

# *A Grammar of Anong*

LANGUAGE DEATH UNDER INTENSE CONTACT



LANGUAGES OF THE GREATER HIMALAYAN REGION

BY

HONGKAI SUN AND GUANGKUN LIU

*Translated, annotated, and supplemented by  
Fengxiang Li, Ela Thurgood and Graham Thurgood*

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## PREFACE TO THE ENGLISH EDITION

This volume evolved out of a National Science Foundation Grant that Professor Sun Hongkai participated in. As part of his contribution to the grant, Sun Hongkai and Guangkun Liu wrote a grammar of Anong. This book is a translation of that grammar, but differs from the Chinese version in several ways. Most of them are minor, such as the differences between Chinese and English linguistic terminology; here, the consequences of these differences have been relatively small. The intent was always clear from the examples. A second difference lies in the considerably expanded lexicon, which includes all the known Anong forms: Sun's original lexicon was a version of the standard lexicon found at the end of various grammars in this particular genre. We have included not just the forms in the original but all the forms found in the book and the accompanying texts as well as all the forms in Sun's other wordlists. Annotation through footnotes is found scattered throughout the text. Sun's original footnotes, a mere handful, have been incorporated into the text. Thus, all the footnotes in this English version are our own comments—something Sun invited us to do. More substantial is the appendix by Ela Thurgood, which provides an instrumental acoustic analysis of Anong based on some of Sun's recorded material. Finally, various references have been updated and occasionally new ones added.

This translated, annotated, and supplemented English version is a joint effort by Li Fengxiang, Ela Thurgood, Graham Thurgood, and, of course Sun Hongkai, who generously answered our numerous questions. The overwhelming bulk of the translation was done by Fengxiang, with small pieces here and there done by Graham (but always checked by Fengxiang). The instrumental analysis in the appendix is the work of Ela. The bulk of the editing was done by Graham as was the preparation of the manuscripts, including the lexicon and the texts. All contributors helped with the proofing of the texts, a tedious but necessary task. Randy LaPolla provided valuable information on Trung and Rawang, David Bradley generously supplied valuable information on Anong, especially on the Anong of Myanmar. We thank them both for their help.



## ORIGINAL PREFACE

Research on the Anong language began in 1960, already more than 40 years ago. I recall investigating Anong for the first time. I was full of energy as the young lad I was, but now my head is completely silver. It is humbling to realize that 40 years has failed to sharpen my mind.

The completion of the Anong manuscript has lifted a heavy burden on me. However, when I recall the many people who helped me in this undertaking, such as the Nu ethnic elders, cadres, and many others, an overwhelming sense of heavy-heartedness came upon me. They all treated me with such warmth. When I said goodbye to them at the end of my fieldwork trip in 2003, they presented me with a crossbow as a gift, which is the most coveted possession of a Nu male, a gesture to tell me that they considered me a member of their own. I want to thank Hán Wénjùn, Yànà, Lǐ Shàoēn, Fàn Guópǔ, and Wáng Jímén as well as many other Nu elders, cadres, and intellectuals. Every time I went to the area to investigate Nu languages, they helped me in every way possible. Without their help, I could not have completed the research and writing of this book.

Except for twice when I entered the Nujiang valley by myself, on all the rest of the trips to investigate the languages spoken by the Nu ethnic group, I had other colleagues working together with me, climbing hills and fording streams. Duò Jí was with me on the 1960 fieldwork trip. On the 1965 trip, Liú Lù was with me. Zhāng Jūn and Dù Ruòmíng went with me on the 1987 trip. Huáng Chénglóng and Zhōu Máocǎo joined me on the 1995 trip. Yáng Jiànglǐng was with me on the 1999 trip. And in 2003, Liú Guāngkūn was with me. To these people, I owe my heart-felt gratitude.

I have received support from many organizations to cover the expenses incurred in the many fieldwork trips and research I have undertaken over the years. Among those supporting this work are Research Institute of Minority Languages of the Chinese Academy of Social Sciences, the Institute of Anthropology and Ethnology of the Chinese Academy of Social Sciences, the Key Projects Fund of the Chinese Academy of Social Sciences, the Chinese National Social Science Research Foundation, the Hong Kong City University Research Foundation, the United Nations UNESCO Endangered Languages

Endowment, and the United States National Science Foundation (NSF). I would like to thank all of them for their support.

This book was completed at California State University, Chico. Professor Lǐ Fèngxiáng (Frank Li) and Professor Dù Guānmíng (Graham Thurgood) not only applied for and obtained the National Science Foundation (NSF) grant that partly supported this work, but also invited us to come to the United States to write the book. For four months of intense, day-and-night work, they not only set up a good working environment but also helped and cared for us. We were touched and will always remember this incredible experience.

Finally, I want to convey my heart-felt thanks to my wife and collaborator Liú Gāngkūn. She not only proof read and verified every page of the manuscript, correcting every error and omission, but also built the word list and accompanied me on the fieldwork trips, helping and taking care of me. We have been with each other for almost 50 years now. She shares credit for every accomplishment I have had.

Sun Hongkai

Chico, CA  
United States  
May 26, 2004

## ABBREVIATIONS

1SG	First person singular
1P	First person
2P	Second person
3P	Third person
2SG	Second person singular
3SG	Third person singular
ABL	Ablative
ADV	Adverb(ial)
AGT	Agent
APPR	Approximative
ASP	Aspect
ASP	Aspect
CAUS	Causative
CLF	Classifier
COM	Comitative
CONJ	Conjunction
COP	Copula
DAT	Dative
DEF	Definite
DIM	Diminutive
DIR	Directional
DO	Direct object
DU	Dual
EXCL	Exclusive
EXP	Experiential
FUT.FH	Future first-hand
FUT.HS	Future hearsay
IMP	Imperative
INCH	Inchoative
INCL	Inclusive
IND	Indicative
INSTR	Instrumental
INTER	Interjection
IO	Indirect object
LOC	Locative

NEG	Negation
NOM	Nominalizer
NPST	Non-past
OBJ	Object
OPT	Optative
OV	Object-Verb
P	Pronoun; Pronominal
PASS	Passive
PL	Plural
POSS	Possessive
PRF	Prefix
PRT	Particle
PST	Past
REDUP	Reduplication
REC	Reciprocal
REFL	Reflexive
RQ	Rhetorical question
SG	Singular
SOV	Subject-Object-Verb
SUF	Suffix
SUP	Supplicative
SVO	Subject-Verb-Object
TEMP	Temporal
VO	Verb-Object
VOC	Vocative

The research in this paper is supported in part by National Science Foundation Grant No. 60232 Endangered Languages in China. Sun Hongkai, along with Li Fengxiang and Graham Thurgood, were participants in the grant.

## CHAPTER ONE

### INTRODUCTION

#### 1.1. THE ANONG PEOPLE

The Anong people are a subgroup of the Nu ethnic group (nationality). Their autonym is a<sup>31</sup>nun<sup>35</sup>. The Nu ethnic group has four components: Nusu, Zauzou, Trung, and Anong. The four groups speak four different languages, namely, Nusu, Zauzou, Trung, and Anong. Linguistically, both Nusu and Zauzou belong to the Yi subgroup of the Lolo-Burmese branch of Tibeto-Burman while Anong and Trung are part of the Jingpo branch.<sup>1</sup> The most populous group is Nusu with about 12,000 people distributed over Lúshuǐ and Fúgòng counties in the Nujiang Lisu Autonomous Prefecture of Yunnan Province; it has three dialects with major differences between them. Zauzou is the smallest of the four groups with a little over 2000 people distributed mainly in Lánpíng County with a few in Lúshuǐ County in the Nujiang<sup>2</sup> Lisu Autonomous Prefecture of Yunnan Province; it has only minor differences among its sub-dialects.

Table 1: The Nu ethnic group

autonym	language name	language subgroup	number of speakers	
Nusu	Nusu (怒苏 Nùsū)	Lolo-Burmese (= Yi)	12,000	3 diverse dialects
Anong	Anong (啊依 Anóng)	Jingpo subgroup	380	also in Burma

<sup>1</sup> Sun's Jingpo subgroup is controversial; however, the lower level group consisting of Trung (Dúlóng), Anong, and Rawang is not. LaPolla refers to this group at times as Dúlóng-Anong-Rawang and at times as Nungish. We have replaced LaPolla's use of Dúlóng, a Mandarin name, with the autonym Trung, but otherwise it is the same group. Both Nungish and Trung-Anong-Rawang work fine for linguistic purposes. We reserve Nu for the ethnic group, a group that both speakers of Trung-Anong-Rawang languages and speakers of linguistically quite distinct Lolo-Burmese languages.

<sup>2</sup> The Nujiang is sometimes called the Nujiang River—in English, despite the fact that *jiang* itself means river in Chinese.



Table 1 (*cont.*)

autonym	language name	language subgroup	number of speakers	
Anong	Trung (独龙 Dúlóng)	Jingpo subgroup	6500	minor differences; a Trung dialect
Zauzou	Zauzou (揉若 Róuruò)	Lolo-Burmese (= Yi)	2200	sub-dialectal differences

Two groups call themselves Anong. Distinct from the Anong described in this book are the Trung, who consist of about 6000 speakers residing in Gòngshān County and the Bǐngzhōngluò area in the Nujiang Lisu Autonomous Prefecture of Yunnan Province. Their autonym is a<sup>31</sup>nun<sup>35</sup>. Investigation reveals that another group also designating themselves as Anong live in Gòngshān County; they are very closely related to Trung. Their language is a dialect of Trung, which can be called the Nujiang dialect of Trung. This Nujiang dialect of Anong language is very similar to Trung; it is basically mutually intelligible, with only minor phonological differences and hardly any differences in their grammatical structures and lexicon. Finally, there are the Anong described here, who are distinct from the Trung group, but who certainly belong to the same subgroup.

## 1.2. POPULATION DISTRIBUTION

The Anong people are located within the boundaries of Fúgòng County in the Nujiang Lisu Prefecture of Yunnan Province. Its total population is around 7000, with 2200 living in Shàngpà Township, 1100 in Zǐlǐjiǎ Township, 2100 in Lùmǎdēng Township, and 2200 in Lìshādǐ Township. The rest are scattered in various other places in the county. Their approximate geographical position is roughly 98.7 latitude and 27.1 longitude. The region is very mountainous with the turbulent Nujiang flowing through the whole territory from north to south. To the east of the river, lies the towering snowy Biluó mountain, and to the west stands the Gāolígòng mountains with a year-round snow cover. The Anong live in the valley between the two mountains with some on the tablelands on the hillsides. The Anong are surrounded by various ethnic groups, with Burma in the west, the Tibetan Autonomous Region in the north, and the Lisu, Bai and Han in its midst. There are

said to be some Anong in the Ēnméikāi River reaches in the border region between China and Burma, but information about their actual locations and specific population figures is not available.

### 1.3. LEGENDS ABOUT THE ORIGIN OF THE ANONG PEOPLE

Anong does not have a writing system,<sup>3</sup> and there is no record in Chinese historical documents of this ethnic group. According to an Anong legend, long, long ago, there was a great flood. Among the ancestors of the Anong people, a brother and a sister hid themselves in a big gourd which protected them from the disaster. In order to continue the ancestral line of the Anong people, the brother and sister got married and had nine boys and seven girls. The first child was an Anong, the second was a Trung, and the rest were Han, Tibetan, Bai, Lisu and Naxi. The Anong settled down in the Nujiang region, while the rest went to far away places to make a living. Because of this legend, the elders all believe that the Anong are the indigenous people of the Nujiang region.

The Anong have a tradition of memorizing family genealogies. I had Mr. Hán Wénjùn, who has since passed away, recite his family genealogy of 28 generations, which is given below. If we assign 25 years to each generation, the Hán family has a history of at least 700 years. According to the elders in Mùgǔjiǎ Village, the cave in the mountain behind Mùgǔjiǎ Village was the home of the ancestors of the Anong people. Sometimes, the Anong still go there to pay respect to their ancestors. Also, there are two big pieces of stone which are bigger than a house. The Anong consider them to be God sent and worship the stones. The bigger one is called the male stone and the small one is called the female stone. These anecdotal elements indicate that the Anong are the earliest Nujiang region residents.

---

<sup>3</sup> Bradley (p.c.) points out that the Anong of Myanmar have a recently developed writing system. See the discussion of the literacy work and Bible translation in the next footnote.

Table 2: Hán Wénjùn's genealogy to 28 generations

	Name in IPA	In Chinese characters		Funeral method
1	p <sup>h</sup> u <sup>31</sup> len <sup>31</sup> tɕ <sup>h</sup> iŋ <sup>55</sup>	蒲兰青	pú lánqīng	cremation
2	nɿ <sup>31</sup> dun <sup>31</sup> tɕ <sup>h</sup> iŋ <sup>55</sup>	尼冬青	ní dōngqīng	cremation
3	gu <sup>31</sup> la <sup>55</sup> p <sup>h</sup> uŋ <sup>55</sup>	格拉蓬	gé lāpéng	cremation
4	mu <sup>31</sup> la <sup>55</sup> p <sup>h</sup> uŋ <sup>55</sup>	墨拉蓬	mò lāpéng	cremation
5	t <sup>h</sup> a <sup>31</sup> la <sup>31</sup> ʂ <sup>1</sup> <sup>55</sup>	塔拉石	tǎ lāshí	cremation
6	ga <sup>55</sup> xan <sup>55</sup>	嘎汉	gā hàn	cremation
7	iɛ <sup>55</sup> iun <sup>55</sup>	叶映	yè yìng	cremation
8	iɛ <sup>55</sup> gɛ <sup>31</sup>	叶盖	yè gài	cremation
9	da <sup>31</sup> ʂ <sup>h</sup> an <sup>31</sup> du <sup>55</sup>	达桑德	dá sāngdé	cremation
10	nɿ <sup>55</sup> k <sup>h</sup> uŋ <sup>31</sup>	尼空	ní kōng	cremation
11	nɿ <sup>55</sup> ʒa <sup>31</sup>	尼惹	ní rě	cremation
12	a <sup>31</sup> dʒuŋ <sup>31</sup> (dun <sup>31</sup> )	阿俊	ā jùn	cremation
13	a <sup>31</sup> k <sup>h</sup> ɛn <sup>55</sup>	阿坎	ā kǎn	cremation
14	ka <sup>35</sup> mi <sup>31</sup>	喀密	kā mì	cremation
15	du <sup>31</sup> ba <sup>31</sup> xom <sup>31</sup>	德巴鸿	dé bāhóng	cremation
16	ts <sup>h</sup> <sub>1</sub> <sup>31</sup> xuŋ <sup>55</sup> xom <sup>31</sup>	慈衡鸿	cí héng hóng	cremation
17	ŋu <sup>55</sup> ʂ <sup>1</sup> <sup>31</sup>	瓦斯	wǎ sī	cremation
18	ŋu <sup>55</sup> nɿ <sup>31</sup>	瓦尼	wǎ ní	cremation
19	ua <sup>31</sup> tɕ <sup>h</sup> a <sup>31</sup> si <sup>31</sup>	瓦恰西	wǎ qiàxī	cremation
20	ts <sup>h</sup> <sub>1</sub> <sup>31</sup> xuŋ <sup>55</sup>	慈衡	cí héng	cremation
21	k <sup>h</sup> o <sup>31</sup> ʕo <sup>53</sup>	科秀	kē xiù	cremation
22	gu <sup>31</sup> lɛ <sup>55</sup> bi <sup>55</sup>	古赖碧	gǔ làibì	cremation
23	du <sup>55</sup> dɿ <sup>53</sup>	德帝	dé dì	burial
24	gɛ <sup>31</sup> io <sup>55</sup>	盖尧	gài yáo	burial
25	s <sup>h</sup> ɛ <sup>53</sup> dʒɿ <sup>31</sup>	塞紫	sāi zǐ	burial
26	nɛ <sup>55</sup> ta <sup>55</sup>	年达	nián dá	burial
27	xu <sup>31</sup> mɛ <sup>35</sup> dʒo <sup>31</sup>	何麦局	hé màijú	burial
28	du <sup>55</sup> giɛ <sup>55</sup>	德结	dé jié	burial

## 1.4. SOCIAL AND ECONOMIC CONDITIONS

Before the liberation (1949), the Anong mainly engaged in farming, with a little fishing and gathering on the side. Although the husband and wife nucleus family structure had been well established, and land was privatized, within the same tribe, there was still frequent collective farming, labor swap, and land and draft animal borrowing. The gap between the rich and the poor had already started to widen, and riches had begun to be concentrated among a few. Some limited land sales had taken place but no instances of land leasing activities. Some rich families had begun to possess slaves, usually one or two for one or

two years, and they were always people from outside the Anong ethnic group. Loaning money without charging interest was common though some charged high interest. Commodity exchange was quite backward, often taking the form of a bartering system. Things often bartered were herbs, farm and husbandry products, salt, and cloth. No market existed yet. Cows were often used as the basic exchange items. Farmland was well established, but the percentage of land to be left fallow each year was very high, usually about 45%. The means of production and the farming method were both very backward. Farming tools were highly limited in number and type. Their farming skills were very crude; no fertilization or weeding was practiced. They mostly relied on nature to take care of the crops. They still practiced a certain degree of slash and burn farming. The natural environment was not conducive to farming. The arable land is mostly on the hillside with a thin layer of soil that is full of stones, making it very difficult to farm. As a result, what they could get from the land was never enough to feed themselves, so they had to fish and gather to survive.

## 1.5. TRADITIONS

### 1.5.1. *Dwelling*

In the past, the Anong lived in caves. A few hundred years ago, they started to build thatched houses through mutual help with self-prepared materials. Usually, the owner would get the materials such as hay, bamboo, and wood ready and on the day of construction, friends and relatives would come with tools, some with food and wine while others with bamboo strips, etc. to contribute to the owner. Building a house is a truly collective effort; some would be responsible for putting in the foundational pillars, some would be in charge of making bamboo mats, some would work on constructing the roof, and oftentimes a house can be completed in a day. In the evening, the owner would treat all of the participants (sometimes up to 20 or 30 people) to a meal with meat and wine.

Usually, the Anong choose a spot on the hillside for a place to build a house. They would first build a platform using wooden poles as legs. Then they would use bamboo mats as flooring material. The platform is usually about a meter high from ground level, or a little higher, but rarely over two meters. The walls are made of bamboo mats. The roof is thatched with a thick layer of hay. The door usually opens in the

direction with the slope. The space by the sides of the door outside the house is usually used for storing firewood and for drying clothes. In some households, an airing platform is built close to the door for drying grain or for outdoor activities. The space next to the doorway inside the house is used for storage. Clothing is hung over the bamboo rack behind the door. The middle of the house is the cooking area with a fire stove. When guests come for a visit, they usually sit around the fire stove. Beds are set against the walls. Sometimes the house is divided into several sections as bedrooms for older kids or newly-weds. The number of households in various villages range from several to a few dozen irregularly scattered on the hillsides.

### 1.5.2. *Diet and Food Sources*

The staple for the Anong is maize, which is supplemented by buckwheat and beans. Rice is grown along the riverbank areas, but the yield is very low. Their main cash crop is the rhizome of Chinese goldthread. The rhizome of Chinese goldthread used to grow in the wild. Growing it domestically has only about a hundred year history. This cash crop is the main source of income for the Anong. They also grow some lacquer, walnut, and tung trees. The Anong use oil from lacquer tree seeds for cooking. Animal husbandry is limited to raising cows, pigs, and chickens in small numbers. Gathering is the main supplemental food source with a wide array of varieties, such as bamboo shoots, wild mushrooms, wild vegetables, and tubers. Elderly Anong speakers can name dozens, even hundreds of varieties of wild vegetables, wild mushrooms, wild tubers, and bamboo shoots.

### 1.5.3. *Marriage and Family*

The patriarchal husband and wife family structure has already been established, but remnants of the matriarchal social system, such as intra-ethnic polygamy, still exists, manifested mainly through kinship terms, the wife inheriting over brothers, and the power the maternal uncle possesses. Marriages are usually arranged by the parents. When children come of age, their parents pick the potential spouse from a comparable family and ask a go-between to arrange the marriage for them. Their engagement is announced when parents on both sides agree to the marriage. Customs require engagement gifts, the quantity of which is negotiated by the two families. However, the gifts must include

a cooking pot with a tripod cooking rack. To some extent, marriage is mercenary. Marriage between near relations is forbidden, but marriage between maternal cousins is permitted. No sex is allowed before marriage, and children out of wedlock are discriminated against.

#### 1.5.4. *Burial*

Generations ago, the Anong buried the dead through cremation. Burial in the ground is a more recent phenomenon. The change of burial method is said to be attributable to a shortage of firewood. Tombs can be found in the vicinity of the villages. The dead body is wrapped in a bamboo mat and put in a wooden coffin, which is then put into a stone grave that is covered by a yellow dirt mound. Some of the tombs are marked.

#### 1.5.5. *Religion*

The Anong are polytheists. They believe that everything has a spirit, including the sky, the earth, the sun, the moon, mountains, rivers, trees, grasses, and animals. They attribute all illnesses and disasters to gods and ghosts, which is why whenever there is a calamity, they offer sacrifices to ask god for protection. Each village has its own shaman, called *da*<sup>31</sup> *ŋ*<sup>55</sup> *phui*<sup>31</sup>. The shaman is responsible for organizing all activities related to offering sacrifices to ghosts, driving away ghosts, welcoming gods, sending gods away, calling back the spirits of the dead for healing purposes, or praying for rain. In most cases, when such activities take place, an essential part is sacrificing animals. For major activities, animals such as pigs, sheep or cows are offered, while in minor activities, chickens, piglets or baby goats are sacrificed. Being the shaman is not a full time job, though a certain amount of compensation is given to the shaman after such activities.

In recent times, Christianity has been introduced into the area. It is said that in 1932 a Canadian missionary named Mà Dàomíng brought Christianity to the Fúgòng region. Churches have been built in villages in the surrounding area where Mùgǔjiǎ Village is located. Many of the locals have been converted to Christianity.

## 1.6. THE LANGUAGE OF THE ANONG PEOPLE

Anong is a Tibeto-Burman language in the Jingpo subgroup. It is similar to Trung, a language belonging to the same subgroup, but considerably different from Nusu, a Lolo-Burmese language spoken by the largest component of the Nu ethnic group. Most of the former Anong speakers no longer speak the language. They either speak Lisu or Chinese. Some speak Bai. Only some of the Anong in Mùgǔjiǎ, Kǎshí, Mùlèng, Lāgāgōng, Āníqià, and Lāhǎigōng villages still speak Anong.

1.6.1. *Research on Anong*

Nobody else has done any research on Anong.<sup>4</sup> I have been to the Anong region seven times over the past 40 years or so to do fieldwork on the language. The first time was in 1960, and I spent a total of two months there, September and October. I found a fluent speaker of Anong by the name of Fàn Guópǔ, who was an elementary school teacher. During that trip, I collected over 2000 words and some sentences. At the time, there were about 800 speakers of Anong. My second fieldwork trip took place in April 1965. The main purpose of that trip was to collect data on Nusu, a language spoken by the majority of the people in that region. However, I spent some time in Fúgòng County and collected some examples for certain grammatical structures of Anong. The third time I went to the region to work on Anong was in April and May of 1983. On that trip, I found a fluent speaker in Liùkù, the government seat of the Nujiang Lisu Autonomous Prefecture. His name was Hán Wénjùn. I collected more sentences for various grammatical structures. I wrote a

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<sup>4</sup> This statement must be qualified. First, it is clear that Sun is restricting his comment to the Anong spoken in China. Second, Sun makes clear in the original preface he was accompanied by other linguists in all but two his field trips to work on Anong; in fact, Sun thanks them for their help. However, aside from help from the linguists he mentions in the preface, it appears that Sun is the only linguist to have worked on Anong in China, and, certainly, the only one to have worked on the Nu River dialect.

David Bradley (p.c.) mentions the work of Joel Kopang on the Anong spoken in Myanmar, who has devised and implemented an orthography, published a reading primer ([anonymous], n.d. *Anung Shiuva. Shiureu Chen Demc Bok* [*Literacy Primer in Anung Language*], Noc Shiuva wa Rac Nang Chen Rac: Mulashidi, Putao, Burma); a New Testament ([anonymous], n.d. *Geumeu Heungshangc Shiuva Khaziut se Bok* [*The New Testament in Anung Language*], with publisher or place of publication information; and a hymn book. Undoubtedly, these are the ‘materials from another country’ Sun refers to a little later in this chapter. Joel Kopang has visited the Anong in China accompanied by Anong from Myanmar and reports that there is easy mutual intelligibility.

grammatical sketch based on the data I collected up to that point. The sketch was published in the *Linguistics of the Tibeto-Burman Area* (Sun, 1988). Based on information collected on this trip, the number of Anong speakers was estimated to be around 500. The fourth fieldwork trip was carried out in September 1987. On that trip, I surveyed the middle-aged and younger speakers' use of Anong and collected information on their attitudes towards the Anong language. I also collected more data on grammatical structures, family genealogies, and some texts. The fifth trip was in October and November of 1995. On that trip, I sampled the population and conducted a more in-depth survey of the language situation. It was found that only 410 people could still speak Anong. I collected a considerable amount of additional data on the language, especially data on grammatical structures. In January and February of 1999, I went to the region for the sixth time. I went to the villages and conducted one-on-one interview sessions and group discussions to gauge and analyze the language use situation and language attitudes among different sectors of the population. I paid special attention to the structural changes that Anong has been undergoing as an obsolescing language. This was the most productive of all of the trips up to that point. The word list was expanded to close to 5000 from less than 3000. Additional data were collected on grammatical structures and more grammatical structures were found. More texts were collected, and recordings of words, sounds, grammatical examples, and some texts were made. Sadly, I found out during that trip that some of the speakers who were 70 years of age or older had passed away, including H án Wénjùn the informant I worked with in 1983 and 1987. My estimate based on information collected from the sixth trip was that the number of speakers of Anong dropped to under 400.<sup>5</sup>

### 1.6.2. *Anong Language Use*

I discovered during my first fieldwork trip to work with the Anong that most of them had already shifted from their native language to Lisu, with others having shifted to Chinese and Bai. This took place before

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<sup>5</sup> As Bradley (2007) notes, Sun's 1994 estimate of 400 is now much too high for Anong in China. Bradley (p.c.) citing Sun (p.c.), estimates the number has dropped to 40 or so speakers. However, there are some 4,000 speakers in Myanmar, as well as a few who live in Thailand. (See also Sun 2005). The further description of the Anong of Myanmar takes on more significance, as it represents an earlier stage of many of the changes documented in this work.



the founding of the People's Republic of China in 1949. In 1960, there were about 4300 Anong, with only about 800 Anong speakers left, constituting 18.6% of the total population. The 1994 census puts the total Anong population at 7200 with 400 Anong speakers (5.56% of the total Anong population). This represents a 70% drop in the number of speakers who still speak Anong though the actual decrease in the number of Anong is only 50%.

The total population of these Anong villages is around 1000. The villages fan out in the surrounding areas with Mùgǔjiǎ Village in the center. Mùgǔjiǎ Village is essentially inhabited by the Anong with only one Lisu family in it. The other villages have a much higher percentage of Lisu families in them, and there are a considerable number of cross-marriages between Anong and Lisu. In terms of language use, there are about 400 native speakers of Anong, most of whom are bilingual in Anong and Lisu.<sup>6</sup> A considerable number of them speak Lisu more proficiently than Anong. A few of them are trilingual in Anong, Lisu and Chinese. There is considerable variability among the bilingual and trilingual speakers with respect to their level of proficiency in those languages.

In November 1995, I conducted a survey of the language use situation of the Anong in Mùgǔjiǎ Village, which has the highest concentration of Anong. I interviewed all of the people over 10 years old from all of the households in the village, numbering 104 and 27 respectively. Information collected included name, gender, age, nationality, educational level, and language use. Data on language use included use of their mother tongue, use of Lisu, Chinese, and other languages. I divided the degree of use of the languages into four levels.

#### A. Fluent

This level refers to those who can not only engage in every day conversations but can also talk about various topics related to production and daily living and have a vocabulary of 3000 or more.

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<sup>6</sup> Bradley (p.c.) notes that he has never met an Anong speaker who was not bilingual in Lisu, although he suggests that there may well be a few in Myanmar. It is also clear that among the Anong of China, except for a couple of the most elderly Anong, Lisu was their dominant language.

### B. Semi-fluent

This level refers to those who can carry out every day conversations but are no longer very fluent. They have a vocabulary of over 1000, but they are more proficient in their second language.

### C. Limited Proficiency

Speakers at this level only retain the ability to use Anong greetings and produce some simple sentences in Anong. They can no longer fully express themselves in Anong, and their utterances often contain words from their second language. Their vocabulary is highly limited, and they have lost many of the every day words. Their pronunciation is inaccurate and they are very fluent in their second language.

### D. No Proficiency

This group refers to those who have pretty much lost their mother tongue. Some still retain some comprehension with no production, while others have completely lost their mother tongue.

The findings of the survey can be summarized as follows. Of the 104 people sampled from 25 households, 62 belonged to level A comprising 59.6% of the total number of people sampled; 19 or 18.2% belonged to Level B; 14 or 13.4% belonged to Level C; and 7 or 6.7% belonged to Level D, which indicates that people in Mùgǔjiǎ Village still retain use of their mother tongue. However, analysis of the use of Lisu, their dominant language, showed that the situation was more serious; in Lisu, out of the 104 people surveyed, 96 belong to Level A with only eight belonging to Level B. What is more, the eight that belonged to Level B are all elderly who rarely went out. Nobody fell into Level C and Level D in their ability to speak Lisu. This shows that even in an area where Anong speakers are most concentrated, their second language proficiency has far surpassed their ability to speak their mother tongue. Almost all Anong can speak Lisu and the vast majority can speak it better than their mother tongue. With respect to the use of Chinese, my survey showed that out of the 104 people sampled, only 13 belonged to Level A, i.e. 12.5%; 17 belonged to Level B, i.e. 16.3%; 19 belonged to Level C, i.e. 18.3%; and 55 belonged to Level D, i.e. 52.9%. Although only a small number of Anong speak Chinese, they are mostly intellectuals, village cadres, or those who travel outside the village frequently. It should be pointed out that the variety of Chinese they speak is not the Standard Chinese (Putonghua), but a local

Chinese dialect, which is also different from the Kunming dialect. Of the 13 who belonged to Level A, virtually all of them had received either junior high or senior high education. Those that belonged to Level B had received elementary education or some kind of schooling. They all had plenty of opportunities to travel outside the area, and the language of communication across ethnic groups in the region was mainly Chinese and Lisu. They are usually bilingual in Chinese and Lisu. Those who do not speak Chinese tend to be the elderly or women who never traveled outside the area. In the Mùgǔjiǎ Township, there are some Bai households, but no Anong in this area can speak Bai, and most of the Bai can speak either Chinese or Lisu.

Mùgǔjiǎ Village in Mùgǔjiǎ Township has the highest concentration of Anong. Going from door to door one can still hear conversations in Anong, but Lisu is more commonly used. Anong is also used in the villages mentioned above that are located around Mùgǔjiǎ Village, but since those Anong are interspersed with Lisu and other nationalities, hardly any of them have a Level A type of proficiency, though 280 of the Anong in those villages belong to Level B, they are all over 70 years of age. Hardly any of those who are under 50–60 years old can speak their mother tongue. They rarely had the opportunity to use Anong, except if they spoke a few words of Anong when they greeted the elderly. So most of the Anong in those villages belong to either Level C or Level D. It is clear that Anong has lost its function as the means of communication in those villages, having been completely supplanted by Lisu.

The 400 or so Anong speakers mentioned above refer to those who have the ability to speak Anong belonging to Level A and Level B. In actuality, most of them, especially the ones who live in villages other than Mùgǔjiǎ Village, rarely use Anong.

### 1.6.3. *Analysis of Anong Attrition*

A number of factors contributed to the situation described above. The following are possible reasons based on our long-term field investigations and analysis of our observations.

#### (1) *The Influence of the Surrounding Environment*

The surrounding environment determines language use to a certain extent. According to the genealogies and historical legends of the Nujiang Anong people, the Anong were the indigenous people of the area. They moved here southwards from the Qīnghǎi-Tibetan Plateau

well over 70 generations ago. They also believed that the Nujiang was so-named only after the Nu people had moved here. Therefore, they call the Nujiang the “Nong” River [i.e. the Nujiang]. Legend says that the three brothers of the family parted ways, with some moving northwards to the Gòngshān area. These still call themselves the Anong people today, but due to a lack of contact over an extended period of time, their language became very different from that spoken by the Anong around Fúgòng County. Later, these Anong in the Gòngshān area moved again towards the Dúlóng River, to form the present-day Trung nationality. Therefore, the languages spoken by the Nujiang Anong in the Gòngshān area and the Trung are very similar, and may even be considered two dialects of the same language. Another group moved westwards into Burma.

During the 1940s to 1950s,<sup>7</sup> the Lisu and Bai people migrated gradually into the Nujiang area. As they were powerful and populous, they occupied a large area along the middle reaches of the Nujiang. Gradually cultural assimilation of the Anong who remained in the region occurred, due to a long period of contact with the surrounding ethnic groups, i.e. the Lisu and Bai. The Anong lost many of their distinctive characteristics, including their own language. Therefore, by the time the People’s Republic of China was founded, the vast majority of the Anong in this area no longer spoke their mother tongue. During the 50 years since New China was established, this trend of assimilation has continued.

## (2) *Intermarriage*

The Anong have been a relatively open-minded community. In the Nujiang area, they coexisted peacefully with other ethnic groups. Intermarriage was common, especially with the Lisu. The Anong has complex phonological and grammatical systems. We observed that, even in those few villages where the Anong were in the majority, people from the few households of other ethnic groups living among the Anong did not

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<sup>7</sup> The date of Lisu and Bai arrival in the area is disputed. Bradley (1994) notes that Lisu tradition says that Lisu have been living in the area since about 1573, but now thinks (p.c.) that this is a little too early; he notes that 1742 appears in some sources. He suggests that the local Bai (actually Laemae, sometimes known as ‘Northern Bai’ but speaking a quite distinct language) have probably been there at least as long. Bradley (p.c.) notes that more than 600 years earlier still, the Lisu appear at the time of the Nanzhao kingdom, living further east in the mountains northeast of Erhai Lake and serving as soldiers fighting against the Han and Tibetans for Nanzhao.

learn Anong. In Anong families where one of the members had married someone from another ethnic group, even though there was only one non-Anong member in the family, he or she very rarely learned Anong. On the contrary, Lisu became the common language of the family. My Anong language consultant is a typical example. Among the Anong, his mother tongue proficiency belonged to Level A. However, his wife was Lisu, and they had been married for over 30 years. Even now, she could only speak Lisu though she can understand Anong. In his family, Lisu was the common language of communication. They had three daughters and a son. Like their mother, the children only had a limited comprehension of Anong, and could not speak it. Sometimes, their father would consciously use a few Anong sentences at home, but the children would still answer in Lisu. The Anong also intermarry with Bai and Chinese, and the language use situation is more or less the same in such families. They all use Lisu because Lisu is the dominant language in the region. Members of a family learn Lisu first.

### (3) *Language Attitudes*

During my investigations in the area, I interacted extensively with Anong intellectuals, cadres, as well as other individuals to find out about their attitudes towards the situation of their mother tongue. These attitudes can be summarized into the following three types:

Type One: Some leading cadres and intellectuals are very concerned about the imminent extinction of their mother tongue. They view their language as an important distinguishing characteristic of their nationality, as well as a medium for cultural transmission. Therefore, the disappearance of their language would lead to the loss of cultural phenomena and historical legends, including folk tales, genealogies, music, and poems: this would in turn lead to the loss of their main ethnic distinctiveness.

As early as the 1980s, a leading cadre in the Autonomous Prefecture who was of the Nu nationality had suggested adopting measures to record these languages. Under her guidance, they allocated some funds to enable linguists to record, collate, and publish Nu language data. In her preface to the volumes of Nusu and Zauzou data which had already been published, she stated very clearly:

Language development occurs hand-in-hand with social development. The liberation and economic development of different ethnic groups

have promoted changes and development in their languages. The new situations and new problems which have occurred have required careful consideration, research, and resolution. One such problem which has attracted attention concerns those languages and dialects which have small numbers of speakers. In modern society, fewer and fewer people are speaking these languages and dialects, with some being on the verge of extinction. These include the Nusu and Anong languages of the Nu nationality. Language is a cultural form and is also the medium by which ethnic history, literature, religion, and customs are transmitted. Although a decline in the numbers of speakers of these languages or even their extinction may be an inevitable trend within social development, the loss of these forms of cultural expression is without doubt a regrettable fact of history. Therefore, many within the ethnic groups of this prefecture have appreciated the severity of the situation and have actively promoted the urgent task of preserving linguistic and cultural material.

These words reflect very clearly the basic attitude of ethnic intellectuals towards the imminent extinction of their mother tongues. A few among them also hope to record their language in a phonetic written form, in order to more accurately preserve the linguistic data.

Type Two: A small number of Anong intellectuals and individuals support the disappearance of their own language. Their views are that speaking “Chinese is most useful, as it can be used all over China”; “Once we have learned to speak and write Chinese, we can become cadres and gain more knowledge of important national issues”; and “We can understand easily what is said on the radio or television”. Their attitude towards using Lisu is: “We must learn Lisu because we are surrounded by Lisu speakers, and must speak Lisu on the streets. If we can’t speak Lisu, we can’t go anywhere.” Regarding the imminent extinction of their own language, their view is that: “It doesn’t really matter. It may even be better if it becomes extinct, as everyone will then speak the same language. It will be much more convenient because we won’t need translators anymore.” Some Anong people feel that their own language is “primitive”, and that it cannot be used to express many new concepts. Therefore, using Chinese or Lisu is more convenient. This group of people is strongly opposed to the creation of a phonetic alphabet or writing system, as they feel that any such project would be “unnecessary”.

Type Three: The majority of cadres, individuals, and intellectuals have an indifferent attitude towards the disappearance of their mother tongue.

They consider this to be inevitable, and think that it is better to follow the natural course, since worrying about it is of no use.

Needless to say, Anong is seriously endangered.

## 1.7. OTHER RELATED ISSUES

### 1.7.1. *The Anong of China Have no Writing System*

The Anong of China have apparently never wanted to create a writing system for their language.<sup>8</sup> However, we found that among some Anong, there was some religious scripture and some reading materials being circulated that had been brought in from overseas. The language used in these materials is close to Anong. The Anong people can basically decode them, but there are phonological and lexical differences. This shows that there may be languages similar to Anong on the Burma side. However, lack of information on their speakers and the lack of materials for comparison makes it impossible to determine whether the differences between Anong and those languages are dialectal differences or not. Therefore, if we don't take the Burmese Anong into consideration, the Anong language in China is a seriously endangered language soon to become extinct. If we take into consideration the Anong speakers in Burma, then the situation is a bit better because I firmly believe that there are more Anong on the Burmese side.

### 1.7.2. *Attrition under Intense Contact*

When a language is undergoing attrition due to the impact of linguistic and social surroundings, drastic changes take place in its use and in its structures. As mentioned at the beginning of this chapter, I have carried out seven fieldwork trips in the Anong region, starting in 1960 spanning 40 plus years. In terms of diachronic changes, there should not be a lot of change in such a short time, but large scale historical changes may bring such changes about. During our numerous fieldwork trips to the Nu nationality area, I have witnessed tremendous change in the Nujiang region. The lives of the Anong have undergone major changes

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<sup>8</sup> Note that, as Bradley (p.c.) writes and as we have briefly described in earlier footnotes, the Anong of Myanmar have a script, which contains religious writings. See also Joel Kopang.

too. Our records show differences between data collected at different time periods indicating that Anong is a fast changing language. Thus, one of the values of studying Anong is that such data may help us understand patterns of language change. Details and analysis of such changes will be given in chapters on phonology, morphology and syntax.

### 1.7.3. *Problems with Mutual Intelligibility among the Nu*

Although the Anong are part of the Nu ethnic group and although they are interspersed with the Nusu who are also part of the Nu ethnic, they can only communicate with the Nusu through Lisu. Even among the Nusu themselves there are dialectal differences that affect mutual intelligibility. However, after living in the same area for an extended period of time, mutual intelligibility within Nusu has increased. Thus, it has been pointed out that there is no clear demarcation lines between dialects, especially in border areas between two dialects, but the division between languages is clear. No matter where they are, mutual intelligibility between distinct languages is always a problem. Here, the degree of mutual intelligibility between Nusu dialects is greater than the degree of mutual intelligibility between Anong and Nusu, supporting the view that difference between languages and dialects can usually be differentiated.





## CHAPTER TWO

### PHONOLOGY

Anong is a language that has retained much of its original Tibeto-Burman character. Its sound system shows remnants of its originally more complex consonant clusters, although they are now considerably simplified. Only the nasals still occur in the codas; final obstruents have been reduced to a final glottal stop. Tones have emerged and have begun to be used to distinguish the meanings of words, although this is still limited. There is widespread syllable weakening.

Anong is disappearing step-by-step, as it undergoes extensive phonological change. Some of the resulting patterns are systematic; others do not seem to follow any discernible pattern. The changes are portrayed here, with the details laid out, the patterns discussed, and the causes analyzed where possible.

The base line for the phonological system given in this grammatical sketch is based on the most conservative data collected in 1995, except for the glottal stops, which are based on the oldest collected data—the 1960 data—because the 1995 glottal stops vary freely. The IPA notation used here is essentially a broad phonetic transcription coming close to phonemic.

#### 2.1. INITIAL CONSONANTS

##### 2.1.1. *Single Consonants*

Anong has 47 single initial consonants (see Table 3).

Table 3: Anong initial consonants

stops:	unaspirated	p-	t-	t̚-	k-	ʔ-
	aspirated	p <sup>h</sup> -	t <sup>h</sup> -	t̚ <sup>h</sup> -	k <sup>h</sup> -	
	voiced	b-	d-	d̚-	g-	
affricates:	unaspirated		ts-	tʃ-	tɕ-	
	aspirated		ts <sup>h</sup> -	tʃ <sup>h</sup> -	tɕ <sup>h</sup> -	
	voiced		dz-	dʒ-	dʑ-	

Table 3 (*cont.*)

fricatives:								
	voiceless		f-	s-	ʃ-	ç-	x-	h-
	voiced		v-	z-	ʒ-	ʒ̣-	ɣ-	
nasals:								
	voiceless	m̥-	n̥-	ɲ̥-	ɳ̥-	ŋ̥-		
	voiced	m-	n-	ɲ-	ɳ-	ŋ-		
laterals:								
	voiceless		ɬ-					
	voiced		l-		ɭ-			
semi-vowel:								
			ɹ-					

## Notes on single consonants:

- (1) Aspirated and unaspirated consonants. The aspirated and unaspirated consonants appear with comparatively low frequency. In some words, the voiced stops and voiced affricates alternate freely with their voiceless counterparts.
- (2) Nasals. The nasals [m], [n] [ɲ], [ŋ] can all be syllabic as well as occur in initials and codas (for examples, see the vowel section). The [ɲ] is often deleted before [i]. In prefixes, [ŋ] occurs in free variation with [o] in prefixes. Some of the voiceless nasals only occur in roots with inflectional suffixes.
- (3) Retroflexes. Anong has a set of retroflex consonants, which includes retroflex stops, nasals, and laterals, for example, [ɬ], [ɬ<sup>h</sup>], [ɖ], [ɲ], [ɭ]. These retroflex consonants are often palatalized, making them quite similar to the corresponding palatalized series: [tʃ], [tʃ<sup>h</sup>], [ɖʃ], [ɲʃ], and [ɭ]. In the Anong of semi-fluent speakers, these retroflexed consonants are replaced with their non-retroflexed counterparts: [t], [t<sup>h</sup>], [d], [n], and [l].
- (4) Phonetics of retroflexes. The actual phonetic values of the retroflex fricatives and affricates [tʃ], [tʃ<sup>h</sup>], [ɖʃ], [ʃ], and [ʒ] are [tʃ], [tʃ<sup>h</sup>], [ɖʃ], [ʃ], and [ʒ]. In some words, the voiced and voiceless alveolar retroflex fricatives [ʃ] and [ʒ] occur in free variation with their non-retroflex counterparts [s] and [z]. Also, the retroflex affricates [tʃ], [tʃ<sup>h</sup>], and [ɖʃ] occur in free variation with their non-retroflex counterparts [tʃ], [tʃ<sup>h</sup>], and [ɖʒ] in some words.
- (5) The semi-vowel [ɹ]. The semi-vowel [ɹ] is unstable. Sometimes it is realized as a voiced alveolar fricative or as a voiced alveolar retroflex fricative. It is often deleted before the high, front unrounded vowel [i].

- (6) The coronals. The [tɕ], [tɕ<sup>h</sup>], [dʒ], [ɲ], and [ç] are slightly back and sound close to laminal affricates [cç], [cç<sup>h</sup>], [jɟ], [ɲ], and [ç].
- (7) The glottal stop. The glottal stop [ʔ] occurs both alone in syllable onsets and as a part of consonant clusters. It also occurs in coda position both alone and in combination with nasals. In addition, syllabic nasals have an accompanying glottal stop.
- (8) Some of the fricatives are clearly aspirated, but this aspiration is non-phonemic, that is, it does not distinguish the meanings of words, and thus the aspirated fricatives are not treated as separate phonemes.
- (9) The glottal fricative mainly occurs with nasalized vowels. The velar fricative occurs in free variation with the glottal fricative in some words.
- (10) Voiced nasals and the glottal stop occur both in onset and coda positions.
- (11) Voiceless nasals and laterals mainly occur in inflections.

### 2.1.2. Single Initial Consonants

Table 4: Single Initial Consonants

p	pi <sup>31</sup>	brush	ka <sup>55</sup> pu <sup>31</sup>	cuckoo
p <sup>h</sup>	p <sup>h</sup> i <sup>35</sup> du <sup>55</sup>	key	p <sup>h</sup> u <sup>31</sup>	fill in (dirt)
b	bu <sup>31</sup>	snake	a <sup>31</sup> bɛ <sup>55</sup>	goat
m̩	m̩i <sup>55</sup> ŋu <sup>31</sup>	begin; start	m̩a <sup>31</sup> u <sup>31</sup>	dig
m	mi <sup>55</sup>	hemp	la <sup>31</sup> ma <sup>55</sup>	(dry) field
f	fau <sup>31</sup>	tie, fasten	fu <sup>35</sup>	soak
v	vi <sup>55</sup> ka <sup>31</sup>	bottle	a <sup>31</sup> vu <sup>35</sup>	hand
ts	tsui <sup>55</sup>	crime; guilt	tsi <sup>ʔ55</sup>	a frame
ts <sup>h</sup>	ts <sup>h</sup> i <sup>31</sup>	rain	a <sup>31</sup> ts <sup>h</sup> u <sup>55</sup> ɛ <sup>55</sup>	point, tip
dz	la <sup>35</sup> dzi <sup>ʔ31</sup>	chili	dzu <sup>53</sup>	stockaded village
s	si <sup>31</sup> di <sup>55</sup>	true; really	a <sup>31</sup> suŋ <sup>55</sup>	reed
z	zɿn <sup>53</sup>	ask	a <sup>31</sup> zu <sup>55</sup> u <sup>31</sup>	write
t	tan <sup>55</sup>	(bamboo) joint	tu <sup>31</sup>	thousand
t <sup>h</sup>	t <sup>h</sup> i <sup>55</sup>	one	t <sup>h</sup> u <sup>31</sup>	sharp; fast
d	di <sup>55</sup> ba <sup>35</sup>	spider	do <sup>31</sup>	push
ŋ	ŋo <sup>31</sup> iun <sup>55</sup>	stay	ŋem <sup>31</sup>	sell (imp.)
n	nɛn <sup>55</sup>	goods	nɛm <sup>55</sup>	ear of millet
ʈ	ʈau <sup>53</sup>	seek; look for	ʈam <sup>53</sup>	roast in sun
l	lim <sup>53</sup>	bury	lu <sup>35</sup> lu <sup>35</sup>	(put on) straight
t̩	t̩i <sup>31</sup> ju <sup>53</sup>	pay for	ʈa <sup>53</sup> ni <sup>33</sup>	grow up; mature
t̩ <sup>h</sup>	t̩ <sup>h</sup> i <sup>31</sup> man <sup>31</sup>	old	ʔi <sup>31</sup> ʈu <sup>31</sup>	grasshopper
ɖ	ɖim <sup>55</sup>	kick	ɖo <sup>55</sup>	durable
ŋ	gu <sup>31</sup> ŋi <sup>55</sup>	kneel	ŋu <sup>31</sup>	wine

Table 4 (*cont.*)

ŋ	ŋo <sup>55</sup>	sit (imp.)		
l	tʰi <sup>31</sup> li <sup>31</sup>	return (money)	go <sup>31</sup> luŋ <sup>31</sup>	curve, bend
tʂ	pau <sup>31</sup> tʂɿ <sup>55</sup>	newspaper	sua <sup>55</sup> tʂaŋ <sup>55</sup> ua <sup>55</sup>	reckon accounts
tʂ <sup>h</sup>	tʂ <sup>h</sup> ɿ <sup>31</sup>	buttocks	a <sup>31</sup> tʂ <sup>h</sup> u <sup>55</sup>	breast; udder
dz <sub>v</sub>	dzɿ <sup>31</sup>	expand; swell	dzua <sup>55</sup> ʂɿ <sup>31</sup>	raise; lift
ʂ	ʂa <sup>55</sup> ʂɿ <sup>31</sup>	urine	ʂo <sup>55</sup>	enclosing wall
z	zɿ <sup>55</sup>	be	a <sup>31</sup> zɿn <sup>31</sup> ɛ <sup>55</sup>	turn over (food)
ɿ	ɿɿ <sup>31</sup> ŋuŋ <sup>55</sup>	mountain	ɿuŋ <sup>55</sup>	hibernation
tɕ	tɕi <sup>55</sup> p <sup>h</sup> i <sup>55</sup>	narrow	tɕo <sup>55</sup>	surround
tɕ <sup>h</sup>	a <sup>31</sup> tɕ <sup>h</sup> iŋ <sup>31</sup>	to change	tɕ <sup>h</sup> uŋ <sup>55</sup>	earthen jar
dʒ	dʒi <sup>31</sup>	copper	dʒo <sup>31</sup>	success
ŋ	ŋu <sup>55</sup> ŋu <sup>31</sup>	spin yarn	ŋa <sup>53</sup> u <sup>31</sup>	chew
n	nin <sup>55</sup>	finger nail	nun <sup>55</sup>	year, age
ɕ	ɕim <sup>55</sup> bui <sup>31</sup>	full	ɕoŋ <sup>31</sup>	want
ʒ	ʒa <sup>31</sup> u <sup>31</sup> t <sup>h</sup> im <sup>31</sup>	shine	a <sup>31</sup> ʒe <sup>31</sup> mu <sup>55</sup>	prisoner
k	ko <sup>31</sup> p <sup>h</sup> u <sup>33</sup>	fox	kuŋ <sup>55</sup>	six
k <sup>h</sup>	k <sup>h</sup> iŋ <sup>53</sup>	cook; boil	k <sup>h</sup> uŋ <sup>55</sup>	room (house)
g	a <sup>31</sup> gi <sup>31</sup>	lift; carry	gua <sup>31</sup>	wear (clothes)
ŋ	ŋe <sup>31</sup> ŋu <sup>31</sup>	a name		
ŋ	ŋi <sup>31</sup> sa <sup>31</sup>	monkey	ŋom <sup>55</sup> ŋom <sup>55</sup>	nod (head)
x	a <sup>31</sup> xi <sup>55</sup>	laugh	xua <sup>31</sup> u <sup>55</sup>	revolve
ʔ	ʔu <sup>55</sup>	shadow	ʔom <sup>55</sup>	beat; tap
ʎ	ʎi <sup>55</sup> bui <sup>31</sup>	goose	ɿɿ <sup>31</sup> ŋuŋ <sup>55</sup>	mountain
h	a <sup>31</sup> hiŋ <sup>35</sup>	bowl	hā <sup>55</sup> ʂɿ <sup>31</sup>	carry (on head)

### 2.1.3. Consonant Clusters

There are 23 initial consonant clusters, which have been divided into three groups. The first consists of clusters with the retroflex semi-vowel [ɿ] as the second member: [pɿ], [p<sup>h</sup>ɿ], [bɿ], [mɿ], [fɿ], [vɿ], [k<sup>h</sup>ɿ], [gɿ], and [xɿ]. The second consists of preglottalized onsets: [ʔb], [ʔd], [ʔt], [ʔg], [ʔdz], [ʔdʒ], [ʔdʒ], [ʔm], [ʔn], [ʔl], [ʔŋ], [ʔŋ], and [ʔŋ]. And, the last consists of a single cluster, combining the features of the first two: [ʔbɿ].

All three sets of clusters are disappearing. The retroflex semi-vowel has already disappeared in the speech of speakers 50 years of age or younger. It has merged with the high front unrounded vowel. The pre-glottalized series is only retained in the speech of certain elderly speakers. For other elderly speakers, the glottal feature has been lost, but has left vowel constriction behind. Certainly, most speakers no longer have pre-glottalization. In my informant's speech, pre-glottalization still contrasted phonemically in the data collected in 1960, but the contrast was gone in the 1999 data.

Table 5: Consonant clusters

pɿ	pɿuən <sup>55</sup> no <sup>31</sup>	untie; undo		
p <sup>h</sup> ɿ	ʔa <sup>31</sup> p <sup>h</sup> ɿ <sup>31</sup>	ancestors	p <sup>h</sup> ɿ <sup>33</sup>	tears
bɿ	bɿi <sup>53</sup>	four	sa <sup>31</sup> bɿ <sup>55</sup>	wild leeks
mɿ	a <sup>31</sup> mɿuən <sup>55</sup> se <sup>33</sup>	get angry		
fɿ	da <sup>31</sup> fiə <sup>55</sup>	turtledove	di <sup>31</sup> fɿ <sup>55</sup>	to winnow
vɿ	a <sup>31</sup> vɿi <sup>55</sup>	cable yoke		
k <sup>h</sup> ɿ	k <sup>h</sup> ɿ <sup>53</sup>	sweet	da <sup>31</sup> k <sup>h</sup> ɿ <sup>55</sup>	varnish tree
gɿ	dɛ <sup>31</sup> gɿ <sup>55</sup>	dog	gɿ <sup>55</sup> dʒɛ <sup>35</sup>	melt (snow, etc.)
xɿ	xɿuən <sup>53</sup>	sift	xɿuən <sup>31</sup>	charcoal
ʔb	a <sup>31</sup> ʔban <sup>55</sup>	bamboo	ʔbɛ <sup>31</sup> ni <sup>55</sup>	food steamer
ʔd	ʔdɛm <sup>55</sup>	on credit	a <sup>31</sup> ʔdɛn <sup>55</sup>	cut off (rope)
ʔd̥	ʔd̥aŋ <sup>55</sup>	crawl	ʔd̥uŋ <sup>55</sup> ɛ <sup>31</sup>	vomit
ʔg	ʔgam <sup>55</sup>	carve; engrave	tʂɿu <sup>55</sup> ʔgɛŋ <sup>55</sup>	titmouse
ʔdz	ʔdzam <sup>55</sup>	drench (rain)	i <sup>31</sup> dzuŋ <sup>55</sup>	leopard
ʔdz̥	ʔdz̥ɿn <sup>55</sup> ɛ <sup>31</sup>	defecate	ʔdz̥ɿ <sup>31</sup>	fierce (action)
ʔdʒ	ʔdʒu <sup>55</sup> ŋu <sup>31</sup>	bite; bark	ʔdʒɛ <sup>35</sup>	finished, complete
ʔm	tɛ <sup>h</sup> ɛ <sup>55</sup> ʔmu <sup>31</sup>	daughter		
ʔn	a <sup>31</sup> ʔna <sup>31</sup>	dye (cloth)		
ʔl	ʔla <sup>31</sup> sum <sup>55</sup>	musk	ʔlin <sup>35</sup>	bloated (with urine)
ʔŋ	ʔa <sup>31</sup> ʔŋɛ <sup>35</sup>	to paint	ʔŋuŋ <sup>31</sup>	greasy; slippery
ʔŋ̥	ʔŋ̥a <sup>31</sup> ɛ <sup>31</sup>	ruminant		
ʔŋ	ŋi <sup>31</sup> ʔŋu <sup>31</sup>	grab; arrest		
ʔbɿ	ɕa <sup>55</sup> ʔbɿuən <sup>35</sup>	step over		

## 2.2. VOWELS AND FINALS

Anong has 10 simple vowels, 16 complex vowels, 48 vowel + coda combinations, and 4 syllabic nasals.

### 2.2.1. Simple Vowels

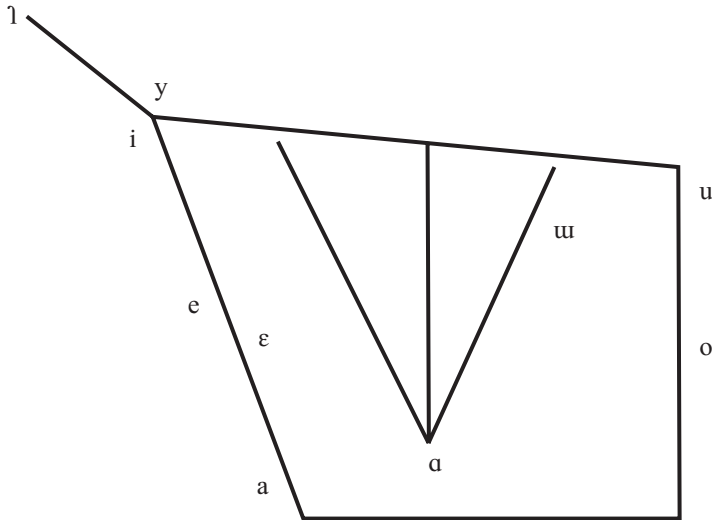
Anong has ten simple vowels: [i], [e], [ɛ], [a], [o], [u], [ʉ], [y], [ɑ], and [ŋ]. Their positions are indicated on the vowel chart (see page 24).

Notes on monophthongs:

- (1) The phonetic values of the four vowels [ŋ], [y], [e], and [ɑ] is as indicated on the chart. The vowel [y] has the lowest frequency of occurrence; it appears to only occur in Chinese loans.
- (2) [i] is slightly more open than the standard value assigned to this vowel position. [e] is slightly lower than IPA [ɛ], with a value approaching [æ], and [ɛ] is slightly more to the center and slightly

more open, closer to [A]. [ɑ] is relatively back, a little less to the front than IPA [A]. When [ɑ] occurs before [n] and [ŋ], it has the value of [a]. Both [u] and [o] are slightly more open. [ʊ] is more to the center and more open.

- (3) The value of [u] remains unchanged after [m], [n], and [ŋ]. But when it occurs after bilabial stops [u] is closer to [ʊ]. When it occurs after the other consonants, it is labialized, with a value close to [ɥ].
- (4) [ʊ]. In multisyllabic words, [ʊ] appears to be the vowel that results from the reduction of an unstressed vowel in a non-initial position. In Chinese loans, instead of [ʊ] as the reduced vowel, [ə] is often used as the reduced vowel. When [ʊ] occurs after retroflex consonants, it sometimes becomes [i].
- (5) [i] is deleted after the palatal nasal [ɲ], and [u] is often deleted after the velar nasal [ŋ].
- (6) The apical vowel [ɿ] becomes [ɪ] after retroflex consonants.
- (7) Vowels in prefixes are always significantly reduced, rendering them almost inaudible.



2.2.2. *Simple Vowels without Codas*

Table 6: Simple vowels without codas

i	si <sup>55</sup>	and; red; spicy	ts <sup>h</sup> i <sup>31</sup> u <sup>31</sup>	scoop up
e	se <sup>55</sup>	bird cry	ts <sup>h</sup> e <sup>31</sup>	to temper
ɛ	a <sup>31</sup> se <sup>55</sup>	sour	ts <sup>h</sup> ɛ <sup>53</sup>	come out (sun)
a	sa <sup>31</sup> bo <sup>33</sup>	expel	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> a <sup>55</sup>	ten
ɑ	a <sup>31</sup> sa <sup>35</sup>	earth	ts <sup>h</sup> ɑ <sup>31</sup> bi <sup>31</sup>	dust; dirt
o	so <sup>53</sup>	understand; know	ts <sup>h</sup> o <sup>33</sup> o <sup>55</sup>	plow
u	ʔa <sup>31</sup> su <sup>31</sup>	to boil	ɑ <sup>31</sup> ts <sup>h</sup> u <sup>55</sup>	pointed; sharp
y	y <sup>35</sup> sɿ <sup>31</sup>	jade	tɕ <sup>h</sup> y <sup>55</sup> nin <sup>53</sup>	extinguish
uɯ	a <sup>31</sup> suɯ <sup>31</sup>	boat; ship	ts <sup>h</sup> uɯ <sup>31</sup>	cut (cloth)
ɿ	a <sup>31</sup> sɿ <sup>55</sup>	comb	ts <sup>h</sup> ɿ <sup>31</sup>	rain

2.2.3. *Nasalized Vowels*

Contrastively nasalized vowels are a relatively new phenomenon in Anong. The data from 1960 show free variation in the distribution of nasalized vowels. However, more recently collected data indicate that nasalized vowels have become contrastive, as shown in the following examples.

Table 7: Contrasts in nasalization

nasal final	lan <sup>55</sup>	piece (of stone)	k <sup>h</sup> uan <sup>55</sup>	room (of house)
nasalized vowel	lã <sup>31</sup>	swim	k <sup>h</sup> uã <sup>31</sup>	hole, cave
non-nasalized vowel	la <sup>33</sup>	look for; seek	k <sup>h</sup> ua <sup>33</sup>	bee; wasp

Therefore, it is necessary to analyze Anong as having a set of nasalized vowels: [ĩ], [ẽ], [ẽ̃], [ã], [ã̃], [õ], [ũ], [ũ̃], [iẽ], [iã], [iũ], and [uã̃]. Some nasalized vowels only occur in Chinese loans, for example [ũ̃].

Table 8: Nasalized vowels

ĩ	da <sup>31</sup> tɕ <sup>h</sup> i <sup>55</sup>	wing	di <sup>31</sup> tɕ <sup>h</sup> i <sup>31</sup> k <sup>h</sup> ɑ <sup>33</sup>	side
ẽ	k <sup>h</sup> ẽ <sup>31</sup> u <sup>31</sup>	to weed (grass)		
ẽ̃	ɕa <sup>31</sup> k <sup>h</sup> ẽ <sup>55</sup>	iron	hẽ <sup>35</sup> pu <sup>33</sup>	hedgehog
ã	a <sup>31</sup> bã <sup>33</sup>	loaf on the job	hã <sup>55</sup>	to brush
ũ	ŋã <sup>55</sup>	borrow	lã <sup>31</sup>	swim
õ	du <sup>31</sup> gõ <sup>55</sup>	idle; free time	mi <sup>55</sup> lõ <sup>55</sup>	hemp stalk
ũ̃	di <sup>31</sup> tɕ <sup>h</sup> ũ̃ <sup>55</sup> ũ <sup>31</sup>	marry (of woman)	di <sup>31</sup> dʒã <sup>31</sup> ũ <sup>31</sup>	taste
ũ̃̃	ta <sup>35</sup> fũ̃ <sup>35</sup>	manure	zũ̃ <sup>31</sup> sũ̃ <sup>55</sup>	ginseng



Table 8 (*cont.*)

iē	i <sup>35</sup> iē <sup>31</sup>	unitary	t <sup>h</sup> iē <sup>31</sup> u <sup>31</sup>	sweep (dirt)
iā	iā <sup>55</sup> ε <sup>31</sup> xo <sup>55</sup>	beast		
iā	a <sup>31</sup> iā <sup>55</sup> mu <sup>31</sup> .uŋ <sup>31</sup>	midday; noon	a <sup>31</sup> iā <sup>35</sup> si <sup>31</sup>	slow
uē	ts <sup>h</sup> uē <sup>55</sup>	inch		
uā	k <sup>h</sup> uā <sup>31</sup>	hole; cave	nō <sup>31</sup> uā <sup>31</sup>	cow

## 2.2.4. Vowel “Sequences”

The transcription used here for Anong uses neither the symbol j- nor w-, but instead uses i and u in slots where others might prefer to use these glide symbols. For the most part, context dictates a more consonantal or a more vocalic interpretation. It is in this context, then, that Anong is said to have 22 vowel “sequences”.

There are 22 complex vowels, of which 20 are diphthongs and two are triphthongs. The 20 diphthongs can be divided into two types, those with [i], [u], or [y] as onset as in [ie], [iε], [ia], [ia], [io], [iu], [iuw], [ui], [ue], [uε], [ua], [ua], [yi], [ye], [yε], [uii], or [ɣu] and those with [i] or [u] as coda as in [ei], [ai], or [au].<sup>1</sup> The two triphthongs are [iau] and [uai].

Table 9: Vowel sequences

ie	u <sup>55</sup> ie <sup>31</sup>	member	mu <sup>55</sup> gie <sup>55</sup>	kind of bird
iε	a <sup>31</sup> ts <sup>h</sup> iε <sup>55</sup>	free time	p <sup>h</sup> u <sup>31</sup> iε <sup>31</sup>	ashes (fire)
ia	a <sup>31</sup> ɣgia <sup>31</sup> ŋ <sup>55</sup>	to peck	mu <sup>31</sup> t <sup>h</sup> ia <sup>35</sup> lu <sup>55</sup>	tapioca
ia	a <sup>31</sup> ia <sup>55</sup>	rock bee	dzɿ <sup>31</sup> ia <sup>33</sup> so <sup>55</sup>	paddy rice
io	io <sup>31</sup> mu <sup>55</sup>	clouds	io <sup>55</sup> ma <sup>33</sup>	sickle
iu	liu <sup>35</sup>	doubt; suspect	dzɿ <sup>31</sup> kiu <sup>53</sup>	copper oxidation
iuw	iu <sup>31</sup>	army	iu <sup>31</sup> dzui <sup>55</sup>	wolf
ui	dzui <sup>55</sup>	pair	sui <sup>55</sup> in <sup>31</sup>	mercury
ue	kue <sup>55</sup> tɕy <sup>31</sup>	rule; custom	sue <sup>55</sup>	tax
uε	kue <sup>35</sup> p <sup>h</sup> ε <sup>35</sup>	national flag	uai <sup>35</sup> kue <sup>35</sup>	foreign country
ua	ŋua <sup>55</sup> sɿ <sup>55</sup> ne <sup>35</sup>	village name	sua <sup>55</sup> tɕaŋ <sup>35</sup> ua <sup>55</sup>	to reckon
ua	ŋua <sup>55</sup>	fish	tɕ <sup>h</sup> o <sup>31</sup> ŋua <sup>31</sup>	river
yi	yi <sup>31</sup> t <sup>h</sup> o <sup>35</sup>	cruel/evil people	k <sup>h</sup> yi <sup>53</sup> u <sup>31</sup>	to bark
ye	mu <sup>55</sup> xye <sup>31</sup>	green corn	tɕ <sup>h</sup> ye <sup>31</sup> tian <sup>53</sup>	shortcoming
(1) yε	ɕye <sup>55</sup> ts <sup>h</sup> uā <sup>31</sup>	propagate	only one	
(2) ya	cya <sup>55</sup> dze <sup>31</sup>	sugar	ɕya <sup>55</sup> ɕya <sup>55</sup> ua <sup>33</sup>	sound of wind

<sup>1</sup> The proposed numerals indicate the number of tokens. Several of these combinations are limited to loans or onomatopoeic forms.

Table 9 (*cont.*)

(1)	ui	p <sup>h</sup> u <sup>31</sup> li <sup>31</sup> a <sup>31</sup> bui <sup>53</sup>	apologize	only one	
(2)	ɣu	tʂu <sup>55</sup> ŋgeŋ <sup>55</sup>	titmouse	qi <sup>31</sup> ʂu <sup>35</sup>	come down in torrents
	ei	fei <sup>31</sup> liu <sup>31</sup>	fertilizer	t <sup>h</sup> u <sup>55</sup> fei <sup>55</sup>	bandit; brigand
	ai	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> ni <sup>33</sup>	twelve	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> kuŋ <sup>55</sup>	sixteen
	ai	xo <sup>55</sup> ts <sup>h</sup> ai <sup>31</sup>	matches	kai <sup>55</sup> tsɿ <sup>33</sup>	collect
	au	au <sup>31</sup> ma <sup>31</sup>	aunt	pau <sup>55</sup> tsɿ <sup>33</sup>	steamed stuffed bun
	iau	p <sup>h</sup> iau <sup>35</sup>	ticket	fun <sup>55</sup> t <sup>h</sup> iau <sup>31</sup>	noodles
	uai	k <sup>h</sup> uai <sup>35</sup> tɕi <sup>35</sup>	accounting	uai <sup>35</sup> kue <sup>35</sup>	foreign country

In general, complex vowels have low frequency of occurrence in Anong. Only the vowels with transitional glides [i] or [u] occur in native words with any frequency. The triphthongs only occur in Chinese loanwords. Thus, we believe that complex vowels in Anong are a relatively new phenomenon, which could also be the consequence of Lisu and Chinese influence.

2.2.5. *Vowels with Codas*

The codas following vowels consist of a nasal, a glottal stop, or a nasal plus glottal stop combination [m], [n], [ŋ], [ɲ], [ŋʔ], [mʔ], [nʔ], and [ŋʔ], shown in the following table.

Table 10: Vowel plus coda combinations

	i	e	ɛ	a	o	u	ɯ	ɿ	ie	ia	io	iu	iu	ue	ua	a	ua	ia
m	/	/	/	/	/	/	/	/	/	/					/	/		
mʔ	/		/	/														
n	/	/	/	/		/	/	/	/					/	/	/	/	/
nʔ			/			/	/										/	
ŋ				/		/	/											
ɲ	/		/				/											
ŋ	/	/	/	/	/	/	/	/	/	/		/	/		/	/		
ŋʔ						/												
ʔ	/		/	/	/	/	/	/		/					/			

Notes on vowels with codas:

- (1) The velar nasal [ŋ] in such finals is often deleted with a residual compensatory effect of nasalizing the preceding vowel.
- (2) The palatal nasal [ɲ] in coda position developed from the reduction of an earlier syllable consisting of a palatal nasal followed by

- a vowel. The vowel was lost leading to the reanalysis of the [ŋ] as the coda of the preceding syllable.
- (3) The semi-vowel [ɹ] is unstable in coda position and only occurs in a limited number of words. Sometimes it is pronounced as a retroflexed vowel and sometimes it is deleted. Therefore, it is not included in the finals inventory.
  - (4) The glottal stop is also unstable as part of a final. It seems to be on its way to being lost. In some words it is realized as the tight throat feature on vowels and in others it simply disappeared. However, its phonemic contrast is clearly there, which is why we still included it in our discussion of finals.
  - (5) The vowel [e] has a very low frequency of occurrence in finals, but it does not fall together with any of the other vowels, so it is treated here as an independent sound.
  - (6) In the database, all examples of -ieŋ occur before -u. Thus, the -ieŋ combinations are recognizable as the result of a morphological juxtaposition: the combination originally only occurred before ŋu, the post-verbal, sentence-final particle.

Altogether there are more than 50 finals with consonant endings, which are illustrated with the following examples.

im	lim <sup>53</sup>	bury	ɑ <sup>31</sup> dim <sup>55</sup>	kick
imʔ	tɕ <sup>h</sup> im <sup>ʔ55</sup> ɛ <sup>31</sup>	suck (milk)	k <sup>h</sup> u <sup>31</sup> lim <sup>ʔ31</sup> u <sup>31</sup>	fold
em	ɑ <sup>31</sup> nem <sup>55</sup>	should		
ɛm	ɕɛm <sup>31</sup>	knife	nem <sup>31</sup>	sun
ɛmʔ	dɛm <sup>ʔ55</sup>	debt		
am	s <sup>31</sup> lam <sup>55</sup>	jump	mu <sup>31</sup> ɣam <sup>55</sup>	lower jaw
				bone
am	k <sup>h</sup> am <sup>53</sup>	to ladle, scoop out	p <sup>h</sup> u <sup>31</sup> dzam <sup>31</sup>	shady side (mountain)
amʔ	ma <sup>31</sup> k <sup>h</sup> amʔ	to bully		
om	dzom <sup>31</sup>	prop up; support	ɑ <sup>31</sup> som <sup>53</sup>	three
omʔ	k <sup>h</sup> ɑ <sup>31</sup> som <sup>35</sup>	search (body)	dzɛ <sup>35</sup> zom <sup>ʔ35</sup>	build wall
um	ɑ <sup>55</sup> um <sup>55</sup>	hit (iron)	bum <sup>55</sup>	pile, heap
uum	ŋi <sup>55</sup> .uum <sup>31</sup>	heart	ʔŋ <sup>31</sup> buum <sup>55</sup>	messy
ɣm	bɑ <sup>31</sup> sɣm <sup>53</sup>	a fly	ʂ <sup>31</sup> .ɣm <sup>31</sup>	skirt
uam	uam <sup>31</sup> .uu <sup>55</sup>	linen thread	ʔuam <sup>55</sup>	needle
in	ŋin <sup>55</sup>	fingernail	gin <sup>31</sup> u <sup>31</sup>	roll
inʔ	t <sup>h</sup> in <sup>ʔ55</sup>	seize		
en	ɑ <sup>55</sup> ben <sup>31</sup>	mother's brother		
ɛn	vɛn <sup>35</sup>	buy	k <sup>h</sup> ɛn <sup>33</sup>	greens

Table (cont.)

ɛnʔ	di <sup>31</sup> xɛnʔ	to divine		
an	tan <sup>55</sup> tɕ <sup>h</sup> im <sup>31</sup>	small vehicle	ʂan <sup>31</sup>	pull (drawer)
anʔ	ba <sup>55</sup> t <sup>h</sup> anʔ <sup>55</sup> nu <sup>55</sup>	behead		
an	.ian <sup>55</sup>	weave (cloth)	ɕuən <sup>55</sup> tan <sup>55</sup>	wood
un	ɕuən <sup>55</sup> io <sup>31</sup> mun <sup>55</sup> su <sup>55</sup>	carpenter	tian <sup>55</sup> tun <sup>55</sup>	electric light
un	a <sup>31</sup> k <sup>h</sup> uən <sup>55</sup>	cough	ʔn <sup>31</sup> p <sup>h</sup> uən <sup>55</sup>	solidify
unʔ	a <sup>31</sup> p <sup>h</sup> uənʔ <sup>35</sup>	pant; gasp		
ɲn	zɲn <sup>53</sup>	ask	ʂ <sup>55</sup> ɿ <sup>h</sup> ɲn <sup>31</sup>	dust
ɲnʔ	bu <sup>31</sup> ts <sup>h</sup> ɲnʔ <sup>55</sup>	kind of sparrow	a <sup>31</sup> ts <sup>h</sup> an <sup>31</sup> do <sup>33</sup> m <sup>31</sup> ʂɲnʔ <sup>31</sup>	gossip
iɛn	iɛn <sup>55</sup> tɕi <sup>31</sup> ɛ <sup>31</sup>	flee	p <sup>h</sup> u <sup>31</sup> ien <sup>31</sup>	stomach
ian	tian <sup>53</sup> t <sup>h</sup> uən <sup>31</sup>	flashlight	tian <sup>55</sup> tun <sup>55</sup>	electric light
uan	suan <sup>55</sup> ts <sup>h</sup> u <sup>35</sup>	sour	kuan <sup>55</sup>	clf. baskets
uan	xuan <sup>35</sup>	go crazy (2ps)	an <sup>55</sup> tsuan <sup>55</sup>	install; fix
aŋ	ua <sup>55</sup> t <sup>h</sup> aŋ <sup>55</sup>	thick, rich		
uŋ	di <sup>31</sup> xuŋ <sup>53</sup>	to whip		
uŋ	ɕa <sup>31</sup> .ia <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	steamed bun		
in	cin <sup>31</sup>	rub; wipe; scrape	bu <sup>31</sup> tɕ <sup>h</sup> in <sup>55</sup>	lizard
ɲn	ʂɲn <sup>35</sup>	seven	ts <sup>h</sup> ɲn <sup>55</sup>	spit; saliva
ɛn	ɕɛn <sup>55</sup>	eight	a <sup>31</sup> ɕɛn <sup>55</sup>	fish
in	k <sup>h</sup> in <sup>55</sup> nuŋ <sup>31</sup>	shell, peel	ba <sup>33</sup> sum <sup>55</sup> pu <sup>31</sup> niŋ <sup>31</sup>	fly droppings
eŋ	i <sup>31</sup> feŋ <sup>55</sup>	a portion	taŋ <sup>55</sup> seŋ <sup>55</sup>	dangshen
eŋ	beŋ <sup>55</sup>	tray	a <sup>31</sup> seŋ <sup>55</sup>	elect
aŋ	gaŋ <sup>55</sup> ʔdʒɛ <sup>35</sup>	ruin (clothes)	k <sup>h</sup> aŋ <sup>31</sup> u <sup>31</sup>	spread; unfold
aŋ	saŋ <sup>55</sup>	daughter-in-law	p <sup>h</sup> aŋ <sup>31</sup>	five
aŋʔ	ɕaŋ <sup>55</sup>	shame; shy		
oŋʔ	ʔoŋ <sup>55</sup>	put on (hat)	ɕɛm <sup>31</sup> t <sup>h</sup> an <sup>55</sup> dɔŋ <sup>55</sup>	short knife/ sword
uŋ	p <sup>h</sup> uŋ <sup>55</sup>	open (door)	ma <sup>33</sup> xuŋ <sup>55</sup>	cloth
ɲŋ	zɲŋ <sup>31</sup> ɛ <sup>55</sup>	scratch (for food)	zɲŋ <sup>55</sup> ŋu <sup>31</sup>	dig; excavate
uŋ	b.uŋ <sup>31</sup>	name	buŋ <sup>55</sup>	silk; thread
uŋʔ	la <sup>33</sup> tɕ <sup>h</sup> uŋʔ <sup>55</sup>	bracelet	ɕuŋʔ <sup>55</sup>	louse
iɛŋ	t <sup>h</sup> iɛŋ <sup>31</sup>	to guard, watch	p <sup>h</sup> i <sup>55</sup> dza <sup>55</sup> t <sup>h</sup> iɛŋ <sup>35</sup> u <sup>31</sup>	give written invitation
iaŋ	a <sup>31</sup> iaŋ <sup>31</sup>	sheep	iaŋ <sup>31</sup>	once; ever
iuŋ	a <sup>31</sup> iuŋ <sup>31</sup>	to covet		
iuŋ	ŋo <sup>31</sup> iuŋ <sup>55</sup>	to stay	dzi <sup>31</sup> iuŋ <sup>55</sup>	come
uaŋ	xuaŋ <sup>53</sup>	spiral; circle	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> xuaŋ <sup>55</sup> dɛm <sup>55</sup>	scarf
iʔ	tɕiʔ <sup>55</sup>	two buckets of (clf)	tɕ <sup>h</sup> i <sup>31</sup> niʔ <sup>55</sup>	arm (part of)
ɛʔ	dzeɿ <sup>55</sup>	drop (clf)		
aʔ	mo <sup>55</sup> daʔ	thunder	baɿ <sup>31</sup> lü <sup>55</sup>	sow (seeds)
aʔ	k <sup>h</sup> aʔ <sup>55</sup>	chicken	vi <sup>55</sup> kaʔ <sup>31</sup>	be pregnant
oʔ	p <sup>h</sup> oʔ <sup>35</sup>	change; transform	doʔ <sup>53</sup> u <sup>55</sup>	to ladle, bail
uʔ	k <sup>h</sup> a <sup>55</sup> luʔ <sup>31</sup>	where	fuʔ <sup>35</sup>	hungry

Table (*cont.*)

uŋ?	buŋ <sup>31</sup> nuŋ <sup>55</sup>	snail	tɕ <sup>h</sup> i <sup>31</sup> duŋ <sup>55</sup>	cricket
ɣŋ?	xuŋ <sup>55</sup> dʒiŋ <sup>53</sup>	thorn of flesh		
ioŋ?	ioŋ <sup>55</sup>	clf (person)	tɕe <sup>31</sup> ioŋ <sup>31</sup>	save; be thrifty
ueŋ?	guɛŋ <sup>53</sup>	pine tree		
uaŋ?	dɛ <sup>53</sup> guŋ <sup>53</sup>	cucumber		

### 2.3. TONES AND REMNANTS OF TONE SANDHI

Anong has five tones: 55, 33, 53, 31 and 35. The tone 33 used to be unstable. When the 33 tone co-occurred with 31 or 35, it became 55; the 33 tone changed to 31 when occurring next to 53 and 55; as a consequence, the 31 tone is a sandhi variant of other tones in certain contexts. Recently collected data show that the 33 tone is now contrastive. As a consequence, it is treated here as an independent tone. Both the 35 and the 53 tones are relatively infrequent, with a low functional load in terms of signaling meaning distinctions. The following examples illustrate the five tones.

high level 55	tɕ <sup>h</sup> uŋ <sup>55</sup>	(earthen) jar	lim <sup>55</sup>	bake, roast
high falling 53	tɕ <sup>h</sup> uŋ <sup>53</sup>	straight; press	lim <sup>53</sup>	egg
mid level 33	tɕ <sup>h</sup> uŋ <sup>33</sup>	to play on swing	lim <sup>33</sup>	turn on (water)
mid falling 31	tɕ <sup>h</sup> uŋ <sup>31</sup>	dig up	lim <sup>31</sup>	bury
mid rising 35	ɑ <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>35</sup>	to fish	lim <sup>35</sup>	lay (egg)

Although the tones display variation including some tone sandhi, no clear systematic patterns can be established and the variation is unstable. Thus, beyond the comments on tone 33, further detailed discussion of tone sandhi is still not possible at this point.

### 2.4. SYLLABLES

A syllable in Anong consists of an initial, a rhyme and a tone (with the term rhyme referring to the vowel and any accompanying coda. Some syllables lack an initial, and thus are made up of just a rhyme and a tone. A syllable minimally contains one sound, which is either a vowel or a syllabic consonant, and maximally contains five sounds.

1	C	m <sup>31</sup>	not	ŋ <sup>31</sup> t <sup>h</sup> am <sup>55</sup>	notebook
2	V	o <sup>31</sup>	carry on back (clf.)	ɛ <sup>31</sup>	stative particle
3	VV	iu <sup>31</sup>	seed	ɑ <sup>31</sup> id <sup>55</sup>	rock bee
4	VVV	iau <sup>55</sup> tɕ <sup>h</sup> ui <sup>31</sup>	demand	uai <sup>35</sup> kuɛ <sup>31</sup>	foreign country
5	CV	bɛ <sup>55</sup>	white	p <sup>h</sup> u <sup>55</sup>	silver
6	CVV	ɑ <sup>31</sup> xua <sup>35</sup>	go mad	liu <sup>35</sup>	doubt; suspect
7	CVVV	p <sup>h</sup> iau <sup>35</sup>	ticket	tiau <sup>55</sup> k <sup>h</sup> ɛ <sup>31</sup>	carve; engrave
8	CCV	p <sup>h</sup> .ŋ <sup>55</sup>	dig	bii <sup>31</sup>	four
9	CCVC	?dem <sup>55</sup>	on credit	ɑ <sup>31</sup> m.ian <sup>55</sup>	get angry
10	CCCVC	ɕɑ <sup>55</sup> ?b.iun <sup>35</sup>	step across		
11	VC	in <sup>55</sup>	to sweat	dɛ <sup>31</sup> yun <sup>35</sup>	cotton
12	VVC	ian <sup>31</sup>	item (thing), CLF	ɑ <sup>31</sup> ian <sup>31</sup>	smoke
13	CVC	san <sup>55</sup>	slaughter	ts <sup>h</sup> uŋ <sup>55</sup>	empty out (dirt)
14	CVVC	gien <sup>35</sup>	exist; to mail	k <sup>h</sup> uan <sup>31</sup>	puncture

Syllable structure: (C)(C)(C)(V)V(V)(C)T

Of the 14 structures, the VVV and CVVV only occur in Chinese loans, and CCCVC has an extremely low frequency of occurrence. The ones that have a high frequency of occurrence are V, VV, CV, CVV, VC, VVC, and CVC.

Anong is rich in weakened syllables with the following characteristics (see the word list for examples). The syllable is short and indistinct, usually with a 31 tone, although some words have a high tone. It usually consists of a reduced simple vowel without a coda, making it resemble the onset of a consonant cluster somewhat. Since such syllables are often the remnant of a reduced morpheme or of a grammaticalized lexeme, it frequently either carries meaning or has a grammatical function, differentiating it from the initial sound of a consonant cluster, which lacks meaning or grammatical function. With a considerable portion of the lexicon containing these weakened syllables, the Anong lexicon has ceased to be monosyllabic and has become increasingly bisyllabic or polysyllabic.



## CHAPTER THREE

### LEXICON

#### 3.1. BASIC CHARACTERISTICS OF WORDS IN ANONG

Anong has mostly monosyllabic morphemes. However, since most of the words occur with prefixes or suffixes, the majority of words in Anong are polysyllabic, though most of the root morphemes are monosyllabic. Only less than ten percent of the five thousand or so lexical items we have collected are monosyllabic.

