (182) quantifies the noun *yi* ‘chicken’.

- (182) Yar yi **cir-ddeir-lor-bba** zzor jjia ar.
 3s chicken one-CL-become-serve eat all PFV
 ‘He ate the **whole** chicken.’

3.17.3 Complex Adverbial Expressions

Many complex adverbial expressions are formed from two syllable adjectives or verbs that reduplicate in AABB and ABAC patterns. Refer to Table 31 for a sampling of these.

⁴⁰ Although it is true that certain Lolo words are just adjectives while others are only adverbs, the distinction between these two classes, especially between complex adjectival and adverbial expressions, is not always definitive. Some adjectival expressions can function as either adjectives or adverbs.

Table 31: Complex Adverbial Expressions

Expression	Gloss	Meaning
maer-maer-ssi-ssi	maerssi ‘neat’	‘orderly’
gge-gge-se-se	ggese ‘happy’	‘happily’
me-me-lal-lal	crush-crush-CL-CL	‘crushed, shredded manner’
ddir-ddir-ddux-ddux	enter-enter-exit-exit	‘going in and out’
vei-cil-vei-ge	take-??-take-??	‘manner of taking back and forth’
ker-sil-ker-bbax	smoke-emit-smoke-move	‘manner of emission-very smoky’
aex-yir-aex-ba	drink-sleep-drink-lying	‘manner of drunken state-flat out’

Some adjectives reduplicate in AABB and ABAC patterns to form adverbial expressions. The adjectives *zzi* ‘slow’ and *zzae* ‘slant’ become the adverbial *zzi-zzi-zzae-zzae* ‘tottering’.

- (183) Aniu ddo **zzi-zzi-zzae-zzae** ssi.
 child CL slow-slow-slant-slant walk
 ‘The child walks in a **tottering manner**.’

The adjective *worcil* ‘strong’ becomes the adverbial *worcil-worni* ‘vigorously or loudly.’

- (184) Camar hal-ddei nolbbar
 old.person that-CL hard.of.hearing

 yel yar da ddar biar ael **worcil-worni** biar nia.
 so 3s with word say NF strong-strong say must
 ‘That old person is hard of hearing, so (you) must speak **loudly** with him/her.’

Verbs also reduplicate in ABAC patterns. The verb *xia* ‘wait’ becomes the adverbial *xialil-xialoxr* ‘loudly and unhappily’.

- (185) Aniu hal-ddo mel yarma yar leil deil ael,
 child that-CL top his.mom 3s DOM hit NF

xia-lil-xia-loxr nge dor dae.
 wait-much-wait-? cry NCES IPFV
 ‘Concerning that child, (because) his mom hit him, he keeps on crying **loudly and unhappily**.’

CHAPTER 4
NOUN PHRASE AND VERB COMPLEX

This chapter discusses noun phrases, genitive constructions, classifier phrases, postposition phrases, and the verb complex.

4.1 Noun Phrase

A noun phrase may consist of just a noun or a pronoun or it may have a genitive construction (GEN) or a restricting clause, nouns, an adjective (ADJ), and a classifier phrase (CLP)—in that order. The noun is obligatory; all other elements are optional. But if the noun is understood in the context, even it may be omitted sometimes. In such cases, the NP will consist of a classifier phrase.⁴¹

Table 32: Noun Phrase

(Genitive) (Restricting Clause)	(N)	N	(Adjective)	(Classifier Phrase)
------------------------------------	-----	---	-------------	---------------------

Sentence (186) illustrates two NPs: one NP comprised of a pronoun and another comprised of a noun.

⁴¹ This is also the case in Lisu, where NPs may consist of only a demonstrative or numeral plus classifier (Bradley 2003:227).

- (186) **Yar alddur** ggabil.
 3s door close
 PN N
 ‘**He** closes the **door**.’

Some NPs (187) just consist of a classifier phrase because the head noun is understood from the context.

- (187) Yar ngo leil **ar xiu** gger.
 3s 1s to one CL give
 ‘He gives me **one** (set of clothes).’

The NP in (188) is comprised of a pronoun, two nouns, and a classifier.

- (188) **yaa bbiurvi warga ddei** gga
 3p honey pot CL in
 PN N N CLP
 ‘in **their honey pot**’

If two nouns co-occur in the same NP, the first one modifies the second.

- (189) **sil xie** ar gie
 grass house one CL
 N N CLP
 ‘one **grass hut**’
- (190) **so aba** ar ddei
 wheat bread one CL
 ‘one **wheat bread**’

An adjective may follow the head noun of the NP.

- (191) ggor **hie** ddei
 buckwheat dry CL
 N ADJ
 ‘the **dry** buckwheat’

Restrictive relative clauses precede the head noun of the NP.⁴²

- (192) **Lu leil ga dae** xialpil hal-ddei de zei lei ar.
 wall on hang IPFV picture that-CL fall down VEN PFV
 ‘The picture **that hangs on the wall** fell down.’

When *ddei* ‘general classifier’ is in the classifier position as in (188) and (191), it indicates specificity in the NP. But when *ddei* follows NPs, it serves an associative function. It joins possessor NPs and possessed NPs in genitive constructions as in (195) and (197).⁴³

Definiteness can be indicated by a bare classifier as in (188) and (191) or by a deictic demonstrative + classifier as in (193). Indefiniteness is indicated by the numeral *ar* ‘one’ + classifier as in (194).

- (193) Yi (ha)-**te** anol ddei leil cor.
 chicken that-CL dog CL DOM bothers
 ‘**The/that** chicken bothers the dog.’

- (194) Xie [**ar gie/ar mel**] leil ado bbiur du lei ar.
 house one CL/one PL to fire burn up VEN COS
 ‘**A house/some** houses started burning.’

⁴² Both the ordering of the adjective and the restrictive relative clause—in relation to the head N—is consistent with what Dryer has found to be typical of other eastern Tibeto-Burman OV languages (Dryer 2003:37).

⁴³ Matisoff states that the Lahu equivalent *ve* is also versatile, as it marks possessive constructions, forms the most general kind of nominalizations, and marks embedded clauses as topics (Matisoff 2003: 216-219). Bradley also observes that the Lisu equivalent *ma* is a general classifier and a nominalizer/relativizer (Bradley 2003:228).

4.1.1 Genitive

The genitive is an NP that precedes the head N. The associative *ddei* follows the possessor NP and precedes the possessed N. It is optional if the possessor NP is a pronoun, but otherwise it is obligatory.

Table 33: Genitive

Genitive		N
NP	(ddei)	

- (195) **ngago** **ddei** dilhua
 my.older.brother ASSOC telephone
 ‘My older brother’s phone’

The associative *ddei* is often omitted in genitive constructions when the possessor is expressed with a pronoun.

- (196) **ngo** \emptyset maeji luldaddur
 1s hemp pants
 ‘my hemp pants’

The genitive may consist of a full NP followed by the associative *ddei*. *Ddei* is not functioning as a classifier in (197), *ler* ‘numeral classifier’ is.

- (197) **niul** **ca** **lil-ler** **ddei** miar
 1p people 4-CL ASSOC task
 ‘our four people’s task’

4.1.2 Classifier Phrase

Classifier phrases are composed of a deictic demonstrative and/or a numeral and a classifier, in that order. Only the classifier is obligatory. Classifier phrases follow the head N.

Table 34: Classifier Phrase

(N)	Classifier Phrase		
	(Demonstrative)	(Numeral)	Classifier

Deictic demonstratives and numerals both precede classifiers; the demonstrative always precedes the numeral as in (199).

(198) silhua **cir** **tae**
 persimmon one CL
 NUM CL
 ‘one persimmon’

(199) Veixr **eil** **nr** **nel** leil vur pil gger nia.
 pig this two CL DOM sell away give will
 DEM NUM CL
 ‘(We) will sell **these two** pigs.’

As mentioned above, classifiers may occur without deictic demonstratives and numerals preceding them to mark definiteness. In (200), the speaker is referring to a specific man and woman she has in mind.

(200) capor ∅ **ddei** nael bbaeyo, ssormaer ∅ **ddei** nael sulkul.
 man CL DM lazy woman CL DM suffer
 ‘The man/husband is lazy, the woman suffers.’

Because deictic demonstratives never occur without a classifier (201b), but must be followed by one of them (201a), I consider them to be a constituent of the classifier phrase.⁴⁴

⁴⁴ Bjorverud (1998) also treats Lalo determiner-numeral-classifier constructions in the same way.

- | | | | | | | | |
|-------|---|---------------|-----------|--|---|-------------|---|
| (201) | a | hal | hhexr | | b | *hal | Ø |
| | | that | family.CL | | | that | |
| | | DEM | CL | | | DEM | |
| | | 'that family' | | | | *'that' | |

4.2 Postposition Phrase

A postposition phrase consists of a NP followed by a postposition.

- | | | | | |
|-------|-----|-----------------|--------------|--|
| (202) | yar | maerssor | da | |
| | 3s | wife | with | |
| | NP | | Postposition | |
| | | 'with his wife' | | |
-
- | | | | | | |
|-------|-----|--------------------|-------|------|--------------|
| (203) | yaa | bbiurvi | warga | ddei | gga |
| | 3p | honey | pot | CL | in |
| | NP | | | | Postposition |
| | | 'in his honey pot' | | | |

4.3 Verb Complex

The VC consists of negators, verbs, adjectives, auxiliaries, and verbal particles. The negators, auxiliaries, and verbal particles are distributed among five major semantic categories: negators, resultatives, aspectuals, causative, and VC mode words as illustrated in Table 35.

LaPolla (2003a and 2003b) also uses the term 'verb complex'. This is a term which reflects its complicated structure without implying the presence of other elements, such as various (non)arguments, which are not included in the VC. He also clarifies that the verb complex is the predicating part of the clause that does not include sentence-final particles. Neither are Lolo sentential particles members of the VC because they modify the utterance, not the verb.

Table 35: VC Elements

Negators	Consists of prohibitive <i>tor</i> or negative <i>nr</i> .
Resultatives	Consists of directional auxiliaries/particles, result-states, the benefactive <i>gger</i> ‘give’, and completive auxiliaries.
Aspects	Consists of aspectual (imperfective and perfective) auxiliaries and particles.
Causative	Consists of the causative <i>lol</i> .
VC Mode Words	Consists of verbal auxiliaries and particles that modify the verb (not the proposition) and provide deontic, permissive, potential, optative, imperative, and (ir)realis information to the VC.
Verbs/Adjectives	Open classes

Except for the negators and causative, the other four categories can be further subdivided, but it is beyond the scope of this thesis to discuss the characteristics, members, and ordering restrictions of the words in these subgroups. The members of each group (except the verbs and adjectives) share similar meanings.

Besides sharing semantic similarities, the members of each group also occupy the same position within the VC. Very strict ordering restrictions apply to these words, so their position within the VC and in relation to each other is fixed. Verbs, adjectives, and auxiliaries possess verbal characteristics; the negators and verbal particles do not.

A typical VC may consist of a prohibitive (PROH) *tor*, a negative (NEG) *nr*, a verb and/or an adjective, resultatives (RES), aspects (ASP), a causative (CAUS) *lol*, and mode words (MOD), in that order. All elements in the VC are optional, except the head which can be a verb or adjective. Most of the elements in the VC follow the verb or adjective; only the negative and prohibitive precede the head. The prohibitive *tor* ‘don’t’

only precedes the verb, but the position of the negator *nr* ‘not’ can change within the VC, as explained in 3.10. Within the resultative, aspectual, and modal sub classes, the auxiliaries (represented as DIR1, ASP1, and MOD1) always precede the particles (represented by DIR2, ASP2, and MOD2). This ordering principle allows for a directional particle to follow a directional auxiliary, but to precede an aspectual or modal auxiliary.

Like Matisoff (1973), I treat all preverbal adverbs differently than post-verbal particles. They serve different functions and occur in different places in the clause. Manner expressions are not considered elements of the VC because they can precede other arguments in the clause; that is, they may be fronted for emphasis. Pragmatic particles are not members of the VC, so their presence between verbs or adjectives indicates that the verbs or adjectives are in separate VCs.⁴⁵ The distribution of these verbal elements is illustrated in Table 36.

Table 36: Verb Complex

VC										PRAG PCL
(Negators)		Verb and/or Adj	(Resultatives)		(Aspects)		CAUS	(Modes)		
PRO	NEG		DIR1	DIR2	ASP1	ASP2		MOD1	MOD2	

⁴⁵ Wheatley (2003:203) attests to a similar phenomenon in Burmese where “[c]oncatenations can be resolved into temporally consecutive clauses by the insertion of the subordinating particle....” The nature of the relationship of juxtaposed verbs is discussed in chapter 6.

In (204) the VC consists of just the verb *guir* ‘roll’.

- (204) Zzaexpor ddei mel yaa bbiurvi warga ddei gga arleixr **guir**.
 thief CL TOP 3p honey pot CL in a-bit roll
 ‘The thief **rolled** a bit in their honey pot.’

In (205) the VC is more complex; the verb is followed by a directional 1 auxiliary, a benefactive, a directional 2 particle, a completive (repeated to form the question), and the mode 2 realis verbal particle. The sentential particle *ar* ‘final’ follows the VC.

- (205) Ni zzaegu hal-mel ngo leil
 2s stuff that-plural.CL 1s for

vei zei gger lei jjia jjia ho ar?
 take descend give VEN all all already FIN
 V DIR1 BEN DIR2 COMPL MOD2 SENT
 ‘**Have you already brought all** the stuff **down** for me?’

In (206) the verb is followed by the causative *lol* ‘let/allow’, the negative *nr* ‘not’, and the mode auxiliary *ddo* ‘permit’. The sentential particles *arddeir* ‘contrastive prominence’ and *ar* ‘final’ follow the VC.

- (206) **Zzor lol nr ddo** arddeir ar.
 Eat let not permit CONT.PROM FIN
 V CAUS NEG MOD1 SENT SENT
 ‘(You) certainly **shouldn’t have let** him eat (that).’

CHAPTER 5

CLAUSES AND SENTENCES

This chapter describes clause structure and clause types. It also explains how clauses combine to form sentences. It concludes with a brief description of sentence types.

5.1 Order of Constituents in the Clause

Lolo is an SOV, SV language.

(207) Ni yifu vei xiel si.
 2s chicken.egg take return away
S O V
 ‘You take the eggs back.’

(208) Eil-bol ni zalbbaer ssi du si ar.
 this-time 2s outside go up away PFV
S V
 ‘Now you have already gone away (to the) outside.’

(209) Almer lei dae ar.
 rain come IPFV FIN
S V
 ‘It is raining now.’

Interjections, connectors, and topicalized elements appear at the beginning of clauses and sentences. (Non)arguments follow them in the following order (from furthest away to closest to the verb): time, subject, place, oblique (goal/beneficiary/recipient), object (undergoer/patient) and manner. Neither the place adjunct nor the recipient/beneficiary typically precedes the subject, in contrast to Matisoff’s observation for Lahu and LaPolla’s for Qiang that BOTH time and place tend to come before those

referring to participants in the verbal event (Matisoff 2003:211-12 and LaPolla 2003b:584). The place adjunct seems to freely alternate positions with the recipient/beneficiary, with no apparent difference in meaning or prominence. The latter of the constituents (whichever it is in any given clause) seems to be the one that is contributing new information. These constituents and the unmarked order of a typical Lolo clause are presented in Table 37. Elements in parenthesis are optional; only the predicate is obligatory. It is usually filled with a VC, but in equative clauses the predicate can be an NP.

Table 37: Order of Constituents in the Lolo Clause⁴⁶

	(Core Arguments & Adjuncts)						Predicate	
(Interjections or Connectors)	(Time)	(Subject)	(Place)	(OBL)	(O)	(Manner)	VC	(Pragmatic particles and/or Connectors)
(Topicalized (non) arguments)							or NP	

This ordering is demonstrated in (210).

(210) Albor niabor dol aneipo hhexr da
son your.father TM grandmom family.CL with
VOC S PLACE

⁴⁶ Subjects, objects, and obliques are arguments, while time, place, and manner are adjuncts.

veixrbol hor niarnialniar zzor dor dae piar ar
 boar meat fatty eat NCES IPFV perhaps FIN
O VC SENT
 ‘Son, your father perhaps is eating fatty boar meat at grandmother’s.’

All (non)arguments precede the VC. Clausal connectors occur at the beginning and end of clauses; sentential particles occur sentence finally.

(211) Yel eilni ngua zzomeillexie gga zabbar seilseir-ala
 So today 1p kitchen in carefully good-good-ADVLZ
CONN TIME S PLACE MANNER
 ni leil aba bei gger ngo ar.⁴⁷
 2s for bread make give EVI FIN
OBL O VC SENT SENT
 ‘So (I) suggest (that) today we carefully make bread for you in the kitchen.’

Although the VC is obligatory in verbal clauses, it is optional in equative clauses such as (212) and (213). (See 5.2.9 for examples of equative clauses with the copula *nga* ‘be’.)

(212) Yar mel Lorlopor ar.
 She TOP Lolo.person FIN
 ‘She (is) Lolopo.’

(213) Nael cir ddei nael zzaexpor;
 DM one CL DM thief
 cir ddei nael zzirmar.
 one CL DM king
 ‘One (was a) thief; one (was a) king.’

Like other Loloish languages, (non)arguments are always ordered to the left of the verb and even to the left of strings of verbs (Wheatley 1985:407-409, Matisoff 2003:211). Any one of the (non)arguments may be fronted to the beginning of the clause,

⁴⁷ Although this is an acceptable utterance, the Lolo people do not typically include so much information in one clause.

either to be topicalized or made prominent.⁴⁸ The order of the (non)arguments, in relation to each other, may vary according to the emphasis of the speaker, but whatever the focus or prominence, all of these (non)arguments occur prior to the verb. The order of these constituents is influenced by the principle of natural information flow, the existence of points of departure, and various kinds of prominence.

The principle of natural information flow is the propensity in many languages for the established information to be presented before the non-established information (Levinsohn 2010a). This seems to be the case in many Lolo sentences, for the constituents which contribute the new information occur later in the clause. These constituents are not specially marked; their position is just closer to the verb.