The lexicon of a language is a clear picture of the life of its speakers, a mirror of the cultural traits of a people. Due to the natural geography of the region where the Nu people reside, Anong is rich in certain types of words. For instance, the Nujiang reaches have a warm climate with a lot of bamboo varieties. Therefore, Anong has several dozen names of different varieties of bamboo, e.g., the following (which are accompanied by a translation of their Chinese names), t<sup>h</sup>a<sup>31</sup>ua<sup>55</sup> ‘dragon bamboo’, hi<sup>31</sup>zɿ<sup>31</sup> ‘cane bamboo’, a<sup>31</sup>tɕɿn<sup>55</sup> ‘solid bamboo’, tɕ<sup>h</sup>ɿ<sup>31</sup>ŋaŋ<sup>31</sup> ‘rubber bamboo’, a<sup>31</sup>ɣuŋ<sup>55</sup> ‘poisonous bamboo’, and t<sup>h</sup>i<sup>31</sup>ma<sup>31</sup> ‘mountain bamboo’. In addition, there are these other varieties of bamboo, for which we lack even Chinese names: sɿ<sup>31</sup>men<sup>55</sup>, a<sup>31</sup>lu<sup>31</sup>, a<sup>31</sup>ʔben<sup>55</sup>, ma<sup>31</sup>ŋam<sup>55</sup>, a<sup>31</sup>dɛ<sup>31</sup>, a<sup>31</sup>.ɿm<sup>55</sup>, and a<sup>31</sup>va<sup>55</sup> as well as numerous other varieties of bamboo and bamboo products that also lack names in Chinese. The Anong use bamboo to build houses. The floors are made of bamboo; the walls are woven with bamboo strips; the roofs are made of bamboo poles of different sizes except for the beams, pillars, and thatch. They use bamboo sections for carrying water, bamboo bowls for eating rice, bamboo baskets for carrying grain, bamboo pockets for gathering, bamboo rafts for fishing, bamboo arrows for hunting and bamboo sliding cable for crossing rivers. Bamboo is closely bound up with the lives of the Anong. City dwellers might find it unimaginable but the Anong cannot live without bamboo.

The Nu nationality live in the tableland areas on both sides of the Nujiang. Fishing is not only their pastime but also a manifestation of their accumulated experiences through years of fishing and gathering. Anong lives are inextricably bound with fishing, hunting, and gathering wild fruits and plants. As a result, they are able to describe many



different types of fishing methods and fishing tools and name a great variety of species of fish in the Nujiang. Many of their legends are closely related to fishing.

Gathering is also an integral part of the lives of the Anong. They gather a variety of different things in different seasons. When collecting lexical items in Anong, one can not help but notice the rich experiences the Anong have accumulated through gathering. Those of us who have lived in the cities far away from the rural areas cannot imagine how rich such experiences are. For instance, the Anong like gathering mushrooms, so I asked the informant to describe the varieties of mushrooms they gather, and he immediately named several dozen. Besides the generic term  $\text{mu}^{31}\text{k}^{\text{h}}\text{am}^{55}$  for mushrooms, there are many other words for different varieties which have no corresponding names in Chinese, such as  $\text{mo}^{55}\text{k}^{\text{h}}\text{u}\eta^{55}$ ,  $\text{t}\check{\text{c}}\text{a}^{31}\text{mu}^{31}\text{t}^{\text{h}}\text{i}\text{a}^{35}\text{lu}^{55}$ ,  $\text{a}^{31}\text{t}\check{\text{c}}^{\text{h}}\text{a}^{31}\text{mu}^{55}\text{dim}^{55}$ ,  $\text{m}^{55}\text{bu}^{31}\text{si}^{31}$ ,  $\text{mu}^{35}\text{ku}^{33}$ ,  $\text{d}\check{\text{z}}\text{i}^{55}\text{c}\check{\text{e}}\text{m}^{55}\text{bum}^{55}\text{mu}^{55}\text{dim}^{55}$ ,  $\text{mu}^{55}\text{ti}^{33}\text{li}^{33}$ ,  $\text{da}^{31}\text{so}^{55}\text{mu}^{35}\text{dim}^{55}$ , and  $\text{k}^{\text{h}}\text{a}^{55}\text{su}^{35}\text{mu}^{55}\text{dim}^{55}$ , etc.

In the fall, the Anong like digging wild taro and other wild tubers. They eat some of them fresh and dry the rest. They sometimes grind the tubers into powder for use in spring when there is a food shortage. There are over a dozen names of tubers in Anong. For example,  $\text{k}^{\text{h}}\text{u}^{31}\text{dzu}^{55}$ ,  $\text{bi}^{31}\text{c}\check{\text{u}}^{35}\text{di}^{31}$ ,  $\text{mu}^{31}\text{n}\check{\text{e}}\text{m}^{31}$ ,  $\text{bi}^{31}\text{p}^{\text{h}}\text{a}^{31}$ ,  $\text{n}\check{\text{i}}^{31}\text{ua}^{31}\text{g}\check{\text{r}}\text{l}^{55}$ ,  $\text{mi}^{31}\text{la}^{55}\text{da}^{55}$ ,  $\text{bu}^{31}\text{l}\check{\text{e}}^{33}\text{go}^{53}$ , and  $\text{k}^{\text{h}}\text{u}^{31}\text{dzu}^{55}\text{t}\check{\text{c}}^{\text{h}}\text{e}\text{n}^{31}$ , etc. As to the names of wild fruits, the list is endless, some of which can be used for medicinal purposes. Medicinal herbs are also among things the Anong gather. Some of the herbs are not found in regions inhabited by the Han nationality, so many of them have no names in Chinese. Some of the herbs are very effective in curing illnesses. The Anong use some of the herbs they gather themselves and dry or process the rest for bartering for some of their daily basic necessities.

Anong men are good at hunting. They either hunt individually or through group encircling. When they hunt individually, they use several different methods, such as pit traps, snares, and bows and arrows. Anong men always carry a bow and arrow. They are extremely skilled archers. If an animal is within the distance of ten meters, it rarely escapes their arrows. They use poisoned arrows to shoot big animals. If hit by such an arrow, the animal usually either passes out or dies within minutes. To hunt for smaller animals, they use normal arrows made of bamboo, some of which have metal wrapped heads. They usually use such normal arrows to hunt birds and small creatures like rats and squirrels. Among the words collected, a number of them are names of such animals. For

instance, a<sup>31</sup>din<sup>55</sup> ‘rat’, tɕ<sup>h</sup>im<sup>31</sup>din<sup>55</sup> ‘mouse’, ba<sup>31</sup>din<sup>55</sup> ‘white tail rat’, gu<sup>31</sup>lu<sup>55</sup> ‘long tail rat’, p<sup>h</sup>u<sup>31</sup>dzɿ<sup>55</sup> ‘flying rat’, dzɿ<sup>31</sup>l<sup>h</sup>aŋ<sup>55</sup> ‘squirrel’, and so on. Some of the varieties of rats have no names in Chinese, such as t<sup>h</sup>o<sup>31</sup>dzin<sup>31</sup>dzu<sup>55</sup>, tɕ<sup>h</sup>ɿ<sup>31</sup>ŋm<sup>55</sup>, tɕ<sup>h</sup>ɿ<sup>31</sup>dzuŋ<sup>31</sup>, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>a<sup>31</sup>din<sup>55</sup>, tɕ<sup>h</sup>ɿ<sup>31</sup>la<sup>55</sup>, dzɿ<sup>31</sup>su<sup>31</sup>, tɕa<sup>55</sup>xo<sup>55</sup>, and bu<sup>31</sup>tɕ<sup>h</sup>i<sup>53</sup>, etc.

There are many lexemes in Anong that are used as both nouns and verbs. For example, ven<sup>55</sup> ‘flower; to flower’, in<sup>55</sup> ‘sweat; to sweat’, sɿ<sup>55</sup> ‘fruit; to bear fruit’, ŋi<sup>55</sup> ‘stool; to empty one’s bowels’, maŋ<sup>55</sup> ‘a dream; to dream’, lim<sup>31</sup> ‘egg; to lay an egg’, t<sup>h</sup>im<sup>55</sup> ‘a knot; to make a knot’, etc. There are also forms that are both nouns and classifiers or verbs and classifiers. For example, ŋuŋ<sup>55</sup> ‘year; classifier for age’, buŋ<sup>33</sup> ‘rope; classifier for three dimensional thin flexible things’, ɕem<sup>55</sup> ‘leaf; classifier for two dimensional flat rigid things’, tɕ<sup>h</sup>im<sup>31</sup> ‘house; classifier for buildings’, buŋ<sup>33</sup> ‘pile; classifier for a pile of something’, k<sup>h</sup>a<sup>55</sup> ‘speech, language; classifier for sentences’. Sometimes the same form is even used as a noun, a verb, and a classifier, such as ven<sup>55</sup> ‘flower; to flower; classifier for flowers’. These could be remnants of some kind of old word formation process.

### 3.2. LEXICAL CLASSIFICATION

Lexical items in Anong can be classified in various ways. For instance, we can classify them according to their origin, structural features, or semantic relations.

#### 3.2.1. *Classifying Words According to Their Origins*

Words in Anong can be divided into two classes: native words and loans. Native words can be further divided into two subclasses. First, native words of Tibeto-Burman origin, some of which are of Sino-Tibetan in origin, are illustrated as follows.

	Anong	Written Tibetan	Taoping Qiang	Xide Yi	Spoken Burmese
dog	de <sup>31</sup> gɿ <sup>55</sup>	khji	k <sup>h</sup> uə <sup>55</sup>	k <sup>h</sup> u <sup>33</sup>	k <sup>h</sup> we <sup>55</sup>
firewood	ɕuŋ <sup>55</sup>	me ɕiŋ	sie <sup>33</sup>	ɕɿ <sup>33</sup>	hfi <sup>55</sup>
black	ŋaŋ <sup>55</sup>	nag po	ŋi <sup>55</sup> ŋi <sup>33</sup>	a <sup>44</sup> no <sup>33</sup>	neɿ <sup>944</sup>
new	ŋ <sup>31</sup> sɛ <sup>55</sup>	gsar po	ts <sup>h</sup> i <sup>55</sup>	a <sup>33</sup> ɕɿ <sup>55</sup>	tɕi <sup>944</sup>
three	a <sup>31</sup> som <sup>53</sup>	gsum	ts <sup>h</sup> i <sup>55</sup>	so <sup>33</sup>	tfo <sup>55</sup>

Table (cont.)

	Anong	Written Tibetan	Taoping Qiang	Xide Yi	Spoken Burmese
fish	ɲua <sup>55</sup>	ɲa	dʒɿ <sup>33</sup>	huu <sup>33</sup>	ɲa <sup>55</sup>
stone	luŋ <sup>55</sup>	rdo	ɬo <sup>241</sup>	l(ɯ) <sup>33</sup> ma <sup>55</sup>	tɕauɿ <sup>244</sup>
gall bladder	ɲ <sup>31</sup> da <sup>31</sup> k <sup>h</sup> ɿ <sup>55</sup>	mkhris pa	χtʂə <sup>55</sup>	tɕɿ <sup>33</sup>	tʃe <sup>55</sup> tɕ <sup>h</sup> e <sup>22</sup>
heart	ɲi <sup>55/31</sup> ɯm <sup>31</sup>	sŋiŋ	χtie <sup>55</sup> ma <sup>55</sup>	he <sup>33</sup> ma <sup>55</sup>	ɲa <sup>53</sup> lɔ <sup>55</sup>
moon	sɿ <sup>31</sup> la <sup>55</sup>	zla ba	ɕy <sup>33</sup> ɕya <sup>55</sup>	lɔ <sup>31</sup> bo <sup>21</sup>	la <sup>53</sup>
nine	duw <sup>31</sup> gu <sup>31</sup>	dgu	χguə <sup>33</sup>	gu <sup>33</sup>	ko <sup>55</sup>
steal	k <sup>h</sup> u <sup>33</sup>	rku	χkə <sup>55</sup>	k <sup>h</sup> u <sup>33</sup>	k <sup>h</sup> o <sup>55</sup>
pig	ʔo <sup>55</sup>	p <sup>h</sup> ag pa	pa <sup>33</sup>	vo <sup>55</sup>	wɛɿ <sup>244</sup>
I	ɲa <sup>31</sup>	ɲa	ɲa <sup>55</sup>	ɲa <sup>33</sup>	ɲa <sup>22</sup>
pile (up)	bum <sup>55</sup>	spuŋs	bo <sup>241</sup>	bo <sup>33</sup>	põ <sup>22</sup>

Among the above 20 words, we have nouns, verbs, adjectives, numerals, and pronouns. Half of them date back to Sino-Tibetan and the other half dates back at least to Tibeto-Burman. Although the number of such words is small, they are among the core vocabulary in Anong. A preliminary survey shows that 15% of the vocabulary collected is cognate with languages in the Lolo-Burmese subgroup, specifically 14.8% cognate with Yi, and 16.1% cognate with Lisu. The percentage of cognates with languages in the Jingpo branch is slightly higher than that of the Lolo-Burmese branch, 18.5% with Jingpo and 33.2% with Trung. Cognates with languages in other branches are relatively small in number.

A considerable number of the native words in Anong are unique to Anong, most of which were created due to the needs of the Anong way of life. Some of them are derived from those in the core vocabulary, and some are derived through compounding, which will be discussed in detail in the section on word formation. The words reflect not only the characteristics of the region and its environment, but also the Anong way of life and traditions. Those words make up the core of Anong's lexicon.

In addition to native words, Anong has a lot of loans. At this point in time, it is not possible to determine the diachronic layers of the loans. However, we can discern the recent loans from the surrounding languages, since the Anong are mixed with quite a few other ethnic groups. The source of the loans in Anong is complex. In terms of percentage, the majority come from Chinese and Lisu, constituting 25% of the Anong lexicon. A small number of the loans come from Burmese with occasional instances of borrowings from Bai and Tibetan. There

are also some that came into Anong from Chinese via Lisu. Anong has two classes of Chinese loanwords: early loans which have assimilated to the structure of Anong, and later loans, which have not undergone as much assimilation. These are for the most part nouns but there is also a small number of verbs and classifiers. It is sometimes clear that the loans have in part been borrowed through Lisu because Lisu often has the same Chinese borrowing with an almost identical shape.

Anong	Pinyin	gloss	Anong	Pinyin	gloss
lo <sup>55</sup> tsu <sup>55</sup>	lúozi	mule	dá <sup>31</sup> mo <sup>55</sup>	màozi	hat
ts <sup>h</sup> u <sup>31</sup> tɛ <sup>55</sup>	jiǎo	scissors; shears	ts <sup>h</sup> o <sup>55</sup>	cōng	scallions; green onions
so <sup>55</sup> t <sup>h</sup> u <sup>31</sup>	suǒ	lock	lo <sup>35</sup> tso <sup>31</sup>	lúzi	stove
p <sup>h</sup> ɛ <sup>31</sup>	xuǎnpài	elect	fu <sup>55</sup>	yīfèn	portion; share
so <sup>55</sup>	suǒ	to lock			

A later group of borrowings has been entering the language since the founding of the People's Republic of China in 1949, including new technical terms and classifiers.

Anong	Pinyin	gloss	Anong	Pinyin	gloss
sɿ <sup>55</sup> tse <sup>31</sup>	shī	lion	ɕan <sup>35</sup> fa <sup>31</sup>	zhāngchéng	constitution
k <sup>h</sup> uai <sup>35</sup> tɕi <sup>35</sup>	kuàijì	accounting	tsɿ <sup>35</sup> iu <sup>31</sup>	zìyóu	freedom
t <sup>h</sup> ɛ <sup>35</sup> p <sup>h</sup> iŋ <sup>31</sup>	tàipíng	peace	nu <sup>55</sup> li <sup>33</sup>	nǔlì	try hard
p <sup>h</sup> i <sup>55</sup> p <sup>h</sup> i <sup>31</sup>	pīpíng	criticize	t <sup>h</sup> au <sup>55</sup> lue <sup>55</sup>	tǎolùn	discuss
ts <sup>h</sup> au <sup>35</sup> fan <sup>53</sup>	zàofán	rebel; revolt	ti <sup>35</sup> i <sup>31</sup>	dì-yī	first
i <sup>31</sup> iē <sup>31</sup>	yīyuán	a dollar	i <sup>31</sup> li <sup>53</sup>	yīlǐ	one li (half a kilometer)

In some instances native forms are combined with borrowed forms to create lexical items, as is illustrated below.

Anong	Pinyin	gloss	Anong	Pinyin	gloss
po <sup>31</sup> p <sup>h</sup> u <sup>31</sup>	bǎorén	guarantor	pá <sup>55</sup> sa <sup>31</sup> tɕ <sup>h</sup> en <sup>31</sup>	bǎixìng	common people
ko <sup>55</sup> t <sup>h</sup> uŋ <sup>55</sup>	qiángjiǎo	corner (wall)	k <sup>h</sup> en <sup>55</sup> bē <sup>55</sup>	càipán	plate
me <sup>31</sup> tɕ <sup>h</sup> u <sup>31</sup>	mòshuǐ	Chinese ink	t <sup>h</sup> i <sup>55</sup> ts <sup>h</sup> uŋ <sup>31</sup>	yīcóng	grove

In the above examples, po<sup>31</sup> is from the Chinese word *bǎo* ‘protect’, pa<sup>55</sup>sa<sup>31</sup> is from the Chinese compound *bǎixìng* ‘the common people’, ko<sup>55</sup> came from the Chinese ‘corner; angle’, bē<sup>55</sup> came from the Chinese *pán* ‘plate’, me<sup>31</sup> came from the Chinese *mò* ‘ink’ and ts<sup>h</sup>uŋ<sup>31</sup> came from the Chinese *cóng* ‘grove’. In each case, the item borrowed from Chinese is combined with an Anong form to create a compound word in Anong.

There are a number of cases of Chinese borrowings existing alongside Anong counterparts with apparently identical meaning.

Table 11: Chinese borrowings alongside native words

	native word	Chinese borrowing	Pinyin
lime	la <sup>55</sup> xu <sup>31</sup>	s <sup>1</sup> <sup>31</sup> xue <sup>31</sup>	shíhūi
a bank (for money)	dza <sup>31</sup> xa <sup>31</sup> lan <sup>55</sup> tɕ <sup>h</sup> im <sup>31</sup>	t <sup>31</sup> xā <sup>55</sup>	yínháng
rule; custom	ŋ <sup>31</sup> iā <sup>33</sup>	kue <sup>55</sup> tɕy <sup>33</sup>	gūiju
study; learn	tɕ <sup>h</sup> en <sup>31</sup>	cye <sup>31</sup> çi <sup>31</sup>	xúexí
confiscate	d <sup>i</sup> <sup>31</sup> çā <sup>35</sup> ŋu <sup>31</sup>	mo <sup>31</sup> su <sup>55</sup>	mòshōu

For a period of several hundred years the Nu nationality have lived intermingled with the Lisu people, with consequent widespread mutual borrowing, but with more borrowing from Lisu into Anong. The borrowings are usually related to culture, religion, and daily life activities.

s <sup>1</sup> <sup>55</sup> gu <sup>31</sup>	celebrate	mu <sup>31</sup> gua <sup>31</sup> gua <sup>31</sup>	sing a sound
p <sup>h</sup> e <sup>31</sup>	flag	k <sup>h</sup> o <sup>31</sup> s <sup>1</sup> <sup>31</sup>	celebrate New Year
tu <sup>55</sup> s <sup>1</sup> <sup>31</sup>	folk song	ts <sup>h</sup> o <sup>55</sup> dzi <sup>31</sup>	photograph
su <sup>55</sup> ni <sup>31</sup>	culture	la <sup>31</sup> t <sup>h</sup> a <sup>55</sup>	a mill
ʔo <sup>31</sup> k <sup>h</sup> u <sup>55</sup>	cabbage	na <sup>33</sup> do <sup>33</sup>	smallpox
gu <sup>31</sup>	coffin		

We find Lisu borrowings and comparable Anong expressions coexist in Anong. It is actually more common for Lisu expressions to be used among the Anong than Chinese borrowings because most of the Anong speak Lisu. It is also more common to have compounds made up of partly Lisu borrowings and partly Anong native forms, but I am not going into detail on this.

The Nujiang reaches are contiguous with Burma. In downtown Fúgòng, one often comes across people from the bordering areas in

Burma. What is even more noteworthy is that some religious materials were brought into the Anong region from Burma, which have had an impact on the culture and life of the Anong. Needless to say, language influence is no exception, resulting in Anong having a certain number of Burmese loans, shown below.

Table 12: Burmese loans

	Native word	Lisu borrowing
whirlpool	tɕ <sup>h</sup> a <sup>31</sup> ŋa <sup>35</sup> a <sup>31</sup> xu <sup>a55</sup>	i <sup>55</sup> tɕu <sup>33</sup>
wrought iron	ɕa <sup>31</sup> k <sup>h</sup> ɛ <sup>55</sup> ŋin <sup>55</sup>	xu <sup>55</sup> mi <sup>55</sup>
right side	dzaŋ <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	lɛ <sup>31</sup> iɛ <sup>55</sup>
left side	m <sup>31</sup> dzaŋ <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	lɛ <sup>31</sup> ɣu <sup>55</sup>
leopard	i <sup>31</sup> dzuŋ <sup>55</sup>	la <sup>31</sup> mu <sup>55</sup> du <sup>31</sup>

Near the Nujiang (Salween) river valley and the Burmese border there are also inhabitants from Burma. More importantly, the Anong are also scattered over a portion of Burma and in each area have been influenced by the local culture. Recently the Anong have been taken in a small number of Burmese words into their vocabulary.

	Anong	Pinyin
glass; cup	vi <sup>55</sup> ka <sup>31</sup>	bōli
powder (face)	ɣua <sup>55</sup> ts <sup>h</sup> ɿ <sup>31</sup>	fěn
soap	ts <sup>h</sup> a <sup>31</sup> pi <sup>55</sup> io <sup>55</sup>	féizào
steamboat	ts <sup>h</sup> a <sup>31</sup> p <sup>h</sup> o <sup>31</sup>	lúnchúan
train	mɛ <sup>33</sup> t <sup>h</sup> a <sup>33</sup>	huǒchē
kerosene	tā <sup>35</sup> ts <sup>h</sup> u <sup>31</sup>	méiyóu
bell; clock	na <sup>55</sup> li <sup>55</sup>	zhōng
film; movie	bō <sup>55</sup>	diànyǐng
(place name)	mi <sup>31</sup> dzi <sup>55</sup> na <sup>31</sup>	Mizhīnà

We even find half Chinese and half Burmese compounds such as vi<sup>55</sup>ka<sup>31</sup> pin<sup>31</sup>tsɿ<sup>55</sup> ‘glass bottle’, which is sometimes used to refer to bottles in general. The Burmese borrowing vi<sup>55</sup>ka<sup>31</sup> is a generic expression in Burmese meaning glass products, though it is also used to refer to glass. The pin<sup>31</sup>tsɿ<sup>55</sup> is a Chinese borrowing which means bottle in Chinese.

3.2.2. *Word Formation*

Words in Anong can be divided into mono-morphemic words and compounds. Monomorphemic words are mostly monosyllabic. The number of polysyllabic mono-morphemic words is relatively small. In fact, Anong has less monosyllabic monomorphemic words than other Tibeto-Burman languages, consisting of only about 10% of its lexicon.

	Anong	Pinyin		Anong	Pinyin
sun	nɛm <sup>31</sup>	tàiyang	gold	ʃɿ <sup>33</sup>	jīnzi
stone	luŋ <sup>55</sup>	shítou	house	tɕ <sup>h</sup> im <sup>31</sup>	fángzi
eat	ɛm <sup>53</sup>	chī	prop up	dzom <sup>31</sup>	fú
to spit	p <sup>h</sup> rɿ <sup>31</sup>	tù	to brush, paint	xǎ <sup>55</sup>	shūa

There are, in contrast, relatively few disyllabic but mono-morphemic words.

	Anong	Pinyin		Anong	Pinyin
cloud	io <sup>31</sup> mun <sup>55</sup>	yún	moon	sa <sup>31</sup> la <sup>55</sup>	yuè
star	k <sup>h</sup> o <sup>31</sup> ni <sup>55</sup>	xīngxing	a crow	dza <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	wūyā
flea	ɕi <sup>31</sup> li <sup>31</sup>	tiàozao	cuckoo	ka <sup>55</sup> pu <sup>31</sup>	bùgū
neck	go <sup>31</sup> io <sup>53</sup>	bózi	ant	so <sup>31</sup> zo <sup>55</sup>	mǎyǐ

Although bisyllabic monomorphemic words do exist, they are rarer than monosyllabic mono-morphemic words. Polysyllabic mono-morphemic words do exist in Anong, but they are extremely rare. Only a few can be found among the words I collected, and they are mostly names of insects and birds, illustrated below.

	Anong	pinyin
magpie	a <sup>31</sup> ne <sup>55</sup> tɕa <sup>31</sup> tɕa <sup>31</sup>	xǐque
centipede	k <sup>h</sup> u <sup>31</sup> xu <sup>55</sup> la <sup>31</sup> ma <sup>55</sup>	wúgōng
wasp	mu <sup>31</sup> k <sup>h</sup> ua <sup>31</sup> mu <sup>55</sup> vi <sup>33</sup>	huángfēng
dragonfly	da <sup>31</sup> p <sup>h</sup> u <sup>55</sup> tɕi <sup>55</sup> gun <sup>55</sup>	qíngtīng
gecko; house lizard	ka <sup>31</sup> la <sup>31</sup> dzaŋ <sup>55</sup>	bìhǔ
sparrow	la <sup>55</sup> dzi <sup>33</sup> so <sup>55</sup>	máquè

3.2.3. *Semantic Classification*

There are nine main categories:

(1) *Homonyms*

These are words with the same pronunciation but different meanings. Since Anong is still a richly polysyllabic language, it has a relatively small number of homophones compared with other languages. There are two types of homophonous words in Anong: those that are homophonous in pronunciation and tones and those that are pronounced the same except for different tones. The latter type is more prevalent. The following are examples of completely homophonous words:

a <sup>31</sup> ts <sup>h</sup> an <sup>31</sup>	'person' or 'run, jump'	nem <sup>31</sup>	'sun' or 'tie (shoe laces)'
a <sup>31</sup> sui <sup>31</sup>	'boat' or 'to select (seeds)'	k <sup>h</sup> a <sup>55</sup>	'chicken' or 'speech/language'
ian <sup>31</sup>	'sheep' or 'classifier for matter'	ni <sup>55</sup>	'stool (fecal)' or 'eye' or 'seized'

Anong has many words that differ only in the tone, as shown below:

tɕ <sup>h</sup> un <sup>55</sup>	'jug'	lim <sup>55</sup>	'warm (by fire)'
tɕ <sup>h</sup> un <sup>33</sup>	'ride (swing)'	lim <sup>33</sup>	'boil (water)'
tɕ <sup>h</sup> un <sup>31</sup>	'straight' or 'pod (bean)'	lim <sup>31</sup>	'egg' or 'taste, smell'
tɕ <sup>h</sup> un <sup>53</sup>	'dig (yam)'	lim <sup>53</sup>	'bury'
tɕ <sup>h</sup> un <sup>35</sup>	'to fish'	lim <sup>35</sup>	'lay (egg)' or 'roll up'

(2) *Synonyms*

These are words with the same meaning but different in pronunciation. It is rare to have words with identical meanings but with different pronunciations in a language. Here I refer to words in Anong that have similar meanings. Often such words come from different languages, which is a temporary phenomenon resulting from language contact. In time, some of the words will be lost and some will remain. The following are examples of synonyms.

m <sup>31</sup> dʒan <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	'left'	lɛ <sup>31</sup> ɣu <sup>55</sup>	'left' (Lisu loan)
dʒan <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	'right'	lɛ <sup>31</sup> ie <sup>55</sup>	'right' (Lisu loan)
i <sup>31</sup> dzuuŋ <sup>55</sup>	'leopard'	la <sup>31</sup> mu <sup>55</sup> du <sup>31</sup>	'leopard' (Lisu loan)

Such synonymous pairs are common in Anong between native forms and loans from Lisu, Chinese, or Burmese. In fact, such synonyms are not confined to native forms coexisting with loans. We also find synonyms among native words, such as the following.



ts <sup>h</sup> ɿ <sup>31</sup> taŋ <sup>5</sup>	‘squirrel’	tɕa <sup>55</sup> xom <sup>31</sup>	‘squirrel’
dʒi <sup>31</sup> suŋ <sup>55</sup>	‘weasel’	tʂ <sup>h</sup> ɿ <sup>31</sup> v.ɿ <sup>31</sup>	‘weasel’
bu <sup>31</sup> lu <sup>31</sup>	‘strap (for carrying a baby)’	tɕ <sup>h</sup> a <sup>55</sup> p <sup>h</sup> a <sup>53</sup>	‘strap (for carrying a baby)’
tsiŋ <sup>55</sup>	‘classifier (yoke for cows)’	ʂu <sup>33</sup>	‘classifier (yoke for cows)’
k <sup>h</sup> a <sup>31</sup>	‘classifier (for sentences)’	tɕ <sup>h</sup> uŋ <sup>55</sup>	‘classifier (for sentences)’

### (3) *Near Synonyms*

These are words with different pronunciations but similar meanings that are related in some way.

ʔo <sup>55</sup> lu <sup>35</sup>	‘head scarf (for men)’	da <sup>31</sup> tɕ <sup>h</sup> a <sup>55</sup>	‘tripod (made of metal for cooking)’
ʔo <sup>55</sup> t <sup>h</sup> u <sup>35</sup>	‘head scarf (for women)’	ni <sup>33</sup> gu <sup>55</sup>	‘tripod (made of stone for cooking)’
ɕi <sup>55</sup> l i <sup>31</sup> i <sup>31</sup> i <sup>31</sup> t <sup>h</sup> i <sup>31</sup> za <sup>31</sup>	‘road (for horses)’	ʔɕaŋ <sup>55</sup>	‘climb (a tree)’
mo <sup>55</sup> do <sup>55</sup> t <sup>h</sup> i <sup>31</sup> za <sup>31</sup>	‘road (for cars)’	a <sup>31</sup> ɣom <sup>31</sup>	‘crawl’

### (4) *Polysemous Words*

Polysemous words differ from homophonous words in that, while there are no connections between the meanings of homophones, the meanings of polysemous words are connected, if not always synchronically, certainly through diachronic extension.

io <sup>31</sup> mum <sup>55</sup>	‘cloud or fog’
t <sup>h</sup> i <sup>31</sup> ven <sup>31</sup>	‘snow or frost or ice’
min <sup>55</sup>	‘hair or mane or feather’
lim <sup>31</sup>	‘egg or insect egg or fish egg or to lay eggs’
ɕuŋ <sup>55</sup>	‘tree or firewood or wood’

For ɕuŋ<sup>55</sup>, everything that has something to do with tree or wood is related to it. For instance, ɕuŋ<sup>55</sup>ɬom<sup>33</sup> ‘wood borer’, ɕuŋ<sup>55</sup>ʂɿ<sup>33</sup> ‘fruit’, ɕuŋ<sup>55</sup>t<sup>h</sup>im<sup>53</sup> ‘tree root’, ɕuŋ<sup>55</sup>tɕi<sup>55</sup> ‘bark’, etc. Its near synonym dzuŋ<sup>55</sup> ‘classifier for plants’ can also be used to mean ‘tree’.

### (5) *Antonyms*

Mainly among the adjectives and among the directions, new sets of words are emerging, making use of various types of antonyms.

Table 13: Antonyms

	Anong		Anong
above	ga <sup>31</sup> taŋ <sup>55</sup>	below	ga <sup>31</sup> p <sup>h</sup> aŋ <sup>33</sup>
inside	ʔi <sup>55</sup> ɕuŋ <sup>33</sup>	outside	ʔi <sup>55</sup> di <sup>31</sup> tɕ <sup>h</sup> ɿ <sup>55</sup>
sunny side of mountain	p <sup>h</sup> u <sup>31</sup> li <sup>m</sup> <sup>55</sup>	shady side of mountain	p <sup>h</sup> u <sup>31</sup> dza <sup>m</sup> <sup>31</sup>
long	ua <sup>55</sup> iã <sup>31</sup>	short	tɕi <sup>55</sup> t <sup>h</sup> uŋ <sup>55</sup>
wide (road)	ua <sup>55</sup> gã <sup>31</sup>	narrow	tɕi <sup>55</sup> p <sup>h</sup> i <sup>55</sup>
big	ua <sup>55</sup> ɕuŋ <sup>31</sup>	small	tɕ <sup>h</sup> i <sup>55</sup> la <sup>55</sup>
high, tall	ua <sup>55</sup> maŋ <sup>31</sup>	short, low	tɕ <sup>h</sup> i <sup>55</sup> ni <sup>m</sup> <sup>31</sup>
thick, coarse	ua <sup>55</sup> lom <sup>33</sup>	thin (pole)	tɕi <sup>55</sup> sɿ <sup>n</sup> <sup>33</sup>
deep	ŋuŋ <sup>31</sup>	shallow	m <sup>31</sup> ŋuŋ <sup>31</sup>
beautiful	a <sup>31</sup> nɛ <sup>m</sup> <sup>55</sup>	ugly	ma <sup>31</sup> nɛ <sup>m</sup> <sup>55</sup>

Of the ten pairs of antonyms above, the first three are nouns with the first two being directionals. The two words in each pair are opposite in meaning with the same prefix on two different roots. The remaining seven pairs are adjectives, with the first five having the same prefix in the left column and the same prefix in the right column, though the prefix in the right column alternates between aspirated and unaspirated initials depending on the consonant immediately following the prefix. If the following consonant is voiced, then the initial consonant of the prefix is aspirated. Otherwise it is unaspirated. The final two pairs are also antonyms but of a different sort, namely, the opposite meaning is realized through the use of negative marker. That is to say, not deep means shallow and not beautiful means ugly. However, the negative marker m<sup>31</sup> precedes ŋuŋ<sup>31</sup> which has a reduced syllable before it while ma<sup>31</sup> occurs on nɛ<sup>m</sup><sup>55</sup> because in this case there is a reduced syllable a<sup>31</sup> before nɛ<sup>m</sup><sup>55</sup>. In other words, ma<sup>31</sup> is made up of the negative marker m<sup>31</sup> and the reduced syllable a<sup>31</sup>.

### 3.3. WORD FORMATION PROCESSES

It was mentioned earlier that words in Anong can be divided into native words and loans. In this section, we will focus on the rich word formation processes of the native words. The Anong have lived by the Nuijiang for centuries. Through their work and daily life activities, including their fight against the elements, the Anong have enriched their lexicon by creating a large number of new words through their unique way of

thinking based on the core vocabulary that are of Tibeto-Burman origin. Anong has a variety of word formation processes. The commonly used types are derivation, compounding, reduplication, and onomatopoeia. We will discuss each of those processes below.

### 3.3.1. Derivation

Prefixes. Derivation through prefixation and suffixation is very productive in Anong. Anong is rich in prefixes (or reduced syllables in prefix position)<sup>1</sup>. Only single vowels with no consonant endings occur in prefixes. The following prefixes have a high frequency of occurrence.

(1) The prefix  $p^h u^{31}$  is used productively and with considerable frequency.

	Anong		Anong
tongue	$p^h u^{31} l e^{31}$	poison	$p^h u^{31} l a^{55}$
stove	$p^h u^{31} i e^{31}$	intestines	$p^h u^{31} i u^{55}$
stomach	$p^h u^{31} i e n^{31}$	ghosts	$p^h u^{31} i \tilde{a}^{33}$
sunny side of mountain	$p^h u^{31} l i m^{55}$	shady side of mountain	$p^h u^{31} d z a m^{31}$

(2)  $b u^{31}$  is also a productive prefix.<sup>2</sup>

	Anong		Anong
liver	$b u^{31} \zeta i n^{33}$	insect; worm	$b u^{31} l u \eta^{33}$
snail	$b u^{31} n u \eta^{55}$	bequeath	$b u^{31} \zeta \eta n^{31}$
k. of rodent	$b u^{31} t \zeta^h i^{53}$	itch	$b u^{31} s a \eta^{55}$
winding, crooked	$b u^{31} t^h a^{55}$	long-tailed sparrow	$b u^{31} t^h u^{55}$

(3)  $m u^{31}$  is a commonly used prefix. It has been suggested that this prefix goes on words that are related to human organs, but this does not seem to be the case. The following are examples.

<sup>1</sup> It is important to note that, while Sun refers to these entities as prefixes, he often alternately refers to them as reduced syllables in prefix position. From a historical perspective, some of these are known to descend from fuller morphemes; others are still unidentified.

<sup>2</sup> At least some of these  $b u^{31}$  'prefixes' come from the reduction of a word for 'insect; bug'.

Anong		Anong		Anong	
chin	mu <sup>31</sup> gi <sup>31</sup>	cat	mu <sup>31</sup> ŋi <sup>31</sup>	grain; cereals	mu <sup>31</sup> dza <sup>33</sup>
mushroom	mu <sup>31</sup> k <sup>h</sup> am <sup>55</sup>	place; site	mu <sup>31</sup> gam <sup>53</sup>	guest	mu <sup>31</sup> nem <sup>35</sup>
dawn	mu <sup>31</sup> ga <sup>55</sup> ga <sup>55</sup>	peach	mu <sup>31</sup> ŋm <sup>31</sup>		

(4) The prefix s<sup>31</sup>

This is also a very productive prefix. This prefix goes on verbs to mark causative. It also goes on nouns. In the past, people treated the two instances of this prefix as the same. In fact, these are two different prefixes from different sources.<sup>3</sup>

Anong		Anong	
daughter	s <sup>31</sup> lan <sup>55</sup> za <sup>55</sup>	salt	s <sup>31</sup> lan <sup>55</sup>
moon	s <sup>31</sup> la <sup>55</sup>	bee sting	s <sup>31</sup> la <sup>55</sup>
garlic	s <sup>31</sup> bε <sup>33</sup>	Chinese mugwort	s <sup>31</sup> mo <sup>33</sup>
nose	s <sup>31</sup> na <sup>55</sup>	solid bamboo	s <sup>31</sup> mεn <sup>55</sup>

(5) The s<sup>31</sup> prefix has a relatively low frequency of occurrence. It mainly occurs before roots with retroflex consonant initials.

Anong		Anong	
quilt	s <sup>31</sup> ɬam <sup>31</sup>	pine tree	s <sup>31</sup> iu <sup>33</sup>
pear	s <sup>31</sup> t <sup>h</sup> o <sup>55</sup>	pus	s <sup>31</sup> dzu <sup>31</sup>
skirt	s <sup>31</sup> ŋm <sup>31</sup>	be on diet	s <sup>31</sup> ɬam <sup>31</sup> s <sup>31</sup>
break; smash	s <sup>31</sup> xuam <sup>53</sup>	bashful; shy	s <sup>31</sup> .lan <sup>55</sup>

(6) The prefix du<sup>31</sup>- . This prefix is not very frequent, sometimes being manifested as di<sup>31</sup>-.

Anong		Anong	
nine	du <sup>31</sup> gu <sup>31</sup>	neck tumor	du <sup>31</sup> ba <sup>ʔ</sup> 55
tendon	du <sup>31</sup> gu <sup>31</sup>	thin person	du <sup>31</sup> zu <sup>55</sup> ε <sup>31</sup>
walking stick	du <sup>31</sup> .lan <sup>31</sup>	disaster	du <sup>31</sup> k <sup>h</sup> u <sup>55</sup>
wring; twist	du <sup>31</sup> tε <sup>h</sup> im <sup>31</sup>	center; middle	di <sup>31</sup> du

<sup>3</sup> Although only a few of the examples given here exemplify the two prefixes Sun is referring to, it is quite clear that there was both an \*s- prefix marking causative, transitive, directional and a quite separate prefix referred to as the \*s- animal prefix, which was extended to body parts.

(7) The prefix  $\text{.iu}^{31}$ -,  $\text{z\u{u}}^{31}$ -, or  $\text{z}\text{ɿ}^{31}$ - is often used in everyday conversation. Sometimes it varies even to the degree of becoming  $\text{io}$ , then sometimes occurring with the high level tone.

Anong		Anong	
mountain	$\text{.iu}^{31}\text{ʔu}\text{ŋ}^{55}$	necklace	$\text{z\u{u}}^{31}\text{lu}\text{ŋ}^{35}$
cure	$\text{z\u{u}}^{31}\text{mu}\text{ŋ}^{55}$	abandoned field	$\text{z}\text{ɿ}^{31}\text{bu}\text{m}^{55}$
tangerine	$\text{z}\text{ɿ}^{31}\text{ma}^{55}\text{t\u{e}}\text{u}^{55}$	acne	$\text{io}\text{ʔ}^{55}\text{dz}\text{ɿ}^{31}$
cloud	$\text{io}^{55}\text{mu}\text{ŋ}^{55}$ ; $\text{io}^{31}\text{mu}\text{ŋ}^{55}$		

(8)  $\text{ŋ}^{31}$ -/ $\text{ʔo}^{31}$ -/ $\text{ʔŋ}^{31}$ -. This is one of the most productive prefixes. Its frequency of occurrence is slightly lower than the most productive prefix  $\text{a}^{31}$ . The glottal stop is very robust before the syllabified velar nasal so we transcribe the glottal stop. In other cases, we have left the glottal stop out.

Anong		Anong	
seed	$\text{ŋ}^{31}\text{i}\text{u}^{31}$	cave; hole	$\text{ŋ}^{31}\text{k}^{\text{h}}\text{u}\tilde{\text{a}}^{31}$
year; age	$\text{ŋ}^{31}\text{n}\text{u}\text{ŋ}^{55}$	day	$\text{ŋ}^{31}\text{n}\text{i}^{55}$
nut; kernel	$\text{ŋ}^{31}\text{ts}^{\text{h}}\text{a}\text{ŋ}^{31}$	stem; stalk	$\text{ŋ}^{31}\text{dz}\text{u}\text{ŋ}^{55}$
fetus	$\text{ŋ}^{31}\text{t}\text{ɕ}^{\text{h}}\text{e}\text{ŋ}^{31}$	peel; rind	$\text{ŋ}^{31}\text{t}\text{ɕ}^{\text{h}}\text{i}^{55}$
hoof	$\text{ʔo}^{31}\text{go}^{31}\text{n}\text{i}\text{ŋ}^{31}$	silkworm chrysalis	$\text{ʔo}^{31}\text{ɕ}\text{u}\text{ŋ}^{55}$
mustard greens	$\text{ʔo}^{31}\text{n}\text{e}^{55}$	spleen	$\text{ʔo}^{31}\text{t}^{\text{h}}\text{i}^{31}\text{v}\text{e}\text{ŋ}^{55}$

(9)  $\text{a}^{31}$ -. This is the most productive prefix in Anong. It often occurs with a glottal stop. Since the glottal stop does not signal any meaning distinction, I have left the glottal stop out in all cases.

Anong		Anong	
ear	$\text{a}^{31}\text{na}^{31}$	tooth	$\text{a}^{31}\text{sa}^{31}$
mouse; rat	$\text{a}^{31}\text{din}^{55}$	person	$\text{a}^{31}\text{ts}^{\text{h}}\text{a}\text{ŋ}^{31}$
soak; bubble	$\text{a}^{31}\text{p}^{\text{h}}\text{u}\text{m}^{55}$	sheep	$\text{a}^{31}\text{ia}\text{ŋ}^{31}$
wild pepper	$\text{a}^{31}\text{dzam}^{55}$	hand	$\text{a}^{31}\text{vu}^{35}$

(10)  $\text{ʔi}^{55}$ -/ $\text{i}^{55}$ -/ $\text{i}^{31}$ -. This prefix has several variants and they alternate, mainly depending on the syllable it occurs with. Sometimes the glottal stop can be deleted.

	Anong		Anong
inside	ʔi <sup>55</sup> ɬuŋ <sup>33</sup>	nearby	ʔi <sup>55</sup> dza <sup>55</sup>
outside	ʔi <sup>55</sup> di <sup>31</sup> tɕ <sup>h</sup> i <sup>55</sup>	sawdust	ʔi <sup>55</sup> p <sup>h</sup> u <sup>31</sup>
future	i <sup>55</sup> zaŋ <sup>31</sup>	leopard	i <sup>31</sup> dzuŋ <sup>55</sup>
water duck	ʔi <sup>55</sup> bu <sup>31</sup>	lungs	i <sup>31</sup> su <sup>55</sup>

In addition to the ten prefixes above, Anong also has some low frequency prefixes, such as pu<sup>31</sup>, ts<sup>h</sup>ɿ<sup>31</sup>, dzɿ<sup>31</sup>, tu<sup>31</sup>, t<sup>h</sup>u<sup>31</sup>, ɬu<sup>31</sup>, tɕ<sup>h</sup>i<sup>31</sup>, dzi<sup>31</sup>, ɕi<sup>31</sup>, ni<sup>31</sup>, ku<sup>31</sup>, k<sup>h</sup>u<sup>31</sup>, and gu<sup>31</sup>. I will not give examples for those low frequency affixes.<sup>4</sup> It is noteworthy that it is not possible at this point to figure out the meanings of most of the prefixes in Anong. This is especially true of those prefixes that came from consonant cluster reductions, which in most cases should be treated as part of the root since they are like prefixes only because of where they occur and their phonological characteristics. We often call such prefixes reduced syllables to differentiate them from true prefixes, which is probably a more accurate way of describing them.

Suffixes. Anong has a certain number of suffixes. Although they are fewer in number than prefixes, they are no less productive. Also, the meanings and functions of all of the suffixes are quite clear. The following are the common ones.

(1) -su<sup>55</sup>. This suffix is common among Tibeto-Burman languages. Its original meaning was ‘person’. It has been grammaticalized into a suffix on the verb to derive a noun meaning the person who performs the action encoded in the verb. In some languages, it is still being used as a full lexical item meaning person. In Anong, a different form is used to mean ‘person’, which is a<sup>31</sup>tsaŋ<sup>31</sup>. In many cases, it occurs on a VN (Verb-Noun) compound.

	Anong		Anong
herder	a <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>53</sup> su <sup>55</sup>	thief	k <sup>h</sup> u <sup>55</sup> su <sup>55</sup>
teacher	sɿ <sup>31</sup> lam <sup>55</sup> su <sup>55</sup>	goldsmith	ʂɿ <sup>33</sup> zɿn <sup>55</sup> su <sup>55</sup>
woodcutter	ɕuŋ <sup>55</sup> ua <sup>31</sup> su <sup>55</sup>	a cook	a <sup>31</sup> grɿ <sup>55</sup> l <sup>55</sup> hi <sup>55</sup> su <sup>55</sup>
butcher	ʔo <sup>55</sup> san <sup>55</sup> su <sup>55</sup>	translator	k <sup>h</sup> a <sup>55</sup> ɕi <sup>31</sup> t <sup>h</sup> i <sup>55</sup> su <sup>55</sup>
tailor; dressmaker	ga <sup>31</sup> mu <sup>31</sup> p <sup>h</sup> a <sup>55</sup> su <sup>55</sup>		

<sup>4</sup> Sun declines to give examples for this set of low frequency prefixes. However, examples of all of them can be found through a search of the lexicon.

(2)  $-p^h u^{31}$ . This suffix is similar to  $-su^{55}$ . In Lisu, it is a very productive suffix. We have noticed that some Lisu loans with this suffix have a high frequency of occurrence. Consequently, this originally uncommonly used suffix in Anong has become very productive.

	Anong		Anong
Trung person	$m a^{55} t s^h \epsilon^{31} p^h u^{31}$	Bai person	$l a^{31} b u^{31} p^h u^{31}$
Lolo person (Yi)	$l a^{35} l o^{33} p^h u^{31}$	sorceress	$d a^{31} \zeta \eta^{55} p^h u^{31}$
guarantor; sponsor	$p o^{31} p^h u^{31}$	butler	$t \epsilon^h i m^{31} k^h a \eta^{55} p^h u^{31}$

Among the six examples in the group above, the first four are Lisu loans. The fifth form is made up of the Chinese word *bǎo* ‘guarantee’ plus the suffix  $-p^h u^{31}$  to mean ‘guarantor’. The sixth form consists of the Anong form  $t \epsilon^h i m^{31}$  ‘house’, the Chinese word *khan*<sup>55</sup> ‘look’, and the suffix  $-p^h u^{31}$  meaning ‘butler’.

(3)  $-d \epsilon m^{55}$  This suffix is also a nominalizer that goes on verbs, similar to  $su^{55}$ . The difference is that  $su^{55}$  derives nouns that refer to people whereas  $d \epsilon m^{55}$  creates nouns that refer to things.

	Anong		Anong
to eat	$\epsilon m^{53}$	food	$\epsilon m^{53} d \epsilon m^{55}$
to fan	$d i^{31} f \eta^{55}$	a fan	$d i^{31} f \eta^{55} d \epsilon m^{55}$
to place under	$\zeta i^{31} n \epsilon^{55}$	cushion, pad, mat	$\zeta i^{31} n \epsilon^{55} d \epsilon m^{55}$

In most cases, it occurs with VN (Verb-Noun) compounds meaning what something is used for.

$m a^{33} x u \eta^{55}$ cloth	+ $z a n^{53}$ weave	+ $-d \epsilon m^{55} \Rightarrow$	$m a^{33} x u \eta^{55} z a n^{53} d \epsilon m^{55}$	loom
$i n^{55}$ sweat	+ $\zeta i n^{55}$ wipe	+ $-d \epsilon m^{55} \Rightarrow$	$i n^{55} \zeta i n^{55} d \epsilon m^{55}$	towel
$l a^{31} p^h u \eta^{55}$ head	+ $x u a \eta^{55}$ wrap	+ $-d \epsilon m^{55} \Rightarrow$	$l a^{31} p^h u \eta^{55} x u a \eta^{55} d \epsilon m^{55}$	scarf; turban
$a^{31} v u^{35}$ hand	+ $d i m^{55}$ cover	+ $-d \epsilon m^{55} \Rightarrow$	$a^{31} v u^{35} d i m^{55} d \epsilon m^{55}$	gloves
$m \tilde{a}^{55}$ face	+ $d \zeta \epsilon n^{31}$ wash	+ $-d \epsilon m^{55} \Rightarrow$	$m \tilde{a}^{55} d \zeta \epsilon n^{31} d \epsilon m^{55}$	washbasin
$t \epsilon^h \epsilon^{31} m i^{31}$ fire	+ $a^{31} p^h u^{55}$ blow	+ $-d \epsilon m^{55} \Rightarrow$	$t \epsilon^h \epsilon^{31} m i^{31} a^{31} p^h u^{55} d \epsilon m^{55}$	blow tube

(4)  $-k^h a^{55}$  This suffix goes on nouns of places, times, and directions to refer to locations and times.

	Anong		Anong
in front; front	ma <sup>55</sup> su <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	opposite	lu <sup>55</sup> lu <sup>35</sup> k <sup>h</sup> a <sup>55</sup>
lower course (of river)	ŋi <sup>55</sup> k <sup>h</sup> a <sup>55</sup>	upper course (of river)	na <sup>55</sup> k <sup>h</sup> a <sup>55</sup>
reverse; wrong side	ŋi <sup>55</sup> iaŋ <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	over, above; head	na <sup>33</sup> tɕ <sup>h</sup> a <sup>55</sup> k <sup>h</sup> a <sup>55</sup>
evening	a <sup>31</sup> ʂi <sup>55</sup> k <sup>h</sup> a <sup>55</sup>	this evening	dɛ <sup>55</sup> ʂi <sup>55</sup> k <sup>h</sup> a <sup>55</sup>
last night	tɕ <sup>h</sup> a <sup>55</sup> ma <sup>55</sup> ʂi <sup>55</sup> k <sup>h</sup> a <sup>55</sup>		

(5) -ɛ<sup>55</sup> or -ɛ<sup>31</sup> This suffix appears on stative adjectives.<sup>5</sup>

	Anong		Anong
thin; watery	ga <sup>31</sup> ɛ <sup>55</sup>	deep	ŋaŋŋ <sup>31</sup> ɛ <sup>31</sup>
black	ŋaŋ <sup>55</sup> ɛ <sup>31</sup>	pointed	a <sup>31</sup> ts <sup>h</sup> u <sup>55</sup> ɛ <sup>55</sup>
light (weight)	a <sup>31</sup> ŋã <sup>31</sup> ɛ <sup>31</sup>	heavy	a <sup>31</sup> lɿ <sup>33</sup> ɛ <sup>31</sup>

When this suffix goes on adjectives that end with a consonant, the consonant goes with the suffix to form a syllable.

a <sup>31</sup> nɛm <sup>55</sup>	+ ɛ <sup>55</sup>	→	a <sup>31</sup> nɛm <sup>55</sup> mɛ <sup>55</sup>	→	a <sup>31</sup> nɛ <sup>55</sup> mɛ <sup>55</sup>	handsome; beautiful
a <sup>31</sup> ɕɛŋ <sup>31</sup>	+ ɛ <sup>31</sup>	→	a <sup>31</sup> ɕɛŋ <sup>31</sup> nɛ <sup>31</sup>	→	a <sup>31</sup> ɕɛ <sup>31</sup> nɛ <sup>31</sup>	mistake
ɕoŋ <sup>55</sup> ɕoŋ <sup>55</sup>	+ ɛ <sup>55</sup>	→	ɕoŋ <sup>55</sup> ɕoŋ <sup>55</sup> ŋɛ <sup>55</sup>	→	ɕoŋ <sup>55</sup> ɕo <sup>55</sup> ŋɛ <sup>55</sup>	inexperienced

(6) -za<sup>55</sup> This suffix has a low frequency of occurrence. It occurs on human nouns to refer to young people.

youngster; lad	di <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> za <sup>31</sup>	young married woman; female	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> za <sup>55</sup>
girl	ʂi <sup>31</sup> lan <sup>55</sup> za <sup>55</sup>		

(7) -ua<sup>31</sup>. This suffix goes on adjectives and other words to derive adverbial expressions.

<sup>5</sup> The -ɛ<sup>31</sup>, -ɛ<sup>55</sup> is the reflex of the old Sino-Tibetan copula. It is found attached to stative adjectives elsewhere in Tibeto-Burman, too.



$k^h a^{31} m\tilde{a}^{55} u\alpha^{33}$	quietly; stealthily	$m\alpha^{31} t^h \alpha n^{\eta 55} u\alpha^{33}$	unceasingly; continuously
$m\alpha^{31} \eta \epsilon n^{55} u\alpha^{33}$	motionlessly	$d\zeta o^{55} d\zeta o^{33} u\alpha^{33}$	everyday; daily
$\alpha^{31} t\epsilon^h u\eta^{55} t\epsilon^h u\eta^{55}$ $u\alpha^{33}$	in vain; for nothing (adv.)		

### 3.3.2. Compounding

Compounding is the main word formation process in Anong. Most of the words in Anong are created through compounding. We can classify the compounds into the following types based on the relationship between the roots in the compound.

(1) Coordinate compounds. In this type of compounds, there is no modified and modifying relationship between the roots. The number of such compounds is relatively small.

$\alpha^{31} p^h \alpha^{31}$ father	+	$\alpha^{31} m u \alpha^{31}$ mother	==>	$\alpha^{31} p^h \alpha^{31} \alpha^{31} m u \alpha^{31}$ parents
$o^{55} p^h \alpha^{31}$ uncle	+	$a u^{31} m \alpha^{31}$ aunt	==>	$o^{55} p^h \alpha^{31} a u^{31} m \alpha^{31}$ uncle and aunt

(2) Modified-modifying and modifying-modified compounds. Most of the compounds in Anong belong to this type.

Modified-modifying compounds:

$l\alpha^{31} t\epsilon\alpha^{55}$ tea	+	$p^h u \eta n^{55}$ circular	==>	$l\alpha^{31} t\epsilon\alpha^{55} p^h u \eta n^{55}$ bowl shaped tea leaves
$l u \eta^{55}$ stone	+	$s u^{55}$ mill	==>	$l u \eta^{55} s u^{55}$ grindstone

Modifying-modified compounds:

$\epsilon\alpha^{31} .l\alpha^{31}$ wheat	+	$b u \eta \eta^{55}$ flour	==>	$\epsilon\alpha^{31} .l\alpha^{31} b u \eta \eta^{55}$ string noodles
$k^h \epsilon n^{55}$ vegetable	+	$t\zeta^h \eta^{31}$ juice	==>	$k^h \epsilon n^{55} t\zeta^h \eta^{31}$ vegetable soup

(3) Noun-complement compounds. Strictly speaking, noun-complement compounds are also a type of modified-modifying compounds,





(2) *Animal Sounds*

Anong has names for the sounds some animals make. Some are named after the sound they make.

moo (cow)	mã <sup>35</sup>	cackle (hen)	gu <sup>31</sup> la <sup>55</sup>	neigh (horse) nã <sup>55</sup>
(mu <sup>55</sup> )daŋ <sup>55</sup>	to thunder	dj <sup>31</sup> ʃɿ <sup>55</sup> ʃɿ <sup>55</sup> u <sup>31</sup>	the sound of fluttering	
bo <sup>55</sup>	sound of small gun			

(3) *Onomatopoeia*

Some words are direct imitations of sounds made by animals and actions. These are often used as adverbs. Therefore, they all take the suffix ua<sup>33</sup>.

mɛ <sup>55</sup> mɛ <sup>55</sup> ua <sup>33</sup>	sound of a sheep baaing
ʃua <sup>31</sup> ʃua <sup>31</sup> ua <sup>33</sup>	sound of leaves falling
ko <sup>31</sup> lo <sup>31</sup> ko <sup>31</sup> lo <sup>31</sup> ua <sup>33</sup>	sound of mud or rocks falling down the mountain
ɕya <sup>55</sup> ɕya <sup>55</sup> ua <sup>33</sup>	sound of wind or heavy sleeper



## CHAPTER FOUR

### SYNTAX

Anong is a Tibeto-Burman language, sharing many of the grammatical characteristics of Tibeto-Burman languages. For instance, its basic word order is SOV, as in most Tibeto-Burman languages, and many but not all of its grammatical structures are similar to those of Tibeto-Burman languages. Like the other Tibeto-Burman languages, it has a rich classifier system, postposed auxiliaries and grammatical particles, and so on. However, Anong also has its own unique features. It is rich in morphology with both agglutinating and fusional morphological features. Its grammatical functions are mainly indicated through morphological means, although word order and particles also play a role. Reduplication is utilized but not productive. The grammatical characteristics of Anong will be discussed in two sections of this chapter under two headings: parts of speech (or, morphological categories) and syntax.

#### 4.1. PARTS OF SPEECH (MORPHOLOGICAL CATEGORIES)

Based on their form, meaning, and function in a sentence, words in Anong can be classified as nouns, numerals, classifiers, pronouns, verbs, adjectives, adverbs, conjunctions, modals, interjections, and particles. We will briefly discuss each of these eleven categories.

##### 4.1.1. *Nouns*

Nouns have the following grammatical characteristics:

###### (1) *Number*

Anong has two plural markers, the suffix  $z\eta^{31}\eta\mu^{31}$  and the suffix  $\mu\mu^{53}$ . These two forms are quite similar. Both originated as classifiers and gradually grammaticalized into plural markers, which may occur after nouns. The former,  $z\eta^{31}\eta\mu^{31}$ , is restricted to animate nouns while the latter,  $\mu\mu^{53}$ , can occur with both animate and inanimate nouns. The use of these plural markers is illustrated by the examples below. For example:

$\alpha^{31}ts^h\alpha\eta^{31}$	‘person’	$\alpha^{31}ts^h\alpha\eta^{31}z\eta^{31}\eta\mu^{31}$ ;	$\alpha^{31}ts^h\alpha\eta^{31}\mu\mu^{53}$	‘people’
$da^{55}t\zeta^h\alpha^{55}$	‘friend’	$da^{55}t\zeta^h\alpha^{55}\alpha^{55}z\eta^{31}\eta\mu^{31}$ ;	$da^{55}t\zeta^h\alpha^{55}\mu\mu^{53}$	‘friends’
$\alpha^{31}be^{55}$	‘goat’	$\alpha^{31}be^{55}z\eta^{31}\eta\mu^{31}$ ;	$\alpha^{31}be^{55}\mu\mu^{53}$	‘goats’
$\eta\mu\alpha^{55}$	‘fish’	$\eta\mu\alpha^{55}z\eta^{31}\eta\mu^{31}$ ;	$\eta\mu\alpha^{55}\mu\mu^{53}$	‘fish (plural)’

These two pluralizing suffixes can occasionally be distinguished in use.  $z\eta^{31}\eta\mu^{31}$  is generally used with animate nouns; the  $\eta\mu^{31}$  is often omitted in the flow of speech. After inanimate nouns only  $\mu\mu^{53}$  can be added. For example:

$\zeta\eta^{55}dz\mu\eta^{55}$	‘tree’	$\zeta\eta^{55}dz\mu\eta^{55}\mu\mu^{53}$	‘trees’
$t\zeta^h\imath\mu^{31}$	‘house’	$t\zeta^h\imath\mu^{31}\mu\mu^{53}$	‘houses’

These plural suffixes are equivalent in meaning to the Chinese plural marker 们 *men*. It is necessary to make two clarifications: first, the lack of a plural suffix by no means indicates that a noun is singular; second, if there is a numeral plus classifier expression, it is not possible in most cases to also add a plural suffix.

### (2) Possessive Prefixes

Possessives are shown by prefixes attached to nouns. First person is shown by the prefix  $\alpha^{31}$ , second person by  $\eta\mu^{31}$ , and third person by  $\eta^{31}$ . For example:

first person		second person		third person	
$\alpha^{31}p^h\mu^{31}$	‘my father’	$\eta\mu^{31}p^h\mu^{31}$	‘your father’	$\eta^{31}p^h\mu^{31}$	‘his father’
$\alpha^{31}\mu\mu^{31}$	‘my mother’	$\eta\mu^{31}\mu\mu^{31}$	‘your mother’	$\eta^{31}\mu\mu^{31}$	‘his mother’
$\alpha^{31}k^h\alpha\eta^{31}$	‘my paternal grandfather’	$\eta\mu^{31}k^h\alpha\eta^{31}$	‘your paternal grandfather’	$\eta^{31}k^h\alpha\eta^{31}$	‘his paternal grandfather’
$\alpha^{31}t\zeta^h\eta^{31}$	‘my paternal grandmother’	$\eta\mu^{31}t\zeta^h\eta^{31}$	‘your paternal grandmother’	$\eta^{31}t\zeta^h\eta^{31}$	‘his paternal grandmother’

The singular personal pronominal prefixes originated through the grammaticalization of personal pronouns, reducing them to prefixes, although the first person plural form still alternates between prefix and a personal pronoun uses. We can see the historical connections through comparing the prefixes with their full pronoun counterparts.

Table 14: Pronouns and possessive prefixes

person	personal pronoun	possessive prefix
first	$\eta\alpha^{31}$ , $\alpha^{31}io^{31}$	$\alpha^{31}$
second	$\eta\alpha^{31}$	$\eta\mu^{31}$ , $\eta i^{31}$
third	$\eta^{31}$	$\eta^{31}$

Comparison of a number of Tibeto-Burman languages shows a close connection between possessive prefixes and pronouns. In fact, the possessive prefixes came from pronouns through phonological erosion and grammaticalization over an extended period of time. Although many words in Anong occur with the possessive prefixes, they are no longer productive grammatical markers. Thus, the possessive prefixes are the remnant of a now disappearing construction. They only occur on kinship terms and some animate nouns when they still carry the grammatical function of possession. Their grammatical function has been considerably weakened when occurring with other nouns.

The same phenomenon exists in Chinese. In certain dialects of Chinese, we have forms like the following.

$\alpha^{55}ge^{55}$	$\bar{a}g\bar{e}$	阿哥	‘elder brother’
$\alpha^{55}jie^{214}$	jiějie	姐姐	‘elder sister’
$\alpha^{55}ma^{55}$	māma	妈妈	‘mother’
$\alpha^{55}die^{55}$	ādiē	阿爹	‘father’

The prefix  $\alpha^{55}$ - in the above forms is the cognate of the first person possessive prefix  $\alpha^{31}$  in Anong. Needless to say, no grammarian of Chinese considers  $\alpha^{55}$ - in the above forms as synchronic prefixes marking possession.

The following examples illustrate a similar situation in the use of the possessive prefixes in Anong: the first person possessive pronominal prefix  $\alpha^{31}$ - of Anong continues to exist but has lost most of its meaning.

First person:

$\alpha^{31}phu^{31}$	‘my father’
$\alpha^{31}mu^{31}$	‘my mother’
$\alpha^{31}ben^{31}$	‘my maternal uncle’



Second person:

ŋu <sup>31</sup> phu <sup>31</sup>	‘your father’
ŋu <sup>31</sup> mu <sup>31</sup>	‘your mother’
ŋu <sup>31</sup> ben <sup>31</sup>	‘your maternal uncle’

Third person:

ŋ <sup>31</sup> phu <sup>31</sup>	‘his father’
ŋ <sup>31</sup> mu <sup>31</sup>	‘his mother’

With kinship terms, it is even clearer that the former prefix has lost much of its possessive meaning. There kinship terms with possessive prefixes can still take personal pronouns as well as a “possessive” particle, which is shown in the examples below.

ŋa <sup>31</sup> I ‘my paternal grandfather’	k <sup>h</sup> a <sup>31</sup> POSS.	a <sup>31</sup> 1st.Poss.	k <sup>h</sup> aŋ <sup>31</sup> grandfather
ŋa <sup>31</sup> you ‘your paternal grandfather’	k <sup>h</sup> a <sup>31</sup> POSS.	ŋu <sup>31</sup> 2nd.Poss.	k <sup>h</sup> aŋ <sup>31</sup> grandfather
ŋ <sup>31</sup> he ‘his paternal grandfather’	k <sup>h</sup> a <sup>31</sup> POSS.	ŋ <sup>31</sup> 3rd.	k <sup>h</sup> aŋ <sup>31</sup> grandfather

Occasionally, the possessive prefix can occur on non-human animate nouns, such as the following.

ŋa <sup>31</sup> I ‘my goat’	k <sup>h</sup> a <sup>31</sup> POSS.	a <sup>31</sup> 1st.Poss.	bε <sup>55</sup> goat
ŋa <sup>31</sup> you ‘your goat’	k <sup>h</sup> a <sup>31</sup> POSS.	ŋu <sup>31</sup> 2nd.Poss.	bε <sup>55</sup> goat
ŋ <sup>31</sup> he ‘his goat’	k <sup>h</sup> a <sup>31</sup> POSS.	ŋ <sup>31</sup> 3rd.Poss.	bε <sup>55</sup> goat

It is clear from the above examples that when a pronoun is used attributively to indicate possession, the possessive particle  $k^h a^{31} i e^{55}$  usually occurs with it. However, no intervening material can occur between the possessive prefix and the noun.

### (3) *Diminutives*

The suffix  $t\epsilon^h e n^{33}$  occurs on nouns to mark diminutive. Its original meaning is ‘son’, which has been grammaticalized into a bound suffix. It is somewhat like the Chinese *ér* 儿 ‘son’ and *zǐ* 子 ‘child’, but  $t\epsilon^h e n^{33}$  is much more productive. It can occur with both animate and inanimate nouns. The following are some examples.

$a^{31} t s^h a \eta^{31}$	‘person’	$a^{31} t s^h a \eta^{31} t \epsilon^h e n^{31}$	‘child’
$a^{31} b e^{55}$	‘goat’	$a^{31} b e^{55} t \epsilon^h e n^{31}$	‘kid’
$\epsilon^{31} h i \eta^{35}$	‘wooden bowl’	$\epsilon^{31} h i \eta^{35} t \epsilon^h e n^{31}$	‘small wooden bowl’
$\eta^{55} d z u \eta^{55}$	‘tree’	$\eta^{55} d z u \eta^{55} t \epsilon^h e n^{31}$	‘tree seedling’

### (4) *Gender*

Anong has two gender markers:  $p^h u^{31}$  and  $m u^{31} / m a^{55}$ .  $p^h u^{31}$  indicates masculine or male while  $m u^{31} / m a^{55}$  marks feminine or female. They can occur with both animate and inanimate nouns, as is illustrated by the following examples.

Table 15: Gender markers

Gloss	Plain noun	Masculine	Feminine
‘teacher’	$\eta^{31} l a m^{55} s u^{55}$	$\eta^{31} l a m^{55} s u^{55} p^h u^{31}$	$\eta^{31} l a m^{55} s u^{55} m u^{31}$
‘servant’	$d z u^{31} \epsilon e n^{55}$	$d z u^{31} \epsilon e n^{55} p^h u^{31}$	$d z u^{31} \epsilon e n^{55} m u^{31}$
‘cow’	$n \tilde{o}^{31} u \tilde{a}^{31}$	$n \tilde{o}^{31} u \tilde{a}^{31} p^h u^{31}$	$n \tilde{o}^{31} u \tilde{a}^{31} m u^{31}$
‘dog’	$d e^{31} g \eta^{55}$	$d e^{31} g \eta^{55} p^h u^{31}$	$d e^{31} g \eta^{55} m u^{31}$
‘stone’	$l u \eta^{55}$	$l u \eta^{55} p^h u^{31}$	$l u \eta^{55} m u^{31}$
‘pepper tree’	$d z i^{53} d z u \eta^{55}$	$d z i^{53} d z u \eta^{55} p^h u^{31}$	$d z i^{53} d z u \eta^{55} m u^{31}$

Adding these markers on nouns to indicate gender is not the grammatical category gender in its strict sense, but it is not a compounding process either, because neither of the markers can occur alone to mean ‘male’ or ‘female’. The markers can occur on any noun that refers to entities that can be divided into masculine and feminine genders. We wonder if they are remnants of an earlier gender marking system in Anong.

## 4.1.2. Numerals

Numerals in Anong can be divided into cardinal numbers, ordinal numbers, compound numbers, approximative numbers, and so on. Numerals usually cannot occur alone. They co-occur with classifiers following them. In this respect, Anong is similar to Trung but different from Jingpo. In this section, we will discuss the formation and characteristics of numerals.

## (1) Cardinal Numbers

In Anong, the numbers one through nine are simple numbers and the rest are compound numbers. One through nine are as follows.

t <sup>h</sup> i <sup>55</sup>	‘one’	kun <sup>55</sup>	‘six’
a <sup>31</sup> ni <sup>55</sup>	‘two’	sɿŋ <sup>35</sup>	‘seven’
a <sup>31</sup> som <sup>53</sup>	‘three’	ɕeŋ <sup>55</sup>	‘eight’
bii <sup>53</sup>	‘four’	du <sup>31</sup> gu <sup>31</sup>	‘nine’
p <sup>h</sup> aŋ <sup>31</sup>	‘five’		

The form t<sup>h</sup>i<sup>55</sup> ‘one’ occurs with two different tones t<sup>h</sup>i<sup>55</sup> and t<sup>h</sup>i<sup>31</sup>. When it occurs with a classifier, it often carries the mid-low tone t<sup>h</sup>i<sup>31</sup>. This tonal variation reflects not only tone sandhi but subtle changes in meaning as well. Its semantic content is somewhat weakened when it carries the mid-low tone.

Most of the cardinal numbers in Anong were once prefixed. Historically, the prefixes themselves developed out of the initials of earlier consonant clusters. Thus, the current forms are a result of sound changes over a long period of time. What is noteworthy is the fact that the forms for ‘five’, ‘six’, ‘seven’ and ‘eight’ all used to have prefixes. However, they became monosyllabic due to sound change, but close examination of those forms reveal that they still carry remnants of the earlier prefixes. This is especially clear in the cases of ‘five’ and ‘seven’. When we compare them with their cognates in Trung, we can see the sound changes they underwent.

Table 16: Numbers and prefixes

gloss	Anong	Trung dialect	Trung-Nujiang dialect
‘five’	p <sup>h</sup> aŋ <sup>31</sup>	pu <sup>31</sup> ŋa <sup>53</sup>	pu <sup>31</sup> ŋa <sup>53</sup>
‘six’	kun <sup>55</sup>	ɗi <sup>ʔ</sup> u <sup>55</sup>	k <sup>h</sup> i <sup>ʔ</sup> u <sup>55</sup>
‘seven’	sɿŋ <sup>35</sup>	su <sup>31</sup> ŋit <sup>55</sup>	su <sup>31</sup> ŋit <sup>55</sup>
‘eight’	ɕeŋ <sup>55</sup>	ɕat <sup>55</sup>	ɕat <sup>55</sup>

The examples above clearly show that the velar nasal consonant in the coda position in phaŋ<sup>31</sup> ‘five’ in Anong came from ŋa through the loss of the vowel a. Similarly, the final consonant in sɲŋ<sup>35</sup> ‘seven’ in Anong resulted from the loss of the vowel and coda consonant in n̄it<sup>55</sup> and then became attached to the end of the preceding syllable. This means that both forms, i.e. phaŋ<sup>31</sup> ‘five’ and sɲŋ<sup>35</sup> ‘seven’ used to be bisyllabic. As for kuŋ<sup>55</sup> ‘six’ and ɕeŋ<sup>55</sup> ‘eight’, both forms used to have stops in their codas. However, almost all of the stops in codas have been lost in Anong, in many cases leaving a residual glottal stop. The final nasals in the forms for ‘six’ and ‘eight’ in Anong come from earlier stops with corresponding places of articulation.

## (2) Compound Numbers

The numbers from ten or higher are all compound numbers. The number ten must occur with the number one preceding it t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>a<sup>55</sup> ‘ten’. Eleven through nineteen consist of t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>a<sup>55</sup> ‘ten’ followed by a cardinal number.

t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> t <sup>h</sup> i <sup>33</sup>	‘eleven’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> n̄i <sup>33</sup>	‘twelve’
t <sup>h</sup> i <sup>53</sup> ts <sup>h</sup> ai <sup>55</sup> som <sup>31</sup>	‘thirteen’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> bɾɿ <sup>53</sup>	‘fourteen’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> p <sup>h</sup> ɑŋ <sup>31</sup>	‘fifteen’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> kuŋ <sup>55</sup>	‘sixteen’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> sɲŋ <sup>35</sup>	‘seventeen’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> ɕeŋ <sup>55</sup>	‘eighteen’
t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> du <sup>31</sup> gu <sup>31</sup>	‘nineteen’

It should be pointed out that a sound change took place when the form t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>a<sup>55</sup> ‘ten’ is combined with a cardinal number to form the compound numbers above, namely, the vowel in ts<sup>h</sup>a<sup>55</sup> changed from a simple vowel to a diphthong ts<sup>h</sup>ai<sup>55</sup>. It is highly likely that the second element in the diphthong came from the conjunction si<sup>55</sup> through sound change, because most Tibeto-Burman languages utilize this conjunction to form compound numbers. For now, we will call the second element in this diphthong the conjunctive morpheme.

The numbers twenty through ninety are formed in the following manner.

ɑ <sup>31</sup> ni <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	‘twenty’
ɑ <sup>31</sup> som <sup>31</sup> ts <sup>h</sup> a <sup>55</sup>	‘thirty’
ɑ <sup>31</sup> brɿ <sup>31</sup> ts <sup>h</sup> a <sup>55</sup>	‘forty’
p <sup>h</sup> ɑŋ <sup>31</sup> ts <sup>h</sup> a <sup>55</sup>	‘fifty’
kun <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	‘sixty’
sɿn <sup>35</sup> ts <sup>h</sup> a <sup>55</sup>	‘seventy’
ʕɛn <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	‘eighty’
duw <sup>31</sup> gw <sup>31</sup> ts <sup>h</sup> a <sup>55</sup>	‘ninety’

The formation of numbers over a hundred is the same as the process for formulating the number ten. For instance, t<sup>h</sup>i<sup>55</sup>ʕɑ<sup>33</sup> ‘hundred’, t<sup>h</sup>i<sup>31</sup>ja<sup>55</sup>/t<sup>h</sup>i<sup>31</sup>tu<sup>31</sup> ‘thousand’, t<sup>h</sup>i<sup>31</sup>muw<sup>31</sup> ‘ten thousand’.

The conjunctive morpheme i<sup>31</sup> is used between numbers in a number with multiple places. The following are a few examples.

ɑ<sup>31</sup>som<sup>31</sup> ʕɑ<sup>55</sup> i<sup>31</sup> kun<sup>55</sup> tsai<sup>55</sup> kun<sup>55</sup>  
 three hundred CONJ six ten six  
 ‘three hundred and sixty-six’

t<sup>h</sup>i<sup>31</sup> ja<sup>55</sup> i<sup>31</sup> p<sup>h</sup>ɑŋ<sup>31</sup> ʕɑ<sup>55</sup> i<sup>31</sup> kun<sup>55</sup> ts<sup>h</sup>ai<sup>55</sup> ɑ<sup>31</sup>ni<sup>55</sup>  
 one thousand CONJ five hundred CONJ six ten two  
 ‘one thousand five hundred and sixty-two’

The conjunctive morpheme usually occurs at places in a number from ten through twenty. It is optional for numbers from twenty through ninety-nine. And it is compulsory for numbers from one hundred and higher. In addition, when occurring in numbers ten through nineteen, it is pronounced closely blended together with the vowel preceding it. Therefore, we treated it as the second element of a diphthong. However, when it occurs in other cases, such blending does not occur, so we treat it as an independent syllable.

### (3) Approximative Numbers

Anong has a number of different ways to express approximation and estimation.

- 1) Using two successive numbers with the approximative particle ɖɑŋ<sup>31</sup>.

p<sup>h</sup>ɑŋ<sup>31</sup>-ioŋ<sup>55</sup> kun<sup>55</sup>-ioŋ<sup>55</sup> ɖɑŋ<sup>31</sup>  
 five-CLF six-CLF APPR  
 ‘about five or six (people)’

$\alpha^{31}\eta_i^{55}$   $ts^h a^{55}$   $\alpha^{31}som^{31}$   $ts^h a^{55}$   $io\gamma^{55}$   $q\alpha\eta^{31}$   
 two ten three ten CLF APPR  
 ‘about twenty to thirty (people)’

$th_i^{31}$   $ts^h ai^{55}$   $\alpha^{31}som^{31}$   $io\gamma^{55}$   $bi^{31}$   $io\gamma^{55}$   $q\alpha\eta^{31}$   
 one ten three CLF four CLF APPR  
 ‘about thirteen to fourteen (people)’

2) The approximative particle  $q\alpha\eta^{55}$  ‘several’ can be used with a classifier or numbers such as ten, hundred, ten thousand, etc., to express estimation/approximation.

$q\alpha\eta^{55}$   $io\gamma^{55}$   
 APPR CLF (people)  
 ‘several people’

$q\alpha\eta^{55}$   $dzu\eta^{55}$   
 APPR CLF (trees)  
 ‘several trees’

$q\alpha\eta^{55}$   $lu\eta^{55}$   
 APPR CLF (rocks)  
 ‘several rocks’

The approximate particle  $q\alpha\eta^{55}$  can also be used with numbers.

$q\alpha\eta^{55}$   $ts^h a^{55}$   
 APPR ten  
 ‘several dozen’

$q\alpha\eta^{55}$   $\zeta a^{55}$   
 APPR hundred  
 ‘several hundreds’

$q\alpha\eta^{55}$   $mu^{31}$   
 APPR ten thousand  
 ‘several ten thousands’

$q\alpha\eta^{55}$  can also be used in connection with a set compound number followed by the approximative particle. The construction indicates the number is approximate.

$\alpha^{31}iu\eta^{55}$   $dzu^{53}$   $\alpha^{31}$   $s\eta^{31}lan^{55}$   $za^{55}$   $z\eta^{31}\eta u^{31}$   $\alpha^{31}\eta_i^{55}$   $ts^h a^{55}$   $p^h a\eta^{31}$   $n u\eta^{55}$   $q\alpha\eta^{55}$   
 we village DEF girl PL two ten five age APPR

$th a^{35}$   $\alpha^{31}vu^{35}$   $\alpha^{31}\zeta i^{31}th_i^{55}$   $ne^{33}$ .  
 CONJ marry PRT

‘Women in our village get married around the age of 25.’

$\eta^{31}$   $s\eta n^{35}$   $n u\eta^{55}$   $q\alpha\eta^{55}$   $th a^{35}$   $\zeta \eta^{55}$   $va^{31}$   $t\zeta^h \epsilon n^{31}$   $se^{33}$ .  
 he seven age APPR CONJ book read DIM PRT  
 ‘He went to school at about the age of seven.’

It should be noted that there are two versions of the approximative particle  $q\alpha\eta$ , one with a mid-low tone and the other a high-high tone. The question is are they two different morphemes or are they allomorphs of the same morpheme? We consider them as allomorphs of the same morpheme with a similar grammatical function, although one is a bit

more concrete than the other. Specifically, the one with the mid-low tone is less concrete while the one with the high tone is more concrete. Grammatically, they are very similar though not identical. This may be a case of a functional morpheme changing to a content morpheme due to the influence of the phonetic environment. This surmise is based on the fact that suffixal morphemes in Anong usually carry the mid-low tone. They only change to a different tone when influenced by their phonetic environment in the flow of speech. Also, the use of morphemes with the concrete meanings ‘several’ and ‘about’ being used as grammatical markers is a relatively recent phenomenon.

(4) *Place Numbers*

Place numbers such as the ten’s place, the hundred’s place, etc., may occur with the prefix  $\eta^{31}$  to convey the meaning ‘several’.

$\eta^{31}$ ts <sup>h</sup> a <sup>55</sup>	$\eta^{31}$ ɕa <sup>55</sup>	$\eta^{31}$ tu <sup>31</sup>	$\eta^{31}$ mu <sup>31</sup>
PRF ten	PRF hundred	PRF thousand	PRF ten thousand
‘several tens’	‘several hundreds’	‘several ten thousands’	‘several thousand’

Some of the place number plus the prefix  $\eta^{31}$  combinations can be used to form compound expressions, such as the following. In this case the smaller number comes first.

$\eta^{31}$ tu <sup>31</sup> $\eta^{31}$ mu <sup>31</sup>	$\eta^{31}$ ɕa <sup>55</sup> $\eta^{31}$ tu <sup>31</sup>
PRF thousand PRF ten.thousand	PRF hundred PRF thousand
‘thousands upon ten thousands’	‘hundreds upon thousands’

Numbers can also be followed by  $ka^{31}t^h a\eta^{55}$  to indicate ‘in excess of’ or ‘more than’.

t<sup>h</sup>i<sup>31</sup>-ts<sup>h</sup>a<sup>55</sup> ka<sup>31</sup>t<sup>h</sup>a $\eta^{55}$  io<sup>ɔ</sup><sup>55</sup>  
 one-ten more.than CLF (people)  
 ‘more than ten (people)’

t<sup>h</sup>i<sup>31</sup> ɕa<sup>55</sup> ka<sup>31</sup>t<sup>h</sup>a $\eta^{55}$  io<sup>ɔ</sup><sup>55</sup>  
 one hundred more.than CLF (people)  
 ‘more than a hundred (people)’

a<sup>31</sup>som<sup>53</sup> ts<sup>h</sup>a<sup>55</sup> da<sup>31</sup>t<sup>h</sup>a $\eta^{55}$  io<sup>ɔ</sup><sup>55</sup>  
 three ten more.than CLF (people)  
 ‘more than thirty (people)’

ka<sup>31</sup>ʈʰaŋ<sup>55</sup> usually occurs between the number and classifier, but it can also occur after the classifier, which is illustrated by the examples below.

ʔo<sup>55</sup> iε<sup>31</sup> dʷa<sup>31</sup> ŋʷa<sup>31</sup> a<sup>31</sup>ŋi<sup>55</sup> ʕa<sup>55</sup> gam<sup>55</sup> da<sup>31</sup>ʈʰaŋ<sup>55</sup> a<sup>31</sup>ne<sup>55</sup>.  
 pig this CLF DEF two hundred catty more.than have  
 ‘This pig is about two hundred catties (= around 1/2 kilogram).’

mu<sup>31</sup>guŋ<sup>55</sup> dzaŋ<sup>31</sup> dzu<sup>53</sup> ŋʷa<sup>31</sup> sɿŋ<sup>35</sup> ts<sup>h</sup>a<sup>55</sup> zam<sup>55</sup> da<sup>31</sup>ʈʰaŋ<sup>55</sup> ŋo<sup>33</sup>-ε<sup>31</sup>.  
 proper.name village DEF seven ten household more.than have-IND  
 ‘Mügüjiä Village has about 70 or so households.’

### (5) Fractions

Fractions are expressed by using the locative particle ɖoŋ<sup>31</sup>k<sup>h</sup>a<sup>31</sup> between the two numbers.

som <sup>53</sup> -ʈʰu <sup>55</sup>	ɖoŋ <sup>31</sup> k <sup>h</sup> a <sup>31</sup>	ʈʰi <sup>31</sup> -ʈʰu <sup>55</sup>
three-prt	LOC	one-PRT
‘one third’		

p <sup>h</sup> aŋ <sup>31</sup> -ʈʰu <sup>55</sup>	ɖoŋ <sup>31</sup> k <sup>h</sup> a <sup>31</sup>	a <sup>31</sup> ŋi <sup>55</sup> -ʈʰu <sup>55</sup>
five-prt	LOC	two-PRT
‘two-fifths’		

### (6) Multiples

Multiples are expressed through using the suffix k<sup>h</sup>a<sup>55</sup>.

ʈʰi <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	p <sup>h</sup> aŋ <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	ʈʰi <sup>31</sup> ʕa <sup>55</sup> k <sup>h</sup> a <sup>31</sup>
one times	five times	one hundred times
‘twice’	‘five times’	‘one hundred times’

The expression fu<sup>55</sup> borrowed from Lisu can be used in place of the suffix k<sup>h</sup>a<sup>55</sup>. In fact, the Lisu form has a higher frequency of occurrence.