Points of departure (PODs) signify discontinuities in speech, occur at the beginning of clauses, correlate with established information, and are not focused constituents (Levinsohn 2010a). Accordingly, some Lolo constituents may be fronted to the beginning of the clause and are followed by the default topicalizer (TOP) *mel*, the NF *ael*, or the contrastive topicalizer *nael* in order to signify that they provide the point of departure of the following utterance.

Since the default location of the subject is already before the other arguments and the place and manner adjuncts, its prominence is not most effectively communicated

⁴⁸ Fraser observed that (non)arguments in the Lisu language were preposed for emphasis (Fraser 1922).

LaPolla states that in Qiang “The order of the NPs in the clause is affected by pragmatic factors. Utterance-initial position is the unmarked topic position, while the position immediately before the verb is the unmarked focus position” (LaPolla 2003a:221).

through its fronting, but rather with the pragmatic words from Table 25 that follow it. Since the position of the verb is always after the (non)arguments, its prominence is indicated by other means, not through the reordering of constituents.

When subjects and objects co-occur within the same clause, they are often distinguished from each other by means of position. The default order is for the subject to precede the object. (OS order is also possible, but not near as common). The subject usually is animate; the object more likely is not, as in (214). Sometimes subjects and objects can be distinguished from each other by case marking. When the object is a human, it is marked with the postposition *leil* ‘DOM’ to differentiate it from the subject as in (215). Animate non-human objects can also optionally take the postposition *leil* ‘DOM’.

(214) Yar alddur **deil**.
 3s door hit
 S O V
 ‘She **knocks** (on the) door.’

(215) Argol nimar leil **deil**.
 old.brother young.brother DOM hit
 S O V
 ‘(The) older brother **hit** (the) younger brother.’

It is not just objects that can take *leil*. Obliques, whether animate or not, are also usually marked with *leil* ‘at/on/to/for’ as (216 - 217) demonstrate.

(216) Ngo **leil** kol gger la.
 1s to return give IMP
 ‘Give (it) back to me okay.’

- (217) Zhentou barde ddei **leil** nal dae.
 pillow chair CL on put IMP
 ‘The cushion is on the chair.’

Matisoff (2003) discusses an equivalent word in Lahu, *tha* ‘upper surface/top part’. He refers to it as a noun particle and says that it acts as an object marker in Lahu. He explains that the word originally meant ‘ascend/above’. He states that in its function as an object marker “...it is used sparingly, only where clarity demands or emphasis is required. When both direct and indirect objects are present, *tha* will follow the indirect object. This is because indirect objects are typically human, so that an explicit marker is sometimes required to exclude an agentive interpretation” (Matisoff 2003:215). The Lolo *leil* ‘DOM’, however, is not used sparingly, and it is not applied only when clarity is required.

Gerner (2008) also discusses an equivalent word in Yongren Lolo, *t^hie₂₁*. He labels it as an ambiguity-driven differential object marker. He states that the morphological marker *t^hie₂₁* is obligatory if and only if the roles of A (agent) and O (object) or B (oblique) “cannot be unambiguously retrieved from the semantics of the verb” (Gerner 2008:324). He says that

Yongren Lolo is...a kind of language which mobilizes grammatical devices only when universal semantic principles fail to assign participant roles. For a huge chunk of clauses, Lolo does not mark anything, either by morphology or by word order. When an ambiguity arises, Lolo opens first the morphological toolbox and then, in case that ambiguity persists, a second toolbox of word-order hierarchies (Gerner 2008:329).

It cannot be said, however, that the Lolo *leil* ‘DOM’ is obligatory if and only if the roles of A and O or B are ambiguous, as it is applied to all human direct objects.

LaPolla (2003b:578) explains that the Qiang equivalent *ta* is a type of ‘anti-ergative’ marking. He says that “[i]n general the NP representing the undergoer of a transitive verb does not take any marking of its undergoer status, though if the undergoer is animate and the NP representing the actor does not have agentive marking the locative marker /ta/ can be used after the NP representing the undergoer.” The same cannot be said of *leil* ‘DOM’, because the marking on the object is not at all related to any marking on the subject (as the subject in Lolo is not marked).

5.2 Simple Clauses

This section provides examples of intransitive, transitive, active, passive, locative, existential, possessive, attributive, and equative clauses.

5.2.1 Intransitive Clauses

Intransitive clauses are formed with intransitive verbs that subcategorize for one direct argument as in (218) - (221).

(218) Aniu yelye **yir** dae.
 child small sleep IPFV
 ‘The baby is **sleeping**.’

(219) Wor **lei** gor ar.
 snow come EXP PFV
 ‘It has snowed (here before).’

(220) Mi lei ael
 earth/ground come NF

lu darmumumo hal-dur **leixr** zei si ar.
 wall tall that-CL fall down away PFV
 ‘(When) the earthquake happened, that tall wall **fell** down.’

- (221) Mur hal-ddei yarzi **beix** jiax.⁴⁹
 Horse that-CL really run fast
 ‘That horse really **runs** fast.’

5.2.2 Transitive Clauses

Transitive clauses are formed with transitive verbs or by adding the verb *gger* ‘give’ or the causative particle *lol* ‘allow/cause’ to an intransitive verb. Utterances formed with transitive verbs are provided in (222) – (224). (See 5.3 and 5.4 for examples with *gger* ‘give’ or *lol* ‘cause/let/allow’.)

- (222) Yar ni leil **perniar**.
 3s 2s DOM love
 S O V
 ‘He **loves** you.’

- (223) Eilni yar wordabbor sebexr **dae**.
 today 3s mountain.area corn plant
 S O V
 ‘Today he **plants** corn (on the) mountain.’

- (224) Ngo Mayou hher dae ael, me **so**,
 1s Mayou be IPFV NF mushrooms gather
 S O V

veixrzzor **ho**, niur **lol**.
 pig.food look.for cows herd
 O V O V

‘(When) I live in Mayou, (I) **gather** mushrooms, **look for/get** pig food, (and) **herd** cows.’

⁴⁹ Despite the gloss, *jiax* ‘fast’ is an auxiliary because it is reduplicable and negatable.

5.2.3 Clauses with Three Arguments

Some verbs select three arguments.

- (225) Yar aniu leil zzipbae **gger** ho ar.
 3s child to money give already PFV
 S OBL O V
 ‘She already **gave** the child money.’

- (226) Niama limo leil almeir **zol**.
 your.mom granddaughter to rice feed
 S OBL O V
 ‘Your mother **feeds** (her) granddaughter rice.’

- (227) Ngo nimo aniu leil bar **da** var.
 1s sister child to milk give.drink can
 S OBL O V
 ‘My sister is able to **nurse** (her) child.’

Another way to produce clauses with three arguments is to add *gger* ‘give’ or *lol* ‘let/allow/cause’ to a transitive verb. (See 5.3 and 5.4 for more examples of clauses with three arguments.)

- (228) Yar gaggor-cabei yar leil vilu vae **gger**.
 3s play- friend 3s to/for flowers buy give
 S OBL O V
 ‘Her friend bought her flowers.’

5.2.4 Active and Passive

Lolo has no voice opposition in the verb, nor is there any productive passive construction.⁵⁰ One construction with a passive function exists to communicate ‘made of’. It is composed of the verb *bei* ‘do’, the auxiliary *teil* ‘out’, and the verbal particle *lei* ‘come/venitive’ as in (229b) and (230).

⁵⁰ A morphosyntactically distinct passive also does not exist in Lisu (Bradley 2003:231).

- (229) a Yar mo sser ael, barde eil-tae bei.
 3s bamboo use NF chair this-CL do
 ‘She uses bamboo to make this chair.’
- b Barde eil-tae mel mo sser ael **bei teil lei.**
 chair this-CL TOP bamboo use NF do out VEN
 ‘Concerning this chair (it) **is made of** bamboo.’
- (230) Beler hal-tae mel ca **bei teil lei** ar.
 basket that-CL TOP people do out VEN PFV
 ‘Concerning that basket, (it) **is made (by)** people.’

It could be argued that the passive perspective can be communicated by fronting and topicalizing the undergoer as (231b) and (232b) illustrate.⁵¹ The problem with this view is that there is no change of grammatical relations between clearly active utterances like (231a) and (232a) and the ones that follow them; the subject and object remain the same.

- (231) a Yar ssormaer hal-ddo leil deil ar.
 3s girl that-CL DOM hit PFV.
 S O V
 ‘He hit that girl.’
- b **Ssormaer hal-ddo leil mel** yar deil ar.
 girl that-CL DOM TOP 3s hit PFV
 O S V
 ‘**Concerning the girl**, he hit (her).’

⁵¹ Matisoff observed that a “given Lahu verb will receive an active or passive English translation according to which noun phrase is treated as the topic...” (Matisoff 2003:217).

- (232) a Yar alddur ggabil ar.
 3s door close PFV
 S O V
 ‘He closed the door.’
- b **Alddur mel** yar ggabil ar.
 door TOP 3s close PFV
 O S V
 ‘**Concerning the door**, he closed it.’

Watters describes a detransitivization process in Kham that is “...functionally equivalent to a prototypical passive. All trace of the agent is deleted, the patient is promoted to subject status, and the overall construction is stativized” (Watters 2003:697). Lolo has a similar structure, but it is not passive, just stative.

- (233) Alddur ggabil dae.
 door close IPFV
 ‘The door is closed.’

Another type of detransitivization process is formed by making the patient (e.g. door) the subject and by adding an emphatic pronoun (e.g. *yar ddei yar*), which is obligatory.

- (234) Alddur yar ddei yar ggabil ar.
 door 3s ASSOC 3s close PFV
 ‘The door closed by itself.’

5.2.5 Locative Clauses

Locative clauses are formed with the locative copula *hher* ‘be.at’ or with directed motion verbs that subcategorize for a subject and a locative argument. The subject and locative argument are obligatory, unless they are understood by the context.

Table 38: Structure of a Locative Clause

Subject	Locative Argument	Locative Copula <i>hher</i> or Directed Motion Verb
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The default means for producing an intransitive locative clause is for the subject to precede the locative argument as in (235). *Hher* ‘be at/live’ is a general locative copula; it is not a locative adposition like the Mandarin *zai* ‘at’. It can take verbal auxiliaries and particles as (235) and (236) demonstrate.

- (235) Alhuar ake **hher** dae.
 Joseph home be.at IPFV
 ‘Joseph is (at) home.’

The locative argument is optional, only if it is understood from the context.

- (236) Ngo ol **hher** dae seir ei!
 1s INTERJN be.at IPFV still INTERJN
 ‘Oh, I am still (here)!’

The verbs in Table 39 not only communicate motion but also indicate the direction of the motion, whether it is up, down, in, out, toward ego, away from ego, etc.

Table 39: Directed Motion Verbs

Directed Motion Verb	Meaning
gger	cross over
ddeix	ascend
zei	descend
ji	insert
ddir	enter
ddux	exit
jjir	return
lei	come
ssi	go

Examples (237) – (239) illustrate the use of these directed motion verbs.

(237) Ngo vizzo/lazzamo (leil) **gger**.
 1s bridge/river at/on pass.over
 ‘I **cross** the bridge/river.’

(238) Ni ake/yirggie (gga) **ddir**.
 2s house/bedroom in enter
 ‘You **enter** the house/bedroom.’

(239) Ni worda-bbor **ssi**.
 2s mountain-area go
 ‘You **go** to the mountains.’

The locative copula *hher* ‘be.at’ and most directed motion verbs do NOT require a locative PP as demonstrated in (237) - (239). But *ddeix* ‘ascend’ does take a locative argument with the postposition *ddeileil* ‘on’ or *leil* ‘at/on’.

(240) Ngo mermi **ssi** ael mel worga ddei leil **ddeix** nia.
 1s region go NF TOP mountain CL at/on ascend need
 ‘When I **go** home, I need to **ascend** the mountain.’

Because locative arguments in locative clauses do not usually take postpositions, even though they do allow an optional PP as in (237) and (238), they look similar to objects, but they cannot be topicalized (241) or relativized (242), as objects can.

(241) *Ake **ddei** **mel** ngo ddir.
 house CL TOP 1s enter
 ‘I enter the house.’

(242) *Ngo **ddir** **ake** **ddei** yarzi naer.
 1s enter house CL really dirty.
 ‘The house I entered was really dirty.’

5.2.6 Existential Clauses

Existential clauses are formed with existential verbs that subcategorize for an indefinite pivot nominal. I use the term ‘pivot nominal’ following Clark (1978). She

explains that existential clauses typically lack a subject, or take a dummy subject, and that the pivot nominal describes the individual whose existence is under discussion. Lolo existential clauses usually require that a location be specified. (The general existential *zza* ‘exist’ takes a temporal or a locative argument.) The order of these constituents is restricted. The locative argument precedes the pivot nominal, which precedes the verb. There are no dummy subjects.

Table 40: Structure of an Existential Clause

Locative Argument	Pivot Nominal [- agent] [-definite]	Existential Verb
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Like other Tibeto-Burman languages (LaPolla 2003b, Walters and Atqi 2006), several existential verbs exist in the Lolo language.⁵² Like Nosu, existential verbs are used to introduce new referents into the discourse and/or to affirm or deny the existence of something (Walters and Atqi 2006). They express possession or location of indefinite or non-specific items (Kroeger 2005). But Lolo existential utterances also differentiate unattached existence, attached existence, existence of animate referent, existence of inanimate referent, existence in, and existence with, to be discussed below.

Posture verbs, such as *nier* ‘stand’, *cux* ‘sit’, and *yir* ‘lie’, are not used as existential verbs, in contrast to what Walters and Atqui (2006) have observed for Nosu. In order for these utterances to express an existential meaning the posture verb is replaced

⁵² LaPolla has observed that TB languages often have multiple existential verbs. Some TB languages may have as many as seven different existential verbs that distinguish animate/inanimate, abstract/concrete, location within a container/location on a plane, and movable/immovable (LaPolla 2003c:33).

with *hher* ‘be.at’ or *zza* ‘exist’, the subject is replaced by an indefinite pivot nominal, and the order of the pivot nominal and the locative argument is switched, as (243b) and (244b) demonstrate.

- (243) a Yar sibbar bbae ddeileil **yir** dae.
 3s grass CL on lie IPFV
 S LOCATIVE V
 ‘She **lies** on the grass.’
- b Sibbar bbae ddeileil ssormaer ar ddei **hher** dae.
 grass CL on woman one CL be.at IPFV
 LOCATIVE PIVOT NOMINAL V
 ‘**There is** a woman on the grass.’
- (244) a Sul bbe zaezi ddeileil **nier** dae.
 book CL table on stand IPFV
 S LOCATIVE V
 ‘The book **stands** on the table.’
- b Zaezi ddeileil su ar bbe **zza** dae.
 table on book one CL exist IPFV
 LOCATIVE PIVOT NOMINAL V
 ‘**There is** a book on the table.’

A list of verbs that occur in existential clauses is provided in Table 41. Of those cited, *hher* ‘exist at’, *ni* ‘exist in’, and *ca* ‘exist with’ also express locative meanings.

Table 41: Verbs Used in Existential Clauses

Verbs	Existential Contrast
<i>zza</i>	to exist unattached (usually inanimate)
<i>hher</i>	animate, to exist at
<i>niar</i>	exist attached
<i>ni</i>	exist in
<i>ca</i>	exist with

Like other Lolo verbs, existential verbs take aspectual and modal auxiliaries/particles and are followed by sentential particles. But they do not easily

collocate with resultatives, especially the directional auxiliaries/particles. They are negated in the same way as other verbs.

Zza ‘exist’ is the most common existential verb. It is a prototypical existential with a general existential meaning. It does not require that the location or posture of the referent be specified as in (251). Although it can take inanimate, animate, and abstract referents, it is most typical for it to take inanimate referents as in (245) and (246). It only takes animate referents when participants are being introduced into a discourse (251). It is used for referents that are not attached to each other (249). It may also include the notion of possession.

- (245) Yaa xie giedae bbaer mel sil xie ar gie **zza**.
 3p house behind area TOP grass house one CL exist
 ‘**There is** a grass hut behind their house.’

When *zza* indicates the existence of something that is in a particular place, it subcategorizes for an inanimate pivot nominal, which is why (247) is not acceptable. The existence of animate referents is expressed with the locative copula *hher* ‘be at’.

- (246) Zomeilelxie gga binggan **zza** dae.
 kitchen in cookies exist IPFV
 ‘**There are** cookies in the kitchen.’
- (247) *Zomeilelxie gga aniu armel **zza** dae.
 kitchen in child some exist IPFV
 ‘**There are** children in the kitchen.’
- (248) Zomeilelxie gga aniu armel **hher** dae.
 kitchen in child some be.at/exist IPFV
 ‘**There are** some children in the kitchen.’

But neither *zza* ‘exist’ nor *hher* ‘be.at’ subcategorize for plants as demonstrated in (249). In this context, *zza* ‘exist’ requires that the referent be unattached; *hher* ‘be.at’

requires that the referent be a human, animal, or bird. As a result, a verb, such as *ner* ‘grow’, must be used instead as in (250).

(249) *Vilu-dae-labox ddei gga sibbar ar zeï hher/zza dae.
 flower-plant-pot CL in grass one CL exist IPFV
 ‘**There is** a stalk of grass in the flower pot.’

(250) Vilu-dae-labox ddei gga sibbar ar zeï ner dae.
 flower-plant-pot CL in grass one CL grow IPFV
 ‘**There is** a stalk of grass growing in the flower pot.’

At the beginning of a story, it is possible to introduce the participants in an existential clause with the verb *zza* ‘exist’. Otherwise, *zza* ‘exist’ does not allow an animate pivot nominal.

(251) Hal-car ca nr nel **zza**.
 that-time people two CL exist
 ‘At that time **there were** two people.’

Ni communicates that something ‘exists in’ something else.

(252) Saer eil-tae yarvi **ni**.
 fruit this-CL juice exist.in
 ‘**There is** juice **in** this fruit.’