ʈʰi <sup>31</sup> fu <sup>55</sup>	p <sup>h</sup> aŋ <sup>31</sup> fu <sup>55</sup>	ʈʰi <sup>31</sup> ʕa <sup>55</sup> fu <sup>55</sup>
one suf	five suf	one hundred suf
‘two times, twice’	‘five times’	‘one hundred times’

### (7) Ordinal Numbers

ku<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup> or ʔi<sup>55</sup>p<sup>h</sup>aŋ<sup>55</sup> is used before a cardinal number to form an ordinal number.



kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>55</sup>	or	ŋi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>55</sup>	‘first’
kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup> som <sup>53</sup>	or	ŋi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup> som <sup>53</sup>	‘third’
kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	or	ŋi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	‘tenth’
kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>31</sup> ɕa <sup>55</sup>	or	ŋi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>31</sup> ɕa <sup>55</sup>	‘hundredth’

Anong has a calendar system similar to the Chinese lunar system. However, the word sɿ<sup>31</sup>la<sup>55</sup> ‘moon/month’ must occur before the number.

sɿ<sup>31</sup>la<sup>55</sup>      t<sup>h</sup>i<sup>55</sup>      ŋi<sup>33</sup>  
 month      one      day  
 ‘first day of the month’

sɿ<sup>31</sup>la<sup>55</sup>      a<sup>31</sup>som<sup>53</sup>      ŋi<sup>33</sup>  
 month      three      day  
 ‘third day of the month’

sɿ<sup>31</sup>la<sup>55</sup>      ɕeŋ<sup>55</sup>      ŋi<sup>33</sup>  
 month      eight      day  
 ‘eighth day of the month’

sɿ<sup>31</sup>la<sup>55</sup>      t<sup>h</sup>i<sup>51</sup>      ts<sup>h</sup>ai<sup>55</sup>      p<sup>h</sup>aŋ<sup>53</sup>      ŋi<sup>33</sup>  
 month      one      ten      five      day  
 ‘fifteenth day of the month’

Anong has also lexicalized the practice of putting their children in the order according to age for both males and females.<sup>1</sup> Up to ten such terms are in use, five of which are given below. The reason for omitting the other five expressions is that due to the effect of the government’s family planning policy, there is no longer a consistently accepted set of expressions for referring to the next five children in Anong since they are very rarely used.

<sup>1</sup> Table 17 has terms for birth order only up to fifth-born. However, Bradley (2008:54–69) writes that the Anong system in Myanmar has terms up to ninth-born. One question is why there is a difference here. In any case, this system, borrowed into Lisu, is one of the clearest cases of influence from Anong into Lisu.

Table 17: Terms for birth order

Birth order	Male	Female
first	a <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	a <sup>31</sup> ŋaŋ <sup>55</sup>
second	a <sup>31</sup> du <sup>55</sup>	a <sup>31</sup> ŋi <sup>33</sup>
third	a <sup>55</sup> k <sup>h</sup> im <sup>33</sup>	a <sup>55</sup> tɕ <sup>h</sup> aŋ <sup>33</sup>
fourth	a <sup>31</sup> ts <sup>h</sup> ŋn <sup>55</sup>	a <sup>55</sup> du <sup>31</sup>
fifth	a <sup>55</sup> guŋ <sup>31</sup>	a <sup>55</sup> ku <sup>31</sup>

#### 4.1.3. *Classifiers and Measure Words*

Although Anong belongs to the Jingpo subgroup of the Tibeto-Burman language family, it has a rich classifier system. In this respect, Anong is very similar to Trung in terms of the number of classifiers, their grammatical functions and characteristics. And, just like Trung, its classifier system is typologically more similar to languages in the Qiang, Burmese, and Yi branches, and more different from languages in the Jingpo branch.<sup>2</sup>

Classifiers in Anong can be divided into nominal classifiers and verbal classifiers. Classifiers can not occur alone. They must occur with numerals or some other part of speech as constituents of a sentence. Their characteristics and uses are briefly discussed below.

##### (1) *Noun Classifiers*

Noun classifiers can be categorized in many ways, depending on usage and characteristics. The following are commonly used classifications.

##### 1) Classifiers indicating the shape of objects:

loŋ <sup>55</sup>	round, hard objects
lan <sup>31</sup>	objects that come in flexible sheets
t <sup>h</sup> am <sup>55</sup>	objects that come in thin rigid layers
buŋ <sup>55</sup>	rope-like flexible objects
k <sup>h</sup> o <sup>55</sup>	rope-like rigid objects
p <sup>h</sup> um <sup>55</sup>	round, soft objects

<sup>2</sup> Sun Hongkai. 1999. *Zhangmian Yu Liangci Yongfa Bijiao-jian lun liangci fazhan de jieduan cengci* [A comparison of the uses of classifiers in Tibeto-Burman languages, with a discussion on their developmental stages and layers]. *Zhongguo Yuyan Xuebao* [Journal of Languages of China], Vol. 3.

## 2) Measure words

lam <sup>33</sup>	arms spread, i.e. the length from finger tip to finger tip with arms spread
buu <sup>31</sup> t <sup>h</sup> a <sup>55</sup>	the length between the thumb and middle finger
mu <sup>33</sup> kr <sup>33</sup>	the length between the thumb and the index finger
luŋ <sup>55</sup>	one tenth of a catty (one catty equals half a kilogram)
duŋ <sup>55</sup>	a unit of dry measure (equals one decaliter)
gam <sup>55</sup>	catty
p <sup>h</sup> ɛn <sup>55</sup>	liter
ɕuŋ <sup>55</sup>	a unit of length (equals one third of a centimeter)

## 3) Temporal measure words

n <sup>h</sup> uŋ <sup>55</sup>	‘year/age’
ni <sup>33</sup>	‘day’
saŋ <sup>55</sup>	‘morning’
di <sup>31</sup> ts <sup>h</sup> uŋ <sup>55</sup>	‘generation’
iaŋ <sup>55</sup>	‘night’

## 4) Classifiers for abstract matters

t <sup>h</sup> ɿ <sup>31</sup>	kind (of things/goods)
iaŋ <sup>31</sup>	item (of matter)
ŋu <sup>31</sup>	unit
t <sup>h</sup> ɿ <sup>31</sup> .iɑ <sup>31</sup>	item (of problem)
bam <sup>55</sup>	type/item (of unspecific objects)

## 5) Classifiers for collective nouns

zɿ <sup>31</sup>	flock
za <sup>55</sup>	nest
k <sup>h</sup> aŋ <sup>35</sup>	grove
m <sup>31</sup> ɕiŋ <sup>55</sup>	bouquet
dzui <sup>55</sup>	pair
ba <sup>31</sup> mu <sup>53</sup>	some

## 6) Nouns or verbs as classifiers

## Nouns:

xɑ <sup>55</sup>	basket
t <sup>h</sup> am <sup>55</sup>	book

di <sup>31</sup> k <sup>h</sup> ɿ <sup>3</sup>	bowl
tɕ <sup>h</sup> ɛm <sup>55</sup>	petal

## Verbs:

mu <sup>31</sup> baŋ <sup>33</sup>	bundle
m <sup>31</sup> guaŋ <sup>53</sup>	hold (with both hands cupped together)
doŋ <sup>55</sup>	roll
bu <sup>m</sup> <sup>55</sup>	pile
k <sup>h</sup> u <sup>31</sup> li <sup>m</sup> <sup>55</sup>	bunch
ɕa <sup>31</sup>	carry on back (so a backload of)

## 7) Classifiers borrowed from Chinese and Lisu

## From Chinese:

xo <sup>31</sup>	box
p <sup>h</sup> i <sup>n</sup> <sup>31</sup>	bottle
ts <sup>h</sup> u <sup>ɛ̃</sup> <sup>55</sup>	cun (= one third of a decimeter)
faŋ <sup>55</sup>	a square or cubic meter
t <sup>h</sup> uŋ <sup>33</sup>	bucket

## From Lisu:

ka <sup>35</sup>	box
dza <sup>55</sup>	chi (= one third of a meter)
ti <sup>55</sup>	unit of dry measure (= one decaliter)
tɕi <sup>35</sup>	pack (as in a load carried by a pack animal)

Some of the classifiers in Anong have a very high frequency of occurrence, such as io<sup>55</sup>/ioʔ<sup>55</sup> for people (e.g. person, professor, military officer), dzuŋ<sup>55</sup> for plants (e.g. tree, bamboo, seedling), ɕu<sup>31</sup> for animals and insects (e.g. horse, fish, chicken, insect, snake), dzui<sup>55</sup> for things that come in pairs (e.g. earrings, shoes, bracelets), and t<sup>h</sup>u<sup>55</sup> for relatively abstract matters (e.g. matter, country, case/incidence, sort/kind, slice (of kind heart)). These characteristics show that the functions of classifiers in Anong are expanding. In addition to being used to indicate quantity, they show signs of taking on functions of classification. The following examples illustrate that classifiers in Anong begin to be used as demonstratives in addition to their functions of measure and classification.

su<sup>55</sup>u<sup>31</sup> io<sup>55</sup> mi<sup>53</sup> di<sup>51</sup>zu<sup>55</sup>u<sup>31</sup> io<sup>55</sup> ηu<sup>31</sup> ba<sup>31</sup> t<sup>h</sup>i<sup>55</sup> dam<sup>55</sup> dzu<sup>35</sup> ni<sup>55</sup> ua<sup>31</sup>dza<sup>33</sup>  
 fat CLF CAUS skinny CLF DEF do one CLF beat with.fist ASP  
 ‘The fat person beat up the skinny person with his fist.’

The literal meaning of the above sentence is ‘The fat one beat up the skinny one.’ The demonstrative, that is, the indexical, use of the person classifier is quite obvious. Also, in Anong, there are a number of expressions for the meaning ‘beat’ depending on the instrument or method used. In this case, the expression dzu<sup>35</sup>ni<sup>55</sup> means ‘to beat with fist’.

Noun classifiers also display the following three characteristics.

### 1) Reduplication

Either reduplicating the classifier alone or together with the numeral one to mean one by one. The following are some examples.

t <sup>h</sup> i <sup>55</sup>	io <sup>ʔ55</sup>	io <sup>ʔ55</sup>	one by one/one at a time
t <sup>h</sup> i <sup>55</sup>	dzuη <sup>55</sup>	dzuη <sup>55</sup>	plant by plant/one plant at a time
t <sup>h</sup> i <sup>55</sup>	ni <sup>33</sup>	ni <sup>33</sup>	day by day/one day at a time
t <sup>h</sup> i <sup>55</sup>	bum <sup>55</sup>	bum <sup>55</sup>	pile by pile/one pile at a time
t <sup>h</sup> i <sup>55</sup> na <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> na <sup>31</sup>		item by item/one item at a time
t <sup>h</sup> i <sup>55</sup> k <sup>h</sup> a <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> k <sup>h</sup> a <sup>55</sup>		utterance by utterance/one utterance at a time
t <sup>h</sup> i <sup>55</sup> p <sup>h</sup> an <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> p <sup>h</sup> an <sup>55</sup>		piece by piece/one piece at a time
t <sup>h</sup> i <sup>55</sup> duη <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> duη <sup>55</sup>		bucket by bucket/one bucket at a time

Both types of reduplication have the same grammatical function. When these constructions occur in a sentence as adverbials, they must be marked by ua<sup>33</sup>, li<sup>55</sup>, or sɿ<sup>31</sup>.

sɿ<sup>31</sup>t<sup>h</sup>a<sup>31</sup> t<sup>h</sup>i<sup>55</sup>ni<sup>33</sup>ni<sup>33</sup> li<sup>55</sup> a<sup>31</sup>ba<sup>35</sup>  
 time one day day ADV go  
 ‘Time goes by day by day.’

na<sup>55</sup> t<sup>h</sup>i<sup>55</sup>k<sup>h</sup>a<sup>55</sup> t<sup>h</sup>i<sup>55</sup>k<sup>h</sup>a<sup>55</sup> ua<sup>33</sup> t<sup>h</sup>im<sup>35</sup>  
 you one utterance one utterance ADV say  
 ‘You speak utterance by utterance.’

2) The prefix k<sup>h</sup>a<sup>31</sup>- and the suffix -nu<sup>31</sup>gu<sup>55</sup> are used with a classifier to convey the meaning ‘each/every’.

k <sup>h</sup> a <sup>31</sup> - PRF	ioŋ <sup>55</sup> CLF	-nu <sup>31</sup> gu <sup>55</sup> SUF	k <sup>h</sup> a <sup>31</sup> - PRF	dzuŋ <sup>55</sup> CLF	-nu <sup>31</sup> gu <sup>55</sup> SUF
'each person'			'each plant'		
k <sup>h</sup> a <sup>31</sup> - PRF	ianŋ <sup>55</sup> CLF	-nu <sup>31</sup> gu <sup>55</sup> SUF	k <sup>h</sup> a <sup>31</sup> - PRF	luŋ <sup>55</sup> CLF	-nu <sup>31</sup> gu <sup>55</sup> SUF
'each evening'			'each piece'		

3) Auto-classification: a noun or a part of a noun can be used as classifiers for the object it refers to.

Full nouns as classifiers:

p <sup>h</sup> an <sup>33</sup> leg 'a leg'	t <sup>h</sup> i <sup>55</sup> one	p <sup>h</sup> an <sup>33</sup> leg	ɕem <sup>55</sup> leaf 'a leaf'	t <sup>h</sup> i <sup>55</sup> one	ɕem <sup>55</sup> leaf
luŋ <sup>55</sup> stone 'a stone'	t <sup>h</sup> i <sup>55</sup> one	luŋ <sup>55</sup> stone	tɕ <sup>h</sup> im <sup>31</sup> house 'a house'	t <sup>h</sup> i <sup>55</sup> one	tɕ <sup>h</sup> im <sup>31</sup> house
dzu <sup>53</sup> village 'a village'	t <sup>h</sup> i <sup>55</sup> one	dzu <sup>53</sup> village	k <sup>h</sup> a <sup>55</sup> utterance 'an utterance'	t <sup>h</sup> i <sup>55</sup> one	k <sup>h</sup> a <sup>55</sup> one utterance

Partial nouns as classifiers:

ni <sup>55</sup> luŋ <sup>55</sup> eye 'an eye'	t <sup>h</sup> i <sup>55</sup> one	luŋ <sup>55</sup> eye	ɕuŋ <sup>55</sup> ven <sup>55</sup> flower 'a flower'	t <sup>h</sup> i <sup>55</sup> one	ven <sup>55</sup> flower
ʂ <sup>55</sup> dzuŋ <sup>55</sup> tree 'a tree'	t <sup>h</sup> i <sup>55</sup> one	dzuŋ <sup>55</sup> tree	k <sup>h</sup> a <sup>55</sup> lim <sup>31</sup> road 'a road'	t <sup>h</sup> i <sup>55</sup> one	lim <sup>31</sup> road

## (2) Verb Classifiers

Anong has a small number of verb classifiers. However, they have a high frequency of occurrence with significant grammatical functions. They occur before verbs of activity or action to quantify the activity or action. They are dzuŋ<sup>31</sup>, dam<sup>55</sup>, so<sup>31</sup>, and mo<sup>33</sup>.

mu<sup>31</sup>dzi<sup>31</sup> iε<sup>55</sup>-ŋu<sup>31</sup>    a<sup>31</sup>io<sup>31</sup>    t<sup>h</sup>i<sup>55</sup>-so<sup>31</sup>    lε<sup>55</sup>    dʒaŋ<sup>53</sup>    o<sup>31</sup>  
 map    this-CLF    I    one-CLF    IMP    see    IMP.SG  
 ‘Let me take a look at this map, please.’

tɕ<sup>h</sup>i<sup>55</sup>ŋi<sup>31</sup>    bu<sup>55</sup>dʒa<sup>31</sup>-vu<sup>31</sup>-su<sup>55</sup>    ba<sup>31</sup>    dε<sup>31</sup>gŋ<sup>55</sup>    mi<sup>53</sup>  
 yesterday    beggar    OBJ    dog    caus

t<sup>h</sup>i<sup>55</sup>-mo<sup>33</sup>    k<sup>h</sup>i<sup>53</sup>    a<sup>31</sup>ba<sup>35</sup>  
 one-CLF    bite    go  
 ‘Yesterday, a beggar was bitten by a dog.’

#### 4.1.4. *Pronouns*

Anong has personal pronouns, demonstrative pronouns, interrogative pronouns, reflexive pronouns, and indefinite pronouns. The following is a brief discussion of their formation and functions.

##### (1) *Personal Pronouns*

Table 18: Personal pronouns

	Singular	Dual	Plural
1	ŋa <sup>31</sup> , a <sup>31</sup> io <sup>31</sup>	ŋa <sup>31</sup> iʉŋ <sup>55</sup> si <sup>31</sup> (INCL) a <sup>31</sup> iʉŋ <sup>55</sup> si <sup>31</sup> (EXCL)	ŋa <sup>31</sup> iʉŋ <sup>55</sup> (ŋε <sup>31</sup> ni <sup>35</sup> ) (INCL) a <sup>31</sup> iʉŋ <sup>55</sup> (EXCL)
2	ŋa <sup>31</sup>	ŋε <sup>31</sup> ŋʉŋ <sup>55</sup> si <sup>31</sup>	ŋε <sup>31</sup> ŋʉŋ <sup>55</sup>
3	ŋ <sup>31</sup>	ŋ <sup>31</sup> ŋʉŋ <sup>55</sup> si <sup>31</sup>	ŋ <sup>31</sup> ŋʉŋ <sup>55</sup>

Anong has first, second, and third person pronouns which come in singular, dual and plural forms. First person dual and plural also have inclusive and exclusive distinctions. The first and second person pronouns are Tibeto-Burman, and, ultimately, Sino-Tibetan, in origin.

It should be noted that the first person singular pronoun has two forms. The ŋa<sup>31</sup> form originates in Sino-Tibetan. The other form is made up of the phonologically reduced first person singular pronoun ŋa<sup>31</sup> and the person classifier io<sup>31</sup>. The former contrasts with the first person dual and plural inclusive whereas the latter contrasts with the first person dual and plural exclusive. The difference between the plural and dual forms of the pronouns is the marker si<sup>31</sup> on all of the dual pronouns.

(2) *Demonstrative Pronouns*

Anong has two sets of demonstrative pronouns: proximal and distal. The proximal set has only one form,  $ia^{55}$  ‘this (here)’, which has two variants  $ie^{55}$  and  $ie^{31}$ . The distal set has four forms to distinguish—high, level, and low positions of the object with respect to a mountain, river, or flat land. The form  $na^{55}$  ‘that (up there)’ is used to refer to an object located high up in the mountain, in the upper reaches of a river, or on the mountain side (as opposed to the water side). The form  $\eta i^{55}$  ‘that (down there)’ is used to refer to an object located down a mountain, in the lower reaches of a river, or on the water side (as opposed to the mountain side). To refer to objects on flat land, Anong has two different forms, namely,  $\eta o^{55}$  ‘that (over there)’ and  $k^h u^{55}$  ‘that (yonder)’. Demonstrative pronouns have to occur with classifiers as constituents of a sentence. Usually, they cannot occur alone. The following are some examples.

$ia^{55}$	$bam^{31}$	$nu^{31}a^{55}$	$a^{31}io^{31}$	$k^h a^{31}$	$ie^{55}$
this	CLF	DEF	I	POSS	be

‘This one here is mine.’

$\eta o^{55}$	$bam^{31}$	$nu^{31}a^{55}$	$\eta a^{31}$	$k^h a^{31}$	$ie^{55}$
that	CLF	DEF	you	POSS	be

‘That one over there is yours.’

$k^h u^{55}$	$bam^{31}$	$nu^{31}a^{55}$	$a^{31}p^h u^{31}$	$k^h a^{31}$	$ie^{55}$
that	CLF	DEF	father	POSS	be

‘That one yonder is father’s.’

$\eta i^{55}$	$bam^{31}$	$nu^{31}a^{55}$	$a^{31}k^h a\eta^{31}$	$k^h a^{31}$	$ie^{55}$
that	CLF	DEF	grandpa	POSS	be

‘That one down there is grandpa’s.’

$na^{55}$	$bam^{31}$	$nu^{31}a^{55}$	$a^{31}ben^{31}$	$k^h a^{31}$	$ie^{55}$
that	CLF	DEF	uncle	POSS	be

‘That one up there is uncle’s (on mother’s side).’

(3) *Interrogative Pronouns*

All of the interrogative pronouns are made up of the interrogative morpheme  $k^h a^{55}$  or  $k^h a^{31}$  plus a pronominal morpheme.

The interrogative pronoun for people is  $k^h a^{31}io\eta^{55}$  ‘who’, which is made up of the interrogative morpheme  $k^h a^{31}$  and the classifier for



person  $io\gamma^{55}$ . Literally, it means ‘which one’, but because the classifier is the classifier for people, it implies ‘which person’.

$\eta\alpha^{31}$      $k^h\alpha^{31}io\gamma^{55}$      $\eta\mu^{31}$ -     $ie^{33}$   
 you    who    2SG    be  
 ‘Who are you?’

When  $k^h\alpha^{31}io\gamma^{55}$  is used with the adverb  $gu^{31}$  ‘also’, the combination is no longer an interrogative pronoun. It becomes an indefinite pronoun.

$\eta\alpha^{31}$      $k^h\alpha^{31}io\gamma^{55}$      $ba^{31}$      $gu^{31}$      $m^{31}$ -     $-lan^{35}$   
 I    who    do    also    NEG    look.for  
 ‘I am not looking for anybody.’

The interrogative pronoun plus classifier can be reduplicated to indicate plurality.

$k^h\alpha^{31}io\gamma^{55}$   
 Q    CLF (person)  
 ‘which one (i.e. who)’

$k^h\alpha^{31}io\gamma^{55}k^h\alpha^{31}io\gamma^{55}$   
 Q    CLF    Q    CLF (person)  
 ‘which ones (i.e. which persons)’

The interrogative pronoun for things is  $k^h\alpha^{55}t\zeta^h\eta^{31}$  ‘what’. It is made up of the interrogative morpheme  $k^h\alpha^{55}$  and the classifier for relatively abstract things  $t\zeta^h\eta^{31}$ .

$\eta\alpha^{31}$      $k^h\alpha^{55}t\zeta^h\eta^{31}$      $\eta\mu^{31}$      $\zeta\eta\eta^{31}?$   
 you    what    2SG    want  
 ‘What do you want?’

Just like the interrogative pronoun for people, when the adverb  $gu^{31}$  is used with  $k^h\alpha^{55}t\zeta^h\eta^{31}$ , they form an indefinite pronoun meaning ‘anything’.

$\alpha^{31}io^{31}$      $k^h\alpha^{55}t\zeta^h\eta^{31}$      $gu^{31}$      $m^{31}$ -     $\zeta\eta\eta^{31}$   
 I    what    also    NEG    want  
 ‘I don’t want anything.’

It can be reduplicated to indicate plurality.

k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>            ‘what’  
 k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup> k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>    ‘which ones’

It can occur with lan<sup>31</sup> to form a rhetorical question.

ŋa<sup>31</sup>    a<sup>55</sup>    k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>lan<sup>31</sup>    a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>    ba<sup>31</sup>    ŋa<sup>31</sup>    ɲe<sup>35</sup>    u<sup>31</sup>?  
 you    DEF    why                    somebody    do    2SG-    beat    -ASP  
 ‘Why did you hit somebody?’

The location interrogative pronoun is k<sup>h</sup>a<sup>55</sup>a<sup>31</sup> ‘where’, which is made up of the interrogative morpheme k<sup>h</sup>a<sup>55</sup> and a<sup>31</sup>. The a<sup>31</sup> used to be used as a locative particle.

ŋa<sup>31</sup>    k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>    ŋu<sup>31</sup>    dzɿ<sup>31</sup>    dzɛ<sup>31</sup>  
 you    where    2SG    go    ASP  
 ‘Where did you go?’

There are two other location interrogative pronouns k<sup>h</sup>a<sup>55</sup>ba<sup>31</sup> and k<sup>h</sup>a<sup>55</sup> k<sup>h</sup>a<sup>31</sup>, but they are not as widely used as k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>. Just like the interrogative pronouns for people and things, the location interrogative pronoun can occur with the adverb gu<sup>31</sup> ‘also’ to turn it into an indefinite location pronoun, and it can be reduplicated to indicate plurality. The interrogative pronoun for quantity is k<sup>h</sup>a<sup>55</sup>ɕan<sup>31</sup> ‘how much/many’. It is made up of the interrogative morpheme k<sup>h</sup>a<sup>55</sup> and the indefinite number ɕan<sup>31</sup> ‘several’. The interrogative pronoun for quality, state, or appearance is k<sup>h</sup>a<sup>31</sup>di<sup>55</sup>, which is made up of the interrogative morpheme k<sup>h</sup>a<sup>31</sup> and the abstract noun di<sup>55</sup> ‘circumstance/kind/state’.

#### (4) Reflexive Pronouns

The reflexive pronoun in Anong is ŋ<sup>31</sup>luŋ<sup>55</sup>ŋ<sup>31</sup> ‘self’. It can occur alone as a constituent of a sentence. The ending ŋ<sup>31</sup> is often deleted.

ŋ<sup>31</sup>    ga<sup>31</sup>mu<sup>31</sup>    ŋ<sup>31</sup>luŋ<sup>55</sup>    dzɛn<sup>55</sup>    -u<sup>31</sup>  
 he    clothes    REFL    wash    -MOOD  
 ‘He washes his own clothes.’

The reflexive pronoun can co-occur with a pronoun. However, both the prefix ŋ<sup>31</sup> and the suffix ŋ<sup>31</sup> must be deleted.

ɑ <sup>31</sup> io <sup>31</sup> luŋ <sup>55</sup>	‘myself’
ɑ <sup>31</sup> iuuŋ <sup>55</sup> si <sup>31</sup> luŋ <sup>55</sup>	‘ourselves (dual)’
ɑ <sup>31</sup> iuuŋ <sup>55</sup> luŋ <sup>55</sup>	‘ourselves’
ŋɑ <sup>31</sup> luŋ <sup>55</sup>	‘yourself’
ŋɛ <sup>31</sup> ŋuuŋ <sup>55</sup> si <sup>31</sup> luŋ <sup>55</sup>	‘yourselves (dual)’
ŋɛ <sup>31</sup> ŋuuŋ <sup>55</sup>	‘yourselves’
ŋ <sup>31</sup> luŋ <sup>55</sup>	‘himself’
ŋ <sup>31</sup> ŋuuŋ <sup>55</sup> si <sup>31</sup> luŋ <sup>55</sup>	‘themselves (dual)’
ŋ <sup>31</sup> ŋuuŋ <sup>55</sup> luŋ <sup>55</sup>	‘themselves’

### (5) *Indefinite Pronouns*

There are two indefinite pronouns in Anong ɑ<sup>31</sup>ts<sup>h</sup>ɑŋ<sup>31</sup> or ɑ<sup>31</sup>ts<sup>h</sup>ɑŋ<sup>31</sup>tʂ<sup>h</sup>ŋ<sup>55</sup> ‘somebody’, and the other one is ɑ<sup>31</sup>ɖɑŋ<sup>55</sup> ‘everybody’.

ia <sup>55</sup>	nu <sup>55</sup> ɑ <sup>55</sup>	ɑ <sup>31</sup> ts <sup>h</sup> ɑŋ <sup>31</sup>	k <sup>h</sup> ɑ <sup>31</sup>	ie <sup>55</sup>
this	DEF	somebody	POSS	be
‘This is somebody else’s.’				

ɑ <sup>31</sup> ts <sup>h</sup> ɑŋ <sup>31</sup> tʂ <sup>h</sup> ŋ <sup>55</sup>	m̩ <sup>31</sup> -	ɛm <sup>55</sup>	-nu <sup>31</sup>
somebody	NEG-	eat	-MOOD
‘Somebody has not eaten yet.’			

ŋɑ <sup>31</sup>	ɑ <sup>31</sup> ɖɑŋ <sup>55</sup>	bɑ <sup>31</sup>	ŋɑ <sup>31</sup>	t <sup>h</sup> im <sup>55</sup>
you	everybody	DO	2SG-	speak
‘You speak to everybody.’				

#### 4.1.5. *Verbs*

Verbs in Anong are marked for person, number, aspect, voice, mood, and direction using prefixes, suffixes, root internal changes of initial, final and tone, and reduplication.

##### (1) *Person and Number*

In Anong, a verb must agree in person and number with its subject. The agreement is marked through affixation. The verb k<sup>h</sup>i<sup>55</sup> ‘bite; gnaw’ is used below to illustrate Anong agreement marking.<sup>3</sup>

<sup>3</sup> The citation form for verbs is, as LaPolla (2000:284) has noted for closely-related Rawang, the third-person non-past affirmative/declarative form.

Table 19: Agreement on the verb

	Singular	Dual	Plural
1	k <sup>h</sup> iŋ <sup>55</sup>	k <sup>h</sup> i <sup>55</sup> se <sup>55</sup>	k <sup>h</sup> i <sup>55</sup> i
2	ŋ <sup>31</sup> k <sup>h</sup> i <sup>55</sup>	ŋ <sup>31</sup> k <sup>h</sup> i <sup>55</sup> se <sup>55</sup>	ŋ <sup>31</sup> k <sup>h</sup> i <sup>55</sup> ŋu <sup>31</sup>
3	k <sup>h</sup> i <sup>55</sup>	k <sup>h</sup> i <sup>55</sup>	k <sup>h</sup> i <sup>55</sup>

1) The first person singular marker on the verb is the suffix -ŋ, which comes from the first person pronoun through the grammaticalization process, and has been fused onto the verb root. When the verb ends in a vowel, the suffix becomes part of the final. When the verb ends in a consonant, the final remains unchanged but the tone changes from a level tone to a rising tone. When the verb ends in a glottal stop, then the suffix comes before the glottal stop (e.g. ŋ<sup>31</sup>gaŋ<sup>55</sup> ‘dry (clothes)’ vs. sŋ<sup>31</sup>gaŋ<sup>55</sup>/sŋ<sup>31</sup>kaŋ<sup>55</sup> ‘cause to dry (clothes)’). As part of the final of a verb, the suffix ŋ<sup>31</sup> is in the process of weakening, being realized through nasalization of the preceding vowel. Sometimes it also causes the vowel in the morpheme that follows it to become nasalized.

2) Second person singular is marked by the prefix ŋ, which comes from the second person pronoun through the process of grammaticalization. It is sometimes realized as ŋu<sup>31</sup>.

3) Third person marking is zero for singular, dual, and plural.

4) First person dual is marked by the suffix se<sup>55</sup>, which is sometimes realized as so<sup>33</sup>. Notice that both forms have the initial [s]. We believe that both forms are grammaticalized variants of the dual marker si<sup>31</sup> for personal pronouns. Anong has a homophonous aspect marker se<sup>55</sup>, which often occurs with a low falling tone.

5) Second person dual is marked by the prefix ŋ and the suffix se<sup>55</sup> or so<sup>33</sup> on the verb. The prefix marks person while the suffix marks number.

6) First person plural is marked by the suffix i<sup>31</sup>. The origin of i<sup>31</sup> is difficult to ascertain. It may be connected to the first person pronoun. It is noteworthy that in all of the Tibeto-Burman languages that have person marking, the first person plural markers are related to either i<sup>31</sup> or a vowel similar to it. This is not a coincidence. It could be an indication that they are all cognates.

7) Second person plural is marked by the prefix ŋ<sup>31</sup> and the suffix ŋu<sup>31</sup> on the verb, both of which come from second person pronouns. Using person marking to indicate plural is not unique to Anong. This

kind of marking is almost universal among Tibeto-Burman languages that retain the person marking category.

8) It was mentioned earlier that Anong has the inclusive and exclusive distinction for first person dual and plural. In the examples given in Table 20, the marking for first person dual and plural are examples for exclusive dual and plural in the first person. The dual inclusive marker is the suffix  $\eta^{31}$ . For first person plural inclusive, the marker is the same as the marker for first person plural exclusive.

The copula verb in Anong is also marked for person, but it has its own patterns. The affirmative form of the copula is  $ie^{33}$ , which does not inflect for person. The negative form of the copula, however, inflects for person and number. The negative marker  $m^{31}$  is fused with the prefix in second person to be part of the same syllable.

Table 20: Agreement marking on the copula

	Singular Affirmative	Negative	Dual Affirmative	Negative	Plural Affirmative	Negative
1	$ie^{33}$	$m^{31}z\eta\eta^{55}$	$ie^{33}$	$m^{31}z\eta^{55}se^{55}$	$ie^{33}$	$m^{31}z\eta^{55}i^{55}$
2	$ie^{33}$	$m\mu\eta\eta^{31}z\eta^{55}$	$ie^{33}$	$m\mu\eta\eta^{31}z\eta^{55}se^{55}$	$ie^{33}$	$m\mu\eta\eta^{31}z\eta^{55}\eta\mu^{31}$
3	$ie^{33}$	$m^{31}z\eta^{55}$	$ie^{33}$	$m^{31}z\eta^{55}$	$ie^{33}$	$m^{31}z\eta^{55}$

It should be pointed out that the negative form of the copula  $z\eta^{55}$  can also be used as the affirmative form, although the affirmative form of the copula  $ie^{33}$  can not be used in place of the negative form.

9) Inverse marking. Anong has SVO word order, and the verb most often agrees with the subject in person and number. Sometimes, however, the verb has to agree with the object and its modifier in person and number. Specifically, when the subject is third person, and the object and its modifier are in first or second person, the verb must agree with the object or its modifier in person and number. This pattern is exemplified as follows with the verbs  $p^h\alpha^{53}$  'sew' and  $\alpha^{31}\eta\epsilon^{33}$  'hit (a person)' when the subject is third person.

Table 21: Inverse marking

Subject	Object	‘sew’	‘hit; beat’
3	1SG	ŋ <sup>31</sup> p <sup>h</sup> aŋ <sup>53</sup> ẽ <sup>31</sup>	ŋa <sup>31</sup> ŋeŋ <sup>35</sup> ẽ <sup>31</sup>
3	1DU	ŋ <sup>31</sup> p <sup>h</sup> a <sup>53</sup> se <sup>55</sup> ua <sup>31</sup>	ŋa <sup>31</sup> ŋe <sup>35</sup> se <sup>55</sup> ua <sup>31</sup>
3	1PL	ŋ <sup>31</sup> p <sup>h</sup> a <sup>53</sup> i <sup>55</sup> ua <sup>31</sup>	ŋa <sup>31</sup> ŋe <sup>35</sup> i <sup>55</sup> ua <sup>31</sup>
3	2SG	ŋ <sup>31</sup> p <sup>h</sup> a <sup>53</sup> e <sup>31</sup>	ŋa <sup>31</sup> ŋe <sup>35</sup> e <sup>31</sup>
3	2DU	ŋ <sup>31</sup> p <sup>h</sup> a <sup>53</sup> se <sup>55</sup> ua <sup>31</sup>	ŋa <sup>31</sup> ŋe <sup>35</sup> se <sup>55</sup> ua <sup>31</sup>
3	2PL	ŋ <sup>31</sup> p <sup>h</sup> a <sup>53</sup> ŋu <sup>31</sup> ua <sup>31</sup>	ŋa <sup>31</sup> ŋe <sup>35</sup> ŋu <sup>31</sup> ua <sup>31</sup>

The examples above show that when the subject is third person, and the object is first or second person, the subject must agree with the object in person. But another difference is that the verb takes the prefix ŋ<sup>31</sup>, which is a very productive prefix in Anong.

The affixes on the verb follow predictable rules in pronunciation. For instance, when a verb root ends in a nasal consonant, it combines with the vowel suffix to form a syllable, as is illustrated below.

Verb	Verb+1PL	Pronunciation
em <sup>53</sup> ‘eat’	em <sup>53</sup> i <sup>31</sup> ‘we eat’	ε <sup>53</sup> mi <sup>31</sup>
çin <sup>53</sup> ‘poke’	çin <sup>53</sup> i <sup>31</sup> ‘we poke’	çi <sup>53</sup> ni <sup>31</sup>
aŋ <sup>53</sup> ‘drink’	aŋ <sup>53</sup> i <sup>31</sup> ‘we drink’	a <sup>53</sup> ni <sup>31</sup>

When the verb root ends in a nasalized vowel, then the suffixal vowel becomes nasalized as well.

Verb	Verb+1PL	Pronunciation
di <sup>31</sup> dzã <sup>31</sup> ‘taste’	di <sup>31</sup> dzã <sup>31</sup> i <sup>31</sup>	di <sup>31</sup> dzã <sup>31</sup> ɿ <sup>31</sup>
k <sup>h</sup> ẽ <sup>31</sup> ‘pull’	k <sup>h</sup> ẽ <sup>31</sup> i <sup>31</sup>	k <sup>h</sup> ẽ <sup>31</sup> ɿ <sup>31</sup>
t <sup>h</sup> ã <sup>31</sup> ‘sew (button)’	t <sup>h</sup> ã <sup>31</sup> i <sup>31</sup>	t <sup>h</sup> ã <sup>31</sup> ɿ <sup>31</sup>

For verbs that either begin with a vowel or with the prefix a<sup>31</sup>, the second person prefix ŋ<sup>31</sup> combines with a<sup>31</sup> to form a syllable or it becomes the onset of the verb root.

	α <sup>31</sup> suw <sup>31</sup> ‘select (seeds)’	α <sup>31</sup> p <sup>h</sup> u <sup>31</sup> ‘blow (on fire)’	εm <sup>53</sup> ‘eat’
2SG	ηα <sup>31</sup> suw <sup>31</sup>	ηα <sup>31</sup> p <sup>h</sup> u <sup>31</sup>	ηεm <sup>53</sup>
2DU	ηα <sup>31</sup> suw <sup>31</sup> se <sup>55</sup>	ηα <sup>31</sup> p <sup>h</sup> u <sup>31</sup> se <sup>55</sup>	ηεm <sup>53</sup> se <sup>55</sup>
2PL	ηα <sup>31</sup> suw <sup>31</sup> ηu <sup>31</sup>	ηα <sup>31</sup> p <sup>h</sup> u <sup>31</sup> ηu <sup>31</sup>	ηεm <sup>53</sup> ηu <sup>31</sup>

There are some other pronunciation changes, such as tonal changes. But the conditions governing those changes are quite complex. We will not go into detail about those changes here.

## (2) Aspect

Aspect is marked by suffixes on the verb. Anong has future progressive, present progressive, perfect, experiential, and perfective aspects.

### (A) Future Progressive

Future progressive is marked by the suffix buw<sup>55</sup> or ua<sup>55</sup> on the verb. The former can occur with first, second or third person, but the latter can only occur with the third person. Also, buw<sup>55</sup> indicates eye-witnessed or first-hand events (FUT.FH) while ua<sup>55</sup> indicates non-eye-witnessed or hearsay events (FUT.HS). Anong has a declarative mood suffix ε<sup>55</sup>/ε<sup>31</sup>, which is also used to mark present progressive when used alone. It can co-occur with any aspect marker to indicate declarative mood.

α <sup>31</sup> io <sup>31</sup>	α <sup>55</sup>	[oŋ] <sup>55</sup>	buw <sup>55</sup>	-ε <sup>55</sup>	
I	DEF	return.1SG	FUT.FH	-IND	
‘I am going back.’					
η <sup>31</sup> ηuŋ <sup>55</sup>	k <sup>h</sup> εn <sup>33</sup>	ven <sup>35</sup>	-ε <sup>55</sup>	-ua <sup>55</sup>	
they	vegetable	buy	-IND	-FUT.HS	
‘They are going to buy vegetables (hearsay).’					

### (B) Present Progressive

Present progressive is marked by the suffix ε<sup>55</sup> or no<sup>31</sup>ε<sup>55</sup> on the verb.

mo <sup>55</sup> do <sup>55</sup>	duw <sup>31</sup> ba <sup>31</sup>	[ <sup>h</sup> αŋ] <sup>55</sup>	-k <sup>h</sup> α <sup>31</sup>	α <sup>31</sup> iaŋ <sup>35</sup>	-si <sup>31</sup>	α <sup>31</sup> gu <sup>55</sup>	-ε <sup>55</sup> .
car	bridge	on.top.of	-LOC	slow	-ADV	CROSS	-IND
‘The car is slowly crossing the bridge.’							
η <sup>31</sup> ηuŋ <sup>55</sup>	tɕ <sup>h</sup> im <sup>31</sup>	k <sup>h</sup> α <sup>31</sup>	la <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>55</sup>	α <sup>31</sup> t <sup>h</sup> i <sup>31</sup> zɿn <sup>31</sup> sa <sup>55</sup>	no <sup>31</sup> -ε <sup>31</sup>		
they	home	POSS	door	latch	ASP-IND		
‘The door to their house is latched.’ (i.e. in the state of being latched.)							

## (C) Perfect Progressive

Perfect progressive is marked by the suffix  $d\zeta\epsilon^{31}/d\zeta u^{31}/d\zeta i^{31}$  on the verb. This marking indicates that the event has already been in progress or a resultant state is being realized. It does not emphasize its telicity, i.e. its endpoint. The marker varies in form in sentences with pronominal subjects. Person marking usually occurs before the aspect marker. (See the section on person and number marking on verbs for details.)

$a^{31}io^{31}$   $a^{55}$   $\zeta a^{33}$   $t^h i^{31}$   $gam^{55}$   $ven^{35}$   $d\zeta u\eta^{31}$   $-a^{31}$   
 I DEF meat one catty buy EXP.1SG -PST  
 'I bought one catty of meat.'

$ts^h \eta^{31}$   $d\zeta a\eta^{55}$   $a^{31}d\zeta\epsilon^{31}$   
 rain fall EXP  
 'It is already raining.'

## (D) Experiential Aspect

Experiential aspect is marked by the suffix  $-ie^{31}$ . It indicates that the event has happened or used to take place. Sometimes it is used to convey the sense that the speaker experienced it in the past.

$\eta a^{31}$   $pei^{31}t\epsilon in^{55}$   $d\zeta\epsilon^{53}bu\eta^{55}$   $-ie^{31}$   
 I Beijing go -ASP  
 'I have been to Beijing.'

$\eta^{31}$   $a^{55}$   $a^{31}din^{55}$   $\zeta a^{33}$   $k^h i^{55}$   $-\epsilon^{31}$   $-ie^{31}$   
 he DEF rat meat bite -IND -ASP  
 'He has eaten rat meat.'

## (E) Perfective Aspect

Perfective Aspect is marked by  $t^h a\eta^{55}$  on the verb to indicate that the event was not only already in progress but has been completed as well. The perfective aspect marker  $t^h a\eta^{55}$  is often used in combination with the perfect progressive aspect.

$\eta^{31}$   $a^{55}$   $a^{31}g\eta^{55}t\zeta^h \eta^{31}$   $\epsilon m^{55}$   $t^h a\eta^{55}$   $d\zeta\epsilon^{31}$   $-\epsilon^{55}$   
 he DEF food eat ASP ASP -IND  
 'He has finished eating the food/meal.'

$m^{31}d\zeta\eta n^{55}s\eta n^{31}$   $a^{31}d a\eta^{55}$   $a^{31}k^h o m^{55}$   $t^h a\eta^{55}$   $d\zeta\epsilon^{31}$   $-\epsilon^{55}$   
 crops all harvest ASP ASP -IND  
 'All crops have been harvested.'



(3) *Voice*

Anong has reflexive (middle), causative, and reciprocal voices marked by prefixes, suffixes, and verb root internal changes.

## (A) Reflexive

The reflexive is marked by the suffix  $\text{ɕu}^{31}$  on the verb. The marker has two variants  $\text{ɕɿ}^{31}$  and  $\text{sɛ}^{31}$ . Reflexive marking<sup>4</sup> is no longer productive in Anong. In some cases, it has been fossilized with the verb root. The first person singular form is  $\text{ɕuŋ}^{31}$  and the second singular form can be either  $\text{ɕɿ}^{31}$  or  $\text{sɛ}^{31}$ . It has no special forms for dual and plural. In other words, the regular person and number markers for dual and plural are used.

verb		first person	second person
$\text{dzɛn}^{31}$	‘wash (clothes)’	$\text{dzɛn}^{31}\text{ɕuŋ}^{31}$	$\text{dzɛn}^{31}\text{ɕɿ}^{31}$
$\text{san}^{55}$	‘kill’	$\text{san}^{55}\text{ɕuŋ}^{31}$	$\text{san}^{55}\text{sɛ}^{31}$ ( $\text{ɕɿ}^{31}$ )
$\text{tɕ}^{\text{h}}\text{aŋ}^{55}$	‘comb (hair)’	$\text{tɕ}^{\text{h}}\text{aŋ}^{55}\text{ɕuŋ}^{31}$	$\text{tɕ}^{\text{h}}\text{aŋ}^{55}\text{ɕɿ}^{31}$ ( $\text{sɛ}^{31}$ )
$\text{gua}^{31}$	‘put on (clothes)’	$\text{gua}^{31}\text{ɕuŋ}^{31}$	$\text{gua}^{31}\text{ɕɿ}^{31}$

## (B) Causative

Causatives are marked by prefixes or devoicing of the initial consonant in some verb roots.

a) The prefix  $\text{sɿ}^{31}$  is used to mark causative. It has several phonetically determined variants. Verbs containing vowels such as a, o, u, or u take  $\text{sɿ}^{31}$ .  $\text{sɛ}^{31}$  occurs before verbs containing the vowel e.  $\text{ɕi}^{31}$  occurs before verbs with either a palatal consonant in the initial position or with the high front vowel i. This last form is clearly a result of place of articulation assimilation. This is the main causative marker in Anong, which is a reflex of the proto-Tibeto-Burman causative marker. However, it is not very productive in Anong.

<sup>4</sup> Anong reflexive marking seems to include some middle marking (see LaPolla 2004), or fossilized remains of middle marking.

	Verb	Causative verb
'adhere'	ga <sup>55</sup>	sɿ <sup>31</sup> ga <sup>55</sup>
'eat'	ɛm <sup>53</sup>	sɛ <sup>31</sup> ɛm <sup>53</sup>
'bite (dog)'	dʒuŋ <sup>53</sup>	ɕi <sup>31</sup> dʒuŋ <sup>53</sup>
'break'	t <sup>h</sup> o <sup>55</sup> da <sup>55</sup>	sɿ <sup>31</sup> t <sup>h</sup> o <sup>55</sup> da <sup>55</sup>

b) Some of the verbs with either a lateral liquid or a nasal consonant in the initial position, the initial consonant becomes devoiced in the causative forms.

	Verb	Causative verb
'bury'	lim <sup>55</sup>	ɬim <sup>55</sup> (sɿ <sup>31</sup> lim <sup>55</sup> )
'fill'	naŋ <sup>55</sup>	naŋ <sup>55</sup> (sɿ <sup>31</sup> naŋ <sup>55</sup> )
'sleep'	ɲim <sup>55</sup>	ɲim <sup>55</sup> (sɿ <sup>31</sup> ɲim <sup>55</sup> )
'cry'	ɲu <sup>55</sup>	ɲu <sup>55</sup> (sɿ <sup>31</sup> ɲu <sup>55</sup> )

c) Another causative prefix is du<sup>31</sup> which has a variant form di<sup>31</sup>.

	Verb	Causative verb
'hatch'	bu <sup>m</sup> <sup>55</sup>	du <sup>31</sup> bu <sup>m</sup> <sup>55</sup>
'melt'	gɿ <sup>55</sup>	du <sup>31</sup> gɿ <sup>55</sup>
'rot'	bu <sup>m</sup> <sup>55</sup>	du <sup>31</sup> bu <sup>m</sup> <sup>55</sup>
'put on (clothes)'	gu <sup>d</sup> <sup>31</sup>	du <sup>31</sup> gu <sup>d</sup> <sup>31</sup>

d) Anong has some other causative prefixes, which have the same function as sɿ<sup>31</sup> and du<sup>31</sup>. But they have a very low frequency of occurrence. Whether these are just exceptions or not is still unknown. Further investigation is needed to have a clear understanding of these prefixes.

	Verb	Causative verb
'fall (wall)'	dim <sup>55</sup>	bu <sup>31</sup> dim <sup>55</sup> (ɕi <sup>31</sup> dim <sup>55</sup> )
'flat'	ɑ <sup>31</sup> dʒɑ <sup>31</sup>	p <sup>h</sup> ɑ <sup>55</sup> dʒɑ <sup>31</sup>
'sour'	m <sup>31</sup> tɕ <sup>h</sup> u <sup>m</sup> <sup>55</sup>	p <sup>h</sup> ɑ <sup>m</sup> <sup>31</sup> tɕ <sup>h</sup> u <sup>m</sup> <sup>55</sup>

The first form above, takes either bu<sup>31</sup> or ɕi<sup>31</sup> as the causative marker. In the other two examples under (d), the prefix p<sup>h</sup>ɑ<sup>55</sup> came from the

combination of p<sup>h</sup>u<sup>31</sup> with the prefix a<sup>31</sup> and p<sup>h</sup>u<sup>31</sup> with a<sup>31</sup> and m<sup>31</sup> respectively, and the causative markers being p<sup>h</sup>a<sup>31</sup> and p<sup>h</sup>am<sup>31</sup>.

### (C) Reciprocals

Reciprocals are marked by the prefix a<sup>31</sup>-.

	Verb	Reciprocal verb	
‘shoot’	vam <sup>55</sup>	a <sup>31</sup> vam <sup>55</sup>	‘shoot each other’
‘miss’	ts <sup>h</sup> om <sup>55</sup>	a <sup>31</sup> ts <sup>h</sup> om <sup>55</sup>	‘miss each other’
‘ask’	zɿn <sup>53</sup>	a <sup>31</sup> zɿn <sup>53</sup>	‘ask each other’
‘pull’	ʂan <sup>33</sup>	a <sup>31</sup> ʂan <sup>33</sup>	‘pull each other’

There are some words that have an inherent reciprocal meaning, and they all have the prefix a<sup>31</sup>-. This could be an indication that this grammatical marker is moving in the direction of becoming a derivational morpheme. The following are some examples.

a <sup>31</sup> tɕ <sup>h</sup> iŋ <sup>31</sup>	‘exchange’
a <sup>31</sup> gʷŋ <sup>55</sup>	‘discuss’
a <sup>31</sup> p <sup>h</sup> u <sup>55</sup>	‘bump each other’
a <sup>31</sup> ŋɛ <sup>31</sup>	‘fight’
a <sup>31</sup> k <sup>h</sup> aŋ <sup>55</sup>	‘divorce’
a <sup>31</sup> vam <sup>55</sup>	‘battle’
a <sup>31</sup> tan <sup>55</sup>	‘wrestle’
a <sup>31</sup> ɿu <sup>55</sup>	‘copulate’
a <sup>31</sup> lin <sup>55</sup>	‘compete’

Also, reciprocal and causative markers can occur on the same verb, which is illustrated by the following examples.

a<sup>31</sup>    ɕi<sup>31</sup>    dʒʷŋ<sup>31</sup>  
 RECIP CAUS believe  
 ‘cause to believe each other’

a<sup>31</sup>    sɿ<sup>31</sup>    ga<sup>55</sup>  
 RECIP CAUS glue  
 ‘make stick to each other’

a<sup>31</sup>    ɕi<sup>31</sup>    ŋʷŋ<sup>55</sup>(ŋʷŋ<sup>55</sup>)  
 RECIP CAUS rub  
 ‘make rub each other’

## (D) Mood

Mood in Anong is marked either through an utterance final particle or a morphological marker on the verb. Anong has indicative, imperative, and directional moods, marked by affixation, or voicing alternations of the initials of verb roots.

## 1) Indicative mood

The indicative mood in Anong is marked by the suffix  $\epsilon^{55}$  or  $\epsilon^{31}$  on the verb.<sup>5</sup> If another marker is also present, the combination will include progressive in its meaning.

$p^h a^{55} dza^{55} ma^{31} a^{31}$        $g\eta^{55} t\eta^{h 31}$        $\epsilon m^{53}$        $-\epsilon^{31}$ .  
 older brother    DEF    porridge    eat-    IND  
 ‘Older brother is eating porridge.’

$\eta^{31}$        $a^{31}$        $bu^{55} dza^{31}$        $k^h in^{31}$        $-\epsilon^{31}$   
 he      DEF      food      boil      -IND  
 ‘He is cooking food.’

## 2) Imperative

The imperative is often used to issue a command to the person the speaker is speaking to. Therefore, in Tibeto-Burman languages, the imperative is related to second person markings. The imperative in Anong has singular, dual, and plural forms marked by affixation, and, for some verbs, alternation in the voicing of the initials.

a) When the initial is a voiceless consonant, or a voiced stop/affricate, or a consonant cluster, it remains unchanged, and the imperative is marked by the suffix  $o^{31}$  for singular,  $so^{31}$  for dual, and  $\eta o^{31}$  for plural.

Root	Singular	Dual	Plural	
$dzam^{55}$	$dzam^{55} o^{31}$	$dzam^{55} so^{31}$	$dzam^{55} \eta o^{31}$	‘glue’
$bi^{31}$	$bi^{31} o^{31}$	$bi^{31} so^{31}$	$bi^{31} \eta o^{31}$	‘cut (meat)’
$x.\eta u\eta^{53}$	$x.\eta u\eta^{53} o^{31}$	$x.\eta u\eta^{53} so^{31}$	$x.\eta u\eta^{53} \eta o^{31}$	‘sift’

The singular imperative marker often blends with the verb or suffix. For instance,  $dzam^{55} o^{31}$  is pronounced as  $dza^{55} mo^{31}$ ,  $bi^{31} o^{31}$  as  $bio^{31}$  and  $x.\eta u\eta^{53} o^{31}$  as  $x.\eta u^{53} \eta o^{31}$ . The same rule applies to the examples below.

<sup>5</sup> The tonal variation is not unexpected. Work is needed on the nuances of the tense-aspect marking.

b) If the initial of the verb root is a voiced fricative, a voiced nasal, or a voiced lateral, then it is devoiced in the imperative form. The suffixes are the same.

Root	Singular	Dual	Plural	
ve <sup>31</sup>	fe <sup>31</sup> o <sup>31</sup>	fe <sup>31</sup> so <sup>31</sup>	fe <sup>31</sup> ηo <sup>31</sup>	‘light (lamp)’
zɪn <sup>53</sup>	sɪn <sup>53</sup> o <sup>31</sup>	sɪn <sup>53</sup> so <sup>31</sup>	sɪn <sup>53</sup> ηo <sup>31</sup>	‘ask’
ηem <sup>33</sup>	ηem <sup>33</sup> o <sup>31</sup>	ηem <sup>33</sup> so <sup>31</sup>	ηem <sup>33</sup> ηo <sup>31</sup>	‘sell’
mɛŋ <sup>35</sup>	mɛŋ <sup>35</sup> o <sup>31</sup>	mɛŋ <sup>35</sup> so <sup>31</sup>	mɛŋ <sup>35</sup> ηo <sup>31</sup>	‘dig’
laŋ <sup>55</sup>	ɬaŋ <sup>55</sup> o <sup>31</sup>	ɬaŋ <sup>55</sup> so <sup>31</sup>	ɬaŋ <sup>55</sup> ηo <sup>31</sup>	‘lick’

c) If the verb root begins with a vowel, the prefix must be added in addition to the imperative marker. In pronunciation, this prefix weakens to just the consonant which then blends with the vowel that follows it to form a syllable.

	aŋ <sup>55</sup>	‘drink’	
Singular	p <sup>h</sup> u <sup>31</sup> aŋ <sup>55</sup> o <sup>31</sup>		(pronounced as: p <sup>h</sup> a <sup>55</sup> ηo <sup>31</sup> )
Dual	p <sup>h</sup> u <sup>31</sup> aŋ <sup>55</sup> so <sup>31</sup>		(pronounced as: p <sup>h</sup> aŋ <sup>55</sup> so <sup>31</sup> )
Plural	p <sup>h</sup> u <sup>31</sup> aŋ <sup>55</sup> ηo <sup>31</sup>		(pronounced as: p <sup>h</sup> aŋ <sup>55</sup> ηo <sup>31</sup> )
a <sup>31</sup> dza <sup>55</sup>		‘chop’	
Singular	p <sup>h</sup> u <sup>31</sup> a <sup>31</sup> dza <sup>55</sup> o <sup>31</sup>		(pronounced as: p <sup>h</sup> a <sup>31</sup> dza <sup>55</sup> o <sup>31</sup> )
Dual	p <sup>h</sup> u <sup>31</sup> a <sup>31</sup> dza <sup>55</sup> so <sup>31</sup>		(pronounced as: p <sup>h</sup> a <sup>31</sup> dza <sup>55</sup> so <sup>31</sup> )
Plural	p <sup>h</sup> u <sup>31</sup> a <sup>31</sup> dza <sup>55</sup> ηo <sup>31</sup>		(pronounced as: p <sup>h</sup> a <sup>31</sup> dza <sup>55</sup> )
ɛm <sup>53</sup>		‘eat’	
Singular	p <sup>h</sup> u <sup>31</sup> ɛm <sup>53</sup> o <sup>31</sup>		(pronounced as: p <sup>h</sup> ɛ <sup>53</sup> mo <sup>31</sup> )
Dual	p <sup>h</sup> u <sup>31</sup> ɛm <sup>53</sup> so <sup>31</sup>		(pronounced as: p <sup>h</sup> ɛm <sup>53</sup> so <sup>31</sup> )
Plural	p <sup>h</sup> u <sup>31</sup> ɛm <sup>53</sup> ηo <sup>31</sup>		(pronounced as: p <sup>h</sup> ɛm <sup>53</sup> ηo <sup>31</sup> )

d) When the verb begins with a diphthong that has [i] as its first element, [i] becomes ɕ in the imperative forms. The [ɕ] may have come from [s]. In any case, the alternation lacks an explanation.

Root	Singular	Dual	Plural	
ien <sup>55</sup>	ɕɛn <sup>55</sup> o <sup>31</sup>	ɕɛn <sup>55</sup> so <sup>31</sup>	ɕɛn <sup>55</sup> ηo <sup>31</sup>	‘escape’
ian <sup>55</sup>	ɕaŋ <sup>55</sup> o <sup>31</sup>	ɕaŋ <sup>55</sup> so <sup>31</sup>	ɕaŋ <sup>55</sup> ηo <sup>31</sup>	‘yell’

## 3) Optative

Anong has two types of optative. One is marked by the prefix  $l\epsilon^{55}$  and the other is marked by the prefix  $l\alpha^{31}$ , in addition to the imperative markers, the sentence ends with the utterance final particle  $lie^{31}$  in both cases.

$a^{31}io^{31}$   $a^{55}$   $l\epsilon^{55}$   $d\zeta\alpha\eta^{55}$   $o^{31}$   $lie^{31}$   
 I DEF OPT look IMP.SG OPT  
 ‘Please let me take a look.’

$a^{31}io^{31}$   $a^{55}$   $t^hi^{55}$   $so^{31}$   $l\epsilon^{55}$   $di^{31}g\tilde{a}^{55}$   $o^{31}$   $lie^{31}$   
 I DEF one CLF OPT rest IMP.SG OPT  
 ‘Please let me take a rest.’

$\eta^{31}$   $l\alpha^{31}$   $d\zeta\epsilon n^{55}$   $o^{31}$   $lie^{31}$   
 he OPT wash IMP.SG OPT  
 ‘Please let them wash.’

$\eta\alpha^{31}$   $a^{55}$   $z\eta^{55}$   $m^{31}$   $-d\zeta o^{31}$   $d\zeta\alpha^{31}$ ,  
 you DEF carry.on.back NEG- walk CONJ

$\eta^{31}$   $l\alpha^{55}$   $z\eta^{55}$   $\eta\eta^{31}$   $du^{31}gu^{55}$   $o^{31}$   $lie^{31}$   
 he OPT carry.on.back 2SG help IMP.SG OPT  
 ‘Please let him help you carry (it), if you cannot carry (it).’

## (E) Directional Markers on Verbs

The Anong people live in the mountains and valleys. Therefore, their actions and activities are marked for directions through a variety of suffixes based on the location and orientation of rivers and mountains. The suffixes can be divided into two categories, centrifugal vs centripetal, dependent on the speaker’s perspective. The suffixes came from full fledged lexical items, the original meanings of some of which are still retained, which can be seen in the examples below.

1) Motion toward the center of action (usually the place of the speech act) is marked by the suffixes  $a^{31}ie^{55}$ ,  $a^{31}na^{55}$ ,  $a^{31}da^{55}$ , and  $l\alpha^{31}$  on the verb. Their grammatical functions and meanings are illustrated using the verb  $z\eta^{55}$  ‘carry on back’.

$z\eta^{55} a^{31}ie^{55}$  ‘carry on back hither (level ground)’  
 $z\eta^{55} a^{31}na^{55}$  ‘carry on back up hither (from lower to higher ground)’  
 $z\eta^{55} a^{31}da^{55}$  ‘carry on back down hither (from higher to lower ground)’  
 $z\eta^{55} l\alpha^{31}$  ‘carry on back return hither (return to starting point)’

2) Motion away from the center of action (usually the speech act) is marked by the suffixes  $a^{31}ba^{55}$ ,  $a^{31}la^{31}$ ,  $ɖaŋ^{55}$ , and  $lu^{55}$  on the verb.

$zɿ^{55} a^{31}ba^{55}$	‘carry on back hither/away (away from point of origin)’
$zɿ^{55} a^{31}la^{31}$	‘carry on back down thither (from up a mountain/dwelling)’
$zɿ^{55} ɖaŋ^{55}$	‘carry on back up thither (from down a mountain/dwelling)’
$zɿ^{55} lu^{55}$	‘carry on back return thither (return to point of origin)’

When these directional suffixes co-occur with other grammatical markings, their finals inflect for person and number marking. We will again use the verb ‘carry on back’ to illustrate the inflections for future progressive and perfect progressive.

Table 22: Future progressive and perfect progressive

Subject	Future Progressive	Perfect Progressive
1SG	$zɿn^{55} a^{31}boŋ^{55}$	$zɿn^{55} a^{31}buŋ^{55} \tilde{a}^{31}$
2SG	$\eta^{31} zɿ^{55} a^{31}bo^{55}$	$\eta^{31} zɿ^{55} a^{31}ba^{31}$
3SG	$zɿ^{55} a^{31}bo^{31}$	$zɿ^{55} a^{31}ba^{31}$
1DU	$zɿ^{55} a^{31}bu^{55} so^{31}$	$zɿ^{55} a^{31}bu^{55} sa^{31}$
2DU	$\eta^{31} zɿ^{55} a^{31}bo^{55} so^{31}$	$\eta^{31} zɿ^{55} a^{31}bu^{55} sa^{31}$
3DU	$zɿ^{55} a^{31}bo^{31}$	$zɿ^{55} a^{31}ba^{31}$
1PL	$zɿ^{55} a^{31}bi^{55}$	$zɿ^{55} a^{31}bu^{55} a^{31}$
2PL	$\eta^{31} zɿ^{55} bo^{55} \eta u^{31}$	$\eta^{31} zɿ^{55} bu^{55} \eta u^{31} a^{31}$
3PL	$zɿ^{55} a^{31}bo^{31}$	$zɿ^{55} a^{31}ba^{31}$

There are several points to be noted about this set of examples. First, an alveolar nasal occurs on the verb in the first person singular forms for both future progressive and perfect progressive. The function and origin of this ending are still unknown, and will require further study. One possibility is that it is a variant of person marking resulting from double marking for person. Second, marking future progressive and perfect progressive through inflecting the suffix could be a remnant of changes in tense marking. So far, we do not have any other explanation for this kind of inflection. Third, in addition to the vowel change of the suffixes for the inflection, there is an accompanying tonal change in the form of an alternation between the high level and low falling tones. This is true with both the person and number markings and the

marking for aspect. We conjecture that this is an accompanying effect of combining various affixes and the intonation patterns.<sup>6</sup>

(F) Nominalization of verbs

Verbs and verb-object phrases can be turned into nominals through suffixation. The suffix on the verb-object phrase turns it into a noun meaning the thing used to V. The following are some examples.

1) dem<sup>55</sup> can be added to both verbs and verb-object phrases to turn them into nouns.

Verb		Noun	
em <sup>53</sup>	‘eat’	em <sup>53</sup> dem <sup>55</sup>	‘food’
aŋ <sup>55</sup>	‘drink’	aŋ <sup>55</sup> dem <sup>55</sup>	‘beverage’
dzaŋ <sup>55</sup>	‘look’	dzaŋ <sup>55</sup> dem <sup>55</sup>	‘something to read/look at/see’
dzom <sup>31</sup>	‘use’	dzom <sup>31</sup> dem <sup>55</sup>	‘something to use’
VO Phrase		V-O compound noun	
a <sup>31</sup> tshaŋ <sup>31</sup>	a <sup>31</sup> gi <sup>31</sup>	a <sup>31</sup> tshaŋ <sup>31</sup> a <sup>31</sup> gi <sup>31</sup> dem <sup>55</sup>	‘pole (for carrying people)’
person	carry		
bunŋ <sup>31</sup> a <sup>31</sup> dza <sup>55</sup>		bunŋ <sup>31</sup> a <sup>31</sup> dza <sup>55</sup> dem <sup>55</sup>	‘stamp, seal’
name	carve		

2) za<sup>55</sup> is added to a verb or verb-object phrase to create a noun to refer to the place where V-ing is taking place.

Verb		Noun	
ɲim <sup>55</sup>	‘sleep’	ɲim <sup>55</sup> za <sup>55</sup>	‘bed (place to sleep)’
di <sup>55</sup> gã <sup>55</sup>	‘rest’	di <sup>55</sup> gã <sup>55</sup> za <sup>55</sup>	‘place to rest (place to rest for horses)’
a <sup>55</sup> um <sup>55</sup>	‘forge (iron)’	a <sup>55</sup> um <sup>55</sup> za <sup>55</sup>	‘anvil (for blacksmith to fashion iron on)’
ɕan <sup>31</sup>	‘pump (water)’	ɕan <sup>31</sup> za <sup>55</sup>	‘pump (place to pump water)’

<sup>6</sup> The tense-aspect-agreement system is still far from being fully understood.



VO phrase	V-O compound	
mu <sup>31</sup> dza <sup>31</sup> t <sup>h</sup> am <sup>55</sup> grain beat	mu <sup>31</sup> dza <sup>31</sup> t <sup>h</sup> am <sup>55</sup> za <sup>55</sup>	‘thrashing ground’
ni <sup>31</sup> na <sup>31</sup> sɿ <sup>33</sup> la <sup>55</sup> animal graze	ni <sup>31</sup> na <sup>31</sup> sɿ <sup>33</sup> la <sup>55</sup> za <sup>55</sup>	‘grazing land’

3) -su<sup>55</sup> is added to verbs or verb-object phrases to derive agentive nouns.

Verb	Noun		
tɕ <sup>h</sup> en <sup>33</sup>	‘study’	tɕ <sup>h</sup> en <sup>33</sup> su <sup>55</sup>	‘student, apprentice’
sɿ <sup>31</sup> lam <sup>55</sup>	‘teach’	sɿ <sup>31</sup> lam <sup>55</sup> su <sup>55</sup>	‘teacher, master’
di <sup>31</sup> ban <sup>31</sup>	‘help’	di <sup>31</sup> ban <sup>31</sup> su <sup>55</sup>	‘assistant’

VO phrase	V-O compound	
la <sup>31</sup> ma <sup>55</sup> ua <sup>33</sup> field do	la <sup>31</sup> ma <sup>55</sup> ua <sup>33</sup> su <sup>55</sup>	‘farmer’
la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> dzu <sup>33</sup> headman sit	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> dzu <sup>33</sup> su <sup>55</sup>	‘headman’

The same verb can take any one of the three suffixes to derive a noun.

Verb	Noun	
ɕuŋ <sup>55</sup> ua <sup>31</sup> (firewood + do)	ɕuŋ <sup>55</sup> ua <sup>31</sup> za <sup>55</sup>	‘place for gathering firewood’
ɕuŋ <sup>55</sup> ua <sup>31</sup> (firewood + do)	ɕuŋ <sup>55</sup> ua <sup>31</sup> su <sup>55</sup>	‘person who gathers firewood’
ɕuŋ <sup>55</sup> ua <sup>31</sup> (firewood + do)	ɕuŋ <sup>55</sup> ua <sup>31</sup> dem <sup>55</sup>	‘tool for gathering firewood’

#### (4) *The Copulas*

Like some of the Tibeto-Burman languages, Anong has several forms of the copula verb that occur in different contexts.

1) a<sup>31</sup>qa<sup>55</sup> occurs with inanimate and movable objects. Its negative form is ma<sup>31</sup>qa<sup>55</sup>.

$a^{31}io^{31}$   $ga^{31}mu^{31}$   $se^{55}$   $t^h_1^{55}$ -  $t^ham^{55}$   $a^{31}da^{55}$   $-e^{31}$ .  
 I clothes new one- CLF COP -IND  
 ‘I have an article of new clothing.’

Like the other verbs, the copula verb inflects for person and number, shown in the following table.

Table 23: Person and number on the copula  $a^{31}da^{55}$

	Singular	Dual	Plural
1	$a^{31}da^{55}$	$a^{31}da^{55} se^{31}$	$a^{31}da^{55} i^{31}$
2	$na^{31}da^{55}$	$na^{31}da^{55} se^{31}$	$na^{31}da^{55} nu^{31} a^{31}$
3	$a^{31}da^{55} e^{31}$	$a^{31}da^{55} e^{31}$	$a^{31}da^{55} e^{31}$

2)  $no^{55}$  occurs with animate entities, including entities that are considered to be animate by the speakers. Sometimes it is pronounced as  $no^{55}$ . Its negative form is  $mu^{31}no^{55}$ .

$a^{31}iu^{55}$   $t^him^{31}$   $ka^{35}$   $a^{31}ts^han^{31}$   $ph^an^{31}$ - $io^{55}$   $a^{31}si^{31}$   $no^{55}$   $-i^{31}$ .  
 we house LOC person five- CLF only COP 1PL  
 ‘There are only five people in our family.’

$a^{31}nu^{31}$   $ts^h_1^{55}$   $t^hu^{31}mu^{31}$   $ka^{31}$   $nu^{55}$   $no^{55}$   $-e^{31}$ .  
 Among nationality river LOC fish COP -IND  
 ‘There are fish in the Nu (Anong) River.’

This copula also inflects for person and number. Its inflected forms are similar to those of  $a^{31}da^{55}$ .

3)  $a^{31}ne^{55}$  occurs with abstract nouns and nouns that refer to an entity inside a container. This form of the copula does not seem to inflect for person and number. Its negative form  $mu^{31}e^{55}$  is also quite unusual. We suspect that the earlier form of this copula may have been  $an^{55}$ . Due to its frequent occurrence with the indicative particle  $e^{55}$ , over time it has evolved into the current form as a result of blending.

$no^{31}$   $mu^{31}si^{55}$   $ba^{31}si^{31}$   $a^{31}ne^{55}$   
 he story very COP  
 ‘He has many stories.’

$a^{31}io^{31}$   $ph^a^{53}du^{55}do^{55}$   $ka^{31}$   $a^{31}ph^i^{55}du^{55}$   $a^{31}ne^{55}$   
 I pocket LOC key COP  
 ‘There is a key in my pocket.’

4)  $io^{55}$  occurs with nouns denoting entities that are not movable at will. It does not inflect for person and number. Its negative form is  $m^{31}io^{55}$ .

$z\eta^{31}\eta u\eta^{55}$	$k^h a^{31}$	$\zeta u\eta^{55} dzu\eta^{55}$	$io^{55}$	$-e^{31}$
mountain	LOC	tree	COP	-IND

‘There are trees on the mountain.’

$mo^{33}gu^{33}$	$s\eta^{31}na^{55}$	$ua^{55}i\tilde{a}^{31}$	$t^h i^{55}$	$nu^{31}$	$io^{55}$	$-e^{31}$
elephant	nose	long	one	CLF	COP	-IND

‘The elephant has a long nose.’

5)  $d\epsilon m^{55}$  occurs with nouns denoting animal body parts or entities that are not movable at will. It overlaps with the meaning and function of  $io^{55}$ . In some contexts it is interchangeable with  $io^{55}$ .

$k^h a^{55}$	$\eta a^{31}xa^{35}$	$a^{31}ni^{55}-bu^{55}$	$d\epsilon m^{55}$	$-e^{31}$ ,
chicken	foot	two-CLF	COP	-IND

$\eta o^{55}$	$\eta a^{31}xa^{35}$	$b\eta^{53}-bu^{55}$	$d\epsilon m^{55}$	$-e^{31}$ ,
pig	foot	four-CLF	COP	-IND

$di^{55}ba^{35}$	$\eta a^{31}xa^{35}$	$ku\eta^{55}-bu^{55}$	$d\epsilon m^{55}$	$-e^{31}$ .
spider	foot	six-CLF	COP	-IND

‘A chicken has two feet, a pig has four feet, and a spider has six feet.’

### (5) *Auxiliary Verbs*

Auxiliary verbs are a subcategory of verbs. In Chinese grammar, they are referred to as modal verbs. However, in Chinese, modal verbs occur before main verbs. Anong, like other Tibeto-Burman languages, has a set of auxiliary verbs that are similar in meaning to the modal verbs in Chinese. They occur with main verbs to function as the predicate of a sentence. These auxiliary verbs are different from adverbs, since adverbs occur before verbs while auxiliary verbs occur after main verbs. They are not the same as verbs because a verb can be the predicate of a sentence but an auxiliary by itself verb cannot be the predicate of a sentence, except in special contexts. They are similar to verbal suffixes in terms of position and function, but they have specific meanings and can occur alone. So they have both lexical meaning and grammatical function. Therefore, they are half way between a content word and a function word. Some of them are more affix like and some are more verb like. We will discuss several auxiliary verbs with illustrative examples.

(A)  $da^{55}$  ‘able/can/may’

The auxiliary verb  $da^{55}$  cannot be the predicate of a sentence alone, but it can be negated. It does not inflect for person and number. It cannot take an object. It can occur alone when used as an answer to a question.

$\eta^{31}$        $ba^{31}\xi^{31}$        $\epsilon m^{53}$        $da^{55}$        $-\epsilon^{31}$ .  
 he      very      eat      able      -IND  
 ‘He can eat a lot.’

(B)  $zi^{55}/i^{33}$  ‘dare’

This auxiliary verb can be negated. It can be the predicate of a sentence. It inflects for person and number. And it can occur alone as an answer to a question. But it cannot take an object.

$\eta a^{31}$     $a^{55}$     $bu^{31}$     $ni^{55}$     $\eta u^{31}$     $zi^{55}$     $-\epsilon^{31}$     $m\epsilon^{33}$     $mu^{31}$     $zi^{55}$     $m\epsilon^{31}?$   
 you   DEF   snake   catch   2SG   dare   -IND   Q   NEG   dare   Q?  
 ‘Do you dare to catch a snake or not?’

(C)  $\eta\tilde{u}^{55}$  ‘want, like’

This auxiliary can be negated and it can be the predicate of a sentence alone. It inflects for person and number. It can stand alone as an answer to a question under certain circumstances, but it cannot take an object.

$a^{31}io^{31}$     $a^{55}$     $n\tilde{o}^{31}u\tilde{a}^{31}$     $\zeta a^{55}$     $k^h i^{55}$     $m^{31}-$     $\eta a^{55}$     $\zeta u\eta^{35}$ .  
 I      DEF   cow      meat   eat   NEG-   like   1SG.REFL  
 ‘I don’t like eating beef.’

(D)  $ua^{55}$  ‘will, consent’

This auxiliary can be negated and it can be the predicate of a sentence alone. It inflects for person and number. It can stand alone as an answer to a question under certain circumstances, but it cannot take an object.

$n\tilde{o}^{31}u\tilde{a}^{31}$     $i\epsilon^{55}$     $q\eta^{31}$     $\eta u^{31}$     $l\sigma^{55}$     $m^{31}-$     $ua^{55}$     $-\zeta u^{31}$ .  
 cow      this   CLF   DEF   return   NEG   will   REFL  
 ‘This cow will not go back.’

(E)  $so^{55}$  ‘can, understand, know’

This auxiliary verb can be negated and it can be the predicate of a sentence alone. It inflects for person and number. It can stand alone

as an answer to a question under certain circumstances, but it cannot take an object.

ŋa<sup>31</sup> a<sup>55</sup> t<sup>h</sup>a<sup>31</sup>ma<sup>55</sup> vam<sup>55</sup> -ε<sup>31</sup> ŋ<sup>31</sup> so<sup>55</sup> mε<sup>31</sup> m<sup>31</sup> ŋ<sup>31</sup> so<sup>55</sup> mε<sup>31</sup> ?  
 you DEF arrow shoot IND 2SG can Q NEG 2SG can Q  
 ‘Do you know how to shoot an arrow or not?’

(F) dzɿ<sup>35</sup>/lɿ<sup>33</sup> ‘should’

This auxiliary verb can be negated, but it cannot be the predicate of a sentence. It does not inflect for person and number. It cannot stand alone in answering a question and it cannot take an object. It must occur with the copula a<sup>33</sup>ne<sup>55</sup> to function as the predicate of a sentence.

ŋ<sup>31</sup> a<sup>55</sup> nε<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup> aŋ<sup>55</sup> dzɿ<sup>33</sup> a<sup>31</sup>ne<sup>55</sup>.  
 He DEF medicine drink should COP  
 ‘He should take the medication.’

(G) ba<sup>31</sup> ua<sup>55</sup> ‘prepare, get ready to, want to’

This auxiliary verb can be negated and it can be the predicate of a sentence alone. It inflects for person and number. It can stand alone as an answer to a question under certain circumstances, but it cannot take an object.

a<sup>31</sup>io<sup>31</sup> a<sup>55</sup> du<sup>31</sup>ŋa<sup>55</sup> ba<sup>31</sup>uaŋ<sup>55</sup> ɕuaŋ<sup>35</sup> -ε<sup>31</sup>.  
 I DEF rest prepare-1SG 1SG.REFL -IND  
 ‘I am prepared to rest.’

(H) dzu<sup>31</sup> ‘can (both permission and ability)’

The meaning and function of this auxiliary verb are very similar to those of da<sup>55</sup>. This auxiliary verb can be negated, but it cannot be the predicate of a sentence. It inflects for person and number and can stand alone as an answer to a question in certain contexts. It cannot take an object.

a<sup>31</sup>io<sup>31</sup> a<sup>55</sup> dzɿ<sup>55</sup> m<sup>31</sup> dzuŋ<sup>31</sup> bu<sup>55</sup> ʔ<sup>31</sup>.  
 I DEF walk NEG can ASP FUT  
 ‘I am about to run out of strength to walk.’

#### 4.1.6. *Adjectives*

Adjectives in Anong can be predicates of sentences just like verbs. In addition to the grammatical features they share with verbs, adjectives also have the following characteristics.

(1) *The prefix ua<sup>55</sup>-*

The prefix *ua<sup>55</sup>-* often occurs with adjectives denoting concepts such as ‘big’, ‘tall, high’, ‘long’, ‘wide’, ‘thick’, etc. and the prefix *tɕi<sup>55</sup>/tɕ<sup>h</sup>i<sup>55</sup>* frequently occurs with adjectives meaning ‘small’, ‘short’, ‘low’, ‘thin’, etc. The following are some examples.

<i>ua<sup>55</sup>duŋ<sup>31</sup></i>	‘big’	<i>tɕ<sup>h</sup>i<sup>55</sup>la<sup>55</sup></i>	‘small’
<i>ua<sup>55</sup>maŋ<sup>31</sup></i>	‘tall, high’	<i>tɕ<sup>h</sup>i<sup>55</sup>naim<sup>31</sup></i>	‘short, low’
<i>ua<sup>55</sup>iã<sup>31</sup></i>	‘long’	<i>tɕi<sup>55</sup>t<sup>h</sup>uŋ<sup>55</sup></i>	‘short’
<i>ua<sup>55</sup>gã<sup>31</sup></i>	‘wide’	<i>tɕi<sup>55</sup>p<sup>h</sup>i<sup>55</sup></i>	‘narrow’
<i>ua<sup>55</sup>lom<sup>33</sup></i>	‘thick (bamboo pole)’	<i>tɕi<sup>55</sup>sɿŋ<sup>33</sup></i>	‘thin (bamboo pole)’

Not all adjectives take those prefixes, and not all adjectives form opposite pairs such as those given above. The prefix *ua<sup>55</sup>* seems to have a higher frequency of occurrence than *tɕi<sup>55</sup>/tɕ<sup>h</sup>i<sup>55</sup>*. We are not sure what the exact meanings are for those prefixes. However, adjectives that do take the prefixes cannot occur without them. Also, adjectives that take those prefixes cannot go through the reduplication process to indicate intensity. In other words, the meanings of such adjectives are similar to the reduplicated adjectives.

Anong has a set of opposite pairs of adjectives created by adding the negative marker to the adjectives.

<i>xom<sup>55</sup></i>	‘crispy’	<i>m̄<sup>31</sup>xom<sup>55</sup></i>	‘rubbery (not crispy)’
<i>k<sup>h</sup>a<sup>33</sup></i>	‘salty’	<i>m̄<sup>31</sup>k<sup>h</sup>a<sup>33</sup></i>	‘bland (not salty)’
<i>a<sup>31</sup>nem<sup>55</sup></i>	‘beautiful’	<i>ma<sup>31</sup>nem<sup>55</sup></i>	‘ugly (not beautiful)’
<i>tɕ<sup>h</sup>uŋ<sup>55</sup></i>	‘real’	<i>m̄<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup></i>	‘false (not real)’
<i>sɿ<sup>31</sup>la<sup>33</sup></i>	‘good’	<i>m̄<sup>31</sup>sɿ<sup>31</sup>la<sup>33</sup></i>	‘bad (not good)’
<i>t<sup>h</sup>u<sup>31</sup></i>	‘sharp’	<i>m̄<sup>31</sup>t<sup>h</sup>u<sup>31</sup></i>	‘blunt (not sharp)’
<i>n̄uŋ<sup>31</sup></i>	‘deep’	<i>m̄<sup>31</sup>n̄uŋ<sup>31</sup></i>	‘shallow (not deep)’

(2) *Reduplication*

Most of the adjectives in Anong can go through the reduplication process to indicate intensity. It is usually total reduplication though some adjectives display tonal variation when reduplicated, and a small number of adjectives undergo vowel or final change.

<i>p<sup>h</sup>u<sup>55</sup></i>	‘yellow’	<i>p<sup>h</sup>u<sup>55</sup>p<sup>h</sup>u<sup>55</sup></i>	‘very yellow’
<i>tɕ<sup>h</sup>uŋ<sup>35</sup></i>	‘straight’	<i>tɕ<sup>h</sup>uŋ<sup>35</sup>tɕ<sup>h</sup>uŋ<sup>31</sup></i>	‘very straight’
<i>ba<sup>35</sup></i>	‘thin’	<i>ba<sup>35</sup>ba<sup>31</sup></i>	‘very thin’
<i>ŋuŋ<sup>55</sup></i>	‘soft’	<i>ŋuŋ<sup>55</sup>ŋuŋ<sup>55</sup></i>	‘very soft’
<i>dzen<sup>55</sup></i>	‘tender’	<i>dzen<sup>55</sup>dzen<sup>55</sup></i>	‘very tender’

dza <sup>33</sup>	‘quick’	dzɿ <sup>31</sup> dza <sup>33</sup>	‘very quick’
dzum <sup>55</sup>	‘convex’	dzu <sup>33</sup> dzum <sup>55</sup>	‘very convex, bulgy’

### (3) Comparatives and Superlatives

Although adjectives in Anong do not have comparison markers to differentiate positive, comparative, and superlative degrees, they do take affixes that express degrees of difference in quality or property.

#### (A) The suffix tɕ<sup>h</sup>ɛn<sup>31</sup>

The suffix tɕ<sup>h</sup>ɛn<sup>31</sup> is added to reduplicated adjectives to indicate a slightly lessened degree of change in the quality designated by the adjective. The suffix originates from a lexical item that meant ‘son’. It is also used as a diminutive marker.

xuŋ <sup>55</sup>	‘clear (water)’	xuŋ <sup>55</sup> xuŋ <sup>31</sup> tɕ <sup>h</sup> ɛn <sup>31</sup>	‘a little clearer’
k <sup>h</sup> .ŋ <sup>53</sup>	‘sweet’	k <sup>h</sup> .ŋ <sup>53</sup> k <sup>h</sup> .ŋ <sup>53</sup> tɕ <sup>h</sup> ɛn <sup>31</sup>	‘a little sweeter’
ɕuŋ <sup>55</sup>	‘tender (vegetable)’	ɕuŋ <sup>55</sup> ɕuŋ <sup>55</sup> tɕ <sup>h</sup> ɛn <sup>31</sup>	‘a little more tender’
buum <sup>31</sup>	‘much’	buum <sup>31</sup> buum <sup>31</sup> tɕ <sup>h</sup> ɛn <sup>31</sup>	‘a little more’

#### (B) The prefix lɛ<sup>55</sup>

The prefix lɛ<sup>55</sup> is added to adjectives to mean ‘relatively’.

ŋaŋ <sup>55</sup>	‘black’	lɛ <sup>55</sup> ŋaŋ <sup>55</sup>	‘relatively black’
tɕ <sup>h</sup> a <sup>55</sup>	‘tidy/neat’	lɛ <sup>55</sup> tɕ <sup>h</sup> a <sup>55</sup>	‘relatively neat/tidy’
sɛ <sup>55</sup>	‘new’	lɛ <sup>55</sup> sɛ <sup>55</sup>	‘relatively new’
ŋɛ <sup>33</sup>	‘skinny’	lɛ <sup>55</sup> ŋɛ <sup>33</sup>	‘relatively skinny’

#### (C) The suffix buum<sup>31</sup>

The suffix buum<sup>31</sup> is used on adjectives to indicate that the quality or property denoted by the adjective is a bit excessive. The suffix came from the adjective buum<sup>31</sup> ‘much’ through the grammaticalization process.

t <sup>h</sup> aŋ <sup>55</sup>	‘thick’	t <sup>h</sup> aŋ <sup>55</sup> buum <sup>31</sup>	‘too thick’
tɕ <sup>h</sup> a <sup>55</sup>	‘bald, bare’	tɕ <sup>h</sup> a <sup>55</sup> buum <sup>31</sup>	‘too bald, too bare’
a <sup>31</sup> ŋ <sup>31</sup>	‘heavy’	a <sup>31</sup> ŋ <sup>31</sup> buum <sup>31</sup>	‘too heavy’
xu <sup>55</sup>	‘coarse’	xu <sup>55</sup> buum <sup>31</sup>	‘too coarse’

#### (D) Nominalization

Adjectives can be nominalized by the suffix o<sup>55</sup>/o<sup>31</sup>/u<sup>55</sup>/u<sup>31</sup> or the prefix ŋ<sup>31</sup>/ŋ<sup>31</sup>.

	Adjective	Noun	
‘pointed’	a <sup>31</sup> ts <sup>h</sup> u <sup>55</sup>	a <sup>31</sup> ts <sup>h</sup> u <sup>55</sup> o <sup>55</sup>	‘pointedness’
‘smooth’	sɿ <sup>55</sup>	sɿ <sup>55</sup> o <sup>55</sup>	‘smoothness’
‘deep’	ŋuŋ <sup>31</sup>	ŋuŋ <sup>31</sup> u <sup>31</sup>	‘deepness’
‘red’	bu <sup>31</sup> si <sup>55</sup>	bu <sup>31</sup> si <sup>55</sup> u <sup>55</sup>	‘redness’
‘old’	ɿ <sup>55</sup>	ŋ <sup>31</sup> ɿ <sup>55</sup>	‘oldness’
‘ripe; cooked’	ŋin <sup>55</sup>	ʔŋ <sup>31</sup> ŋin <sup>55</sup>	‘ripeness; cookedness’
‘cold’	dʒuŋ <sup>55</sup>	ŋ <sup>31</sup> dʒuŋ <sup>55</sup>	‘coldness (water)’
‘fat’	su <sup>55</sup>	ŋ <sup>31</sup> su <sup>55</sup>	‘fatness’

## (E) Definite Marker

Adjectives in Anong take one affix or another when occurring in a sentence except when they are used as modifiers. When an adjective functions as a subject or an object, it must be marked by the definite marker ŋu<sup>31</sup>a<sup>55</sup>, in addition to the nominalizer.

a<sup>31</sup>ŋã<sup>31</sup> u<sup>31</sup> ŋu<sup>31</sup>a<sup>55</sup> dɑ<sup>31</sup>γuŋ<sup>35</sup>, a<sup>31</sup>ɿ<sup>31</sup> u<sup>31</sup> ŋu<sup>31</sup>a<sup>55</sup> luŋ<sup>55</sup>.  
 soft NOM DEF cotton, heavy NOM DEF stone  
 ‘The light is cotton and the heavy is stone.’

a<sup>31</sup>io<sup>31</sup> a<sup>55</sup> ŋin<sup>55</sup>-ŋin<sup>55</sup> o<sup>31</sup> ŋu<sup>31</sup> ɛm<sup>53</sup> -ɛ<sup>31</sup>,  
 I DEF soft-REDUP NOM DEF eat -IND

ŋɑ<sup>31</sup> a<sup>55</sup> k<sup>h</sup>a<sup>55</sup>-k<sup>h</sup>a<sup>55</sup> o<sup>31</sup> ŋu<sup>31</sup> p<sup>h</sup>u<sup>31</sup> ɛm<sup>53</sup>.  
 you DEF hard-REDUP NOM DEF IMP eat  
 ‘I eat the very soft (rice/food), you eat the very hard (rice/food).’

(4) *Adjectives > Adverbials*

When an adjective is used as an adverbial, it has to be reduplicated and marked by the adverbial suffix ua<sup>33</sup>li<sup>31</sup>.

ŋɑ<sup>31</sup> ga<sup>31</sup>-ga<sup>31</sup> ua<sup>33</sup>li<sup>31</sup> p<sup>h</sup>u<sup>31</sup> ɛm<sup>53</sup>.  
 you full-REDUP ADV PRT eat  
 ‘You eat enough.’

ŋ<sup>31</sup> a<sup>31</sup>ŋã<sup>31</sup>-a<sup>31</sup>ŋã<sup>31</sup> ua<sup>33</sup>li<sup>31</sup> t<sup>h</sup>i<sup>31</sup>zɿm<sup>33</sup> -ɛ<sup>31</sup>.  
 he light-REDUP ADV speak -IND  
 ‘He speaks softly.’



When used as predicates, adjectives behave very much like verbs in terms of grammatical marking through affixation. An adjective can also take the suffix  $\alpha^{31}ni^{55}$  to indicate that the property has begun an on-going changing process (inchoative).

$\alpha^{31}mu^{31}$     $\alpha^{31}dza^{35}$     $\eta u^{31}$     $gam^{55}$     $\alpha^{31}ni^{55}$ .  
 Mother   sick   DEF   good   INCH  
 ‘Mother’s illness is getting better.’

$ie^{55}$     $da^{55}$     $\eta u^{55}$     $\eta u^{31}$     $\alpha^{55}$     $gua^{31}$     $za^{55}$     $ba^{31}\eta^{31}$     $\alpha^{31}nem^{55}$     $\alpha^{31}ni^{55}$ .  
 this   several   year   DEF   wear   NOM   very   beautiful   INCH  
 ‘Clothing [what is worn] has been getting prettier over the last few years.’

#### 4.1.7. Adverbs

Adverbs mainly modify the predicate. Anong is relatively rich in adverbs. These adverbs may basically be separated into the following kinds.

##### (1) Degree Adverbs

$\eta a^{31}$    ‘very’  
 $\alpha^{31}du^{35}t^{h31}$    ‘relatively’  
 $ba^{31}\eta^{31}$    ‘very, specially, further more’  
 $\alpha^{31}k^{h}u^{55}$    ‘extremely’ (Lisu borrowing)  
 $\epsilon^{31}si^{55}$    ‘only’

##### (2) Scope Adverbs

$gu^{55}$    ‘also’  
 $\alpha^{31}p^{h}i^{55}$    ‘also, again’  
 $da^{31}da^{55}$    ‘all’  
 $da^{31}si^{55}$    ‘together’

##### (3) Temporal Adverbs

$ie^{55}sa^{55}nu^{31}$    ‘now’  
 $ba^{55}\eta^{31}$    ‘first’  
 $\eta^{55}ia^{31}k^{h}a^{55}$    ‘last’  
 $\eta^{31}p^{h}a^{55}$    ‘later’  
 $t^{h}\epsilon^{31}me^{53}$    ‘already’  
 $ma^{55}\eta^{33}ua^{33}\eta^{55}$    ‘previously’  
 $t^{h}i^{55}sua^{31}li^{55}$    ‘suddenly’

(4) *Modal Adverbs*

t <sup>h</sup> a <sup>31</sup> lu <sup>ʔ55</sup>	‘approximately’
le <sup>55</sup> m <sup>31</sup> ʒ <sup>55</sup>	‘maybe’
k <sup>h</sup> a <sup>31</sup> di <sup>55</sup> gu <sup>31</sup>	‘certainly’
t <sup>h</sup> a <sup>31</sup> lu <sup>ʔ55</sup> ie <sup>33</sup>	‘more or less’

(5) *Manner Adverbs*

a <sup>31</sup> iaŋ <sup>35</sup> si <sup>31</sup>	‘slowly’
k <sup>h</sup> a <sup>55</sup> mã <sup>55</sup> ua <sup>33</sup>	‘quietly’
s <sup>ʃ</sup> <sup>31</sup> la <sup>55</sup> ŋɛm <sup>55</sup> ua <sup>31</sup> li <sup>31</sup>	‘well, healthily’
du <sup>31</sup> dzan <sup>31</sup>	‘quickly’

(6) *Onomatopoeia*

xua <sup>31</sup> xua <sup>31</sup> ua <sup>55</sup>	‘sound of running water’
mɛ <sup>55</sup> mɛ <sup>55</sup> ua <sup>31</sup>	‘cry of a goat’
ʂua <sup>31</sup> ʂua <sup>31</sup> ua <sup>55</sup>	‘sound of falling leaves’
do <sup>31</sup> lo <sup>31</sup> do <sup>31</sup> lo <sup>31</sup> ua <sup>55</sup>	‘sound of flowing mud’

(7) *Conjunctive Adverbs*

le <sup>31</sup> xua <sup>55</sup> ...le <sup>31</sup> xua <sup>55</sup> ...	‘the more... the more...’
le <sup>31</sup> ʂ <sup>55</sup> ...le <sup>31</sup> ʂ <sup>55</sup> ...	‘at the same time’ <sup>7</sup>
ma <sup>31</sup> na <sup>31</sup> ...ma <sup>31</sup> na <sup>31</sup> ...	‘simultaneously’ <sup>8</sup> (‘He eats while he runs.’)
k <sup>h</sup> a <sup>31</sup> tɛ <sup>h</sup> ã <sup>31</sup> ...gu <sup>31</sup> ...	‘as soon as’

(8) *Negatives*

m <sup>31</sup>	‘not’
t <sup>h</sup> a <sup>31</sup>	‘don’t’

The above examples illustrate various types of adverbs in Anong. It should be pointed out that those adverbs have different characteristics. For instance, the temporal adverbs have a flexible word order. They can occur before the verb or before the object. Sometimes, they can

<sup>7</sup> This conjunction apparently consists of two clauses each marked with le<sup>31</sup>ʂ<sup>55</sup> ‘continue’.

<sup>8</sup> Sun, in a wordlist, gives along with this form ‘He eats while he runs’ to clarify the semantics.

even occur before the subject. Manner and onomatopoeic adverbs are similar in usage, but they differ in origin. Manner adverbs come from adjectives while onomatopoeic adverbs originate in sound imitation. The adverbial marker on the former is optional but it is compulsory on the latter. Conjunctive adverbs can be adverbs or conjunctions. They can be used to connect lexical items, phrases, or sentences to create a tightly knit unit.

Adverbs have the following characteristics when occurring in a sentence.

#### (9) *Reduplication*

They can go through the reduplication process to indicate intensity.

dε<sup>55</sup> ʂ<sup>55</sup> k<sup>h</sup> a<sup>55</sup> a<sup>31</sup> dα<sup>31</sup> dan<sup>55</sup> -dα<sup>31</sup> dan<sup>55</sup> a<sup>31</sup> do<sup>55</sup> k<sup>h</sup> o<sup>55</sup> mi<sup>31</sup> li<sup>31</sup> a<sup>31</sup> guŋ<sup>55</sup> i<sup>31</sup>.  
 tonight DEF all-REDUP gather CONJ meet 1PL  
 ‘Tonight we all gather together to have a meeting.’

#### (10) *Adverb Placement*

Most of the adverbs used as adverbials in a sentence occur before the predicate verb, though a few can occur after the verb.

a<sup>31</sup> io<sup>31</sup> tɕ<sup>h</sup> en<sup>31</sup> a<sup>55</sup> t<sup>h</sup> i<sup>31</sup> io<sup>ʔ55</sup> ε<sup>31</sup> si<sup>55</sup> ŋo<sup>55</sup> -ε<sup>31</sup>.  
 I child DEF one CLF only have -IND  
 ‘I have only one child.’

ŋa<sup>31</sup> a<sup>55</sup> dza<sup>31</sup> dza<sup>31</sup> p<sup>h</sup> a<sup>31</sup> gε<sup>55</sup> dzɿ<sup>53</sup> -ε<sup>31</sup> dɔ<sup>55</sup>.  
 You DEF quick-REDUP IMP go -IND first  
 ‘You go first quickly.’

#### 4.1.8. *Particles*

Anong is rich in particles that mark various grammatical relations. We have already discussed the plural particles on nouns, approximative particles on numerals, and adverbial particles on manner adverbs. Here we will discuss particles that mark grammatical relations in sentences.

All of these particles are postpositional in Anong. Their grammatical functions are similar to the prepositions in Chinese though they are postpositions in Anong. Based on their grammatical functions, we can divide them into possessive particles, agentive particles, object particles, instrumental particles, temporal particles, locative particles, ablative particles, comparative particles, comitative particles, and definite particles. They are illustrated as follows.

(1) *Possessive Particles*

Possessive particles occur with nouns and pronouns that function as attributives to indicate definiteness and possession. Anong has two possessive particles  $ni^{55}$  and  $k^h a^{31}$ . The former tends to occur with nouns while the latter tends to occur with pronouns. They are usually used to indicate the grammatical relation of possession, and in most cases they are optional.

$p^h a^{55} dza^{55} ma^{31}$ older.brother 'older brother's child'	$ni^{55}$ POSS	$t\phi en^{31}$ child
$a^{31} mu^{31}$ mother 'mother's hair'	$ni^{55}$ POSS	$a^{31} ni^{55}$ hair
$\eta^{31} \eta u \eta^{55}$ they 'their house'	$k^h a^{31}$ POSS	$t\phi im^{31}$ house
$\eta \varepsilon^{31} \eta u \eta^{55} si^{31}$ 2DU 'you (dual) book'	$k^h a^{31}$ POSS	$\eta^{55} va^{31}$ book

The tendency for  $ni^{55}$  to occur after nouns and for  $k^h a^{31}$  to occur after pronouns is only a tendency; the two are often used interchangeably. Further, the possessive particle is usually optional; however, when the possessee is left out, the possessive particle is obligatory, which is shown by the following example.

$n\epsilon m^{31} dza \eta^{31} d\epsilon m^{55}$ wrist watch 'Whose wrist watch is it?'	$\eta u^{31}$ DEF	$k^h a^{31} i o \eta^{55}$ who	$k^h a^{31}$ POSS	$i \varepsilon^{33} ?$ COP
$\eta^{31} lam^{55} su^{55}$ teacher	$ni^{55}$ POSS	$i \varepsilon^{33}$ COP		
'It is the teacher's.'				

(2) *The agentive Postposition*

Anong has a single agentive postposition marking the noun as the causer.

$\text{a}^{31}\text{mu}^{31}$      $\text{mi}^{53}$      $\text{di}^{31}\text{k}^{\text{h}}\text{l}^{31}$      $\text{k}^{\text{h}}\text{a}^{55}$      $\text{ya}^{33}$      $\text{a}^{31}\text{ba}^{55}$ .  
 mother    AGT    bowl    break    fall    go  
 'Mother broke the bowl.'

$\eta^{31}$      $\text{mi}^{53}$      $\text{d}\epsilon^{31}\text{gr}^{55}$      $\text{k}^{\text{h}}\text{a}^{31}$      $\text{a}^{31}\eta\epsilon^{33}$      $\text{u}^{31}\text{li}^{31}$      $\text{ʃl}^{31}$      $\text{dze}^{31}$ .  
 he    AGT    dog    OBJ    beat    CONJ    die    ASP  
 'He has beaten the dog to death.'

The agentive particle is not always required in a causative sentence. However, there are a couple of contexts in which the agentive particle must be used. First, when the predicate verb is transitive, the agentive particle is obligatory, as is shown in the two examples above since both the verb 'break' and 'beat' are used transitively. Second, when the causer cannot be identified, the agentive particle is compulsory.

$\eta^{31}$      $\text{k}^{\text{h}}\text{a}^{31}$      $\text{m}^{31}$ -     $\text{su}^{31}\text{la}^{55}$      $-\text{o}^{55}$      $\text{a}^{31}\text{ts}^{\text{h}}\text{a}\eta^{31}$      $\text{mi}^{55}$      $\text{san}^{55}$      $\text{a}^{31}\text{ba}^{35}$ .  
 He    OBJ    NEG-    good    -NOM    person    AGT    kill    go  
 'A bad person killed him.'

This is not a passive sentence; the syntax is quite typical of active sentences in many Tibeto-Burman languages. In addition, the word order does not affect the interpretation of who the actor is and who the undergoer is. It is worth noting that one difference between the two sentences above is that in the first sentence, the agentive can be omitted while in the second sentence, it cannot be omitted.

### (3) *Object Postpositions*

There are two object postpositions in Anong, namely,  $\text{k}^{\text{h}}\text{a}^{31}$  and  $\text{ba}^{31}$ . The particle  $\text{k}^{\text{h}}\text{a}^{31}$  has three functions. First, it occurs on objects,<sup>9</sup> which is its main function. Second, it occurs on location nouns to indicate the location of the action or activity. Third, it occurs on names of containers to show that the action or activity is carried out with the container as an instrument.

#### (A) The Particle $\text{k}^{\text{h}}\text{a}^{31}$

The particle  $\text{k}^{\text{h}}\text{a}^{31}$  does not occur on all objects, only on affected objects.

<sup>9</sup> This marker occurs on a wide-range of 'objects' including some indirect objects, some datives, and some direct objects. The basic meaning seems to be 'affected entity', but we will continue to follow Sun in terming these simply objects.

$a^{31}io^{31}$   $t^h a^{31}\eta a\eta^{55}$   $k^h a^{31}$   $\eta^{55}va^{31}$   $t^h i^{31}$   $pu\eta^{55}$   $dzi\eta^{55}$ .  
 I younger.brother OBJ book one CLF give.1SG  
 'I gave a book to younger brother.'

It also occurs on objects that are directly affected by the action or activity denoted by the verb.

$\eta a^{31}$   $\eta^{31}$   $k^h a^{31}$   $ga^{31}mu^{31}$   $dzen^{55}$   $du^{31}gu^{53}$   $o^{31}$ .  
 you he OBJ clothes wash help IMP  
 'You help him wash clothes.'

$a^{31}ia\eta^{31}$   $ie^{55}$   $mu^{53}$   $a^{31}$   $\eta a^{31}$   $k^h a^{31}$   $dzi\eta^{55}$   $-e^{31}$ .  
 tobacco this some DEF you OBJ send -IND  
 'This tobacco is for you.'

Except in the above two instances, the particle  $k^h a^{31}$  can be omitted.

1)  $k^h a^{31}$  also occurs on nouns of places and locations.

$k^h u^{55}min^{31}$   $k^h a^{31}$   $ba^{31}\eta^{31}$   $t^h i^{31}iu^{33}$   $-e^{31}$ .  
 Kunming LOC very far -IND  
 'Kunming is very far.'

2)  $k^h a^{31}$  occurs on names of containers to indicate that the action or activity is carried out using the container as an instrument.

$a^{31}t\eta^h\eta^{31}$   $t\eta^h\eta^{55}$   $k^h a^{31}$   $\eta a^{55}ia^{55}ua^{55}t\eta^h\eta^{31}$   $du^{31}gom^{55}$   $-e^{31}$ .  
 grandma bag OBJ flour hold -IND  
 'Grandma holds flour with a bag.'

Anong has another object marker  $ba^{31}$ , which has basically the same functions as  $k^h a^{31}$ . The two markers can often be used interchangeably. However,  $ba^{31}$  is rarely used to mark indirect objects.

$\eta a^{31}$   $a^{31}da\eta^{55}$   $ba^{31}$   $ge\eta^{31}$   $o^{31}$ .  
 you everybody OBJ speak IMP  
 'You speak to everybody.'

$mo^{31}gu\eta^{55}$   $dza\eta^{31}$   $z\eta^{31}u\eta^{55}$   $ba^{31}$   $k^h a^{55}t^h a^{33}$   $ma^{33}t^h a^{33}$   $t^h i^{31}ven^{31}$   $dza\eta^{55}$   $-e^{31}$ .  
 Mùgǔjiǎ mountain OBJ often snow fall IND  
 'It often snows on Mùgǔjiǎ mountain.'

(4) *Instrumental*

The instrumental postposition in Anong is *mi*<sup>55</sup>. Like in other Tibeto-Burman languages, the instrumental postposition is the same as the agentive postposition. At this point, it is hard to determine whether the two are homophonous or polysemous.

ŋ <sup>31</sup>	va <sup>55</sup>	mi <sup>55</sup>	ɕuŋ <sup>55</sup>	a <sup>31</sup> tɕ <sup>h</sup> ɿ <sup>31</sup>	ɛ <sup>31</sup> .
he	ax	INSTR	firewood	chop	IND

‘He is chopping firewood with an ax.’

ŋ <sup>31</sup>	bun <sup>31</sup>	mi <sup>55</sup>	ŋuɑ <sup>55</sup>	a <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>33</sup>	ɛ <sup>31</sup> .
he	hook	INSTR	fish	(to)fish	IND

‘He is fishing with a hook.’

(5) *Temporal*

Anong has a temporal particle *t<sup>h</sup>a*<sup>35</sup> that occurs with temporal expressions to indicate that the activity took place at the time designated by the temporal expression.

a <sup>31</sup> io <sup>31</sup>	t <sup>h</sup> i <sup>31</sup> -ts <sup>h</sup> ai <sup>55</sup>	a <sup>31</sup> ŋi <sup>55</sup>	ɕɿ <sup>31</sup> la <sup>55</sup>	t <sup>h</sup> i <sup>55</sup>	ŋi <sup>31</sup>	t <sup>h</sup> a <sup>35</sup>
I	one-ten	two	month	one	day	TEMP

mo <sup>31</sup> guŋ <sup>55</sup> dzaŋ <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> uŋ <sup>55</sup>	bun <sup>55</sup>	-ɛ <sup>31</sup> .
Mùgǔjiǎ	OBJ	arrive	ASP	-IND

‘I will arrive at Mùgǔjiǎ on December first.’

ŋ <sup>31</sup>	t <sup>h</sup> i <sup>55</sup>	ts <sup>h</sup> ai <sup>55</sup>	ɕeŋ <sup>55</sup>	ŋuŋ <sup>31</sup>	t <sup>h</sup> a <sup>35</sup>	iu <sup>31</sup>	ua <sup>55</sup>	dzi <sup>31</sup>	-ɛ <sup>55</sup> .
he	one	ten	eight	age	TEMP	soldier	do	ASP	-IND

‘He enlisted at the age of eighteen.’

(6) *Locative Postpositions*

Locative postpositions are somewhat like directional particles. They cannot occur alone. They attach to nouns and pronouns to mark the location for the action or activity. As is discussed earlier, some of the grammatical markers mark location in addition to marking other grammatical relations. Here we will discuss several particles that only mark locations.

(A) *dun*<sup>55</sup>/*dun*<sup>55</sup>*kha*<sup>31</sup> ‘inside’

dza <sup>31</sup> k <sup>h</sup> o <sup>55</sup>	dun <sup>55</sup> k <sup>h</sup> a <sup>31</sup>	bu <sup>55</sup> dza <sup>31</sup>	tɕ <sup>h</sup> ɿ <sup>55</sup>	a <sup>31</sup> ne <sup>55</sup> .
wok	inside-LOC	rice	still	have

‘There is still rice in the wok.’

(B) t<sup>h</sup>aŋ<sup>55</sup> ‘on top of’

This particle came from the directional expression ga<sup>31</sup> t<sup>h</sup>aŋ<sup>55</sup> through grammaticalization which resulted in the reduction of the prefix to t<sup>h</sup>aŋ<sup>55</sup>.

tɕɛ <sup>55</sup> tsɿ <sup>31</sup>	t <sup>h</sup> aŋ <sup>55</sup>	a <sup>31</sup>	ɕɿ <sup>55</sup> va <sup>31</sup>	t <sup>h</sup> i <sup>31</sup>	t <sup>h</sup> am <sup>55</sup>	a <sup>31</sup> ne <sup>55</sup> .
table	on.top.of	DEF	book	one	CLF	have

‘There is a book on the table.’

(C) p<sup>h</sup>aŋ<sup>55</sup> ‘down, below’

This particle came from the directional expression ga<sup>31</sup> p<sup>h</sup>aŋ<sup>33</sup> which lost the prefix ga<sup>31</sup> through grammaticalization.

mu <sup>31</sup> guŋ <sup>55</sup>	p <sup>h</sup> aŋ <sup>33</sup>	a <sup>55</sup>	tɕ <sup>h</sup> im <sup>31</sup>	t <sup>h</sup> i <sup>55</sup>	tɕ <sup>h</sup> im <sup>31</sup>	io <sup>55</sup>	-ɛ <sup>31</sup> .
slope	below	DEF	house	one	house	have	-IND

‘There is a household at the foot of the mountain.’

(D) sa<sup>31</sup> ‘by the side of; beside’

tɕ <sup>h</sup> u <sup>31</sup> mu <sup>31</sup>	sa <sup>31</sup>	ŋua <sup>55</sup>	a <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>33</sup>	su <sup>55</sup>	t <sup>h</sup> i <sup>31</sup>	io <sup>55</sup>	ŋo <sup>55</sup>	-ɛ <sup>31</sup> .
river	beside	fish	fish	NOM	one	CLF	have	-IND

‘There is someone fishing by the river.’

(7) *The Ablative Postposition*

The ablative particle is actually a location particle. The ablative particle in Anong is k<sup>h</sup>uŋ<sup>31</sup>ne<sup>55</sup> or ne<sup>55</sup>, which occurs with nouns or pronouns to indicate the location from where the action or activity originates.

k <sup>h</sup> ɛn <sup>55</sup> dza <sup>31</sup> ham <sup>35</sup>	dŋ <sup>31</sup>	ne <sup>55</sup>	k <sup>h</sup> a <sup>55</sup>	a <sup>31</sup> ŋi <sup>55</sup>	du <sup>31</sup>	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	a <sup>31</sup> ne <sup>55</sup> .
vegetable.garden	inside	ABL	chicken	two	CLF	run	DIR

‘Two chickens ran out of the vegetable garden.’

k <sup>h</sup> oŋ <sup>55</sup> min <sup>31</sup>	k <sup>h</sup> uŋ <sup>31</sup> ne <sup>55</sup>	lo <sup>31</sup> k <sup>h</sup> u <sup>35</sup>	k <sup>h</sup> a <sup>31</sup>	a <sup>31</sup> som <sup>53</sup> -ŋi <sup>33</sup>	t <sup>h</sup> i <sup>31</sup> za <sup>31</sup>	a <sup>31</sup> ne <sup>55</sup> .
Kunming	ABL	Liùkù	LOC	three-day	road	COP

‘It takes three days to get to Liùkù from Kunming.’

(8) *The Comparative*

The comparative t<sup>h</sup>aŋ<sup>55</sup>a<sup>31</sup> occurs with nouns or pronouns to mark the standard to which something is being compared.

du <sup>31</sup> ɿaŋ <sup>31</sup>	k <sup>h</sup> u <sup>55</sup>	k <sup>h</sup> o <sup>55</sup>	ŋu <sup>31</sup>	t <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup>	iɛ <sup>55</sup>	k <sup>h</sup> o <sup>55</sup>	ŋu <sup>31</sup>	ɕɿ <sup>33</sup>	-ɛ <sup>31</sup> .
stick	that	CLF	DEF	COMP	this	CLF	DEF	thin	-IND

‘This stick is thinner than that stick.’



ie<sup>31</sup> k<sup>h</sup>uaŋ<sup>55</sup> ŋu<sup>31</sup> t<sup>h</sup>aŋ<sup>55</sup>a<sup>31</sup> k<sup>h</sup>u<sup>55</sup> k<sup>h</sup>uaŋ<sup>55</sup> ŋu<sup>31</sup> ta<sup>55</sup> -e<sup>31</sup>.  
 this CLF DEF COMP that CLF DEF big -IND  
 ‘That room is bigger than this room.’

(9) *The Conjunctive Particle ‘Including’*

Anong has two conjunctive particles: ŋe<sup>31</sup>ŋaŋ<sup>55</sup> and ta<sup>55</sup>ti<sup>55</sup>. Their functions and meanings are more or less the same.

a<sup>31</sup>io<sup>31</sup> ŋe<sup>31</sup>ŋaŋ<sup>55</sup> a<sup>55</sup> p<sup>h</sup>aŋ<sup>31</sup>-io<sup>ŋ</sup><sup>55</sup> ie<sup>31</sup>.  
 I CONJ DEF five-CLF COP  
 ‘There are five people including me.’

ŋ<sup>31</sup> dze<sup>31</sup>p<sup>h</sup>i<sup>55</sup> ŋu<sup>31</sup> ta<sup>55</sup>ti<sup>55</sup> tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>za<sup>55</sup> som<sup>53</sup>-io<sup>ŋ</sup><sup>55</sup> ie<sup>31</sup>.  
 he older sister DEF CONJ woman three-CLF COP  
 ‘There are three women including his older sister.’

(10) *The Comitative zan<sup>31</sup> ‘together with’*

a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>ŋi<sup>31</sup> a<sup>31</sup>io<sup>31</sup> gu<sup>31</sup> ŋe<sup>31</sup>ŋu<sup>55</sup> zan<sup>31</sup> mu<sup>31</sup>gu<sup>55</sup>  
 tomorrow I also you.PL COM mountain

ba<sup>31</sup> ta<sup>31</sup>si<sup>55</sup> ɕu<sup>55</sup> ua<sup>33</sup> a<sup>31</sup>ɕaŋ<sup>55</sup>.  
 LOC together firewood do DIR  
 ‘Tomorrow I will go to the mountain to get firewood with you.’

(11) *Definite Particles*

Definite particles occur with nouns, pronouns, or forms that function like nouns or pronouns to indicate definiteness. Sometimes it marks the topic of an utterance.

There are two definite particles in Anong: ŋu<sup>31</sup>/ŋu<sup>55</sup> and a<sup>55</sup>/a<sup>31</sup>. The variation in tone is conditioned by the tone of the last syllable of the word it attaches to. If that syllable carries a high tone (55), then the definite particle occurs with a mid falling tone (31). If that syllable carries a mid level tone (33) or mid falling tone (31), then the definite particle occurs with a high level tone (55). Sometimes the two definite particles occur together with ŋu<sup>31</sup> before a<sup>55</sup>. The definite particles have a very high frequency of occurrence. They can also occur after other particles and affixes.

a<sup>31</sup>io<sup>31</sup> a<sup>55</sup> k<sup>h</sup>oŋ<sup>55</sup>min<sup>31</sup> k<sup>h</sup>u<sup>31</sup>ne<sup>55</sup> dzɿ<sup>55</sup>i<sup>55</sup>u<sup>55</sup> a<sup>31</sup>.  
 I DEF Kunming ABL come PST  
 ‘I came from Kunming.’

ŋa<sup>31</sup> ŋa<sup>31</sup>dzau<sup>35</sup> ŋu<sup>31</sup> gam<sup>55</sup> dze<sup>55</sup> me<sup>55</sup>?  
 you sick DEF good ASP Q  
 ‘Are you recovered from your illness?’

p<sup>h</sup>a<sup>55</sup>dzau<sup>55</sup>ma<sup>31</sup> ven<sup>35</sup> ŋu<sup>31</sup>a<sup>31</sup> ɕuŋ<sup>55</sup>ven<sup>55</sup> ga<sup>31</sup>mu<sup>31</sup> ie<sup>33</sup>.  
 older brother buy DEF flower clothes COP  
 ‘What older brother bought was flowery clothing.’<sup>10</sup>

### (12) *Adverbial Particles*

Adverbial particles are like the 地 -de ‘-ly’ in Chinese. They are used to derive adverbs or adverb constructions which occur as adverbials in a sentence. Anong has a number of adverbial particles. The most frequently used ones are li<sup>31</sup>, ʂɿ<sup>31</sup>, and ua<sup>33</sup>. Sometimes ua<sup>33</sup> and li<sup>31</sup> can occur on the same expression in that order.

ŋ<sup>31</sup>ʂɿ<sup>31</sup>t<sup>h</sup>a<sup>31</sup> t<sup>h</sup>i<sup>55</sup>ŋi<sup>33</sup>t<sup>h</sup>i<sup>55</sup>ŋi<sup>33</sup> li<sup>31</sup> a<sup>31</sup>ba<sup>55</sup>.  
 time one.day.one.day ADV go  
 ‘Time went by day by day.’

ŋ<sup>31</sup> m<sup>31</sup>ʂɿ<sup>31</sup>ŋu<sup>31</sup>-m<sup>31</sup>ʂɿ<sup>31</sup>ŋu<sup>31</sup> li<sup>31</sup> p<sup>h</sup>ɿ<sup>33</sup> a<sup>31</sup>ʂu<sup>35</sup> a<sup>31</sup>qa<sup>55</sup>.  
 he speak-REDUP ADV tear fall DIR  
 ‘As he is speaking, his tears started to fall.’

tɕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup> a<sup>31</sup>iã<sup>35</sup>-a<sup>31</sup>iã<sup>35</sup> ʂɿ<sup>31</sup> ta<sup>53</sup> a<sup>31</sup>ni<sup>55</sup>.  
 child slow-REDUP ADV big INCH  
 ‘The child got up slowly.’

a<sup>31</sup>ʂa<sup>55</sup>mu<sup>31</sup> mi<sup>53</sup> ga<sup>31</sup>mu<sup>31</sup> ŋu<sup>55</sup> ʂaŋ<sup>55</sup>-ʂaŋ<sup>55</sup> ua<sup>33</sup>li<sup>31</sup> dzeŋ<sup>55</sup> -ɛ<sup>31</sup> dʒi<sup>31</sup>.  
 elderly.woman AGT clothes DEF clean-REDUP ADV wash -IND ASP  
 ‘The elder woman has washed the clothes very clean.’

#### 4.1.9. *Conjunctions*

Anong is not rich in conjunctions. There are two kinds of conjunctions in Anong that occur with words and phrases, and sentences. Here we will discuss conjunctions that occur with words and phrases. The

<sup>10</sup> The key to understanding the meaning of this example is the placement of ŋu<sup>31</sup>a<sup>31</sup>, glossed as a definite marker, but which is often equivalent to a subject or topic marker. It occurs directly after ven<sup>35</sup> ‘buy’, making the topic of the sentence ‘what older brother bought’ and the predicate ‘was flowery clothing’, hence, the translation. Sun translates it as such; our translation of the Chinese reflect both the Anong and Sun’s translation of it.

coordinate conjunction for compound sentences will be discussed in the syntax section.

The coordinate conjunction for words and phrases is  $si^{55}$  ‘and’.

$a^{31}hiŋ^{35}$   $si^{55}$   $a^{31}ʃuŋ^{55}$   
bowl and chopstick  
‘bowl and chopsticks’

$em^{53}$   $dem^{55}$   $si^{55}$   $aŋ^{53}$   $dem^{55}$   
eat NOM and drink NOM  
‘food and beverage’

$ŋ^{31}$   $ven^{35}$   $dʒe^{55}$   $ŋu^{31}a^{31}$   $si^{55}$   $a^{31}io^{31}$   $ven^{35}$   $dʒe^{55}e^{31}$   
he buy ASP DEF and I buy ASP.LSG

$ŋu^{31}$   $t^h i^{55}$   $tʃ^h o^{55}$   $tʃ^h o^{55}$   $a^{31}$   $m̃^{31}$   $-zɿ^{33}$ .  
DEF same-REDUP DEF NEG COP  
‘What he bought and what I bought are not the same.’<sup>11</sup>

Another conjunction is  $me^{33}$  ‘or’, which is not as frequently used as  $si^{55}$ . This is an alternative conjunction that can also occur with sentences.

$a^{31}ni^{35}$   $dʒɿ^{31}$   $e^{31}bi^{55}$   $me^{33}$   $di^{31}gã^{55}$   $i^{31}$   $me^{53}?$   
we walk DIR or rest 1PL Q  
‘Do we walk or rest?’

#### 4.1.10. Mood Particles

Anong is rich in mood particles. When the elders tell stories, they use many mood particles. Mood particles also have a high frequency of occurrence in daily conversations. They usually occur at the end of utterances to mark questions, warnings, requests, estimation, rhetorical questions, etc.

##### (1) *The Interrogative Particle $me^{53}$*

$ie^{55}$   $tʃ^h i^{35}$   $ŋu^{31}a^{31}$   $ŋa^{31}$   $a^{55}$   $m̃^{31}$   $so^{55}$   $o^{31}$   $me^{53}?$   
this CLF DEF you DEF NEG know IMP.SG Q  
‘Didn’t you know about this matter?’

<sup>11</sup> The conjoined topic is ‘what he bought’ and ‘what I bought’, marked by the definite marker  $ŋu^{31}a^{31}$  and the definite marker  $a^{31}$ ; what remains is the predicate, hence the translation.

ɲa<sup>31</sup>    a<sup>55</sup>    a<sup>31</sup>nun<sup>31</sup>    tʂ<sup>h</sup>ɿ<sup>55</sup>    ɲu<sup>31</sup>    iɛ<sup>55</sup>    mɛ<sup>53</sup>?  
 you    DEF    Anong    nationality    2SG    COP    Q  
 ‘Are you an Anong?’

(2) *The Exhortative Particle la<sup>35</sup>*

The exhortative particle is used to express warning, urging, and the like.

du<sup>31</sup>ba<sup>31</sup>    k<sup>h</sup>a<sup>31</sup>    mɛ<sup>31</sup>gu<sup>55</sup>    t<sup>h</sup>a<sup>35</sup>    p<sup>h</sup>a<sup>31</sup>    dza<sup>55</sup>    ʂɿ<sup>31</sup>    la<sup>35</sup>  
 bridge    LOC    cross    TEMP    IMP    careful    REFL    EXH  
 ‘Be careful when crossing the bridge.’

ɲa<sup>31</sup>    a<sup>55</sup>    ʂɿ<sup>31</sup>la<sup>31</sup>nɛm<sup>55</sup>    ɲa<sup>31</sup>dza<sup>35</sup>    ɲu<sup>31</sup>    zu<sup>31</sup>mɯn<sup>55</sup>    ʂɿ<sup>31</sup>    la<sup>35</sup>  
 you    DEF    well    illness    DEF    cure    REFL    EXH  
 ‘You get your illness cured.’

(3) *The Rhetorical Particle qa<sup>53</sup>*

The rhetorical particle, as one would expect, is used when the person asking the question already knows the answer to the question.

ɲa<sup>31</sup>    a<sup>55</sup>    a<sup>31</sup>p<sup>h</sup>i<sup>55</sup>    t<sup>h</sup>i<sup>55</sup>    dzaŋ<sup>31</sup>    ɲu<sup>31</sup>    dzɿ<sup>31</sup>    a<sup>31</sup>iɛ<sup>55</sup>    qa<sup>53</sup>?  
 you    DEF    again    one    time    2SG    walk    DIR    RQ  
 ‘You came again?’

mu<sup>55</sup>    gu<sup>31</sup>    tʂ<sup>h</sup>ɿ<sup>31</sup>    m̥<sup>31</sup>-    dɯ<sup>55</sup>    -ɛ<sup>31</sup>.    ɲa<sup>31</sup>    a<sup>55</sup>    ɲim<sup>55</sup>    bu<sup>55</sup>    -ɛ<sup>31</sup>    qa<sup>53</sup>?  
 sky    also    still    NEG-    dark    -IND.    You    DEF    sleep    ASP    -IND    RQ  
 ‘It is not dark yet. Are you going to bed already?’

(4) *Countering Questions*

The particle le<sup>53</sup> is used to mark questions in situations such as below when the speaker first makes a statement and then asks a question about it. The question has le<sup>53</sup> tagged on the end.<sup>12</sup>

a<sup>31</sup>io<sup>31</sup>    a<sup>55</sup>    dzaŋ<sup>55</sup>    a<sup>31</sup>dzaŋ<sup>55</sup>    -ɛ<sup>31</sup>.    ɲa<sup>31</sup>    le<sup>53</sup>?  
 I    DEF    look    ASP 1SG.    -IND    You    Q  
 ‘I have seen it. What about you?’

ɲ<sup>31</sup>ɲuŋ<sup>55</sup>    a<sup>31</sup>le<sup>33</sup>    gu<sup>31</sup>    m̥<sup>31</sup>    so<sup>53</sup>.    ɲɛ<sup>31</sup>ɲuŋ<sup>55</sup>    le<sup>53</sup>?  
 they    little    also    NEG    understand.    You.PL    Q  
 ‘They don’t understand at all. What about you?’

<sup>12</sup> The le<sup>53</sup> looks to be the wide-spread Tibeto-Burman content question marker, which has otherwise been largely replaced in Anong by mɛ<sup>53</sup>, ultimately from < ‘not’.

(5) *The Supplicative Particle lie<sup>31</sup>*

The supplicative particle lie<sup>31</sup> is sometimes used to mark supplicative requests, requests in which one is not sure that the request will be granted.

ŋɑ<sup>31</sup> gɑ<sup>31</sup>mu<sup>31</sup> iɛ<sup>33</sup> t<sup>h</sup>ɑm<sup>55</sup> ŋu<sup>31</sup> ŋ<sup>31</sup> lɑ<sup>55</sup> dʒɛŋ<sup>55</sup> o<sup>31</sup> lie<sup>31</sup>  
 you clothes this CLF DEF he SUP wash IMP SUP  
 ‘Please let him wash this article of clothing of yours.’

4.1.11. *Interjections*

Interjections are independent elements that are outside the syntactic structure of a sentence. They usually occur utterance initially, though some occasionally occur inside a sentence. They are used to convey various emotions.

Anong is very rich in interjections, which are often used with facial expressions and gestures to add expressiveness. Based on their functions, such as showing surprise, sighing, prompting, and responding, we can divide interjections into a number of categories which are discussed below.

(1) *The Prompting Interjections*

The prompting interjections ʔo<sup>55</sup> or na<sup>53</sup> occur utterance initially to get the listener’s attention. They are often reduplicated.

ʔo<sup>55</sup>! ʔo<sup>55</sup>! ʔu<sup>53</sup> o<sup>31</sup>! dʒɑ<sup>35</sup> ʔu<sup>53</sup> o<sup>31</sup>!  
 hey-REDUP take IMP quick take IMP  
 ‘Hey! Hey! Take it quick! Take it!’

na<sup>53</sup>na<sup>53</sup> dʒɑ<sup>35</sup> dʒɑ<sup>55</sup> o<sup>31</sup> dʒɑ<sup>35</sup> dʒɑ<sup>55</sup> o<sup>31</sup> na<sup>33</sup> ŋu<sup>31</sup>ɑ<sup>31</sup>  
 hey-REDUP quick look IMP quick look IMP upon DEF

k<sup>h</sup>ɑ<sup>55</sup> tʂ<sup>h</sup>ɿ<sup>31</sup> iɛ<sup>31</sup>?  
 LOC what COP  
 ‘Hey! Quick! Look! What is that up there?’

(2) *The Futility Marker*

The interjection fiɛ<sup>55</sup> is used to express futility, that is, the feeling that one has no way out or there is nothing one can do about a situation or state of affairs. Notice that it contains a sound that is not given in the consonant chart in the phonology chapter [fi].

fɛ<sup>55</sup>!      a<sup>31</sup>ŋi<sup>33</sup>      gu<sup>31</sup>      bɛ<sup>55</sup>      a<sup>31</sup>      ie<sup>55</sup>.  
 sigh!      hair      all      white      DIR      COP  
 ‘Sigh! All the hair is already white.’

(3) *Surprise Markers*

The interjections ɕa<sup>55</sup>, a<sup>55</sup>mi<sup>55</sup> and a<sup>55</sup>tɕu<sup>33</sup> occur utterance initially to express the emotions of being surprised, stunned, thrilled, and so on.

ɕa<sup>55</sup>!      ie<sup>55</sup>saŋ<sup>55</sup>nu<sup>31</sup>      gu<sup>55</sup>      tʂ<sup>h</sup>ɿ<sup>55</sup>      m̩<sup>31</sup>      dzɿ<sup>55</sup>      dɕa<sup>53</sup>?  
 ah!      now      also      still      NEG      walk      RQ  
 ‘Jeez, you are still here (i.e. you still have not left)?’

a<sup>55</sup>mi<sup>55</sup>!      ŋa<sup>31</sup>      dza<sup>55</sup>      o<sup>31</sup>!      bu<sup>31</sup>      t<sup>h</sup>i<sup>55</sup>      dʒu<sup>31</sup>      dzɿ<sup>31</sup>      a<sup>31</sup>      ie<sup>55</sup>!  
 Oh!      you      look      IMP!      snake      one      CLF      walk      DIR      COP!  
 ʔo<sup>55</sup>      ŋu<sup>31</sup>!  
 there      DEF  
 ‘Oh my! Look! A snake is coming! Over there!’

a<sup>33</sup>tɕu<sup>33</sup>!      tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>35</sup>      ba<sup>31</sup>ʂɿ<sup>31</sup>      dzuŋ<sup>55</sup>      -ɛ<sup>31</sup>!  
 wow      water      very      cold      -IND  
 ‘Gosh! The water is so cold.’

(4) *The Interjections a<sup>31</sup>la<sup>55</sup> and la<sup>55</sup>iun<sup>55</sup>*

The interjections a<sup>31</sup>la<sup>55</sup> and la<sup>55</sup>iun<sup>55</sup> occur utterance initially to express pain or discomfort.

a<sup>31</sup>la<sup>55</sup>!      ba<sup>31</sup>ʂɿ<sup>31</sup>      ŋu<sup>31</sup>      dza<sup>55</sup>      -ɛ<sup>31</sup>  
 ouch      very      2SG      hurt      -IND  
 ‘Ouch! It really hurts.’

a<sup>55</sup>iun<sup>55</sup>      a<sup>31</sup>io<sup>31</sup> k<sup>h</sup>a<sup>31</sup>      p<sup>h</sup>a<sup>55</sup>      na<sup>31</sup>dzaŋ<sup>35</sup>      -ɛ<sup>31</sup>  
 ouch      I      POSS      stomach hurt.1sg      -IND  
 ‘Ouch! My stomach is hurting.’

(5) *The Interjection p<sup>h</sup>e<sup>53</sup>*

The interjection p<sup>h</sup>e<sup>53</sup> occurs utterance initially to show contempt.

p<sup>h</sup>e<sup>53</sup>!      ŋa<sup>31</sup>      ŋ<sup>31</sup>-t<sup>h</sup>im<sup>55</sup>      ŋu<sup>31</sup>      a<sup>31</sup>io<sup>31</sup>      to<sup>55</sup>      m̩<sup>31</sup>      ŋa<sup>55</sup>      ɕuŋ<sup>35</sup>!  
 phish!      you      2SG-say      DEF      I      listen      NEG      want      1SG.REFL  
 ‘Phish! I don’t want to hear what you have to say.’

(6) *The Interjection*  $a^{55}\gamma u^{55}$ 

The interjection  $a^{55}\gamma u^{55}$  is used as a greeting when you bump into somebody on your way to somewhere or in the fields. It is also used to alert somebody of something. When used as a greeting, it has the connotation of intimacy or familiarity.

$a^{55}\gamma u^{55}!$   $\eta\varepsilon^{31}\eta u\eta^{55}$   $a^{31}$   $\gamma o^{55}$   $\eta u^{31}$   $t^h a^{31}$   $\eta\varepsilon n^{55}$   $o^{31}$   $io^{53}!$   
 hey you-PL DEF that CLF NEG touch IMP MOOD  
 ‘Hey, you guys. Don’t touch that!’

(7) *The Interjection*  $\tilde{a}^{31}$ 

The interjection  $\tilde{a}^{31}$  occurs utterance initially to express realization, acknowledgment, or understanding.

$\tilde{a}^{31}!$   $s\eta^{31}t^h\eta^{31}$   $\gamma o^{55}$   $b u\eta^{55}$   $\eta u^{31} a^{31}$   $a^{31} i o^{31}$   $t i^{55} s a\eta^{31} d i^{55}$   $s o\eta^{55} -\tilde{a}^{31}!$   
 oh! matter that CLF DEF I already know-1SG  
 ‘Oh, I know that already.’

(8) *The Interjection*  $\eta^{31}\eta\eta^{35}$ 

The interjection  $\eta^{31}\eta\eta^{35}$  is used to express displeasure.

$\eta^{31}\eta\eta^{35}!$   $\eta a^{31}$   $a^{55}$   $k^h a^{55} t_s^h \eta^{31}$   $a^{31} t s^h a\eta^{31}$   $i\varepsilon^{33}!$   
 tsk you DEF what person COP  
 ‘Tsk! What kind of person are you!’

(9) *The Interjection*  $\gamma o^{55} u e^{31}$ 

The interjection  $\gamma o^{55} u e^{31}$  occurs utterance initially to convey praise and admiration.

$\gamma o^{55} u e^{31}!$   $p^h u^{31} n e m^{33}$   $i\varepsilon^{55} d a\eta^{55}$   $d a^{55}$   $o^{31} \eta u^{31}$   $\eta i^{55} \varepsilon^{55}$   $t^h a m^{55} u^{31}!$   
 wow! wild pig such.a big NOM catch obtain  
 ‘Wow! Caught such a big wild pig!’

(10) *The Interjection*  $\tilde{e}^{31}$ 

The interjection  $\tilde{e}^{31}$  is used to convey a sigh with emotions.

$\tilde{e}^{31}!$   $a^{31} i o^{31}$   $t^h i^{31}$   $t s^h u\eta^{55}$   $\eta u^{31} a^{31}$   $t^h i^{31} v e n^{31} d z u\eta^{55}$   
 eh! I one lifetime DEF ice-snow  
 $\zeta u\eta^{55}$   $l i^{31} l i^{53}$   $- \varepsilon^{31}!$   
 tread experience -IND  
 ‘Ehh, my life has been like treading on ice and snow!’ (with a lot of frustration and tribulation)

(11) *The Interjection tse*<sup>31</sup>

The interjection *tse*<sup>31</sup> conveys regret or sympathy.

*tse*<sup>31</sup>*tse*<sup>31</sup>!    *ŋa*<sup>31</sup>    *a*<sup>55</sup>    *a*<sup>31</sup>*vu*<sup>35</sup>    *iε*<sup>55</sup>*tʂ*<sup>h</sup>*ɿ*<sup>55</sup>    *pi*<sup>31</sup>*pi*<sup>31</sup>    *ŋa*<sup>31</sup>-*k*<sup>h</sup>*ε̃*<sup>35</sup>!  
 tsk tsk!    You    DEF    hand    so    severe    2SG-burn  
 ‘Gosh! Your hand is so severely burned.’

(12) *The Interjection pfuu*<sup>31</sup>

The interjection *pfu*<sup>31</sup> is often used in conversations to mean disagreement or a negative response to a question.

*ŋ*<sup>31</sup>*ŋuŋ*<sup>55</sup>*si*<sup>31</sup>    *a*<sup>31</sup>*nun*<sup>31</sup>*tʂ*<sup>h</sup>*ɿ*<sup>55</sup>    *iε*<sup>55</sup>    *mε*<sup>53</sup>?    *pfu*<sup>31</sup>!  
 they two    Among nationality    COP    Q?    INTER  
 ‘Are the two of them of the Nu nationality?’    Don’t know.

## 4.2. SYNTAX

Anong does not have a writing system. So our understanding of its syntax is based on the sentences collected through a fieldwork questionnaire and the texts we collected. Therefore, subjectivity is unavoidable. Since this is only a sketch, the grammatical description is limited to simple structures. The following is a discussion of the sentential constituents, word order, and simple and complex sentences.

4.2.1. *Word Order and Sentential Constituents*(1) *The Order of Subject, Predicate, and Object*

The basic word order in Anong is SOV, as is illustrated by the example below.

*a*<sup>31</sup>*bε*<sup>55</sup>    *ŋ*<sup>31</sup>*k*<sup>h</sup>*u*<sup>55</sup>    *io*<sup>55</sup>-*ε*<sup>31</sup>.  
 goat    horn    have-IND  
 Subject    Object    Verb  
 ‘Goats have horns.’

Anong has no passive voice, and the subject and object order is flexible without affecting the meaning, as can be seen through the following examples.



ɑ <sup>31</sup> io <sup>31</sup>	ɑ <sup>55</sup>	mi <sup>53</sup>	ŋ <sup>31</sup>	k <sup>h</sup> ɑ <sup>31</sup>	ɑ <sup>31</sup> ŋεŋ <sup>33</sup>	-ε <sup>31</sup> .
I	DEF	AGT	he	OBJ	beat.1SG	-IND
Subject			Object		Verb	
'I beat him.'						
ŋ <sup>31</sup>	k <sup>h</sup> ɑ <sup>31</sup>	ɑ <sup>31</sup> io <sup>31</sup>	ɑ <sup>55</sup>	mi <sup>53</sup>	ɑ <sup>31</sup> ŋεŋ <sup>33</sup>	-ε <sup>31</sup> .
he	OBJ	I	def	AGT	beat.1SG	-IND
Object		Subject			Verb	
'I beat him.'						

The sentence immediately above would, following Chinese practice, be translated as 'He was beaten by me' but, in Anong, the sentence means 'I beat him.' This is because in Anong grammatically marked objects and subjects have a relatively flexible word order. Fronting the object does not affect the basic meaning. In addition, the verb in the sentence immediately above has first person subject agreement marking. Therefore, the third person pronoun ŋ<sup>31</sup> 'he' cannot be the subject regardless of the word order. It should be noted that, while the agentive particle mi<sup>53</sup> in the first sentence can sometimes be omitted, in this sentence, it is compulsory because the agentive particle is needed to help clarify the relationship between the two noun phrases since the object has been fronted,

Anong has both direct and indirect objects, with the indirect object occurring before the direct object. The marker k<sup>h</sup>ɑ<sup>31</sup> usually occurs with the indirect object.

ɑ <sup>31</sup> mu <sup>31</sup>	ɑ <sup>31</sup> io <sup>31</sup>	k <sup>h</sup> ɑ <sup>55</sup>	ga <sup>31</sup> mu <sup>31</sup>	se <sup>55</sup>	t <sup>h</sup> i <sup>31</sup>	t <sup>h</sup> am <sup>55</sup>
mother	I	OBJ	clothes	new	one	CLF

ŋ<sup>31</sup>-p<sup>h</sup>ɑ<sup>53</sup>-p<sup>h</sup>uŋ<sup>31</sup>-ε̃<sup>31</sup><sup>13</sup>  
 1SG-sew-give-IND (INV)

'Mother is sewing a new article of clothing for me.'

## (2) *Attributive Modifiers*

Anong has two types of attributives with different orders with respect to the head noun. Nouns and pronouns as attributives occur before the head noun, usually without the possessive marker.

<sup>13</sup> The form for 'give' incorporated into the verb suggests benefactive marking.

ɑ <sup>31</sup> p <sup>h</sup> u <sup>31</sup>	ni <sup>55</sup>	va <sup>55</sup>	ŋ <sup>31</sup>	mã <sup>55</sup>
father	POSS	ax	he	face
attribute	head		attribute	head
‘father’s ax’			‘his face’	

Adjectives, numerals, and classifiers occur after the head noun.

ga <sup>31</sup> mu <sup>31</sup>	se <sup>55</sup>	ŋi <sup>55</sup> luŋ <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> -luŋ <sup>55</sup>	ɕuŋ <sup>55</sup> dzuŋ <sup>55</sup>	iɛ <sup>31</sup>	dzuŋ <sup>55</sup>
clothes	new	eye	one-CLF	tree	this	CLF
head	attribute	head	attribute	head	attribute	
‘new clothes’		‘one eye’		‘this tree’		

If all of the attributive modifiers occur in the same phrase, their order would be as is shown as follows:

ŋ <sup>31</sup>	ɑ <sup>31</sup> k <sup>h</sup> aŋ <sup>31</sup>	ga <sup>31</sup> mu <sup>31</sup>	se <sup>55</sup>	na <sup>55</sup>	ɑ <sup>31</sup> ŋi <sup>55</sup>	t <sup>h</sup> am <sup>55</sup>
he	grandfather	clothes	new	that	two	CLF
‘those two articles of clothing of his grandfather’s’						

In this example, the head noun is ‘clothes’. The pronoun ‘he’, the noun ‘grandfather’, the adjective ‘new’, the adjectival demonstrative pronoun ‘that’, and the numeral plus classifier ‘two CLF’ are all attributive modifiers. Except for the pronoun ‘he’ which modifies the noun ‘grandfather’, all of the rest modify the head noun ‘clothes’. The order of attributive modifiers exemplified by the above example is the dominant order. However, it should be noted that when adjectives with two or more syllables are used as modifiers, they sometimes occur before the head noun, especially nominalized adjectives.<sup>14</sup>

ba <sup>35</sup> ba <sup>31</sup> -tɕ <sup>h</sup> ɛn <sup>31</sup>	u <sup>55</sup>	ʂ <sup>55</sup> va <sup>31</sup>
thin-DIM	NOM	book
‘thin book’		
ʂ <sup>31</sup> la <sup>33</sup>	u <sup>55</sup>	ɑ <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>
good	NOM	person
‘good person’		

<sup>14</sup> The u<sup>55</sup>, which is labeled a nominalizer, has the same shape as sentence-final particle found elsewhere.

(3) *Adverbials*

Adverbials usually occur before the predicate, though some adverbials can occur after the predicate. When the predicate of a sentence has a number of constituents before it, most adverbials come after the other constituents. However, temporal and locative adverbials have a flexible order. They can occur before the predicate and after the object, after the subject and before the object, or even before the subject.

ŋ<sup>31</sup> a<sup>55</sup> k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>a<sup>31</sup>ma<sup>31</sup>t<sup>h</sup>a<sup>31</sup> tɕ<sup>h</sup>u<sup>31</sup>mu<sup>31</sup> sa<sup>31</sup>-k<sup>h</sup>a<sup>31</sup> ŋua<sup>33</sup> la<sup>55</sup>-ɛ<sup>31</sup>.  
 he DEF often Nujiang beside-LOC fish seek-IND  
 ‘He often fishes by the Nujiang.’

In this example, the expressions ‘often’ and ‘Nujiang’ are temporal and locative adverbials respectively, both occurring after the subject and before the object.

na<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup> tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup> t<sup>h</sup>i<sup>31</sup> ioŋ<sup>55</sup> a<sup>31</sup>t<sup>h</sup>i<sup>31</sup> ŋo<sup>55</sup> -ɛ<sup>31</sup>.  
 that house child one CLF only have -IND  
 ‘That family has only one child.’

The word ‘only’ is the adverbial in this example, and it occurs after the object and before the predicate.

dɛ<sup>55</sup>ŋ<sup>55</sup>k<sup>h</sup>a<sup>55</sup> ŋ<sup>31</sup>ŋuŋ<sup>55</sup> t<sup>h</sup>a<sup>31</sup>luŋ<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup> ma<sup>31</sup> t<sup>h</sup>aŋ<sup>33</sup>i<sup>u</sup>ŋ<sup>55</sup>.  
 tonight they maybe house NEG return  
 ‘Tonight they may not return home.’

In this example, there are three adverbials: the temporal adverbial ‘tonight’ occurs before the subject; the adverbial ‘maybe’ occurs after the subject and before the object; and the adverbial ‘not’ occurs after the object and before the predicate.

Adverbials occurring after the predicate are rare. We have only come across one instance.

ŋa<sup>31</sup> a<sup>55</sup> dza<sup>31</sup>dza<sup>31</sup> p<sup>h</sup>a<sup>31</sup> gɛ<sup>55</sup>dzi<sup>53</sup>-ɛ<sup>31</sup> qo<sup>55</sup>.  
 you DEF quick-REDUP IMP go-IND first  
 ‘Quick, you go first.’

4.2.2. *Simple Sentences*

Simple sentences are the basic units of discourse. They can be categorized from a variety of perspectives. In this section, we will divide simple sentences into several categories based on their structures and mood.

(1) *Declarative Sentences*

Declarative sentences are marked by the indicative  $-\epsilon^{31}$  suffix or an aspect suffix.

ŋ<sup>31</sup>      mā<sup>55</sup>      ŋw<sup>31</sup>      p<sup>h</sup>u<sup>55</sup>p<sup>h</sup>u<sup>55</sup>-ε<sup>31</sup>.  
 he      face      DEF      yellow-REDUP-IND  
 ‘His face is very yellow.’

(2) *Interrogative Sentences*

Interrogative sentences can be formulated through using interrogative pronouns, interrogative particles, the alternative interrogative structure, or the A-Not-A interrogative structure.

Interrogative particles:

ŋa<sup>31</sup>      a<sup>55</sup>      iε<sup>55</sup>p<sup>h</sup>iε<sup>55</sup>      t<sup>h</sup>i<sup>55</sup>      dzɑŋ<sup>31</sup>      ŋ<sup>31</sup>      dzɿ<sup>53</sup>      a<sup>31</sup>iε<sup>55</sup>      dɑ<sup>53</sup>?  
 you      DEF      again      one      time      2SG      walk      DIR      Q  
 ‘You came again?’

Interrogative pronouns:

k<sup>h</sup>a<sup>55</sup>ioi<sup>55</sup>      ga<sup>31</sup>mu<sup>31</sup>      ŋw<sup>31</sup>      iε<sup>55</sup>k<sup>h</sup>a<sup>31</sup>      gen<sup>55</sup>      a<sup>31</sup>dze<sup>53</sup>?  
 who      clothes      DEF      here      put      ASP  
 ‘Whose clothes are placed here?’

The A-Not-A interrogative structure:

ŋa<sup>31</sup>      tian<sup>35</sup>ʃɿ<sup>35</sup>tçi<sup>55</sup>      ŋ<sup>31</sup>      ven<sup>55</sup>-ε<sup>31</sup>      mε<sup>53</sup>      m<sup>31</sup>      ŋ<sup>31</sup>      ven<sup>55</sup>      mε<sup>53</sup>?  
 you      television      2SG      buy-IND      Q      NEG      2SG      buy      Q  
 ‘Did you buy a television or not?’

The alternative interrogative structure:

a<sup>31</sup>      tç<sup>h</sup>en<sup>31</sup>p<sup>h</sup>ur<sup>31</sup>      k<sup>h</sup>a<sup>31</sup>      ŋ<sup>31</sup>-ŋa<sup>55</sup>-se<sup>55</sup>      mε<sup>53</sup>      tç<sup>h</sup>en<sup>31</sup>mu<sup>31</sup>  
 you      son      OBJ      2-like-DU      Q      daughter

k<sup>h</sup>a<sup>31</sup>      ŋ<sup>31</sup>-ŋa<sup>55</sup>-se<sup>55</sup>      mε<sup>53</sup>?  
 OBJ      2-like-DU      Q

‘Would you two like a son or a daughter?’

(3) *Imperative Sentences*

Imperative structures use the imperative form of the verb.

ŋɑ<sup>31</sup>    k<sup>h</sup>ɛn<sup>55</sup>    ven<sup>31</sup>    ɛ<sup>31</sup>    bo<sup>55</sup>  
 you    vegetable    buy    ASP    go  
 'You go and buy vegetables.'

(4) *Requests*

Like imperatives, a request is also formed through using la<sup>31</sup> and lie<sup>31</sup>.<sup>15</sup>

ŋ<sup>31</sup>    k<sup>h</sup>ɑ<sup>31</sup>    iɛ<sup>55</sup>p<sup>h</sup>iɛ<sup>55</sup>    t<sup>h</sup>i<sup>55</sup>-hiŋ<sup>35</sup>    tɕ<sup>h</sup>ɿ<sup>55</sup>    la<sup>31</sup>    ɛm<sup>53</sup>    lie<sup>31</sup>.  
 he    OBJ    again    one-bowl    still    OPT    eat    SUP  
 'Please let him eat another bowl (of food).'

(5) *Exclamations*

Exclamatory particles or expressions are used to form exclamatory sentences.

ɑ<sup>55</sup> la<sup>55</sup>!    ba<sup>31</sup>ɕ<sup>31</sup>    ɑ<sup>31</sup>dza<sup>31</sup>-ɛ<sup>31</sup>.  
 ouch!    very    ache-IND  
 'Ouch! It really hurts.'

(6) *Estimations*

Estimations are often marked with certain particles.

mu<sup>31</sup>ɕ<sup>31</sup>m<sup>31</sup>    iɛ<sup>55</sup>    xa<sup>55</sup>    ŋu<sup>31</sup>ɑ<sup>55</sup>    p<sup>h</sup>ɑŋ<sup>31</sup>    ts<sup>h</sup>ɑ<sup>55</sup>    gam<sup>55</sup>    t<sup>h</sup>ɑ<sup>31</sup>lu<sup>?</sup>55  
 peach    this    basket    def    five    ten    catty    about  
 ɑ<sup>31</sup>nɛ<sup>55</sup>    bu<sup>31</sup>-ɛ<sup>31</sup>  
 have    asp-ind  
 'This basket of peaches is about fifty catties (i.e. 25 kilograms).'

4.2.3. *Complex Sentences*

Complex sentences come in two main categories, namely, compound sentences and sentences made up of a main clause and a subordinate clause. We will discuss a few frequently occurring types of complex sentences with illustrative examples.

<sup>15</sup> The la<sup>31</sup> is labeled an optative elsewhere and the lie<sup>31</sup> is labeled a supplicative.

(1) *Compound Sentences*

Compound sentences usually are not connected by coordinate conjunctions. There are three types of compound sentences in Anong.

(A) *Contrastive Compound Sentences*

a <sup>31</sup> io <sup>31</sup>	a <sup>55</sup>	ta <sup>55</sup> -o <sup>55</sup>	t <sup>h</sup> i <sup>55</sup>	nu <sup>31</sup>	ven <sup>33</sup>	t <sup>h</sup> am <sup>55</sup> -ε <sup>31</sup>	dzɯŋ <sup>55</sup>	a <sup>31</sup>
I	DEF	big-NOM	one	CLF	buy	CONT-IND	ASP	ASP
ŋ <sup>31</sup>	a <sup>55</sup>	tɛ <sup>h</sup> ɛm <sup>31</sup> -o <sup>55</sup>	t <sup>h</sup> i <sup>55</sup>	nu <sup>31</sup>	ven <sup>33</sup>	t <sup>h</sup> am <sup>55</sup> -ε <sup>31</sup>	dzɯŋ <sup>31</sup>	a <sup>31</sup> .
he	DEF	small-NOM	one	CLF	buy	CONT-IND	ASP	ASP

‘I bought a big one and he bought a small one.’

(B) *Relative Contrast Compound Sentences*

mo <sup>31</sup> gun <sup>55</sup> dzaŋ <sup>31</sup>	iε <sup>55</sup> k <sup>h</sup> a <sup>31</sup>	k <sup>h</sup> uŋ <sup>31</sup> ne <sup>55</sup>	tɕ <sup>h</sup> ɿ <sup>55</sup>	t <sup>h</sup> i <sup>31</sup> .ɿum <sup>33</sup>	ε <sup>31</sup> ,	
Mùgǔjiǎ	here	ABL	relative	far	IND	
mo <sup>31</sup> gun <sup>55</sup> dzaŋ <sup>31</sup>	k <sup>h</sup> uŋ <sup>31</sup> ne <sup>55</sup>	duŋ <sup>35</sup> ɕua <sup>55</sup>	k <sup>h</sup> a <sup>31</sup>	ba <sup>31</sup> ɕɿ <sup>31</sup>	t <sup>h</sup> i <sup>31</sup> .ɿum <sup>55</sup>	ε <sup>31</sup> .
Mùgǔjiǎ	ABL	Gòng Mt.	LOC	very	far	IND

‘It is relatively far from here to Mùgǔjiǎ, and it is even farther from Mùgǔjiǎ to the Gòngshān area.’

(C) *Successive Compound Sentences*

ŋ <sup>31</sup>	saŋ <sup>55</sup>	ba <sup>31</sup> ɕɿ <sup>31</sup>	a <sup>31</sup> ne <sup>55</sup> ,	t <sup>h</sup> i <sup>31</sup>	ɕa <sup>55</sup>	gam <sup>55</sup>
he	strength	very	have,	one	hundred	catty
da <sup>31</sup> t <sup>h</sup> aŋ <sup>55</sup>	gu <sup>55</sup>	zɿ <sup>35</sup>	dzo <sup>31</sup>	ε <sup>31</sup> .		
excess	also	carry.on.back	can	IND		

‘He is very strong, and can carry over a hundred catties (= 50 kilograms) on his back.’

(2) *Complex Sentences with Subordinate Clauses*

Complex sentences containing subordinate clauses usually have conjunctions. They can be divided into the following types.

Transitional:

ŋa <sup>31</sup>	ma <sup>55</sup> ɕu <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	a <sup>31</sup> io <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	ɕɿ <sup>55</sup> va <sup>31</sup> le <sup>31</sup> ɕu <sup>55</sup>	p <sup>h</sup> a <sup>31</sup>	zu <sup>55</sup> -u <sup>31</sup>	la <sup>53</sup> ,
you	later	I	OBJ	letter	IMP	write	OPT

m̄<sup>31</sup>ie<sup>35</sup>ε<sup>53</sup> a<sup>31</sup>io<sup>31</sup> ηa<sup>31</sup> mɿan<sup>55</sup> a<sup>31</sup>ie<sup>31</sup>.  
 CONJ I 2SG angry ASP  
 ‘You write to me in the future, otherwise I will be upset.’

Cause and result:

la<sup>31</sup>ma<sup>55</sup> ie<sup>31</sup>-xaŋ<sup>35</sup> ηu<sup>31</sup> ɕuŋ<sup>55</sup>k<sup>h</sup>a<sup>31</sup> i<sup>31</sup> ηaŋ<sup>31</sup> ŋi<sup>55</sup>  
 land this-CLF DEF inside-LOC domestic.animals dung

ba<sup>31</sup>ŋ<sup>31</sup> a<sup>31</sup>sa<sup>55</sup> ŋ<sup>31</sup> le<sup>31</sup>, a<sup>31</sup>mu<sup>55</sup> dzuŋ<sup>55</sup> ŋ<sup>31</sup> ŋ<sup>31</sup>la<sup>33</sup> -ε<sup>31</sup>.  
 very fill REFL CONJ, corn grow REFL good -IND  
 ‘The corn of this piece of land is growing very well because a lot of manure was applied.’

Conditional:

ηa<sup>31</sup> muŋ<sup>31</sup> so<sup>55</sup> o<sup>55</sup> la<sup>55</sup>zɿ<sup>31</sup> ŋa<sup>31</sup>, a<sup>31</sup>io<sup>31</sup> k<sup>h</sup>a<sup>31</sup> ŋn<sup>53</sup> muŋ<sup>55</sup>.  
 you NEG understand IMP CONJ, I OBJ ask may  
 ‘If you don’t understand, (you) may ask me.’

Concessive:

η<sup>31</sup> a<sup>55</sup> t<sup>h</sup>i<sup>31</sup>maŋ<sup>31</sup> ε<sup>55</sup> ie<sup>55</sup>i<sup>31</sup>, la<sup>31</sup>ma<sup>55</sup> a<sup>55</sup> tʂ<sup>h</sup>ŋ<sup>55</sup> ua<sup>55</sup> dzo<sup>31</sup>-ε<sup>31</sup>.  
 he DEF old IND CONJ, land DEF still do move-IND  
 ‘Although he is old, (he) can still go to work in the fields.’

Temporal Sequence:

a<sup>31</sup>sa<sup>55</sup>p<sup>h</sup>u<sup>31</sup> k<sup>h</sup>u<sup>55</sup> ioŋ<sup>55</sup> mi<sup>53</sup> nō<sup>31</sup>uā<sup>31</sup> p<sup>h</sup>am<sup>31</sup> a<sup>31</sup>dze<sup>55</sup>  
 old man that CLF AGT cow close ASP

p<sup>h</sup>aŋ<sup>55</sup>a<sup>55</sup>, io<sup>55</sup>mā<sup>33</sup> laŋ<sup>35</sup> li<sup>31</sup> zɿ<sup>31</sup>ŋuŋ<sup>55</sup> k<sup>h</sup>a<sup>31</sup>  
 CONJ sickle take CONJ mountain LOC

nō<sup>31</sup> uā<sup>31</sup> dza<sup>31</sup> ŋan<sup>53</sup> dze<sup>55</sup>.  
 cow food cut ASP

‘After enclosing the cows, the old man picked up the sickle and went to the mountains to cut hay.’

Complex sentences with complex relations:

a<sup>31</sup>dam<sup>31</sup>xaŋ<sup>35</sup> mu<sup>53</sup> da<sup>31</sup>p<sup>h</sup>u<sup>55</sup> a<sup>31</sup>p<sup>h</sup>o<sup>55</sup> ηu<sup>31</sup> o<sup>35</sup>t<sup>h</sup>i<sup>31</sup>,  
 dry land PL rice.paddy change want CONJ,

da<sup>31</sup>ɕaŋ<sup>55</sup>t<sup>h</sup>i<sup>55</sup> t<sup>h</sup>i<sup>55</sup>-saŋ<sup>55</sup>a<sup>31</sup> ua<sup>55</sup> a<sup>31</sup>ni<sup>55</sup> li<sup>31</sup> di<sup>31</sup>tʂ<sup>h</sup>ŋ<sup>55</sup> du<sup>55</sup>-i<sup>31</sup>,  
 everybody one-strand do INCH CONJ ditch dig-1PL

t<sup>h</sup>a<sup>31</sup>ηa<sup>35</sup> ɕin<sup>31</sup> iuŋ<sup>55</sup> ta<sup>35</sup>, da<sup>31</sup>p<sup>h</sup>u<sup>55</sup> dzo<sup>35</sup>dzo<sup>31</sup>  
 water draw come CONJ, rice.paddy all

a<sup>31</sup>p<sup>h</sup>o<sup>55</sup> o<sup>55</sup>nu<sup>55</sup>-li<sup>31</sup>.  
 change MOOD-CONJ

‘In order to convert the land into rice paddies, everybody worked together in digging the irrigation ditch to bring in water and convert all of the land into rice paddies.’

mu<sup>55</sup> tɕhin<sup>55</sup>du<sup>33</sup> li<sup>31</sup>, tʰi<sup>31</sup>za<sup>31</sup> gu<sup>31</sup> m̩<sup>31</sup>-zaŋ<sup>55</sup> ʂl<sup>31</sup> li<sup>31</sup>,  
 sky dark CONJ, road also NEG-see REFL CONJ

ʔa<sup>31</sup>xa<sup>35</sup> be<sup>55</sup> di<sup>31</sup>ɕa<sup>31</sup> li<sup>31</sup>, ŋ<sup>3</sup> tʰi<sup>55</sup> dzaŋ<sup>31</sup> a<sup>31</sup>tan<sup>55</sup> dʒɛ<sup>55</sup>.  
 foot again difficult CONJ, he one time fall ASP

‘He tripped because it was dark, the road was bad, and (his) feet were not right (i.e. His feet did not feel right.)’





## CHAPTER FIVE

### THE RESTRUCTURING OF ANONG

Research on Anong started in 1960. Except for the long interruption during the Cultural Revolution, we did follow-up fieldwork on Anong at quite regular intervals to collect additional data. Altogether seven fieldwork trips were undertaken over a span of 43 years ending in the fall of 2003.

Forty years is a very short time period in terms of the diachronic development of a language—one would expect it to be too short to see major changes in a language. During those years, the region inhabited by the Anong underwent tremendous changes. Revolutionary changes took place in the economy, transportation, commerce, culture and education, health, and communications. A once closed Anong society suddenly opened its doors allowing other ethnic groups to come in and settle down in their midst, which led to cross-marriages between Anong and other ethnic groups. During the same time, some of the Anong traveled from their villages to other places to go to school, to seek employment opportunities, to engage in business activities, and so on. Interactions and communications between various ethnic groups reached an unprecedented width and depth. These social changes have been reflected in the Anong language.

Data collected from different time periods indicate that the Anong language is also undergoing considerable change. The data we collected from distinct groups of Anong speakers show differences. Some of those differences are idiolectal features, while others are characteristic of age group differences. The speech of older speakers is more conservative while that of the younger ones has undergone considerable restructuring, which to a degree reflects the direction of change being taken by the Anong language.

We also did research on languages in the Jingpo subgroup related to Anong as well as a language closely related to Anong, namely, Trung and its dialects. Comparative studies involving these languages helps us understand the changes in Anong.

Analyzing the changes in Anong in terms of the social changes, the language internal differences, and the differences between Anong and closely-related languages gives us insight into Anong's obsolescence.

## 5.1. THE RESTRUCTURING OF THE LEXICON

5.1.1. *The Rapid Increase in Loanwords*

The 5000 or so word list in the back of this grammar indicates the loans from Chinese, Lisu, and Burmese. We also tabulated the loans in the data collected in 1960 and the ones in the data collected in 1999. It is interesting to note that out of the 2600 words collected in 1960, we found 130 Chinese loans, about 5% of the total, and 208 Lisu loans, about 8% of the total. In 1999, we expanded the word list to 4900 and double checked words collected in 1960. We found that this expanded word list contains 391 Chinese loans, which make up 8% of the total, and 832 Lisu loans constituting 17% of the total. That is to say, we see the Chinese loans have increased by 3% and Lisu loans by 9%, when compared with the data collected in 1960. The following is a small sample of loans in Anong to show what kind of words are borrowed into Anong from Lisu, Chinese and Burmese.

## Lisu loans

ɑ <sup>55</sup> mu <sup>33</sup>	sweet potato	nu <sup>55</sup> di <sup>31</sup>	broad bean	do <sup>31</sup> ts <sup>h</sup> i <sup>31</sup>	pea
nu <sup>55</sup> p <sup>h</sup> u <sup>55</sup>	mung bean	po <sup>55</sup> na <sup>55</sup> ts <sup>l</sup> <sup>31</sup>	saltpeper	bu <sup>31</sup> lu <sup>55</sup>	trumpet
k <sup>h</sup> u <sup>31</sup> ku <sup>55</sup>	evening star	ne <sup>31</sup> ku <sup>55</sup>	morning star	ts <sup>h</sup> u <sup>31</sup>	tin
ka <sup>55</sup> tsu <sup>55</sup>	cupboard	dzi <sup>31</sup> dze <sup>55</sup>	wine pot	sa <sup>31</sup> la <sup>55</sup>	table; desk
mo <sup>33</sup> gu <sup>33</sup>	elephant	ga <sup>55</sup> gu <sup>31</sup>	orangutan	ʔi <sup>55</sup> bu <sup>31</sup>	water duck
ko <sup>55</sup> to <sup>55</sup>	cock's comb	p <sup>h</sup> ɿ <sup>55</sup> du <sup>31</sup>	a plane	yu <sup>31</sup> du <sup>31</sup>	a saw
po <sup>55</sup> lo <sup>55</sup>	bullet	la <sup>31</sup> t <sup>h</sup> a <sup>55</sup>	polish with whetstone		

## Chinese loans

ie <sup>31</sup> sui <sup>35</sup>	coriander	ts <sup>h</sup> o <sup>55</sup>	scallion	la <sup>35</sup> dzi <sup>ʔ31</sup>	chili
p <sup>h</sup> iŋ <sup>31</sup> ko <sup>53</sup>	apple	vu <sup>55</sup> kui <sup>55</sup>	tortoise	fun <sup>55</sup> t <sup>h</sup> iau <sup>31</sup>	noodles
mɛ <sup>31</sup> t <sup>h</sup> a <sup>55</sup>	coal	lo <sup>55</sup> tsu <sup>55</sup>	mule	s <sup>l</sup> <sup>55</sup> tse <sup>31</sup>	lion
suan <sup>55</sup> ts <sup>h</sup> u <sup>35</sup>	sour	pɛ <sup>31</sup> t <sup>h</sup> a <sup>31</sup>	white sugar	tɕaŋ <sup>35</sup> iu <sup>31</sup>	soy sauce
tian <sup>55</sup> tun <sup>55</sup>	electric light	la <sup>31</sup> tsu <sup>55</sup>	candle	ia <sup>31</sup> uã <sup>55</sup>	enamelware
kai <sup>55</sup> ts <sup>l</sup> <sup>33</sup>	market	sui <sup>55</sup> fu <sup>31</sup>	kettle	xo <sup>55</sup> tsai <sup>31</sup>	matches
tɕi <sup>33</sup> tɕ <sup>h</sup> <sup>35</sup>	machine	ta <sup>35</sup> p <sup>h</sup> o <sup>35</sup>	artillery		

## Burmese loans

ts <sup>h</sup> a <sup>31</sup> p <sup>h</sup> o <sup>31</sup>	steamboat	mɛ <sup>33</sup> t <sup>h</sup> a <sup>33</sup>	train
tã <sup>35</sup> ts <sup>h</sup> u <sup>31</sup>	kerosene	bõ <sup>55</sup>	movie
vi <sup>55</sup> ka <sup>31</sup>	glass works	na <sup>31</sup> li <sup>31</sup>	wristwatch
ts <sup>h</sup> a <sup>31</sup> pi <sup>55</sup> io <sup>55</sup>	soap	ʔua <sup>55</sup> ts <sup>h</sup> <sup>31</sup>	powder

It is clear from the above 48 loans from three different languages that the borrowed lexical items are mostly for expressing new aspects of daily life and cultural phenomena. Only a few of them are part of the core vocabulary. A closer examination reveals that the loans from Burmese are mainly about phenomena that were non-existent in Anong. For example, luxury items such as face powder, and new means of transportation, such as trains and ships, were completely novel to the Anong. It is likely that such loans came into Anong via religious activities. Those loans did not exist in Anong in the '60s. It was in the '70s and '80s when Catholicism was rapidly developing in the Anong region when the Anong were introduced to those new phenomena.

The Chinese loans are slightly different. Although we did collect some Chinese loans in 1960, most of the Chinese loans have occurred in the last 30 years or so, especially during the Cultural Revolution. The massive coalition building movement involving widespread mutual visitations between organizations throughout the country brought about contact and interactions between different nationalities to a degree the country had never seen before. In addition, the reform and open door policy adopted by the Chinese government in more recent times produced a lot of new experiences that are inevitably reflected in the language's lexicon. Many of the Chinese loans are words for daily necessities. We suspect that some of the Chinese loans came into Anong via Lisu, because these are also Chinese loans in Lisu, and their phonological shape resembles that of Lisu words.

It is not surprising that there is a higher percentage loans from Lisu than from any other language since the Anong are surrounded by Lisu. They interact with the Lisu on a daily basis whenever they go to the store or when they go to school, and so on. Life would be impossible if one could not speak Lisu. In fact, people of all nationalities in the region speak Lisu, be they Chinese, Bai, or Naxi. Except for a few elderly women who rarely leave their homes, all the Anong are bilingual in Lisu. In fact, some of the Anong speak Lisu better than Anong. The number of Anong speakers has decreased by half in the last 40 years or so, specifically, from 800 to 400. In terms of semantic content, Lisu loans are found in every aspect of their lives. However, none of the loans are from the core vocabulary.

It is intriguing which of the native words have been replaced by Lisu loans in the speech of many Anong. In the examples of grammatical structures we collected, some Lisu words were used in place of readily available native words. For instance, the Anong high frequency degree adverb ba<sup>31</sup>ʂ<sup>31</sup> 'very/particularly/too/especially' is often replaced by the

Lisu loan a<sup>31</sup>ku<sup>55</sup>, which has the same meaning. When this occurred, we would sometimes remind the informant of the native Anong word; he would immediately say apologetically that he forgot to use the native Anong form. In the same way, when we returned to the field to check words collected in 1960, we discovered that the informant had forgotten quite a number of the words on our 1960 word list, although when he was asked about these words he was able to recall them. In current day Anong, coexistence of loans side-by-side with native words is quite widespread, as is evident from discussions elsewhere in this volume.

### 5.1.2. *Differences Among Anong Speakers' Knowledge of the Lexicon*

A survey of the knowledge of vocabulary among Anong speakers with different levels of proficiency and in different age groups was carried out in 1995. The speakers surveyed can be divided into three groups. The proficient speakers who can serve as informants are 60 or older and have a vocabulary of over 3000 words; the number of such speakers is rather small. The middle-aged group is between 40 and 60. These speakers are no longer proficient in Anong although they can still engage in every day conversations. They are more proficient in their second language. Those under 40 have basically lost their native tongue. They are able to use daily greetings and have retained some basic comprehension abilities. We used the crossbow, the most familiar hunting tool to Anong men, as an example to test the Anong speakers' knowledge of vocabulary. In addition to the general term 'crossbow', there are over ten words in Anong naming various parts of the crossbow, some of which are monomorphemic while others are compounds. We asked the Anong speakers to name the crossbow and its various parts for us in various situations. Speakers in the elderly group could either name all of the parts or almost all of the parts. Those belonging to the middle-aged group could only give the general term, with some being able to name the bowstring, back of the bow and the trigger. Those under the age of 40 have lost all of the terms related to the crossbow. The test results are given in the table below.

Table 24: Vocabulary loss

	Older people	Middle aged	Younger
gloss			
a bow	ba <sup>31</sup> da <sup>33</sup>	ba <sup>31</sup> da <sup>33</sup>	gone
crossbow	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup>
trigger	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> go <sup>31</sup> .io <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> go <sup>31</sup> .io <sup>55</sup>	gone
spring	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup>	gone	gone
string	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> va <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> va <sup>55</sup>	gone
trigger groove	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> go <sup>31</sup> lo <sup>55</sup>	gone	gone
string button	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> pu <sup>55</sup>	gone	gone
main stock	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> k <sup>h</sup> uŋ <sup>55</sup>	term now lost	gone
head	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	gone
tenon	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> tso <sup>35</sup>	gone	gone
arrow	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup>
arrow groove	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> tɕ <sup>h</sup> a <sup>31</sup>	gone	gone
arrow head	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	gone
arrow tail	ba <sup>55</sup> tɕ <sup>h</sup> iŋ <sup>31</sup>	gone	gone
balance	ba <sup>55</sup> tɕ <sup>h</sup> iŋ <sup>31</sup> p <sup>h</sup> an <sup>31</sup> dem <sup>55</sup>	gone	gone
arrow bag	k <sup>h</sup> o <sup>55</sup> dzɿ <sup>55</sup>	gone	gone
quiver	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> da <sup>31</sup> k <sup>h</sup> uŋ <sup>55</sup>	gone	gone
poison arrow	p <sup>h</sup> u <sup>31</sup> la <sup>55</sup> so <sup>31</sup> mu <sup>53</sup>	gone	gone
nonpoison arrow	p <sup>h</sup> a <sup>55</sup> dŋ <sup>55</sup>	gone	gone
shoot arrow	vam <sup>55</sup> , fam <sup>53</sup>	vam <sup>55</sup>	vam <sup>55</sup>

We also conducted some other semantic domain tests on a smaller scale. Although the results varied a little from person to person, the overall outcome was more or less the same, constituting credible evidence that drastic decrease in the number of native words is indicative of the lack of vitality of a language. Sometimes a native word is lost before an item is borrowed from another language to replace it.