(253) Lilba gga zzirbae nr **ni** ar.
 purse in money not exist.in FIN
 ‘**There is** no money **in** the purse.’

(254) Dae mi gga ajji nr **ni** ar.
 plant field in water not exist.in FIN
 ‘**There is** no water **in** the field.’

Niar ‘bear’ and *ca* ‘accompany’ are verbs that communicate the meanings ‘exist attached’ and ‘exist with’ in existential clauses. As a regular verb *niar* means ‘to bear’.

(255) Ssormaer hal-ddei aniu ngor xiubbo **niar** dae ho ar.
 woman that-CL child 5 months bear IPFV already PFV
 ‘That woman is five months **pregnant**.’

In a sentence with the existential structure enumerated above (that is a locative argument followed by an indefinite pivot nominal), the meaning of *niar* changes; it indicates that something exists as an integral, yet still distinct part, of something else. Flower stickers on a wall, printed flowers on a curtain, stains on shoes, dust on a desk, and a bow on a hat are all items that exist in this kind of close, connected relationship, so in Lolo, the verb *niar* ‘bear/exist attached’ is used to indicate their existence. *Zza* ‘exist unattached’ cannot be used in (256) – (258).

(256) Almer lei ael tshine ddeileil nilnael **niar** dae.
rain come NF shoe on mud exist.attached IPFV
‘(When it) rains, **there is** mud on the shoes.’

(257) Cahuo ddeileil leirni ciddur **niar** dae ar.
window on hand print exist.attached IPFV FIN
‘**There is** a handprint on the window.’

(258) Pia ddeileil seir<nr>bei **niar**.
clothes on not.clean exist.attached
‘**There is** dirt/a stain on the clothes.’

As a regular verb *ca* means ‘accompany’.

(259) Ngo no i ssi ael, yar ngo da **ca** ssi.
1s pain look AND NF 3s 1s with accompany AND
‘(When) I go to see the doctor, she **accompanies** me.’

In an existential clause, it means ‘exist with’; the referents coexist together in the same place.

(260) Almeir gga nihar **ca** dae.
rice in dirt exist.with IPFV
‘**There is** dirt in the rice.’

(261) Nihar gga legebe nei six lei **ca** dae.
dirt in stones and sticks also exist.with IPFV
‘**There are** stones and sticks in the dirt.’

The locative copula *hher* ‘be.at’ also communicates an existential meaning in existential clauses. In an existential clause, *hher* ‘be.at’ requires an animate pivot nominal. It contrasts with *zza* ‘exist’, which normally requires an inanimate one.

- (262) Ake ca cir-ke **hher** dae.
 house people one-many be.at IPFV
 ‘**There are** some people in/at the house.’
- (263) *Ake ca cir-ke **zza** dae.
 house people one-many exist IPFV
 ‘**There are** some people in/at the house.’

5.2.7 Possessive Clauses

Possessive clauses are formed with the existential verbs *zza* ‘exist’ and *niar* ‘exist attached’. They have the same structure as existential clauses, as these verbs both subcategorize for a locative/possessor argument and an indefinite pivot nominal/possessed. Some locative arguments may optionally take *leil* ‘at/to/on’ as in (265).

Table 42: Structure of a Possessive Clause

Locative/Possessor Argument	Pivot Nominal/Possessed [-definite]	Existential Verbs <i>zza</i> or <i>niar</i>
--------------------------------	--	--

- (264) Ni aniu so ler **zza**.
 2s child 3 CL exist.unattached
 ‘You **have** three children.’
- (265) Zaezi ddei (leil) qiurhher lil bbor **niar**.
 table CL on/to leg 4 CL exist.attached
 ‘The table has four legs.’

Niar ‘exist attached’ expresses that the referents are connected, so it is used to refer to the limbs of an animal in (266). *Zza* ‘exist unattached,’ on the other hand, indicates that the referents are not connected, so it is unacceptable in (267).

(266) Anol mel qihher leirhher lil bbor **niar**
 dog TOP leg arm 4 CL exist.attached.
 ‘Dogs **have** four legs/arms.’

(267) *Anol mel qihher leirhher lil bbor **zza**
 dog TOP leg arm 4 CL exist.unattached
 ‘Dogs **have** four legs/arms.’

5.2.8 Attributive Clauses

Attributive clauses are formed with predicate adjectives. They only allow one argument as in (268) and (269).

(268) Aniu ddo yarzi **vaer**.
 child CL really big
 ‘The child is really **big**.’

(269) Yar elde yarzi **no** wo nr ddo.
 3s head really hurt obtain not able
 ‘She has a splitting migraine.’

5.2.9 Equative Clauses

Equative clauses are formed by the juxtaposition of two NPs. The second NP acts as the predicate. The NPs are usually separated from each other with a pragmatic particle, e.g. the topicalizer *mel* or the developmental marker *nael*. These particles follow the first NP as (270) and (271) demonstrate. These pragmatic particles are common, but not obligatory, as (272) illustrates. The sentential particle *ar* usually follows the second NP to indicate that the utterance is complete.

Table 43: Structure of an Equative Clause

NP	(Pragmatic particle) <i>mel, nael...</i>	NP	(Copula) <i>nga</i>	(Sentential Particle)
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- (270) Yar capor ddei mel Sipor ar.
 3s husband CL TOP Han FIN
 NP NP
 ‘Her husband is Han (Chinese).’

- (271) Xie-zi-su hal-ddei mel yarbbor ar.
 house-build-NMLZ that-CL TOP her.father FIN
 NP NP
 ‘The one who builds the house (is) her father.’

- (272) Ngo niabor ar.
 1s your.father FIN
 NP NP
 ‘I am your father.’

The default means of producing equative clauses is without a copula, but *nga* ‘be’ may be added to equative clauses to make the statement emphatic.

- (273) Yar mel Sipor **nga**; ngo mel Lorlorpor **nga**.
 3s TOP Han be 1s TOP Lolo.person be
 ‘She **is** Han; I **am** Lolo.’

The negative *nr* cannot negate nominal elements, so to negate equative clauses, the copula *nga* ‘be’ must be added. Like other verbs, *nga* ‘be’ can take aspectual and modal auxiliaries and can also be followed by sentential particles as (274) demonstrates.

- (274) Yar capor ddei mel Sipor **nr nga** ar.
 3s husband CL TOP Han not be FIN
 ‘Her husband **is not** Han (Chinese).’

To form a yes-no question with equative clauses the copula *nga* ‘be’ is repeated at the end of the proposition.

- (275) Yar capor ddei mel Sipor **nga nga**?
 3s husband CL TOP Han be be
 ‘Her husband is Han (Chinese), isn’t he?’

5.3 Benefactive and Causative Constructions with *Gger*

When the verb *gger* ‘give’ forms serial verb constructions with other verbs, it has a range of semantic functions. It becomes a semantic valence increasing device that adds arguments to verbs. It most often contributes a benefactive meaning, but it can express a causative meaning as well.

5.3.1 Benefactive Usage of *Gger*

A benefactive meaning is communicated by adding *gger* ‘give’ to the matrix verb and an animate oblique argument to the clause.

Table 44: Structure of a Clause with Benefactive *Gger*

Subject	Oblique [+animate]	(Oblique)	(Object)	V + <i>gger</i>
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The argument that the benefactive *gger* ‘give’ adds to the clause is the beneficiary of the event expressed, as the following examples demonstrate. When the benefactive *gger* ‘give’ is added to an intransitive verb, an utterance with two arguments is produced as (276) and (277) illustrate.

- (276) Yar **ngo leil** beix **gger** ar.
 3s 1s for run give PFV
 S OBL_{BEN} V
 ‘He ran for me.’

- (277) Yar **ngo** **leil** ssi **gger** ar.
 3s 1s for go give PFV
 S OBL_{BEN} V
 ‘He went for me.’

When the benefactive *gger* ‘give’ is added to a transitive verb, an utterance with three arguments is produced.

- (278) a Yar miar bei jjia ar.
 3s task do all PFV
 S O V
 ‘She finished the chores.’
- b Yar ngo leil miar bei jjia **gger** ar.
 3s 1s for task do all give PFV
 S OBL_{BEN} O V
 ‘She finished the chores for me.’

When the benefactive *gger* is added to verbs with three arguments, like *zol* ‘feed’ or *nial* ‘cause to stick’, it produces propositions with four arguments.

- (279) a Yar veixr mel leil sebex **zol**.
 3s pig PL to corn feed
 S OBL_{REC} O V
 ‘He fed the pigs corn.’
- b Yar ngo leil veixr mel leil sebex **zol** **gger**.
 3s 1s for pig PL to corn feed give
 S OBL_{BEN} OBL_{REC} O V
 ‘He fed the pigs corn for me.’
- (280) a Yar guizi leil zhaopian **nial** ge.
 3s bookcase to photo stick on
 S OBL_{Goal} O V
 ‘She stuck the photo to the bookcase.’
- b Yar ngo leil guizi leil zhaopian **nial** ge **gger**
 3s 1s for bookcase to photo stick on give
 S OBL_{BEN} OBL_{Goal} O V
 ‘She stuck the photo to the bookcase for me.’

5.3.2 Causative Usage of *Gger*

Sometimes *gger* ‘give’ does not produce utterances with benefactive meanings. It produces utterances that express direct causation as illustrated in (281b) and (282b). The original subject in (a) becomes a causee in (b).

- (281) a Ngo ssor pia **veir.**
 1s son clothes wear
 ‘My son got dressed.’
- b Ngo ngo ssor leil pia **veir** **gger** ar.
 1s 1s son to/for clothes wear give PFV
 ‘I dressed my son.’
- (282) a Yar ssormaer ddo ggecir **cir** **dae.**
 3s daughter CL body wash IPFV
 ‘Her daughter is bathing.’
- b Yar yar ssormaer ddo leil **cir** **gger** **dae.**
 3s 3s daughter CL DOM wash give IPFV
 ‘She is bathing her daughter.’

It is typical to add another transitive verb and *gger* ‘give’ to adjectives (283) to create a transitive clause. When these words are added to intransitive verbs (284a) and (285a), a causative construction with three verbs is produced as in (284b) and (285b).

- (283) a Beizi tae **xiar** ar.
 glass CL ruin PFV
 S ADJ
 ‘The glass is broken.’
- b Yar beizi **bei** **xiar** **gger** ar.
 3s glass do ruin give PFV
 S O V ADJ
 ‘She broke the glass.’
- (284) a Si-zzei hal zzei **de** ze ar.
 tree-pillar that pillar.CL fall down PFV
 ‘The tree **fell** down.’

- b Yar si-zzei hal zzei **tae** **zei** **gger** ar.
 3s tree-pillar that pillar.CL chop down give PFV
 ‘He **felled** the tree.’
- (285) a Arni veixr **si** ar.
 yesterday pig die PFV
 ‘Yesterday the pig died.’
- b Ngago veixr **deil** **si** **gger** dae.
 1s.older.brother pig hit die give IPFV
 ‘My older brother is beating the pig to death.’

5.3.3 Other Usage of *Gger*

Even when the oblique argument is animate, a benefactive meaning is not always expressed. In (286) and (287), what is conveyed is that the event is not for the benefit of a particular argument, but is due to it instead.

- (286) Ngo aniu leil nge **gger**.
 1s child to/for cry give.
 ‘I cry because of the child.’
- (287) Ama aniu leil vaex **gger**.
 mom child to/for smile give
 ‘Mom smiles because of the child’ or ‘Mom smiles at the child.’

5.4 Causative Constructions

Causation is communicated in three ways: with the verb *gger* ‘give’ (as discussed in 5.3.2), with lexical causatives, or with the causative particle *lol* ‘allow/cause’.⁵³ Direct causation can be expressed with all three of these, but indirect causation is usually expressed with the particle *lol* ‘let/allow/cause’.

⁵³ TB languages often utilize the *s- prefix, voicing alternation, an analytical causative formed by serializing a verb meaning ‘give’, and/or a post-verbal causative marker to form causative constructions (LaPolla 2003c:33).

5.4.1 Lexical Causatives

Lolo has several verbs—lexical causatives—whose basic semantic content includes a sense of causation (Kroeger 2004). They were produced through morphological processes that are no longer productive.⁵⁴ With the exception of *lol* ‘let/allow/cause’, they always communicate direct causation. Various linguists have already observed that causative verbs exist in other Tibeto-Burman languages (Matisoff 1973, LaPolla 2003a, and Bradley 2003). Matisoff explains that

[t]he oldest way of forming causative verbs in the Tibeto–Burman family was by an *s*-prefix. Although this prefix has long since disappeared from the Loloish languages, its effects survive in over a dozen Lahu verbs of causative meaning that differ only in tone and/or initial consonant (Matisoff 1973).

Lolo is no exception. Like Lahu and Qiang this process is no longer productive, so only a few examples exist (Matisoff 1973 and LaPolla 2003a). Table 45 provides a list of words that were most likely derived through this causation process. *Zol* ‘feed’, *da* ‘give to drink’ and *lol* ‘cause/let’ are causative fossilizations of *zzor* ‘eat’, *dda* ‘drink’, and *lor* ‘become’. Several of the other words have meanings that are no longer causative. The derived word either has a high tone (*l*) and/or an initial voiceless consonant.⁵⁵

⁵⁴ Because of their similarity to pure lexical causatives, these words are labeled as ‘lexical causatives’. Comrie explains “that there are constructions intermediate between the ideal morphological type and the ideal lexical (suppletive) type, in particular examples where there is a clear formal relationship between the predicates used to express effect and to express causation, but no regularity to this formal relationship.” He says that some non-productive causatives behave like canonical lexical causatives (Comrie 1981:163).

⁵⁵ In the Lolo orthography, voiced consonants (except nasals and laterals) are written with two identical consonants, e.g. *dd*, and voiceless unaspirated consonants are written with one consonant, e.g. *d*.

Table 45: Causative Derivations

Verbs	Verbs
zzor ‘eat’	zol ‘cause to eat, feed’
dda ‘drink’	da ‘give to drink’
niar ‘exist.attached’	nial ‘attach/stick’
Auxiliaries	
gger ‘pass/cross’	gel ‘through’
ddir ‘enter’	dil ‘in’
ddeix ‘ascend’	deix ‘on’
jjir ‘return’	xiel ‘reverse’
Particle	
lor ‘become/enough’	lol ‘cause/let’

Zol ‘feed’ derives from *zzor* ‘eat’.

- (288) Aniu ssor hal-ddo zzaegu zzor dae ael,
child son that-CL thing eat IPFV NF

yar carbei mel leil nr **zol**.
3s friend CL to not feed.

‘That child is eating something, (he) doesn’t **feed** (it) to his friend.’

Da ‘give to drink’ derives from *dda* ‘drink’.

- (289) Aniu yelye leil bar **da**.
child small to milk give.to.drink
‘(She) **nurses** the child.’

Nial ‘glue/cause to stick’ derives from *niar* ‘bear/exist attached’.

- (290) Ni cux dae ddei leil sei<nr>bei **niar** dae.
2s sit IPFV CL on not.clean exist.attached IPFV
‘There is dirt on your seat/chair.’

- (291) Yar guizi leil zhaopian **nial** ge.
3s bookcase to photo stick on
‘She **stuck** the photo to the bookcase.’

A metaphorical extension of *nial* is to express a close relationship between people as in (292).

- (292) Capor maerssor hal nr nel yarzi **nial**.
 husband wife that two CL really stick
 ‘That husband and wife couple are very **close** (to each other).’

5.4.2 Analytical Causative Construction with *Lol*

Analytical causative constructions are produced by adding the causative particle *lol* ‘let/allow/cause’ to a verb. This results in a change to the argument structure of the matrix verb as a new participant is also introduced. Even though *lol* ‘let/cause/allow’ adds an argument, it is not a verb. It is not reduplicable or negatable. It cannot serve as the only member of a VC.

With only a few exceptions, the causative construction formed with *lol* consists of a subject, an oblique_{causee} (the original subject), a verb, and the particle *lol*. If the matrix verb is transitive, then an object is also included as illustrated in Table 46.

Table 46: Structure of the Analytical Causative with *Lol*

Single Clause				
“Object”				
S	OBL _{causee}	(O)	V	<i>lol</i>

Although it is most typical for analytical causatives formed with *lol* to communicate indirect causation, it is also possible for them to communicate direct causation, which is why it is glossed as ‘let/allow/cause’. The amount of control the causer and/or causee is perceived to possess affects the interpretation.

Native speakers say that (293b) and (295) sound more natural with the *leil* ‘DOM’, even though neither one of these utterances has an animate object. With transitive verbs, the causee is usually expressed as an oblique with *leil* ‘to/for’. The tendency is for the causative construction in Lolo to select/categorize for a causee that is marked. (In the following sentences the causee is underlined.) This pattern conforms to what Bradley has observed—that the Lisu equivalent “**is almost obligatory on the causee subject of a causative or causativized verb [emphasis mine]**, quite frequent on a DAT or BEN, and least frequent on an ACC” (Bradley 2003:226). While **it is most typical for the causee in an analytical causative formed with *lol* to be marked with *leil* ‘to/for’**, it is also possible for it to be unmarked as shown in (296).

The causative *lol* ‘cause/let/allow’ is easily added to adjectives and intransitive verbs as in (293) – (296).

- (293) a Yaryo mel nr hie.
 potatoes PL not dry
 ‘The potatoes are not dry.’
- b Ni yaryo mel (leil) hie **lol** nr ddo.
 2s potatoes PL DOM dry let not able
 S CAUSEE ADJ
 ‘You are not able/permitted **to let** the potatoes to dry out.’
- (294) a Aniu ddo vae.
 child CL smiles
 ‘The child smiles.’
- b Ama aniu ddo leil vae **lol**.
 Mom child CL DOM smile cause
 S CAUSEE V
 ‘Mom **causes** the child to smile.’

(295) Ngo sul bbe (leil) nier dae **lol**.
 1s book CL DOM stand IPFV cause
 ‘I stand the book up.’

(296) Arbosobo almer lei **lol**.
 God rain come cause
 ‘God **causes** it to rain.’