## 5.2. PHONOLOGICAL CHANGES

Since Anong has borrowed a certain number of words from Lisu and Chinese, the phonological structures of those loan words have clearly influenced the phonological system of Anong. Also, since the Anong reside in the middle reaches of the Nujiang surrounded by speakers of languages of the Lolo-Burmese subgroup, especially Lisu, the characteristics of those languages are impacting Anong, resulting in Anong's phonology changing in the direction of the phonological systems of the Lolo-Burmese languages. The changes are mainly manifested in the following way.

5.2.1. *Development of Complex Vowels and Nasalized Vowels*

Originally, Anong did not have vowel plus glide diphthongs, nor did it have any glide plus vowel diphthongs, nor any triphthongs. Due to the borrowing of words with diphthongs from Chinese, some diphthongs have been added to the Anong sound system. In addition, the development of nasalized vowels is also attributable to Chinese borrowings. Some examples are given in below.

ũ	ta <sup>35</sup> fũ <sup>35</sup>	excrement	zũ <sup>31</sup> sũ <sup>55</sup>	ginseng
uẽ	ts <sup>h</sup> uẽ <sup>55</sup>	inch	ts <sup>h</sup> a <sup>55</sup> kuẽ <sup>55</sup>	visit; tour
ei	fei <sup>31</sup> liau <sup>31</sup>	fertilizer	t <sup>h</sup> u <sup>55</sup> fei <sup>55</sup>	bandit
ai	xo <sup>55</sup> ts <sup>h</sup> ai <sup>31</sup>	matches	kai <sup>55</sup> tsɿ <sup>33</sup>	county fair
au	pau <sup>55</sup> tsɿ <sup>33</sup>	steamed bun	pau <sup>55</sup> fu <sup>55</sup>	cloth wrapper
ue	kue <sup>55</sup> tɛɿ <sup>31</sup>	rule; custom	sue <sup>55</sup>	tax
ue	kue <sup>55</sup> p <sup>h</sup> ɛ <sup>35</sup>	national flag	uai <sup>35</sup> kue <sup>35</sup>	foreign country
ye	çye <sup>55</sup> ts <sup>h</sup> uã <sup>31</sup>	propagate		
iau	p <sup>h</sup> iau <sup>35</sup>	ticket	fun <sup>55</sup> t <sup>h</sup> iau <sup>31</sup>	k. of noodles
uai	k <sup>h</sup> uai <sup>35</sup> tɛɿ <sup>35</sup>	accounting	uai <sup>35</sup> kue <sup>35</sup>	foreign country

Nasalized vowels are a transitional phenomenon resulting from the loss of nasals in finals. Anong has already developed some nasalized vowels. Some of the nasalized vowels and diphthongs had never occurred in native Anong words. However, due to the influence of Chinese loans, some phonological structures started to occur that did not exist back in the 1960s. We conjecture that this is probably a kind of phonological diffusion, which is illustrated by the following examples.

ui	sui <sup>55</sup> in <sup>31</sup>	mercury	dzui <sup>55</sup>	pair; clf.
ua	sua <sup>55</sup> tɕan <sup>35</sup> ua <sup>55</sup>	reckon accounts	ɲua <sup>55</sup> sɿ <sup>55</sup> ɲɛ <sup>35</sup>	village name
ye	tɕ <sup>h</sup> ye <sup>31</sup> tian <sup>53</sup>	defect	mu <sup>55</sup> xye <sup>31</sup>	green corn
ai	t <sup>h</sup> i <sup>31</sup> tsai <sup>55</sup> t <sup>h</sup> i <sup>31</sup>	eleven	t <sup>h</sup> i <sup>31</sup> tsai <sup>55</sup> sɿɲ <sup>35</sup>	seventeen
ai	xo <sup>55</sup> ts <sup>h</sup> ai <sup>31</sup>	matches	kai <sup>55</sup> tsɿ <sup>33</sup>	market
ya	çya <sup>55</sup> dʒɛ <sup>31</sup>	sugar	du <sup>31</sup> go <sup>55</sup>	idle
ã	lã <sup>31</sup>	swim	ɲã <sup>55</sup>	borrow

The nasalized vowels and diphthongs above do not have a high frequency of occurrence in Anong and they are not very stable. However, they indicate the tendency of certain phonological changes in Anong, which is why we have included them in the inventory of finals in Anong.

5.2.2. *Loss of Consonant Clusters*

It is uncontroversial that Proto-Tibeto-Burman originally had consonant clusters, but contemporary Tibeto-Burman languages share a general tendency toward cluster simplification and loss. Anong is no exception. Since Anong has a small number of speakers and it is surrounded by languages that do not have consonant clusters, Anong is losing its consonant clusters faster than the other Tibeto-Burman languages.

Anong had a small number of simple consonant clusters. In the '60s, there were altogether 20 or so consonant clusters in two series with one series being made up of a glottal stop followed by a consonant and the other series consisting of a consonant followed by the retroflex semi-vowel ɿ. Both series are being lost and the former is disappearing at a faster rate. The following are some examples.

Clusters	Older speakers	gloss	Middle-aged speakers
ʔb	ʔbe <sup>31</sup> ni <sup>55</sup>	food steamer	bɛ <sup>31</sup> ni <sup>55</sup>
ʔd	a <sup>31</sup> ʔden <sup>55</sup>	cut off (rope)	a <sup>31</sup> den <sup>55</sup>
ʔd̥	ʔdan <sup>55</sup>	crawl	dan <sup>55</sup>
ʔg	ʔgam <sup>55</sup>	carve records	gam <sup>55</sup>
ʔdz	ʔdzam <sup>55</sup>	drench (rain)	dzam <sup>55</sup>
ʔdz̥	ʔdzɿn <sup>55</sup>	defecate	dzɿn <sup>55</sup>
ʔdz̥	ʔdzɿ <sup>55</sup> ɿu <sup>31</sup>	bark	dzɿ <sup>55</sup> ɿu <sup>31</sup>
ʔm	tɕ <sup>h</sup> ɛ <sup>55</sup> ʔmu <sup>31</sup>	daughter; girl	tɕ <sup>h</sup> ɛ <sup>55</sup> mu <sup>31</sup>
ʔn	a <sup>31</sup> ʔna <sup>31</sup>	dye (cloth)	a <sup>31</sup> nɒ <sup>31</sup>
ʔl	ʔla <sup>31</sup> sum <sup>55</sup>	musk	lɒ <sup>31</sup> sum <sup>55</sup>
ʔŋ	a <sup>31</sup> ʔŋɛ <sup>35</sup>	spread (paint)	a <sup>31</sup> nɛ <sup>35</sup>
ʔn̥	ʔn̥a <sup>31</sup>	ruminant	n̥ɒ <sup>31</sup>
ʔŋ	ŋi <sup>31</sup> ʔŋu <sup>31</sup>	grab; seize	ŋi <sup>31</sup> ɿu <sup>31</sup>
ʔb	ɕa <sup>55</sup> ʔbiun <sup>35</sup>	step across	ɕa <sup>55</sup> biun <sup>35</sup>

Only a few elderly speakers' speech still contains consonant clusters with an initial glottal stop. They no longer occur in most elderly speakers' speech nor in the speech of middle-aged and younger speakers, which is clearly illustrated by the examples above. The loss of the initial glottal stop has a residual effect manifested in the form of laryngealized vowels though the patterns are not systematic. Basically, all monophthongs turned into laryngealized vowels. Only some speakers pronounce the vowels in finals with the laryngealized feature. Several points can be made in connection with this phenomenon. First, at this point, we can not determine the source of the glottal stop though it is clear that



there is a close connection between the feature of laryngealized vowels and the loss of the glottal stop. This is consistent with the mechanism that gave rise to laryngealized vowels in Tibeto-Burman languages. Second, the laryngealized feature is stable in vowels without consonant endings and it is not stable with vowels in finals with consonant endings. There are two types of laryngealized vowels in Tibeto-Burman languages. One type is laryngealized monophthongs such as those in Lolo-Burmese languages and the other type involves laryngealized vowels in finals with consonant endings such as Jingpo and Zaiwa. Although Anong belongs to the Jingpo subgroup, geographically Anong is contiguous with Lolo-Burmese languages. Therefore, the laryngealized feature described above is closely related to language contact. Lolo-Burmese languages, especially Lisu, do not have finals with consonant endings, and only monophthongs in those languages display the laryngealized feature. The laryngealized feature in Anong patterns closely with Lolo-Burmese languages and differs from Jingpo languages as a result of language contact.

Clusters	Older speakers	gloss	Middle-aged speakers
pɪ	piuŋ <sup>55</sup> no <sup>31</sup>	untie	piuŋ <sup>55</sup> no <sup>31</sup>
p <sup>h</sup> ɪ	p <sup>h</sup> .ɪ <sup>33</sup>	tears (eye)	p <sup>h</sup> i <sup>33</sup>
bɪ	bi <sup>53</sup>	four	bi <sup>53</sup>
mɪ	a <sup>31</sup> miuŋ <sup>55</sup>	get angry	a <sup>31</sup> miuŋ <sup>55</sup>
fɪ	da <sup>31</sup> fi <sup>55</sup>	turtledove	da <sup>31</sup> fi <sup>55</sup>
vɪ	a <sup>31</sup> vi <sup>55</sup>	to slide	a <sup>31</sup> vi <sup>55</sup>
k <sup>h</sup> ɪ	k <sup>h</sup> .ɪ <sup>53</sup>	sweet	k <sup>h</sup> i <sup>53</sup>
gɪ	dɛ <sup>31</sup> gi <sup>55</sup>	dog	dɛ <sup>31</sup> gi <sup>55</sup>
xɪ	xuŋ <sup>53</sup>	to sift	ɕuŋ <sup>53</sup>
?bɪ	ɕa <sup>55</sup> ?biuŋ <sup>35</sup>	step across	ɕa <sup>55</sup> biuŋ <sup>35</sup>

The examples above show that the semi-vowel [ɪ] is changing to [i]. Sometimes it affects the place of articulation of the adjacent consonant. When it occurs after a velar fricative, it is pronounced as [i]. When the voiceless velar fricative occurs next to it, the velar fricative is fronted, becoming a palatal fricative.

### 5.2.3. *The Loss of Retroflex Consonants*

Anong has a retroflex consonant series, which includes retroflex stops, nasals, laterals and glides. They are ʈ, ʈ<sup>h</sup>, ɖ, ŋ, ʌ, and ɹ. These retroflex con-

sonants have lost their retroflex character in the speech of some middle-aged and some elderly speakers. The following are some examples.

Retroflexes	Older speakers	gloss	Middle-aged speakers
t	ta <sup>53</sup> ni <sup>33</sup>	grow (up)	ta <sup>53</sup> ni <sup>33</sup>
t <sup>h</sup>	ʔi <sup>31</sup> t <sup>h</sup> u <sup>31</sup>	grasshopper	ʔi <sup>31</sup> t <sup>h</sup> u <sup>31</sup>
ɖ	ɖo <sup>55</sup>	durable	do <sup>55</sup>
ŋ	ŋu <sup>31</sup>	wine	nu <sup>31</sup>
l	go <sup>31</sup> luŋ <sup>31</sup>	curve; bend	go <sup>31</sup> luŋ <sup>31</sup>
ɿ	ɿ <sup>31</sup> ʔuŋ <sup>55</sup>	mountain	ɿ <sup>31</sup> ʔuŋ <sup>55</sup>

Some elderly speakers still retain the retroflex consonant series. In fact, sometimes they even add the retroflex feature to non-retroflex consonants. However, the general trend is clear, namely, they are losing their retroflex feature. This change does not affect retroflex affricates and fricatives. Those are still quite stable. This could be the result of Lisu influence because Lisu has a set of such consonants that are very similar to the palatals in Anong.

#### 5.2.4. *The Emergence of Laryngealized Vowels*

The data collected in 1960 showed no sign of laryngealized (tight throat) vowels in Anong. However, in 1983, we found that some of the vowels and finals with nasals were pronounced with laryngealization, though the laryngealization did not have any contrastive distribution for differentiating word meanings or grammatical function. In 1999, it was found to be contrastively used to mark grammatical relations. Then we found some contrastive use of the laryngealized feature for differentiating word meanings. In cases where a vowel developed the laryngealized feature due to the loss of an initial glottal stop, we kept the glottal stop in the onset position. And we use the glottal stop in the coda position to indicate that the preceding vowel has the laryngealized feature. The following are some examples.

gloss	Symbol used	Actual pronunciation
row (boat)	zam <sup>ʔ53</sup>	zam <sup>53</sup>
browbeat	ma <sup>31</sup> k <sup>h</sup> am <sup>ʔ35</sup>	ma <sup>31</sup> k <sup>h</sup> am <sup>55</sup>
search (body)	k <sup>h</sup> a <sup>31</sup> som <sup>ʔ35</sup>	k <sup>h</sup> a <sup>31</sup> som <sup>35</sup>
to divine	di <sup>31</sup> xɛn <sup>ʔ35</sup>	di <sup>31</sup> xɛn <sup>35</sup>

Table (*cont.*)

behead	ba <sup>55</sup> t <sup>h</sup> an <sup>ʔ55</sup> nu <sup>55</sup>	ba <sup>55</sup> t <sup>h</sup> an <sup>55</sup> nu <sup>55</sup>
pant; breathe deeply	a <sup>31</sup> p <sup>h</sup> uən <sup>ʔ35</sup>	a <sup>31</sup> p <sup>h</sup> uən <sup>35</sup>
shave	muən <sup>ʔ55</sup>	muən <sup>55</sup>
ashamed	caŋ <sup>ʔ55</sup>	caŋ <sup>55</sup>
suck (milk)	tɕ <sup>h</sup> im <sup>ʔ55</sup> ε <sup>31</sup>	tɕ <sup>h</sup> im <sup>55</sup> ε <sup>31</sup>
louse	cuən <sup>ʔ55</sup>	cuən <sup>55</sup>

What is noteworthy is that Trung, a language closely related to Anong, has consonant clusters such as mʔ, nʔ, ŋʔ, etc. And the vowels in those finals are in the process of gaining the laryngealized feature. This provides evidence that the contrastive laryngealized feature on vowels in Tibeto-Burman languages can originate in final consonants with glottal stops.

Further investigation is needed to fully understand the laryngealized feature in Anong. We believe that in addition to language internal mechanisms, one must take into account the influence of contiguous languages such as Lisu and Bai, both of which are rich in vowels with the laryngealized feature.

#### 5.2.5. *Development of the 33 Tone*

The data collected in 1960 showed four tones. At the time, we also noticed a 33 tone, but it only occurred in free variation and was never used contrastively. Therefore, we did not include it in the phonemic inventory of tones. However, in 1999, we found that the 33 tone had gained its contrastive status (See chapter two for examples.). Checking all of the 9500 syllables of the words collected, we found 250 instances of the 33 tone—constituting 2.67% of the total number of syllables in our word list, establishing its phonemic status in the phonological system of Anong.

#### 5.2.6. *Allophonic Variation*

Since Anong is an obsolescing language, many of its phonemes display frequent allophonic variation patterns within and between speakers, regardless of whether the setting is the same or different. The following are some examples.

(1) Anong has a syllabified velar nasal ŋ with a high frequency of occurrence, and it is often pronounced as o. The following are some examples.

velar prefix		o prefix	gloss
ŋ <sup>31</sup> k <sup>h</sup> uã <sup>31</sup>	↔	ʔo <sup>31</sup> k <sup>h</sup> uã <sup>31</sup>	hole
ŋ <sup>31</sup> ɕuŋ <sup>55</sup>	↔	ʔo <sup>31</sup> ɕuŋ <sup>55</sup>	pupa
ŋ <sup>31</sup> luŋ <sup>55</sup>	↔	ʔo <sup>31</sup> luŋ <sup>55</sup>	stone; rock
ŋ <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	↔	ʔo <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	kernel

(2) Although Anong has two different sets of retroflex affricates, some of the retroflex laminal affricates occur in free variation with their non-retroflex counterparts, which is illustrated by the examples below.

ɕ		ʂ	
tɕa <sup>55</sup> xom <sup>31</sup>	↔	tʂa <sup>55</sup> xom <sup>31</sup>	squirrel
tɕ <sup>h</sup> a <sup>55</sup>	↔	tʂ <sup>h</sup> a <sup>55</sup>	bird
ɕya <sup>55</sup> dʒɛ <sup>31</sup>	↔	ʂya <sup>55</sup> dʒɛ <sup>31</sup>	sugar
ɕem <sup>3</sup>	↔	ʂem <sup>31</sup>	knife

(3) In addition to the nasalized vowels series, we also have nasalized vowels that came from the allophonic variation of finals that end with the velar nasal, as is shown in the examples below.

velar nasal		nasalization	gloss
a <sup>31</sup> nun <sup>31</sup>	↔	a <sup>31</sup> nũ <sup>31</sup>	Arab (self-designation)
a <sup>31</sup> ian <sup>35</sup> ʂ <sup>31</sup>	↔	a <sup>31</sup> iã <sup>35</sup> si <sup>31</sup>	slowly
p <sup>h</sup> aŋ <sup>31</sup>	↔	p <sup>h</sup> ã <sup>31</sup>	five
p <sup>h</sup> u <sup>31</sup> ian <sup>33</sup>	↔	p <sup>h</sup> u <sup>31</sup> iã <sup>33</sup>	ghost

(4) The tones on some affixes, particles and certain lexemes display some free variation. The most typical case is the numeral one which occurs with high frequency with classifiers, see the examples below.

High-level tone <sup>55</sup>			
t <sup>h</sup> i <sup>55</sup> mu <sup>31</sup>	one 10,000	t <sup>h</sup> i <sup>55</sup> ts <sup>h</sup> uŋ <sup>31</sup>	one grove
t <sup>h</sup> i <sup>55</sup> so <sup>31</sup>	one point (needle)	t <sup>h</sup> i <sup>55</sup> tu <sup>31</sup>	one 1000
Mid-level tone <sup>33</sup>			
t <sup>h</sup> i <sup>33</sup> ian <sup>55</sup>	one night	t <sup>h</sup> i <sup>33</sup> bẽ <sup>55</sup>	one disk
t <sup>h</sup> i <sup>33</sup> xa <sup>55</sup>	one basket		
Mid-falling tone <sup>31</sup>			
t <sup>h</sup> i <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	one half	t <sup>h</sup> i <sup>31</sup> xuŋ <sup>55</sup>	one foot (12")
t <sup>h</sup> i <sup>31</sup> gam <sup>33</sup>	one step	t <sup>h</sup> i <sup>31</sup> p <sup>h</sup> u <sup>55</sup>	one bag

The numeral one has a 55 tone when it is used to count, but when it occurs with other lexical categories its tone changes to either 31 or 33. The variation displays a certain degree of systematicity: the numeral before a word with 31 tone carries a 55 tone; and in other cases, the numeral carries either a 31 tone or a 33 tone. Since the patterns are not stable and thus no prediction is possible, we could only record them as we heard them in elicitation.

(5) Some voiced consonants occur in free variation with their voiceless counterparts. For instance, the voiced lateral and the voiceless lateral fricative are two different phonemes, but in some verbs and adjectives, they occur in free variation. Several examples follow.

voiced		voiceless	
lim <sup>31</sup>	↔	ɬim <sup>31</sup>	bury
lan <sup>55</sup>	↔	ɬan <sup>55</sup>	tongue
la <sup>55</sup>	↔	ɬa <sup>55</sup>	take
li <sup>31</sup> mu <sup>33</sup>	↔	ɬi <sup>31</sup> mu <sup>33</sup>	welding

The nasals  $\text{m}/\text{m}$ ,  $\text{n}/\text{n}$ ,  $\text{ŋ}/\text{ŋ}$ ,  $\text{n}/\text{n}$ ,  $\text{ŋ}/\text{ŋ}$  behave the same way as the laterals. We even get voiced fricatives occurring in free variation with their voiceless counterparts.

(6) Aspirated consonants in Anong have a low frequency of occurrence. However, aspiration is phonemic in Anong. In some words, aspirated voiceless stops occur in free variation with unaspirated voiceless stops. The following are some examples.

unaspirated		aspirated	
$\eta^{31}$ di <sup>31</sup> pu <sup>35</sup>	↔	$\eta^{31}$ di <sup>31</sup> p <sup>h</sup> u <sup>35</sup>	price
a <sup>31</sup> paŋ <sup>55</sup>	↔	a <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup>	spoon
pu <sup>31</sup> la <sup>55</sup>	↔	p <sup>h</sup> u <sup>31</sup> la <sup>55</sup>	poison
la <sup>31</sup> tin <sup>31</sup>	↔	la <sup>31</sup> t <sup>h</sup> in <sup>31</sup>	monster

In addition to the above, there are some other cases of free variation between certain sounds. For instance, in the initial position of syllables that begin with a vowel, sometimes they occur with a glottal stop and

sometimes the glottal stop is deleted. Although this alternation can be contrastive, it no longer does so in most instances. Also, [ɿ], [z], [z̥] are interchangeable in a limited number of words. Sometimes they can even be interchangeable with the vowel [i] in syllable initial position. The following examples illustrate this phenomenon.

io<sup>55</sup>mun<sup>55</sup> ↔ ɿo<sup>55</sup>mun<sup>55</sup> ↔ zo<sup>55</sup>mun<sup>55</sup> ↔ zɿ<sup>55</sup>mun<sup>55</sup> cloud  
 ɿuu<sup>55</sup>mun<sup>55</sup> ↔ zuu<sup>55</sup>mun<sup>55</sup> ↔ iuu<sup>55</sup>mun<sup>55</sup> ↔ zuu<sup>55</sup>mun<sup>55</sup> cure

All of the above free variation patterns are so frequent in Anong that it is difficult to describe them completely.

### 5.3. GRAMMATICAL RESTRUCTURING

Anong has a rich grammatical system indicated through prefixation, suffixation, and inflection. The drastic changes Anong is undergoing is also reflected in changes in its grammatical system. The system is relatively fully preserved in the speech of level A speakers. It is no longer strictly observed by speakers with Level B or lower fluency (see Chapter 1 for descriptions of different proficiency levels). Many of the grammatical structures either disappeared or have been simplified. The ensuing discussion is based on the findings of the language proficiency survey mentioned in the introduction. Only a few common categories and structures will be described here.

#### 5.3.1. *Plural Marking on Nouns*

The plural is marked by particles in Anong. There are two plural particles, zɿ<sup>31</sup> ɿu<sup>31</sup> and mu<sup>53</sup>, both of which came from measure words through the grammaticalization process. The zɿ<sup>31</sup> ɿu<sup>31</sup> particle occurs with animate nouns whereas the mu<sup>53</sup> particle can be used with any count noun. In Level B fluency speech, plural markers no longer occur, and quantifying expressions, such as the word meaning ‘many’, are used instead. The following two sentences illustrate the use of plural marking among speakers with Level A and Level B fluency.

Level A fluency:

mu <sup>31</sup> nem <sup>35</sup>	zɿ <sup>31</sup> ɿu <sup>31</sup> (or, mu <sup>31</sup> )	dɑ <sup>31</sup> dɑŋ <sup>55</sup>	dzɿ <sup>31</sup>	ɑ <sup>31</sup> bɑ <sup>55</sup> (indefinite)
guest	group	all	come	(directional.suffix)

‘The guests have all come.’

Level B fluency:

mu<sup>31</sup> nem<sup>35</sup> (bu<sup>31</sup> mu<sup>31</sup>)    d<sup>31</sup> d<sup>31</sup> a<sup>55</sup>    dz<sup>31</sup>    a<sup>31</sup> ba<sup>55</sup> (indefinite)  
 guest                    many                    all                    come                    (directional.suffix)  
 ‘many guests have come.’

### 5.3.2. Possessives

Anong has a residual possessive marking system in the form of a prefix to nouns. It is still widely used in the speech of Level A fluency speakers. A considerable number of kinship terms take the possessive prefix. In fact, even some animate nouns can occur with the prefix. This marking system has disappeared in the speech of speakers with Level B fluency, and pronouns are used in its place. Examples are given below.

person	Level (A)	Level (A)	Level (B)	
1	a <sup>31</sup> mu <sup>31</sup>	ŋa <sup>31</sup> a <sup>31</sup> mu <sup>31</sup>	ŋa <sup>31</sup> a <sup>31</sup> mu <sup>31</sup>	my mother
2	ŋu <sup>31</sup> mu <sup>31</sup>	ŋa <sup>31</sup> ŋu <sup>31</sup> mu <sup>31</sup>	ŋa <sup>31</sup> a <sup>31</sup> mu <sup>31</sup>	your mother
3	ŋ <sup>31</sup> mu <sup>31</sup>	ŋ <sup>31</sup> ŋ <sup>31</sup> mu <sup>31</sup>	ŋ <sup>31</sup> a <sup>31</sup> mu <sup>31</sup>	his mother

The above examples show that the forms produced by speakers with Level A fluency in the first column still take possessive prefixes. In the second column, Level A speakers used pronouns in addition to the possessive prefixes. In the third column, the forms produced by speakers with Level B fluency indicate that the possessive prefix has mostly disappeared leaving only a residual form a- with no grammatical function. This is in fact the prevalent prefix a-/a- in front of kinship terms among many current day Sino-Tibetan languages.

### 5.3.3. Changes in the Numeral System

Anong has its own numeral system, which has basically preserved the characteristics of numeral systems of Tibeto-Burman languages. Except for the one's place, the ten's place and the hundred's place, one can count up to a thousand. However, among speakers with Level B fluency, the situation is quite complicated. Some of them can count up to a hundred in Anong using Lisu words for the rest, some up to ten, some can only say the lower numbers, and some use Lisu words even for the lower numbers. This situation resulted in Anong having two

numeral systems, with a native system and a borrowed system from Lisu co-existing at the same time, which is illustrated by the examples given below.

number	Original	< Lisu	number	Original Anong	< Lisu
1	t <sup>h</sup> i <sup>55</sup>	t <sup>h</sup> i <sup>31</sup>	11	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> t <sup>h</sup> i <sup>31</sup>	ts <sup>h</sup> l <sup>31</sup> ti <sup>55</sup>
2	a <sup>31</sup> ni <sup>55</sup>	ni <sup>31</sup>	12	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> ni <sup>55</sup>	ts <sup>h</sup> l <sup>55</sup> ni <sup>31</sup>
3	a <sup>31</sup> som <sup>53</sup>	sa <sup>55</sup>	13	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> som <sup>53</sup>	ts <sup>h</sup> l <sup>31</sup> sa <sup>55</sup>
4	bai <sup>53</sup>	li <sup>33</sup>	14	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> bai <sup>53</sup>	ts <sup>h</sup> l <sup>31</sup> li <sup>33</sup>
5	p <sup>h</sup> aŋ <sup>31</sup>	ŋua <sup>31</sup>	15	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> p <sup>h</sup> aŋ <sup>31</sup>	ts <sup>h</sup> l <sup>55</sup> ŋua <sup>31</sup>
6	kuŋ <sup>55</sup>	tso <sup>53</sup>	16	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> kuŋ <sup>55</sup>	ts <sup>h</sup> l <sup>31</sup> tso <sup>53</sup>
7	sŋn <sup>35</sup>	ŋŋ <sup>31</sup>	17	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> sŋn <sup>35</sup>	ts <sup>h</sup> l <sup>55</sup> ŋŋ <sup>31</sup>
8	ɕɛn <sup>55</sup>	he <sup>53</sup>	18	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> ɕɛn <sup>55</sup>	ts <sup>h</sup> l <sup>31</sup> he <sup>53</sup>
9	duw <sup>31</sup> guw <sup>31</sup>	ku <sup>55</sup>	19	t <sup>h</sup> i <sup>31</sup> ts <sup>h</sup> ai <sup>55</sup> duw <sup>31</sup> guw <sup>31</sup>	ts <sup>h</sup> l <sup>31</sup> ku <sup>55</sup>
10	t <sup>h</sup> i <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	ts <sup>h</sup> l <sup>55</sup>	20	a <sup>31</sup> ni <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	ni <sup>31</sup> ts <sup>h</sup> l <sup>55</sup>
100	t <sup>h</sup> i <sup>55</sup> ɕa <sup>55</sup>	t <sup>h</sup> i <sup>31</sup> he <sup>33</sup>	1000	t <sup>h</sup> i <sup>55</sup> tu <sup>31</sup>	t <sup>h</sup> i <sup>31</sup> tu <sup>55</sup>

The ordinal number system is even more interesting. Anong has three co-existing systems, namely, the native system, a system borrowed from Chinese and a system borrowed from Lisu. The system borrowed from Chinese is actually used the most frequently probably because of its simplicity, see the examples given below.

gloss	Original Anong	< Chinese	< Lisu
first	kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> t <sup>h</sup> i <sup>55</sup>	ti <sup>35</sup> i <sup>31</sup>	e <sup>55</sup> vu <sup>55</sup> t <sup>h</sup> i <sup>31</sup> ma <sup>33</sup>
second	kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup> ni <sup>55</sup>	ti <sup>35</sup> ɛ <sup>35</sup>	ni <sup>31</sup> ma <sup>33</sup> t <sup>h</sup> i <sup>31</sup> ma <sup>33</sup>
third	kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup> som <sup>53</sup>	ti <sup>35</sup> sɛ <sup>55</sup>	sa <sup>55</sup> ma <sup>33</sup> t <sup>h</sup> i <sup>31</sup> ma <sup>33</sup>
fourth	kuw <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> bai <sup>53</sup>	ti <sup>35</sup> s <sup>l</sup> <sup>35</sup>	li <sup>33</sup> ma <sup>33</sup> t <sup>h</sup> i <sup>31</sup> ma <sup>33</sup>

#### 5.3.4. Person Marking on Verbs

Verbs in Anong are marked for person and number through prefixes, suffixes and verb root inflections. Generally, the verb agrees in person and number with the subject, though in some cases the agreement also occurs on modifiers of the subject or object. This is the case with speakers of Level A fluency. For speakers with Level B fluency, the situation is quite different. The agreement marking system is no longer strictly observed. Sometimes it is used, while at other times it is



not used by the same speakers. Oftentimes it is only used to mark first and second persons with no marking for dual and plural. Object and other constituents agreement marking has completely disappeared. This is illustrated in the examples given below using the verb  $\alpha^{31}\eta\epsilon^{33}$  'hit' showing the differences between Level A and Level B fluency speakers' use of person marking.

Table 25: Agreement systems (Fluency Levels A and B)

number	person	Fluency (A)	Fluency (B)
singular	1	$\alpha^{31}\eta\epsilon\eta^{35}$	$\alpha^{31}\eta\epsilon\eta^{35}$
	2	$\eta\alpha^{31}\eta\epsilon^{33}$	$\eta\alpha^{31}\eta\epsilon^{33}$
	2	$\alpha^{31}\eta\epsilon^{33}$	$\alpha^{31}\eta\epsilon^{33}$
dual	1	$\alpha^{31}\eta\epsilon^{33}\eta\epsilon^{55}$	$\alpha^{31}\eta\epsilon^{33}$
	2	$\eta\alpha^{31}\eta\epsilon^{33}\eta\epsilon^{55}$	$\eta\alpha^{31}\eta\epsilon^{33}$
	3	$\alpha^{31}\eta\epsilon^{33}$	$\alpha^{31}\eta\epsilon^{33}$
plural	1	$\alpha^{31}\eta\epsilon^{33}i^{31}$	$\alpha^{31}\eta\epsilon^{33}$
	2	$\eta\alpha^{31}\eta\epsilon^{33}\eta\eta^{31}$	$\eta\alpha^{31}\eta\epsilon^{33}$
	3	$\alpha^{31}\eta\epsilon^{33}$	$\alpha^{31}\eta\epsilon^{33}$

Notes on Table 25:

- (1) The use of agreement marking does not show clearly delineatable differences by age. In other words, the use of person and number marking varies quite a bit among all Among speakers, mainly correlating with proficiency levels. Those who are proficient still preserve the agreement marking of person and number. Those who are no longer proficient either show an incomplete marking system or do not use any of them at all.
- (2) We surveyed over ten types of speakers. We first sorted out the agreement system among Level A speakers and then checked them among Level B speakers. The table above represents a summary of the results we obtained.
- (3) The data show that in terms of first person and second person marking for agreement, there is no difference between Level A and Level B speakers. That is to say the person agreement marking system is still well preserved. The difference lies in number marking. Level B speakers no longer differentiate singular, dual, and plural.

5.3.5. *Causatives*

Causatives in Anong are indicated through either prefixes or inflection of the verb root. In 1983, we collected a full set of examples showing causative marking in Anong through prefixation. The data were collected from a 70-year old Anong speaker by the name Hán Wénjùn. It is clear that the Anong system is a remnant of causatives in Tibeto-Burman languages. However, in 1999 when we went back to double check on those forms, our informant already passed away. We found another Anong speaker as our informant, but this informant rejected all of the causative forms we collected from Hán Wénjùn. Further checking with other speakers reveal that some accepted the forms while others rejected them. And those who accepted those forms showed differences in the causative forms they provided. Clearly causative markings are disappearing in Anong. Those speakers who have it also showed sound differences. Although the differences correlate with age differences, they mirror the changes in causatives in Tibeto-Burman languages, and even to some extent, Sino-Tibetan languages. Therefore, we treated causatives as a special project and studied this grammatical category in detail. Since we already described the causatives in elderly speakers in the chapter on grammar, here we will only discuss the use of causatives in different age groups (see also Sun 1999b:183–199).

gloss	verb	Fluency (A)	Fluency (B)
bury	lim <sup>55</sup>	ɕi <sup>31</sup> lim <sup>55</sup>	ɬim <sup>55</sup>
collapse	dim <sup>55</sup>	ɕi <sup>31</sup> dim <sup>55</sup>	ɕtim <sup>55</sup> (t <sup>h</sup> im <sup>55</sup> )
cry	ɲu <sup>55</sup>	sɿ <sup>31</sup> ɲu <sup>55</sup>	ɲu <sup>55</sup>
cut off (stick)	dʒuŋ <sup>55</sup>	ɕi <sup>31</sup> dʒuŋ <sup>55</sup>	ɕtɕuŋ <sup>55</sup> (tɕ <sup>h</sup> uŋ <sup>55</sup> )
know	ɲi <sup>55</sup>	ɕi <sup>31</sup> ɲi <sup>55</sup>	ɲi <sup>55</sup>
smash (bowl)	ga <sup>55</sup>	sɿ <sup>31</sup> ga <sup>55</sup>	hka <sup>55</sup> (k <sup>h</sup> a <sup>55</sup> )
white	bɛ <sup>55</sup> ɛ <sup>31</sup>	sɿ <sup>31</sup> bɛ <sup>55</sup> ɛ <sup>31</sup>	hpɛ <sup>55</sup> (p <sup>h</sup> ɛ <sup>55</sup> ) ɛ <sup>31</sup>
wear (clothes)	ɡua <sup>55</sup>	du <sup>31</sup> ɡua <sup>55</sup>	ɡua <sup>55</sup>
flat	a <sup>31</sup> dʒa <sup>31</sup>	p <sup>h</sup> a <sup>31</sup> dʒa <sup>31</sup>	a <sup>31</sup> dʒa <sup>31</sup>
sour	m <sup>31</sup> tɕ <sup>h</sup> um <sup>55</sup>	p <sup>h</sup> am <sup>31</sup> tɕ <sup>h</sup> um <sup>55</sup>	m <sup>31</sup> tɕ <sup>h</sup> um <sup>55</sup>

Notes on the ten examples above.

- (1) In Anong, causatives occur with not only verbs but adjectives as well, illustrated by ‘white’, ‘flat’, and ‘sour’ in the examples above.

- (2) The causative is marked by prefixation. The most frequently used prefix is  $s_1^{31}/\text{ci}^{31}$ . Other prefixes used are  $du^{31}$ , and  $p^h u^{31}(p^h a^{31})$ . The  $s_1^{31}$  becomes  $\text{ci}^{31}$  when it occurs before a palatal consonant followed by [i]. When  $p^h u^{31}$  occurs before verbs or adjectives that already have the prefix  $a^{31}$ , then it becomes  $p^h a^{31}$ , which is a combination of  $p^h u^{31}$  and  $a^{31}$ . The frication of the consonants in these two forms of the causative marker is rather slight among elderly speakers' speech. They are hardly audible in middle-aged speakers' speech. This indicates that causatives are undergoing changes in Anong.
- (3) Some sound changes have occurred due to the pronunciation changes the causative prefixes have undergone. Fricatives have weakened to a slight puff of air resulting in the loss of the prefix as an independent syllable, which led to changes in the consonants in initial position of the verb or adjective root. Voiced consonants have become voiceless and aspirated while stops have disappeared altogether.

The differences shown in the speech of different age groups in Anong causatives provide good evidence for the paths of change for causatives. These data help explain the various residual forms of causative markings among Tibeto-Burman languages, because the case in Anong illustrates one of the links in the continuum of changes this grammatical category has been undergoing among Tibeto-Burman languages.

### 5.3.6. *Grammatical Particles*

Anong has a set of grammatical particles for marking possessive, causative, accusative, instrumental, locative, allative (source), comparative, and definite. These particles fulfill very important grammatical functions, and the rules for their use are generally speaking quite strictly observed. However, in recent years, changes have occurred among speakers in different age groups with different levels of proficiency. Elderly speakers who are proficient still strictly follow the rules governing the use of those particles. Those who are younger and those who are not proficient no longer follow those rules strictly.

	Fluency (A)	Fluency (B)	notes:
conjunctive:	ni <sup>55</sup> , k <sup>h</sup> a <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	basically not used
causative:	mi <sup>53</sup>	mi <sup>53</sup>	still in use
recipient:	k <sup>h</sup> a <sup>31</sup> , ba <sup>31</sup>	ba <sup>31</sup>	basically not used
instrumental:	mi <sup>55</sup>	mi <sup>55</sup>	basically not used
temporal:	t <sup>h</sup> a <sup>35</sup>	—	not used
locative:	duŋ <sup>55</sup> k <sup>h</sup> a <sup>31</sup> , t <sup>h</sup> aŋ <sup>55</sup> , p <sup>h</sup> aŋ <sup>33</sup>	—	not used; use points of compass
source:	k <sup>h</sup> uŋ <sup>31</sup> ne <sup>55</sup> , ne <sup>55</sup>	ne <sup>55</sup>	only use ne <sup>55</sup>
comparative:	t <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup> , p <sup>h</sup> aŋ <sup>33</sup> a <sup>31</sup>	t <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup>	basically not used
continuative:	ŋɛ <sup>31</sup> ŋɛŋ <sup>31</sup> , ta <sup>55</sup> ti <sup>55</sup>	—	not used
comitative	zaŋ <sup>31</sup>	—	not used
definite:	ŋu <sup>31</sup> , a <sup>31</sup>	ŋu <sup>31</sup> , a <sup>31</sup>	used more often
adverbializer:	li <sup>31</sup> , ɕi <sup>31</sup> , ua <sup>33</sup> , ua <sup>33</sup> li <sup>31</sup>	ua <sup>33</sup>	only use ua <sup>33</sup>

The possessive particle is only used when the possessee is omitted. The description ‘basically not used’ means sometimes it is used and sometimes it is not used, or some speakers use it while others don’t. Among the elderly speakers, a difference is made in comparison, namely, superior comparison and inferior comparison. For instance, in ‘I am older than you’ the superior comparative form is used and in ‘I am younger than you’ the inferior comparative form is used. However, most speakers no longer make this distinction, including Level A speakers. Sometimes, even when it is used, only the superior comparative form is used. The definite particle is used more often among Level B speakers than Level A speakers, showing a tendency to replace other particles.

### 5.3.7. *The Copulas*

Among Tibeto-Burman languages, especially those with rich morphology, the copula verb can not be omitted in copula constructions. Further, the copula verb undergoes various morphological processes marking various grammatical functions, such as person, number, aspect, and voice. However, those languages that are not rich in morphology allow omission of the copula. Anong is somewhere in between. In Level A speakers’ speech, the copula is still required, and the copula inflects for negation. Among Level B speakers, the copula is usually omitted in affirmative sentences. In negative sentences, the copula is required, but its morphological inflection has disappeared. The following two sentences illustrate these differences.

Level A speaker:

ŋɑ<sup>31</sup> hẽ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup> iẽ<sup>33</sup> mɛ<sup>53</sup>?  
 you Han be Q  
 'Are you Han?'

ɑ<sup>31</sup>io<sup>31</sup> ɑ<sup>55</sup> m<sup>31</sup>zɿ<sup>η</sup><sup>55</sup>, ɑ<sup>31</sup>io<sup>31</sup> ɑ<sup>55</sup> ɑ<sup>31</sup>nun<sup>31</sup>tɕɿ<sup>55</sup> iẽ<sup>33</sup>  
 I Def.Part. Neg.be I Def.Part. Nu be  
 'I am not, I am Nu.'

Level B speaker:

ŋɑ<sup>31</sup> hẽ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup> mɛ<sup>53</sup>?  
 you Han Q  
 'Are you Han?'

ɑ<sup>31</sup>io<sup>31</sup> ɑ<sup>55</sup> m<sup>31</sup>zɿ<sup>η</sup><sup>55</sup>, ɑ<sup>31</sup>io<sup>31</sup> ɑ<sup>55</sup> ɑ<sup>31</sup>nun<sup>31</sup>tɕɿ<sup>55</sup>  
 I Def.Part. Neg.be I Def.Part. Nu  
 'I am not; I am Nu.'

Clearly, in the Level A speaker's speech, the copula zɿ<sup>η</sup><sup>55</sup> is made up of the root zɿ<sup>55</sup> and the first person singular marker ŋ. In contrast, the Level B speaker no longer uses the first person singular marker.

### 5.3.8. *Stories and Texts*

Anong has a rich oral literature tradition, including myths, epic stories, legends, congratulatory speeches, and ancient songs. However, very few elderly speakers still remember them. When collecting texts, we discovered that very few elderly speakers have the ability to tell stories eloquently using expressive language with moving plots and good coherence. Such performances often use vivid expressions such as four-syllable rhyming constructions, idioms and sayings, and couplet sentences. Even those who are still proficient do not necessarily have the ability to tell stories. Some can tell stories to some extent using simplistic language with incoherent and poor plots. Most Anong speakers can no longer tell stories.

It should be pointed out that the differences between different age groups and different proficiency level speakers are more extensive than we depicted here. We have only discussed the most transparent cases. More subtle differences in lexicon, phonological and grammatical structures will be discussed in later studies.

## CHAPTER SIX

### ANONG IN TIBETO-BURMAN

In the western linguistics literature, when the Nung languages are discussed, until recently there has been a tendency to limit the discussion to the Nung languages found in Burma, such as Rawang which is similar to Trung, as if they were quite similar. However, in actuality, the languages in the Nung ethnic group differ in major ways. They can be divided into four branches,<sup>1</sup> one of which is the Anong branch that consists of two languages, namely, Anong and the Nujiang dialect with the ethnonym Anong, a language which is similar to Trung.

Anong belongs to the Tibeto-Burman language family. However, is it a separate language? What languages in the Tibeto-Burman language family are close to Anong? How should Anong be subgrouped within Tibeto-Burman? These questions must be answered for any newly discovered language. And in this chapter, we will discuss those questions from two perspectives.

#### 6.1. ANONG AS A SEPARATE LANGUAGE

When we first started investigating Anong in 1960, we thought that the speakers of Anong were ethnically Nung. Although there were differences between Anong and the Nung languages, they might be just dialectal or subdialectal differences. So maybe Anong was close to the Nung languages. Therefore, we considered classifying all these languages including Anong as closely related. In 1961–62, the then Minority Nationality Languages Research Institute entrusted us with the task of working out the subgrouping of Trung and Nung languages through a comparative study. After almost two years of research, we reached a conclusion: The main language in the Nung ethnic group is Nusu, which we classified as a Yi (Loloish; Lolo-Burmese) language. Trung

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<sup>1</sup> This subgroup of four languages is ethnic, not linguistic. The two non-Nung languages are Nusu and Zauzou, both Lolo-Burmese. Thus, the ethnic designation combines two Nungish languages and two Lolo-Burmese languages.

is close to languages in the Jingpo subgroup so we classified Trung as a Jingpo language.

Later further investigation revealed that the Nung ethnicity speaks four different languages: Nusu, Zauzou (Chinese: Róuruò), Anong, and Trung (Dúlóng). And the languages have marked differences. Additional data from all of those languages and more in-depth comparative research indicate that the languages are so different that they do not look like dialects of the same language. After we documented Trung, we discovered that Anong is very similar to Trung. So the question is is Anong a dialect of Trung? After the grammatical sketch of Trung was published, we made several more trips to the Anong area to collect more data. After we did more comparative research in the late '80s and completed the grammatical sketch of Anong, we finally concluded that Anong is a separate language. In the following sections, we will demonstrate that the Nung groups all speak different languages.

### 6.1.1. Sound Comparisons

In this section, we will look at initials, finals, tones, and syllable structures to find out what differences exist between those languages.

#### (1) Initials

Initials consist of single consonants or consonant clusters, though Zauzou no longer has consonant cluster initials (although it does have affricates).

#### (A) Single Consonant Initials

Table 26: Initial single consonants

	Anong (Nujiang)	Nusu	Zauzou	Trung
bilabial	p p <sup>h</sup> b m̩ m	p ph b m̩ m	p ph m	p ph b m w
labiodental	f v	f fh v	f v	f
alveolar sibilant	ts ts <sup>h</sup> dz s z	ts tsh dz s sh z	ts tsh s z	ts tsh dz s z
alveolar	t t <sup>h</sup> d ɲ n ʎ l	t th d ɲ n ʎ l	t th n l	t th d n l
retroflex	ṭ ṭ <sup>h</sup> ḍ ɲ̣ ṇ ʎ̣ ḷ ṭʂ ṭʂ <sup>h</sup> dẓ ʂ ẓ	ṭʂ ṭʂ <sup>h</sup> dẓ ʂ̣ ʂ̣ ẓ ʎ̣	—	ṭʂ ṭʂ <sup>h</sup> ʂ̣ ʎ̣
palatal	tɕ tɕ <sup>h</sup> dʒ ɕ ẓ ɲ̣ ɲ̣	tɕ tɕ <sup>h</sup> dʒ ɲ̣ ɲ̣ ɕ ɕ <sup>h</sup> ẓ	tɕ tɕ <sup>h</sup> ɲ̣ ɕ	tɕ tɕ <sup>h</sup> dʒ ɲ̣ ɕ ẓ j
velar	k k <sup>h</sup> g x ɣ ɲ ɳ	k kh g ɳ ɲ x ɣ	k kh ɳ x ɣ	k kh g ɳ x
glottal	? h	? h	?	?

For Trung we have used the Nujiang dialect of Trung, who are of Nung ethnicity. Their autonym is Anong, and they described themselves as the same people but speaking different languages. The data used are from Nujiang dialect of Trung. Through comparison, we can see the differences among these languages in terms of consonants.

First, Anong has retroflex stops, nasals, and a retroflex lateral that the other languages do not have; its voiceless nasals have a high frequency of occurrence. Nusu has voiceless fricatives while the other languages do not; its voiceless nasals also have a high frequency of occurrence. Zauzou has lost all of the voiced stops and affricates. It has not developed any retroflex consonants yet. It does not have voiceless nasals or voiceless lateral. The retroflex and labiodental consonants in Trung only occur in Chinese borrowings and have a low frequency of occurrence. It has neither voiceless nasals nor laterals. It has developed bilabial and palatal glides.

Second, in terms of complexity and quantity, Zauzou has the least complex and smallest in number consonant system, with a total of 22 consonants, followed by Trung with 33 consonants. Both Anong and Nusu are complex in their consonant systems with more than 45 consonants.

(B) Consonant Clusters

Table 27: Consonant clusters

	Anong	Nusu	Zauzou	Trung
ʔ+C	ʔb ʔd ʔd̥ ʔg ʔdz ʔdz̥ ʔdz̥ ʔm ʔn ʔŋ ʔl ʔi ʔ, ʔbiʔ	ʔm ʔn ʔl ʔŋ	—	—
C+ɿ	pɿ p <sup>h</sup> ɿ bɿ mɿ fɿ vɿ k <sup>h</sup> ɿ gɿ xɿ	pɿ phɿ bɿ mɿ m̥ɿ fɿ vɿ kɿ khɿ gɿ xɿ	—	pɿ phɿ bɿ mɿ kɿ khɿ gɿ xɿ
C+l	—	—	—	pl phl bl ml kl khl gl

First, Zauzou no longer has consonant clusters. Anong allows clusters consisting of a glottal stop followed by a consonant, a consonant plus a glide, and even a glottal stop plus consonant plus glide combination. Nusu is similar to Anong though it only allows a glottal stop plus either



a nasal or a lateral but it no longer allows glottal stop plus stop clusters or affricate clusters. Trung does not have glottal stop plus consonant clusters; however, it not only has consonant plus glide clusters but also allows consonant and lateral liquid clusters, the latter being a remnant of Proto-Tibeto-Burman.

Second, remnants of the old Tibeto-Burman consonant clusters can be seen in the consonant clusters of the Nung languages. Zauzou lost its consonant clusters the earliest, followed by Nusu, which still retains some. Anong and Trung both still possess some unique features: Anong still allows glottal stop plus consonant clusters and CCC- consonant clusters, whereas Trung still has consonant clusters that consist of a consonant and a lateral liquid. These features are the last remnants of an old system.

## (2) Finals

Finals are made up of simple vowels, diphthongs, and vowel plus consonant combinations.

### (A) Simple Vowel Finals (Broad Phonetic Transcription)

Table 28: Simple vowel finals

	Anong	Nusu	Zauzou	Trung
plain	i e ε a a	i e ε a ɔ o	i e ε a o	i e a ɔ u
	o u y ɰ ɣ	u ɰ ə ɣ ɣ ʈ	u ɰ ə ɣ ɣ	ɰ y
nasalized	ĩ ě ẽ ã ã	ĩ ě ẽ ã ǿ	ĩ ě ẽ ã	—
	õ ũ ũ	õ ũ ǿ ǿ ỹ	õ ǿ ỹ	—
retroflexed	—	ɰɰ əɰ ɰɰ	—	—
constricted	—	ĩ e a ɔ o u ə	ĩ e e a o u ɰ ɣ	—
constricted & retroflex	developing	ɰɰ	—	—
constricted, nasalized, & retroflexed	—	ǰɰ	—	—
constricted & nasalized	—	—	ĩ ě ẽ	—
short	—	—	—	ĩ ě ǿ ǿ ũ ỹ

What is common among these four languages is that they all have a rich simple vowel series. Many differences exist among these languages in their vowel systems.

First, Anong has both a simple vowel series and a nasalized simple vowel series, and there is evidence that Anong is developing constricted vowels (see Chapter five for details). Nusu and Zauzou, as members of the Yi (= Loloish) subgroup, both have constricted vowels, which is characteristic of Yi (= Loloish) languages. The nasalized vowels in Nusu and Zauzou are remnants (of earlier vowel plus nasal combinations), which indicate that those two languages are more conservative among the Yi languages. Nusu not only developed retroflex vowels but retroflex nasalized vowels as well. In addition, it has developed retroflex constricted vowels. These features result in a complex vowel system for Nusu which has a vowel inventory of 35 for simple vowels alone, making Nusu a language with the most complex simple vowel system among the Sino-Tibetan languages. Trung's simple vowel system has not developed as many contrasts. However, it does have a long vowel versus short contrast, a relatively rare feature among Tibeto-Burman languages.

Second, the vowel systems of those four languages indicate that changes in the syllable structure, that is, the reduction in both the onset and coda positions of the syllable, correlate with the degree of complexity in the vowel system. Thus, since the endings in finals are largely retained, the four languages have not undergone much vowel splitting and their vowel systems are not as complex. As a result, their vowel systems are not as complex. In this respect, Anong is in the middle while Nusu has the most complex system. Zauzou has already passed the most complex stage and is now undergoing simplification. This cycle of sound change constitutes a continuum, which correlates with the contact patterns of the languages in question. Zauzou is the closest to Chinese speaking regions and began to have the earliest contact with the outside, followed by Nusu, with Anong and Trung being the most isolated.

## (B) Diphthongs and Triphthongs:

Table 29: Diphthongs and triphthongs

Types	Anong	Nusu	Zauzou	Trung
i + V	ie, iɛ, ia, ia, io, iu, iuu, iẽ, iã, iã	ie, iɛ, ia, io, io,iu, iə, iu, iã, iaɪ, iq, io, iẽ, io, ie, iũ, iãɪ, io	ie, iɛ, iẽ, ia, iã, io, io, io, io, iu, iuu	i = j
u + V	ui, ue, uɛ, ua, ua, uẽ, uã	ui, ue, uɛ, ua, uo, uaɪ, uã, uoɪ, uẽ, uɛ, uẽ, uẽ, uõɪ, uɛ, uõ, uõɪ, uõ, uq	ue, uẽ, uɛ, ua, uã, uã, uɛ, uẽ, uɛ, uo, uõ, uõ	u = w
y + V	yi, ye, yɛ, ya	yi, ye, yɛ, ya, yẽ, yã, yɛ	yi, yɪ, ye, ya, yẽ, yɛ	ye
ui + V	ui, ɣu	ui, ue	—	—
V + i	ei, ai, ai	—	—	ai, oi, ui, ui, ai, ai, ui, ui
V + u	au	—	—	—
triphthong	iau, uai	—	—	—

There are a lot of similarities between the four languages in terms of complex vowels, but there are also some notable differences. First, Nusu and Zauzou have not developed diphthongs that begin with the central vowel and then transition to i or u yet; both Anong and Trung have both types of diphthongs. Some of the diphthongs that end with i or u came from Chinese borrowings.

Second, Nusu has a few instances of diphthongs that begin with the transitional vowel *u*, which is uncommon among Tibeto-Burman languages. Diphthongs that begin the transitional with element *y* in Trung occur only in Chinese borrowings. In Anong, the frequency of occurrence of diphthongs that begin with the transitional element *y* is quite low. This means that in Trung and Anong, diphthongs with *y* as the onset are a new development.

Third, diphthongs in Trung that begin with *i* or *u* are treated as combinations of the semivowels *y* or *w* followed by a vowel and are realized as the palatalization or labialization of the vowel. In actuality, there are no qualitative differences (between such combinations and the diphthongs in the other languages).

## (C) Finals with Consonantal Codas Differ Among the Four Languages

Table 30: Finals with consonantal codas

	Anong	Nusu	Zauzou	Trung
-p	—	—	—	ip, ɨp, ep, ɛp, ap, ǎp, ɔp, uɔp, ʉp
-t	—	—	—	it, ɨt, et, ɛt, at, ǎt, ɔt, ɔ̃t, ut, ʉt, ut, ʉ̃t
-k	—	—	—	ik, ɨk, ek, ɛk, ak, ǎk, ɔk, ɔ̃k, uk, ʉk, uk, ʉ̃k
-ʔ	iʔ, ɛʔ, aʔ, aʔ, oʔ, uʔ, uʔ, ɨʔ ioʔ ueʔ, uaʔ	—	—	iʔ, ɨʔ, eʔ, ɛʔ aʔ, ǎʔ, ɔʔ, ɔ̃ʔ, uʔ, ʉʔ, uʔ, ʉ̃ʔ
-m	im, imʔ, em, ɛm, ɛmʔ, am, amʔ, om, omʔ, um, um, ɨm, uam, uam	—	—	em, ɛm, am, ǎm, ɔm, ɔ̃m, um, ʉm, imʔ, ɛmʔ, ǎmʔ, ɔmʔ, ʉmʔ
-n	in, inʔ, en, enʔ, an, anʔ, ɔn, un, un, unʔ, ɨn, ɨnʔ, iɛn, ian, uan, uan	—	—	in, ɨn, en, ɛn, an, ǎn, ɔn, ɔ̃n, un, ʉn, un, ʉ̃n, yn, yan, ɨnʔ, ɛnʔ, ǎnʔ, ɔnʔ, ʉnʔ, ʉ̃nʔ
-ŋ	ɛŋ, aŋ, uŋ, uŋʔ	—	—	—
-ŋ̥	iŋ, ɨŋ, ɛŋ	—	—	—
-ŋ̥ʔ	iŋ, ɛŋ, ɛŋ, aŋ, aŋ, oŋ, uŋ, ɨŋ, uŋ, uŋʔ, iɛŋ, ian, ian, uan	—	—	iŋ, ɨŋ, ɛŋ, aŋ, ɔŋ, ɔ̃ŋ, uŋ, ʉŋ, uŋ, ʉ̃ŋ, ɨŋʔ, ɛŋʔ, ǎŋʔ, ɔŋʔ, ʉŋʔ, ʉ̃ŋʔ
-l	—	—	—	el, ɛl, al, ǎl, ɔl, ɔ̃l, ul, ʉl, ul, ʉ̃l
-ɿ	—	—	—	ɛɿ, ɛɿ, ǎɿ, ɔɿ, ʉɿ, ʉ̃ɿ

The above table shows enormous contrasts in the codas across the four languages. First, Nusu and Zauzou, the two Yi languages, have lost all of the consonants in coda position.

Second, Trung has retained the original Tibeto-Burman coda position consonants including the nasals, the stops, and the lateral. The only consonant that does not occur in the coda position of finals is [s]. The retroflex [ɺ], we suspect, is a variant of the earlier coda [r]. In Anong, all instances of stops, fricatives, and laterals have been lost in codas. The glottals in the coda are the remains of earlier stops. And

the vowels plus nasal combinations are in the process of becoming nasalized vowels. Anong has developed finals with retroflex nasals and palatal nasals. Where they came from can be figured out by comparing the forms with forms from other Tibeto-Burman languages.

Third, both Anong and Trung have nasal finals followed by glottal stops. Although Tibetan and some other Tibeto-Burman languages have finals with consonant codas, it is not clear whether the finals with glottal stop codas in Anong and Trung are cognate to these.

Fourth, the sound changes in those four languages have played an important role in determining the independent status of Anong. At least, phonologically, they set Anong far apart from the other three languages.

### (3) *Tones*

The tones of those four languages are also different, which are manifested in the following two ways.

#### (A) Number of Tones

The number of tones differ among those languages, which can be seen from the table below.

Table 31: Number of tones

	Anong	Nusu	Zauzou	Trung
high level 55	/	/	/	/
mid level 33	/		/	
low falling 31	/	/	/	/
high falling 53	/	/	/	/
high rising 35	/	/	/	
low rising 13			/	

Trung has only three tones. Nusu has four, while Anong has five. Zauzou has six which is the highest number of tones among those four languages. All four have a high level tone, a mid-falling tone, and a high falling tone. Three of the languages have a mid-rising tone, and two languages have a mid-level tone. Only one, i.e. Zauzou, has a low rising tone. These patterns show tendency toward tone development. Very few of the Tibeto-Burman languages have developed contour tones, which is an indication that Tibeto-Burman languages are more conservative in tone development than Chinese, Hmong, Mien, and Tai-Kadai languages.

## (B) The Functional Load

The functional load of tones in those four languages differs in the following ways. First, although there is a correlation between the number of tones a language has and the functional load of the tones, it is not always true that the more the tones and the higher the functional load. For instance, Anong has more tones than Nusu. However, this does not mean that tones have a higher functional load in Anong than in Nusu. It is clear that Trung has the lowest functional load for tones whereas tones in Zauzou have the highest functional load.

Second, the functional load of tones is determined by their frequency of occurrence for making meaning distinctions. Although we have not done a thorough investigation of this, it is easy to find many examples in Zauzou where tones are used to signal meaning distinctions with otherwise identical forms. It is also relatively easy to find such examples in Nusu. However, it is hard to find them in Anong and Trung.

Third, our investigation reveals that tones in Zauzou and Nusu are relatively stable. Few instances of variation in the tone of the same word occur in either language. This is not so in Anong and Trung. Tones on the same word vary quite freely, and this is especially true in Anong.

Fourth, Trung and Anong are predominantly polysyllabic, while Nusu and Zauzou are basically monosyllabic. In Trung and Anong, tones have a relatively low functional load but in Nusu and Zauzou tones have a much higher functional load.

Fifth, Trung and Anong have complex sound systems with a high number of consonant clusters and finals. Nusu and Zauzou have relatively simple sound systems with many homophones making it necessary to use tones to signal meaning distinctions, which led to the increase in their functional load.

(4) *Syllable Structure*

There are two marked differences between those four languages in their syllable structure. First of all, as members of the Yi subgroup, Nusu and Zauzou have predominantly open syllables because of the loss of consonants in coda position. In contrast, Trung and Anong still have numerous consonantal codas resulting in more closed syllables. The other major difference is that Trung and Anong are rich in prefixes and suffixes, which is why quite a number of the words in the basic word list are polysyllabic. Consequently, words in Nusu and Zauzou are mostly monosyllabic while Trung and Anong, which belong to the

Jingpo subgroup, are predominantly polysyllabic. Let's compare syllable structures in the four languages (T= Tone; C=Consonant; V=Vowel).

Table 32: Syllable structures in the four languages

	Anong	Nusu	Zauzou	Trung
CT	/	/	/	
VT	/	/	/	/
VVT	/	/	/	/
VVVT	/			
CVT	/	/	/	/
CVVT	/	/	/	/
CVVVT	/		/	
CCVT	/	/		/
CCCVCT	/			
VCT	/			/
VVCT	/			/
CVCT	/			/
CVVCT	/			/
CCVVT				/
CVCCT				/
CCVCCT				/

The table above shows that Anong has 14 different syllable types. Nusu and Zauzou have six each and Trung has a total of 13. The cause of the differences in syllables is the differences in consonant clusters and the differences in the occurrence of consonantal codas. Phonologically, the four languages can be divided into those that allow consonantal codas and those that do not: The languages that allow consonants in coda position do not have a constricted versus non-tight vowels contrast. Languages that are now without consonantal codas have a tight versus non-tight vowel contrast. The languages that allow a full range of consonantal codas have short vowels contrasting with their long counterparts. Languages that allow consonantal codas and tones have tones with a lighter functional load whereas tones in languages without consonantal codas have a higher functional load. Languages with consonants in coda positions have complex syllable structures, while those without consonants in coda positions have relatively simple syllable structures, and so on.

## 6.2. LEXICAL COMPARISON

In terms of differences in lexicon, Nusu and Zauzou are both predominantly monosyllabic languages, while Trung and Anong are mostly polysyllabic. All four languages share considerable basic vocabulary, as is evident in the clear correspondences between forms, which can be seen in the following table. An examination of these data provide evidence that Anong and Nusu are in one subgroup and Zauzou and Nusu are in the other. See immediately below the table for an explication of the numbers in the column on the right.

Table 33: Cognate sets in basic vocabulary (100 words)

	Anong	Nusu	Zauzou	Trung	
sky	mu <sup>55</sup> lan <sup>31</sup>	mu <sup>55</sup>	mu <sup>33</sup>	mũ <sup>55</sup>	1
sun	nɛm <sup>31</sup>	ni <sup>35</sup> a <sup>55</sup>	mi <sup>31</sup>	nãm <sup>53</sup> luŋ <sup>55</sup>	1
moon	s <sup>31</sup> la <sup>55</sup>	ɬa <sup>31</sup>	l <sup>31</sup>	su <sup>31</sup> la <sup>55</sup>	1
star	k <sup>h</sup> o <sup>31</sup> ni <sup>55</sup>	kɛ <sup>31</sup> lo <sup>35</sup>	ki <sup>55</sup> zo <sup>33</sup> la <sup>31</sup>	gu <sup>31</sup> net <sup>55</sup>	1
wind	ŋa <sup>31</sup> bu <sup>31</sup>	mu <sup>55</sup> a <sup>31</sup> ɬi <sup>35</sup>	mu <sup>33</sup> ɛ <sup>33</sup>	nãm <sup>53</sup> bũŋ <sup>53</sup>	2
rain	ts <sup>h</sup> ɿ <sup>31</sup>	mu <sup>55</sup> a <sup>31</sup> ɬua <sup>55</sup>	mu <sup>33</sup> vu <sup>55</sup>	nãm <sup>53</sup> zaŋ <sup>55</sup>	3
water	tɕ <sup>h</sup> a <sup>31</sup> ŋa <sup>35</sup>	.i <sup>31</sup> gia <sup>53</sup>	ɣe <sup>33</sup>	ŋaŋ <sup>55</sup>	2
earth	la <sup>31</sup> ma <sup>55</sup>	mi <sup>35</sup> a <sup>55</sup>	mi <sup>33</sup> ti <sup>33</sup>	miã <sup>55</sup>	2
mountain	zɿ <sup>31</sup> ɿuŋ <sup>55</sup>	ŋu <sup>35</sup> a <sup>55</sup>	ko <sup>53</sup> tiu <sup>33</sup>	lu <sup>31</sup> kha <sup>55</sup>	3
stone	luŋ <sup>55</sup>	lɿ <sup>53</sup>	la <sup>53</sup>	luŋ <sup>55</sup>	1
gold	ʃɿ <sup>33</sup>	tɕɿ <sup>35</sup> a <sup>55</sup>	tɕɿ <sup>31</sup>	seɿ <sup>55</sup>	1
silver	p <sup>h</sup> u <sup>55</sup>	ŋui <sup>35</sup> a <sup>55</sup>	ŋue <sup>33</sup>	ŋun <sup>55</sup>	4
iron	ɕa <sup>31</sup> k <sup>h</sup> ɕ <sup>55</sup>	ɕa <sup>35</sup>	xo <sup>55</sup>	ɕã <sup>53</sup>	4
fire	tɕ <sup>h</sup> ɛ <sup>31</sup> mi <sup>55</sup>	mi <sup>55</sup>	mi <sup>33</sup>	tu <sup>31</sup> mi <sup>55</sup>	1
ox	nō <sup>31</sup> uã <sup>31</sup>	nō <sup>55</sup>	nu <sup>33</sup>	nuŋ <sup>55</sup> ŋua <sup>53</sup>	1
horse	ma <sup>31</sup>	mu <sup>31</sup> la <sup>55</sup>	mia <sup>33</sup>	mu <sup>31</sup> gu <sup>53</sup>	1
goat	a <sup>31</sup> be <sup>55</sup>	tʃhãɿ <sup>55</sup>	tɕhe <sup>53</sup>	tɕhit <sup>55</sup>	4
sheep	a <sup>31</sup> iaŋ <sup>31</sup>	iã <sup>55</sup>	iã <sup>55</sup>	jãŋ <sup>53</sup>	1
pig	ɿo <sup>55</sup>	vɿ <sup>53</sup>	ɿɿ <sup>53</sup>	wãɿ <sup>55</sup>	1
dog	dɛ <sup>31</sup> gŋ <sup>55</sup>	khui <sup>55</sup>	khyi <sup>33</sup>	du <sup>31</sup> gi <sup>55</sup>	1
cat	mu <sup>31</sup> ni <sup>31</sup>	mu <sup>35</sup> nɛ <sup>31</sup>	na <sup>55</sup> ni <sup>33</sup>	na <sup>31</sup> me <sup>55</sup>	1
bear	ʃɿ <sup>55</sup> p <sup>h</sup> u <sup>31</sup>	khui <sup>55</sup> ua <sup>35</sup>	ɣo <sup>55</sup>	ɕui <sup>55</sup>	3
rat	a <sup>31</sup> diŋ <sup>55</sup>	.ɿua <sup>53</sup> p <sup>31</sup>	vu <sup>53</sup>	ɕit <sup>55</sup>	2
chicken	k <sup>h</sup> aɿ <sup>55</sup>	.ɿɿ <sup>31</sup>	ɣo <sup>53</sup>	khãɿ <sup>55</sup>	2
fish	ŋua <sup>55</sup>	ŋa <sup>55</sup>	ŋo <sup>33</sup>	nãm <sup>31</sup> plãɿ <sup>55</sup>	4
snake	bu <sup>31</sup>	v.ɿia <sup>55</sup>	ŋɿ <sup>31</sup>	bu <sup>53</sup>	2
egg	ɿo <sup>31</sup> lim <sup>31</sup>	ɿu <sup>31</sup>	vu <sup>13</sup>	kha <sup>31</sup> lũm <sup>53</sup>	2
tree	ʃɿ <sup>55</sup> dzuŋ <sup>55</sup>	si <sup>53</sup> dzãɿ <sup>35</sup>	se <sup>53</sup> tse <sup>33</sup>	ɕuŋ <sup>55</sup>	1
bamboo	k <sup>h</sup> am <sup>55</sup>	va <sup>55</sup>	kho <sup>33</sup> tse <sup>33</sup>	kham <sup>55</sup>	4
fruit	ɕuŋ <sup>55</sup> ʃɿ <sup>33</sup>	tɕhu <sup>55</sup> tɕhu <sup>55</sup>	ɕi <sup>33</sup>	ɕi <sup>53</sup>	4



Table 33 (cont.)

	Anong	Nusu	Zauzou	Trung	
grass	ɕin <sup>33</sup>	mɿq <sup>53</sup>	piɔ <sup>13</sup>	ɕin <sup>53</sup>	2
root	ɕuŋ <sup>55</sup> zu <sup>33</sup>	gɿu <sup>55</sup>	tɕhi <sup>55</sup> kã <sup>33</sup>	aŋ <sup>31</sup> ɿu <sup>53</sup>	2
flower	ɕuŋ <sup>55</sup> ven <sup>55</sup>	va <sup>53</sup> a <sup>55</sup>	ʔua <sup>53</sup>	min <sup>31</sup> tɔ <sup>55</sup>	4
body	dʒ <sup>31</sup> gu <sup>31</sup>	tɕhi <sup>35</sup> gu <sup>31</sup>	ku <sup>33</sup> tse <sup>33</sup>	gɔŋ <sup>53</sup>	1
head	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	u <sup>31</sup> phu <sup>55</sup>	ʔɔ <sup>13</sup> tu <sup>33</sup> le <sup>33</sup>	u <sup>53</sup>	4
eye	ni <sup>55</sup> luŋ <sup>55</sup>	mia <sup>53</sup> dʒi <sup>31</sup>	miɔ <sup>53</sup> sɿ <sup>33</sup>	ne <sup>ɔ</sup> <sup>55</sup>	1
ear	a <sup>31</sup> na <sup>31</sup>	ŋa <sup>55</sup> shã <sup>35</sup>	na <sup>33</sup> sɿ <sup>33</sup>	a <sup>31</sup> na <sup>55</sup>	1
nose	sɿ <sup>31</sup> na <sup>55</sup>	ŋa <sup>55</sup> kã <sup>35</sup>	na <sup>35</sup> ka <sup>35</sup>	sɿ <sup>31</sup> na <sup>55</sup>	1
mouth	ma <sup>55</sup> duŋ <sup>31</sup>	ŋa <sup>55</sup> kɔ <sup>35</sup>	mi <sup>55</sup> ɕi <sup>31</sup>	ni <sup>31</sup> gɔŋ <sup>55</sup>	1
tooth	a <sup>31</sup> sa <sup>31</sup>	shua <sup>55</sup>	tɕyi <sup>13</sup>	a <sup>31</sup> sa <sup>53</sup>	1
tongue	p <sup>h</sup> u <sup>31</sup> le <sup>31</sup>	fɿa <sup>35</sup>	lio <sup>55</sup> te <sup>33</sup>	pu <sup>31</sup> lai <sup>53</sup>	1
hand	a <sup>31</sup> vu <sup>35</sup>	lq <sup>53</sup>	lo <sup>53</sup>	u <sup>55</sup>	2
finger	n <sup>31</sup> tɕ <sup>h</sup> im <sup>55</sup>	lq <sup>53</sup> n <sup>u</sup> <sup>55</sup>	lo <sup>53</sup> na <sup>33</sup>	u <sup>55</sup> xɿam <sup>53</sup>	2
heart	ni <sup>55</sup> ɿum <sup>31</sup>	ʔi <sup>31</sup> lo <sup>53</sup>	na <sup>35</sup> thue <sup>13</sup>	ɿu <sup>31</sup> mɔ <sup>ɔ</sup> <sup>55</sup>	1
liver	bu <sup>31</sup> ɕin <sup>33</sup>	tshã <sup>55</sup>	se <sup>33</sup>	pu <sup>31</sup> ɕin <sup>53</sup>	2
lung	i <sup>31</sup> su <sup>55</sup>	tshuã <sup>35</sup>	tshue <sup>55</sup> phu <sup>33</sup>	ɿu <sup>31</sup> su <sup>53</sup>	1
blood	ɕu <sup>33</sup>	sui <sup>55</sup>	ɕue <sup>33</sup>	ɕi <sup>55</sup>	1
bone	zã <sup>31</sup> k <sup>h</sup> o <sup>53</sup>	ɿu <sup>55</sup>	xo <sup>33</sup> kã <sup>55</sup>	aŋ <sup>31</sup> ɿu <sup>53</sup>	1
person	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	su <sup>35</sup>	tsu <sup>33</sup>	a <sup>31</sup> tshãŋ <sup>53</sup>	2
name	a <sup>31</sup> nuŋ <sup>31</sup>	nu <sup>35</sup> su <sup>35</sup>	zo <sup>55</sup> zo <sup>33</sup>	a <sup>31</sup> nuŋ <sup>53</sup>	2
house	tɕ <sup>h</sup> im <sup>31</sup>	iɔ <sup>35</sup>	ie <sup>33</sup>	tɕum <sup>53</sup>	2
clothes	gã <sup>31</sup> mu <sup>31</sup>	gã <sup>53</sup>	me <sup>33</sup>	jɔ <sup>ɔ</sup> <sup>55</sup>	2
hat; cap	dã <sup>31</sup> mo <sup>55</sup>	du <sup>55</sup> nu <sup>55</sup>	tsha <sup>33</sup> ko <sup>55</sup>	ʃu <sup>31</sup> wa <sup>55</sup>	3
shoe	a <sup>31</sup> xa <sup>55</sup> gŋ <sup>55</sup> dem <sup>55</sup>	ko <sup>31</sup> la <sup>35</sup> ba <sup>35</sup>	tɕhi <sup>55</sup> kie <sup>55</sup>	lu <sup>31</sup> gɿu <sup>53</sup>	3
cloth	ma <sup>33</sup> xuŋ <sup>55</sup>	tsha <sup>31</sup> phiɔ <sup>35</sup>	sa <sup>13</sup> so <sup>53</sup>	ɿe <sup>31</sup> bɔp <sup>55</sup>	3
rice; food	bu <sup>55</sup> dʒa <sup>31</sup>	tshi <sup>55</sup> kha <sup>35</sup>	tso <sup>33</sup> tɕhe <sup>53</sup>	aŋ <sup>31</sup> za <sup>55</sup>	3
meat	ɕa <sup>33</sup>	ɕa <sup>55</sup>	xo <sup>33</sup>	ɕa <sup>53</sup>	1
oil	ŋ <sup>31</sup> su <sup>55</sup>	tshu <sup>55</sup> a <sup>55</sup>	mɔ <sup>31</sup>	tu <sup>31</sup> mã <sup>55</sup>	3
salt	sɿ <sup>31</sup> lan <sup>55</sup>	tsha <sup>55</sup>	tsho <sup>33</sup>	su <sup>31</sup> lã <sup>ɔ</sup> <sup>55</sup>	2
road	t <sup>h</sup> i <sup>31</sup> za <sup>31</sup>	khɿa <sup>35</sup> phiɔ <sup>35</sup>	kho <sup>55</sup> mɔ <sup>31</sup>	mu <sup>31</sup> lɔŋ <sup>53</sup>	3
bridge	go <sup>31</sup> ɿã <sup>55</sup>	gu <sup>55</sup> dʒa <sup>35</sup>	kho <sup>33</sup> tso <sup>33</sup>	zã <sup>55</sup>	1
ghost, spirits	p <sup>h</sup> u <sup>31</sup> ɿã <sup>33</sup>	yi <sup>35</sup>	pe <sup>31</sup> tɕa <sup>13</sup>	plãŋ <sup>55</sup>	3
eat	em <sup>53</sup>	dʒa <sup>55</sup>	tso <sup>33</sup>	khe <sup>53</sup>	2
see	dʒã <sup>55</sup> u <sup>31</sup>	ɿu <sup>31</sup>	ni <sup>55</sup>	jaŋ <sup>53</sup>	3
blow on (fire)	a <sup>31</sup> p <sup>h</sup> u <sup>31</sup>	si <sup>35</sup>	me <sup>53</sup>	mit <sup>55</sup>	2
read	su <sup>31</sup> zu <sup>31</sup> u <sup>31</sup>	ɿu <sup>31</sup>	za <sup>55</sup>	dɔn <sup>53</sup>	3
sit	go <sup>55</sup> na <sup>33</sup>	ni <sup>35</sup>	ni <sup>33</sup>	ɿɔŋ <sup>53</sup>	2
ride (horse)	du <sup>31</sup> dʒu <sup>31</sup>	dʒu <sup>31</sup>	tɕi <sup>33</sup>	ɕɔn <sup>55</sup>	2
go; walk	dʒi <sup>53</sup>	shua <sup>55</sup> a <sup>31</sup>	i <sup>55</sup>	a <sup>31</sup> gɿu <sup>55</sup>	3
die	sɿ <sup>31</sup>	ɕi <sup>35</sup>	ɕi <sup>55</sup>	ɕi <sup>53</sup>	1
big	ua <sup>55</sup> duŋ <sup>31</sup>	zɿ <sup>55</sup> a <sup>31</sup>	i <sup>33</sup>	ka <sup>31</sup> teŋ <sup>55</sup>	2
small	tɕ <sup>h</sup> i <sup>55</sup> la <sup>55</sup>	a <sup>31</sup> ʔme <sup>53</sup>	nɛ <sup>33</sup>	ka <sup>31</sup> ne <sup>ɔ</sup> <sup>55</sup>	3
tall; high	ua <sup>55</sup> maŋ <sup>31</sup>	m <sup>u</sup> <sup>31</sup>	mia <sup>55</sup>	xɿaŋ <sup>53</sup>	4

Table 33 (*cont.*)

	Anong	Nusu	Zauzou	Trung	
low	tɕ <sup>h</sup> i <sup>55</sup> n̩im <sup>31</sup>	ŋiɔ <sup>53</sup>	nɛ <sup>53</sup>	thi <sup>53</sup>	4
long	ua <sup>55</sup> iã <sup>31</sup>	xɿu <sup>31</sup>	ɣe <sup>55</sup>	miãŋ <sup>53</sup>	3
short	tɕi <sup>55</sup> t <sup>h</sup> uŋ <sup>55</sup>	a <sup>31</sup> dʒu <sup>53</sup>	tɕo <sup>33</sup>	thi <sup>53</sup>	2
red	tsa <sup>35</sup> si <sup>55</sup>	xɿ <sup>35</sup> a <sup>55</sup>	ne <sup>33</sup>	puw <sup>31</sup> sai <sup>53</sup>	2
white	bɛ <sup>55</sup>	ba <sup>55</sup> ba <sup>31</sup>	phiɔ <sup>33</sup>	bɔŋ <sup>53</sup>	1
black	ŋaŋ <sup>55</sup>	na <sup>35</sup> na <sup>53</sup>	nũ <sup>53</sup>	na <sup>ɔ</sup> <sup>55</sup>	1
sweet	k <sup>h</sup> ɿ <sup>53</sup>	tɕhu <sup>35</sup>	tɕhu <sup>55</sup>	zɿu <sup>53</sup>	1
bitter	k <sup>h</sup> a <sup>33</sup>	kha <sup>53</sup>	kho <sup>33</sup>	kha <sup>53</sup>	1
one	t <sup>h</sup> i <sup>55</sup>	thi <sup>53</sup>	tu <sup>31</sup>	tɕi <sup>55</sup>	1
two	a <sup>31</sup> n̩i <sup>55</sup>	m <sup>55</sup>	nɛ <sup>53</sup>	a <sup>31</sup> n̩i <sup>55</sup>	1
three	a <sup>31</sup> som <sup>53</sup>	sɔ <sup>35</sup>	se <sup>33</sup>	sũm <sup>53</sup>	1
four	bɿ <sup>53</sup>	vɿ <sup>35</sup>	ɣi <sup>33</sup>	bli <sup>53</sup>	1
five	p <sup>h</sup> aŋ <sup>31</sup>	ŋa <sup>55</sup>	ŋo <sup>33</sup>	puw <sup>31</sup> ŋa <sup>53</sup>	1
six	kuŋ <sup>55</sup>	khɿu <sup>53</sup>	kha <sup>53</sup>	khɿu <sup>ɔ</sup> <sup>55</sup>	1
seven	sŋɿ <sup>35</sup>	ŋãɿ <sup>55</sup>	ne <sup>55</sup>	suw <sup>31</sup> n̩it <sup>55</sup>	1
eight	ɕɛŋ <sup>55</sup>	ʂaɿ <sup>53</sup>	ia <sup>33</sup>	ɕãt <sup>55</sup>	1
nine	duw <sup>31</sup> gu <sup>31</sup>	guw <sup>35</sup>	kuw <sup>33</sup>	duw <sup>31</sup> gu <sup>53</sup>	1
ten	t <sup>h</sup> i <sup>55</sup> ts <sup>h</sup> a <sup>55</sup>	tshe <sup>35</sup>	tshe <sup>55</sup>	tɕi <sup>31</sup> tshãn <sup>55</sup>	1
I	a <sup>31</sup> io <sup>31</sup> , ŋa <sup>31</sup>	ŋa <sup>35</sup>	ŋu <sup>55</sup>	guw <sup>55</sup>	1
you	ŋa <sup>31</sup>	nɔ <sup>55</sup>	nɔ <sup>33</sup>	na <sup>53</sup>	1
he, she	ŋ <sup>31</sup>	ŋnɔ <sup>55</sup>	tu <sup>55</sup>	ũŋ <sup>53</sup>	2
who	k <sup>h</sup> a <sup>31</sup> io <sup>55</sup>	khe <sup>31</sup>	khɔ <sup>35</sup>	ka <sup>31</sup> me <sup>55</sup>	1
where	k <sup>h</sup> a <sup>55</sup> k <sup>h</sup> a <sup>31</sup>	kha <sup>35</sup> ba <sup>31</sup>	xa <sup>55</sup> ka <sup>55</sup>	kha <sup>55</sup> dɔ <sup>31</sup>	4
what	k <sup>h</sup> a <sup>55</sup> ts <sup>h</sup> ɿ <sup>31</sup>	tɕhu <sup>31</sup> ma <sup>31</sup>	se <sup>55</sup> i <sup>55</sup>	tãŋ <sup>53</sup>	3
not	m <sup>31</sup>	ma <sup>55</sup>	ʔa <sup>31</sup>	muw <sup>31</sup>	4
don't	t <sup>h</sup> a <sup>31</sup>	tha <sup>55</sup>	tha <sup>31</sup>	me <sup>31</sup>	4
and; with	si <sup>55</sup>	le <sup>31</sup>	ni <sup>33</sup>	n̩i <sup>55</sup>	3

The table above contains 100 core vocabulary of Tibeto-Burman languages, most of which are cognates within the Tibeto-Burman subgroup. In fact, they are mostly cognates among Sino-Tibetan languages. A syllable count indicates that out of the 100 lexical items, the percentage of monosyllabic words are as follows, 70% for Zauzou, 61% for Nusu, 50% for Trung, and 33% for Anong.

1. In terms of cognates, 44 words are cognates in all four languages (marked as 1), although there are considerable differences phonologically among them.

2. There are 26 items that show cognates between Nusu and Zauzou, and between Trung and Anong (marked as 2). It should be noted that there are a couple of exceptions. For instance, the forms for 'he' show cognates in Anong and Trung but not in Nusu and Zauzou. On the

other hand, the forms for 'sweet' show cognates in Zauzou and Nusu, but not in Anong and Trung.

3. Seventeen of the 100 items are definitely not cognates among the four languages (marked as 3), though some of them are somewhat phonologically similar. Some of those seventeen items are borrowings from the same lending language while some others may be borrowings from each other.

4. The thirteen items that are identified by the number four show a complex cognate relationship among the four languages. Notice that forms for 'other', 'high' and 'low' are cognates among Anong, Nusu, and Zauzou, whereas the forms for 'bamboo' and 'fruit/seed' are cognates among Anong, Zauzou and Trung.

It should be pointed out that here we have limited the comparison to the first 100 core vocabulary items, which is why we have a relatively high percentage of cognates among the four languages. If we expand the vocabulary to include 2000 to 3000 basic vocabulary commonly used for subgrouping purposes, then the percentage of cognates would be much lower.

### 6.3. GRAMMATICAL COMPARISON

Similarities in grammatical structures are an important basis for determining genetic relatedness among languages. Our examination of the grammatical structures among the four Nung languages reveals that Zauzou and Nusu are close to each other, and Anong and Trung are close to each other. In terms of grammatical categories and the means through which they are indicated, we also see clear differences between those languages. Both Zauzou and Nusu have relatively simple grammatical categories, mainly marked analytically with function words. In contrast, Anong and Trung both have rich systems of prefixes and suffixes, some even involving consonant and vowel alternations. In addition, Anong displays certain unique characteristics not present in the other three languages.

6.3.1. *Plural Marking*

Table 34: Markers of noun plurality

	Anong	Nusu	Zauzou	Trung
marker	zɿ <sup>31</sup> ɲu <sup>31</sup> , mu <sup>53</sup>	vɿi <sup>35</sup> ɑ <sup>55</sup>	tu <sup>31</sup> , mo <sup>31</sup>	mǎŋ <sup>55</sup>
usage	countables	animates	countables	demonstratives
form	auxiliary	auxiliary	auxiliary	auxiliary
origin	not same source	not same source	not same source	not same source

First, as is shown in the table above, all four languages utilize particles after the nouns to mark plurality. However, the source of the plural markers is different for each of the four languages. The plural marker in Anong comes from a measure word, whereas the plural markers in Zauzou and Nusu originate from indefinite numerals. The origin of the plural marker in Trung is unclear at this point.