When the causative particle *lol* ‘let/cause’ is added to a transitive verb, a clause with three arguments is formed—a subject, an oblique causee (the original subject) and an object. The causee is marked with *leil* ‘to/for’.

(297) a Aniu gaggor-ddu vae ar.
 child play-thing buy PFV
 S O V
 ‘The child bought a toy.’

b Ama aniu leil gaggor-ddu vae **lol** ar.
 Mom child to/for play-thing buy let/allow PFV
 S OBL O V
 ‘Mom allowed the child to buy a toy.’

(298) a Sulzzasu mel sul zza dae.
 students PL book study IPFV
 S O V
 ‘The students are reading books.’

b Sulmusu ddei sulzzasu mel leil sul zza dae **lol**.
 teacher CL student PL to/for book read IPFV let/allow
 S OBL O V
 ‘The teacher allows the students to read books.’

In (299) the causative construction with *gger* ‘give’ only has two arguments, whereas the causative construction with *lol* ‘let/allow’ has three.

(299) a Beizi tae xiar ar.
 glass CL ruin PFV
 S ADJ
 ‘The glass is broken.’

- b Yar beizi **bei** **xiar** **gger** ar.
 3s glass do ruin give PFV
 S O V ADJ
 ‘She broke the glass.’
- c Yar aniu leil beizi **bei** **xiar** **lol** ar.
 3s child to/for glass do ruin let/allow PFV
 S OBL O V ADJ
 ‘She caused the child to break the glass.’

5.4.3 Summary of Causative Constructions

Causation is communicated with the verb *gger* ‘give’, with lexical causatives, or with the particle *lol* ‘allow/cause’. Lexical causative constructions mark causees as objects, if the basic form of the verb is intransitive, but mark them as obliques (with *leil* ‘to/for’), if the basic form of the verb is transitive. The causee of an analytical causative SVC construction with *gger* is usually an object, so it only takes *leil* ‘DOM’ if it is animate. Although causative constructions with *lol* do not require animate causees, it is most common for the causee to be an animate. In both (300b & c) the causees take *leil* ‘to/for’ because they are obliques. In (301b-e) none of the causees take *leil* ‘DOM’ because they are nonhuman objects.

Direct causation is expressed with lexical causatives like *seil* ‘kill’ and with the analytical causative *gger* ‘give’, as in (300b). Indirect causation is expressed with the analytical causative *lol* ‘let/allow’, as in(300c).

- (300) a Ngo ssor pia **veir**.
 1s son clothes wear
 ‘My son got dressed.’
- b Ngo ngo ssor leil pia **veir** **gger** ar.
 1s 1s son to/for clothes wear give PFV
 ‘I dressed my son.’

- c Ngo ngo ssor leil pia **veir** **lol**.
 1s 1s son to/for clothes wear let/cause
 ‘I caused/allowed my son to get dressed.’

Examples (301b and c) with the lexical causative *seil* ‘kill’ and (301b, d) with *gger* ‘give’ express direct causation. Example (301e) with *lol* expresses indirect causation.

- (301) a Arni veixr **si** ar.
 yesterday pig die PFV
 ‘Yesterday the pig **died**.’
- b Arni ngago veixr **seil** **si** **gger** ar.
 yesterday my.bro pig kill die give PFV
 ‘Yesterday my older brother **killed** the pig.’
- c Ngago veixr **seil** dae.
 my.brother pig kill IPFV
 ‘My older brother is **killing** the pig.’
- d Arni ngago veixr **deil** **si/zil** **gger** ar.
 yesterday my.brother pig hit die give PFV
 ‘Yesterday my older brother **killed** a pig by hitting.’
- e Arni ngago veixr **si** **lol** ar.
 yesterday my.brother pig die cause PFV
 ‘Yesterday my older brother **let** the pig die.’

Since *gger* ‘give’ is a verb that forms serial verb constructions and *lol* ‘cause/let/allow’ is a particle, they are dissimilar in several significant respects. *Gger* ‘give’ can be negated and repeated; *lol* ‘cause/allow/let’ cannot. The verb *gger* ‘give’ occurs in the resultative slot (though it is not a resultative); it precedes all aspectual and modal auxiliaries and particles; it does not follow particles. *Lol* ‘cause/allow/let’ follows all other verbs in the VC. It also follows the resultative and aspectual auxiliaries and particles, but it can precede the modal auxiliaries and particles. For a summary of the distribution of *gger* ‘give’ and *lol* ‘cause/allow/let’ in the VC refer to Table 47.

Table 47: Distribution of *gger* and *lol* in VC

VC					
(NEG)	Verbs/Adj	(RES) gger	(ASP)	(CAUS) lol	(Mode)

It is possible for *gger* and *lol* to coocur in the same VC, but their order is restricted. *Gger* always precedes *lol* as (303) illustrates.

(302) Ngo yar leil beizi bei xiar **gger** **lol** ar.
 1s 3s to/for glass do ruin give cause PFV
 ‘I caused her to break the glass.’

(303) a Arni ngo ngago leil veixr seil zil **gger** **lol** ar.
 yesterday 1s my.bro to/for pig kill die give let PFV
 ‘Yesterday I let my brother kill a pig.’

b *Arni ngo ngago leil veixr seil zil **lol** **gger** ar.
 yesterday 1s my.bro to/for pig kill die let give PFV
 *‘Yesterday I let my brother kill a pig.’

Benefactive and causative constructions formed with *gger* ‘give’ and analytical causative constructions formed with *lol* ‘allow/let/cause’ are single clauses because *gger* and *lol* are in the same VC as the matrix verb that they follow. This is evidenced by the fact that: 1) a VC with *gger* or *lol* takes only one negator and only one set of TAM words; 2) pragmatic particles and connectors follow a VC with *gger* or *lol*; they do not occur between the matrix verb and *gger* or *lol*; 3) a VC with *gger* or *lol* is pronounced with one intonation contour and pauses are not allowed between the main verb and *gger* or *lol*; and 4) the clause consists of only one subject and one object; the other arguments in the clause are marked as obliques.

5.5 Structure of the Sentence

Lolo sentences may consist of several clauses. These clauses combine in coordinating or subordinating relationships with each other. In the former case, two or more independent clauses are juxtaposed, sometimes with a connector between them. In the latter case, dependent clauses either 1) function as adjuncts of a matrix clause, 2) function as object complements of a matrix verb, or 3) modify a noun head.

The use of clause-initial or clause-medial connectors does not alter the independent status of clauses, so the clauses that they join are considered coordinating clauses. The use of **clause-final pragmatic particles and connectors**, however, does **change the grammatical status of a clause**; they cause it to become dependent.

5.5.1 Coordinating Clauses

Lolo employs several means to conjoin clauses. It can either juxtapose clauses with no overt marking or add clause-initial and medial connectors to make the relationship between the clauses explicit. In both cases, the clauses have the same grammatical status; they have the structure of independent sentences with neither being dependent on the other. The VC of each clause can have its own verbal particles (TAM words), but coordinating clauses are not terminated with clause connectors.

Independent clauses can be juxtaposed, with no overt clause-initial connector to indicate their relationship. An example of this zero strategy⁵⁶ is demonstrated in (304b) and (304c).⁵⁷

- (304) a Nael yarma mel mullaesei nael,
 DM her.mother TOP wicked DM
- b Ø ggor zzeir nael yar cirmu leil bber lol,
 buckwheat raw DM 3s daughter-in-law to carry let/cause
- c Ø ggor hie nael yar ssormaer leil bber lol.
 buckwheat dry DM 3s daughter to/for carry let/cause
 ‘(Being the case that) her mother is wicked, (she) causes her daughter-in-law to carry the (heavy) raw/fresh buckwheat; (and) causes her daughter to carry the (light) dry buckwheat.’

The default means of expressing contrast is also with juxtaposed clauses.

- (305) Ni mel eine bbeix nr ddo;
 2s TOP this way say not may
- ni yaa leil bil jjiu dae lal ddo.
 2s 3p to/for carry help IPFV only may
 ‘You may not speak this way; (in contrast) you may only help them carry it.’

Although zero strategy is employed, it is also common for clause-initial and clause-medial connectors to conjoin coordinate clauses. There is always a slight pause **before** the clause-initial connector as in (306) and (307).

⁵⁶ Payne uses the term ‘zero strategy’ to identify two phrases or clauses that are simply juxtaposed (Payne 1997: 337).

⁵⁷ Wheatley (2003:205) also attests to the existence of this type of juxtaposed clauses in Burmese. He says “[i]ndependent clauses are usually conjoined asyndetically, the only indication being parallel structure and non-final intonation in the first clause.”

Bbeisael ‘or’ joins two equally ranked clauses as interrogative alternatives.

- (306) Eilsenehe ngo ni leil bei jjiu, **bbeisael** yar ni leil bei jjiu?
 This.morn 1s 2s DOM do help or 3s 2s DOM do help
 ‘This morning (should) I help you, **or** (should) she help you?’

Dder ‘then’ is a connector that presents the conclusion of the preceding proposition.

- (307) Si ni leil bei ssi bbeix, **dder** bei ssi nia.
 others 2s to do go say then do go will/must
 ‘Other people tell you to do (something), **then** (you) must do (it).’

Lei ‘also’ is the default additive, which adds propositions of equal importance. It is often used to join coordinating clauses.

- (308) Nixmox ddei seir nael,
 heart CL good DM

 yar **lei** ni leil perniar var;
 3s also 2s DOM love will

 ni **lei** yar da bei hor ddo.
 2s also 3s with do compatible may
 ‘(His) heart is good, he **also** will love you; you **also** may be compatible with him.’

5.5.2 Subordinating Clauses

Lolo has several types of subordinate clauses: adverbial/adjunct clauses, complement clauses, relative clauses, temporal clauses, and nominalized clauses.

5.5.2.1 Adverbial or Adjunct Clauses

Adverbial clauses express temporal, conditional, concessive, additive, circumstantial, sequential, and manner/simultaneous concepts. Adverbial clauses are initial and/or intermediate clauses that are terminated with pragmatic particles or clausal connectors. There is always a slight pause **after** the pragmatic particle or clausal

connector, which sets off the adverbial clause from the clause that follows it. The presence of these particles and connectors makes the preceding clause subordinate, so none of these adverbial clauses may be uttered in isolation. Adverbial clauses always precede a final independent clause that terminates the utterance. The main differences between adverbial clauses and main clauses are: 1) adverbial clauses cannot terminate utterances, as main clauses do. Adverbial clauses always precede main clauses. 2) Adverbial clauses take clause-final pragmatic particles and/or connectors, whereas main clauses do not. 3) Adverbial clauses cannot take sentential particles, whereas main clauses can. 4) The constituents in adverbial clauses do not have the same freedom of word order that is typical of matrix clauses; they only occur in the default SOV order. Adverbial and main clauses, however, both have verbs that take resultative, aspectual, and/or modal verbal auxiliaries/particles.

Table 48: Adverbial Clause

Adverbial Clause		Matrix Clause
Clause	Pragmatic particle and/or Clause-final connector	

Temporal adverbial clauses are formed by adding words, such as *qie* ‘as soon as’ and *sael* ‘until’ to the end of clauses to provide a temporal setting.

- (309) **Halbbaer adol deil dor dae ael qie,**
 there fire hit NCES IPFV NF as.soon.as
- yar yol bei xiel lei ael,
 3s also run reverse VEN NF

zzirmar mu su ddei leil piur teil lei ar.
 king do NMLZ CL DOM release out VEN PFV
 ‘As soon as (they) were there beating out the fire, he also ran back, and released the king.’

- (310) **Ake jjir lei sael,**
 home return VEN until

ddaer jjir lei ddo.
 break return VEN may
 ‘(It is not) until you return home, (that you) break (the eggs).’

Conditional adverbial clauses are expressed by adding *arddeir (nga ael)* ‘if’ or *zzorbbeixlei* ‘supposing’ to clauses.

- (311) **ama leil azo lei bei nr jjiu arddeir nga ael,**
 mom to/for what also do not help if

ama cirmuzil mel arsae bei jjia ddo?
 mom alone TOP how do all can
 ‘...if (he) does not help mom even a little bit, how can mom do it alone?’

- (312) **Ngo arsae ar zzu bei zzorbbeixlei,**
 1s how one CL do supposing

ni ddei mel ngo bei da nr cer.
 2s CL TOP 1s do with not possible
 ‘Supposing I do a lot, I am (still) not able to do yours.’

Concessive adverbial clauses are produced by adding (*bbeix a*) *nar* ‘even though’ or *lei* ‘even’ to clauses.

- (313) **Ama lei meir ddei ni leil ssi ddo bbeix dae a-nar,**
 mom also mouth CL 2s to go may say IPFV ?-even.though

nixmox ddei ni leil ssi lol nia nr zzir.
 heart CL you to go let will not think
 ‘Even though mom (with her) mouth said that you may go, (in her) heart (she does) not want to let you go.’

Circumstantial and causal clauses are communicated by adding the nonfinal *ael* to clauses. The subject of the circumstantial, causal, or absolutive clause with *ael* does not

have to be coreferential with the subject of the matrix clause as (315) demonstrates. When several clauses with *ael* occur in sequence, however, the subject of each clause with *ael* must be coreferential, which is why (316) is ungrammatical. In (318), the person holding the pole parallel and the person carrying it must be identical.

(314) **Yar mel no ael,**
3s TOP pain NF

miar nr bei lei.
task not do VEN

‘(Because) she is sick, she does not come to work.’

(315) ...**ajji ddei gguarggualgguar zu ael,**
water CL onomotapoeia bubbling NF

ddaer ji.
break in

‘...(when) the water gguar gguar gguar boils, (then you) break (the eggs) in.’

(316) ***Ngo pia cir ael, ngo ssormaer ake ca ael,**
1s clothes wash NF 1s daughter house wipe NF

ngo ssor var vae ssi.
1s son vegetables buy go

‘Being the case that I wash clothes, my daughter cleans the house, (then) my son goes to buy the food.’

Sequential adverbial clauses are formed by adding the realis *ho* ‘already/after’ to clauses as in (317). Manner or simultaneous adverbial clauses are expressed with the imperfective *dae* as in (318). Other particles, like the developmental marker *nael* or the NF *ael*, often follow these clauses.

(317) **Ngo pia cir ho nael,** yol zzorlabox bei.
1s clothes wash already DM again food make
‘After I wash the clothes, I also prepare food.’

(318) **Naelnae** **darzzopir** **ddeir** **mel** **vaelaertae** **vei** **dae ael,**
 DM pole CL TOP parallel take IPFV NF

bil **ge** **dor** **dae ael,**
 carry on NCES IPFV NF

ddu nr xie ar.
 exit not able PFV

‘**Holding the pole parallel, carrying (it) on his shoulders**, (he) was not able to exit (the house).’

5.5.2.2 Complement Clauses

Lolo has complement clauses, but they are not used as widely and as frequently as in English. While I have observed a variety of sentential complements, I have not noticed many open complements, which require that the subject of the complement clause be coreferential with an argument of the matrix clause (Kroeger 2004:109).⁵⁸

Many complement clauses have VCs that take a wide range of resultative, aspectual, and modal auxiliaries and particles as in (319) and (320).⁵⁹ Some reduced complements exist.⁶⁰ For example, the verb *zzir* ‘think/try.to’—when it communicates the meaning of ‘try to’—does not allow many aspect words, but requires the use of the modal word *nia* ‘must/will’. *Miardal* ‘order’ and *quer* ‘urge’ do not allow the use of

⁵⁸ It may be the case that open complement clauses are not used much because SVCs, AVCs, and sentential particles are employed instead. Most aspectual concepts (e.g. begin, finish), modal meanings (e.g. willing, able), demands (e.g. insist), and emotive words (e.g. surprised, worried, upset) are not expressed with complement clauses, but rather with SVCs, AVCs, grammaticalized SVCs, or with sentential particles. Refer to chapter 6 for an explanation of the characteristics of monoclausal SVCs and AVCs versus multiclausal verb sequences.

⁵⁹ These clauses may be what Noonan calls indicative S-like complement clauses because they are most similar to declarative main clauses (Noonan 2007).

⁶⁰ Noonan (2007:32) defines reduced complements as “[a]ny complement type that has fewer syntactic and inflectional possibilities than an indicative main clause.”

- (323) Aba mel ngo nia da zzor nr da.
 bread TOP 1s 2p with eat not accompany
 O S OBL V
 ‘As for the bread, I don’t eat (it) with y’all.’

Since complement clauses are object complements of the VC, they usually occupy the same slot as a regular NP object; they follow the other arguments and precede the matrix verb. Although it is not as common, the complement clause can also follow certain speech/cognitive verbs, as in (319) and (320). It is most typical for the complement clause to either immediately precede or immediately follow the matrix verb. The default order is illustrated in Table 49.

Table 49: Lolo Complement Clause

Subject	(Oblique)	Object	VC
		Complement Clause	

With certain speech or cognitive verbs, it is possible for the complement clause to precede or follow the verb as in (324) – (325).

- (324) a Ngo zzir dae ael **er-yue-fen** **gga jiehui nia**.
 1s think IPFV NF February in marry will
 S V COMP CL
 ‘I am thinking/plannning **(that I) will get married in February.**’
- b Ngo **er-yue-fen** **gga jiehui nia** zzir dae.
 1s February in marry will think IPFV
 S COMP CL V
 ‘I am thinking/planning **(that I) will get married in February.**’
- (325) a Yar **capor hal-ddei holmo kol lor a** nr saexl.
 3s man that-CL how.many years become PFV not know
 S COMP CL V
 ‘He doesn’t know **how old the man is.**’

b Nael yaa nr saexl,
 DM 3p not know
 S V

nalzzar diu jie dae ddei mel yarbbor nga.
 inside suspend insert IPFV CL TOP their.father be
 COMP CL

‘They didn’t know **the one suspended inside was their father.**’

It is also possible to repeat the speech verb after the complement clause as in

(326).