Second, we see differences in the way the plural markers are used in each of the languages. For instance, in both Anong and Zauzou, the plural markers can occur on all countable nouns, whereas the plural markers in Nusu and Trung are more restricted. In Nusu, only animate nouns can take the plural marker, while in Trung only human nouns can be marked as plural.

6.3.2. *Nominal Diminutives*

All four languages possess diminutive suffixes for nouns denoting cuteness or diminution of the entities referred to by the noun. Their function is similar to the diminutive markers, such as *ér* 儿 and *zǐ* 子, in Chinese.

Table 35: Diminutives

	Anong	Nsusu	Zauzou	Trung
diminutive	tɕ <sup>h</sup> ɛn <sup>31</sup>	zɑ <sup>55</sup>	zo <sup>31</sup> , ɲɑ <sup>55</sup>	tɕhǎl <sup>53</sup>
usage	widely	narrowly	narrowly	widely
form	grammaticalized suffix < 'son'	grammaticalized suffix < 'son'	grammaticalized suffix < 'son; daughter'	grammaticalized suffix < 'son'
origin	Trung	Zauzou	Nusu	Anong

First, the diminutive suffixes in Anong and Trung are cognates while the ones in Nusu are cognate with those in Zauzou. However, the diminutive marker ɲɑ<sup>55</sup> in Zauzou does not have a cognate in Nusu.

Second, all of the diminutive markers originate from content lexemes meaning ‘son’ or ‘baby’ through grammaticalization. They are either part of the full-lexeme or have undergone phonological changes in the process of grammaticalization.

Third, in terms of the breadth of their distribution, we see differences among the four languages. The terms of ‘wide’ and ‘narrow’ used in the table are relative in nature. We have not done a statistical survey of the frequency of occurrence of all of these diminutive affixes. The wide versus narrow labeling merely reflects our estimate of their distribution based on the data we have on the situations in which such markers were used.

### 6.3.3. Possessives

Some of the Tibeto-Burman languages have a possessive marking system. All four languages retain remnants of an earlier possessive marking system. The systems show identity in origin: all four of them are reduced forms of the personal pronouns. All four of them mark first, second, and third person distinctions. And, all share distributional restrictions: Anong and Zauzou do not prefix them to kinship terms or personal names, while Nusu and Trung rarely prefix them to kinship terms or personal names.

Table 36: Possessive marking

	Anong	Nusu	Zauzou	Trung
possessive remnants	yes	yes	yes	yes
from pronouns	yes	yes	yes	yes
kinship or personal names	no	rarely	no	rarely

Several comments are in order. First, few languages in the Tibeto-Burman subgroup still retain possessive markings. About ten such languages can be found in China, which include the four Nung languages in question. Even in those languages, the possessive marking system is on its way to being lost. They are becoming less and less productive and their occurrence is more and more restricted.

Second, the possessive markers in Nusu and Trung only occur with kinship terms. However, in Anong and Zauzou, both kinship and non-kinship nouns take the possessive marking. This indicates that possessive marking in Anong and Zauzou is more productive than that in Nusu and Trung.

6.3.4. *Classifiers and Measure Words*

Measure words in Tibeto-Burman languages display marked differences from language to language. Therefore, the characteristics of classifier words can be a good indicator of the closeness between Tibeto-Burman languages. Classifier words in the four Nung languages are quite similar in nature but there are some differences.

Table 37: Classifiers (measure words)

	Anong	Nusu	Zauzou	Trung
number	rather plentiful	very plentiful	especially plentiful	rather plentiful
functional load	rather large	very large	especially large	rather large
used alone	generally not	sometimes	fully possible	not possible
for classification	beginning to be	beginning to be	very clearly	no
auto-classifiers	rather many	remnants	not have	very plentiful

The most obvious difference in the behavior of classifiers among Tibeto-Burman languages is word order. Another difference is the number of classifiers a language possesses. And there is an interesting correlation between those two points. Some of the Tibeto-Burman languages have the classifier word-plus-numeral order while others have numeral-plus-classifier word order. The former type of languages tend to have a relatively small number of classifiers with a limited functional load while the latter type of languages are usually rich in measure words with a heavier functional load. The four Nung languages under discussion are quite consistent in this regard, which is why we consider them to be similar in general.

When we say that measure words may occur alone we mean that when a classifier co-occurs with the numeral one to modify a noun, the numeral can be omitted, which means that the classifier retains the connotation of one. This only occurs in languages with a rich classifier system.

The classifying function refers to the phenomenon where nominals denoting different categories of entities take different classifiers. For instance, different classifiers refer to various types of entities such as rigid, two dimensional things, three dimensional things (which are further divided into rigid vs flexible and thick vs thin), round things, flat things, liquids, animals, plants, humans, and so on.

Auto- or self-classifying classifiers refer to instances where the classifier is the same in form as the nominal, such as  $\eta i^{55} \text{lu}\eta^{55} t^h i^{55} \text{lu}\eta^{55}$

‘eye one eye: one eye’ (partially identical), p<sup>h</sup>an<sup>33</sup> t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>an<sup>33</sup> ‘leg one leg: one leg’, ven<sup>55</sup> t<sup>h</sup>i<sup>55</sup> ven<sup>55</sup> ‘flower one flower: one flower’, and so on. This is characteristic of those Tibeto-Burman languages in which measure words just started to develop.

### 6.3.5. *The Formation and Characteristics of Reflexives*

All four languages have reflexive pronouns. However, they differ in terms of how they are formed and used.

Although reflexive pronouns are a relatively new phenomenon in Tibeto-Burman languages, they are quite common across the subgroup with specific characteristics. All of the four Nung languages have reflexive pronouns. Trung has two basic forms of reflexive pronouns whereas Anong and Nusu have only one basic form respectively. Zauzou does not have a separate reflexive pronoun. Instead, it utilizes the reduplication process to indicate reflexive.

In fact, using reduplication to express reflexive is not uncommon in Tibeto-Burman languages. Of the four Nung languages, three utilize the reduplication process to denote reflexive, though two of the three require the reflexive form in addition to reduplicating the pronoun.

The reflexive forms in all four languages can be combined with pronouns to form singular, dual, and plural reflexive pronouns. The combination is tighter in some cases than in others. Some of the reflexive forms are from roots without the prefix while others are full forms. Also, some of the reflexive forms can serve as a constituent of a sentence alone whereas others cannot.

### 6.3.6. *Verbal Grammatical Categories*

Verbs in all four languages can be marked for a variety of grammatical relations, and there are marked differences among the four languages in this respect. In some instances, the same grammatical category is marked very differently in different languages and the markings are not cognate.

Seven verbal grammatical categories and how each of the four languages marks them is shown in Table 39. Among the four languages, only Anong and Trung have person and number marking on verbs and the two languages are quite similar in the sense that both use prefixes and suffixes to mark first and second person for singular, dual, and plural.

Table 38: Reflexives across languages

	Anong	Nusu	Zauzou	Trung
basic form	$\eta^{31}luj^{55}\eta^{31}$	1. $tud^{53}m^{55}$ 2. overlaps with personal pronouns	overlaps with personal pronouns or interrogative pronouns	1. $l\ddot{u}l^{55}$ , $\alpha^{31}du^{53}$ 2. overlaps with personal pronouns
interaction with personal pronouns	drops the prefix $\eta^{31}$ ; uses 1, 2, 3, singular, dual and plural forms	uses 1, 2, 3, singular, dual and plural forms	uses 1, 2, 3, singular, dual and plural forms and the interrogative forms	uses 1, 2, 3, singular, dual and plural forms
overlapping forms	none	with personal pronouns, inserts $tud^{53}$ in the middle	with personal pronouns, inserts $s\ddot{a}^{31}$ in the middle	simple overlap with personal pronouns



Table 39: Verbal categories across languages

	Anong	Nusu	Zauzou	Trung
number	1, 2, 3 person suffixes	—	—	1, 2, 3 person suffixes
aspect	future bui <sup>55</sup> , ud <sup>55</sup> , progressive ε <sup>55</sup> , no <sup>31</sup> ε <sup>31</sup> , finished dʒε <sup>31</sup> , <sup>31</sup> , past ie <sup>31</sup> , completed l <sup>1</sup> aij <sup>55</sup>	future gud <sup>35</sup> , duration di <sup>55</sup> , ta <sup>55</sup> , ɕi <sup>31</sup> , dʒa <sup>31</sup> , finished ga <sup>31</sup> , ka <sup>31</sup> , past io <sup>35</sup> , dʒa <sup>35</sup> , completed ku <sup>31</sup> a <sup>31</sup> , io <sup>35</sup>	future ie <sup>33</sup> , immediate future mo <sup>35</sup> zɔ <sup>31</sup> , progressive tɔ <sup>55</sup> yu <sup>55</sup> , finished zɔ <sup>31</sup> , experiential ku <sup>55</sup> zɔ <sup>31</sup> , completed kue <sup>33</sup> zɔ <sup>31</sup>	future pǎj <sup>55</sup> wa <sup>53</sup> , present dʒin <sup>53</sup> , finished luŋ <sup>55</sup> , completed bui <sup>31</sup>
voice	reflexive -ɕui <sup>31</sup> , causative sɿ <sup>31</sup> -, mutual a <sup>31</sup> -	suppletive and analytic forms	analytic forms	reflexive -ɕui <sup>31</sup> , causative su <sup>31</sup> -, mutual a <sup>31</sup> -
mood	indicative ε <sup>55</sup> , imperative le <sup>55</sup> and lie <sup>31</sup>	imperatives are analytic	optatives are analytic; questions use the prefix -ta <sup>53</sup>	questions use -ma <sup>55</sup> ; imperatives use various affixes
directionals	centering suffixes: a <sup>31</sup> ie <sup>55</sup> , a <sup>31</sup> na <sup>55</sup> , a <sup>31</sup> l <sup>1</sup> o <sup>31</sup> , toward periphery suffixes: a <sup>31</sup> ba <sup>55</sup> , a <sup>31</sup> la <sup>31</sup> , ɕaij <sup>55</sup> , lu <sup>55</sup>	use directional verbs 'go' and 'come'	use directional verbs 'go' and 'come'	centering suffixes: .ia <sup>53</sup> , .iɕi <sup>53</sup> , .iɕt <sup>55</sup> ; toward periphery suffixes: di <sup>31</sup> , downward dʒɕi <sup>55</sup> , upward luŋ <sup>55</sup>
nominalizers	dem <sup>55</sup> , zɔ <sup>55</sup> , su <sup>55</sup>	a <sup>31</sup> , khue <sup>35</sup>	te <sup>53</sup> , pe <sup>31</sup> , tu <sup>33</sup> , su <sup>55</sup>	sa <sup>55</sup> , a <sup>31</sup> ja <sup>55</sup>
copulas	a <sup>31</sup> dɕ <sup>55</sup> , ηo <sup>55</sup> , a <sup>31</sup> ne <sup>55</sup> , io <sup>55</sup> , dem <sup>55</sup>	nɿ <sup>35</sup> , dʒa <sup>53</sup> , khui <sup>31</sup>	nɿ <sup>33</sup> , tɕi <sup>13</sup>	ɕn <sup>53</sup>

All four languages have the category of aspect with minor differences in how it is marked. None of the aspect markers is cognate across the four languages. Progressive, durative, present, and present progressive are essentially the same in nature, that is, the differences are more terminological than substantive. Also, past progressive and experiential are the same.<sup>2</sup>

All four languages have the category of voice with significant differences. Anong and Trung are very similar in both meanings and forms of voice marking. The only voice category Nusu has is causative. In fact, the causative prefix has been lost in Nusu with resulting sound changes in the verb roots. Zauzou no longer has any synthetic voice markers; it utilizes analytical means to indicate voice.

Mood categories exist in all four languages but with significant differences. First, only Anong has indicative mood marking in the verb. Second, verbs are marked for interrogative in both Zauzou and Trung, but not in the other two languages. The interrogative markers in Zauzou and Trung are not cognates. Third, all the languages except Zauzou have imperative marking. Imperatives are marked similarly in Anong and Trung and the verbal inflections are all related to person. Nusu marks imperatives analytically. Fourth, all four languages mark requests, though none of those markings are cognates.

Verbs in all four languages carry directional marking. Directional marking in Anong is very similar to that in Trung, and few of the markers in those two languages are cognates. In Nusu and Zauzou, the verbs 'come' and 'go' are used as directional markers, and the verbs are probably cognate.

All four languages have nominalizers. The nominalizer *su*<sup>55</sup> in Anong has a cognate in Lisu.<sup>3</sup> The rest of the nominalizers do not seem to have any shared origins.

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<sup>2</sup> The reader, wary or not, should be aware by this point that the aspectual labels are unclear even within a given language description, let alone across descriptions. Sun himself makes that point in this section. While it would be nice to straighten all of the differing aspectual terminology out it would be neither trivial, nor possible, without sophisticated fieldwork on all the languages involved.

<sup>3</sup> It is clear that Sun recognizes the cognacy of this term. Whether he would agree that the Anong form is borrowed from Lisu is another question. In any case, it is a grammaticalized form of a word for 'person'.

Existential (copular) verbs are present in all four languages, but only three of the languages have more than one with use distinctions.<sup>4</sup> The copular verbs *ni*<sup>35</sup> in Nusu and *ni*<sup>33</sup> in Zauzou are cognate.<sup>5</sup>

### 6.3.7. Case Marking Particles

Case markers (and other) particles in Tibeto-Burman languages are syntactic elements that function like cohesive devices to glue constituents together to form sentences.

Table 40 below clearly shows that the four languages differ in the number, type, and usage of particles.

Definite particles are found in three of the four languages. It is quite obvious that the possessive particles in Nusu and Zauzou are cognate.

Agent and instrumental particles are found in all four languages. They are cognates in Anong and Trung, and Nusu and Zauzou respectively. What is curious is that the same particles have both causative and instrumental function in all four languages.<sup>6</sup>

Locative particles often indicate the position of the syntactic constituent in a sentence such as high, low, inside, outside, etc., which is why more often than not a language would have multiple location particles. Zauzou has five, Anong has four, Trung and Nusu both have two. The particles that indicate 'inside' in Trung and Nusu are clearly cognate.

Only three of the four languages have temporal particles, since we have not found any in Zauzou. The temporal particles in Nusu and Trung are very similar.

All four languages have source or ablative particles, but they vary in number, with three in Nusu, two in Trung, two in Anong, and only one in Zauzou. The source particles in Nusu and Trung are cognates.

Comparative markers are found in all four languages. Only Nusu differentiates two types of comparative marker.

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<sup>4</sup> The terminology is again a problem. Sometimes these verbs are labeled copular, sometimes existential, occasionally stative, and sometimes progressive. Their glosses vary in a similar way: sometimes glossed as 'be' and other times as 'have'. A search for COP, 'be', or 'have' will yield numerous examples.

<sup>5</sup> Sun notes elsewhere in the text that Anong *ɑ<sup>31</sup>nɛ<sup>55</sup>* is cognate to Trung *ũn<sup>53</sup>*.

<sup>6</sup> As Sun suggests elsewhere this simply might be ergativity.

Anong and Trung have conjunction particles, while Anong and Zauzou have comitative particles. Only Trung has a prolativative particle. None of those particles are cognates.

Only Anong and Trung have definite particles and they are cognates, although Anong has a second definite particle  $a^{31}$  that does not have a cognate in Trung.

Adverbial particles should exist in all four languages. However, at this point in time, we only found adverbial particles in Anong and Nusu, and they don't seem to be cognates.

Table 40: Case markers and other particles

	Anong	Nusu	Zauzou	Trung
genitive	$ni^{55}$ , $k^h a^{31}$	$e^{31}$	$ze^{31}$	—
agent	$mi^{53}$	$i^{31}$	$\text{ci}^{33}$	$mi^{55}$ , $i^{55}$
object	$k^h a^{31}$ , $ba^{31}$	$na^{35}$	$ko^{33}$	$le^{31}$
instrumental	$mi^{55}$	$i^{31}$	$\text{ci}^{33}$	$mi^{55}$
locative	$du\eta^{55} k^h a^{31}$ , $sa^{31}$ , $t^h a\eta^{55}$ , $p^h a\eta^{33}$	$do^{35}$ , $ba^{31}$	$ku^{55}$ , $tu^{33}$ , $ta^{55}$ , $t^h ie^{31}$ , $k^h o^{33}$	$le^{31}$ , $do^{31}$
temporal	$t^h a^{35}$	$do^{35} le^{31}$	—	$do^{31}$
source	$k^h tu\eta^{31} ne^{55}$ , $ne^{55}$	$do^{35} le^{31}$ , $ba^{31} li^{31}$ , $ba^{35} le^{31}$	$\text{ci}^{33}$	$le^{31}$ , $pa\eta^{55}$
comparative	$t^h a\eta^{55} a^{31}$	$du^{35} na^{35}$ , $ku^{35} na^{35}$ , $t^h a^{53} a^{31}$	$tu^{33}$ , $tu^{55} tu^{33}$	$mu^{31}$ $d\check{a}m^{53} wa^{31}$
conjunction	$\eta\text{e}^{31} \eta\text{e}\eta^{31}$ , $ta^{55} ti^{55}$	—	—	$mi^{53}$
comitative	$za\eta^{31}$	—	$t^h e^{35}$	—
definite	$\eta u^{31}$ , $a^{31}$	—	—	$nu^{31}$
by way of	—	—	—	$\eta\eta^{55}$
adverbial	$li^{31}$ , $\text{ŋ}^{31}$ , $ua^{33}$	$k^h ue^{35}$ , $m^{55}$ , $gu^{35}$ , $dze^{55}$	—	—

The comparison of the four languages spoken by the Nung ethnic group shows that each language has unique features that can be considered as evidence to show that they are independent languages. It is clear that Zauzou and Nusu are closer while Anong and Trung are closer.

## 6.4. THE POSITION OF ANONG IN TIBETO-BURMAN

Tibeto-Burman has several hundred languages. Among the Tibeto-Burman languages spoken in China, the overall characteristics of Anong and Trung are close to those of the Jingpo languages. Therefore, it is highly likely that Anong can be classified under Jingpo.<sup>7</sup> We will now discuss this issue based on data from Tibeto-Burman languages spoken in China.

Although the Jingpo subgroup in Tibeto-Burman was established in the '50s of the 20th century, it had only one language in it at that time. No other languages were classified as members of the Jingpo subgroup because of Jingpo's unique features. Views on this issue vary among scholars outside China. As more and more data and findings become available, scholars discovered some languages that seem genetically close to Jingpo, especially in terms of those typical characteristics. In 1960, we conducted our preliminary investigation of both Anong and Trung. We then set up a research team to specifically look at the classification issue of Trung. Two years study on this issue resulted in our tentative decision to put Trung in the Jingpo subgroup. Starting from the 70s of the 20th century, we have done extensive research on languages spoken in the Himalayan region. During the process of writing grammatical sketches of the languages being investigated, we ran into the issue of classifying Trung, Luoba, and so on. After further comparative studies, we became convinced that those languages belong to the Jingpo subgroup. Since Anong and Trung are close, we classified both under the Jingpo subgroup. So far, we can see that the languages in this subgroup are scattered with a relatively small number of speakers. Based on our statistics, this subgroup has less than 200,000 speakers. The main characteristics of the subgroup are discussed below.

Quite a number of years ago, the American scholar Paul Benedict treated Jingpo as a language central to Tibeto-Burman.<sup>8</sup> In his book titled *Sino-Tibetan: A conspectus* (1972), Benedict provided a family tree

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<sup>7</sup> The subgrouping here is typological, more than genetic.

<sup>8</sup> Benedict was interested both in genetic affiliations and in diffusion of characteristics from one language. His diagram is sometimes given a genetic interpretation and sometimes a diffusional interpretation. The centrality of Jingpo (labeled Kachin, a term which is ethnic rather than linguistic) is absolutely unambiguous in the diagram.

for Tibeto-Burman languages, in which he placed Jingpo in the center surrounded by the following branches of languages.

1. Tibeto-Kanuri: a subgroup of Tibeto-Burman distributed over a region that includes China, India, Bhutan, Nepal, and Pakistan
2. Lepcha: a language distributed over an area that includes Bhutan and India
3. Bahing-Vayu-Newari, a subgroup found in Nepal
4. Abor-Miri-Dafla: a subgroup found in China and India
5. Bodo-Garo, a subgroup found in India and Burma
6. Konyak: a language of India and Burma
7. Kuki-Chin-Naga, a subgroup found in India and Burma
8. Luish, found in India and Burma
9. Nung(ish)-Trung, a subgroup found in China and Burma
10. Lolo-Burmese (Burmese-Lolo), a subgroup found in China, Burma, Thailand, Vietnam, and Laos
11. Gyarung (=Gyalrong, =rGyalrong), a subgroup found in China

This shows the significant position of Jingpo among Tibeto-Burman languages. We offer the following comments about Benedict's classification.

First, it is still too early to definitively determine the position of Sulung and Bengru because in-depth studies of those two languages are still ongoing and the data collected so far are being sorted out. Comparison of those two languages with the surrounding languages has not been carried out yet. This is especially true with respect to Sulung which is the most unique language with considerable differences from all the other Tibeto-Burman languages. Classifying it properly is a challenging task to say the least.

Second, most of the languages in the Jingpo subgroup are distributed over the middle and eastern parts of the southern portion of the Himalaya mountains. And some of them are found in the border regions of China, India, and Burma. In fact, most of the Tibeto-Burman languages are concentrated in that area. Although we have gained some knowledge about the language situation of that region, we do not have a full picture nor an in-depth understanding of all of the Tibeto-Burman languages of the region. Therefore, a thorough comparative study of those languages is not possible at this point in time. For this reason, our discussion on classification is confined to Tibeto-Burman

languages spoken in China. It is possible that some of the languages may be closer related genetically to Tibeto-Burman languages spoken in India and Burma.

Third, the nine subgroups of languages above are based on the fact that each has characteristics not found in the others. Some of those characteristics are unique while others are shared by some but not all of the languages in the same subgroup. We now look at the basic features of the Jingpo subgroup through comparing the sound systems, lexicon, and grammatical structures of the languages in the Jingpo subgroup.<sup>9</sup>

#### 6.4.1. *Phonological Features*

Generally speaking, Jingpo languages retained more of the Proto-Tibeto-Burman phonological features in their sound systems. For instance, stops and affricates do not have aspiration yet, the inventory of stops is smaller compared with other Tibeto-Burman languages, consonant clusters in coda positions are retained, and the phonemicization of tones is still limited. We will consider each of those characteristics in more detail below.

1. Consonant systems of Jingpo languages are relatively simple. One clear feature is that most of the languages have only two series of stops and affricates. Jingpo only has voiceless stops and affricates contrasting with their aspirated counterparts. It does not have any voiced stops or affricates. Trung, Bokar, and Sulung have no aspirated voiceless stops and affricates. They only have voiced stops and affricates contrasting with their voiceless counterparts. What is significant is that Anong and Trung are quite close. However, aspirated sounds in Trung are not phonemic yet. In contrast, aspirated stops in Anong contrast with unaspirated stops. We have specific examples of lexical items with inflectional prefixes in Anong clearly showing that aspirated stops and affricates came from consonant clusters in onset positions through phonological changes. This is strong evidence indicating that aspirated sounds in Tibeto-Burman languages are a later development. Needless to say, some of the languages in the Jingpo subgroup already have a

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<sup>9</sup> The Jingpo [labeled Kachin] in Benedict's diagram shows affiliations between Jingpo and all the rest of Tibeto-Burman; thus, Sun has to mean by his Jingpo subgroup a subgroup that shares characteristics with Jingpo to the exclusion of other Tibeto-Burman languages, that is, he is arguing for a special relationship between Jingpo and his languages.

three-way contrast between voiced, voiceless, and aspirated stops and affricates.

2. Comparative studies of Sino-Tibetan languages yielded findings showing that affricates are developed later in Sino-Tibetan. The same is true with affricates in Tibeto-Burman languages, although there is considerable variation among Tibeto-Burman languages in this regard. Some have more affricates than others, with the highest having five series including apical, retroflex, laminal, alveo-palatal, and palatal. Qiang languages usually have four series, namely, apical, retroflex, laminal, and alveopalatal. Tibetan and Yi (Loloish) languages usually have three series which are apical, retroflex, and alveo-palatal. Jingpo languages usually have two series, with Bokar having only one series. In many of the languages in question, retroflex affricates only occur in Tibetan borrowings.

3. Except for Bokar, most of the languages in the Jingpo subgroup possess consonant clusters made up of stops, fricatives, or nasals combined with a liquid [-l] or [-r]. Some of the consonant clusters begin with a velar nasal. Hardly any of the consonant clusters begin with a fricative, a lateral liquid, or a trill retroflex liquid. Some of the languages even have palatalized and labialized consonants. Details are shown in Table 41 below.

Table 41: Clusters, palatalized sounds, and labialized sounds

Jingpo	pɿ phɿ kɿ khɿ pj phj mj kj khj nj
Trung	pl bl ml kl gl pɿ bɿ mɿ gɿ xɿ pj bj mj tj lj tsw sw tw lw kw gw xw ŋw
Anong	pɿ pʰɿ bɿ mɿ fɿ vɿ kʰɿ gɿ xɿ ʔbɿ ʔb ʔd ʔd̥ ʔg ʔdz ʔdz̥ ʔm ʔn ʔŋ ʔŋ̥ ʔŋ̥̥
Kaman	ph phl bl kl khl gl pɿ phɿ bɿ kɿ lhɿ gɿ xɿ mph nth ntsh ntçh ŋkh mphl mphɿ ŋkhl ŋkhɿ
Darang	pl phl bl ml kl khl gl pɿ phɿ bɿ mɿ kɿ khɿ gɿ xɿ
Idu	pl bl pɿ phɿ bɿ mɿ kɿ khɿ gɿ hɿ mb nd ŋg ndz ndz̥ ndz̥̥ mbɿ ŋgɿ
Bokar	pj bj mj
Bengru	pl phl bl kl khl gl pr phr br kr khr gr
Sulung	pl bl kl gl hl ʎl pr br kr gr fr sr hr çr xr hj fj lj bw

Table 41 shows the consonant clusters in all of the Jingpo languages. We can see the changes that have taken place in those languages with respect to consonant clusters, except for Anong which is unique in



having glottal stop as the first element of consonant clusters. In Bokar, liquids [-l] and [-r] no longer occur in consonant clusters. It only retains a few palatalized consonants. Jingpo and Anong no longer have consonant clusters that end in the lateral liquid [-l]. Comparative studies on Tibeto-Burman languages clearly show that consonant clusters that end in liquids [-l] and [-r] correspond with consonant clusters that end in a palatal glide [-j] or palatalized consonants. Table 41 also enables us to see the relationship between Jingpo languages and the other languages in Tibeto-Burman with respect to the situation of consonant clusters.

4. There is considerable variation among Tibeto-Burman languages in the presence and absence of consonants in coda positions. Some languages basically retained consonants in coda positions while other languages only allow some consonants in coda position. There are also languages that have become open syllable languages since consonants in coda positions are completely lost. Languages in the Jingpo subgroup still allow consonants in coda positions shown in the table below.

Table 42: Coda consonants

	stops	nasals	laterals	retroflexes	fricatives
Jingpo	p t k ?	m n ŋ			
Trung	p t k ?	m n ŋ	l	ɻ	
Anong	?	m n ny ŋ ŋ			
Geman	p t k	m n ŋ	l		
Darang		m n ŋ			
Idu		m n ŋ			
Bokar	p t k	m n ŋ		ɻ	
Bengru	?	n ŋ			
Sulung	t k ?	n ŋ			h

We can see from Table 42 that all languages in the Jingpo subgroup retained consonants such as stops and nasals in coda positions. However, few of the languages still allow the lateral and trill retroflex liquids to occur in codas. Fricatives in coda positions have basically been lost in all of the Jingpo languages.

5. Tones are a later development in Tibeto-Burman. Jingpo languages are in the process of developing tones, which is why there is considerable variation among them. Tones in Jingpo languages and their functional load for meaning distinctions between words and for marking gram-

matical categories are still limited. The distribution of tones in Jingpo languages is as follows.

Language	Number of Tones
Bokar	0
Bengru	2
Sulung	2
Jingpo	3
Trung	3
Darang	4
Geman	4
Idu	4
Anong	5

The tones in Bengru and Sulung must have been developed very recently. They do not have clear contrasting functions yet. In other words, tones in Bengru and Sulung are not phonemic yet. Although both Jingpo and Trung have three tones, tones in Jingpo carry a higher functional load for meaning distinctions. One of the tones in languages with four tones only occurs in prefixes and it does not seem to have a contrasting function. Anong has five tones. Its mid-mid (i.e. 33) tone is the result of influence from Lisu. Please see the sound changes section for details on this issue.

#### 6.4.2. *Morphological Characteristics*

The most prominent feature of Jingpo languages in terms of morphological structure is that all of the languages have prefixes (which are called weakened syllables, or half syllables or secondary syllables by some scholars). This is one of the most important features separating Jingpo languages from the other Tibeto-Burman languages. The following table shows the prefixes in Jingpo languages.

Table 43: Prefixes (weakened syllables)

Jingpo	pa <sup>31</sup> pha <sup>31</sup> ma <sup>31</sup> wa <sup>31</sup> tsa <sup>31</sup> sa <sup>31</sup> la <sup>31</sup> n <sup>31</sup> tʃa <sup>31</sup> ʃa <sup>31</sup> ka <sup>31</sup> a <sup>31</sup>
Trung	pu <sup>31</sup> bu <sup>31</sup> mu <sup>31</sup> tsu <sup>31</sup> dzu <sup>31</sup> su <sup>31</sup> zu <sup>31</sup> tu <sup>31</sup> du <sup>31</sup> nu <sup>31</sup> lu <sup>31</sup> .ɹu <sup>31</sup> tɕi <sup>31</sup> dʒi <sup>31</sup> ɲi <sup>31</sup> ɕi <sup>31</sup> ci <sup>31</sup> jɿ <sup>31</sup> ʃi <sup>31</sup> ku <sup>31</sup> gu <sup>31</sup> ɲu <sup>31</sup> ɲu <sup>31</sup> a <sup>31</sup> aŋ <sup>31</sup>
Anong	bu <sup>31</sup> ba <sup>31</sup> p <sup>h</sup> u <sup>31</sup> p <sup>h</sup> a <sup>31</sup> mu <sup>31</sup> ɲ t <sup>h</sup> i <sup>31</sup> t <sup>h</sup> a <sup>31</sup> di <sup>31</sup> da <sup>31</sup> du <sup>31</sup> dɹu <sup>31</sup> t <sup>h</sup> a <sup>31</sup> na <sup>31</sup> nu <sup>31</sup> la <sup>31</sup> tɕ <sup>h</sup> a <sup>31</sup> tɕ <sup>h</sup> i <sup>31</sup> ɲi <sup>31</sup> ɕa <sup>31</sup> ɕi <sup>31</sup> ga <sup>31</sup> ɲ <sup>31</sup> i <sup>31</sup> o <sup>31</sup>
Geman	pa <sup>31</sup> pu <sup>31</sup> pha <sup>31</sup> phu <sup>31</sup> ba <sup>31</sup> ma <sup>31</sup> mu <sup>31</sup> wa <sup>31</sup> su <sup>31</sup> ta <sup>31</sup> tu <sup>31</sup> tha <sup>31</sup> thu <sup>31</sup> da <sup>31</sup> du <sup>31</sup> na <sup>31</sup> nu <sup>31</sup> la <sup>31</sup> lu <sup>31</sup> .ɹu <sup>31</sup> tɕa <sup>31</sup> tɕi <sup>31</sup> dʒi <sup>31</sup> ɕa <sup>31</sup> ka <sup>31</sup> ku <sup>31</sup> kha <sup>31</sup> ga <sup>31</sup> gu <sup>31</sup> gu <sup>31</sup> xa <sup>31</sup> xu <sup>31</sup> a <sup>31</sup>
Darang	pa <sup>31</sup> pu <sup>31</sup> pha <sup>31</sup> phu <sup>31</sup> ba <sup>31</sup> bu <sup>31</sup> ma <sup>31</sup> mu <sup>31</sup> dza <sup>31</sup> su <sup>31</sup> ta <sup>31</sup> tu <sup>31</sup> tha <sup>31</sup> thu <sup>31</sup> da <sup>31</sup> du <sup>31</sup> na <sup>31</sup> lu <sup>31</sup> .ɹu <sup>31</sup> tɕi <sup>31</sup> dʒa <sup>31</sup> ɲa <sup>31</sup> ka <sup>31</sup> ku <sup>31</sup> kha <sup>31</sup> khu <sup>31</sup> ga <sup>31</sup> gu <sup>31</sup> xa <sup>31</sup> a <sup>31</sup>
Idu	pa <sup>31</sup> pu <sup>31</sup> ba <sup>31</sup> bu <sup>31</sup> ma <sup>31</sup> tu <sup>31</sup> du <sup>31</sup> lu <sup>31</sup> .ji <sup>31</sup> ja <sup>31</sup> ka <sup>31</sup> ku <sup>31</sup> ku <sup>31</sup> kha <sup>31</sup> khu <sup>31</sup> ga <sup>31</sup> gu <sup>31</sup> ha <sup>31</sup> a <sup>31</sup> i <sup>55</sup> e <sup>55</sup>
Bokar	pu mə ta nu la lu lə ɲ ɕa ɕi ja ka ku i e a o u w
Bengru	pa <sup>31</sup> mə <sup>31</sup> dzə <sup>31</sup> sə <sup>31</sup> də <sup>31</sup> nə <sup>31</sup> lə <sup>31</sup> ɕə <sup>31</sup> kə <sup>31</sup> gə <sup>31</sup> a <sup>31</sup>
Sulung	pu <sup>31</sup> pi <sup>31</sup> bu <sup>31</sup> bə <sup>31</sup> bo <sup>31</sup> mu <sup>31</sup> mə <sup>31</sup> si <sup>31</sup> tu <sup>31</sup> ta <sup>31</sup> lə <sup>31</sup> tɕa <sup>31</sup> ɕi <sup>31</sup> ɕa <sup>31</sup> ku <sup>31</sup> ki <sup>31</sup> ka <sup>31</sup> ga <sup>31</sup> gu <sup>31</sup> xa <sup>31</sup> ha <sup>31</sup> a <sup>31</sup>

1. Although this is not an exhaustive list, it clearly shows the systematic correspondences and the phonological features shared by all of the languages in terms of the phonological structures of those prefixes.

2. The cognate words with prefixes in those languages show some differences among the prefixes, but we can still see clear sound correspondences between the prefixes.

3. A considerable number of lexical items in Jingpo languages have prefixes (though the percentage varies greatly from language to language), their lexicon has become predominantly polysyllabic.

4. There seem to be three sources for the prefixes. One source for the prefix is through an insertion of a weak vowel after the first consonant of a consonant cluster in the onset position. Prefixes that came into existence this way do not have clear meanings or functions. Another source has to do with an inflectional prefix that has lost its grammatical marking function and turned into a derivational prefix with a vague residual grammatical meaning. A third source is through grammaticalization from full-fledged lexical items. Although they

have undergone phonological changes, we can still easily discern their original meanings.

5. Those Jingpo languages that have prefixes are distributed over the bordering region between China, India and Myanmar where their contiguous languages are mostly polysyllabic southeast Asian or Indo-European languages. This seems to point to the possibility of language contact as the cause for those languages becoming polysyllabic.

We illustrate the situation of prefixes in Jingpo languages by looking at some numerals given in Table 44 below.

Table 44: Numbers and prefixes

	two	three	five	seven	nine
Jingpo	lǎ <sup>55</sup> khon <sup>31</sup>	mǎ <sup>31</sup> sum <sup>33</sup>	mǎ <sup>31</sup> ŋa <sup>33</sup>	sǎ <sup>31</sup> nit <sup>31</sup>	tǰǎ <sup>31</sup> khū <sup>31</sup>
Trung	a <sup>31</sup> ni <sup>55</sup>	a <sup>31</sup> sūm <sup>53</sup>	pu <sup>31</sup> ŋa <sup>53</sup>	su <sup>31</sup> ŋit <sup>55</sup>	du <sup>31</sup> gu <sup>53</sup>
Anong	a <sup>31</sup> ŋi <sup>55</sup>	a <sup>31</sup> som <sup>53</sup>	p <sup>h</sup> aŋ <sup>31</sup>	sŋ <sup>35</sup>	du <sup>31</sup> gu <sup>31</sup>
Geman	ku <sup>31</sup> jin <sup>53</sup>	ku <sup>31</sup> sǎm <sup>53</sup>	ku <sup>31</sup> len <sup>55</sup>	nun <sup>53</sup>	nan <sup>55</sup> mu <sup>53</sup>
Darang	ka <sup>31</sup> ŋ <sup>55</sup>	ka <sup>31</sup> suŋ <sup>55</sup>	ma <sup>31</sup> ŋa <sup>55</sup>	weŋ <sup>53</sup>	ka <sup>31</sup> ŋuŋ <sup>55</sup>
Idu	ka <sup>31</sup> ni <sup>55</sup>	ka <sup>31</sup> soŋ <sup>55</sup>	ma <sup>31</sup> ŋa <sup>55</sup>	i <sup>55</sup> fiŋ <sup>53</sup>	ku <sup>55</sup> ŋi <sup>55</sup>
Bokar	a ŋi	a fiŋ	o ŋo	ku nu	ko noŋ
Bengru	kǎ <sup>31</sup> ɣai <sup>55</sup>	gǎ <sup>31</sup> dɣŋ <sup>55</sup>	bun <sup>55</sup>	muai <sup>53</sup>	sǎ <sup>31</sup> təŋ <sup>55</sup>
Sulung	ni <sup>55</sup>	ɣuk <sup>35</sup>	wu <sup>55</sup>	lie <sup>55</sup>	duan <sup>33</sup> ɟar <sup>53</sup>

All of the numerals in Table 44 are cognate. However there are some questions about the prefixes. a<sup>31</sup>, a, ku<sup>31</sup>, ka<sup>31</sup>, ko, gǎ<sup>31</sup> are cognates; mǎ<sup>31</sup>, pu<sup>31</sup> are cognates; su<sup>31</sup>, sǎ<sup>31</sup>, i<sup>55</sup>, sŋ are cognates; du<sup>31</sup>, tǰǎ<sup>31</sup>, lǎ<sup>55</sup> are cognates. There are two possible reasons why the prefixes are different. First, historical change led to substitution of some of the prefixes. Second, the prefixes underwent sound changes.

Another noteworthy point to be made has to do with Anong and Bengru. The consonants in coda positions of p<sup>h</sup>aŋ<sup>31</sup> ‘five’ and sŋ<sup>35</sup> ‘seven’ used to be the initial consonants in the onset positions of earlier roots which lost their finals resulting in the initial consonants to become part of the finals of the prefixes. The form bun<sup>55</sup> ‘five’ in Bengru underwent the same process.

#### 6.4.3. Grammatical Characteristics

There is considerable variation among Jingpo languages in terms of grammatical categories and inflectional markers. It is very difficult to

reconstruct the proto-forms for these grammatical markers, which is the main reason why people question the inclusion of certain languages in the Jingpo subgroup. However, we can still detect features shared by those languages. Several points are to be made in this regard.

(1) *Classifiers*

Jingpo languages are similar with respect to the stage of development of classifiers. As is generally known, classifiers in Tibeto-Burman languages are a recent phenomenon. We can tell what stage a language is at by looking at the number of characteristics of classifiers such as the number, word order of classifiers and numerals, whether classifiers can occur with nominals alone, whether classifiers can be omitted when expressing quantity, and the functions of classifiers, etc. Although the number of classifiers and their functional load in a language are not reliable indicators of relatedness between languages, there are features that can be considered as strong evidence of genetic relatedness. The following are a few examples.

(1) In Tibeto-Burman languages, the order of classifier and numeral modifiers that modify nouns and verbs come in two types: classifier word+numeral and numeral+classifier word. Languages that have the former order have a relatively small number of measure words with a limited grammatical functional load. Languages that have the latter order are rich in measure words with a heavy grammatical functional load. Among the Jingpo languages, Jingpo, Darang (Dáràng), Kaman (Gémàn), Idu (Yídōu), Bokar (Bógār), Bengru (Bēngrú), and Sulung (Sūlóng) have the classifier word+numeral order, whereas Trung and Anong have the numeral+classifier word order.

(2) Another point which is related to the point above has to do with omissibility of classifiers when they are used to modify nouns and verbs. In other words, whether the language allows numerals to be used to modify nouns and verbs without classifiers. It turned out that when the order is numeral+classifier word, the classifier cannot be omitted, but if the order is classifier word+numeral, then the classifier usually can be left out. This is because classifiers came from nouns and verbs. In languages that have the classifier word+numeral order, nouns and measure words are closely related in many ways and classifiers have not completely evolved from their earlier full lexemes yet. Even in languages such as Trung and Anong, which have evolved into numeral+classifier word order, we still see intricately bound relationships between the

nouns and the classifier in mirror classifier word constructions. For instance, in Anong, we have the following constructions: p<sup>h</sup>an<sup>33</sup> t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>an<sup>33</sup> 'leg one leg: one leg', ven<sup>55</sup> t<sup>h</sup>i<sup>55</sup> ven<sup>55</sup> 'flower one flower: one flower'. Similar examples can also be found in Trung.

(3) Only languages with well developed classifier systems would allow classifiers to occur with nouns alone without numerals. Among the Tibeto-Burman languages, only the Yi languages have this characteristic. In those languages, classifiers not only have quantifying functions but classifying and demonstrative functions as well. Languages in the Jingpo subgroup do not have such functions yet.

(2) *Person Marking on Verbs*

Verbs are marked for person in several of the languages in the Jingpo subgroup, which is a remnant of Proto-Tibeto-Burman. Jingpo, Trung, Anong, and Kaman have person marking on the verb. All of the markers are closely related to the personal pronouns. This is a uniform feature among those languages. The marking not only indicates agreement between the subject and verb but shows up in imperatives and possessives as well. The rest of the Jingpo languages do not have person marking on the verb.

(3) *Directional Marking on Verbs*

Verbs in Tibeto-Burman languages take directional markers. However, there is considerable variability in this regard among Tibeto-Burman languages. For instance, prefixes are used in Qiangic languages to mark the direction towards which the action is moving. The number of directional prefixes among those languages varies a great deal, ranging from three to four to as many as a dozen or so. Directional marking has similar functions in Jingpo languages. However, in Jingpo languages, directional markers are all suffixes, which are illustrated in Table 45 below.

Table 45: Suffixal directional markers

	away from	towards	upwards	downwards
Jingpo	sit <sup>55</sup> , su <sup>55</sup>	ʒit <sup>55</sup> , ʒin <sup>55</sup> , ʒə <sup>55</sup>		
Trung	di <sup>53</sup>	.ɪa <sup>53</sup> , .ɪai <sup>53</sup> , .ɪət <sup>55</sup>	luŋ <sup>31</sup>	dzǎŋ <sup>55</sup>
Anong	a <sup>31</sup> ba <sup>55</sup> , lu <sup>55</sup>	a <sup>31</sup> ie <sup>55</sup> , lo <sup>31</sup>	ɗaŋ <sup>55</sup> , a <sup>31</sup> na <sup>55</sup>	a <sup>31</sup> ɗa <sup>55</sup> , a <sup>31</sup> la <sup>31</sup>
Kaman	wit <sup>55</sup> , lo <sup>55</sup>	lit <sup>55</sup> , na <sup>55</sup>	tɕi <sup>55</sup>	pu <sup>55</sup>
Darang	gie <sup>53</sup> , bo <sup>53</sup> n <sup>55</sup>	bi <sup>35</sup> , na <sup>55</sup> , boŋ <sup>35</sup>	tɪu <sup>55</sup>	dza <sup>31</sup>
Idu	ge <sup>55</sup> , ga <sup>53</sup> ba <sup>53</sup>	a <sup>55</sup> bi <sup>35</sup> , mu <sup>35</sup>	a <sup>55</sup> tɪu <sup>55</sup>	a <sup>55</sup> dza <sup>55</sup>

At this point in time, our data do not show any directional markers in Bokar, Sulung, and Bengru. Therefore, we cannot determine whether those three languages have directional marking. Table 45 shows the similarity in function and form of directional markers among six of the Jingpo languages. Some of the forms are clearly cognates because they are the same in grammatical meaning and are very similar in phonological shape, with obvious correspondences in some cases. This can be seen in the following sets of examples.

Jingpo	ʒit <sup>55</sup>	ʒin <sup>55</sup>	ʒa <sup>55</sup>
Trung	.ɪət <sup>55</sup>	.ɪai <sup>53</sup>	.ɪa <sup>53</sup>
Kaman	lit		
Trung	dzǎŋ <sup>55</sup>		
Darang	dza <sup>31</sup>		
Idu	a <sup>55</sup> dza <sup>55</sup>		
Darang	gie <sup>53</sup>	ge <sup>55</sup>	tɪu <sup>55</sup>
Idu	bi <sup>35</sup>	a <sup>55</sup> bi <sup>35</sup>	a <sup>55</sup> tɪu <sup>55</sup>

The forms above show clear correspondences indicating that they came from the same source.

4. Noun phrases with adjectival modifiers are head initial in Tibeto-Burman languages. In Jingpo languages, monosyllabic adjectives also come after the head noun they modify. However, polysyllabic adjectives and adjectives with particles can be placed before the head noun.

## 6.5. CONCLUSION

In this chapter, we have discussed with examples the characteristics common to all of the languages in the Jingpo subgroup to show

genetic relatedness among those languages. However, we have not had the opportunity to compare these languages with related languages spoken outside of China. Consequently, our classification decision is preliminary in nature at this point in time. More in-depth studies are needed to make a more accurate decision on the issue what languages the Jingpo subgroup should include.

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## APPENDICES



## APPENDIX A

### THE ANONG LEXICON

The lexicon at the end of Sun's grammar consists of only the lexical items typically found at the end of all the grammars in that series. This lexicon, in contrast, contains all the Anong vocabulary in Sun's original lexicon, in Sun's various articles on Anong, and in all the published and unpublished wordlists and articles we know of. It is as close to a dictionary of Anong as is likely to ever exist.

This lexicon is panchronic, that is, as the original sources represent words collected over a forty year period, a period remarkable for its incredible degree of lexical and phonological change. All the sources, with the exception of a subset of one of the wordlists, mix forms from different time settings. At least in part, this was unavoidable as the language consultants exhibited consideration variation, not just diachronically, but synchronically as well. Thus, in the same list some forms reflect an older stage, while others reflect a later one. Even the forms in the oldest document—an older wordlist—seems to have a mix of forms.

As Sun's comments at various places makes clear, there is enormous variation in the lexicon, and hence there is enormous variation in this master lexicon. Wherever it was obvious, the oldest attested form was put in the lexicon. However, it is not always obvious. Many roots have variants in two or even three tones, with clusters and without, and reduced or merged in various ways. While many of these variants occur in this wordlist, not all of them do. An attempt to sort them out will be made to clarify this in the next year or two, but it will neither be trivial, nor easy. That task, however, will require a reconstruction of the linguistic subgroup that Anong occurs in.

Two other features of this lexicon merit a comment. First, forms sometimes occur in several places, depending upon how they are translated. Second, both words and phrases have been included. Numerous entries are phrasal; of these some appear compositional, that is, the meaning can be predicted from the some of meanings of the parts; others are clearly not compositional, that is, the meaning of the whole cannot be predicted from the sum of the meanings of the parts; and,

of course, for many, more would have to be known. In any case, the phrasal utterances are certainly valuable for the structural information that they provide.

- 10 liters,  $\text{du}\eta^{55}$   
 100 catties,  $\text{za}^{55}\text{gan}^{55}\text{ham}^{35}$   
 101,  $\text{t}^{\text{h}i^{55}}\text{ca}^{55}\text{t}^{\text{h}i^{55}}$   
 200,  $\text{a}^{31}\text{n}i^{55}\text{ca}^{55}$   
 300,  $\text{som}^{31}\text{ca}^{55}$   
 400,  $\text{b}\eta^{53}\text{ca}^{55}$   
 500,  $\text{p}^{\text{h}}\text{a}\eta^{31}\text{ca}^{55}$   
 600,  $\text{kun}^{55}\text{ca}^{55}$   
 700,  $\text{s}\eta\text{n}^{35}\text{ca}^{55}$   
 800,  $\text{c}\epsilon\text{n}^{55}\text{ca}^{55}$   
 900,  $\text{du}^{31}\text{gu}^{31}\text{ca}^{55}$
- a few months after,  $\text{ba}^{31}\text{s}\eta^{31}\text{ti}^{55}\text{s}\eta\eta^{31}\text{s}\eta^{31}\text{la}^{55}$   
 a few month before,  $\text{du}^{55}\text{sa}\eta^{31}\text{ua}^{55}\text{s}\eta^{31}\text{la}^{55}$   
 a kind of black,  $\text{mi}^{55}\text{ma}^{55}\text{xun}^{55}$   
 a little bit,  $\text{le}^{55}$ ;  $\text{?a}^{55}\text{le}^{55}\text{le}^{55}$   
 a little (water),  $\text{ben}^{55}$   
 a little while,  $\text{t}^{\text{h}i^{55}}\text{so}^{33}$  ( $\text{dz}\tilde{\text{a}}^{53}$ )  
 a month's (work),  $\text{t}^{\text{h}i^{33}}\text{s}\eta^{31}\text{la}^{55}$   
 a night's (work),  $\text{t}^{\text{h}i^{33}}\text{ia}\eta^{55}$   
 a single (e.g., shoe),  $\text{p}^{\text{h}}\text{e}^{35}$   
 a team (of oxen),  $\text{tsi}^{55}$ ,  $\text{s}\eta^{33}$   
 a well trap,  $\text{a}^{31}\text{dzim}^{33}\text{dem}^{55}$   
 a while,  $\text{t}^{\text{h}i^{55}}\text{so}^{31}$   
 a year's (work),  $\text{t}^{\text{h}i^{55}}\text{n}\eta\text{u}\eta^{33}$   
 abacus,  $\text{sue}^{35}\text{p}^{\text{h}}\text{en}^{31}$   
 abbot,  $\text{dza}^{31}\text{xa}^{31}\text{zo}^{31}\text{mun}^{55}\text{su}^{55}$   
 ability,  $\text{z}\tilde{\text{a}}^{31}$   
 ability, capability,  $\text{ba}^{31}\text{s}\eta^{31}\text{so}^{55}$   
 ability, capability,  $\text{pun}\eta^{55}\text{s}\eta^{35}$  (Ch.)  
 ablative (ABL),  $\text{k}^{\text{h}}\text{u}\eta^{31}\text{ne}^{55}$ ,  $\text{ne}^{55}$   
 able, can,  $\text{da}^{55}$   
 able, capable, competent,  $\text{di}^{31}\text{zu}\eta^{55}$   
 aboriginal,  $\text{a}^{31}\text{n}\eta\text{im}^{55}\text{a}^{31}\text{ts}^{\text{h}}\text{a}\eta^{31}$   
 about, approximately, almost,  $\text{t}^{\text{h}}\text{a}^{31}\text{lu}^{55}$   
 above, the top; (from) above,  $\text{t}^{\text{h}}\text{a}\eta^{55}$   
 above; on top of,  $\text{ga}^{31}\text{t}^{\text{h}}\text{a}\eta^{55}$   
 abuse,  $\text{y}\text{o}^{31}$   
 abusive language,  $\text{de}^{31}\text{gz}\eta^{55}\text{?o}^{55}\text{n}\eta\text{u}^{31}$  (Messy dog!)  
 accept,  $\text{lu}^{35}$   
 accept a bribe,  $\text{kua}^{55}\text{ki}^{31}$   
 accomplish, succeed,  $\text{d}\eta\eta^{55}\text{?dze}^{35}$

- accounting, k<sup>h</sup>uai<sup>35</sup>tɕi<sup>35</sup> (Ch.)  
 accumulate, ʔa<sup>31</sup>m̥u<sup>31</sup>dan<sup>55</sup>so<sup>31</sup>mu<sup>53</sup>  
 accurate, t<sup>h</sup>um<sup>55</sup>  
 accurate, da<sup>55</sup>  
 accustomed to, have habit of, dʒan<sup>31</sup>; dʒan<sup>31</sup>ɛ<sup>55</sup>  
 acne, io<sup>ʔ55</sup>dʒi<sup>31</sup>  
 across; horizontal, xam<sup>55</sup>dʒan<sup>55</sup>  
 act as go-between, k<sup>h</sup>u<sup>55</sup>ni<sup>31</sup>ua<sup>31</sup>u<sup>31</sup>  
 act in play, ɕa<sup>55</sup>san<sup>55</sup>su<sup>55</sup>  
 act as midwife, tɕ<sup>h</sup>a<sup>55</sup>mu<sup>55</sup>ʎu<sup>31</sup>  
 act as peacemaker, a<sup>31</sup>san<sup>55</sup>su<sup>55</sup>ba<sup>31</sup>k<sup>h</sup>an<sup>31</sup>u<sup>31</sup>  
 act voluntarily, ŋ<sup>31</sup>luŋ<sup>55</sup>ŋ<sup>31</sup>ŋan<sup>55</sup>sɛ<sup>31</sup>  
 actor, ɕuŋ<sup>55</sup>ua<sup>55</sup>su<sup>55</sup>  
 actor who takes female role, ŋua<sup>55</sup>san<sup>55</sup>su<sup>55</sup>  
 acupuncture, vam<sup>55</sup>si<sup>35</sup>ni<sup>33</sup>ʎo<sup>35</sup>  
 Adam's apple, bi<sup>55</sup>to<sup>35</sup> (Lisu)  
 add, zam<sup>31</sup>  
 add (water), dilute, p<sup>h</sup>a<sup>31</sup>man<sup>53</sup>  
 add, increase, a<sup>31</sup>nun<sup>55</sup>u<sup>31</sup>, sa<sup>33</sup>mo<sup>31</sup>  
 add, to, p<sup>h</sup>a<sup>31</sup>nan<sup>53</sup> > p<sup>h</sup>a<sup>31</sup>nen<sup>53</sup>  
 additionally, a<sup>31</sup>k<sup>h</sup>i<sup>31</sup>  
 additive ('Eat some more!'), dʒan<sup>33</sup>  
 addicted, t<sup>h</sup>an<sup>55</sup>m<sup>31</sup>da<sup>55</sup>  
 address, tɕ<sup>h</sup>im<sup>31</sup>za<sup>55</sup>  
 address (someone), a<sup>31</sup>du<sup>31</sup>len<sup>55</sup>u<sup>31</sup>  
 admire, envy, mi<sup>35</sup>u<sup>31</sup>  
 admire, envy, mi<sup>31</sup>ʎo<sup>31</sup>  
 admit, ts<sup>h</sup>uŋ<sup>31</sup>zuan<sup>35</sup>  
 admit one's mistakes, ma<sup>31</sup>du<sup>31</sup>ŋu<sup>31</sup>so<sup>53</sup>  
 adopt, a<sup>31</sup>i<sup>31</sup>di<sup>31</sup>k<sup>h</sup>om<sup>35</sup>  
 adult, a<sup>31</sup>ʂa<sup>55</sup>  
 advance, ma<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>55</sup>dʒi<sup>33</sup>  
 advance (military), ba<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>53</sup>dʒi<sup>55</sup>  
 advantageous, ʂi<sup>31</sup>la<sup>55</sup>dɛm<sup>55</sup>a<sup>31</sup>ne<sup>55</sup>  
 adverbializers, -ua<sup>33</sup>, li<sup>55/31</sup>, ʂi<sup>31</sup>, -ua<sup>33</sup>li<sup>31</sup>, li<sup>31</sup>  
 advise, k<sup>h</sup>o<sup>55</sup>u<sup>31</sup> (Lisu)  
 advise, persuade, k<sup>h</sup>an<sup>31</sup>u<sup>31</sup>; k<sup>h</sup>an<sup>31</sup>  
 after, ʎi<sup>55</sup>ian<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 after (time), ʎi<sup>31</sup>p<sup>h</sup>an<sup>55</sup>  
 afternoon, a<sup>31</sup>ʂi<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 afterwards, later, ʎi<sup>31</sup>p<sup>h</sup>an<sup>55</sup>, ma<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 again, a<sup>31</sup>p<sup>h</sup>i<sup>55</sup>  
 again; anew; afresh, a<sup>31</sup>p<sup>h</sup>i<sup>55</sup>t<sup>h</sup>i<sup>55</sup>dʒan<sup>31</sup>; dʒan<sup>31</sup>, be<sup>55</sup>  
 against the current, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>dʒi<sup>33</sup>ban<sup>53</sup>  
 against the wind, na<sup>31</sup>bu<sup>31</sup>di<sup>33</sup>ban<sup>53</sup>  
 age (years old), ŋ<sup>31</sup>ŋuŋ<sup>55</sup>  
 agent (AGT), mi<sup>53</sup>

agentive, -su<sup>55</sup> < Lisu  
 agreeable, ni<sup>31</sup> zɿm<sup>31</sup> la<sup>55</sup> a<sup>31</sup> du<sup>55</sup>  
 agree on, arrange, ʔa<sup>31</sup> dzɿn<sup>55</sup>  
 aim at, sɿ<sup>31</sup> t<sup>h</sup>u<sup>31</sup>  
 air, ʔŋ<sup>31</sup> san<sup>55</sup>  
 airplane, dzi<sup>33</sup> hi<sup>33</sup> (Lisu), dem<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 alive (fish), a<sup>31</sup> ŋen<sup>55</sup> se<sup>33</sup>  
 alive or active, become, ʔa<sup>31</sup> k<sup>h</sup>uŋ<sup>33</sup>  
 all get together, da<sup>31</sup> si<sup>55</sup>  
 all of us, a<sup>31</sup> dɿn<sup>55</sup>  
 all, a<sup>31</sup> ʔdɿn<sup>55</sup>, dɿ<sup>31</sup> dɿn<sup>55</sup>, dzo<sup>35</sup> dzo<sup>31</sup>  
 all the time, ŋen<sup>55</sup> ŋen<sup>55</sup>  
 all the time, dzu<sup>55</sup> dzu<sup>31</sup>  
 allergy, tɕa<sup>55</sup> pu<sup>55</sup> ba<sup>33</sup>  
 alone, a<sup>31</sup> ts<sup>h</sup>an<sup>31</sup> t<sup>h</sup>i<sup>55</sup> io<sup>55</sup>  
 along (the street), dɿn<sup>55</sup>  
 allow, to, da<sup>55</sup> ɛ<sup>33</sup>  
 almost, about, t<sup>h</sup>a<sup>31</sup> lu<sup>ʔ55</sup> (ie<sup>33</sup>)  
 along, in the same direction as, t<sup>h</sup>i<sup>55</sup> tɕ<sup>h</sup>ã<sup>31</sup> t<sup>h</sup>i<sup>31</sup>  
 already, tɕ<sup>h</sup>ɛ<sup>31</sup> mɛ<sup>53</sup>; ti<sup>55</sup> san<sup>31</sup> di<sup>55</sup>  
 already, nɿ<sup>31</sup> a<sup>55</sup>  
 alter, change, ni<sup>33</sup> ni<sup>33</sup>  
 altogether, a<sup>31</sup> dɿn<sup>55</sup>  
 also, gu<sup>55/31/33</sup>  
 also, again, a<sup>31</sup> p<sup>h</sup>i<sup>55</sup>; a<sup>31</sup> p<sup>h</sup>i<sup>55</sup> dzan<sup>31</sup>  
 alter, change, sɿ<sup>55</sup> t<sup>h</sup>uŋ<sup>31</sup> sa<sup>53</sup> u<sup>31</sup>  
 although, ie<sup>33</sup> zɿ<sup>33</sup> gu<sup>33</sup> ...  
 always, k<sup>h</sup>a<sup>55</sup> di<sup>55</sup> gu<sup>53</sup>  
 always; all along, ŋe<sup>55</sup> ŋen<sup>55</sup> dzu<sup>55</sup> dzu<sup>31</sup>  
 amateur, a<sup>55</sup> le<sup>55</sup> gu<sup>31</sup> mm<sup>31</sup> so<sup>53</sup>  
 ambush, ma<sup>55</sup> sɿ<sup>31</sup>  
 amiable; kind, ɕa<sup>31</sup> di<sup>31</sup> dzɿ<sup>55</sup> da<sup>55</sup>  
 amiable; kind, nɿn<sup>55</sup> ɛ<sup>31</sup>  
 Amidha Buddha, ɕa<sup>55</sup> mo<sup>31</sup>  
 among, between, di<sup>31</sup> diu<sup>55</sup>  
 ancestors, a<sup>31</sup> p<sup>h</sup>ɿ<sup>31</sup> (Lisu)  
 anchor, a<sup>31</sup> su<sup>31</sup> k<sup>h</sup>a<sup>55</sup> va<sup>31</sup> dem<sup>55</sup>  
 and, with, sɿ<sup>55</sup>; si<sup>55</sup>  
 angry, get, a<sup>31</sup> mɿan<sup>55</sup>  
 anger someone, i<sup>31</sup> guŋ<sup>55</sup>  
 angry, get, a<sup>31</sup> mɿuŋ<sup>55</sup> (se<sup>33</sup>/sɿ<sup>33</sup>)  
 animal, wild, sɿa<sup>55</sup>, a<sup>31</sup> dam<sup>31</sup> sɿa<sup>55</sup>, ɕa<sup>55</sup>  
 anklebone, ʔa<sup>31</sup> xa<sup>35</sup> tɕ<sup>h</sup>i<sup>31</sup> ni<sup>55</sup>  
 Anong (autonym), a<sup>31</sup> nuŋ<sup>31</sup>  
 Anong nationality, a<sup>31</sup> nuŋ<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>55</sup>  
 answer, to, a<sup>31</sup> t<sup>h</sup>an<sup>31</sup> a<sup>31</sup> i<sup>55</sup>  
 ant, so<sup>31</sup> zo<sup>55</sup>

- ant, white; termite, sɿ<sup>31</sup>zo<sup>55</sup>ba<sup>55</sup>  
 antiquity, ancient, ʔa<sup>31</sup>k<sup>h</sup>e<sup>31</sup>.ɪam<sup>35</sup>  
 antler, pilose (of young stag), ɕa<sup>33</sup>k<sup>h</sup>u<sup>33</sup>  
 anus (hole), ni<sup>31</sup>k<sup>h</sup>u<sup>55</sup>k<sup>h</sup>u<sup>31</sup>  
 anvil, a<sup>55</sup>um<sup>55</sup>za<sup>55</sup>  
 any; whatever, k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>ɡu<sup>55</sup>  
 anyway; whatever, k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>ɡu<sup>55</sup>  
 anyway, after all, ʔɿ<sup>55</sup>m<sup>31</sup>ʔɿ<sup>55</sup>ɡu<sup>55</sup>  
 anxious, ɕuŋ<sup>55</sup>a<sup>31</sup>k<sup>h</sup>om<sup>55</sup>  
 apart, cuum<sup>53</sup>wal<sup>53</sup>  
 ape, ɡa<sup>55</sup>ɡu<sup>31</sup>  
 apologize, p<sup>h</sup>u<sup>31</sup>li<sup>31</sup>a<sup>31</sup>bui<sup>53</sup>  
 appear, to, lan<sup>53</sup>a<sup>31</sup>na<sup>33</sup>  
 appearance, shape, ʔo<sup>55</sup>ŋu<sup>31</sup>du<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 appendix, p<sup>h</sup>u<sup>31</sup>i<sup>u</sup><sup>55</sup>di<sup>31</sup>k<sup>h</sup>an<sup>55</sup>  
 appetite, p<sup>h</sup>u<sup>31</sup>i<sup>ɛ</sup>n<sup>31</sup>ɿ<sup>55</sup>  
 applause, a<sup>31</sup>vu<sup>55</sup>t<sup>h</sup>am<sup>55</sup>  
 apple, p<sup>h</sup>iŋ<sup>31</sup>ko<sup>53</sup> (Ch.)  
 apply, to, a<sup>31</sup>nɛ<sup>35</sup>  
 apply medicine or paint, dzam<sup>53</sup>ŋa<sup>31</sup>ŋɿ<sup>35</sup>  
 apply (ointment), zam<sup>53</sup>  
 apprentice, tɕ<sup>h</sup>ɿ<sup>55</sup>su<sup>55</sup>  
 apron, la<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 approximate marker (APPR), several, ɕan<sup>55</sup>  
 approximately, t<sup>h</sup>a<sup>31</sup>lu<sup>ʔ55</sup>  
 April, bɿ<sup>31</sup>la<sup>55</sup>  
 apron, la<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 apron, tɕ<sup>h</sup>i<sup>31</sup>xu<sup>35</sup> (Lisu)  
 Arab (self-designation), a<sup>31</sup>nun<sup>31</sup>  
 arbitrate; mediate, k<sup>h</sup>a<sup>33</sup>ni<sup>53</sup>ŋu<sup>31</sup>  
 arc of bow, t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>p<sup>h</sup>an<sup>55</sup>  
 arch of foot, ʔa<sup>31</sup>xa<sup>35</sup>pam<sup>55</sup>ɕu<sup>31</sup>ɕu<sup>31</sup>  
 argali (wild sheep), sie<sup>33</sup>  
 argue, a<sup>31</sup>san<sup>55</sup>  
 arm from wrist up, a<sup>31</sup>vu<sup>35</sup>t<sup>h</sup>uŋ<sup>31</sup>  
 arm, .ɪa<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 arm, a<sup>31</sup>vu<sup>35</sup>(tɕ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>)  
 arm (part of), tɕ<sup>h</sup>i<sup>31</sup>ni<sup>ʔ55</sup>  
 armpit, ɡu<sup>31</sup>lu<sup>55</sup>  
 arm muscles, biceps, a<sup>31</sup>vu<sup>35</sup>t<sup>h</sup>uŋ<sup>31</sup>ɕa<sup>53</sup>  
 arm of chair, a<sup>31</sup>vu<sup>55</sup>di<sup>31</sup>bun<sup>55</sup>ɕɿ<sup>31</sup>  
 armor, a<sup>31</sup>dza<sup>53</sup>ɡa<sup>31</sup>mu<sup>31</sup>  
 armspan, the length from finger tip to finger tip with arms spread, lam<sup>33</sup>  
 arms akimbo, a<sup>31</sup>vu<sup>35</sup>di<sup>31</sup>ban<sup>55</sup>ɕɿ<sup>31</sup>  
 army; troops, soldier, iu<sup>31</sup>; iu<sup>31</sup>mum<sup>55</sup>su<sup>55</sup>  
 army cap, iu<sup>31</sup>da<sup>31</sup>mo<sup>55</sup>  
 around, i<sup>55</sup>dza<sup>55</sup>(ba<sup>31</sup>)



- arrive, t<sup>h</sup>u<sup>31</sup>  
arrogant, conceited, di<sup>31</sup> ts<sup>h</sup>aŋ<sup>31</sup> ʂ<sup>1</sup> ʂ<sup>55</sup>  
arrow, t<sup>h</sup>a<sup>31</sup> ma<sup>55</sup>  
arrow (nonpoison), p<sup>h</sup>a<sup>55</sup> dʌŋ<sup>55</sup>  
arrow bag, k<sup>h</sup>o<sup>55</sup> dzɿ<sup>55</sup>  
arrow groove, t<sup>h</sup>a<sup>31</sup> ma<sup>55</sup> tɕ<sup>h</sup>a<sup>31</sup>  
arrow head, t<sup>h</sup>a<sup>31</sup> ma<sup>55</sup> la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
arrow shaft, t<sup>h</sup>a<sup>31</sup> ma<sup>55</sup>  
arrow tail, ba<sup>55</sup> tɕ<sup>h</sup>iŋ<sup>31</sup>  
arrow, t<sup>h</sup>a<sup>31</sup> ma<sup>55</sup>  
arson, tɕ<sup>h</sup>a<sup>31</sup> mi<sup>55</sup> va<sup>53</sup> u<sup>31</sup>  
arteries, veins, ɕu<sup>33</sup> buŋ<sup>55</sup>  
artillery, ta<sup>35</sup> p<sup>h</sup>o<sup>35</sup> (Ch.)  
as soon as, k<sup>h</sup>a<sup>31</sup> tɕ<sup>h</sup>ã<sup>31</sup> ... gu<sup>31</sup> ...  
ascend the stairs, la<sup>31</sup> bu<sup>55</sup> t<sup>h</sup>aŋ<sup>55</sup>  
ascend; climb, na<sup>31</sup> k<sup>h</sup>a<sup>55</sup> (dzɿ<sup>55</sup>)  
ascend; up; above, ka<sup>31</sup> t<sup>h</sup>aŋ<sup>55</sup>  
ascend or climb a hill, mo<sup>31</sup> guŋ<sup>55</sup> dʌŋ<sup>55</sup>  
ash; ember, ni<sup>33</sup> iŋ<sup>53</sup>  
ashamed, embarrassed, ʂ<sup>1</sup> ʂ<sup>1</sup> ʂ<sup>1</sup> ʂ<sup>1</sup> m<sup>31</sup> dʌŋ<sup>55</sup>, ɕaŋ<sup>1</sup> ʂ<sup>55</sup>  
ashes (fire), p<sup>h</sup>u<sup>31</sup> ie<sup>31</sup>, ni<sup>31</sup> k<sup>h</sup>u<sup>55</sup>  
ashes, become, p<sup>h</sup>u<sup>31</sup> ie<sup>31</sup> a<sup>31</sup> p<sup>h</sup>o<sup>55</sup> ʎdʒe<sup>35</sup>  
aside, dʌ<sup>33</sup>  
ask a guest to stay, no<sup>31</sup> iuŋ<sup>55</sup>  
ask for, request, ge<sup>31</sup> nu<sup>55</sup>  
ask for leave, tɕ<sup>h</sup>iŋ<sup>55</sup> tɕa<sup>53</sup>  
ask, zɿ<sup>53</sup>; ask each other, a<sup>31</sup> zɿ<sup>53</sup>  
askew, awry, go<sup>31</sup> laŋ<sup>55</sup>  
asparagus lettuce, ʎo<sup>55</sup> si<sup>55</sup> (Ch.)  
aspect (ASP), dʒe<sup>31</sup>, -u<sup>31</sup>, bu<sup>33</sup> e<sup>31</sup>  
assertive, to seize floor to speak, t<sup>h</sup>iŋ<sup>1</sup> ʎ<sup>55</sup>  
assess, estimate, ts<sup>h</sup>om<sup>53</sup>  
assign a theme or composition, t<sup>h</sup>i<sup>31</sup> mu<sup>31</sup>  
assistant; aide, di<sup>31</sup> baŋ<sup>33</sup> su<sup>55</sup>  
asthma, saŋ<sup>55</sup> a<sup>31</sup> p<sup>h</sup>aŋ<sup>35</sup>  
astringent, tart, p<sup>h</sup>a<sup>55</sup>  
at any time, k<sup>h</sup>a<sup>55</sup> ɣam<sup>53</sup>  
at first, a<sup>31</sup> mo<sup>55</sup> t<sup>h</sup>a<sup>35</sup>  
at first; first of all, ba<sup>55</sup> ʂu<sup>31</sup>  
at one time ... at another ..., t<sup>h</sup>i<sup>55</sup> so<sup>31</sup> a<sup>31</sup> ... t<sup>h</sup>i<sup>55</sup> so<sup>31</sup> a<sup>31</sup> ...  
at the same time, simultaneously, le<sup>31</sup> ʂ<sup>1</sup> ʂ<sup>55</sup> ... le<sup>31</sup> ʂ<sup>1</sup> ʂ<sup>55</sup> ..., ma<sup>31</sup> na<sup>31</sup> ...  
ma<sup>31</sup> na<sup>31</sup> ...  
at night; evening, dʒu<sup>31</sup> a<sup>31</sup> ʎi<sup>35</sup> (dusk)  
at your convenience, a<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
athlete's foot, ts<sup>h</sup>ɿ<sup>31</sup> dza<sup>31</sup> bu<sup>31</sup> sa<sup>31</sup> ɿ<sup>55</sup>  
atlas, di<sup>35</sup> t<sup>h</sup>u<sup>31</sup>  
attend class, ɕi<sup>31</sup> ɲin<sup>55</sup> u<sup>31</sup>, saŋ<sup>35</sup> k<sup>h</sup>o<sup>35</sup> (Ch.)

attend meeting, k<sup>h</sup>ai<sup>55</sup> xue<sup>35</sup> (Ch.)  
 attend or hold a meeting, k<sup>h</sup>ai<sup>55</sup> xue<sup>35</sup>  
 audit (accounts), tsəŋ<sup>35</sup> dʒa<sup>53</sup> u<sup>31</sup>  
 August, ʕən<sup>55</sup> la<sup>55</sup>  
 aunt; father's married sister, a<sup>31</sup> lɿŋ<sup>35</sup>  
 aunt; wife of father's older brother, au<sup>31</sup> ma<sup>31</sup>  
 aunt; wife of father's younger brother, ma<sup>55</sup> io<sup>55</sup>  
 aunt; wife of mother's brother, a<sup>31</sup> lɿŋ<sup>35</sup>  
 aunt and uncle, o<sup>55</sup> p<sup>h</sup>a<sup>31</sup> au<sup>31</sup> ma<sup>31</sup>  
 avenge a grievance, a<sup>31</sup> p<sup>h</sup>uŋ<sup>35</sup> tɕ<sup>h</sup>iŋ<sup>31</sup> u<sup>31</sup>  
 avoid certain food, ʃl<sup>31</sup> dʒaŋ<sup>31</sup> sɛ<sup>53</sup>  
 automobile = car, mo<sup>55</sup> do<sup>55</sup>  
 automobile, ʕi<sup>55</sup> li<sup>31</sup> li<sup>31</sup> tɕ<sup>h</sup>i<sup>m</sup><sup>31</sup>  
 automobile road, mo<sup>55</sup> do<sup>55</sup> t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>  
 awake from a drunken stupor, bu<sup>31</sup> a<sup>31</sup> ŋi<sup>55</sup>  
 awake from drunken stupor, tɕ<sup>h</sup>o<sup>55</sup> guŋ<sup>55</sup>  
 awaken; wake up, a<sup>31</sup> sɛ<sup>55</sup>  
 awaken; wake up, bu<sup>31</sup> a<sup>31</sup> ŋi<sup>55</sup>  
 aware, a<sup>31</sup> dʒa<sup>55</sup> ʃl<sup>31</sup>  
 aware, become, tɕo<sup>31</sup> u<sup>35</sup>  
 awl, ʃl<sup>31</sup> do<sup>31</sup> iu<sup>55</sup> u<sup>31</sup>  
 axe; hatchet, va<sup>55</sup>, va<sup>55</sup>  
 azalea, me<sup>55</sup> la<sup>31</sup> ven<sup>55</sup>

baby; infant, a<sup>31</sup> ŋi<sup>31</sup> la<sup>31</sup>; a<sup>31</sup> ŋ<sup>55</sup> la<sup>55</sup>  
 baby finger, ŋ<sup>31</sup> tɕ<sup>h</sup>i<sup>m</sup><sup>55</sup> tɕ<sup>h</sup>ɛŋ<sup>31</sup>  
 babysitter, tɕ<sup>h</sup>a<sup>55</sup> ma<sup>55</sup> dʒaŋ<sup>31</sup> su<sup>55</sup>  
 bachelor, gua<sup>31</sup> tɕ<sup>h</sup>a<sup>55</sup> t<sup>h</sup>i<sup>31</sup> io<sup>55</sup>  
 back (of body), ʔi<sup>55</sup> zaŋ<sup>31</sup> k<sup>h</sup>a<sup>53</sup>  
 back (of body), dɕɛ<sup>31</sup> guŋ<sup>31</sup> t<sup>h</sup>aŋ<sup>55</sup>  
 back of hand, a<sup>31</sup> vu<sup>35</sup> t<sup>h</sup>aŋ<sup>55</sup>  
 back, zɿ<sup>35</sup> a<sup>31</sup> bo<sup>55</sup>  
 back basket, da<sup>31</sup> guŋ<sup>55</sup>  
 back door, la<sup>33</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> iaŋ<sup>31</sup> k<sup>h</sup>a<sup>53</sup>  
 back of chair, go<sup>55</sup> no<sup>33</sup> dem<sup>55</sup> k<sup>h</sup>a<sup>31</sup> nam<sup>55</sup> ʃl<sup>31</sup>  
 back of hand, a<sup>31</sup> vu<sup>35</sup> t<sup>h</sup>aŋ<sup>55</sup>  
 back of knife, ʕem<sup>31</sup> da<sup>31</sup> guŋ<sup>31</sup>  
 back of neck, occiput, go<sup>31</sup> lo<sup>53</sup> buŋ<sup>55</sup>  
 back up, retreat, ʕin<sup>55</sup> ʃa<sup>31</sup>  
 backbone, dɕɛ<sup>31</sup> guŋ<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>31</sup>  
 backpack frame, ʕa<sup>31</sup> xam<sup>55</sup> dem<sup>55</sup>  
 backyard, tɕ<sup>h</sup>i<sup>m</sup><sup>31</sup> zaŋ<sup>31</sup> k<sup>h</sup>a<sup>55</sup> dʒa<sup>31</sup> xam<sup>35</sup>  
 bacon; cured meat, ʕa<sup>33</sup> li<sup>55</sup>  
 bad, m<sup>31</sup> ta<sup>33</sup>  
 bad (person), m<sup>31</sup> ʃl<sup>31</sup> la<sup>33</sup>, m<sup>31</sup> ta<sup>33</sup>  
 bad-tempered, p<sup>h</sup>i<sup>31</sup> tɕ<sup>h</sup>i<sup>35</sup> m<sup>31</sup> ta<sup>55</sup>  
 bag of sugar, du<sup>31</sup> p<sup>h</sup>u<sup>31</sup> u<sup>31</sup>, p<sup>h</sup>u<sup>55</sup> (bag)

- bah!, p<sup>h</sup>e<sup>53</sup>  
 Bai person, la<sup>31</sup>bu<sup>31</sup> p<sup>h</sup>u<sup>31</sup> (Lisu)  
 bake in glowing embers, p<sup>h</sup>a<sup>31</sup> k<sup>h</sup>i<sup>31</sup> u<sup>31</sup> ε<sup>55</sup> gu<sup>55</sup>  
 bake, roast, lim<sup>55</sup>  
 balance (n.), ba<sup>55</sup> tɕ<sup>h</sup>iŋ<sup>31</sup> p<sup>h</sup>an<sup>31</sup> dɛm<sup>55</sup>  
 balance hook, ŋɛ<sup>31</sup> tɕ<sup>h</sup>im<sup>55</sup> dɛm<sup>55</sup>  
 balance, scale, ŋɛ<sup>31</sup> dɛm<sup>55</sup>  
 balance scale with capital, i<sup>55</sup>ko<sup>31</sup>ŋa<sup>31</sup>t<sup>h</sup>aŋ<sup>55</sup>  
 bald headed, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup> tɕ<sup>h</sup>a<sup>55</sup>  
 bald, bare, tɕ<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>a<sup>55</sup>  
 ball, a, p<sup>h</sup>i<sup>31</sup>tɕ<sup>h</sup>u<sup>31</sup>-  
 ball, a, ɕa<sup>55</sup>sa<sup>31</sup>ŋuŋ<sup>55</sup>  
 ball of dough, t<sup>h</sup>i<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 balloon guitar, tɕi<sup>55</sup>bu<sup>55</sup>  
 bamboo, a<sup>31</sup>ʔban<sup>55</sup>  
 bamboo, k<sup>h</sup>am<sup>33</sup>  
 bamboo basket for rice-washing, ʂɿ<sup>55</sup> ba<sup>31</sup>luŋ<sup>31</sup>  
 bamboo (cane), hi<sup>31</sup>zɿ<sup>31</sup>  
 bamboo flute, dʒi<sup>31</sup> li<sup>31</sup>  
 bamboo joint, k<sup>h</sup>am<sup>55</sup> tɕ<sup>h</sup>i<sup>31</sup>ŋi<sup>55</sup>; tan<sup>55</sup>  
 bamboo (mountain), t<sup>h</sup>i<sup>31</sup>ma<sup>31</sup>  
 bamboo (poisonous), a<sup>31</sup>ɣuŋ<sup>55</sup>  
 bamboo root, k<sup>h</sup>am<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 bamboo (rubber), tɕ<sup>h</sup>ɿ<sup>31</sup>ŋaŋ<sup>31</sup>  
 bamboo shoots, a<sup>31</sup>maŋ<sup>55</sup>  
 bamboo skimmer, ŋi<sup>31</sup> ʂu<sup>31</sup>  
 bamboo slices, a<sup>31</sup>ɕim<sup>55</sup>  
 bamboo, solid, a<sup>31</sup>tɕɿŋ<sup>55</sup>  
 bamboo strip, thin, a<sup>31</sup>lam<sup>31</sup>  
 bamboo, strip, ʂɿ<sup>55</sup>p<sup>h</sup>a<sup>31</sup>  
 bamboo, dragon, t<sup>h</sup>a<sup>31</sup>ua<sup>55</sup>  
 bamboo, gold, k<sup>h</sup>am<sup>55</sup>  
 bamboo, mountain, t<sup>h</sup>i<sup>31</sup>ma<sup>31</sup>  
 bamboo type, ʂɿ<sup>31</sup>men<sup>55</sup>  
 bamboo type, a<sup>31</sup>lu<sup>31</sup>  
 bamboo type, a<sup>31</sup>ʔben<sup>55</sup>  
 bamboo type, a<sup>31</sup>ʔban<sup>55</sup>xan<sup>35</sup>  
 bamboo type, ma<sup>31</sup>ŋam<sup>55</sup>  
 bamboo type, a<sup>31</sup>de<sup>31</sup>  
 bamboo type, a<sup>31</sup>va<sup>55</sup>  
 ban, forbid, prohibit, k<sup>h</sup>uŋu<sup>31</sup>  
 band (clothing), mu<sup>55</sup>dɛm<sup>55</sup>  
 bandit, m<sup>31</sup>ɕaŋ<sup>55</sup>ua<sup>33</sup>su<sup>55</sup>  
 bandit; brigand; t<sup>h</sup>u<sup>55</sup>fei<sup>55</sup> (Ch.)  
 bank (money), dʒa<sup>31</sup> xa<sup>31</sup> lan<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup>, in<sup>31</sup>xan<sup>55</sup> > ɿ<sup>31</sup> xã<sup>55</sup> (Ch.)  
 bank (river), di<sup>55</sup> tɕ<sup>h</sup>i<sup>55</sup>  
 bank (river), tɕ<sup>h</sup>o<sup>31</sup> ŋua<sup>31</sup>sa<sup>55</sup>

- barber, a<sup>31</sup>ni<sup>55</sup> ɕi<sup>31</sup>ɣim<sup>55</sup>su<sup>55</sup>  
 barefooted, a<sup>31</sup>xa<sup>35</sup>tʂ<sup>h</sup>a<sup>55</sup>  
 bark (tree), ɕuŋ<sup>55</sup>tɕ<sup>h</sup>i<sup>55</sup>, ɕuŋ<sup>55</sup>tɕi<sup>55</sup>  
 bark, ʔdzu<sup>55</sup>ŋu<sup>31</sup>  
 bark, yap (dog), luŋ<sup>55</sup>, k<sup>h</sup>yi<sup>53</sup>u<sup>31</sup>, dʒɛ<sup>35</sup>  
 barley, ʂa<sup>55</sup>ia<sup>31</sup>  
 barley, highland, ka<sup>31</sup>su<sup>31</sup>ua<sup>55</sup>  
 barnyard millet, tɕo<sup>55</sup>ba<sup>55</sup>  
 bashful, ɕaŋ<sup>55</sup>ʂɿ<sup>31</sup>  
 bashful, shy, ʂɿ<sup>33</sup>ɕaŋ<sup>55</sup>t<sup>h</sup>a<sup>31</sup>ɕaŋ<sup>55</sup>  
 basin; washbasin, mɛŋ<sup>55</sup>dʒɛn<sup>55</sup>dɛm<sup>55</sup>  
 basket (back), da<sup>31</sup>guŋ<sup>55</sup>  
 basket (bamboo) (rice-washing), ʂɿ<sup>55</sup>ba<sup>31</sup>luŋ<sup>31</sup>  
 basket, large bamboo/wicker, p<sup>h</sup>a<sup>33</sup>  
 basket, shallow, la<sup>35</sup>dzu<sup>31</sup>  
 basket, small, p<sup>h</sup>ɛ<sup>55</sup>p<sup>h</sup>ɛ<sup>55</sup>  
 basket, xa<sup>55</sup>  
 basket, p<sup>h</sup>ɛ<sup>53</sup>  
 basket for fowls, k<sup>h</sup>a<sup>55</sup>dʒaŋ<sup>31</sup>  
 bat, ba<sup>55</sup>su<sup>55</sup>, ua<sup>31</sup>la<sup>31</sup> (Lisu)  
 bath towel, zɿ<sup>31</sup>gu<sup>31</sup>dʒɛn<sup>55</sup>ʂɿ<sup>31</sup>ɕin<sup>31</sup>dɛm<sup>55</sup>  
 bathe, zɿ<sup>31</sup>gu<sup>31</sup>dʒɛn<sup>55</sup>  
 bathhouse, zɿ<sup>31</sup>gu<sup>31</sup>dʒɛn<sup>55</sup>dɛm<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 bathtub, zɿ<sup>31</sup>gu<sup>31</sup>dʒɛn<sup>55</sup>dʒɿ<sup>35</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 battlefield, a<sup>31</sup>san<sup>55</sup>za<sup>55</sup>  
 bayberry, red, k<sup>h</sup>a<sup>31</sup>luŋ<sup>55</sup>  
 bayberry, red, small, mo<sup>31</sup>zom<sup>31</sup>  
 be at, stay, no<sup>33</sup>  
 be at home; be in, no<sup>33</sup>  
 be in heat, ʔi<sup>55</sup>ʂɿ<sup>55</sup>ɣu<sup>31</sup>  
 be sad, feel sorry, ŋim<sup>31</sup>p<sup>h</sup>i<sup>31</sup>ɕa<sup>31</sup>  
 be, ie<sup>33</sup>ŋzɿ<sup>55</sup>  
 be, zɿ<sup>55</sup>  
 be or become a wife, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>ua<sup>31</sup>  
 be, not-; false, m<sup>31</sup>zɿ<sup>55</sup>  
 beach, dʒaŋ<sup>31</sup>  
 beak, bill, ŋ<sup>55</sup>dʒɿ<sup>31</sup>  
 beak, bill, ŋ<sup>55</sup>dʒɿ<sup>31</sup>  
 beam, la<sup>31</sup>bu<sup>55</sup>guŋ<sup>31</sup>  
 beam or ridge of roof, a<sup>31</sup>dʒɿ<sup>31</sup>zɿ<sup>55</sup>guŋ<sup>31</sup>  
 beam of a steelyard, ŋɛ<sup>31</sup>dɛm<sup>55</sup>lã<sup>33</sup>  
 bean curd, a<sup>31</sup>no<sup>55</sup>di<sup>31</sup>zi<sup>55</sup>  
 bean curd, a<sup>31</sup>no<sup>55</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 bean sprouts (a dish), a<sup>31</sup>no<sup>55</sup>bi<sup>31</sup>li<sup>31</sup>a<sup>31</sup>maŋ<sup>55</sup>  
 bean thread, fun<sup>55</sup>t<sup>h</sup>iau<sup>31</sup>  
 bean, broad, nu<sup>55</sup>di<sup>31</sup> (Lisu)  
 bean, mung, nu<sup>55</sup>p<sup>h</sup>u<sup>55</sup> (Lisu)