(326) Ngama bbeix
 my.mom say
 S V

Eilnrnisael ngua mermi su mel xie ggu xiel dor dae ar
 these.days 1p place people PL house fix reverse NCES IPFV PFV
 COMP CL

(bbaexl eine bbeix ar).
 hearsay this.way say PFV
 V

‘My mom said that **these days the people of our home area are rebuilding (their) homes.**’

The complement clause can precede the subject in the clause as in (327)-(328).

(327) **Ni moxi ddaer dae ngo saexl.**
 2s sweater hit IPFV 1s know
 V IPFV

‘I know **that you are knitting a sweater.**’

(328) **Xielmeir hal xiubbo Alhuar maerssor ddei lei aniu**
 before that month Joseph wife CL also child
 COMP CL

ar ddo xiu wo a, ngo bbejjiur ar.
 one CL give.birth obtain PFV 1s heard PFV
 COMP CL S V

‘I heard **that last month Joseph’s wife also gave birth to a child.**’

The verb *loxia* ‘hope’ requires that its complement precedes it.

- (329) a Ngo **ni/ngo cabbessor ar ddei lor loxia.**
 1s 2s/1s poor.person one CL become hope
 ‘I hope **you/I become a rich person.**’
- b *Ngo loxia **ni/ngo cabbessor ar ddei lor.**
 1s hope 2s/1s poor.person one CL become
 ‘I hope **you/I become a rich person.**’

Some verbs, e.g., *ger* ‘fear’, and *i* ‘see’, *saexl* ‘know’, *bbeixgger* ‘tell’, *bbejjiur* ‘hear’ subcategorize for either a sentential complement clause as in (330a) and (331a) or an NP object as in (330b) and (331b).

- (330) a Ngo **yar sirzzi lei ael ger.**
 1s 3s angry possible NF fear
 S COMP CL V
 ‘I am afraid **that she will get mad.**’
- b Ngo **anol ger.**
 1s dog fear
 S O V
 ‘I am afraid of **the dog.**’
- (331) a **Ni ngo maerssor luldaddur xiu ker wo xie i la**
 2s 1s wife pants CL steal succeed able see okay
 COMP CL V
 ‘...(I will) see (if) **you can succeed (in) stealing my wife's pants.**’
- b Ni **sul eil-ber i.**
 2s book this-CL see
 S O V
 ‘You look at this book.’

Other verbs, e.g., *zzir* ‘think’ (332) – (335) and *loxia* ‘hope’ (329) just subcategorize for clausal complements.

- (332) eil-bol yar maerssor zzae
 this-time 3s wife CONT

- (336) a Ngo Cuiryor leil **Alhuar arddolcar Mayou jjir ci** bie.
 1s Daniel to Joseph when Mayou return arrive ask
 ‘I ask Daniel **when Joseph returns to Mayou.**’
- b Ngo Cuiryor_i leil \emptyset _i **arddolcar Mayou jjir ci** bie.
 1s Daniel to when Mayou return arrive ask
 ‘I ask Daniel **when (Daniel) returns to Mayou.**’
- c Ngo Cuiryor leil “**Ni arddolcar Mayou jjir ci?**” bie.
 1s Daniel to 2s when Mayou return arrive ask
 ‘I ask Daniel, “**When do you return to Mayou?**”’
- (337) Yargol yar nimo_i leil
 her.brother 3s sister to
- \emptyset _i **yar leil zzirbae ddux gger (nia/la) quer** dor.
 3s to money exit give must/please urge NCES
 ‘Her brother urged his sister over and over **to give him money.**’
- (338) Ni ngo leil zzirbae ddux gger nia/ la.
 2s 1s to money exit give must/please
 ‘Give me money please.’

The subject NP of a complement clause in indirect questions does not have to be coreferential with any constituent in the matrix clause as (339) illustrates. When the subject NP of a complement clause is coreferential with an oblique in the matrix clause as in (340), it is expressed by zero anaphora. These examples also show that indirect questions take the same interrogative marking (reduplication of the verb) as direct questions.

- (339) Alhuar capor hal-ddei leil **yar ssormaer ddo**
 Joseph man that-CL to 3s daughter CL
- yar da jiehui yue yue** bie ar.
 3s with marry willing willing ask PFV
 ‘Joseph asked that man (if) **his daughter is willing to marry him.**’
- (340) Capor hal-ddei Cuiryir_i leil
 man that-CL Rebecca to

Ø_i **yar** **da** **jiehui** **yue** **yue** bie ar
 3s with marry willing willing ask PFV
 ‘That man asked Rebecca (if **she**) **is willing to marry him.**’

But the subject NP of a complement clause in indirect commands with *miardal* ‘order’ and *quer* ‘urge’, must be coreferential with an oblique in the matrix clause as (342) and (343) illustrate. These two verbs also take reduced complements that do not allow all aspect words (e.g., imperfective *dae* or perfective *ar*), but do allow mode words (e.g., *nia* ‘must’, *cer* ‘can’, or *la* ‘please’). The mode words are optional.

(341) Mi lei ho ael vaervaerpor mel ca_i mel leil
 ground come already NF leader PL people PL to

Ø_i **xie** **mel** **bei** **box** **dulei** (**nia/cer**) miardal.
 house PL do againbegin must/can order
 ‘After the earthquake, the leaders order the people **(to) begin to repair their homes again.**’

(342) Mi lei ho ael vaervaerpor mel ca mel leil
 ground come already NF leader PL people PL to

(*yaa **aniu**) **xie** **mel** **bei** **box** **dulei** (**nia/cer**) miardal.
 3p child house PL do again begin must/can order
 *‘After the earthquake, the leaders order the people for **their children (to) begin to repair their homes.**’

(343) Yargol yar nimo_i leil (*yarbbor-yarma)
 her.brother 3s sister to his.father-his.mom

yar **leil** **zzirbae** **ddux** **gger** (***dae/ar**) (**nia/la**) quer dor.
 3s to money exit give IPFV/PFV must/please urge NCES
 *‘Her brother urged his sister for his parents over and over **to give him money.**’

5.5.2.3 Relative Clauses

Lolo employs the gap strategy⁶² and pronoun retention to form prenominal relative clauses. The default means of producing relative clauses is for a restricting clause to precede both a noun and a classifier phrase as in (344).⁶³

- (344) **Ngo** --- **bar da** **dae** aniu hal-ddei yarzi pa.
 1s milk give.to.drink IPFV child that-CL really fat
 ‘The child **whom I nurse** is really plump.’

If the head noun is understood from the context it can be omitted, thus producing a headless relative clause. Although it is not mandatory for a classifier to follow the head noun, it is rare indeed for it to be omitted. Many relativized utterances sound unnatural without a classifier. The Lolo most often use the general classifier *ddei*, but other classifiers may also be used, depending on the nature of the head noun.⁶⁴ This structure is illustrated in Table 50.

Table 50: Structure of the Relative Clause

Restricting Clause	Noun	Classifier Phrase
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Relative clauses are usually externally headed, with the modifying clause preceding the noun head. It is possible, however, for the subject or the object of the

⁶² Payne explains that the gap strategy is “simply leaving a conspicuous “gap” in the position where the NP_{rel} would be if it were overtly expressed” (Payne 1997:330).

⁶³ In example sentences the relative clause is **boldfaced**; the head noun and classifier phrase are underlined. Unexpressed head nouns are represented with Ø. The original position of the head noun is represented with ---.

⁶⁴ LaPolla makes a similar claim for Qiang. He explains that the nominalizer a relative clause takes depends on the semantics of the head noun (LaPolla 2003b:584).

modifying clause to remain *in situ*, thereby producing an internally headed clause. Lolo speakers say that prenominal relative clauses and internally headed clauses are both acceptable and possess the same meaning. The (a) sentence of each of the following pairs is the normal, externally headed (pre-nominal) relative clause, and the (b) sentence of each pair is an internally headed relative clause.

- (345) a **Yar** --- **naexr dae** vilu hal-tae mel hazzi naexr sol.
 3s sew IPFV flower that-CL TOP very sew difficult
 ‘The flower **that she is sewing** is difficult to sew.’
- b **Yar** vilu **naexr dae** hal-tae mel hazzi naexr sol.
 3s flower sew IPFV that-CL TOP very sew difficult
 ‘The flower **that she is sewing** is difficult to sew.’
- (346) a Yar --- **ngama ngo leil gger cilci** hal-mel zzor mei.
 3s my.mom 1s to give sweet that-PL.CL eat upset
 ‘I am disgusted, he ate the candy **that mom gave me.**’
- b Yar **ngama ngo leil** cilci gger hal-mel zzor mei.
 3s my.mom 1s to sweet give that-PL.CL eat upset
 ‘I am disgusted, he ate the candy **that mom gave me.**’
- (347) a **Yar** --- **vae wo** xie hal-zzir mel yarzi perniar.
 3s buy obtain house that-CL TOP really expensive
 ‘The house **that she bought** was very expensive.’
- b **Yar** xie **vae wo** hal-zzir mel yarzi perniar.
 3s house buy obtain that-CL TOP really expensive
 ‘The house **that she bought** was very expensive.’
- (348) a --- **Xiar dae** ballar peil arddolmaex dol dae?
 ruin IPFV bowl CL where put IPFV
 ‘Where (do you) put the bowl **that is ruined?**’
- b Ballar xiar dae peil arddolmaex dol dae?
 bowl ruin IPFV CL where put IPFV
 ‘The bowl **that is ruined**, where do you put (it)?’

If the noun head is understood from the context, it can be omitted, producing headless clauses.

- (349) ...**nalzzar** **diu** **jie** **dae** Ø ddei mel yarbbor nga.
 ...inside suspend insert IPFV CL TOP their-father be
 ‘...the one **who is suspended inside** is their father.’

Although subjects, objects, obliques and possessors can be relativized, they are not relativized with equal success; restrictions do apply. First, it is most typical for subjects and objects to be relativized. Second, rather than relativize possessors, information is often distributed over more than one (nonrelativized) clause. This pattern conforms to the very strong tendency of the Lolo language to avoid information overload. Third, the gap strategy is employed with subjects, objects, and obliques. Pronoun retention is employed with possessors.

Subject relative clauses (where the noun head is the subject of the restricting clause) are formed with the gap strategy as demonstrated in (350), (351), and (364) – (366).

- (350) --- **Lu** **leil** **ga** **dae** xialpil hal-ddei de zei lei ar.
 wall on hang IPFV picture that-CL fall down VEN PFV
 ‘The picture **that hangs on the wall** fell down.’
- (351) --- **No** **dae** veixr hal-ddei si ar.
 sick IPFV pig that-CL die PFV
 ‘The pig **that was sick** died.’

Object relative clauses (where the noun head is the object of the restricting clause) are also produced with the gap strategy as demonstrated in (352) - (354).

- (352) **Ngo** --- **seissaer** **dae** ssormaer hal-ddo
 1s like IPFV woman that-CL

 kebal zzi hal-ddei gga hher dae.
 other city that-CL in live IPFV
 ‘The woman **whom I like** lives in another city.’

(353) Ngo --- bei xiar gger bbie hal-tae
 1s do ruin give vase that-CL

zaezir ddei leil dol dae.
 table CL on put IPFV

‘The vase **that I broke** is on the table.’

(354) Yar arni --- xiu teil lei nga seir aniu hal-ddo si ar.
 3s yest. birth out VEN be still child that-CL die PFV
 V DIR1 DIR2

‘The child **she just gave birth to yesterday** died.’

Oblique relative clauses (where the noun head is the oblique of the restricting clause) are also formed with the gap strategy as in (355) - (358).

(355) Yar --- zzirbae gger dae capor hal-ddei seifufae ar.
 3s money give IPFV man that-CL mad PFV/COS
 ‘The man **to whom he gave the money** became mad.’

(356) Ngo --- miar bei gger dae ca hal-ddei nixmox yarzi neil.
 1s task do give IPFV person that-CL heart really deep
 ‘The person **that I work for** is stingy.’

(357) --- Sul nial ge dae lu ddei naer ho ar.
 paper stick on IPFV wall CL dirty already FIN
 V RES ASP
 ‘The wall **that the paper is stuck to** is already dirty.’

(358) Yar --- zzirbae ker aniu hal-ddei nge dae ar.
 3s money steal child that-CL cry IPFV COS
 ‘The child **(from whom) he stole the money** is crying.’

It is possible to relativize simple possessor phrases in verbal clauses by employing pronoun retention as in (359), (360b), and (361b). In (359) it is necessary for the NP to be ‘her.brother’, not just ‘brother’ and in (360b) and (361b) it is necessary for the postposition *da* ‘with’ to follow the pronoun. This is a special feature of relativized possessive clauses, as normal possessive NPs do not take the postposition *da* ‘with’.

(359) **Yargo ngo leil vilu gger gor ssormaer hal-ddei**
 her.bro 1s to flower give EXP woman that-CL

ngo da gaggor lei.
 1s with play come

‘The girl **whose brother gave me flowers** is coming over to play with me.’

(360) a Ngo yar xie vae gor.
 1s 3s house buy EXP
 ‘I bought his house.’

b Ngo [**yar da**] xie vae gor ssormaer hal-ddei leil mia ar.
 1s 3s with house buy EXP woman that-CL DOM see PFV
 ‘I saw the woman **whose house I bought**’

(361) a Ngo yar caezi ddei vae.
 1s 3s car CL buy
 ‘I buy his car.’

b **Ngo** [**yar da**] **caezi vae capor hal-ddei** ngo leil fur ar.
 1s 3s with car buy man that-CL 1s DOM deceive PFV
 ‘The man **whose car I bought** deceived me.’

Although the relativized clause in (362) is grammatical, the utterance is challenging to process, so it is preferable for the information to be distributed over two nonrelativized clauses, by employing a non-reduction strategy or paratactic construction, as (363) illustrates.

(362) **Yarbbor yarma yar leil capor hal-ddei da**
 her.dad her.mom 3s to man that-CL with

ddoddonrddo jihui lol ssormaer hal-ddei beix du si ar.
 force marry cause woman that-CL run up away PFV
 ‘That woman, **whose father and mother forced her to marry that man**, ran away.’

(363) Ssormaer hal-ddei yarbbor yarma yar leil capor
 woman that-CL her.dad her.mom 3s to man

hal-ddei da ddoddonrddo jihui lol ael,
 that-CL with force marry cause NF

yar beix du si ar.
 3s run up away PFV
 ‘That woman, (being the case that) her father and mother forced her to marry that man, she ran away.’

Verbal auxiliaries or particles can follow the verb in the restricting clause, but it is not typical for a string of verbal auxiliaries/particles to do so.⁶⁵ Sentences (364) – (366) illustrate the use of resultative auxiliaries and particles within the restricting clause.

(364) --- **De** **zei** **lei** xialpil hal-ddei xiar ar.
 fall descend VEN picture that-CL ruin FIN
 V DIR1 DIR2
 ‘The picture **that fell down** is ruined.’

(365) --- **Nier** **du** **lei** veixr hal-ddei no.
 stand up VEN pig that-CL pain
 V DIR1 DIR2
 ‘The pig **that stands/stood** up is sick.’

(366) --- **Cux** **zei** **xiel** aniu hal-ddo yarzi ggayo.
 sit descend reverse child that-CL really well.behaved
 V DIR1 DIR2
 ‘The child **who sits/sat down** is really well behaved.’

Examples (367) and (368) demonstrate that a variety of aspect auxiliaries (e.g. *dor* ‘noncessative’ and *gor* ‘experiential’) and particles (e.g. *dae* ‘imperfective’) can occur in the restricting clause. It is not possible, however, for the perfective particle *ar* to follow a verb in the restricting clause as in (368). This may seem strange, but Mandarin Chinese also does not allow the perfective *-le* within relative clauses.

(367) **Bbecir-bbexiel** **Cuiryor da** **cirgo a** **gaggor** **(dor)** **dae**
 every.day Daniel with together play NCES IPFV

⁶⁵ Matisoff has observed for Lahu that the “...VP [in relative clauses] may include almost any member of the class of verb particles” (Matisoff 1973:474).

capor hal-ddei meldder ngago ar.
 man that then my.brother FIN
 ‘The man **that hangs out with Daniel every evening together** is my older brother.’

- (368) Yar --- mul gger gor (*ar) caporssor hal-mel daxue kor lal.
 3s teach give EXP PFV boy that-CL college test up
 ‘The boys **whom he taught** (have) tested into college.’

Mode auxiliaries (e.g. *var* ‘can’) and particles (e.g. *ho* ‘realis’) can follow the verb in the restricting clause, but they are not as common as the resultative and aspect words.

- (369) Yar --- naexr var vilu hal-tae mel hazzi naexr sol.
 3s sew can flower that-CL TOP really sew hard
 V MODE1
 ‘The flower that **she can sew** is difficult to sew.’

- (370) Yar --- naexr gor ho vilu hal-tae mel hazzi naexr sol.
 3s sew EXP already flower that-CL TOP really sew hard
 V ASP MODE2
 ‘The flower **she already sewed** is difficult to sew.’

Pragmatic particles, like the topicalizer *mel*, can follow the noun modified by the relative clause, as illustrated in (371).

- (371) Capor hal-ddei --- zzor dae almeixr mel mel
 man that-CL eat IPFV rice PL.CL TOP
 ngua mermi lei arddeir ar.
 1p region come CONT PROM FIN
 ‘The rice **that man is eating** is from my home area.’

5.5.2.4 Temporal Clause

Temporal clauses are formed by adding a temporal word or phrase to a clause.

(The temporal expression is underlined in example sentences.)

- (372) Mipaerbbae gga ssi gel hal-car, almer lei ar.
 field in go across that-time rain come PFV
 ‘When I crossed the field, it rained.’

The temporal expression has nominal characteristics, but is not a noun, so the head of the temporal clause is a temporal expression. The temporal expression does not allow classifier phrases to follow it, as the head of relative clauses do. This structure is illustrated in Table 51.

Table 51: Temporal Clause

Modifying Clause	Temporal Word/Phrase
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Unlike relative clauses, temporal clauses do not take the full range of TAM words as (373) demonstrates.

- (373) **Mayou ssi *dae/ar/var/nia/gor (hal) cirni**
 Mayou go IPFV/PFV/can/will/EXP that one.day
 V ASP and MODE words
 ‘the day (I) go/went/can go/will go/went to Mayou’

Temporal clauses often function as temporal adjuncts, as in (374) – (376).

- (374) **Mayou ssi (hal) cirni, almer lei ar.**
 Mayou go that one.day rain come PFV

Yel jjiumo mel yarzi ssi sol.
 so road TOP really go difficult

‘The day **when he went to Mayou** it rained. So the roads were bad.’

- (375) **Yar aniu xiu hal xiubbo ake ca mel yarzi jjiur.**
 3s child birth that month home people PL really busy
 ‘The month **she gave birth to the baby**, the people in the home were really busy.’

- (376) **Mi lei (hal)-car, ngua mi gga miar bei dae.**
 earth come that-time 1p field in task do IPFV
 ‘At the time/**when the earthquake occurred**, we were in the fields working.’

Temporal clauses also function as the subject (377) or object (378) of the matrix clause.

(377) **Ngo jiehui hal cirni mel yarzi seir.**
 1s marry that one.day TOP really good
 ‘**The day I married** (was) really good.’

(378) **Ngo jiehui hal cirni leil hocir dae.**
 1s marry that one.day DOM remember IPFV
 ‘I remember **the day I married.**’

5.5.2.5 Nominalized Clauses

Nominalized clauses consist of a clause, a nominalizer, and a classifier/locative phrase. (See 3.1.1 for a discussion of nominalizers.) The nominalized agentive clause and locative clause optionally include a noun, consistent with the fact that Lolo allows two juxtaposed nouns in the same NP, as explained in 4.1.

One difference between nominalized clauses and relative clauses is that nominalized agentive and locative clauses have nominalizers, which relative clauses do not. Another significant difference is that nominalized clauses do not take the full range of TAM words.⁶⁶ They allow resultative and aspectual auxiliaries (words with verbal characteristics), but do not take resultative and aspectual particles or mode words.

Nominalized clauses with directional words are illustrated in (379).

(379) **Vilu naexr gex su ssormaer hal-ddei mel Lorlopor ar.**
 flower sew on NMLZ woman that-CL TOP Lolo FIN
 V DIR
 ‘The woman who sews the flowers on is Lolo.’

⁶⁶ Bradley has observed that Lisu nominalized clauses may contain modal and directional postverbal elements, but not aspect markers (Bradley 2003:229).

Some nominalized clauses take aspect auxiliaries (380) and (381), but none of them take aspect particles or mode words as in (382) and (383).

- (380) xie zi **gor** su
house build EXP NMLZ
'person who has built (a) house'
- (381) pia vur **gor/dor** ggie
clothes sell EXP/NCES NMLZ
'place where clothes have been/are repeatedly sold'
- (382) xie zi (***dae/ar/var/ddo/cexr/nia**) su
house build IPFV/PFV/can/able/capable/will NMLZ
'person who builds house'
- (383) pia vur ***dae/ar/var/nia** ggie
clothes sell IPFV/PFV/able/will NMLZ
'place where clothes are being/have been/can be/will be sold'

5.5.2.5.1 Nominalized Agentive Clause

The nominalized agentive clause consists of a clause, the nominalizer *su* 'person who', an optional animate noun, and a classifier phrase. The noun that follows the nominalizer is optional.

Table 52: Nominalized Agentive Clause

Agentive Clause			
Clause	<i>su</i>	(Animate Noun)	Classifier Phrase

In the following nominalized agentive clauses, the noun is present in (384), but is absent in (385) – (387). Note that none of these nominalized clauses have any TAM words, as the preference is not to use them in the nominalized clause.

- (384) Ngo **ngo** **leil** **xie** **vur** **gger** **su** ssormaer hal-ddei
1s 1s to house sell give NMLZ woman that-CL

leil mia ar.
to see PFV
'I saw the woman the one **who sold me the house.**'

(385) **Xie zi su** hal-ddei no ael,
house build NMLZ that-CL pain NF

miar nr bei ssi ar.
task not do AND PFV
'The one **who builds the house** is sick, (so he) did not go work.'

(386) nael **casima bil su** hhexr mia nael,
DM corpse carry NMLZ family.CL see DM

yar yol yarma da lei nr jjir.
3s/he again her.mom with come not return
'(He) saw the family **who (was) carrying the corpse**, so he again did not return to her mother's.'

(387) Niul **var vur su** ddei leil zzirbae gger nia.
1p veg. sell NMLZ CL to money give must
'We must give the person **who sells vegetables** money.'

In (388) and (389) the noun can either precede (a) or follow (b) the modifying clause. It is possible that the noun is in apposition to the nominalized clause.

(388) a Ssormaer vilu naexr su hal-ddei mel Lorlopor ar.
woman flower sew NMLZ that-CL TOP Lolo FIN
'The woman **who sews the flower** is Lolo.'

b **Vilu naexr su** ssormaer hal-ddei mel Lorlopor ar.
flower sew NMLZ woman that-CL TOP Lolo FIN
'The woman **who sews the flower** is Lolo.'

(389) a Ngo capor qine naexr xiel su hal-ddei leil zo.
1s man shoes sew reverse NMLZ that-CL DOM look
'I am looking for the man **who repairs shoes.**'

b Ngo **qine naexr xiel su** capor hal-ddei leil zo.
1s shoes sew reverse NMLZ man that-CL DOM look
'I am looking for the man **who repairs shoes.**'

5.5.2.5.2 Nominalized Locative Clause

The nominalized locative clause is formed by adding the locative nominalizer *ggie* ‘place’ and an optional locative word or a N + classifier to a clause. This structure is summarized in Table 53.

Table 53: Nominalized Locative Clause

Clause	<i>ggie</i>	(Locative Word) (Noun + CL)
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The nominalized locative clause functions as a place adjunct in (390) – (393).

- (390) Ngo **pia** **vur** **ggie** eilmaex yar leil xia dae
 1s clothes sell NMLZ here 3s to wait IPFV

bbeix har dae.
 say COMPL IPFV

‘I said that (I would) meet her here **where clothes are sold.**’

- (391) Yar **mi** **lei** **ggie** halmaex ssi ael,
 3s earth come NMLZ there go NF

ca mel leil bei jjiu.
 people TOP DOM do help

‘She went there **where the earthquake occurred** to help people.’

- (392) Ni mae eil-mel **ngo** **ca** **gor** **ggie** halmaex gga
 2s cloth this-PL 1s wipe EXP NMLZ there inside

dol ji xiel.
 put in reverse/return

‘Put the cloths back there **where I wiped.**’

- (393) Ngo **me** **so** **ggie** halbbaer ssi.
 1s mushrooms gather NMLZ there go

‘I go over there **where mushrooms are gathered.**’

The nominalized locative clause functions as a subject in (394) and (395).

(394) **Sexbex** **dae** **ggie** mi bbae yarzi narcil.
 corn plant NMLZ field CL really good
 ‘The field **where corn is growing** is really doing well.’

(395) **Me** **so** **ggie** halbbaer igazae.
 mushroom gather NMLZ there pretty
 ‘The place **where mushrooms are gathered**, there, is pretty.’

Although it is most typical for *ggie* ‘place’ to be followed by a locative word or a noun, neither of those elements is obligatory as (396) illustrates.

(396) Me so **ggie** Ø igazae.
 mushroom gather NMLZ pretty
 ‘**Where mushrooms are gathered** is pretty.’

5.6 Sentence Types

This section discusses declarative, imperative, and interrogative utterances.

5.6.1 Declaratives

The default means of producing a declarative statement is to form a basic S (O) V sentence as in (397). No auxiliaries or particles are necessary. However, sometimes the particle *ar* ‘final’ is added to an utterance to ensure that the listener does not think it is a command as in (398) or to ensure that the listener knows that the utterance is complete as in (399).⁶⁷

⁶⁷ While it is true that *ar* can act like a declarative particle, that is not its most common application. Its core function is to indicate that the utterance is complete. *Ar* may NOT be added to many declarative statements at the beginning of stories because it indicates that the speaker is finished speaking on that particular topic. If it is added, it gives the listener the impression that the speaker has nothing else to say.

- (397) Yel yar cirmu ddei leil ci
 And 3s daughter-in-law CL DOM mistreat
 yar ssormaer ddei leil nael perniar.
 3s daughter CL DOM DM love.
 ‘She mistreated her daughter-in-law; but she loved her daughter.’
- (398) Ni maerssor zo jjir lei lal ddo ar.
 2s wife search return VEN only may FIN
 ‘You may only return to look for a wife.’
- (399) Yar Lolopor ar.
 3s Lolo.person FIN
 ‘She is Lolo.’

5.6.2 Imperatives

Lolo employs more than ten ways to form imperatives and directives. The default means of ordering another person is to utter a plain statement, with no additional particles. The second person addressee is often omitted in commands. Verbal auxiliaries and particles, along with sentential particles, are also added to utterances to create directives that range from being very polite to very forceful. Of these, only the hortative *la*, the imperative *yi*, and the prohibitive *tor* can be considered ‘imperative’ particles, as their only function is to express commands or prohibitions. Other auxiliaries and particles, such as the deontic *nia* and assumptive declarative *ngo ar*, have nonimperative core meanings and functions, but are often used pragmatically to encourage people in certain behaviors.

The basic command can be produced with just a verb as in (400). The 2s/2p subject is understood.

- (400) Cux dae.
sit IPFV
'Sit down.'
- (401) Almeixr arddor zeil.
rice a.little boil
'Boil a little rice.'
- (402) Pia veir da.
clothes wear more
'(You) put on more clothes.'

The hortative is formed by adding the particle *la* to the utterance. It softens commands. The subject does not need to be expressed.

- (403) Almeixr arddor zeil da **la**.
rice a.little boil more okay/let's
'**Let's** boil a little more rice.'
- (404) Pia veir da **la**.
clothes wear more okay/let's
'**Let's** put on more clothes.'

A more firm imperative is formed by adding the particle *yi* to the utterance. The 2s/2p subject does not need to be expressed.

- (405) Almeixr arddor zeil da **yi**.
rice a.little boil more IMP
'(You) **go** boil a little more rice.'
- (406) Pia veir da **yi**.
clothes wear more IMP
'(You) **go** put on more clothes.'

The prohibitive is formed by adding *tor* 'don't' before the verb.

- (407) Almeixr **tor** zeil.
rice don't boil
'**Don't/stop** boiling the rice.'
- (408) Pia **tor** veir da.
clothes don't wear more
'**Stop** putting on clothes,' or '**Don't** put on more clothes.'

To produce an utterance that communicates obligation, the deontic verbal particle *nia* ‘need/must’ is added to the utterance.

(409) Almeixr arddor zeil **nia**.
 rice a.little boil need/must
 ‘(You) **must** boil a little more rice.’

(410) Pia veir da **nia**.
 clothes wear more need/must
 ‘(You) **must** put on more clothes.’

The mitigative is formed by adding the ‘assumptive’ sentential particle *ngo* and the final *ar* to the utterance. This produces one of the most polite directives in the language.

(411) Almeixr arddor zeil **ngo ar**.
 rice a.little boil ASSUM FIN
 ‘**Please** (you/we) boil a little more rice.’⁶⁸
 Literally, ‘**I assume** (you/we) boil a little rice.’

(412) Pia veir da **ngo ar**.
 clothes wear more ASSUM FIN
 ‘**Please** (you/we) put on more clothes.’
 Literally, ‘**I assume** (you/we) put on more clothes.’

5.6.3 Interrogatives

Lolo employs reduplication, content question words, tag formations, and particles to form a variety of interrogative sentences. When the speaker is requesting information, s/he uses reduplication and content question words. When the speaker desires to communicate his/her own viewpoint and seeks validation of his/her supposition, s/he uses tag questions and particles.

⁶⁸ Since the subject is not specified, it can be either ‘you’, ‘we’, or ‘I’; likewise, for (412).

The default means to ask yes-no questions is to reduplicate the verb, auxiliary, or adjective, with no rise in intonation. Content questions are formed with the question words that are presented in Table 54.

- (413) Ni arni zalbbaer **ddux** **ddux** ar?
 2s yesterday outside exit exit PFV
 ‘Did you go out yesterday?’
- (414) Yar **jili-lir**?
 3s smart-DUP
 ‘Is he smart?’

Table 54: Interrogative Words

arseir	who
arseir leil	to whom
azo	what
arddolyo	what (which kind)
arddolmaex	where (which place)
arddolbol	when (which time)
arddolcar	when (which time)
arsae	how
arsaengael	why
homo	how many

The question word occurs *in situ* as (415) – (417) demonstrate.

- (415) Arni **arseir** ni da cirgor a gaggor?
 Yesterday who you with together ? play
 ‘Yesterday who played together with you?’
- (416) Ni **azo** bei dae?
 2s what do IPFV
 ‘What are you doing?’
- (417) Yar **arsae sael** jilir?
 3s how smart
 ‘How smart is he?’

Tag questions (that expect a positive response) are formed by repeating certain verbs, such as *nga* ‘be’ and *ssa* ‘need’.

(418) Yar jilir **nga nga?**
 3s smart be be
 ‘He is smart, **isn’t he?**’

(419) Eilsenehe niul paegu vizu dda **ssa ssa?**
 this.morning 1p pork.bone soup drink need need
 ‘This morning we drink pork bone soup, **okay?**’

Still other questions are produced by adding interrogative evidential particles.

(420) Yar jilir **bbaex?**
 3s smart hear.doubt
 ‘**How is it that I hear that** he is smart?’

(421) Cilni yar gulsil gor nr jjir lei ael **bbaex?**
 this.year 3s Spring Fest. celeb. not return VEN NF hear.doubt
 ‘This year, he does not return to celebrate Spring Festival, **is what I hear true?**’

(422) Yar jilir **zzar?**
 3s smart see.surprise
 ‘**How is it that I see** he is smart?’

Rhetorical questions are formed by adding sentential particles or question words to the end of utterances. In (423) the speaker uses the assumptive evidential *ngo* to produce a question that means ‘he cannot be smart.’

(423) Yar mel jilir var **ngo?**
 3s TOP smart able ASSUM
 ‘Is he able to be smart?’

In (424) the speaker adds *arddol lei* ‘what also’ to the end of the sentence to communicate that ‘he certainly is smart.’

(424) Yar ji<nr>lir **arddol lei?**
 3s not.smart what also
 ‘**How is it that** he isn’t smart?’

CHAPTER 6

VERB SERIALIZATION

Loloish languages are known for their propensity to string verbs together; Lolo is no exception. This chapter describes verb sequences within the same verb complex and sequences in separate clauses. It also presents the properties of various types of serial verb constructions (SVCs) and auxiliary verb constructions (AVCs).

6.1 Differentiating Monoclausal and Multiclausal Verb Sequences

Once the difference between verbs, adjectives, and auxiliaries is determined, another important distinction to make is whether verbs in a series are members of the same VC or not. While a diagnostic can be created to account for strings of Lolo verbs in the same VC as opposed to sequences of Lolo verbs in different clauses, choosing the correct terminology to explain it is another matter.

Although linguists of Southeast Asian languages often mention verb **concatenation** and verb **serialization** as characteristics of these languages, definitions of these terms which adequately differentiate them from each other and also are consistent with parameters other linguists use are still pending. Bjorverud refers to strings of verbs and auxiliaries as concatenations (Bjorverud 1998:87). Matisoff refers to strings of verbs which refer to a series of separate temporally consecutive actions, **and** series of verbs which express one verbal idea both as concatenations. He says:

Lahu is remarkable for the ease with which two or more verbs may be concatenated by simple juxtaposition to form complex verbal nuclei, even though the verbs refer to a series of separate temporally consecutive actions...

The most interesting strings of verbs are those which form a single verbal idea, so that they all belong to the same clause. One of the verbs in each concatenation is the main verb... (Matisoff 2003:218).

Matisoff distinguishes verb concatenations from serializations based on the presence of intervening arguments. He says that certain Southern Loloish languages are

‘concatenating’, in that they can string together series of 2, 3, 4, or even 5 verbs in simple juxtaposition, with all their normal arguments jointly preposed to this single verb-clot (Matisoff 1985:34).

In contrast, he observes that

the Northern Loloish (Yi) languages.... have developed certain serialized verb constructions, involving grammaticalized “co-verbs”... which are preceded by their own nominal arguments (Matisoff 1985:34).

If Bjorverud and Matisoff’s remarks are applied to the Lolo language, then strings of verbs and auxiliaries, strings of verbs expressing one complex event, and strings of verbs expressing different events (with no intervening NP) are all concatenations, not serializations. But if serializations are defined as Kroeger states, then some Lolo verb strings are serializations. The following diagnostic, based on Kroeger’s (2004) and Aikhenvald’s (2006) explanations of serialized verbs, provides parameters for differentiating Lolo verbs in serializations from Lolo verbs in separate clauses.

Table 55: Characteristics of Verb Sequences

Verb Serialization	Verbs in Different Clauses
Two or more morphologically independent verbs	Two or more morphologically independent verbs
One (possibly complex) event	Separate events
One single intonation contour, with no pause separating verbs	Pauses between verbs are permissible
No intervening connectors between verbs	Connectors may intervene between verbs
Negation only occurs once in an SVC	Each verb may be negated with <i>nr</i> ‘not’ or <i>tor</i> ‘don’t’.
The verbs share at least one semantic argument	The verbs do not have to share any semantic argument
The verbs belong to one relative clause construction	The verbs may belong to separate relative clause constructions
No intervening NPs between verbs	NPs may intervene between each verb
One specification for TAM	Distinct TAM words may follow each verb
No intervening verbal particles, pragmatic particles, or clausal connectors between verbs	Verbal particles, pragmatic particles, and clausal connectors may intervene between verbs

In Lolo, serial verbs are pronounced as one unit with a pause following the entire string. Verbal particles, pragmatic particles, and clausal connectors may not intervene between the verbs in the set, so it is unacceptable to utter the imperfective *dae* or the NF *ael* between verbs as in (425b).