- bean, red, a<sup>31</sup>no<sup>55</sup>bu<sup>31</sup>si<sup>31</sup>  
 bean, string, do<sup>31</sup>ba<sup>31</sup>  
 bean, white, a<sup>31</sup>no<sup>55</sup>ba<sup>33</sup>  
 beans, peas, soy beans, a<sup>31</sup>no<sup>55</sup>  
 bear (n.), ʃɿ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 bear, black, ʃɿ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 bear gall, ʃɿ<sup>55</sup>da<sup>33</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 bear grudge, nɪm<sup>31</sup>zɿ<sup>55</sup>u<sup>31</sup>  
 bear (fruit), ŋ<sup>31</sup>ʃɿ<sup>33</sup>dzɿ<sup>33</sup>; dzɿ<sup>33</sup>  
 bear (fruit), ʔŋ<sup>31</sup>ɿn<sup>55</sup>ven<sup>55</sup>  
 beard of grain, ʃa<sup>31</sup>zə<sup>31</sup>min<sup>33</sup>  
 beard, full, ba<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup> (Lisu)  
 beard, mu<sup>31</sup>tsɿ<sup>55</sup> (Lisu)  
 beast, iã<sup>55</sup>ɛ<sup>31</sup>, xo<sup>55</sup>  
 beast, a<sup>31</sup>dam<sup>31</sup>ʃa<sup>55</sup>  
 beast cave, ɕa<sup>55</sup>qan<sup>31</sup>  
 beat to death, dzo<sup>31</sup>sa<sup>55</sup>u<sup>31</sup>  
 beat with fist, dzu<sup>35</sup>ŋi<sup>55</sup>  
 beat, rap, tap, ɣom<sup>55</sup>  
 beat, thump, k<sup>h</sup>o<sup>31</sup>o<sup>55</sup>  
 beautiful, a<sup>31</sup>nem<sup>55</sup>  
 beautiful, handsome, a<sup>31</sup>nem<sup>55</sup>mɛ<sup>55</sup>  
 because, lan<sup>53</sup>  
 beckon, wave, a<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>vɛ<sup>55</sup>  
 beckon with hand, a<sup>31</sup>vu<sup>35</sup>  
 become, tɕ<sup>h</sup>a<sup>33</sup>, a<sup>31</sup>dzo<sup>55</sup>  
 become a Buddhist monk or nun, tɕ<sup>h</sup>im<sup>31</sup>dun<sup>55</sup>m<sup>31</sup>no<sup>33</sup>  
 become good; reform, a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 become moldy, ɣun<sup>55</sup>  
 become, change, p<sup>h</sup>o<sup>35</sup>; a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>u<sup>31</sup>  
 become, change, a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 bed edge, nɪm<sup>55</sup>za<sup>55</sup>di<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 bed made up, ʃɿ<sup>31</sup>qun<sup>31</sup>qun<sup>55</sup>u<sup>31</sup>  
 bed plank, nɪm<sup>55</sup>za<sup>55</sup>lan<sup>31</sup>  
 bed, nɪm<sup>55</sup>za<sup>55</sup>  
 bedbug, ɕem<sup>53</sup>  
 bedbug, ma<sup>31</sup>xu<sup>31</sup> (Lisu)  
 bedding = bed, nɪm<sup>55</sup>za<sup>55</sup>  
 bedroom, nɪm<sup>55</sup>k<sup>h</sup>ua<sup>55</sup>  
 bee sting, ʃɿ<sup>31</sup>la<sup>55</sup>  
 bee; honeybee, ʃɿ<sup>55</sup>k<sup>h</sup>ua<sup>55</sup>; k<sup>h</sup>ua<sup>33</sup>  
 beef, nɔ<sup>31</sup>uã<sup>31</sup>ɕa<sup>33</sup>  
 beef stomach, nɔ<sup>31</sup>uã<sup>31</sup>p<sup>h</sup>a<sup>53</sup>  
 beehive, honeycomb, k<sup>h</sup>ua<sup>55</sup>p<sup>h</sup>um<sup>55</sup>  
 beetles, class of destructive ones, ɕun<sup>55</sup>zom<sup>55</sup>  
 before (time), ma<sup>55</sup>ʃu<sup>31</sup>k<sup>h</sup>a<sup>53</sup>  
 before; formerly, a<sup>31</sup>k<sup>h</sup>e<sup>31</sup>.iam<sup>35</sup>, a<sup>31</sup>k<sup>h</sup>u<sup>31</sup>zam<sup>55</sup>, ua<sup>33</sup>ʃu<sup>55</sup>

- before noon, a<sup>31</sup>saŋ<sup>31</sup>h<sup>55</sup>a<sup>55</sup>  
 beg, vu<sup>31</sup>ε<sup>55</sup>  
 beg (rice), buw<sup>55</sup>dza<sup>31</sup>vu<sup>55</sup>  
 beggar, buw<sup>55</sup>dza<sup>31</sup>vu<sup>31</sup>su<sup>55</sup>  
 beggar, di<sup>31</sup>dza<sup>31</sup>p<sup>h</sup>a<sup>31</sup>  
 begin class, saŋ<sup>35</sup>k<sup>h</sup>o<sup>35</sup>  
 begin class, ɕi<sup>31</sup>ŋin<sup>55</sup>u<sup>31</sup>  
 begin; start, mi<sup>55</sup>ŋu<sup>31</sup>  
 begin; start, ʔo<sup>33</sup>mo<sup>55</sup>  
 beginning of the month, sɿ<sup>31</sup>la<sup>55</sup>mo<sup>55</sup>  
 beginning of the year, o<sup>31</sup>n<sup>u</sup>ŋ<sup>55</sup>mo<sup>55</sup>  
 behead, ba<sup>55</sup>t<sup>h</sup>an<sup>ʔ</sup><sup>55</sup>nu<sup>55</sup>, pa<sup>31</sup>dzan<sup>55</sup>u<sup>55</sup>  
 behead, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>an<sup>ʔ</sup><sup>55</sup>  
 behind, ʔi<sup>55</sup>zaŋ<sup>31</sup>h<sup>53</sup>a<sup>53</sup>  
 Beijing, pe<sup>31</sup>tɕin<sup>55</sup> (Ch.)  
 belch, xu<sup>33</sup>u<sup>55</sup>  
 belch, hiccup, di<sup>31</sup>gu<sup>31</sup>vε<sup>31</sup>  
 believe, ʂɿ<sup>31</sup>dzuŋ<sup>31</sup>  
 believe, trust, ɕaŋ<sup>55</sup>ɕin<sup>35</sup>  
 bell, ɕa<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>55</sup> (Lisu)  
 bell, musical, na<sup>55</sup>li<sup>55</sup> (Burmese)  
 bellows, di<sup>55</sup>fu<sup>31</sup>  
 belly; abdomen; stomach, p<sup>h</sup>a<sup>55</sup>  
 bellyband; girth, mā<sup>31</sup>p<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>dεm<sup>55</sup>  
 below; following, ga<sup>31</sup>p<sup>h</sup>aŋ<sup>33</sup>; p<sup>h</sup>aŋ<sup>33</sup>  
 belt for carrying baby on back, tɕ<sup>h</sup>a<sup>55</sup>p<sup>h</sup>a<sup>33</sup>  
 belt for carrying baby on back, bu<sup>31</sup>lu<sup>31</sup>  
 bend, ni<sup>31</sup>u<sup>31</sup>  
 bend over, dzu<sup>55</sup>gun<sup>55</sup>  
 bequeath, bu<sup>31</sup>ʂɿn<sup>55</sup>, bu<sup>31</sup>ʂɿn<sup>31</sup>  
 beside, by the side of, sa<sup>31</sup>  
 bet, to, ʔa<sup>31</sup>dzɔŋ<sup>55</sup>  
 bharal, blue sheep, a<sup>31</sup>dzun<sup>55</sup>  
 big, ua<sup>55</sup>ɕun<sup>31</sup>, ua<sup>55</sup>duŋ<sup>31</sup>, ta<sup>53</sup> (Ch.), tɕa<sup>53</sup> (Ch.)  
 big, become, ua<sup>55</sup>duŋ<sup>31</sup>a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 bicycle, bike, tɛn<sup>55</sup>ts<sup>h</sup>ε<sup>55</sup>  
 bicycle, to, tɛn<sup>55</sup>ts<sup>h</sup>ε<sup>55</sup>di<sup>31</sup>dzu<sup>31</sup>ʂɿ<sup>55</sup>  
 Bijiang River, pi<sup>31</sup>tɕa<sup>35</sup>  
 bile, da<sup>31</sup>k<sup>h</sup>ŋ<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
 billfold, p<sup>h</sup>u<sup>55</sup>dε<sup>55</sup>gun<sup>55</sup>  
 bind around, tɕ<sup>h</sup>uŋ<sup>ʔ</sup><sup>55</sup>  
 bind feet, a<sup>31</sup>xa<sup>55</sup>xud<sup>53</sup>u<sup>31</sup>  
 bind with hoop, xuan<sup>u</sup><sup>53</sup>  
 bind, tie up, t<sup>h</sup>a<sup>55</sup>va<sup>31</sup>u<sup>31</sup>; ta<sup>55</sup>va<sup>31</sup>  
 bind, tie up, p<sup>h</sup>an<sup>31</sup>  
 birch, a<sup>31</sup>da<sup>55</sup>  
 bird cry, cackle, gu<sup>31</sup>la<sup>55</sup>ε<sup>31</sup>

- bird cry, se<sup>55</sup>, si<sup>55</sup>li<sup>55</sup> si<sup>33</sup>li<sup>33</sup> u<sup>31</sup>  
 bird nest, tɕ<sup>h</sup>a<sup>55</sup> d̪aŋ<sup>31</sup>  
 bird, baby, tɕ<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>en<sup>31</sup>  
 bird, kind of, mu<sup>55</sup>gie<sup>55</sup>  
 bird, tɕ<sup>h</sup>a<sup>55</sup>  
 birth, born; give birth, d̪u<sup>31</sup> k<sup>h</sup>om<sup>31</sup>  
 birthday, ma<sup>55</sup>zaŋ<sup>55</sup>so<sup>31</sup>ni<sup>55</sup>ŋu<sup>31</sup>  
 bitch, de<sup>31</sup>gz̪<sup>33</sup> ma<sup>55</sup>  
 bite, k<sup>h</sup>i<sup>55</sup>, k<sup>h</sup>i<sup>53</sup> (u<sup>31</sup>)  
 bite (by dog), k<sup>h</sup>i<sup>55</sup>a<sup>31</sup>ia<sup>31</sup>  
 bite, to, ʔd̪z̪u<sup>55</sup>ŋu<sup>31</sup> > d̪z̪uŋ<sup>53</sup>  
 bite (melon seeds), ɕuŋ<sup>53</sup>  
 bite (mosquito), to, k<sup>h</sup>i<sup>33</sup>  
 bite; bark, ʔd̪z̪u<sup>55</sup>ŋu<sup>31</sup>  
 bite and hold on to, gi<sup>55</sup>ũ<sup>31</sup>li<sup>31</sup>ma<sup>31</sup>ɿŋ<sup>31</sup>  
 bits-and-pieces, ŋ<sup>31</sup>ʂ<sup>1</sup><sup>55</sup>  
 bitter, k<sup>h</sup>a<sup>33</sup>  
 bitter, very, a<sup>31</sup>k<sup>h</sup>u<sup>55</sup> k<sup>h</sup>a<sup>33</sup>  
 black bean, a<sup>31</sup>no<sup>55</sup>ŋaŋ<sup>55</sup>  
 black bear, ʂ<sup>1</sup><sup>55</sup> p<sup>h</sup>u<sup>31</sup>  
 black snake, d̪zi<sup>31</sup> su<sup>31</sup> bu<sup>31</sup>  
 black, ŋaŋ<sup>55</sup>; xe<sup>55</sup>ŋaŋ<sup>55</sup>; ni<sup>35</sup>xa<sup>55</sup>ŋaŋ<sup>55</sup>  
 black, become, na<sup>55</sup>xa<sup>55</sup>ŋaŋ<sup>55</sup>a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 blackboard, xe<sup>31</sup>pen<sup>53</sup>  
 blacksmith, ɕa<sup>31</sup>k<sup>h</sup>e<sup>55</sup>z̪im<sup>55</sup>su<sup>55</sup>  
 bladder, (ŋ<sup>31</sup>)ba<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 blame, to, xo<sup>53</sup>u<sup>31</sup>  
 blame, to, t<sup>h</sup>um<sup>31</sup>da<sup>55</sup>la<sup>31</sup>  
 bland, plain, m<sup>31</sup>k<sup>h</sup>a<sup>33</sup>  
 bland, plain, ʂ<sup>1</sup>lan<sup>55</sup>m<sup>31</sup>k<sup>h</sup>ua<sup>55</sup>  
 blanket, d̪za<sup>55</sup>p<sup>h</sup>a<sup>33</sup>  
 blanket, cover, ʂ<sup>1</sup>d̪uŋ<sup>31</sup>du<sup>31</sup>p<sup>h</sup>u<sup>55</sup>dim<sup>55</sup>  
 blighted grain, tɕ<sup>h</sup>o<sup>55</sup>ʔba<sup>55</sup>  
 blessing, ɕa<sup>55</sup>p<sup>h</sup>a<sup>55</sup>  
 blind person, ni<sup>55</sup>da<sup>ʔ55</sup>  
 blind, become, ni<sup>55</sup>da<sup>55</sup>  
 blindly, m<sup>31</sup>za<sup>31</sup>u<sup>31</sup>  
 blink, to, ŋ<sup>55</sup>tɕ<sup>h</sup>im<sup>55</sup>ua<sup>31</sup>  
 blister, a<sup>31</sup>p<sup>h</sup>um<sup>55</sup>  
 bloated (with urine), ʔlin<sup>35</sup>  
 block (the wind), di<sup>31</sup>ga<sup>53</sup>u<sup>31</sup>  
 block way, ʂan<sup>31</sup>  
 block up, plug, obstruct, t<sup>h</sup>aŋu<sup>31</sup>  
 blockhouse, a<sup>31</sup>d̪za<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 blood vessel, ɕu<sup>33</sup>buŋ<sup>55</sup>  
 blood, ʂu<sup>53</sup> > ɕu<sup>33</sup>  
 blood vessel, ʂu<sup>31</sup>buŋ<sup>55</sup>

- bloom, sprout, ɕuŋ<sup>55</sup>ven<sup>55</sup>; ven<sup>55</sup>  
 blossom; bloom, ŋ<sup>31</sup>ven<sup>55</sup> ven<sup>55</sup>  
 blossom; to flower, ven<sup>55</sup>  
 blow, to, ʔgam<sup>35</sup>  
 blow (nose), ɲim<sup>55</sup>u<sup>31</sup>t<sup>h</sup>a<sup>31</sup>; ɲim<sup>55</sup>ʔa<sup>31</sup>t<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 blow (wind), fin<sup>55</sup>; xo<sup>31</sup>ʔo<sup>55</sup>  
 blow air, saŋ<sup>55</sup>a<sup>31</sup>p<sup>h</sup>u<sup>35</sup>  
 blow brass instrument, ma<sup>55</sup>duŋ<sup>31</sup>mi<sup>55</sup>u<sup>31</sup>  
 blow the trumpet, sa<sup>55</sup>la<sup>55</sup>min<sup>55</sup>  
 blow tube (for fire), tɕ<sup>h</sup>e<sup>31</sup>mi<sup>31</sup>a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>dɛm<sup>55</sup>  
 blow on, muut<sup>55</sup>?  
 blow (on fire), to, a<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 blow up (rock), di<sup>31</sup>bo<sup>3</sup>  
 blue, dark or deep, tɕuŋ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>nɯŋ<sup>31</sup>  
 blue-bottle fly, ba<sup>33</sup>suŋ<sup>55</sup>ɕuŋ<sup>31</sup>  
 blurred vision, ɲi<sup>55</sup>m<sup>31</sup>zau<sup>35</sup>  
 boar, ʔo<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 board game, tɕ<sup>h</sup>i<sup>31</sup> (Ch.)  
 board; plank, ɕuŋ<sup>55</sup>lan<sup>31</sup>  
 board; plank, taŋ<sup>31</sup>sa<sup>55</sup>po<sup>44</sup>p<sup>h</sup>i<sup>31</sup>, ŋa<sup>44</sup>p<sup>h</sup>i<sup>33</sup>  
 board; plank,  
 boast, brag, ɲi<sup>53</sup>a<sup>31</sup>m<sup>55</sup>  
 boat body, a<sup>31</sup>su<sup>31</sup>zɿ<sup>31</sup>gu<sup>31</sup>  
 boat made of animal hide, ɕa<sup>55</sup>sam<sup>31</sup>a<sup>31</sup>su<sup>31</sup>  
 boat, a<sup>31</sup>su<sup>31</sup>  
 boat, small, a<sup>31</sup>su<sup>31</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 boatmen, a<sup>31</sup>su<sup>31</sup>ga<sup>55</sup>su<sup>55</sup>  
 Bodhisattva, Buddha, a<sup>31</sup>sa<sup>33</sup>p<sup>h</sup>u<sup>31</sup>iã<sup>55</sup>  
 body dirt, ɲi<sup>55</sup>  
 body odor, le<sup>31</sup>bu<sup>31</sup>ts<sup>h</sup>ɿ<sup>31</sup>nu<sup>33</sup>  
 body odor, le<sup>31</sup>bu<sup>31</sup>p<sup>h</sup>e<sup>31</sup>lɛm<sup>31</sup>  
 body, dzɿ<sup>31</sup>gu<sup>31</sup>, zɿ<sup>31</sup>gu<sup>31</sup>  
 boil (water), ʔa<sup>31</sup>su<sup>31</sup>; lim<sup>33</sup>  
 boil water, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>a<sup>31</sup>sy<sup>31</sup>  
 boil, stew, ʔdzu<sup>55</sup>ŋu<sup>31</sup>, k<sup>h</sup>in<sup>31</sup>  
 boil, to, ʔa<sup>35</sup>u<sup>31</sup>  
 bold, ɲ<sup>31</sup>dɛ<sup>31</sup>k<sup>h</sup>ɕɿ<sup>55</sup>da<sup>31</sup>  
 bold, audacious, ɲim<sup>31</sup>ua<sup>55</sup>ɕuŋ<sup>31</sup>  
 bolt (door), to, t<sup>h</sup>i<sup>31</sup>zɿn<sup>31</sup>u<sup>33</sup>  
 bolt (cloth), clf., ma<sup>31</sup>xuŋ<sup>55</sup>t<sup>h</sup>i<sup>31</sup>xuŋ<sup>55</sup>  
 bone SEE fish bone  
 bone soup, ɕa<sup>53</sup>.ɿu<sup>31</sup>k<sup>h</sup>o<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>  
 bone, -ɿu<sup>31</sup> in 'bone soup'  
 bone, ɕa<sup>31</sup>k<sup>h</sup>o<sup>53</sup>, za<sup>31</sup>k<sup>h</sup>o<sup>53</sup>  
 book, ɕɿ<sup>55</sup>va<sup>31</sup>, ɕɿ<sup>55</sup>  
 bookcase, ɕɿ<sup>55</sup>va<sup>31</sup>a<sup>31</sup>zu<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>ɿŋ<sup>53</sup>u  
 bookshop, ɕɿ<sup>55</sup>va<sup>31</sup>ven<sup>55</sup>za<sup>55</sup>



- boots, ɕa<sup>55</sup> sam<sup>31</sup> gŋ<sup>55</sup> dem<sup>55</sup>  
 bore (breeding), sire, ʔo<sup>55</sup> dzɿ<sup>31</sup>  
 bore a hole, iu<sup>55</sup>; iu<sup>35</sup>  
 bore, to, ɕu<sup>55</sup> u<sup>31</sup> iu<sup>55</sup>  
 born, be, ma<sup>55</sup> laŋ<sup>31</sup> ʃɿ<sup>31</sup>  
 born fifth (female), a<sup>55</sup> ku<sup>31</sup>  
 born fifth (male), a<sup>55</sup> guŋ<sup>31</sup>  
 born first (female), a<sup>31</sup> ŋaŋ<sup>55</sup>  
 born first (male), a<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 born fourth (female), a<sup>55</sup> du<sup>31</sup>  
 born fourth (male), a<sup>31</sup> ts<sup>h</sup>ɿn<sup>55</sup>  
 born second (female), a<sup>31</sup> ŋi<sup>33</sup>  
 born second (male), a<sup>31</sup> du<sup>55</sup>  
 born third (female), a<sup>55</sup> tɕ<sup>h</sup>aŋ<sup>33</sup>  
 born third (male), a<sup>55</sup> k<sup>h</sup>im<sup>33</sup>  
 borrow money, di<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>31</sup> u<sup>31</sup>  
 borrow, lend (e.g. bowl), hã<sup>55</sup> u<sup>31</sup>, ŋã<sup>55</sup>  
 both, a<sup>31</sup> ŋi<sup>31</sup> io<sup>55</sup>  
 both sides, a<sup>31</sup> ŋi<sup>33</sup> tɕ<sup>h</sup>aŋ<sup>55</sup>  
 both... and..., gu<sup>33</sup>... gu<sup>33</sup>...  
 bottle of (wine), p<sup>h</sup>iŋ<sup>31</sup> (Ch.), duŋ<sup>55</sup>  
 bottle, vi<sup>55</sup> ka<sup>31</sup> (pin<sup>31</sup> tsɿ<sup>55</sup>) (Burmese, Ch.)  
 bottom of water, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>53</sup> duŋ<sup>55</sup>  
 bow (boat), a<sup>31</sup> su<sup>31</sup> la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 bow button, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> gu<sup>33</sup> tɕ<sup>h</sup>en<sup>55</sup> dim<sup>55</sup> dem<sup>55</sup>  
 bow button string, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> gu<sup>33</sup> tɕ<sup>h</sup>en<sup>55</sup> dim<sup>55</sup> dem<sup>55</sup>  
 bow groove, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> tɕ<sup>h</sup>a<sup>31</sup>  
 bow groove system, ŋ<sup>31</sup> tɕ<sup>h</sup>a<sup>31</sup> -a<sup>31</sup> zu<sup>35</sup> -li<sup>33</sup>  
 bow point, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 bow pole, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> k<sup>h</sup>uŋ<sup>55</sup>  
 bow shaft, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> k<sup>h</sup>uŋ<sup>55</sup>  
 bow spring, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> p<sup>h</sup>aŋ<sup>55</sup>, dzaŋ<sup>55</sup> li<sup>33</sup>  
 bow string, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> va<sup>55</sup>  
 bow trigger groove, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> go<sup>31</sup> io<sup>55</sup>  
 bow, ba<sup>31</sup> da<sup>33</sup>  
 bow, a, ta<sup>31</sup> da<sup>33</sup>  
 bow; crossbow, t<sup>h</sup>a<sup>31</sup> na<sup>55</sup>  
 bow, to, t<sup>h</sup>im<sup>31</sup> ʃɿ<sup>55</sup>  
 bow; prow, a<sup>31</sup> su<sup>31</sup> la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 bowl, di<sup>31</sup> k<sup>h</sup>ɿ<sup>33</sup>  
 bowl, ia<sup>31</sup> uã<sup>55</sup> (western porcelain)  
 bowl, buŋ<sup>55</sup> a<sup>31</sup> hĩ<sup>35</sup> (wooden)  
 bowl (rice), a<sup>31</sup> gzɿ<sup>33</sup> hiŋ<sup>35</sup>  
 bowl (tobacco), dam<sup>55</sup>  
 bowl, wooden, a<sup>31</sup> hiŋ<sup>35</sup>; a<sup>31</sup> xiŋ<sup>35</sup>  
 box (large); chest; trunk, k<sup>h</sup>a<sup>55</sup> xa<sup>55</sup>  
 box (bamboo), k<sup>h</sup>a<sup>55</sup>

- box, xo<sup>31</sup> (Ch.)  
 box, la<sup>31</sup>ka<sup>35</sup>  
 boy, gua<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 boy/girl friend, tɕu<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup>m<sup>31</sup>ŋa<sup>35</sup>lo<sup>31</sup>  
 bracelet, la<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>755</sup>  
 braces; suspenders, bu<sup>31</sup>lu<sup>31</sup>, tɕ<sup>h</sup>a<sup>55</sup>p<sup>h</sup>a<sup>53</sup>  
 bracken, la<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 brag, to, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>im<sup>55</sup>  
 braid, plait (hair), ʔban<sup>55</sup>ɕ<sup>h</sup>ɿ<sup>31</sup>  
 braid; plait, mu<sup>31</sup>dzun<sup>55</sup>  
 brain of pig, ʔo<sup>55</sup>k<sup>h</sup>o<sup>31</sup>ŋoŋ<sup>55</sup>  
 brain, k<sup>h</sup>o<sup>31</sup>luŋ<sup>55</sup>  
 brake = bracken (fern), la<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 bran (wheat), ɕa<sup>31</sup>ɿa<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 branch road, ts<sup>h</sup>ɿ<sup>31</sup>a<sup>31</sup>di<sup>31</sup>ba<sup>55</sup>  
 branch; twig, ɕuŋ<sup>55</sup>di<sup>55</sup>k<sup>h</sup>an<sup>55</sup>f?  
 branch; twig, t<sup>h</sup>i<sup>55</sup>luŋ<sup>55</sup>  
 branch, -k<sup>h</sup>ɔ<sup>755</sup>  
 brass wind instrument, bu<sup>31</sup>lu<sup>55</sup> (Lisu)  
 brassmarks on a steelyard, ʔŋ<sup>31</sup>ni<sup>55</sup>luŋ<sup>55</sup>  
 brazier, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>a<sup>31</sup>gi<sup>55</sup>dem<sup>55</sup>  
 break, k<sup>h</sup>a<sup>55</sup>  
 break (bowls), k<sup>h</sup>a<sup>55</sup>ɣa<sup>55</sup>; k<sup>h</sup>a<sup>55</sup>ga<sup>55</sup>  
 break an engagement, di<sup>31</sup>tɕ<sup>h</sup>an<sup>31</sup>u<sup>31</sup>m<sup>31</sup>t<sup>h</sup>am<sup>55</sup>  
 break in two, a<sup>31</sup>t<sup>h</sup>ɛn<sup>55</sup>  
 break money, dza<sup>31</sup>xa<sup>31</sup>ŋ<sup>31</sup>ɕ<sup>h</sup>i<sup>55</sup>in<sup>31</sup>ɛ<sup>55</sup>  
 break off with fingers, lu<sup>55</sup>ŋu<sup>31</sup>  
 break out (chicken pox), lan<sup>53</sup>u<sup>31</sup>  
 break out with smallpox, ka<sup>33</sup>la<sup>33</sup>b<sup>h</sup>ŋ<sup>31</sup>  
 break neck, di<sup>31</sup>tɕ<sup>h</sup>u<sup>31</sup>  
 break into pieces (grain), ga<sup>55</sup>ɕi<sup>55</sup>  
 break up family, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>a<sup>31</sup>gi<sup>55</sup>dem<sup>55</sup>  
 break up family (by oldest son), k<sup>h</sup>an<sup>55</sup>  
 break up, scatter, di<sup>31</sup>p<sup>h</sup>ɛŋ<sup>35</sup>ba<sup>55</sup>  
 break up, end, t<sup>h</sup>an<sup>31</sup>  
 break (thunderbolt), mo<sup>55</sup>da<sup>55</sup>li<sup>33</sup>go<sup>31</sup>lo<sup>31</sup>ŋaŋ<sup>55</sup>ɛ<sup>31</sup>  
 break off with fingers (corn), lu<sup>55</sup>ŋu<sup>31</sup>  
 break out in smallpox, na<sup>33</sup>do<sup>33</sup> (Lisu)  
 break out in smallpox, ka<sup>33</sup>la<sup>33</sup>b<sup>h</sup>ŋ<sup>31</sup>  
 break, smash, ŋ<sup>31</sup>ɕ<sup>h</sup>i<sup>31</sup>ɛ<sup>31</sup>t<sup>h</sup>am<sup>53</sup>; ɕ<sup>h</sup>ɿ<sup>31</sup>xuam<sup>53</sup>  
 break, to = break up, end, t<sup>h</sup>an<sup>31</sup>  
 break, to, p<sup>h</sup>u<sup>55</sup>luŋ<sup>55</sup>  
 breakfast, a<sup>31</sup>san<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>p<sup>h</sup>i<sup>31</sup>  
 breastbone, sternum, dem<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 breast-feed, suckle, dzɿ<sup>31</sup>ɿ<sup>55</sup>  
 breast, a<sup>31</sup>tɕ<sup>h</sup>u<sup>55</sup>  
 breast, chest, ga<sup>31</sup>p<sup>h</sup>am<sup>55</sup>

- breath, life, san<sup>55</sup> a<sup>31</sup> xa<sup>55</sup> ʃɿ<sup>31</sup>  
 breathe in, san<sup>55</sup> tɕ<sup>h</sup>i<sup>33</sup> mu<sup>55</sup>  
 breathe out, san<sup>55</sup> a<sup>31</sup> xa<sup>31</sup>  
 brew, make (tea), dzuŋu<sup>53</sup>  
 bribe, to, k<sup>h</sup>u<sup>31</sup> t<sup>h</sup>u<sup>55</sup>  
 brick, t<sup>h</sup>o<sup>55</sup> (Lisu)  
 bricklayer, tɕ<sup>h</sup>im<sup>31</sup> di<sup>31</sup> dzuŋ<sup>55</sup> su<sup>55</sup>  
 bride, tʂ<sup>h</sup>ɿ<sup>31</sup> ma<sup>55</sup> lɛ<sup>55</sup>  
 bridge, go<sup>31</sup> ɿã<sup>55</sup>  
 bridge, rattan, di<sup>31</sup> ba<sup>31</sup>, du<sup>31</sup> ba<sup>31</sup>  
 bright (room), xa<sup>55</sup> xa<sup>33</sup>, p<sup>h</sup>aŋ<sup>31</sup> ŋga<sup>55</sup>  
 bring (as a tray), a<sup>31</sup> gie<sup>35</sup> ɿã<sup>55</sup>  
 bring up (children), ŋa<sup>31</sup> ɕin<sup>33</sup>  
 bring, to, ɿa<sup>55</sup> a<sup>31</sup> io<sup>33</sup>, lu<sup>35</sup>  
 broom (of bamboo), k<sup>h</sup>am<sup>55</sup> mi<sup>55</sup> ɕim<sup>31</sup>  
 broom, mu<sup>55</sup> ɕim<sup>31</sup>  
 broom, small, mu<sup>55</sup> ɕim<sup>31</sup> tɕ<sup>h</sup>ɛn<sup>31</sup>  
 broth, juice, tʂ<sup>h</sup>ɿ<sup>31</sup>  
 brother (older), p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 brother (younger), t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup>, t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup> ]  
 brother, younger (citation), t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup>  
 brother's daughter, sa<sup>55</sup> ma<sup>33</sup>  
 brother's term for sister, t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup>  
 brother's son or daughter, bu<sup>31</sup> du<sup>33</sup>  
 brothers and sisters, t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup> p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 brothers, gu<sup>31</sup> ŋi<sup>53</sup>  
 brothers, p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 brothers, t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup>  
 brothers, tʂ<sup>h</sup>ɿ<sup>55</sup> ma<sup>55</sup>  
 browbeat, ma<sup>31</sup> k<sup>h</sup>am<sup>35</sup>  
 brush (liquid), xã<sup>55</sup>, hã<sup>55</sup>  
 brush teeth, a<sup>31</sup> sa<sup>31</sup> xã<sup>55</sup>  
 brush dust, p<sup>h</sup>a<sup>31</sup> k<sup>h</sup>a<sup>55</sup> u<sup>31</sup>  
 brush, ʂua<sup>31</sup> tsɿ<sup>55</sup> (Ch.), ɕin<sup>33</sup> dem<sup>55</sup>  
 brush, a, pi<sup>31</sup>  
 brush, to, ɕin<sup>55</sup>  
 brusque, m<sup>31</sup> ɕaŋ<sup>55</sup> ʃɿ<sup>31</sup>  
 bubble, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> de<sup>31</sup> bo<sup>55</sup>  
 bucket, clf., t<sup>h</sup>uŋ<sup>33</sup>  
 bucket, dza<sup>31</sup> p<sup>h</sup>aŋ<sup>55</sup>  
 bucket, hand, a<sup>31</sup> gi<sup>55</sup> dem<sup>55</sup> be<sup>31</sup> t<sup>h</sup>u<sup>55</sup>  
 bucket, tub, pail, be<sup>31</sup> t<sup>h</sup>u<sup>55</sup>  
 bucket, water, ɕuŋ<sup>55</sup> t<sup>h</sup>uŋ<sup>31</sup>  
 buckle up; button up, xua<sup>55</sup> ʃɿ<sup>31</sup>  
 buckle up; fasten up, p<sup>h</sup>aŋ<sup>31</sup>  
 buckwheat flour, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> ua<sup>55</sup> tʂ<sup>h</sup>ɿ<sup>31</sup>  
 buckwheat flowers, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> ven<sup>55</sup>

- buckwheat husk, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> tɕ<sup>h</sup>in<sup>55</sup>  
 buckwheat powder, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> ua<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>31</sup>  
 buckwheat, bitter, ua<sup>31</sup> k<sup>h</sup>a<sup>31</sup>  
 buckwheat, sweet, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup>  
 bud, ɕuŋ<sup>55</sup>veŋ<sup>55</sup>t<sup>h</sup>im<sup>31</sup>  
 bud; sprout, a<sup>31</sup>maŋ<sup>55</sup>  
 Buddha; Bodhisattva, a<sup>31</sup>sa<sup>33</sup> p<sup>h</sup>u<sup>31</sup> iã<sup>55</sup>  
 Buddhist priest or nun, tɕ<sup>h</sup>im<sup>31</sup> duŋ<sup>55</sup> m<sup>31</sup>no<sup>33</sup>su<sup>55</sup>  
 bugle, ba<sup>31</sup>la<sup>55</sup>  
 build (house), tɕ<sup>h</sup>im<sup>31</sup>ue<sup>35</sup>/ve<sup>35</sup>  
 build (house), dzim<sup>33</sup>; tɕ<sup>h</sup>im<sup>31</sup>dzim<sup>53</sup>  
 build (hut), a<sup>31</sup>dzi<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>ue<sup>35</sup>  
 build (road), t<sup>h</sup>i<sup>31</sup>za<sup>31</sup> zo<sup>31</sup>muŋ<sup>31</sup>  
 build (rack), di<sup>31</sup>dzu<sup>53</sup>ɣo<sup>53</sup>  
 build wall, dzɛ<sup>35</sup>zom<sup>35</sup>  
 bulb of fritillary, an ingredient used in Chinese medicine, pe<sup>31</sup>mu<sup>33</sup>  
 bull, nɔ<sup>31</sup>ua<sup>31</sup> p<sup>h</sup>u<sup>31</sup>  
 bully, treat someone roughly, ɕa<sup>55</sup>yo<sup>31</sup>  
 bullet, dzu<sup>31</sup>iuŋ<sup>55</sup>  
 bullet, po<sup>55</sup>lo<sup>55</sup> (Lisu)  
 bully (a child), to, ɕa<sup>55</sup>ue<sup>35</sup>, ma<sup>31</sup>k<sup>h</sup>am<sup>35</sup>  
 bumpy, rough, maŋ<sup>31</sup>maŋ<sup>31</sup>nim<sup>31</sup>nim<sup>31</sup>  
 bun, steam and stuffed, pau<sup>55</sup>tsɿ<sup>33</sup> (Ch.)  
 bun, steamed, ɕa<sup>31</sup>la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 bundle, ɕan<sup>33</sup>-dem<sup>55</sup>  
 bundle (hay),  
 bundle of branches for kindling a fire, ŋ<sup>31</sup>ɕɿ<sup>55</sup>p<sup>h</sup>u<sup>55</sup>luŋ<sup>55</sup>  
 bundle, tie (firewood), ba<sup>31</sup>ŋu<sup>31</sup>  
 bundle, to, a<sup>31</sup>ŋu<sup>31</sup>  
 buns, steamed buckwheat, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> lan<sup>55</sup>  
 burlap pocket, mi<sup>55</sup>xuŋ<sup>55</sup> k<sup>h</sup>ɿ<sup>55</sup>  
 burlap; sackcloth, dzi<sup>31</sup>dza<sup>55</sup> p<sup>h</sup>a<sup>33</sup>  
 burlap; sackcloth, ŋ<sup>31</sup>ma<sup>31</sup>(xuŋ<sup>55</sup>)  
 Burma, lo<sup>31</sup> mi<sup>31</sup> mu<sup>31</sup>, mi<sup>31</sup> dzi<sup>55</sup> na<sup>31</sup>  
 burn (firewood), fa<sup>53</sup> u<sup>31</sup>  
 burn (something), to, di<sup>31</sup>guŋu<sup>31</sup>; di<sup>31</sup>guŋ<sup>31</sup>u<sup>31</sup>  
 burn incense, ɕo<sup>55</sup>tɕ<sup>h</sup>u<sup>55</sup>  
 burn incense, ɕo<sup>55</sup>va<sup>53</sup>u<sup>31</sup>  
 burn wasteland, a<sup>31</sup>mu<sup>31</sup>ɕin<sup>55</sup>  
 burn, to, a<sup>31</sup>ba<sup>31</sup> a<sup>31</sup>ni<sup>55</sup>  
 burn, to, k<sup>h</sup>ɛ<sup>35</sup>  
 burn; light (fire), fe<sup>53</sup>u<sup>31</sup>; fe<sup>31</sup>u<sup>31</sup>; ve<sup>31</sup>  
 burnt (e.g., rice), ɕm<sup>55</sup>bu<sup>31</sup> dzi<sup>31</sup>ɛ<sup>31</sup>  
 burnt alive, tɕ<sup>h</sup>a<sup>31</sup>mi<sup>31</sup>dzin<sup>55</sup>li<sup>31</sup>ɕɿ<sup>31</sup>ɿdzɛ<sup>35</sup>  
 burnt rice that adheres to the side of the pot, dza<sup>55</sup>xin<sup>55</sup>  
 burnt, scorched, bu<sup>55</sup>dzɛ<sup>35</sup>  
 burst out of skin (insect), xom<sup>55</sup>

- bury, cover up (animal), tɕ<sup>h</sup>o<sup>55</sup> lim<sup>31</sup>  
 bury, cover up (fire), ɬim<sup>31</sup>, lim<sup>31</sup>  
 bury, lim<sup>31</sup>, lim<sup>53</sup>, ɬim<sup>31</sup>  
 biscuit; cookie, pin<sup>55</sup> gǎ<sup>55</sup> (Ch.)  
 bush, shrub, iɛ<sup>55</sup> sa<sup>31</sup> xaŋ<sup>35</sup>  
 busy, du<sup>31</sup> dzan<sup>31</sup> u<sup>31</sup>  
 but = although, iɛ<sup>33</sup> zɿ<sup>33</sup> gu<sup>33</sup> ...  
 butcher, ʔo<sup>55</sup> san<sup>55</sup> (su<sup>55</sup>)  
 butler, tɕhim<sup>31</sup> k<sup>h</sup>an<sup>55</sup> p<sup>h</sup>u<sup>31</sup> (Lisu)  
 butter, nō<sup>31</sup> uǎ<sup>31</sup> tʂ<sup>h</sup>u<sup>55</sup> tʂ<sup>h</sup>ɿ<sup>31</sup>  
 butter; cow fat, nō<sup>31</sup> uǎ<sup>31</sup> su<sup>53</sup>  
 butterfly, la<sup>31</sup> bu<sup>35</sup> (Lisu)  
 butterfly, da<sup>31</sup> p<sup>h</sup>u<sup>55</sup> tɕi<sup>55</sup> guŋ<sup>55</sup>  
 buttocks, ni<sup>31</sup> k<sup>h</sup>u<sup>55</sup> da<sup>31</sup> buŋ<sup>31</sup>  
 buttocks, tʂ<sup>h</sup>ɿ<sup>31</sup>  
 button (on machine), ga<sup>31</sup> mu<sup>31</sup> tɕim<sup>55</sup> dɛm<sup>55</sup>  
 button, ga<sup>55</sup> ta<sup>55</sup>  
 button, ga<sup>31</sup> mu<sup>31</sup> tɕim<sup>55</sup> dɛm<sup>55</sup>; ga<sup>31</sup> mu<sup>31</sup> tɕim<sup>55</sup>  
 buy or sell on credit, k<sup>h</sup>o<sup>33</sup> o<sup>55</sup>  
 buy, ven<sup>35</sup>, ven<sup>33</sup> (nu<sup>55</sup>)  
 buy (cooking) oil, sa<sup>55</sup> su<sup>55</sup> ven<sup>35</sup>  
 buy Chinese drugs, ɕuŋ<sup>55</sup> zu<sup>31</sup> nɛ<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup> ven<sup>55</sup> za<sup>55</sup>  
 buy cloth, mǎ<sup>33</sup> xuŋ<sup>55</sup> ven<sup>55</sup>  
 buy liquor, nu<sup>31</sup> ven<sup>55</sup>  
 buy meat, ɕa<sup>55</sup> ven<sup>55</sup>  
 buy rice, dzɿ<sup>31</sup> za<sup>55</sup> tʂ<sup>h</sup>a<sup>55</sup> nen<sup>33</sup>  
 buy vegetables or groceries, k<sup>h</sup>ɛn<sup>55</sup> ven<sup>35</sup>  
 by land, a<sup>31</sup> sa<sup>31</sup> dɛm<sup>55</sup> t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>  
 by water; waterway, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> t<sup>h</sup>an<sup>53</sup> dzɿ<sup>55</sup> t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>
- cabbage, Chinese, la<sup>31</sup> ts<sup>h</sup>u<sup>33</sup> ba<sup>55</sup>  
 cabbage, ʔo<sup>31</sup> k<sup>h</sup>u<sup>55</sup> (Lisu)  
 cable yoke on metal bridge, a<sup>31</sup> v.ŋ<sup>55</sup>  
 cackle (hens), to, ga<sup>31</sup> da<sup>ʔ55</sup> > gu<sup>31</sup> da<sup>55</sup>  
 cage, la<sup>31</sup> ka<sup>55</sup>  
 call for a car, t<sup>h</sup>an<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup> a<sup>31</sup> guŋ<sup>55</sup>  
 call 'help!' san<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>53</sup> a<sup>31</sup> iɛ<sup>53</sup>  
 call together, a<sup>31</sup> dan<sup>55</sup> guŋ<sup>53</sup>  
 call, to, ŋan<sup>55</sup> ɛ<sup>31</sup>  
 called; be called, guŋ<sup>53</sup>  
 called; named, len<sup>53</sup>; len<sup>53</sup> ʂɿ<sup>31</sup>  
 calyx of a flower, ŋ<sup>31</sup> ven<sup>55</sup> t<sup>h</sup>i<sup>53</sup> im<sup>53</sup> ɛ<sup>31</sup>  
 cakes of tea, la<sup>31</sup> tɕa<sup>55</sup> lan<sup>55</sup>  
 calamus sweet flag reed, mi<sup>55</sup> tɕi<sup>31</sup>  
 calamity, disaster, du<sup>31</sup> k<sup>h</sup>u<sup>55</sup>  
 calculate, count, so<sup>55</sup>  
 calf of leg, ba<sup>31</sup> buŋ<sup>55</sup>

- calf of leg, lower leg, ʔa<sup>31</sup>xa<sup>35</sup>t<sup>h</sup>uŋ<sup>31</sup>  
 calf; small ox, nō<sup>31</sup>uā<sup>31</sup>tē<sup>h</sup>en<sup>31</sup>  
 camel, lo<sup>31</sup>t<sup>h</sup>o<sup>31</sup> (Ch.)  
 camera, dʒi<sup>31</sup>a<sup>31</sup>dʒa<sup>55</sup>dɛm<sup>55</sup>  
 can, able, so<sup>55</sup>o<sup>31</sup>  
 can hold, sa<sup>33</sup>dʒɿ<sup>33</sup>ɛ<sup>31</sup>  
 can, may, a<sup>31</sup>du<sup>31</sup>ɛ<sup>33</sup>  
 can (ability, permission), dʒu<sup>31</sup>, muŋ<sup>55</sup> (1SG)  
 candid, forthright, tē<sup>h</sup>uŋ<sup>35</sup>tē<sup>h</sup>uŋ<sup>31</sup>lu<sup>35</sup>lu<sup>35</sup>  
 candle, la<sup>31</sup>tsu<sup>55</sup> (Ch.)  
 cane bamboo, hi<sup>31</sup>zɿ<sup>31</sup>  
 cangue, a<sup>31</sup>vu<sup>55</sup>ba<sup>31</sup>so<sup>55</sup>ni<sup>33</sup>yo<sup>35</sup>  
 cangue; pillory; yoke, nɛ<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>  
 canine teeth, dɛ<sup>31</sup>/da<sup>31</sup>gɿ<sup>55</sup>a<sup>31</sup>sa<sup>31</sup>  
 cannon, ta<sup>35</sup>p<sup>h</sup>a<sup>35</sup>; ta<sup>35</sup>p<sup>h</sup>a<sup>55</sup>u  
 cannot, m<sup>31</sup> = not  
 cannot bear to part, m<sup>31</sup>zɑŋ<sup>35</sup>u<sup>31</sup>  
 cap, army, iu<sup>31</sup>da<sup>31</sup>mo<sup>55</sup>  
 capable, da<sup>55</sup>  
 capable, di<sup>31</sup>zuoŋ<sup>55</sup>ɛ<sup>31</sup>  
 capable of; know how to, so<sup>53</sup> = so<sup>55</sup>  
 capital, i<sup>55</sup>ko<sup>31</sup> (Lisu)  
 capon, k<sup>h</sup>a<sup>55</sup>dim<sup>55</sup>  
 capture a prisoner, k<sup>h</sup>a<sup>55</sup>ni<sup>55</sup>t<sup>h</sup>am<sup>55</sup>dʒu<sup>35</sup>  
 car, t<sup>h</sup>an<sup>55</sup>tē<sup>h</sup>im<sup>31</sup>  
 car, mo<sup>55</sup>do<sup>55</sup> (çi<sup>55</sup>), li<sup>31</sup>li<sup>31</sup>tē<sup>h</sup>im<sup>31</sup>  
 carbon, xɛŋ<sup>31</sup> (xɿuŋ<sup>31</sup>)  
 carcass (animal), ɕa<sup>55</sup>maŋ<sup>31</sup>  
 cards, p<sup>h</sup>u<sup>55</sup>k<sup>h</sup>ɛ<sup>31</sup>  
 care for (child), la<sup>55</sup>u<sup>31</sup>  
 care for (child), ɕin<sup>35</sup>  
 careful, (a<sup>31</sup>)dʒa<sup>55</sup>ŋɿ<sup>31</sup>  
 careful, cautious, a<sup>31</sup>dʒa<sup>55</sup>ŋɿ<sup>31</sup>  
 careless, ɕɛ<sup>35</sup>nɛm<sup>55</sup>  
 careless, casual, a<sup>31</sup>tē<sup>h</sup>u<sup>31</sup>tē<sup>h</sup>uŋ<sup>55</sup>ua<sup>33</sup>; (a<sup>31</sup>)tē<sup>h</sup>uŋ<sup>55</sup>  
 carp, ŋua<sup>55</sup>duŋ<sup>55</sup>  
 carpenter, ɕuoŋ<sup>55</sup>io<sup>31</sup>mun<sup>55</sup>su<sup>55</sup>  
 carpenter's ink marker, mu<sup>55</sup>na<sup>33</sup>t<sup>h</sup>u<sup>31</sup> (Lisu)  
 carrot, ʔa<sup>31</sup>ts<sup>h</sup>u<sup>31</sup>di<sup>33</sup>p<sup>h</sup>u<sup>31</sup>bu<sup>31</sup>si<sup>35</sup>  
 carry, laŋ<sup>55</sup>  
 carry (child) on back, a<sup>31</sup>ba<sup>55</sup>u<sup>55</sup>  
 carry, lift up, k<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 carry; lift (with pole), ʔa<sup>31</sup>giŋu<sup>31</sup>; a<sup>31</sup>gi<sup>55</sup>  
 carry (small child), la<sup>55</sup>u<sup>31</sup>, ɕin<sup>35/31</sup>  
 carry (two people), a<sup>31</sup>gi<sup>31</sup>  
 carry in shirt tail, t<sup>h</sup>a<sup>31</sup>u<sup>55</sup>  
 carry on back (child), p<sup>h</sup>a<sup>33</sup>tē<sup>h</sup>en<sup>31</sup>

- carry on back (clf), o<sup>31</sup>  
 carry on back, sa<sup>53</sup>  
 carry on back, bu<sup>31</sup>lu<sup>31</sup>a<sup>31</sup>ba<sup>55</sup>xu<sup>31</sup>u  
 carry on back (firewood), zɿ<sup>55</sup> (u<sup>31</sup>), sɿ<sup>55</sup> (u<sup>31</sup>)  
 carry on back (grain), zɿ<sup>55</sup> u<sup>31</sup> a<sup>31</sup>tɕ<sup>h</sup>en<sup>53</sup> (child)  
 carry on head, du<sup>31</sup> ba<sup>53</sup> ŋu<sup>31</sup>  
 carry on head, hã<sup>55</sup>ɣ<sup>31</sup>  
 carry on pack animal, xamɿ<sup>35</sup>, di<sup>31</sup> bo<sup>53</sup> ŋu<sup>31</sup>  
 carry on shoulders, z/ɿa<sup>55</sup>gẽ<sup>55</sup>t<sup>h</sup>an<sup>53</sup>a<sup>31</sup>gi<sup>31</sup>u<sup>31</sup>  
 carry piggyback, za<sup>55</sup>gɿ<sup>53</sup>t<sup>h</sup>an<sup>53</sup>di<sup>31</sup>dzu<sup>31</sup>se<sup>55</sup>  
 carrying pole, tɕ<sup>h</sup>ɿ<sup>31</sup>  
 carrying pole, a<sup>31</sup>gi<sup>55</sup>dẽm<sup>55</sup>  
 cartilage, grist, dẽm<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>pu<sup>55</sup>  
 carve a seal, dzu<sup>31</sup>a<sup>31</sup>dza<sup>55</sup>dẽm<sup>55</sup>tɕ<sup>h</sup>un<sup>53</sup>  
 carve, engrave, tiau<sup>55</sup>k<sup>h</sup>ẽ<sup>31</sup> (Ch.)  
 carve, whittle, a<sup>31</sup>ts<sup>h</sup>u<sup>35</sup>u<sup>31</sup>, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>  
 carve; engrave, ʔgam<sup>55</sup>, ʔgam<sup>55</sup>  
 cash; ready money, le<sup>31</sup>gu<sup>31</sup>le<sup>31</sup>dzu<sup>35</sup> (Lisu)  
 cast, sprinkle, baɿ<sup>31</sup>ũ<sup>55</sup>  
 castrate, ɳ<sup>31</sup>tɕ<sup>h</sup>un<sup>55</sup>t<sup>h</sup>un<sup>35</sup>  
 castrate (chicken, sheep), t<sup>h</sup>a<sup>31</sup>nu<sup>55</sup>, ʔŋ<sup>55</sup>na<sup>55</sup>xa<sup>31</sup> (Lisu)  
 castrate (bull), k<sup>h</sup>o<sup>31</sup>lo<sup>35</sup>o<sup>55</sup>  
 casually; carelessly, a<sup>31</sup>tɕ<sup>h</sup>un<sup>55</sup>  
 cat, female, mu<sup>31</sup>ni<sup>31</sup>ma<sup>55</sup>  
 cat, male, mu<sup>31</sup>ni<sup>31</sup>gu<sup>55</sup>  
 cat, mu<sup>31</sup>ni<sup>31</sup>  
 cat, small (kitten), mu<sup>31</sup>ni<sup>31</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 catch (chicken), ni<sup>33</sup> (u<sup>55</sup>), ni<sup>55</sup>  
 catch chill, m<sup>31</sup>dʒan<sup>55</sup>a<sup>31</sup>ba<sup>31</sup>  
 catch cold, tɕ<sup>h</sup>iŋ<sup>31</sup>ẽ<sup>31</sup>dza<sup>55</sup>  
 catch on fire, dzu<sup>31</sup>u<sup>31</sup>; tɕ<sup>h</sup>ẽ<sup>31</sup>mi<sup>55</sup>dzu<sup>31</sup>  
 catch on fire, tɕ<sup>h</sup>a<sup>31</sup>mi<sup>55</sup>a<sup>31</sup>gua<sup>53</sup>ni<sup>33</sup>  
 catch up, ko<sup>55</sup>dʒɿ<sup>55</sup>(a<sup>31</sup>na<sup>55</sup>)  
 catch up with (cow), k<sup>h</sup>ẽ<sup>31</sup>ba<sup>55</sup>, k<sup>h</sup>o<sup>55</sup>ʔdʒɿ<sup>55</sup>a<sup>31</sup>ba<sup>33</sup> (overtake)  
 catch up with, za<sup>31</sup>u<sup>31</sup>, sa<sup>31</sup>u<sup>31</sup>  
 catch, capture, ni<sup>31</sup>u<sup>55</sup>  
 catch, seize, ni<sup>55</sup>ẽ<sup>55</sup>t<sup>h</sup>am<sup>55</sup>u<sup>31</sup>  
 catch, to, t<sup>h</sup>a<sup>31</sup>o<sup>55</sup>  
 catch; chase; drive, ni<sup>33</sup>u<sup>55</sup>; ka<sup>55</sup>ni<sup>31</sup>u<sup>31</sup>  
 caterpillar, bu<sup>31</sup>luŋ<sup>33</sup>sa<sup>55</sup>  
 cattle herder, nã<sup>31</sup>uã<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>un<sup>53</sup>su<sup>55</sup>  
 catty, t<sup>h</sup>i<sup>31</sup>gam<sup>55</sup>  
 cause to sweat, in<sup>55</sup>; in<sup>55</sup>  
 causative (CAUS), mi<sup>53</sup>; sɿ<sup>31</sup>-, ɕi<sup>31</sup>-, du<sup>31</sup>-, p<sup>h</sup>u<sup>31</sup>-, p<sup>h</sup>a<sup>31</sup>-  
 cave in, sink, ʔa<sup>31</sup>dʒa<sup>33</sup>  
 cave, cavern, zɿ<sup>31</sup>ʔun<sup>55</sup>k<sup>h</sup>uã<sup>31</sup>  
 ceiling, la<sup>31</sup>bu<sup>55</sup>lan<sup>31</sup>

- celebrate New Year, k<sup>h</sup>o<sup>31</sup> ʃɿ<sup>31</sup> (Lisu)  
 celebrate, ʃɿ<sup>55</sup>gu<sup>31</sup> (Lisu)  
 celery, mu<sup>55</sup>ti<sup>35</sup>li<sup>33</sup>  
 cement, sue<sup>55</sup>ni<sup>31</sup>  
 cent, i<sup>55</sup>fun<sup>55</sup>  
 center, middle, di<sup>31</sup>du<sup>31</sup>, dju<sup>31</sup>  
 center of a flower, ɕuŋ<sup>55</sup>ven<sup>55</sup>p<sup>h</sup>u<sup>31</sup>ŋu<sup>55</sup>  
 centipede, k<sup>h</sup>u<sup>31</sup>xu<sup>55</sup>la<sup>31</sup>ma<sup>55</sup>  
 certainly, k<sup>h</sup>a<sup>31</sup> di<sup>55</sup> gu<sup>31</sup>, k<sup>h</sup>a<sup>31</sup>di<sup>55</sup> gu<sup>31</sup>  
 certificate, pi<sup>31</sup>ne<sup>31</sup>ʃɿ<sup>55</sup>va<sup>31</sup>  
 chaff, thin, xa<sup>55</sup> tɕ<sup>h</sup>ŋ<sup>31</sup>  
 chair, i<sup>35</sup>tsɿ<sup>31</sup>  
 chair, go<sup>55</sup> no<sup>33</sup> dem<sup>55</sup>  
 chair cushion, ɕi<sup>31</sup>ne<sup>55</sup>dem<sup>55</sup>  
 chalk, fun<sup>55</sup>pi<sup>33</sup>  
 change back into, come back, a<sup>31</sup>t<sup>h</sup>aŋ<sup>55</sup>  
 changeable; fickle; capricious, ŋ<sup>31</sup>dzaŋ<sup>31</sup>m<sup>31</sup>k<sup>h</sup>ua<sup>55</sup>  
 change clothes, t<sup>h</sup>i<sup>31</sup> k<sup>h</sup>ua<sup>55</sup> u<sup>31</sup>  
 change clothes, gu<sup>31</sup>mu<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 change, to, a<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>, tɕ<sup>h</sup>i<sup>33</sup>  
 change, to, tɕ<sup>h</sup>uŋ<sup>55</sup>  
 change, to, ʔa<sup>31</sup>ven<sup>33</sup>  
 change, transform, a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 change, transform, a<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup> u<sup>31</sup>  
 change; transform, p<sup>h</sup>o<sup>35</sup>  
 changeable; fickle; capricious, ŋ<sup>31</sup>dzaŋ<sup>31</sup>m<sup>31</sup>k<sup>h</sup>ua<sup>55</sup>  
 channel or direct, ɕin<sup>31</sup>  
 characters and script, ʃɿ<sup>55</sup>va<sup>31</sup>  
 characters, Chinese, hɛ̃<sup>31</sup> ʃɿ<sup>55</sup>va<sup>31</sup>  
 charcoal, xju<sup>31</sup>  
 charcoal, ni<sup>31</sup>gu<sup>55</sup>  
 charcoal, ni<sup>31</sup>xi<sup>55</sup>  
 charcoal kiln, xun<sup>31</sup>su<sup>31</sup>mu<sup>55</sup>za<sup>55</sup>  
 chase after, s<sup>2</sup>a<sup>31</sup>u<sup>31</sup>  
 chase after, hunt, ŋ<sup>31</sup>k<sup>h</sup>i<sup>55</sup>ŋi<sup>31</sup>t<sup>h</sup>i<sup>55</sup>  
 chase away, a<sup>31</sup>t<sup>h</sup>iɕ<sup>31</sup>  
 chase away, sa<sup>31</sup>dzo<sup>53</sup>  
 chase, drive away, z/zɔ<sup>31</sup>u<sup>31</sup>  
 chat, to, k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>t<sup>h</sup>im<sup>35</sup>  
 chat; gossip, a<sup>31</sup>ts<sup>h</sup>i<sup>53</sup>  
 chattering, annoying, k<sup>h</sup>a<sup>55</sup>bu<sup>31</sup>m<sup>31</sup>z/ɿaŋ<sup>31</sup>  
 cheap, m<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 cheap, ua<sup>55</sup>saŋ<sup>55</sup>ʃɿ<sup>31</sup>  
 cheap = easy, saŋ<sup>55</sup>; saŋ<sup>55</sup>ɛ<sup>31</sup>  
 cheat, deceive, ni<sup>53</sup>mɛ<sup>55</sup>  
 check pulse, ni<sup>31</sup>zju<sup>31</sup>bu<sup>31</sup>m<sup>55</sup>dza<sup>55</sup>u<sup>31</sup>  
 cheek, ba<sup>31</sup>tɕa<sup>35</sup>



- cheek, ga<sup>31</sup>p<sup>h</sup>am<sup>55</sup> -f  
 cherish; take care of, ɕa<sup>31</sup>da<sup>55</sup>ŋu<sup>31</sup>  
 cherry, ʃɿ<sup>31</sup>iaŋ<sup>31</sup>ʃɿ<sup>55</sup>  
 chess or board game, tɕ<sup>h</sup>i<sup>31</sup>  
 chest, box (wooden), ka<sup>33</sup>tsu<sup>33</sup> (Lisu)  
 chest, ga<sup>31</sup>p<sup>h</sup>am<sup>55</sup>  
 chest, p<sup>h</sup>a<sup>33</sup>dzim<sup>55</sup>  
 chest; box, la<sup>31</sup>ka<sup>55</sup> (Lisu)  
 chest; box; trunk, ka<sup>31</sup>tsu<sup>55</sup>  
 chestnut, tsu<sup>55</sup>mu<sup>55</sup>  
 chew, to, na<sup>53</sup>u<sup>31</sup>  
 chew cud, ʔna<sup>55</sup>e<sup>55</sup>  
 chew with mouth, ɕua<sup>55</sup>dze<sup>31</sup>em<sup>55</sup>  
 chewy (not crispy), rubbery, m<sup>31</sup>xom<sup>55</sup>  
 chicken, k<sup>h</sup>a<sup>ʔ55</sup>  
 chicken (female), k<sup>h</sup>a<sup>55</sup>ma<sup>31</sup>  
 chicken baby; chick, k<sup>h</sup>a<sup>ʔ55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 chicken coop, k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>am<sup>31</sup>dem<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 chicken dung, k<sup>h</sup>a<sup>55</sup>ŋi<sup>31</sup>  
 chicken pox, io<sup>55</sup>dzi<sup>31</sup>  
 chicken, baby (chick), k<sup>h</sup>a<sup>ʔ55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 chicken dung, k<sup>h</sup>a<sup>55</sup>ŋi<sup>31</sup>  
 chicken, female (hen), k<sup>h</sup>a<sup>ʔ55</sup>ma<sup>33</sup>  
 chief or first wife, mu<sup>31</sup>dzu<sup>31</sup>mu<sup>31</sup>  
 child, illegitimate, he<sup>55</sup>tɕ<sup>h</sup>u<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 child, youngest, li<sup>33</sup>  
 childbirth, ma<sup>55</sup>zaŋ<sup>31</sup>  
 child, son, tɕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 child, son; younger brother, tɕ<sup>h</sup>en<sup>31</sup>  
 chili, pepper, la<sup>35</sup>dzi<sup>ʔ31</sup> (Ch.)  
 chimney, tɕ<sup>h</sup>e<sup>31</sup>mi<sup>31</sup>ʔom<sup>55</sup>dun<sup>55</sup>  
 chin, mu<sup>31</sup>gi<sup>31</sup>  
 Chinese cabbage, pickled, k<sup>h</sup>en<sup>33</sup>mu<sup>31</sup>tɕ<sup>h</sup>um<sup>55</sup>  
 Chinese cabbage, la<sup>31</sup>ts<sup>h</sup>u<sup>33</sup>ba<sup>55</sup>  
 Chinese characters, hɛ̃<sup>31</sup>ʃɿ<sup>55</sup>va<sup>31</sup>  
 Chinese clothes, hɛ̃<sup>31</sup>ga<sup>31</sup>mu<sup>31</sup>  
 Chinese doctor, ɕuŋ<sup>55</sup>k<sup>h</sup>i<sup>55</sup>ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>zu<sup>31</sup>mu<sup>55</sup>su<sup>55</sup>  
 Chinese land, t<sup>h</sup>i<sup>55</sup>ʃu<sup>35</sup>  
 Chinese lute (5–7 strings), hui<sup>55</sup>bui<sup>55</sup>min<sup>55</sup>  
 Chinese mile (1/2 kilometer), i<sup>31</sup>li<sup>53</sup>  
 Chinese mugwort, ʃɿ<sup>31</sup>mo<sup>33</sup>  
 Chinese style, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>ven<sup>55</sup>za<sup>55</sup>  
 Chinese yam, nɛm<sup>31</sup>t<sup>h</sup>aŋ<sup>55</sup>  
 Chinese, hɛ̃<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 chip (rim), gi<sup>55</sup>  
 chirp-chirp, ʔo<sup>33</sup>no<sup>33</sup>ʔo<sup>33</sup>no<sup>33</sup>  
 chisel, a<sup>31</sup>dzo<sup>55</sup>, iu<sup>35</sup>

- chisel, bore, zu<sup>55</sup>u<sup>31</sup>; zu<sup>53</sup>  
 choke (neck); pinch, crush (tick), di<sup>31</sup>tɕ<sup>h</sup>u<sup>31</sup>  
 choke on, go<sup>55</sup>ŋaŋ<sup>31</sup>u<sup>31</sup>  
 cholera, tɕi<sup>55</sup>xo<sup>31</sup>a<sup>31</sup>dza<sup>55</sup>  
 choose (cadre), a<sup>31</sup>se<sup>31</sup>ŋu<sup>31</sup>  
 choose, select, a<sup>31</sup>se<sup>33</sup>  
 chop firewood, ɕuŋ<sup>55</sup>uɕ<sup>33</sup>  
 chop (head), la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>an<sup>35</sup>  
 chop (meat), ba<sup>55</sup>t<sup>h</sup>en<sup>ɔ</sup><sup>55</sup>  
 chop, mince, ua<sup>55</sup>tɕ<sup>h</sup>l<sup>31</sup>ã<sup>31</sup>zan<sup>55</sup>u<sup>31</sup>  
 choose (noodles), a<sup>31</sup>p<sup>h</sup>i<sup>31</sup>u<sup>31</sup>  
 chop (tree), a<sup>31</sup>dzan<sup>55</sup>; p<sup>h</sup>a<sup>31</sup>dzan<sup>55</sup>  
 chop down, p<sup>h</sup>u<sup>31</sup>zom<sup>35</sup>  
 chop, to, a<sup>31</sup>tɕ<sup>h</sup>i<sup>ɔ</sup><sup>31</sup>, a<sup>31</sup>dza<sup>55</sup>, t<sup>h</sup>uŋ<sup>31</sup>  
 chop, gã<sup>35</sup>o<sup>33</sup>  
 chopper (knife), k<sup>h</sup>en<sup>31</sup>a<sup>31</sup>zan<sup>55</sup>dem<sup>55</sup>ɕem<sup>31</sup>  
 chopsticks, a<sup>31</sup>ɕuŋ<sup>33</sup>  
 chopstick holder, a<sup>31</sup>ɕuŋ<sup>33</sup>duŋ<sup>55</sup>  
 chopsticks, bamboo, a<sup>31</sup>ɕuŋ<sup>33</sup>duŋ<sup>55</sup>  
 cherish, ɕa<sup>31</sup>da<sup>55</sup>ŋu<sup>31</sup>  
 chrysalis, silkworm, ɔ<sup>31</sup>ɕuŋ<sup>55</sup>  
 cicada, ko<sup>55</sup>dzaŋ<sup>55</sup>  
 cicada, p<sup>h</sup>a<sup>55</sup>gĩ<sup>55</sup>  
 cigarette, a<sup>31</sup>iã<sup>31</sup>  
 cinnabar, o<sup>55</sup>len<sup>55</sup>  
 circular, round, t<sup>h</sup>o<sup>55</sup>t<sup>h</sup>aŋ<sup>31</sup>  
 circular, p<sup>h</sup>uŋ<sup>55</sup>  
 city, town, ts<sup>h</sup>uŋ<sup>31</sup>ɕl<sup>35</sup>  
 clamp, tɕ<sup>h</sup>aŋ<sup>55</sup>  
 clamp, to, di<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>53</sup>  
 clap hands, a<sup>31</sup>vu<sup>55</sup>t<sup>h</sup>am<sup>55</sup>  
 clarify, clear up, ɕaŋ<sup>55</sup>bi<sup>55</sup>  
 classroom, ɕl<sup>55</sup>va<sup>31</sup>tɕ<sup>h</sup>en<sup>33</sup>k<sup>h</sup>uaŋ<sup>55</sup>  
 claw, clutch, m<sup>31</sup>guaŋ<sup>35</sup>u  
 claw, talon, ŋ<sup>31</sup>ŋin<sup>55</sup>  
 claw, to, la<sup>55</sup>ŋe<sup>31</sup>u<sup>31</sup>  
 clean up, tidy up, duŋ<sup>31</sup>gam<sup>55</sup>u<sup>31</sup>  
 clean, be, tɕ<sup>h</sup>e<sup>55</sup>tɕ<sup>h</sup>e<sup>55</sup>  
 clean, ɕl<sup>31</sup>ɕaŋ<sup>55</sup>  
 clear (sky), m<sup>55</sup>laŋ<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 clear (water), xuŋ<sup>55</sup>xuŋ<sup>31</sup>  
 clear soup; consommé, ŋ<sup>31</sup>tɕ<sup>h</sup>l<sup>31</sup>  
 clear, distinct, da<sup>31</sup>zaŋ<sup>33</sup>e<sup>31</sup>  
 clear, sunny, buŋ<sup>55</sup>  
 clench one's fist, m<sup>31</sup>t<sup>h</sup>om<sup>53</sup>  
 clever, smart, ɕl<sup>31</sup>da<sup>55</sup>u<sup>33</sup>, ɕl<sup>31</sup>p<sup>h</sup>u<sup>31</sup>u<sup>31</sup>  
 clf., 50 grams (= one round object), (t<sup>h</sup>i<sup>55</sup>)luŋ<sup>55</sup>

- clf., a lifetime; a whole lifetime, t<sup>h</sup>i<sup>31</sup>di<sup>31</sup> ts<sup>h</sup>uŋ<sup>55</sup>  
 clf., a portion, share, t<sup>h</sup>i<sup>55</sup> bɑ<sup>33</sup>, (t<sup>h</sup>i<sup>31</sup>)fu<sup>55</sup> (Ch.)  
 clf., animals and insects, q̄u<sup>31</sup>  
 clf., animals, beasts, ɕɑ<sup>55</sup>  
 clf., backloads (vegetables), ɕɑ<sup>31</sup>  
 clf., backloads, t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>a<sup>33</sup>  
 clf., ball (of flour), t<sup>h</sup>i<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 clf., bamboo (sections), t<sup>h</sup>uŋ<sup>55</sup>  
 clf., birds (two), cattle, pigs, fish, q̄u<sup>31</sup> > di<sup>31</sup>  
 clf., barks, bites, mɑ<sup>55</sup> duŋ<sup>31</sup>  
 clf., basketfuls, (t<sup>h</sup>i<sup>55</sup>)k<sup>h</sup>uaŋ<sup>55</sup>  
 clf., baskets (vegetable), (t<sup>h</sup>i<sup>55</sup>)k<sup>h</sup>uan<sup>55</sup> (Ch.)  
 clf., baskets, t<sup>h</sup>i<sup>33</sup> xa<sup>55</sup>  
 clf., books, t<sup>h</sup>am<sup>55</sup>  
 clf., bouquets, m<sup>31</sup> ɕiŋ<sup>55</sup>  
 clf., bowls (of rice), (t<sup>h</sup>i<sup>55</sup>)di<sup>31</sup>k<sup>h</sup>iŋ<sup>31</sup> > di<sup>31</sup>k<sup>h</sup>i<sup>31</sup>  
 clf., bowls, clothing, t<sup>h</sup>am<sup>55</sup>  
 clf., boxes, t<sup>h</sup>i<sup>31</sup>ka<sup>35</sup> (Lisu)  
 clf., bridges, t<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 clf., buckets (water), t<sup>h</sup>uŋ<sup>33</sup> (Ch.)  
 clf., bunch, bundle, m<sup>31</sup>t<sup>h</sup>om<sup>55</sup>  
 clf., bunches, m<sup>31</sup> ɕiŋ<sup>55</sup>  
 clf., bunches, k<sup>h</sup>u<sup>31</sup>lim<sup>55</sup>  
 clf., bundle (grass), (t<sup>h</sup>i<sup>55</sup>)mu<sup>31</sup>baŋ<sup>33</sup>  
 clf., buildings, tɕ<sup>h</sup>im<sup>31</sup>  
 clf., case, instance, buŋ<sup>55</sup>  
 clf., chi (= one third of a meter), dzɑ<sup>55</sup> (Lisu)  
 clf., chickens, etc., q̄u<sup>31</sup>  
 clf., cloth, t<sup>h</sup>i<sup>31</sup> xuŋ<sup>55</sup>  
 clf., clothes, t<sup>h</sup>am<sup>55</sup>  
 clf., clump, k<sup>h</sup>aŋ<sup>35</sup>  
 clf., grove, t<sup>h</sup>i<sup>55</sup> ts<sup>h</sup>uŋ<sup>31</sup> (1/2 Ch.)  
 clf., cup without handle, t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>ɛn<sup>55</sup>  
 clf., days, t<sup>h</sup>i<sup>55</sup> ŋi<sup>33</sup>  
 clf., disks, trays, t<sup>h</sup>i<sup>33</sup> bɕ̃<sup>55</sup>  
 clf., dollars, t<sup>h</sup>i<sup>55</sup> laŋ<sup>55</sup>ŋi<sup>31</sup>iɛ<sup>31</sup> (Ch.)  
 clf., dose = portion, share, t<sup>h</sup>i<sup>31</sup>fu<sup>35</sup>  
 clf., drop, dzɛʔ<sup>55</sup>  
 clf., drop (of oil), t<sup>h</sup>i<sup>31</sup>t<sup>h</sup>o<sup>55</sup>  
 clf., envelopes, t<sup>h</sup>am<sup>55</sup>  
 clf., family, t<sup>h</sup>i<sup>55</sup> bu<sup>53</sup> .uŋm<sup>35</sup>  
 clf., fans, t<sup>h</sup>i<sup>55</sup> laŋ<sup>31</sup>  
 clf., flexible sheets, laŋ<sup>31</sup>  
 clf., flight of stairs, t<sup>h</sup>i<sup>31</sup> gam<sup>55</sup>  
 clf., flocks, zɿ<sup>31</sup>  
 clf., flowers, vɛn<sup>55</sup>  
 clf., generation, di<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>

- clf., generic, t<sup>h</sup>am<sup>55</sup>  
 clf., grains of rice, luŋ<sup>55</sup>  
 clf., grasp, tɕ<sup>h</sup>ɛm<sup>31</sup>, k<sup>h</sup>a<sup>31</sup>  
 clf., group, za<sup>55</sup>  
 clf., groves (trees), ts<sup>h</sup>uŋ<sup>31</sup>  
 clf., groves, k<sup>h</sup>uŋ<sup>35</sup>  
 clf., half kilometer, t<sup>h</sup>i<sup>55</sup> du<sup>31</sup> ŋa<sup>55</sup> ŋi<sup>55</sup> li<sup>53</sup> (Ch.)  
 clf., handles (broom), t<sup>h</sup>i<sup>31</sup> du<sup>55</sup>  
 clf., handles (knife), (t<sup>h</sup>i<sup>55</sup>)tɕ<sup>h</sup>ɛm<sup>31</sup>  
 clf., handles (knife), dɛ<sup>31</sup>guŋ<sup>55</sup> dzuŋ<sup>55</sup>  
 clf., handles, etc., m<sup>31</sup>t<sup>h</sup>om<sup>55</sup>  
 clf., hats, clothes, thin rigid layers, t<sup>h</sup>i<sup>31</sup> t<sup>h</sup>am<sup>55</sup>  
 clf., herds (sheep), zɿ<sup>31</sup>  
 clf., house, bu<sup>31</sup>zom<sup>55</sup>, zam<sup>55</sup>  
 clf., house, (t<sup>h</sup>i<sup>55</sup>)tɕ<sup>h</sup>im<sup>31</sup>  
 clf., item (of problem), t<sup>h</sup>ɿ<sup>31</sup>ɿa<sup>31</sup>  
 clf., item, type (unspecific objects), bam<sup>55/31</sup>  
 clf., litter of pigs, t<sup>h</sup>i<sup>31</sup> za<sup>33</sup>  
 clf., load (of grain), tɕi<sup>35</sup> (Lisu)  
 clf., knife, (t<sup>h</sup>i<sup>55</sup>)tɕ<sup>h</sup>ɛm<sup>31</sup>  
 clf., leaf, slices, ɕɛm<sup>55</sup>  
 clf., letters (postal), t<sup>h</sup>am<sup>55</sup>  
 clf., line (wheat), dzu<sup>55</sup>  
 clf., load carried on back, ɕa<sup>31</sup> > ɕa<sup>31</sup>  
 clf., matter, ian<sup>31</sup>  
 clf., matters (abstract), t<sup>h</sup>u<sup>55</sup>  
 clf., meals, t<sup>h</sup>i<sup>55</sup> bum<sup>31</sup>  
 clf., meals, t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>i<sup>31</sup>  
 clf., page, tɕ<sup>h</sup>uŋ<sup>55</sup>  
 clf., pen, dam<sup>55</sup>  
 clf., pile (e.g., excrement), bum<sup>55</sup>  
 clf., square or cubic meter, t<sup>h</sup>i<sup>31</sup> fan<sup>55</sup> (Ch.)  
 clf., months, t<sup>h</sup>i<sup>55</sup> sɿ<sup>31</sup> la<sup>55</sup>  
 clf., nests, za<sup>55</sup>  
 clf., nights, t<sup>h</sup>i<sup>33</sup> ian<sup>55</sup>  
 clf., once (e.g., go once), t<sup>h</sup>i<sup>55</sup> dzan<sup>31</sup>  
 clf., one time, a short while, t<sup>h</sup>i<sup>55</sup> dam<sup>55</sup>  
 clf., pair, t<sup>h</sup>i<sup>31</sup>luŋ<sup>55</sup>  
 clf., pair of hands, a<sup>31</sup>ŋi<sup>31</sup>bu<sup>55</sup>  
 clf., pairs (shoes), dzui<sup>55</sup>  
 clf., person, (t<sup>h</sup>i<sup>31</sup>)ioŋ<sup>55</sup>  
 clf., petals (flowers), tɕ<sup>h</sup>ɛm<sup>55</sup>  
 clf., pieces (earth), p<sup>h</sup>u<sup>31</sup>  
 clf., pieces (stone), lan<sup>33</sup>  
 clf., piles, (t<sup>h</sup>i<sup>55</sup>)bum<sup>55</sup>  
 clf., point (needle), t<sup>h</sup>i<sup>55</sup>so<sup>31</sup>  
 clf., poles, shafts, sticks, t<sup>h</sup>i<sup>31</sup> k<sup>h</sup>o<sup>55</sup>

- clf., pots, t<sup>h</sup>i<sup>55</sup> tɕ<sup>h</sup>a<sup>31</sup> k<sup>h</sup>o<sup>55</sup>  
 clf., repetitions, t<sup>h</sup>i<sup>55</sup> dam<sup>55</sup>  
 clf., river, t<sup>h</sup>i<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup> ŋua<sup>31</sup>  
 clf., rolls (cloth), doŋ<sup>55</sup>  
 clf., rooms, k<sup>h</sup>uaŋ<sup>55</sup>  
 clf., rooms, t<sup>h</sup>i<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 clf., ropes, buŋ<sup>55</sup>  
 clf., roots, blades, (grass), ropes, songs, translations; clf.s; that is, long narrow  
 soft strips or pieces, buŋ<sup>55</sup> cf. 'thread'  
 clf., round objects (eggs, grains, rice, wheat), ɣuŋ<sup>55</sup> > luŋ<sup>55</sup>  
 clf., round, soft objects, p<sup>h</sup>um<sup>55</sup>  
 clf., rope-like rigid objects, k<sup>h</sup>o<sup>55</sup>  
 clf., row (of houses), (t<sup>h</sup>i<sup>55</sup>)dzu<sup>31</sup> k<sup>h</sup>uŋ<sup>31</sup>  
 clf., sections, ɣom<sup>33</sup>, tɕ<sup>h</sup>i<sup>31</sup> ŋi<sup>55</sup>, t<sup>h</sup>an<sup>55</sup>  
 clf., sentences, speech, k<sup>h</sup>a<sup>31/55</sup>, tɕ<sup>h</sup>uŋ<sup>55</sup>  
 clf., sheets (paper), (t<sup>h</sup>i<sup>31</sup>)t<sup>h</sup>am<sup>55</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 clf., shoes, p<sup>h</sup>e<sup>35</sup>  
 clf., slices, p<sup>h</sup>in<sup>33</sup>  
 clf., slices, leaves, ɕem<sup>55</sup>  
 clf., span (thumb to middle finger), (t<sup>h</sup>i<sup>55</sup>)bu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
 clf., square block, t<sup>h</sup>i<sup>31</sup> faŋ<sup>55</sup>  
 clf., steps, t<sup>h</sup>i<sup>31</sup> gam<sup>33</sup>  
 clf., storey (of building), ɕi<sup>31</sup> lim<sup>33</sup>  
 clf., string (of pearls), (t<sup>h</sup>i<sup>31</sup>)k<sup>h</sup>u<sup>31</sup> lim<sup>55</sup>  
 clf., ten liters, t<sup>h</sup>i<sup>55</sup> duŋ<sup>55</sup> (Lisu)  
 clf., things, iaŋ<sup>31</sup>, tɕ<sup>h</sup>i<sup>31</sup> > tɕ<sup>h</sup>i<sup>31</sup>  
 clf., times (e.g., three times as much), t<sup>h</sup>i<sup>31</sup> fu<sup>55</sup>bu<sup>31</sup>  
 clf., times, occurrences, t<sup>h</sup>i<sup>55</sup> so<sup>31</sup> dzaŋ<sup>31</sup> mo<sup>33</sup>  
 clf., towel, t<sup>h</sup>am<sup>55</sup>  
 clf., trees, plants, cabbage, (t<sup>h</sup>i<sup>31</sup>)dzuŋ<sup>55</sup>  
 clf., unit, e.g. of work, i<sup>35</sup>iɛ<sup>31</sup>  
 clf., unit of dry measure (= one decaliter)  
 clf., two buckets of (clf), tɕi<sup>55</sup>  
 clf., units, ŋu<sup>31</sup>  
 clf., wrapped things (sugar), t<sup>h</sup>i<sup>31</sup> p<sup>h</sup>u<sup>55</sup>  
 clf., years old, t<sup>h</sup>i<sup>55</sup> ŋuŋ<sup>33</sup>; ŋuŋ<sup>55</sup>  
 clf., yokes, airplanes, tsi<sup>55</sup>  
 clf., yokes (for cows), ɕu<sup>33</sup>  
 cliff, a<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 climb (tree), ʔdaŋ<sup>55</sup>  
 clip, a, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup> dem<sup>55</sup>  
 close (book), k<sup>h</sup>o<sup>55</sup> mo<sup>55</sup> ɣo<sup>31</sup>/ɕi<sup>31</sup>  
 close (book), ɕi<sup>55</sup> va<sup>31</sup> k<sup>h</sup>o<sup>55</sup> mo<sup>55</sup> ɣo<sup>31</sup> li<sup>31</sup>  
 close (business), tɕ<sup>h</sup>iŋ<sup>53</sup> ba<sup>31</sup>  
 close (business), t<sup>h</sup>a<sup>53</sup> u<sup>31</sup> ba<sup>31</sup>  
 close (mouth), tɕ<sup>h</sup>im<sup>53</sup>  
 close (relatives), ʔi<sup>55</sup> dza<sup>55</sup>; tɕ<sup>h</sup>i<sup>55</sup> zuŋ<sup>55</sup> ʔi<sup>55</sup> dza<sup>55</sup>