- (425) a Arbbor ama leil lei yarzi **bei jjiu guar** zoxr.
 father mother DOM also really do help manage ought
 S V V V AUX
 ‘(You) also really **ought to help care for** mom and dad.’
- b Arbbor ama leil lei yarzi **bei jjiu (*dae/*ael) guar** zoxr.
 Father mom DOM also really do help IPFV/NF manage ought
 V V *NF V AUX
 ‘(You) also really **ought to help care for** mom and dad.’

The above example also provides good evidence for serialization in Lolo as the verbs *bei* ‘do’ and *jjiu* ‘help’ separate the next verb *guar* ‘manage/care for’ from its object.

However, verbs in different clauses may each be negated as (434) and (435) demonstrate.

(434) Ni qiene **tor** cir, jingzi **tor** ca, pia **tor** de.
 2s shoes don't wipe mirror don't wipe clothes don't fold
 'Do not clean the shoes, do not wipe the mirror, do not fold the clothes.'

(435) Ngo qiene **nr** cir, jingzi **nr** ca, pia **nr** de.
 1s shoes not clean mirror not clean clothes not fold
 'I do not clean the shoes, do not wipe the mirror, do not fold the clothes.'

Verbs in verb serializations are not in separate clauses, so they cannot belong to two different relative clause constructions and maintain the same meaning as the SVC. While the verb serialization in (436a) means 'the man who gets drunk (on) alcohol,' the verb sequence in (436b) means 'the man who drinks, the man who sleeps'.

(436) a **zzibbaer dda yir** capor hal-ddei
 alcohol drink sleep man that-CL
 'the man who gets drunk (on) alcohol'

b ***zzibbaer dda** capor hal-ddei **yir** capor hal-ddei
 alcohol drink man that-CL sleep man that-CL
 'the man who gets drunk (on) alcohol'

But verbs in different clauses can each be relativized.

(437) **Ddarzopir ddei vaelaertae bil ge dor dae** capor hal-ddei
 pole CL parallel carry on NCES IPFV man that-CL
 'The man who carries the pole parallel,'

aniu ddo leil bber dae ssormaer hal-ddei
 child CL DOM carry IPFV woman that-CL
 'the woman who carries the child,'

ddux nr xie.
 exit not capable
 'cannot exit (the room).'

All arguments precede Lolo verb serializations as in (438) and (439).⁷⁰

- (438) Arbbor lei zolzol ael zzipbaer **dda** **yir**
 father also often NF alcohol drink sleep
 S O V V
 ‘Dad also often gets **drunk**’
- (439) Ngo aniu mel yirgurci leil sae **ssu** **dol** gger
 1s child TOP bed on snake snatch put give
 S OBL O V V V
 ‘My son **grabs and puts** (the) snake on the bed.’

Arguments may not intercede between serialized verbs.

- (440) ***ni** silhua tae **xiar** **gger** ar.
 squish persimmon CL break give PFV
 ‘squished the persimmon’

However, NPs may intervene between verbs in separate clauses.

- (441) Ngo qiene **cir**, jingzi **ca**, pia **de**.
 1s shoes clean mirror wipe clothes fold
 ‘I clean the shoes, wipe the mirror, fold the clothes.’

Lolo verb serializations are modified by one set of TAM words, which follow the final verb in the serialization. Therefore, initial and medial verbs in serializations cannot be modified by distinct TAM words, as demonstrated by the unacceptability of (443).⁷¹

- (442) Yar vilu ddei **vei** **dol** **teil** ar.
 3s flower CL take put complete PFV
 V V ASP.AUX ASP.PCL
 ‘She finished putting the flowers (on the table).’

⁷⁰ Bjorverud explains for Lalo “[t]he verb concatenation as a whole functions as the head of the predicate and it is therefore the concatenation that takes arguments, and/or adverbial modifiers” (Bjorverud 1998:87).

⁷¹ There is one exception to this restriction: the V_1 *dae* V_1 *dae* construction, where the verbs and the imperfective aspect words are identical. See 3.7 for an example.

- (446) Yel eil-bol anol te leil **deil si gger** ar.
 then that-time dog CL DOM hit death give PFV
 ‘Then, at that time (the older brother) beat the dogs to death.’

In (447) both *bei* ‘do’ and *jjir* ‘return’ are understood to be in the same VC (because the second verb is negated), so the SVC is interpreted as ‘do not return to work’.

- (447) Ngo miar **bei nr jjir** ael, ama leil bei jjiu dae.
 1s task do not return NF mom DOM do help IPFV
 ‘I do not return (to Chuxiong) to work, (I stay in Mayou) to help mom.’

In (448) *bei* ‘do’ and *jjir* ‘return’ are understood to be in different VCs (because *bei* ‘do’ is negated which would not be possible if they were in the same VC). The verb sequence is interpreted to mean ‘do not work, (then) return’.

- (448) Ngo miar **nr bei, jjir** ael, ama leil bei jjiu.
 1s task not do return NF mom DOM do help
 ‘I do not work (in Chuxiong), (I) return (to Mayou), (I) help mom.’

In (449) *bei* ‘do’ and *jjir* ‘return’ are understood to be in different VCs (because *bei* is negated and followed by the pragmatic particle *ael*). The verb sequence is interpreted to mean ‘being the case I do not work, (it is) the reason (I) return’.

- (449) Ngo miar **nr bei ael, jjir** a-nar,
 1s task not do NF return ?-reason
 ama leil bei jjiu **jjir nr** nga.
 mom DOM do help return not be
 ‘Being the case I do not work, (this is) the reason I return, (it is) not to return to help mom.’

6.2 Serial Verb Constructions and Auxiliary Verb Constructions

Serial verb constructions (SVCs) are not all alike. Aikhenvald distinguishes symmetrical or pure SVCs from asymmetrical SVCs.⁷² “Symmetrical serial verb constructions consist of two or more verbs each chosen from a semantically and grammatically unrestricted class” (Aikhenvald 2006:3). Asymmetrical serial verb constructions consist of “...one verb from a relatively large, open, or otherwise unrestricted class, and another from a semantically or grammatically restricted (or closed) class” (Aikhenvald 2006:21). In Lolo, all verbs in symmetrical SVCs also function as independent verbs; therefore, they represent prototypical SVCs. However, not all words in asymmetrical SVCs can function as independent verbs anymore. In fact, many have lost some of their verbal characteristics and function as auxiliaries. That being the case, it could be argued that they should not be considered SVCs at all (Kroeger 2004 and Aikhenvald 2006). In fact, Anderson refers to constructions like these as auxiliary verb constructions (AVCs) because the construction consists of a lexical verb followed by an auxiliary verb (Anderson 2006:7). Given these facts, I posit three main types of complex verb constructions for Lolo: 1) symmetrical SVCs, 2) asymmetrical SVCs, and 3) AVCs. Lolo symmetrical and asymmetrical SVCs and AVCs all demonstrate the qualities of verb serialization as enumerated in Table 55 above. The main difference between them is the verb’s ability to serve as the head of the VC—main verbs possess this characteristic,

⁷² Aikhenvald states that asymmetrical SVCs tend to undergo grammaticalization, while symmetrical SVCs tend to become lexicalized. She says that the former produce TAM and mood markers, directionals, valency changing morphemes, adpositions, comparative and superlative markers, conjunctions and complementizers, while the latter develop idiomatic meanings (Aikhenvald 2006:30).

but secondary verbs and auxiliaries do not. Another difference between them is that verbal particles do not precede regular verbs and secondary verbs, but sometimes precede auxiliaries. A third difference is that the more grammaticalized auxiliaries are further from the first verb (V_1) than the verbs in symmetrical and asymmetrical SVCs are.⁷³

The auxiliaries in AVCs show a close connection to the verbs from which they derive.⁷⁴ Either their pronunciation is identical or only slightly altered. The semantic shift from the verb to the auxiliary is also often slight and/or predictable. Because the phonological and etymological connection between auxiliaries and the verb from which they derive is often readily apparent, it is assumed that most (if not all) AVCs originally functioned as SVCs. Since AVCs are common, it seems that the tendency of the Lolo language is to grammaticalize its verb strings. As a result, the following continuum of SVCs and AVCs can be postulated, where #1 is the prototypical SVC consisting of pure verbs, #2 is a lexicalized SVC, #3 is an asymmetrical SVC, #4 is an AVC and #5 is no longer an SVC or AVC (because *ssi* ‘go’ and *lol* ‘cause/let/allow’ have lost their verbal characteristics and have become particles).

⁷³ A similar phenomenon is attested in Burmese where “[a]uxiliary verbs ... show a range of grammatical properties and semantic specialization that suggests a cline of abstractness. Those whose relative position is close to the Vh [verb head] show greater independence” (Wheatley 2003:203).

⁷⁴ Bradley (2003:231) has observed that Lisu also has modals which have been grammaticalized from verbs that still exist.

Symmetrical SVCs

1. Two distinct verbs, both communicating their primary meaning

- *ssu* ‘grab’ + *daer* ‘cut’ becomes ‘grab (and) cut’
- *dei* ‘hit’ + *si* ‘die’ becomes ‘hit/beat to death’

2. Two distinct verbs, both of which have lost their original meaning because the construction has been lexicalized.

- *dda* ‘drink’ + *yir* ‘sleep’ becomes ‘drunk’

Asymmetrical SVCs

3. A verb followed by a secondary verb; the meaning of the secondary verb is more lexical than that of auxiliaries, but it can never serve as the head of the VC.

- *dei* ‘hit’ + *zil* ‘die/cause to die’ becomes ‘hit/beat to death’

AVCs

4. A verb followed by auxiliaries; the meaning of the auxiliary shifts from that of its derived verb (the meaning is more abstract than secondary verbs) and the auxiliary also cannot function as the head of the VC.

- *ker* ‘steal’ + *wo* ‘succeed’ + *xie* ‘able’ becomes ‘succeed and able to steal’
- *perniar* ‘love’ + *dor* ‘point’ becomes ‘keep on loving’

5. A verb followed by particles; the meaning of the particle is different from that of its derived verb and it no longer has verbal characteristics.

- *zza* ‘study’ + *ssi* ‘go’ + *lol* ‘allow’ becomes ‘allow to go study’

6.2.1 Symmetrical or Pure SVCs

Each one of the bold-faced verbs in the following examples of this section can function as independent verbs, but in these utterances they are in the same VC, so they are considered to be symmetrical SVCs. In (450) - (454) both verbs retain their primary meanings in the SVCs.

(450) Yel yar maerssor mel arcil yir ho ael,
and 3s wife TOP a-while sleep already NF

yir piarpo xiel lei a mel,
sleep side.roll reverse VEN PFV TOP

silhua tae **ni xiar gger** ar.
persimmon CL squish break-up give FIN

‘And his wife after already asleep, (she) **rolled-over in-her-sleep**, (and) **squished** the persimmon.’

(451) Nael miar cirza-hanga **bei jjir** lei.
then task all-kinds do return come
‘Then (we) would **return to do** all kinds of jobs.’

(452) Ngo aniu mel yirgurci leil sae **ssu dol** gger.
1s child TOP bed DOM snake snatch put give
‘My son **grabs and puts** (the) snake on the bed.’

(453) Ngo olce ddaer nr yue lei, yaa ngo leil **ssu daer** gger.
1s hair cut not willing also 3p 1s DOM snatch cut give
‘Even though I am not willing to cut (my) hair, they **grab me cut** (it).’

(454) Yarma capor nr zza ael,
her.mom husband not exist NF

yar bbielil-bbielor **ae nge** dor dae.
3s loudly call.out cry NCES IPFV

‘When her mom (sees her) husband die, she loudly **calls out (and) cries** without ceasing.’

In some symmetrical serial verb constructions, the verbs lose their primary meaning and assume idiomatic ones, instead, as Aikhenvald predicts (Aikhenvald 2006:34). The verbs *giel* ‘dig’ and *hex* ‘hide/conceal’ together mean ‘bury’.

- (455) Deil si gger nael yar nimar ddo zolnir a **giel hex.**
 hit die give DM 3s bro. CL pity -- dig hide
 ‘(When the dogs) were beat to death, the younger brother felt sorry (for the dogs so he) **buried** them.’

The verbs *xiu* ‘give birth’ and *mu* ‘do’ form an idiom that means to rest for a month after the baby is born.

- (456) Ngo maerssor **xiu mu** dae.
 1s wife give.birth do IPFV
 V V
 ‘My wife is **doing her month.**’

The verbs *bbeix* ‘speak’ and *vuryir* ‘hate’ become an idiom that means to ‘insult.’

- (457) Ca hal nrnel zzi hie ael zzicar-zzileil yarzi **bbeix vuryir.**
 person that two each.other scold NF each.other really speak hate
 ‘Those two people argue with each other, (they) really **insult** one another.’

The verbs *i* ‘look’ and *zei* ‘descend’ become an idiom that means to ‘despise.’

- (458) Halleix Sipor mel Lolopor mel leil **i zei.**
 earlier Han PL Lolo PL DOM look descend
 ‘Earlier the Han **despised** the Lolo.’

6.2.2 Asymmetrical SVCs and AVCs

In asymmetrical SVCs or AVCs the meaning of the secondary verb or auxiliary verb often specifies some modification of the main verb. It is typical for it to contribute result-state, directional, aspectual, modal, or transitivity meanings. Although it is not always easy to differentiate secondary verbs from auxiliaries, several differences between them exist: 1) the pronunciation of an auxiliary is slightly different than the verb from

which it derived (this is usually not the case with secondary verbs); 2) secondary verbs may increase the valence of the clause (auxiliaries never do); 3) verbal particles do not precede secondary verbs, but certain verbal particles do precede auxiliaries; 4) secondary verbs are closer to the V_1 than auxiliaries; and/or 5) the meanings of auxiliaries are more abstract than secondary verbs.⁷⁵ Many auxiliaries express TAM concepts, while secondary verbs have lexical meanings. First, examples of asymmetrical SVCs are provided. Then examples of AVCs are given. In asymmetrical SVCs and AVCs the secondary verbs and the auxiliaries always follow the main verb.

Asymmetrical SVCs are formed with secondary verbs, such as *kae* ‘open/separate’, *zil* ‘cause to die’, *lel* ‘eat’, *jjiu* ‘help’, and *he* ‘like’. These verbs cannot stand alone in a VC; they must follow another verb.

(459) Nael hal-hhexr leil **bbax kae** ssi.
 DM that-family DOM move separate AND
 ‘(He) went to divide/separate that family.’

(460) Nael hal-hhexr yar leil **du zil gger** ar.
 DM that-family 3s DOM butt die give PCL
 ‘Then that family butted him to death.’

(461) Yar nalcir **zzor zil**.
 3s medicine eat die
 ‘He died from eating medicine/poison.’

⁷⁵ Bjorverud has also observed that Lalo auxiliaries are grammaticalized to some degree, which usually results in slight semantic shifts (Bjorverud 1998:88).

In (462) the aspect auxiliary *dor* ‘noncessative’ follows the secondary verb *lei* ‘eat’.

(462) ha-nga-el-nr-nga-el⁷⁶ lei dder si da **meil lei** dor lal nga.
 every-be-not-be also then others with beg eat NCES only be
 ‘(She) just always begs (from) others (to) eat.’

(463) Almeir ddaer wo lei **vur lei**.
 rice hit obtain also sell eat
 ‘(He) threshes the rice, also sells (it) to eat.’

The tendency for verbs to occur in SVCs and AVCs is so strong in Lolo that this structure is used even when it appears that a complement clause would be more likely as in (464) – (467). It is puzzling to observe that *jjiu* ‘help’ can both precede (431) and follow (464) the verb *guar* ‘care for’, but in either case, it must follow another verb because it cannot be the first verb in a series.

(464) Ngo ake xiel jjir lei mel aniu **guar jjiu** jjir lei.
 1s house sleep return VEN TOP child care help return come
 ‘As for returning to the house to sleep, (I) return to **help watch** the child.’

(465) Ni yaa leil **bil jjiu** lal ddo.
 2s 3p DOM carry help only may
 ‘As for you, you may only **help** them **carry** (the corpse).’

(466) Veixr te leil veixr zzo zol lei zol nar<nr>cil
 pig CL DOM pig food feed also feed not.good.quality
 lei yarzi **zzor he**.
 also very eat like
 ‘As for the pig, (the younger brother) feeds (him) low quality food, yet (it) really **likes to eat (it)**.’

(467) Aniu mel sul zza xiel lei ael jjiumo car gga **gaggor he**.
 child PL book study reverse VEN NF road time at play like
 ‘When the children return (from) studying, (they) **like to play** on the road.’

⁷⁶ *Ha ngael nr ngael* is an idiom that means ‘always’.

It could be argued that *jjiu* ‘help’ and *he* ‘like’ are matrix verbs that take obligatory complement clauses, but there is no positive evidence to show that they are. If they took complement clauses, then the following might apply.

- 1) The verb in the complement clause could be negated. Example (468) illustrates it cannot. In fact, to express the idea ‘help me not to drink’ (469) must be uttered instead. It is significant that *jjiu* ‘help’ still follows another verb in (469).

(468) *Ni ngo leil zzibbaer nr dda jjiu.
 2s 1s to alcohol not drink help
 ‘You help me **not to drink.**’

(469) Ni ngo leil bei jjiu ael, zzibbaer duax.
 2s 1s to do help NF alcohol stop/cut off
 ‘(Being the case that) you help me, (I) stop drinking.’

- 2) The complement clause could follow *jjiu* ‘help’ and *he* ‘like’. Example (470) shows it cannot.

(470) *Ni yaa leil jjiu lal ddo casimar bil.
 2s 3p DOM help only may corpse carry
 ‘You may only help **them carry** the corpse.’

- 3) The complement clause could be topicalized. Example (471) illustrates it cannot.

(471) *sexbex zzor mel yar yarzi he.
 corn eat TOP 3s really like
 *‘**Concerning eating corn**, he really likes.’

- 4) Verbal and pragmatic particles could be inserted between the complement clause verb and the matrix clause verb. Example (472) demonstrates that they cannot.

(472) Ni ngo leil aniu hier (*nia/dae/var/la) jjiu.
 2s 1s DOM child raise will/IPFV/can/please help
 *‘You help me **will/are/can/please** raise the child.’

To account for this type of data, Noonan says that “[t]here is another variety of clause reduction which we will call clause union (CU) where the matrix and complement predicates share one set of grammatical relations... Many languages make rather extensive use of CU. Lahu is a case in point, where a very high percentage of cases of complementation will involve CU...” (Noonan 2007:86). For this explanation to adequately describe the use of *jjiu* ‘help’ and *he* ‘like’, then it would also need to specify that the matrix and complement predicates share all TAM words, as well as the same set of grammatical relations, and that they would need to use the same negator.

Auxiliary verb constructions consist of a main verb followed by an auxiliary that contributes directional, aspectual, or modal meanings. None of these auxiliaries can function as main verbs.

In (473) the directional auxiliary *dil* ‘into’ specifies the direction of the action of the verb *bber* ‘carry’.

(473) Ngo aniu ddo leil (ake) **bber** **dil**.
 1s child CL DOM home carry into
 ‘I carry in the child.’

In (474) the aspectual auxiliary *dor* ‘noncessative’ clarifies that the situation is ongoing.

(474) Eilgielggur zolzol lei almer **zi** **dor**.
 short.period often also rain cloudy NCES
 ‘Recently (it is) often continuously overcast.’

In (475) the modal auxiliary *xie* ‘able’ communicates the potentiality to perform the act of stealing.

CHAPTER 7

CONCLUSION

7.1 Summary

This grammatical sketch of Lolo, a Tibeto-Burman language of Yunnan China, has sought to depict the most salient features of its word classes, phrases, clauses, and sentences, with special attention given to verb serialization. In many aspects, Lolo is a typical Tibeto-Burman language with zero anaphora of participants and a dominant verb complex with concatenating verbs. It has multiple reduplication processes, a plethora of particles, a complex deictic system, a myriad of classifiers, diverse locative and directional words, several existential verbs, and numerous 3 and 4 syllable expressions.

Lolo employs several productive strategies for creating new words: compounding (to produce nouns and verbs), affixation and reduplication (to produce a large variety of words), nominalization, complex phrases (to produce temporal and locative expressions), idioms (e.g., to produce adjectivals), and loan words (to produce nouns). Lolo has also used grammaticalization (e.g. to produce auxiliaries, particles, and classifiers).

Lolo's reduplication strategies have diverse functions and communicate a variety of meanings in the sentence. Reduplicated adjectives, verbs, and auxiliaries are used to

form yes/no questions. Reduplicated adjectives⁷⁷ and *V dae V dae* structures indicate increased intensity.⁷⁸ Reduplicated pronouns and verbs (with *lei* in between the verbs) indicate prominence. Other reduplicated adjectives, verbs, and auxiliaries (sometimes with affixes) produce adverbs. Reduplicated adjectives, classifiers, verbs, temporal roots, and locative roots produce complex expressions in ABAC, ABCD, and AABB patterns.

Seventeen word classes have been recognized in the Lolo language: nouns, pronouns, deictic demonstratives, numerals, classifiers, locative/temporal roots, adjectives, adverbs, negators, verbs, auxiliaries, verbal particles, interjections, postpositions, connectors, pragmatic particles, and sentential particles. Most of these serve as elements in the NP and VC.

- NPs: noun, pronoun, demonstrative, numeral, classifier, adjective
- VCs: verb, negator, adjective, auxiliary, verb particle

Locative/temporal roots, interjections, postpositions, connectors, pragmatic particles, and sentential particles are not constituents of the NP or VC.

These word classes combine to form classifier, noun, postposition, and verb phrases. The classifier phrase is a constituent of the NP which modifies the head noun. The classifier, noun, and postposition phrases fill (non)argument slots prior to the VC.

Intransitive and some transitive clauses are formed with intransitive and transitive verbs. But other transitive clauses are produced by adding arguments to verbs that are

⁷⁷ These adjectives are not the head of the VC.

⁷⁸ LaPolla attests that Qiang adjectives can also be reduplicated to communicate intensification (LaPolla 2003b:580).

modified by the verb *gger* ‘give’ and/or the particle *lol* ‘let/cause’. There is no voice opposition in the verb or any productive passive construction. Existential utterances are produced with existential verbs that subcategorize for indefinite pivot nominals and locative arguments. The possessive clause has the same structure as the existential utterance, but it is only formed with the verbs *zza* ‘exist’ or *niar* ‘exist attached’. Equative clauses are formed by the juxtaposition of two NPs, with the second NP acting as the predicate.

These clauses are combined in coordinating and subordinating combinations. Coordinating clauses can be joined with no overt marker of their relationship or with clause-initial and clause-medial connectors. Subordinating clauses are added to the matrix clause in several ways. Adverbial clauses serve as initial and medial clauses that modify the final matrix clause. They are terminated with a variety of connectors and pragmatic particles. Sentential and open complement clauses fill object argument slots. Most relative clauses are formed with the gap strategy; just possessor relative clauses employ pronoun retention. Most verbs in these clauses take a variety of TAM auxiliaries and particles, but some restrictions apply. Temporal and nominalized clauses are similar in some ways to relative clauses, but do not have noun heads or allow the same range of TAM words. None of the subordinating clauses are followed by sentential particles.

The default sentence structure is not to use auxiliaries or particles. As a result, typical declarative and imperative sentences are quite similar; often it is just the subject that is different. Yes-no questions are formed by reduplicating the verb, adjective, or

auxiliary. Content questions are formed with question words *in situ*. Marked declarative, imperative, and interrogative utterances are formed by adding many different auxiliaries, verbal particles, and sentential particles to the utterance. By employing these words, the Lolo are able to express more than 15 different types of directives and at least 15 types of questions.

The order of constituents within phrases is fixed, but the order of the (non)arguments in the clause can change due to pragmatic reasons. While it is the case that some modifiers follow their head, it is also true that many modifiers precede their head, as enumerated in Table 56.

Table 56: Constituent Order

Head-initial ordering	
noun negators	adjectives, classifiers verb, adjective, auxiliary
Head-final ordering	
deictic demonstrative, numeral genitive construction, relative clause verb (non) arguments NP clause	classifier noun auxiliaries VC postpositions clause-final subordinating connectors

The order of these elements and constituents is consistent with what Dryer has observed for other TB languages, especially those east of the Himalayas. He says that all TB languages place genitive modifiers before the possessed noun, relative clauses before the head noun, and postpositional phrases before the verb. He has also observed that TB languages employ auxiliary verbs after main verbs and clause-final markers for

subordinate clauses (Dryer 2003:43-44). He also clarifies that the NAdj and NDem order is typical of eastern TB languages (Dryer (2003:43).

Finally, both monoclausal and multiclausal verb sequences exist in Lolo. Some verb strings combine to form several types of monoclausal verb constructions:

- Fully grammaticalized constructions consisting of a V + verbal particle
- Partially grammaticalized AVCs consisting of a V + auxiliary
- Pure (prototypical) symmetrical SVCs consisting of V + V.

Other verb sequences span more than one clause.

7.2 Suggestions for Further Research

Several distinct, yet interrelated systems, of 1) auxiliaries and particles, 2) directional and locative expressions, and 3) deictic expressions (e.g., evidential, mirative, and emotive sentential particles) serve extremely important functions in Lolo. To understand the language, it is necessary to unravel the mysteries of these systems, to clearly identify and delineate their members, and to understand their interconnectedness. It is important to determine the origins, prototypical meanings, extended usages, reduplication strategies, and ordering tendencies/rules of these words. It is also crucial to understand their discourse and pragmatic usages, especially in producing a variety of directives and questions, in expressing deictic references, and in identifying discourse genres. It would be a substantial contribution to Tibeto-Burman and typological studies

- to clearly delineate the properties of all Lolo auxiliaries and particles,
- to explore the relationship between spatial, temporal, and personal deixis with sentential particles (Floyd 1999),
- to understand better and delineate more accurately the fine distinctions between the Lolo locative and directional words: the deictic demonstratives, classifiers,

locative relator nouns, directional verbs, directional auxiliaries, and directional particles,

- to explain the origin and composition of complex classifier, adjectival, quantifier, and adverbial expressions.

APPENDIX

THE LOLO ALPHABET (Merrifield 2006)

Orthographic Representation	Phonetic Representation	Orthographic Example	Phonetic Example	Meaning
a	[a]	arbbor	[ʔa ²¹ bo ²¹]	‘father’
ax	[a]	zaxr	[tsa ^{ʔ21}]	‘store for later’
ae	[æ]	maerssor	[mæ ²¹ zo ²¹]	‘wife’
aex	[æ]	vaexr	[væ ^{ʔ21}]	‘write’
b	[p]	bebe	[pu ³³ pu ³³]	‘bat’
bb	[b]	bbaeyo	[bæ ³³ jo ³³]	‘lazy’
c	[ts ^h]	ca	[ts ^h a ³³]	‘person’
d	[t]	daemi	[tɛ ³³ mi ³³]	‘rice paddy’
dd	[d]	dderbel	[dɔ ²¹ pu ⁵⁵]	‘pigeon’
e	[w]	alker	[ʔa ⁵⁵ kw ^h u ²¹]	‘smoke’
ex	[w]	hexr	[xw ^{ʔ21}]	‘speak’
ei	[e]	eil	[ʔe ⁵⁵]	‘this’
eix	[e]	meix	[mɛ ⁴⁴]	‘eye’
f	[f]	fadae	[fa ³³ tɛ ³³]	‘take care’
g	[k]	garno	[ka ^{ʔ21} no ³³]	‘get injured’
gg	[g]	gaggor	[ka ³³ go ²¹]	‘play’
h	[x]	hal	[ha ⁵⁵]	‘that’
hh	[ɣ]	hher	[ɣu ²¹]	‘live’
i	[i]	almir	[ʔa ⁵⁵ mi ²¹]	‘cat’
ix	[i]	zixlzoxl	[tsɿ ⁶⁶ tsɿ ⁶⁶]	‘create’
j	[tʃ]	jie	[tʃɛ ³³]	‘eat’
jj	[dʒ]	jjir	[dʒi ^{ʔ21}]	‘return’
k	[k ^h]	ka	[k ^h a ³³]	‘village’
l	[l ~ ʎ]	lei	[le ³³]	‘come’
m	[m]	mae	[mæ ³³]	‘place’
n	[n]	noni	[no ³³ ni ³³]	‘listen’
ng	[ŋ]	ngo	[ŋo ³³]	1 st person singular
o	[o]	ago	[ʔa ³³ ko ³³]	‘older brother’
ox	[ɔ]	loxr	[lɔ ^{ʔ21}]	‘tea’
p	[p ^h]	pahher	[p ^h a ³³ ɣu ²¹]	‘hide’
q	[tʃ ^h]	qie	[tʃ ^h ɛ ³³]	‘invite’

Orthographic Representation	Phonetic Representation	Orthographic Example	Phonetic Example	Meaning
s	[s]	saer	[sæ ²¹]	‘fruit’
ss	[z]	ssor	[zo ²¹]	‘son’
t	[t ^h]	tarlodo	[t ^h a ²¹ lo ³³ to ³³]	‘rabbit’
u	[u]	allur	[ʔa ⁵⁵ lu ²¹]	‘pot’
ux	[u̥]	cux	[ts ^h ɥ ³³]	‘sit’
v	[v]	vae	[væ ³³]	‘smile’
w	[w]	wor	[wo ²¹]	‘snow’
x	[ʃ]	xie	[ʃɛ ³³]	‘house’
y	[j ~ y]	yar	[ja ²¹]	3 rd person singular
z	[ts]	zol	[tso ⁵⁵]	‘feed’
zz	[dz]	zzor	[dzo ²¹]	‘eat’

REFERENCES

- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2006. Serial verb constructions in typological perspective. *Serial verb constructions*, ed. by Alexandra Y. Aikhenvald and R.M.W. Dixon, 1-68. Oxford: Oxford University Press.
- Anderson, Gregory D.S. 2006. *Auxiliary verb constructions*. Oxford: Oxford University Press.
- Bjorverud, Susanna. 1998. *A grammar of Lalo*. PhD Dissertation. Lund, Sweden: Lund University.
- Bradley, David. 1994. *A dictionary of the northern dialect of Lisu*. (Pacific Linguistics Series C 126). Canberra: Australian National University.
- Bradley, David. 2000. The subgrouping of Tibeto-Burman. *Medieval Tibeto-Burman languages*, ed. by Henk Blezer. PIATS Tibetan Studies: Proceedings of the Ninth Seminar of the International Association for Tibetan Studies, 73-112. Leiden.
- Bradley, David. 2003. Lisu. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 222-35. London: Routledge.
- Bybee, Joan, Revere Perkins, and William Pagliuca. 1994. *The evolution of grammar*. Chicago: University of Chicago Press.
- Clark, Eve V. 1978. Locational: Existential, locative, and possessive constructions. *Universals of human language*, vol. 4, ed. by Joseph H. Greenberg, et al., 85-126. Stanford: Stanford University Press.
- Comrie, Bernard. 1989. *Language universals and linguistic typology*, 2nd edition. Chicago: University of Chicago Press.
- Dooley, Robert A. and Stephen H. Levinsohn. 2001. *Analyzing discourse*. Dallas: SIL International.
- Dryer, Matthew S. 2003. Word order in Sino-Tibetan languages from a typological and geographical perspective. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 43-56. London: Routledge.

- Dryer, Matthew S. 2006. Descriptive theories, explanatory theories, and basic linguistic theory. *Catching language: Issues in grammar writing*, ed. by Felix Ameka, Alan Dench, and Nicholas Evans, 207-34. Berlin: Mouton de Gruyter.
- Floyd, Rick. 1999. *The structure of evidential categories in Wanka Quechua*. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.
- Fraser, James. 1922. *Handbook of the Lisu (Yawhin) language*. Rangoon, Burma: Superintendent Government Printing.
- Gerner, Matthias. 2002. *Predicate compounding in the Yi group: The continuum of grammaticalization*. (Studia typologica: language typology and universals, vol. 3). ed. by Thomas Stolz. Berlin: Akademie Verlag GmbH.
- Gerner, Matthias. 2008. Ambiguity-driven differential object marking in Yongren Lolo. *Lingua* 118. 296–331. Online: www.sciencedirect.com.
- Haas, Mary R. 1964. *Thai-English student's dictionary*. Stanford CA: Stanford University Press.
- Kroeger, Paul R. 2004. *Analyzing syntax: A lexical-functional approach*. Cambridge: Cambridge University Press.
- Kroeger, Paul R. 2005. *Analyzing grammar: An introduction*. Cambridge: Cambridge University Press.
- LaPolla, Randy J. 2003a. *A grammar of Qiang*. New York: Mouton de Gruyter.
- LaPolla, Randy J. 2003b. Qiang. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 573-87. London: Routledge.
- LaPolla, Randy J. 2003c. Overview of Sino-Tibetan morphosyntax. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 22-42. London: Routledge.
- Levinsohn, Stephen. 2010a. *Self-Instruction materials on narrative discourse analysis*. Online: <http://www.sil.org/~levinsohns/narr.pdf>.
- Levinsohn, Stephen. 2010b. *Self-Instruction materials on non-narrative discourse analysis*. Online: <http://www.sil.org/~levinsohns/NonNarr.pdf>.
- Li, Charles N. and Sandra Thompson. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley: University of California Press.

- Longacre, Robert E. 1996. *The grammar of discourse*. New York: Plenum Press.
- Matisoff, James A. 1973. *The grammar of Lahu*. Berkeley: University of California Press.
- Matisoff, James A. 1985. New directions in East and Southeast Asian linguistics. *Linguistics of the Sino-Tibetan area: the state of the art*, ed. by Graham Thurgood, James A. Matisoff, David Bradley, 21-35. (Pacific Linguistics Series C 87.) Canberra: The Australian National University.
- Matisoff, James A. 2003. Lahu. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 208-21. London: Routledge.
- Merrifield, W. Scott. 2006. *Yao'an Central Yi phonology*. Unpublished manuscript.
- Mortensen, David. 2003. *Hmong elaborate expressions are coordinate compounds*. Unpublished manuscript. University of California Berkeley. http://www.pitt.edu/~drm31/elaborate_expressions.pdf.
- Noonan, Michael. 2007. Complementation. *Language typology and syntactic description*, Volume II. ed. by Timothy Shopen, 52-150. Cambridge: Cambridge University Press.
- Palmer, F. R. 1986. *Mood and modality*. Cambridge: Cambridge University Press.
- Payne, Thomas E. 1997. *Describing morphosyntax: A guide for field linguists*. Cambridge: Cambridge University Press.
- Smith, Carlota S. 1991. *The parameter of aspect*. (Studies in Linguistics and Philosophy 43). Dordrecht: Kluwer.
- Thurgood, Graham. 2003. A subgrouping of the Sino-Tibetan languages: The interaction between language, contact, change, and inheritance. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 3-21. London: Routledge.
- Walters, Susan and Ndaxit Atqui. 2006. Existential clauses in Nosu texts. *Linguistics of the Tibeto-Burman area* 29.1:127-47. Bundoora, Australia: La Trobe University.
- Watters, David E. 1998. *The Kham language of West-Central Nepal*. PhD Dissertation. Eugene: University of Oregon.
- Watters, David E. 2002. *A grammar of Kham*. Cambridge: Cambridge University Press.

- Watters, David E. 2003. Kham. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 683-704. London: Routledge.
- Wheatley, Julian K. 1985. The decline of verb-final syntax in the Yi (Lolo) languages of Southwestern China. *Linguistics of the Sino-Tibetan area: The state of the art*, ed. by Graham Thurgood, James A. Matisoff, David Bradley, 401-20. (Pacific Linguistics Series C 87). Canberra: Australian National University.
- Wheatley, Julian K. A. 2003. Burmese. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 195-207. London: Routledge.
- Xiao, Richard and Tony McEnery. 2004. *Aspect in Mandarin Chinese*. Amsterdam: John Benjamins.
- Yu, Defen. 2007. *Aspects of Lisu phonology and grammar, a language of Southeast Asia* (Pacific Linguistics 588). Canberra: Australian National University.

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