- close (umbrella), (mo<sup>55</sup>)p<sup>h</sup>en<sup>55</sup>p<sup>h</sup>en<sup>55</sup>  
 close eyes, n̄i<sup>55</sup>luŋ<sup>55</sup> mu<sup>55</sup>, ʔda<sup>55</sup> da<sup>31</sup>  
 close, to, tɕ<sup>h</sup>in<sup>55</sup> u<sup>31</sup>  
 close; lock up, p<sup>h</sup>am<sup>31</sup>  
 closet, cf. chest, box, ka<sup>55</sup>tsu<sup>55</sup>  
 cloth store, ma<sup>33</sup>xuŋ<sup>55</sup>ven<sup>55</sup>za<sup>55</sup>  
 cloth wrapper, pau<sup>55</sup>fu<sup>55</sup> (Ch.)  
 cloth; measure word (third of meter), ma<sup>33</sup>xuŋ<sup>55</sup>  
 cloth pocket, ɕa<sup>55</sup> sam<sup>31</sup> k<sup>h</sup>.ŋ<sup>55</sup>  
 clothes; clothing, ga<sup>31</sup>mu<sup>31</sup>  
 clothes, leather, ɕa<sup>55</sup> sam<sup>31</sup> ga<sup>31</sup> mu<sup>31</sup>  
 clothes, lined, ʔa<sup>31</sup>n̄i<sup>33</sup>ɕi<sup>31</sup>lim<sup>33</sup>  
 cloud cover moon, di<sup>31</sup> ga<sup>55</sup> u<sup>31</sup>  
 cloud, io<sup>55</sup>/io<sup>55</sup>/zo<sup>55</sup>/zo<sup>55</sup>bun<sup>55</sup>  
 cloud, io<sup>31</sup>mun<sup>55</sup>, io<sup>55</sup>mun<sup>55</sup>  
 clouds disperse, io<sup>31</sup>mun<sup>55</sup>a<sup>31</sup>si<sup>55</sup>ʔdze<sup>35</sup>  
 clouds, rosy sunset, io<sup>31</sup>mun<sup>55</sup>bun<sup>31</sup>si<sup>35</sup>/55  
 cloudy (day), mu<sup>55</sup>ɕun<sup>55</sup>  
 cloudy (water), k<sup>h</sup>am<sup>55</sup> k<sup>h</sup>am<sup>55</sup> tɕ<sup>h</sup>.ŋ<sup>31</sup>  
 clown, ʔo<sup>55</sup>san<sup>55</sup>su<sup>55</sup>  
 clumsy, a<sup>31</sup> xa<sup>35</sup> a<sup>31</sup>vu<sup>35</sup> mu<sup>31</sup>  
 clutch, grasp with hand, ɕan<sup>31</sup>  
 coal, m̄e<sup>31</sup> t<sup>h</sup>a<sup>55</sup> (Ch.), m̄e<sup>31</sup> t<sup>h</sup>en<sup>35</sup>  
 coal, t̄a<sup>35</sup>ts<sup>h</sup>u<sup>31</sup>  
 coarse (flour), ŋ<sup>31</sup> ga<sup>55</sup> ɕi<sup>55</sup>  
 coarse, rough, xu<sup>55</sup>xu<sup>55</sup> ua<sup>31</sup>, xu<sup>55</sup>  
 coax, fool, n̄im<sup>31</sup>; n̄im<sup>35</sup>  
 cobbler, tɕ<sup>h</sup>.ŋ<sup>55</sup> n̄i<sup>55</sup> di<sup>31</sup> tɕ<sup>h</sup>i<sup>55</sup> su<sup>55</sup>  
 cobblestone, d̄zi<sup>31</sup> xa<sup>31</sup> luŋ<sup>55</sup>  
 cobweb, bun<sup>55</sup>  
 cock; rooster, ɕa<sup>31</sup>gu<sup>55</sup>  
 cock, young, d̄e<sup>31</sup>gu<sup>55</sup>tɕ<sup>h</sup>i<sup>53</sup>  
 cock-a-doodle-do, ʔo<sup>35</sup>ʔo<sup>35</sup>ʔo<sup>35</sup>!  
 cockroach, ba<sup>55</sup>ŋua<sup>33</sup>  
 cock's comb, ko<sup>55</sup>to<sup>55</sup> (Lisu)  
 cock's tail, k<sup>h</sup>a<sup>55</sup>min<sup>31</sup>  
 cocoon (silkworm), ɕa<sup>31</sup>gun<sup>55</sup>  
 cocoon (silkworm), ŋ<sup>31</sup>ɕan<sup>31</sup>  
 coffin, gu<sup>31</sup> (Lisu)  
 coffin bearer, man<sup>31</sup>a<sup>31</sup>gi<sup>55</sup>su<sup>55</sup>  
 cogon grass, a<sup>33</sup> dzɿ<sup>31</sup>  
 coil (snake); wrap, xuan<sup>55</sup>(ɕɿ<sup>31</sup>)  
 cold (water), (ŋ<sup>31</sup>)dzun<sup>55</sup>  
 cold and cheerless, dzun<sup>35</sup> dzun<sup>35</sup> ua<sup>33</sup>  
 cold and hard (rice), dzun<sup>55</sup>gu<sup>55</sup>dzun<sup>55</sup> k<sup>h</sup>an<sup>55</sup>gu<sup>31</sup>k<sup>h</sup>un<sup>55</sup>  
 coldly, ɕɿ<sup>31</sup> ts<sup>h</sup>o<sup>55</sup> lo<sup>55</sup>  
 collapse, avalanche, a<sup>31</sup>din<sup>31</sup>

- collapse (house), (t<sup>h</sup>o<sup>55</sup>) dzan<sup>55</sup> dzi<sup>31</sup>ε<sup>55</sup>, dim<sup>55</sup> dzε<sup>35</sup>  
collapse, break down, a<sup>31</sup>p<sup>h</sup>an<sup>55</sup> dzi<sup>31</sup>ε<sup>55</sup>  
collar, tʂ<sup>h</sup>ɿ<sup>55</sup> k<sup>h</sup>u<sup>31</sup> (Lisu)  
colleague, da<sup>31</sup>si<sup>55</sup> ua<sup>55</sup> su<sup>55</sup>  
collect kai<sup>55</sup> tsɿ<sup>33</sup>  
collect, to, tʂi<sup>31</sup> fei<sup>31</sup> (Ch.)  
collect manure, tʂi<sup>31</sup> fei<sup>31</sup>  
collected dust (e.g., in cobweb), tʂi<sup>31</sup> fei<sup>31</sup>  
collide, run into, ʔa<sup>33</sup> do<sup>55</sup> o<sup>55</sup>  
colostrum, ʔa<sup>31</sup> tʂ<sup>h</sup>u<sup>55</sup> tʂ<sup>h</sup>ɿ<sup>31</sup> o<sup>31</sup> mo<sup>55</sup> a<sup>31</sup> iu<sup>31</sup>  
colt; foal, mā<sup>31</sup> tʂ<sup>h</sup>en<sup>31</sup>  
columns in a building, dzo<sup>55</sup> tʂ<sup>h</sup>i<sup>53</sup>  
comb, a<sup>31</sup> sɿ<sup>55</sup>  
comb hair, tʂ<sup>h</sup>an<sup>55</sup> ʂɿ<sup>31</sup>  
comb, a<sup>31</sup> sɿ<sup>55</sup>  
come (to Beijing), dzi<sup>31</sup> iun<sup>55</sup>  
come down in torrents, qi<sup>31</sup> ʂu<sup>35</sup>  
come in; enter, bu<sup>31</sup> lin<sup>55</sup> bu<sup>31</sup>  
come in; enter, ie<sup>31</sup> k<sup>h</sup>a<sup>55</sup> dzi<sup>55</sup>  
come loose (shoe), ŋua<sup>55</sup> dzε<sup>35</sup>  
come loose, a<sup>31</sup> p<sup>h</sup>un<sup>53</sup>  
come over, a<sup>31</sup> ia<sup>55</sup>  
come out, ba<sup>31</sup> se<sup>55</sup> bu<sup>53</sup>  
come out (sun), ts<sup>h</sup>ε<sup>53</sup>, lan<sup>55</sup> a<sup>31</sup>  
come to tears, p<sup>h</sup>ɿ<sup>33</sup> a<sup>31</sup> ʂu<sup>35</sup> a<sup>31</sup> da<sup>31</sup>  
comfort, to, k<sup>h</sup>u<sup>55</sup> ni<sup>33</sup> ʔo<sup>31</sup>  
comfortable, sã<sup>55</sup> ε<sup>31</sup>  
comic, ʔa<sup>31</sup> gua<sup>31</sup> ʂɿ<sup>55</sup>  
comitative (COM), zan<sup>31</sup>  
command, to, ua<sup>55</sup> ʂɿ<sup>31</sup> dzi<sup>55</sup> u<sup>3</sup>  
commemorate, ts<sup>h</sup>om<sup>53</sup> dem<sup>5</sup>  
commend, praise, bu<sup>31</sup> ʂɿn<sup>53</sup>  
commit a crime, k<sup>h</sup>ɿn<sup>55</sup> ua<sup>31</sup> ua<sup>31</sup>  
committee, member, u<sup>55</sup> ie<sup>31</sup>  
common people, pa<sup>55</sup> sa<sup>31</sup> tʂ<sup>h</sup>en<sup>31</sup> (1/2 Ch.)  
companion, da<sup>55</sup> tʂ<sup>h</sup>a<sup>55</sup>  
compare, p<sup>h</sup>a<sup>31</sup> lin<sup>55</sup>, a<sup>31</sup> lin<sup>53</sup>  
comparative (COMP), ba<sup>31</sup>  
comparative (COMP), t<sup>h</sup>an<sup>55</sup> a<sup>31</sup>, p<sup>h</sup>an<sup>33</sup> a<sup>31</sup>  
compel, force, ma<sup>31</sup> ua<sup>33</sup> m<sup>31</sup> da<sup>55</sup>  
compensate, to, plie<sup>31</sup>, p<sup>h</sup>ε<sup>31</sup>  
compensate, pay for, ŋ<sup>31</sup> dzan<sup>31</sup>, t<sup>h</sup>i<sup>31</sup> liu<sup>31</sup>  
complain, dzun<sup>31</sup> ʂɿ<sup>55</sup>  
complain about, k<sup>h</sup>a<sup>55</sup> a<sup>31</sup> k<sup>h</sup>o<sup>53</sup>  
complete, a<sup>31</sup> lin<sup>55</sup>  
complete, all, gom<sup>55</sup> dzi<sup>31</sup> ε<sup>33</sup>, dan<sup>35</sup>  
complete, finish, ʔdzε<sup>35</sup>; dzu<sup>55</sup> ʔã<sup>31</sup>

- completed aspect, t<sup>h</sup>an<sup>55</sup>  
 completive aspect, i<sup>31</sup>iun<sup>31</sup>  
 compost, fu<sup>35</sup>  
 concave; sunken, k<sup>h</sup>o<sup>55</sup>k<sup>h</sup>o<sup>31</sup>ioŋ<sup>31</sup>  
 concave; sunken, ɕuŋ<sup>55</sup>dzi<sup>31</sup>e<sup>55</sup>  
 conceal, tɕ<sup>h</sup>u<sup>55</sup>lim<sup>55</sup>  
 conceal (truth), dʒi<sup>31</sup>ma<sup>31</sup>ŋu<sup>31</sup>  
 conceited, arrogant, dʒi<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>se<sup>55</sup>  
 concentrate, to, da<sup>31</sup>si<sup>55</sup>  
 concerned about, ɕi<sup>31</sup>sɿ<sup>31</sup>la<sup>55</sup>  
 conch, bu<sup>31</sup>nur<sup>31</sup>ko<sup>55</sup>  
 concrete, kaŋ<sup>55</sup>tɕin<sup>55</sup>sui<sup>55</sup>ni<sup>31</sup>  
 condense (milk), to, ɕem<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>dzau<sup>53</sup>  
 confess; be frank, iu<sup>55</sup>  
 confiscate, di<sup>31</sup>ɕã<sup>35</sup>ŋu<sup>31</sup>, mo<sup>31</sup>su<sup>55</sup> (Ch.)  
 conform to, satisfy, ʔa<sup>31</sup>qu<sup>31</sup>bu<sup>31</sup>yo<sup>55</sup>di<sup>55</sup>yo<sup>31</sup>  
 congeal, to, k<sup>h</sup>en<sup>55</sup>  
 congee, corn, a<sup>31</sup>mu<sup>55</sup>k<sup>h</sup>a<sup>55</sup>gr<sup>55</sup>da<sup>31</sup>bum<sup>55</sup>  
 congee; porridge, da<sup>31</sup>bum<sup>55</sup>gr<sup>55</sup>, gr<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>, dza<sup>31</sup>  
 conjunction (CONJ), la<sup>55</sup>zɿ<sup>31</sup>na<sup>31</sup>, t<sup>h</sup>a<sup>35</sup>, p<sup>h</sup>an<sup>55</sup>a<sup>55</sup>, ni<sup>55</sup>, k<sup>h</sup>a<sup>31</sup>, ta<sup>55</sup>ti<sup>55</sup>, ŋɛ<sup>31</sup>ŋɛŋ<sup>31</sup>,  
 ŋɛ<sup>31</sup>ŋan<sup>55</sup>, mi<sup>31</sup>li<sup>31</sup>, li<sup>31</sup>, le<sup>31</sup>, m<sup>31</sup>ie<sup>35</sup>le<sup>53</sup>, o<sup>35</sup>t<sup>h</sup>i<sup>31</sup>, ta<sup>35</sup>, le<sup>55</sup>  
 conjunctive morpheme, i<sup>31</sup>  
 connect, ŋ<sup>31</sup>pu<sup>55</sup>, lu<sup>35</sup>dzɿ<sup>33</sup>  
 connect, tie together, ɕɿ<sup>31</sup>t<sup>h</sup>in<sup>35</sup>tsa<sup>55</sup>  
 connect head, ɕɿ<sup>31</sup>t<sup>h</sup>in<sup>31</sup>o<sup>33</sup>  
 conscience, nim<sup>31</sup>ta<sup>55</sup>  
 consommé, clear soup, ŋ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 constipation, ni<sup>55</sup>k<sup>h</sup>om<sup>55</sup>  
 constitution, ɕan<sup>35</sup>fa<sup>31</sup> (Ch.)  
 consult, talk over, a<sup>31</sup>gum<sup>53</sup>  
 content, ɕu<sup>31</sup>ŋu<sup>55</sup>iu<sup>53</sup>  
 contented, willing, nim<sup>55</sup>iu<sup>31</sup>  
 continuative, ŋɛ<sup>31</sup>ŋɛŋ<sup>31</sup>, ta<sup>55</sup>ti<sup>55</sup>, t<sup>h</sup>am<sup>55</sup>  
 continuative, dzi<sup>31</sup>, bu<sup>31</sup>  
 continue, le<sup>31</sup>ɕɿ<sup>55</sup>  
 continuously, unceasingly, ma<sup>31</sup>t<sup>h</sup>an<sup>55</sup>ua<sup>33</sup>  
 contradict a senior, a<sup>31</sup>t<sup>h</sup>an<sup>55</sup>ɕɿ<sup>31</sup>  
 convenient, sã<sup>55</sup>e<sup>55</sup>  
 convex, dzum<sup>55</sup>  
 convex (very), bulgy, dzu<sup>33</sup>dzum<sup>55</sup>  
 cook (rice), boil, k<sup>h</sup>in<sup>53</sup>  
 cook (n.), a<sup>31</sup>gr<sup>55</sup>k<sup>h</sup>in<sup>55</sup>su<sup>55</sup>  
 cook; boil, k<sup>h</sup>in<sup>53</sup>, k<sup>h</sup>in<sup>31</sup>u<sup>31</sup>  
 cook; boil, ŋ<sup>31</sup>ŋin<sup>55</sup>  
 cook in a steamer, ɕɿ<sup>31</sup>mu<sup>31</sup>(u)  
 cook on a griddle, di<sup>31</sup>ts<sup>h</sup>am<sup>53</sup>  
 cook out the fat, k<sup>h</sup>an<sup>55</sup>



- cook soup, k<sup>h</sup>ɛn<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>k<sup>h</sup>iŋ<sup>53</sup>  
 cooked (meat), ʔŋ<sup>31</sup>ŋin<sup>55</sup>  
 cooked rice, ga<sup>55</sup>sa<sup>55</sup>  
 cooking stove, lo<sup>35</sup>tso<sup>31</sup>  
 cool, dʒi<sup>31</sup>fŋ<sup>55</sup>  
 cool (rice), dʒi<sup>31</sup>tɕ<sup>h</sup>am<sup>31</sup>u<sup>31</sup>  
 cooling tea, taŋ<sup>55</sup>seŋ<sup>55</sup>  
 coop, k<sup>h</sup>a<sup>55</sup>xa<sup>55</sup>  
 coop, chicken, k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>am<sup>31</sup>dɛm<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 copper oxidation dzɿ<sup>31</sup>kiu<sup>53</sup>  
 copper, dzɿ<sup>31</sup>, dzɿ (Lisu)  
 copula (COP), ie<sup>33/55</sup>, ie<sup>55</sup>; a<sup>31</sup>dɑ<sup>55</sup>, io<sup>55</sup>; a<sup>31</sup>nɛ<sup>55</sup> < an<sup>55</sup>+ e<sup>55</sup>, ŋo<sup>55</sup>, dɛm<sup>55</sup>  
 copulation (of animals), ʔo<sup>55</sup>iur<sup>31</sup>sa<sup>31</sup>u  
 copulate, have sex, a<sup>31</sup>lu<sup>55</sup>  
 copy (from book), ʃɿ<sup>55</sup>va<sup>31</sup>a<sup>31</sup>zu<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>53</sup>u  
 copy slip, ʃɿ<sup>55</sup>va<sup>31</sup>tso<sup>35</sup>dza<sup>53</sup>u<sup>31</sup>  
 coral, ɕo<sup>33</sup>lo<sup>55</sup>  
 cord or rope (hemp), (mi<sup>55</sup>)a<sup>31</sup>xuŋ<sup>55</sup>  
 coriander, ie<sup>31</sup>sui<sup>35</sup> (Ch.)  
 coriander, da<sup>31</sup>so<sup>55</sup>mu<sup>35</sup>dim<sup>55</sup>  
 cork; stopper, t<sup>h</sup>aŋ<sup>33</sup>dɛm<sup>55</sup>  
 cork, a<sup>31</sup>daŋ<sup>31</sup>  
 cork; stopper, da<sup>31</sup>so<sup>55</sup>mu<sup>35</sup>dim<sup>55</sup>  
 corn cob, a<sup>31</sup>mu<sup>55</sup>tim<sup>31</sup>da<sup>31</sup>gaŋ<sup>55</sup>  
 corn congee, a<sup>31</sup>mu<sup>55</sup>k<sup>h</sup>a<sup>55</sup>grɿ<sup>55</sup>da<sup>31</sup>bu<sup>55</sup>m<sup>55</sup>  
 corn (sand-?), a<sup>31</sup>mu<sup>33</sup>k<sup>h</sup>a<sup>55</sup>  
 corn grits, a<sup>31</sup>mu<sup>33</sup>k<sup>h</sup>a<sup>55</sup>  
 corn husk, a<sup>31</sup>mu<sup>55</sup>k<sup>h</sup>am<sup>55</sup>  
 corn nucleus, a<sup>31</sup>mu<sup>55</sup>tim<sup>31</sup>da<sup>31</sup>gaŋ<sup>55</sup>  
 corn stalk, a<sup>31</sup>mu<sup>55</sup>la<sup>55</sup>  
 corn wrap, t<sup>h</sup>im<sup>31</sup>  
 corn, a<sup>31</sup>mu<sup>55</sup>  
 corn, maize, k<sup>h</sup>o<sup>31</sup>ʃa<sup>44</sup>  
 corn, cooked, a<sup>31</sup>mu<sup>55</sup>grɿ<sup>55</sup>  
 corn, green, mu<sup>55</sup>xye<sup>31</sup>  
 corner, ʔi<sup>55</sup>ku<sup>33</sup>  
 corner, a<sup>31</sup>dzuŋ<sup>55</sup>  
 corner (formed by two walls), ko<sup>55</sup>t<sup>h</sup>uŋ<sup>55</sup>  
 corner of eyes, ni<sup>55</sup>luŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 corner of mouth, ni<sup>55</sup>bu<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>33</sup>  
 cornmeal, a<sup>31</sup>mu<sup>55</sup>ua<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 cornmeal (coarse), a<sup>31</sup>mu<sup>55</sup>ua<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 corpse, (ŋ<sup>31</sup>)maŋ<sup>31</sup>  
 correct, m<sup>31</sup>go<sup>31</sup>ʃaŋ<sup>55</sup>  
 correct, to, tɕ<sup>h</sup>iŋ<sup>31</sup>ʃɿ<sup>55</sup>  
 corridor; passageway, dza<sup>55</sup>ŋa<sup>31</sup>  
 cottage, thatched, a<sup>31</sup>dzɿ<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>

- cotton, ɖa<sup>31</sup>γun<sup>55</sup>  
 cotton grass, dza<sup>31</sup> k<sup>h</sup>a<sup>55</sup> sa<sup>33</sup> la<sup>31</sup>  
 cough, a<sup>31</sup>k<sup>h</sup>uun<sup>55</sup>  
 count as, so<sup>53</sup>  
 count (things), sɿ<sup>31</sup> zu<sup>31</sup> u<sup>31</sup>  
 count, calculate, so<sup>33</sup> (Lisu)  
 count (with fingers), a<sup>31</sup>vu<sup>35</sup> ɲ<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup> mi<sup>53</sup>su<sup>31</sup>zu<sup>31</sup>u<sup>31</sup>  
 country, foreign, a<sup>31</sup>tɕ<sup>h</sup>aŋ<sup>31</sup> kue<sup>31</sup>; uai<sup>35</sup>kuε<sup>35</sup>  
 country, kue<sup>31</sup>tɕa<sup>55</sup> (Ch.)  
 country people, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>dzu<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 countryside, ɕã<sup>55</sup> (Ch.)  
 county, ɕan<sup>35</sup> (Ch.)  
 county fair, market, kai<sup>55</sup>tsɿ<sup>33</sup>  
 courage, da<sup>31</sup> k<sup>h</sup>ɿ<sup>33</sup>  
 courageous, brave, di<sup>31</sup>zuuŋ<sup>55</sup>  
 courtyard, da<sup>31</sup>gua<sup>35</sup> dzaŋ<sup>31</sup>  
 course of river (lower), ʔi<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 course of river (upper), na<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 court a women (successfully), za<sup>31</sup> u<sup>31</sup>, sa<sup>31</sup> u<sup>31</sup>  
 courtyard; compound, da<sup>31</sup> gua<sup>35</sup> dzaŋ<sup>31</sup>  
 cover with, gua<sup>31</sup> ɕɿ<sup>33</sup>, k<sup>h</sup>o<sup>55</sup> mo<sup>55</sup>  
 cover with, dim<sup>55</sup>  
 cover with hand, t<sup>h</sup>aŋ<sup>31</sup>uu<sup>31</sup>  
 cover, cover up, hide, di<sup>31</sup> gã<sup>55</sup> ũ<sup>31</sup>, k<sup>h</sup>am<sup>55</sup>  
 cover completely, t<sup>h</sup>a<sup>31</sup>o<sup>55</sup>  
 cover from head, k<sup>h</sup>o<sup>55</sup> mo<sup>55</sup>yo<sup>31</sup>  
 cover; quilt, ɕɿ<sup>31</sup> dɿuŋ<sup>31</sup>  
 cover; shut, k<sup>h</sup>o<sup>55</sup> mo<sup>55</sup>xua<sup>55</sup>ɕɿ<sup>31</sup>  
 cover up, hide, di<sup>31</sup>ga<sup>55</sup>uu<sup>31</sup>  
 covet, a<sup>31</sup>iun<sup>31</sup>  
 covet, tɕ<sup>h</sup>ɿn<sup>55</sup> a<sup>31</sup>iun<sup>31</sup>  
 cow; ox, nō<sup>31</sup>uã<sup>31</sup>  
 cow disease, nō<sup>31</sup>uã<sup>31</sup>ɿm<sup>55</sup>  
 cow dung, nō<sup>31</sup>uã<sup>31</sup> ɲi<sup>55</sup>  
 cow fat, nō<sup>31</sup>uã<sup>31</sup> su<sup>53</sup>  
 cow neck bag (?), nō<sup>31</sup>uã<sup>31</sup> ga<sup>55</sup> lu<sup>31</sup>  
 cow neck, nō<sup>31</sup>uã<sup>31</sup> k<sup>h</sup>o<sup>31</sup>iũ<sup>55</sup>  
 cow nose ring, na<sup>55</sup> kã<sup>55</sup>  
 cow pen, nō<sup>31</sup>uã<sup>31</sup> dza<sup>31</sup> xam<sup>55</sup>  
 cow (female), nō<sup>31</sup>uã<sup>31</sup> (ma<sup>55</sup>)  
 cow, sick, nō<sup>31</sup>uã<sup>31</sup> ɿm<sup>55</sup>  
 cow (yellow); cattle, nuŋ<sup>55</sup>ɲua<sup>31</sup> > nō<sup>31</sup>ua<sup>31</sup>  
 cow, wild, ɕa<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 cowlick, hair whorl, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>o<sup>31</sup>zɿn<sup>55</sup>ran<sup>55</sup>  
 cowrie hen, tɕ<sup>h</sup>ɿ<sup>31</sup> dan<sup>31</sup>  
 cowrie, pe<sup>31</sup>mu<sup>33</sup> (Ch.)  
 coy, coquettish; in a soft voice, soft-spoken, k<sup>h</sup>a<sup>31</sup>mɛŋ<sup>55</sup>k<sup>h</sup>a<sup>31</sup>mɛŋ<sup>55</sup>

- crack an egg, ʔa<sup>31</sup>tɕ<sup>h</sup>om<sup>31</sup>  
 crack a melon seed, iu<sup>31</sup>ŋ<sup>55</sup>  
 crack between the teeth, ɕuŋ<sup>53</sup>  
 crack, ŋ<sup>31</sup>ɕi<sup>31</sup>lim<sup>55</sup>, tɕu<sup>55</sup>  
 crack open, ga<sup>55</sup>dʒɛ<sup>31</sup>  
 crack, fissure, tɕu<sup>55</sup>  
 crack, fissure, ŋ<sup>31</sup>ɕi<sup>31</sup>lim<sup>55</sup>  
 crack, to, dzi<sup>55</sup>ɛ<sup>31</sup>  
 crane, white, ni<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>53</sup>  
 crane, white, mo<sup>55</sup>xa<sup>33</sup>  
 crawl, to, k<sup>h</sup>o<sup>55</sup>mo<sup>55</sup>a<sup>31</sup>ɣom<sup>31</sup>  
 crawl (child), climb, ʔdaŋ<sup>55</sup>; ʔdaŋ<sup>55</sup>; daŋ<sup>55</sup>  
 crawl, a<sup>31</sup>ɣom<sup>31</sup>  
 crazy, go, a<sup>31</sup>xua<sup>35</sup> (u<sup>31</sup>)  
 crazy, to go, xuan<sup>35</sup> (second person form)  
 crazy person, a<sup>31</sup>xua<sup>35</sup>lu<sup>31</sup>  
 creek (mountain), tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>35</sup>di<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>33</sup>  
 crescent moon, sɿ<sup>31</sup>la<sup>55</sup>a<sup>31</sup>in<sup>55</sup>  
 cricket, tɕ<sup>h</sup>i<sup>31</sup>du<sup>55</sup>  
 crime; guilt, tsui<sup>55</sup>  
 crime; guilt, tsue<sup>55</sup> (Ch.)  
 crisp, brittle, xom<sup>55</sup>  
 crisp, brittle, tɕ<sup>h</sup>a<sup>55</sup>  
 criticism; criticize, p<sup>h</sup>i<sup>55</sup>p<sup>h</sup>iŋ<sup>31</sup>  
 criticize, ŋa<sup>55</sup>, p<sup>h</sup>i<sup>55</sup>p<sup>h</sup>i<sup>31</sup> (Ch.)  
 criticize, ŋi<sup>55</sup>ŋu<sup>31</sup>  
 crooked mouth, ma<sup>55</sup>duŋ<sup>31</sup>lu<sup>33</sup>sa<sup>33</sup>ne<sup>31</sup>  
 crooked (necked), askew, go<sup>31</sup>lo<sup>55</sup>go<sup>31</sup>lan<sup>31</sup>  
 crooked; askew, dʒi<sup>55</sup>ni<sup>33</sup>tɕ<sup>h</sup>ɛ<sup>33</sup>  
 crooked, bent, go<sup>31</sup>lu<sup>31</sup>  
 crooked, winding, bu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
 crop (of bird), bi<sup>55</sup>lu<sup>55</sup>  
 crop, crawl, k<sup>h</sup>a<sup>55</sup>bu<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>  
 crops, m<sup>31</sup>dʒi<sup>55</sup>sɿ<sup>31</sup>, mu<sup>31</sup>dza<sup>31</sup> (=food)  
 crops, la<sup>31</sup>məŋ<sup>55</sup>  
 crotch, da<sup>31</sup>bun<sup>31</sup>  
 cross (bridge), mɛ<sup>31</sup>gu<sup>55</sup>  
 cross (river), li<sup>33</sup>ɕi<sup>31</sup>  
 cross (river), ɕuŋ<sup>33</sup>  
 cross (bridge), go<sup>31</sup>zã<sup>55</sup>ga<sup>31</sup>gu<sup>55</sup>  
 cross by overhead cable, a<sup>31</sup>gu<sup>55</sup>  
 cross over, stride, ɕa<sup>55</sup>ʔbu<sup>35</sup>  
 cross, pass, li<sup>33</sup>bu<sup>33</sup>; li<sup>33</sup>ɕi<sup>31</sup>  
 cross the legs, ku<sup>33</sup>ku<sup>33</sup>no<sup>35</sup>  
 cross the street, dʒi<sup>55</sup>li<sup>55</sup>a<sup>31</sup>ba<sup>55</sup>  
 cross-eyed person, ne<sup>55</sup>dʒi<sup>31</sup> (Lisu)  
 crossbar at the top, be<sup>31</sup>t<sup>h</sup>u<sup>31</sup>di<sup>31</sup>k<sup>h</sup>aŋ<sup>55</sup>

- crossbow, t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>  
 crossbow, p<sup>h</sup>a<sup>31</sup>deŋ<sup>53</sup>  
 crossing, intersection, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>t<sup>h</sup>aŋ<sup>55</sup>  
 crossroad, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>gam<sup>53</sup>  
 crow (rooster), gŋ<sup>33</sup>  
 crow (n.), dza<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 crowd, herd, group, flock, zɿ<sup>31</sup>  
 crowd, to, a<sup>31</sup>[aŋ<sup>55</sup>ɣɿ<sup>31</sup>  
 crowded, a<sup>31</sup>ci<sup>31</sup>lin<sup>55</sup>a<sup>31</sup>du<sup>31</sup>  
 crowded, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>a<sup>31</sup>ci<sup>31</sup>lim<sup>55</sup>  
 crown/top of head, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>o<sup>31</sup>ŋŋ<sup>55</sup>, ɿo<sup>55</sup>lu<sup>35</sup>  
 cruel/evil people, yi<sup>31</sup>t<sup>h</sup>o<sup>35</sup>  
 crush (louse), tɛ<sup>h</sup>a<sup>53</sup>ŋu<sup>31</sup>  
 crush to pieces, ɿŋ<sup>31</sup>ga<sup>55</sup>ci<sup>55</sup>ɿa<sup>31</sup>dza<sup>31</sup>u<sup>31</sup>  
 cry (bird), cackle (hen), gu<sup>31</sup>la<sup>55</sup>ɛ<sup>31</sup>, nã<sup>55</sup>li<sup>33</sup>  
 cry, cause to, sɿ<sup>31</sup>ŋu<sup>55</sup>, sɿ<sup>31</sup>-ŋu<sup>35</sup>(u<sup>31</sup>)  
 cry, weep, a<sup>31</sup>ŋu<sup>55</sup>  
 crystal rock (crystalite), cin<sup>31</sup>tɛi<sup>55</sup>ci<sup>31</sup> (Ch.)  
 crystal sugar, block, pin<sup>55</sup>t<sup>h</sup>ã<sup>31</sup>  
 cuckoo, ka<sup>55</sup>pu<sup>31</sup>  
 cucumber, de<sup>33</sup>gua<sup>53</sup>; de<sup>53</sup>guaɿ<sup>53</sup>  
 culture, su<sup>55</sup>ni<sup>31</sup> (Lisu)  
 cun (inch), i<sup>31</sup>ts<sup>h</sup>uen<sup>35</sup>; ts<sup>h</sup>ue<sup>55</sup>  
 cunning, a<sup>31</sup>s<sup>h</sup>aŋ<sup>31</sup>gua<sup>55</sup>  
 cup; glass, vi<sup>55</sup>kaɿ<sup>33</sup>  
 cupboard, ka<sup>55</sup>tsu<sup>55</sup> (Lisu)  
 cure, treat (disease, illness), ɿu<sup>31</sup>mu<sup>55</sup> (ɣɿ<sup>55</sup>), io<sup>55</sup>/ɿo<sup>55</sup>/zo<sup>55</sup>/zɿo<sup>55</sup>/zɿu<sup>31</sup>mu<sup>55</sup>  
 cured meat, ɕa<sup>55</sup>ɿ<sup>55</sup>  
 current, with the, tɛ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>a<sup>31</sup>im<sup>53</sup>dun<sup>55</sup>  
 curse, xo<sup>33</sup>  
 curse (someone), nã<sup>55</sup>ɛ<sup>31</sup>  
 curse, to, ɿi<sup>55</sup>zan<sup>31</sup>k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>u<sup>31</sup>lu<sup>31</sup>ũ<sup>31</sup>  
 curve, bend, go<sup>31</sup>luŋ<sup>31</sup>, go<sup>31</sup>lan<sup>53</sup>  
 custom, habit, dzaŋ<sup>31</sup>ɛ<sup>55</sup>  
 customer, nen<sup>55</sup>ven<sup>35</sup>su<sup>55</sup>  
 cut (cloth), ts<sup>h</sup>u<sup>31</sup>  
 cut (fish), a<sup>31</sup>p<sup>h</sup>uŋ<sup>53</sup>  
 cut (hay), a<sup>31</sup>zan<sup>53</sup>  
 cut (meat), ua<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>a<sup>31</sup>zan<sup>55</sup>u<sup>31</sup>, dzan<sup>55</sup>p<sup>h</sup>o<sup>33</sup>  
 cut (meat), bi<sup>31</sup>  
 cut (vegetables), p<sup>h</sup>a<sup>31</sup>ɿan<sup>55</sup>u<sup>31</sup>  
 cut firewood, a<sup>31</sup>tɛi<sup>33</sup>  
 cut into pieces, ŋ<sup>31</sup>p<sup>h</sup>in<sup>55</sup>a<sup>31</sup>zan<sup>55</sup>  
 cut into slices, ŋ<sup>31</sup>ɿaŋ<sup>55</sup>a<sup>31</sup>zan<sup>55</sup>  
 cut into threads, ŋ<sup>31</sup>bun<sup>55</sup>a<sup>31</sup>zan<sup>55</sup>  
 cut into two, san<sup>53</sup>  
 cut off; harvest, ɕan<sup>53</sup>

cut off (rope), a<sup>31</sup>ŋden<sup>55</sup>, p<sup>h</sup>a<sup>55</sup>, p<sup>h</sup>a<sup>55</sup>denŋ<sup>55</sup>  
 cut off (stick), p<sup>h</sup>u<sup>55</sup>luŋ<sup>55</sup>; dzuŋ<sup>55</sup>, cause to, ɕi<sup>31</sup> dzuŋ<sup>55</sup>  
 cut out in sewing, ts<sup>h</sup>u<sup>31</sup>  
 cut up (vegetables), ua<sup>55</sup>tɕ<sup>h</sup>ŋ<sup>31</sup>  
 cut with sickle, a<sup>31</sup>zan<sup>53</sup>  
 cut with sideward motion, ʔbi<sup>55</sup>o<sup>55</sup>  
 cut (with downward motion), p<sup>h</sup>a<sup>31</sup> ɿ/zan<sup>55</sup> u<sup>31</sup>  
 cut (with scissors), ts<sup>h</sup>u<sup>31</sup>tɕ<sup>55</sup>  
 cut umbilical cord, ben<sup>31</sup>t<sup>h</sup>u<sup>55</sup>t<sup>h</sup>uŋ<sup>35</sup>  
 cut; chop, a<sup>31</sup>dza<sup>55</sup>  
 cut; dice, ŋ<sup>31</sup>ɕŋ<sup>55</sup>a<sup>31</sup>zan<sup>55</sup>  
 cute, ɕi<sup>31</sup>ŋi<sup>55</sup>ɕ<sup>31</sup>  
 cuticle, n<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>xa<sup>31</sup>a<sup>55</sup>  
 cutting board, ɕa<sup>55</sup> da<sup>31</sup> t<sup>h</sup>an<sup>55</sup>  
 cycle of the twelve animal years, ŋuŋ<sup>55</sup>  
 cypress tree, ɕo<sup>55</sup> pa<sup>33</sup> dzuŋ<sup>55</sup>

daily, every day, dzo<sup>55</sup>dzo<sup>33</sup> ua<sup>33</sup>  
 dam, embankment, da<sup>55</sup> k<sup>h</sup>uŋ<sup>31</sup>  
 damage, spoil, m<sup>31</sup>t<sup>a</sup><sup>33</sup>dzɿ<sup>31</sup>  
 damaged, caved in, ma<sup>55</sup>  
 dance hall, ɕŋ<sup>31</sup> lam<sup>55</sup> tɕ<sup>h</sup>an<sup>31</sup>  
 dance, a<sup>31</sup>lam<sup>31</sup>  
 dance, tɕ<sup>h</sup>a<sup>55</sup> ŋu<sup>31</sup>  
 dandruff, o<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 dangerous, p<sup>h</sup>i<sup>31</sup>ɕa<sup>31</sup>ɛ<sup>55</sup>  
 dangle, a<sup>31</sup>dza<sup>55</sup>  
 dangshen (Chinese medicine), taŋ<sup>55</sup>seŋ<sup>55</sup> (Ch.)  
 dare, to, i<sup>33</sup>, zɿ<sup>55</sup>  
 dark, tɕ<sup>h</sup>in<sup>55</sup> du<sup>33</sup>  
 dark, (tɕan<sup>55</sup>)ɕu<sup>55</sup>  
 dark, get, ɕu<sup>31</sup>a<sup>31</sup>i<sup>33</sup>  
 daughter-in-law, saŋ<sup>31/55</sup>  
 daughter, tɕ<sup>h</sup>ɛ<sup>55</sup>ŋ<sup>31</sup>mu<sup>31</sup>  
 daughter; girl, tɕ<sup>h</sup>ɛn<sup>31</sup>mu<sup>31</sup>, ŋ<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>mu<sup>31</sup>  
 daughter's husband, mɛ<sup>55</sup>vɿ<sup>31</sup>  
 daughter's son, p<sup>h</sup>ɕŋ<sup>31</sup>l<sup>55</sup>  
 dawn, nɛ<sup>31</sup>ku<sup>55</sup>  
 dawn; daybreak, mu<sup>31</sup>ga<sup>55</sup>ga<sup>55</sup>  
 day after tomorrow, a<sup>31</sup>mɛ<sup>55</sup>ŋi<sup>31</sup>  
 day after day after tomorrow, ti<sup>55</sup>saŋ<sup>31</sup>ŋi<sup>55</sup>  
 day after day after tomorrow, i<sup>55</sup>zan<sup>31</sup>ŋi<sup>55</sup>  
 day and night (24 hours), t<sup>h</sup>i<sup>31</sup> iaŋ<sup>55</sup> t<sup>h</sup>i<sup>33</sup> ŋi<sup>31</sup>  
 day before day before yesterday, ua<sup>55</sup>ɕy<sup>31</sup>ŋi<sup>55</sup>  
 day before yesterday, da<sup>33</sup> t<sup>h</sup>u<sup>55</sup>  
 day, fine, nice, buŋ<sup>55</sup>ɛ<sup>31</sup> (bo<sup>55</sup>ŋɛ<sup>31</sup>)  
 day by day, t<sup>h</sup>i<sup>55</sup>ŋi<sup>33</sup>ŋi<sup>33</sup>

- day, a whole, t<sup>h</sup>i<sup>55</sup> ni<sup>33</sup>  
 day, ni<sup>33</sup>, ŋ<sup>31</sup>ni<sup>55</sup>  
 day, the second, a<sup>31</sup>ni<sup>33</sup> ni<sup>33</sup>  
 daybreak, (p<sup>h</sup>aŋ<sup>31</sup>)gɑ<sup>55</sup>  
 daytime, a<sup>31</sup>ŋɑ<sup>35</sup>  
 daytime, a<sup>31</sup>sɔŋ<sup>55</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>  
 dazzling, ni<sup>55</sup> so<sup>31</sup> ɔŋ<sup>33</sup>  
 dead knot, p<sup>h</sup>uŋ<sup>53</sup>m<sup>31</sup>da<sup>55</sup>u  
 deaf person, a<sup>31</sup>na<sup>31</sup> bu<sup>31</sup> du<sup>55</sup>/du<sup>55</sup>  
 deaf, bu<sup>31</sup>qu<sup>55</sup>  
 debate, to, ʔa<sup>31</sup>gɔŋ<sup>55</sup>  
 debt, dɛm<sup>ʔ</sup><sup>55</sup>  
 deceive, cheat, ni<sup>53</sup> mɛ<sup>55</sup>, p<sup>h</sup>ɛ<sup>55</sup> (Lisu)  
 December, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>ai<sup>53</sup> ʔa<sup>31</sup>ni<sup>55</sup> la<sup>55</sup>  
 decide, to, ʔa<sup>31</sup>t<sup>h</sup>a<sup>55</sup>sɛ<sup>31</sup>  
 decision, resolution, ts<sup>h</sup>om<sup>55</sup>p<sup>h</sup>u<sup>31</sup>u<sup>31</sup>  
 decline, to, a<sup>31</sup>t<sup>h</sup>iɛŋ<sup>31</sup>u<sup>31</sup>  
 decoct (herbal medicine), k<sup>h</sup>in<sup>53</sup>  
 decrease, tɛ<sup>h</sup>em<sup>31</sup>ʔdʒɛ<sup>35</sup>  
 deep (water), nɔŋ<sup>31</sup> (ɛ<sup>55</sup>)  
 deep fry, sa<sup>31</sup>  
 deep fry (in oil), du<sup>31</sup>gŋ<sup>31</sup>  
 deep in the night, a<sup>31</sup>ca<sup>55</sup>gɔŋ<sup>31</sup>  
 deep open basket, lo<sup>55</sup>  
 deer, river, t<sup>h</sup>a<sup>31</sup>la<sup>55</sup>  
 deer, sambar, ts<sup>h</sup>e<sup>53</sup>  
 deer, a<sup>31</sup>dzuŋ<sup>55</sup>  
 defeated; lose, m<sup>33</sup>dʒo<sup>55</sup>; m<sup>31</sup>dʒo<sup>31</sup>  
 defecate, ni<sup>31</sup> ni<sup>55</sup> ʔdzɪn<sup>55</sup>ɛ<sup>31</sup>  
 defecate, ʔdzɪn<sup>55</sup>ɛ<sup>31</sup>  
 defect, tɛ<sup>h</sup>ye<sup>31</sup> tian<sup>53</sup>  
 definitely so, ʃɪ<sup>31</sup> do<sup>55</sup>ɛ<sup>33</sup>  
 definite (DEF), a<sup>55</sup>/a<sup>31</sup>, ŋu<sup>31</sup>a<sup>55</sup>/<sup>31</sup>, ŋu<sup>31</sup>/ŋu<sup>55</sup>, nu<sup>55</sup>a<sup>55</sup>  
 degree, extent, li<sup>33</sup>  
 deity, god, p<sup>h</sup>u<sup>31</sup>iã<sup>33</sup>  
 deliberately, ma<sup>31</sup>ma<sup>31</sup>t<sup>h</sup>i<sup>55</sup>  
 delicate, ŋ<sup>31</sup>m<sup>55</sup>ni<sup>33</sup>  
 delicious, tasty, p<sup>h</sup>u<sup>31</sup>lɛm<sup>31</sup>  
 demand, iau<sup>55</sup>tɛ<sup>h</sup>u<sup>31</sup>  
 depend on, rely on, ua<sup>31</sup>k<sup>h</sup>o<sup>35</sup>  
 depend on, rely on, nam<sup>55</sup>ʃɪ<sup>31</sup>  
 deposit, leave with, giɛn<sup>35</sup>ɛ<sup>31</sup> io<sup>33</sup>  
 deposit, leave with, ci<sup>31</sup> hũ<sup>55</sup>ɛ<sup>31</sup> io<sup>33</sup>  
 deposit, leave with, k<sup>h</sup>a<sup>55</sup>gen<sup>35</sup>ɛ<sup>31</sup>io<sup>55</sup>  
 descend, ʔi<sup>31</sup>k<sup>h</sup>aŋ<sup>55</sup>  
 descend, ka<sup>31</sup>p<sup>h</sup>aŋ<sup>31</sup>; -p<sup>h</sup>aŋ<sup>31</sup>/<sup>55</sup>  
 descend, cf. fall, ʔi<sup>31</sup>k<sup>h</sup>a<sup>55</sup>dʒɪ<sup>55</sup>

- descend from a hill, mo<sup>31</sup>gun<sup>55</sup>la<sup>31</sup>ʃl<sup>33</sup>  
 descend the stairs, la<sup>31</sup>bui<sup>55</sup>p<sup>h</sup>aŋ<sup>31</sup>  
 descend, land, a<sup>31</sup>dza<sup>55</sup>e<sup>31</sup>; a<sup>31</sup>dzim<sup>55</sup>  
 describes a frank and tolerant person, tɕ<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>lu<sup>35</sup>lu<sup>35</sup>  
 describes the unhappy state of indeterminacy, k<sup>h</sup>a<sup>55</sup>gam<sup>55</sup>ma<sup>31</sup>gam<sup>55</sup>  
 deserter, iu<sup>31</sup>iem<sup>55</sup>  
 designing, ʃl<sup>55</sup>se<sup>55</sup>  
 desk (long and narrow), tɕe<sup>55</sup>tsu<sup>31</sup>tso<sup>31</sup>tsɿ<sup>55</sup> (Ch.)  
 desk, ʃl<sup>55</sup>va<sup>31</sup>gen<sup>55</sup>za<sup>55</sup>tɕa<sup>55</sup>tsu<sup>31</sup>  
 desk, sa<sup>31</sup>la<sup>55</sup> (Lisu)  
 desolate, deserted, dzuŋ<sup>35</sup>dzuŋ<sup>35</sup>ua<sup>33</sup>  
 destiny, fate, a<sup>31</sup>saŋ<sup>55</sup>k<sup>h</sup>am<sup>31</sup>e<sup>31</sup>t<sup>h</sup>u<sup>55</sup>  
 destroy; collapse, a<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup>dzi<sup>31</sup>e<sup>55</sup>  
 destroy, wipe out, ʃl<sup>31</sup>ma<sup>53</sup>ũ<sup>31</sup>  
 detest, a<sup>31</sup>dzi<sup>31</sup>ne<sup>55</sup>  
 detest; dispise, ŋim<sup>31</sup>ŋaŋ<sup>55</sup>  
 detestable, a<sup>31</sup>k<sup>h</sup>am<sup>55</sup>se<sup>31</sup>  
 devotedly, of one heart and mind, t<sup>h</sup>i<sup>55</sup>ŋim<sup>31</sup>a<sup>31</sup>dan<sup>55</sup>  
 dew, i<sup>55</sup>nem<sup>31</sup>  
 dewdrop, i<sup>55</sup>nem<sup>53</sup>luŋ<sup>55</sup>  
 develop (a career), ta<sup>53</sup>ni<sup>33</sup>  
 diamond, a<sup>31</sup>p<sup>h</sup>u<sup>31</sup>luŋ<sup>55</sup>  
 diaper, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>a<sup>31</sup>pi<sup>31</sup>  
 diaper, to, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>a<sup>31</sup>pi<sup>31</sup>di<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 die, to, ʃl<sup>31</sup>  
 die young, t<sup>h</sup>i<sup>55</sup>t<sup>h</sup>uŋ<sup>53</sup>ni<sup>33</sup>a<sup>31</sup>luŋ<sup>55</sup>  
 diet, to, ʃl<sup>31</sup>dŋ<sup>31</sup>ʃl<sup>55</sup>  
 difficult, (ʃl<sup>31</sup>)di<sup>31</sup>ɕa<sup>31</sup>(e<sup>55</sup>)  
 diffident, p<sup>h</sup>ɿ<sup>31</sup>ɕa<sup>31</sup>, xe<sup>55</sup>ŋi<sup>55</sup>dzi<sup>31</sup> (Lisu)  
 dig (hole), m̃a<sup>31</sup>u<sup>31</sup>  
 dig out with finger, k<sup>h</sup>o<sup>31</sup>lo<sup>33</sup>o<sup>35</sup>  
 dig up, tɕ<sup>h</sup>uŋ<sup>31</sup>  
 dig, du<sup>55</sup>  
 dig, m̃a<sup>31</sup>u<sup>31</sup>, meŋ<sup>35</sup>  
 dig, p<sup>h</sup>ɿ<sup>55</sup>  
 dig; excavate, p<sup>h</sup>ɿ<sup>55</sup>  
 dig; excavate, zɿŋ<sup>55</sup>ŋu<sup>31</sup>  
 dig; scoop out, tɕ<sup>h</sup>uŋ<sup>53</sup>  
 digest, dzi<sup>55</sup>  
 dikes, dams, t<sup>h</sup>a<sup>55</sup>k<sup>h</sup>oŋ<sup>33</sup>  
 diligent, ʃl<sup>31</sup>di<sup>33</sup>p<sup>h</sup>a<sup>35</sup>  
 diminutive (DIM), tɕ<sup>h</sup>en<sup>33</sup>  
 dimple, mu<sup>31</sup>ɣam<sup>55</sup>  
 dining table, bu<sup>55</sup>dza<sup>31</sup>em<sup>55</sup>tɕa<sup>55</sup>tsu<sup>55</sup>  
 Dioscorea, tɕ<sup>h</sup>aŋ<sup>55</sup>xo<sup>31</sup>  
 dip in (ink, sauce), a<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>u<sup>31</sup>  
 dip in (ink), cf. soak, steep, dzuŋu<sup>53</sup>

- dipper, wooden, mu<sup>55</sup>dzim<sup>31</sup>  
direction, qun<sup>53</sup>  
directional (DIR), a<sup>31</sup>, ε<sup>31</sup>bi<sup>55</sup>, a<sup>31</sup>qa<sup>55</sup>  
dirt, mu<sup>31</sup>  
dirty (clothes), ηaŋ<sup>55</sup>ε<sup>31</sup>, m<sup>31</sup>saŋ<sup>55</sup>  
dirty (water), k<sup>h</sup>am<sup>55</sup>  
disagreeable, disgusting, a<sup>31</sup>dʒɿ<sup>31</sup> nε<sup>55</sup>  
disagreeable; disgusting, nim<sup>31</sup> ηaŋ<sup>55</sup>  
disappear, m<sup>31</sup>zuŋ<sup>55</sup>iu<sup>55</sup>  
disappear, vanish, ʔu<sup>31</sup>man<sup>55</sup>  
disaster, calamity, du<sup>31</sup>k<sup>h</sup>u<sup>55</sup>  
discouraged, p<sup>h</sup>i<sup>31</sup> ʔo<sup>35</sup>  
discouraged, be, nim<sup>31</sup>dzun<sup>55</sup>  
discuss, a<sup>31</sup>gun<sup>55</sup>, t<sup>h</sup>au<sup>55</sup>lue<sup>55</sup> (Ch.)  
disease, a<sup>31</sup>dza<sup>35</sup>u<sup>35</sup>  
disheveled, fluffy, puffy, su<sup>31</sup> la<sup>35</sup> (Lisu)  
dislocate, dzu<sup>55</sup>lin<sup>55</sup>  
disk, t<sup>h</sup>i<sup>33</sup>bε<sup>55</sup>  
dismiss class, di<sup>31</sup>gan<sup>35</sup>  
dismiss school, fan<sup>35</sup>ʔo<sup>31</sup>  
disperse, cause to, p<sup>h</sup>ɿn<sup>55</sup>  
disperse, scatter, a<sup>31</sup>gã<sup>55</sup>dzi<sup>31</sup>ε<sup>33</sup>  
dispose of, gen<sup>31</sup> u<sup>55</sup>  
dispute, a<sup>31</sup>di<sup>31</sup> go<sup>31</sup>, m<sup>31</sup>iε<sup>31</sup> m<sup>55</sup>  
dispute; argue, a<sup>31</sup>di<sup>31</sup> go<sup>31</sup>  
dissolve, cause to, du<sup>31</sup>gzɿ<sup>31</sup>u<sup>31</sup>  
dissolve, to, gzɿ<sup>55</sup>  
distant relatives, tʂ<sup>h</sup>ɿ<sup>55</sup>zuŋ<sup>55</sup>t<sup>h</sup>i<sup>31</sup>zom<sup>55</sup>  
distracted, a<sup>31</sup>xud<sup>31</sup>ʂɿ<sup>55</sup>  
distressed, p<sup>h</sup>i<sup>31</sup>ʔaŋ<sup>55</sup>  
district, ʔen<sup>35</sup>  
district, ʔan<sup>53</sup>  
ditch, tɕ<sup>h</sup>a<sup>31</sup>ηa<sup>55</sup>k<sup>h</sup>uŋ<sup>31</sup>  
ditch, gully, di<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>  
ditch, k<sup>h</sup>ε<sup>31</sup>la<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup>  
ditch, cannal, (tɕ<sup>h</sup>a<sup>31</sup>ηa<sup>35</sup>) di<sup>31</sup>tʂ<sup>h</sup>ɿ<sup>55</sup>  
dive, to, tɕ<sup>h</sup>a<sup>31</sup>ηa<sup>55</sup>qun<sup>53</sup>bu<sup>31</sup>liŋ<sup>55</sup>  
divide, distribute (grains, cereal), a<sup>31</sup>ven<sup>55</sup> (nu<sup>31</sup>)  
divine, to, di<sup>31</sup>xen<sup>ʔ</sup>  
divorce, to, a<sup>31</sup>k<sup>h</sup>aŋ<sup>55</sup>  
dizzy, a<sup>31</sup>xua<sup>35</sup>  
do business, ʔo<sup>31</sup> la<sup>55</sup>ua<sup>31</sup>  
do manual labor, la<sup>31</sup>ma<sup>55</sup>ua<sup>31</sup>  
do, make, sɿ<sup>31</sup> la<sup>35</sup>, ua<sup>33</sup>  
do not feel well, zɿ<sup>31</sup>gu<sup>31</sup>m<sup>31</sup>saŋ<sup>55</sup>  
doable, okay, possible, da<sup>55</sup>  
doctor, (zo<sup>55</sup>) nε<sup>55</sup>



- doctor, nɛ<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>.i<sup>u</sup><sup>31</sup>mun<sup>55</sup>su<sup>55</sup>  
 done, accomplished, da<sup>53</sup>  
 dog (female), dɛ<sup>31</sup>gɿ<sup>55</sup>ma<sup>55</sup>  
 dog (male), dɛ<sup>31</sup>gɿ<sup>33</sup>p<sup>h</sup>u<sup>31</sup>  
 dog food, dɛ<sup>31</sup>gɿ<sup>55</sup>dza<sup>55</sup>  
 dog tail, da<sup>31</sup>gɿ<sup>31</sup>ba<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>  
 dog, dɛ<sup>31</sup>gɿ<sup>55</sup>  
 dog, rabid, dɛ<sup>31</sup>gɿ<sup>55</sup>a<sup>31</sup>xuan<sup>35</sup>  
 dog, young, dɛ<sup>31</sup>gɿ<sup>33</sup>tɛ<sup>h</sup>ɛn<sup>31</sup>  
 dolichos, creeping edible bean, tɕ<sup>h</sup>ɿ<sup>31</sup>zɿ<sup>55</sup>  
 dollar, i<sup>31</sup>iɛ<sup>31</sup> (Ch.); (t<sup>h</sup>i<sup>55</sup>lan<sup>55</sup>) ŋi<sup>31</sup>iɛ<sup>31</sup>  
 dollar, t<sup>h</sup>i<sup>55</sup>lan<sup>55</sup>  
 dome, di<sup>31</sup>ɕa<sup>31</sup>  
 domestic animals; livestock, i<sup>31</sup>ŋaŋ<sup>31</sup>  
 Don't move! t<sup>h</sup>a<sup>31</sup>ŋɛn<sup>55</sup>ɕɿ<sup>31</sup>  
 Don't stand on ceremony! t<sup>h</sup>a<sup>31</sup>mu<sup>31</sup>p<sup>h</sup>uŋ<sup>31</sup>  
 Don't take offence! t<sup>h</sup>a<sup>31</sup>zɿ<sup>31</sup>gɿn<sup>55</sup>  
 don't, t<sup>h</sup>a<sup>31</sup>  
 donkey, ass, t<sup>h</sup>o<sup>31</sup>la<sup>55</sup>mu<sup>31</sup>  
 door bolt, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>ɿ<sup>31</sup>zɿn<sup>55</sup>dɛm<sup>55</sup>  
 door planks, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>lan<sup>31</sup>  
 door, back, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>ian<sup>31</sup>k<sup>h</sup>a<sup>53</sup>  
 door curtain, na<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>an<sup>53</sup>  
 door frame = front door, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>uã<sup>31</sup>  
 door, front; gate, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>ma<sup>55</sup>ɕu<sup>31</sup>k<sup>h</sup>a<sup>53</sup>  
 door, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>, na<sup>31</sup>  
 door, t<sup>h</sup>i<sup>55</sup>bum<sup>35</sup>  
 doorkeeper, na<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>iɛn<sup>31</sup>su<sup>55</sup>  
 doorsill, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>um<sup>31</sup>  
 doorsill, step over, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>um<sup>31</sup>ɕa<sup>55</sup>bu<sup>31</sup>ŋ<sup>55</sup>  
 doorway, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>uã<sup>31</sup>  
 doorway; entrance, la<sup>31</sup>tɛ<sup>h</sup>uŋ<sup>55</sup>ma<sup>55</sup>k<sup>h</sup>um<sup>31</sup>  
 dose of medicine, nɛ<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>t<sup>h</sup>i<sup>31</sup>t<sup>h</sup>i<sup>35</sup>  
 double crown of the head, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>a<sup>31</sup>ŋi<sup>31</sup>k<sup>h</sup>o<sup>31</sup>zɿn<sup>55</sup>/ɿn<sup>55</sup>  
 double-edged fine-tooth comb, a<sup>31</sup>sɿ<sup>55</sup>bu<sup>31</sup>dzɿ<sup>55</sup>  
 doubt, xue<sup>31</sup>ni<sup>31</sup>  
 doubt, suspect, liu<sup>35</sup>  
 down, zɕom<sup>35</sup>  
 dowry, le<sup>31</sup>ɕu<sup>55</sup>dzɿ<sup>55</sup>u<sup>31</sup>  
 downstairs, la<sup>31</sup>bu<sup>55</sup>p<sup>h</sup>an<sup>31</sup>  
 doze off, ŋim<sup>55</sup>i<sup>u</sup><sup>33</sup>  
 doze off, t<sup>h</sup>i<sup>55</sup>bum<sup>31</sup>  
 draft soldiers, i<sup>u</sup><sup>31</sup>la<sup>55</sup>ɛ<sup>55</sup>  
 drag for, dredge up, ts<sup>h</sup>i<sup>31</sup>u<sup>31</sup>  
 drag feet in walking, xo<sup>31</sup>ɕɿ<sup>55</sup>  
 dragon, lan<sup>55</sup>  
 dragon, lu<sup>31</sup>

- dragon bamboo, t<sup>h</sup>a<sup>31</sup>ua<sup>55</sup>  
 dragonfly, da<sup>31</sup>p<sup>h</sup>u<sup>55</sup>tɕi<sup>55</sup>ɣuŋ<sup>55</sup>  
 drape over shoulders (top coat), ua<sup>55</sup> (Lisu)  
 draw (a line), ŋ<sup>31</sup>bun<sup>55</sup>a<sup>31</sup>zu<sup>55</sup>u<sup>31</sup>  
 draw (curtain), go<sup>31</sup>lo<sup>55</sup>dʒaŋ<sup>55</sup>  
 draw (picture), ŋ<sup>31</sup>bun<sup>55</sup>a<sup>31</sup>zu<sup>55</sup>u<sup>31</sup>  
 draw (picture), xua<sup>35</sup>  
 draw (water) from the well, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>-ʂan<sup>31</sup>  
 draw (water), ɕan<sup>31</sup>  
 draw (water), ɕin<sup>31</sup>  
 draw out (lots), a<sup>31</sup>se<sup>55</sup>  
 draw out, stretch, ua<sup>55</sup>iaŋ<sup>31</sup>ʂan<sup>31</sup>  
 draw out, take out, a<sup>31</sup>se<sup>55</sup>; ɕu<sup>55</sup>se<sup>55</sup>  
 dream (n.) (v.), maŋ<sup>55</sup>, maŋ<sup>55</sup>  
 dream, to, maŋ<sup>55</sup>maŋ<sup>53</sup>u<sup>31</sup>  
 dredge a river, ba<sup>31</sup>si<sup>31</sup>u<sup>31</sup>  
 dregs, residue, ʂ<sup>l</sup><sup>55</sup>t<sup>h</sup>uŋ<sup>31</sup>  
 dregs, residue, ʔo<sup>55</sup>n<sup>u</sup><sup>31</sup>du<sup>31</sup>tɕ<sup>h</sup>e<sup>55</sup>  
 dregs, residue, ŋ<sup>31</sup>p<sup>h</sup>u<sup>31</sup>za<sup>55</sup>  
 drench (rain), ʔdzam<sup>55</sup>  
 drenched, iu<sup>53</sup>a<sup>31</sup>ɖa<sup>33</sup>  
 dress up, a<sup>31</sup>b<sup>ŋ</sup><sup>55</sup>ʂ<sup>l</sup><sup>55</sup>  
 dress up the hair, a<sup>31</sup>ŋi<sup>33</sup>xuaŋ<sup>55</sup>tɕ<sup>h</sup>aŋ<sup>55</sup>ʂ<sup>l</sup><sup>31</sup>  
 dried up by the wind, su<sup>55</sup>ʔdzɛ<sup>35</sup>  
 drill (hole), (ʂu<sup>55</sup>u<sup>31</sup>)bu<sup>31</sup>lin<sup>55</sup>  
 drill; bore, to, ʂu<sup>55</sup>; ɕu<sup>55</sup>u<sup>31</sup>iu<sup>55</sup>; iu<sup>53</sup>u<sup>31</sup>  
 drink (liquid), ne<sup>55</sup>ts<sup>h</sup><sup>31</sup>ʔaŋ<sup>55</sup>  
 drink (water), aŋ<sup>53</sup>(u<sup>31</sup>), aŋ<sup>55</sup>  
 drink (n.), aŋ<sup>55</sup>dem<sup>55</sup>  
 drip; dribble, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>35</sup>a<sup>31</sup>t<sup>h</sup>o<sup>55</sup>  
 drive a car, t<sup>h</sup>an<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>xua<sup>31</sup>o<sup>55</sup>  
 drive out, expel, za<sup>31</sup>u<sup>31</sup>(sa<sup>31</sup>u<sup>31</sup>); sa<sup>31</sup>bo<sup>33</sup>  
 drive out, expel, sa<sup>31</sup>bo<sup>33</sup>  
 driver, ma<sup>55</sup>ts<sup>h</sup>e<sup>55</sup>k<sup>h</sup>eŋ<sup>55</sup>su<sup>55</sup>  
 drizzle, ts<sup>h</sup><sup>55</sup>le<sup>55</sup>le<sup>55</sup>dʒaŋ<sup>55</sup>  
 drop (downward), a<sup>53</sup>t<sup>h</sup>o<sup>55</sup>; (ts<sup>h</sup><sup>55</sup>a<sup>31</sup>)t<sup>h</sup>o<sup>55</sup>e<sup>55</sup>  
 drop, to, ʔa<sup>31</sup>ʂ<sup>l</sup><sup>31</sup>  
 drop, to, ʔa<sup>31</sup>dʒa<sup>53</sup>  
 drop, to, p<sup>h</sup>o<sup>31</sup>ʂ<sup>l</sup><sup>55</sup>  
 dropsy, gaŋ<sup>55</sup>  
 drought, mu<sup>55</sup>ba<sup>31</sup>ʂ<sup>l</sup><sup>31</sup>boŋ<sup>55</sup>e<sup>31</sup>  
 drown, to, dʒuŋ<sup>55</sup>  
 drum, ku<sup>53</sup>  
 drunk, vi<sup>55</sup>u<sup>31</sup>  
 dry (clothes) in sun, lam<sup>53</sup>/tam<sup>53</sup>  
 dry (clothes), ŋ<sup>31</sup>ga<sup>ʔ55</sup>  
 dry by fire (clothes), du<sup>31</sup>gã<sup>55</sup>

- dry in sun, ʔa<sup>31</sup>k<sup>h</sup>ɛŋ<sup>55</sup>ɛ<sup>31</sup>  
 dry measure = one decaliter, ɬuŋ<sup>33</sup>  
 dry, cause to, sɿ<sup>31</sup>gaŋ<sup>ʔ55</sup>/sɿ<sup>31</sup>kaŋ<sup>ʔ55</sup>  
 dry, drought, ɲuŋ<sup>33</sup>gɛŋ<sup>55</sup>  
 dry, su<sup>33</sup>  
 drying terrace, dza<sup>55</sup>ŋa<sup>31</sup>  
 drying yard, da<sup>55</sup>k<sup>h</sup>uŋ<sup>31</sup>dzaŋ<sup>31</sup>  
 duck, water, ʔi<sup>55</sup>bu<sup>31</sup> (Lisu)  
 duck, ʔi<sup>55</sup>ʔɛ<sup>35</sup>; ʔa<sup>ʔ55</sup>  
 duck's egg, ʔɛ<sup>55</sup>ʔɛ<sup>55</sup>lim<sup>31</sup>  
 dug out area for cooking, mu<sup>31</sup>zam<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 dull (knife), m<sup>31</sup>t<sup>h</sup>u<sup>31</sup>  
 Dulong person, ma<sup>55</sup>ts<sup>h</sup>ɛ<sup>31</sup>p<sup>h</sup>u<sup>31</sup> (Lisu)  
 Dulong, ma<sup>55</sup>ts<sup>h</sup>ɛ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 dumb person, ɬi<sup>31</sup>baŋ<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 dumb; mute, di<sup>31</sup>baŋ<sup>55</sup>  
 dumpling, round, pa<sup>55</sup>tsɿ<sup>33</sup>; pau<sup>55</sup>tsɿ<sup>33</sup> < Ch.  
 dun for money, tɕ<sup>h</sup>a<sup>55</sup>ɛ<sup>55</sup>  
 dung beetle, ba<sup>55</sup>ɲua<sup>33</sup>  
 dung; excrement, ɲi<sup>55</sup>/ɲi<sup>53</sup> > ɲi<sup>33</sup>  
 durable, ɬo<sup>55</sup>  
 dusk, du<sup>31</sup>a<sup>31</sup>i<sup>35</sup>, du<sup>55</sup>ɿom<sup>31</sup>  
 dusk, k<sup>h</sup>u<sup>31</sup>ku<sup>55</sup>  
 dust (collected as in spider webs), ma<sup>55</sup>guŋ<sup>31</sup>  
 dust basket (sweep into); winnowing fan or tray, la<sup>55</sup>ba<sup>55</sup>  
 dust cloth, mi<sup>55</sup>du<sup>31</sup>  
 dust, sɿ<sup>55</sup>t<sup>h</sup>ɿn<sup>31</sup>, ɲ<sup>31</sup>sɿ<sup>33</sup>  
 dust, to, p<sup>h</sup>a<sup>31</sup>k<sup>h</sup>a<sup>55</sup>u<sup>31</sup>; ba<sup>31</sup>k<sup>h</sup>aŋ<sup>53</sup>  
 dust; dirt, ts<sup>h</sup>a<sup>31</sup>bi<sup>31</sup>  
 dye (cloth), to, a<sup>31</sup>ɲna<sup>31</sup>  
 dye (cloth), to, a<sup>31</sup>nɛ<sup>ʔ35</sup>u<sup>31</sup>
- each one, k<sup>h</sup>a<sup>31</sup>io<sup>55</sup>gu<sup>31</sup>  
 each, every one, a<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>ʔo<sup>55</sup>tɕ<sup>h</sup>o<sup>31</sup>mu<sup>55</sup>  
 each, every, k<sup>h</sup>a<sup>31</sup>-, -nu<sup>31</sup>gu<sup>55</sup>  
 ear hole, a<sup>31</sup>na<sup>31</sup>k<sup>h</sup>uã<sup>31</sup>  
 ear lobe, a<sup>31</sup>na<sup>31</sup>ɕam<sup>55</sup>  
 ear of millet, nem<sup>55</sup>  
 ear pendant, a<sup>31</sup>na<sup>31</sup>bɛn<sup>55</sup>dɛm<sup>55</sup>  
 ear, a<sup>31</sup>na<sup>31</sup>  
 ear, inner, a<sup>31</sup>na<sup>31</sup>duŋ<sup>55</sup>a<sup>31</sup>  
 early (get up), m<sup>31</sup>ga<sup>55</sup>ga<sup>55</sup>  
 early in the morning, (t<sup>h</sup>i<sup>55</sup>)saŋ<sup>33</sup>  
 early, ɲ<sup>31</sup>ga<sup>55</sup>ga<sup>55</sup>  
 earring hole, a<sup>31</sup>na<sup>31</sup>iur<sup>55</sup>k<sup>h</sup>uã<sup>31</sup>  
 earrings, ɲi<sup>31</sup>go<sup>33</sup>  
 earth bean, hɛŋ<sup>55</sup>gɿ<sup>55</sup>

- earth spirit, a<sup>31</sup>dam<sup>31</sup> p<sup>h</sup>u<sup>31</sup>iã<sup>33</sup>  
 earth surface; land, la<sup>31</sup>ma<sup>55</sup>t<sup>h</sup>aŋ<sup>55</sup>  
 earth, dirt, mu<sup>55</sup>; mu<sup>31</sup>  
 earth, la<sup>31</sup>ma<sup>55</sup>  
 earth, soil, a<sup>31</sup>sa<sup>55</sup>  
 earthen jar, tɕ<sup>h</sup>uŋ<sup>55</sup>  
 earthquake, mu<sup>31</sup> a<sup>31</sup>nɛm<sup>55</sup>  
 earthworm, bu<sup>31</sup> .ioŋ<sup>31</sup>  
 earwax, a<sup>31</sup>na<sup>31</sup> gu<sup>55</sup> tɕ<sup>h</sup>iŋ<sup>55</sup>  
 east wind, nɛm<sup>31</sup>k<sup>h</sup>uãŋ<sup>55</sup> na<sup>31</sup>bu<sup>31</sup>  
 east, nɛm<sup>31</sup> tɕ<sup>h</sup>ɛ<sup>55</sup> k<sup>h</sup>uã<sup>31</sup>  
 east, k<sup>h</sup>u<sup>55</sup>tɕ<sup>h</sup>ɛŋ<sup>55</sup>  
 easy, comfortable, ɣ<sup>1</sup> sã<sup>33</sup>ɛ<sup>31</sup>  
 easy, ua<sup>55</sup>saŋ<sup>55</sup>  
 easy, saŋ<sup>55</sup>  
 eat, ɛm<sup>53</sup>  
 eavesdrop; listen, k<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>t<sup>h</sup>o<sup>31</sup>o<sup>33</sup>; t<sup>h</sup>o<sup>53</sup>  
 eaves, tɕ<sup>h</sup>iŋ<sup>31</sup> pu<sup>55</sup>  
 edges of a field, la<sup>31</sup>ma<sup>55</sup>dza<sup>31</sup>  
 edible fungus (wood ear in Chinese), mu<sup>31</sup> guŋ<sup>55</sup>  
 edible shoots of a water vegetable, ni<sup>31</sup>ua<sup>31</sup>gɕ<sup>1</sup><sup>55</sup>  
 edible shoots of a water vegetable, bi<sup>31</sup>p<sup>h</sup>a<sup>31</sup>  
 education, tɕa<sup>35</sup>io<sup>31</sup>  
 eel, ŋua<sup>55</sup>bu<sup>31</sup>  
 egg (c<sup>h</sup>icken, etc.), lim<sup>53/31</sup>, ʔo<sup>31</sup>lim<sup>31</sup>  
 egg (lay), lim<sup>31</sup>, lim<sup>35</sup>  
 egg white, k<sup>h</sup>a<sup>55</sup>lim<sup>31</sup>sa<sup>55</sup>p<sup>h</sup>o<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 egg yolk, k<sup>h</sup>a<sup>55</sup> lim<sup>31</sup> p<sup>h</sup>u<sup>31</sup> n<sup>h</sup>uŋ<sup>55</sup>  
 egg, bird, tɕ<sup>h</sup>a<sup>55</sup> lim<sup>53</sup>  
 egg (chicken), (k<sup>h</sup>a<sup>ʔ55</sup>) lim<sup>53</sup>  
 egg, duck, ʔi<sup>55</sup>ʔɛ<sup>35</sup>lim<sup>53</sup>  
 egg, ʔo<sup>31</sup> lim<sup>31</sup>  
 eggplant, xa<sup>55</sup>gu<sup>31</sup>du<sup>31</sup>su<sup>31</sup>  
 eggshell, k<sup>h</sup>a<sup>ʔ55</sup> lim<sup>53</sup> tɕ<sup>h</sup>i<sup>55</sup>  
 eight, (dɔ<sup>53</sup>u<sup>31</sup>) ɕɛŋ<sup>55</sup>, he<sup>53</sup> (Lisu)  
 eighth, ti<sup>35</sup> pa<sup>31</sup> (Ch.)  
 eighth earthly branch (ram), a<sup>31</sup>bɛ<sup>55</sup>n<sup>h</sup>uŋ<sup>55</sup>  
 eighteen, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>ai<sup>55</sup> ɕɛŋ<sup>55</sup>, ts<sup>h</sup>i<sup>31</sup> he<sup>53</sup> (Lisu)  
 eighty, ɕɛŋ<sup>55</sup> ts<sup>h</sup>a<sup>55</sup>  
 either... or..., lɛ<sup>55</sup>ɕ<sup>1</sup>a<sup>33</sup>  
 elbow bone, a<sup>31</sup>vu<sup>35</sup>duŋ<sup>55</sup>  
 elbow, a<sup>31</sup>vu<sup>35</sup>du<sup>31</sup> k<sup>h</sup>aŋ<sup>55</sup>  
 elbow, nudge, a<sup>31</sup>vu<sup>35</sup>tɕ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>do<sup>31</sup>o<sup>55</sup>  
 elder brother's wife, ma<sup>55</sup> la<sup>31</sup> (Lisu)  
 elder generation, ua<sup>55</sup>sa<sup>31</sup>di<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>  
 elder sister's husband, p<sup>h</sup>ɛ<sup>31</sup>  
 elders, a<sup>31</sup>ɕa<sup>35</sup>di<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>

- elect, to, a<sup>31</sup>seŋ<sup>31</sup>; p<sup>h</sup>ɛ<sup>31</sup> (Lisu <Ch.)  
 elect; select, a<sup>31</sup>seŋ<sup>31</sup>  
 electric light, tian<sup>55</sup> tuun<sup>55</sup>, tian<sup>55</sup> tun<sup>55</sup> (Ch.)  
 elephant, mo<sup>33</sup>gu<sup>33</sup> (Lisu)  
 eleven, t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>ai<sup>55</sup>t<sup>h</sup>i<sup>31</sup>; ts<sup>h</sup>ɿ<sup>31</sup>ti<sup>55</sup> (Lisu)  
 eleventh, dɔ<sup>53</sup>u<sup>31</sup>t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>t<sup>h</sup>i<sup>31</sup>; ti<sup>35</sup>sɿ<sup>31</sup>i<sup>31</sup>?  
 eleventh day of lunar month, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>a<sup>55</sup> t<sup>h</sup>i<sup>55</sup> ni<sup>33</sup>  
 eleventh earthly branch (dog), de<sup>31</sup>gɿ<sup>33</sup>ɳuŋ<sup>55</sup>  
 elope, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>iɛn<sup>55</sup>  
 embankment, ts<sup>h</sup>ɿ<sup>55</sup>dom<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>dom<sup>31</sup>  
 embankment, dam, da<sup>55</sup>k<sup>h</sup>uŋ<sup>31</sup>  
 embrace, hug, u<sup>31</sup>tɕ<sup>h</sup>o<sup>55</sup>; ʔa<sup>31</sup>tɕ<sup>h</sup>o<sup>55</sup>o<sup>31</sup>; a<sup>31</sup>tɕ<sup>h</sup>o<sup>55</sup>  
 embroider (flowers), p<sup>h</sup>a<sup>31</sup> a<sup>33</sup>  
 embryo in uterus, lim<sup>31</sup> (egg)  
 emit silk, ŋ<sup>31</sup>mu<sup>31</sup>zãŋ<sup>53</sup>  
 emit, give off, lan<sup>53</sup>  
 empty out (dirt), ts<sup>h</sup>uŋ<sup>55</sup>  
 empty, de<sup>31</sup>gan<sup>55</sup> > da<sup>31</sup>gã<sup>55</sup>  
 enamelware, ia<sup>31</sup>uã<sup>55</sup> (Ch.)  
 enclose in a bamboo fence, dze<sup>55</sup>tɕo<sup>55</sup>  
 enclosed area, ma<sup>55</sup>t<sup>h</sup>am<sup>53</sup>  
 enclosing wall, ʂo<sup>55</sup>  
 end, ʔdʒɛ<sup>31</sup>ɛ<sup>33</sup>  
 end, dzu<sup>55</sup>γã<sup>31</sup>  
 end of the month, ʂ<sup>31</sup>la<sup>55</sup>t<sup>h</sup>an<sup>31</sup>  
 end of the year, o<sup>31</sup>ɳuŋ<sup>55</sup>t<sup>h</sup>an<sup>33</sup>  
 end; ending, ʔŋ<sup>31</sup>dan<sup>55</sup> t<sup>h</sup>an<sup>55</sup>  
 endure, be patient, dzu<sup>31</sup>se<sup>55</sup>; dzu<sup>31</sup>ʂɿ<sup>55</sup>  
 enemy, ti<sup>31</sup>zuun<sup>31</sup>  
 enemy, mu<sup>31</sup>io<sup>53</sup>ts<sup>h</sup>an<sup>53</sup>  
 enemy (personal), dʒi<sup>55</sup>dza<sup>55</sup>  
 enjoy coolness, di<sup>31</sup>fii<sup>55</sup>ʂɿ<sup>31</sup>  
 enjoy happiness, sa<sup>55</sup>ʔdʒɛ<sup>35</sup>  
 enough, adequate, a<sup>31</sup>du<sup>31</sup>  
 enough, ʎuŋ<sup>55</sup>  
 enough, zɿn<sup>55</sup>zɿn<sup>55</sup>  
 enroll, register, buŋ<sup>31</sup>a<sup>31</sup>zu<sup>53</sup>  
 ensiform bean, no<sup>55</sup>kua<sup>31</sup>la<sup>31</sup>  
 entertain a visitor, mu<sup>31</sup>nem<sup>35</sup>da<sup>55</sup>ts<sup>h</sup>a<sup>55</sup>  
 entrance to a road or street, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup> t<sup>h</sup>an<sup>55</sup>  
 entrust, delegate, di<sup>31</sup>ba<sup>55</sup>  
 envelopes, ʂɿ<sup>55</sup>va<sup>31</sup>da<sup>31</sup>guŋ<sup>55</sup>  
 envy, ɳim<sup>31</sup>zɿ<sup>35</sup>u<sup>31</sup>  
 envy, mi<sup>31</sup>ũ<sup>55</sup>  
 epilepsy, ni<sup>31</sup>tʂɿ<sup>35</sup>ʂãŋ<sup>35</sup>  
 eraser, ɕan<sup>35</sup>p<sup>h</sup>i<sup>31</sup>  
 escape, to, iɛn<sup>55</sup>

- esophagus, a<sup>31</sup>gr<sup>31</sup>maŋ<sup>55</sup>dɛm<sup>55</sup>bun<sup>55</sup>  
 estimate, appraise, da<sup>31</sup>xan<sup>55</sup>u<sup>31</sup>, ku<sup>55</sup>tɕi<sup>31</sup> (Ch.)  
 even, including, ta<sup>55</sup>ti<sup>55</sup>  
 evening, ta<sup>55</sup>ti<sup>55</sup>  
 evening (this), a<sup>31</sup>ɕɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 evening (tomorrow evening), a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>ni<sup>31</sup>ɕɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 evening star, k<sup>h</sup>ur<sup>31</sup>ku<sup>55</sup> (Lisu)  
 evening, a<sup>31</sup>ɕɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 evening, this, de<sup>55</sup>ɕɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 every, k<sup>h</sup>a<sup>55</sup>  
 every day, k<sup>h</sup>a<sup>55</sup>ni<sup>33</sup>ma<sup>31</sup>ni<sup>33</sup>, t<sup>h</sup>i<sup>55</sup>ni<sup>33</sup>t<sup>h</sup>i<sup>55</sup>ni<sup>33</sup>  
 every day, t<sup>h</sup>i<sup>55</sup>ni<sup>33</sup>t<sup>h</sup>i<sup>55</sup>ni<sup>33</sup>  
 every day, k<sup>h</sup>a<sup>55</sup>ni<sup>33</sup>ma<sup>31</sup>ni<sup>33</sup>  
 every night, k<sup>h</sup>a<sup>55</sup>ian<sup>55</sup>ma<sup>31</sup>ian<sup>55</sup>, t<sup>h</sup>i<sup>31</sup>ian<sup>55</sup>t<sup>h</sup>i<sup>31</sup>ian<sup>55</sup>  
 every other day, t<sup>h</sup>i<sup>55</sup>ni<sup>31</sup>di<sup>31</sup>xan<sup>31</sup>ũ<sup>31</sup>  
 every year, k<sup>h</sup>a<sup>55</sup>nun<sup>55</sup>gu<sup>55</sup>  
 everybody, a<sup>31</sup>dan<sup>55</sup>  
 everyone, k<sup>h</sup>a<sup>55</sup>io<sup>55</sup>  
 everyone, all, t<sup>h</sup>i<sup>31</sup>io<sup>55</sup>io<sup>55</sup>  
 everyone, all, a<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>o<sup>55</sup>tɕ<sup>h</sup>o<sup>31</sup>mu<sup>55</sup>  
 everywhere, k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 ewe, a<sup>31</sup>ian<sup>31</sup>ma<sup>33</sup>  
 exactly, ka<sup>53</sup>  
 examination, test, di<sup>31</sup>dzan<sup>31</sup>ɛ<sup>33</sup> (verb), k<sup>h</sup>au<sup>55</sup>ɕɿ<sup>35</sup> (Ch.)  
 examine disease, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>zu<sup>31</sup>mun<sup>31</sup>ɕɿ<sup>55</sup>  
 example, p<sup>h</sup>a<sup>31</sup>li<sup>35</sup>nun<sup>31</sup>, tie<sup>55</sup>ɲu<sup>31</sup> (Lisu)  
 exchange, to, a<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>  
 excrement, shit, ni<sup>55</sup>, ta<sup>35</sup>fũ<sup>35</sup> (Lisu)  
 Excuse me! tue<sup>35</sup>pu<sup>31</sup>tɕ<sup>h</sup>i<sup>53</sup>  
 execute by shooting, p<sup>h</sup>a<sup>31</sup>ɲe<sup>55</sup>ɲo<sup>31</sup>  
 executioner, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>sun<sup>55</sup>su<sup>55</sup>  
 exert all one's strength, ba<sup>31</sup>ɕɿ<sup>31</sup>mən<sup>55</sup>ɕɿ<sup>31</sup>  
 exhortative (EXH), la<sup>35</sup> (urging, warning, etc.)  
 exist, to, gien<sup>35</sup>  
 expand, swell, bo<sup>55</sup>ɲdʒɛ<sup>55</sup>  
 expand, swell, ba<sup>55</sup>  
 expand, swell; inflate, tu<sup>31</sup>.ia<sup>55</sup>u<sup>31</sup>, dzɿ<sup>31</sup> (Lisu)  
 expel, get rid of, k<sup>h</sup>ã<sup>31</sup>ũ<sup>31</sup>  
 expel, sa<sup>31</sup>bo<sup>33</sup>  
 expenses, dzum<sup>31</sup>bo<sup>55</sup>  
 expensive, k<sup>h</sup>a<sup>55</sup>; k<sup>h</sup>a<sup>55</sup>  
 expensive, a<sup>31</sup>p<sup>h</sup>u<sup>35</sup>ɛ<sup>35</sup>  
 experience, li<sup>31</sup>li<sup>53</sup>  
 expert, a<sup>31</sup>dan<sup>55</sup>so<sup>53</sup>  
 explode, xom<sup>55</sup>  
 explode, bo<sup>55</sup>ɲdʒa<sup>35</sup>  
 extinguish, put out, tɕ<sup>h</sup>o<sup>55</sup>ɲin<sup>55</sup>; tɕ<sup>h</sup>y<sup>55</sup>ɲin<sup>53</sup>

- extinguish; put out, p<sup>h</sup>u<sup>31</sup>iē<sup>31</sup>  
 extol one's extol, qj<sup>31</sup> ts<sup>h</sup>u<sup>31</sup> sē<sup>55</sup>  
 extract oil, ŋa<sup>31</sup> dza<sup>33</sup>  
 extract oil by heating, di<sup>31</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 extravagant, m<sup>31</sup> p<sup>h</sup>a<sup>55</sup> p<sup>h</sup>a<sup>55</sup> lã<sup>35</sup> fei<sup>35</sup> (Ch.)  
 extravasted blood, ʃ<sup>31</sup> tɕ<sup>h</sup>lu<sup>55</sup>  
 eye of needle, vam<sup>55</sup> k<sup>h</sup>uã<sup>31</sup>  
 eye socket, ni<sup>55</sup> k<sup>h</sup>uã<sup>31</sup>  
 eye socket, ni<sup>55</sup> luŋ<sup>55</sup> (duŋ<sup>55</sup>)  
 eye, ni<sup>55</sup> luŋ<sup>55</sup>  
 eye, white of, ni<sup>55</sup> luŋ<sup>55</sup> ba<sup>33</sup>  
 eyeball, ni<sup>55</sup> luŋ<sup>55</sup> bu<sup>31</sup> t<sup>h</sup>uŋ<sup>55</sup>  
 eyebrow; brow, mã<sup>55</sup> di<sup>31</sup> gaŋ<sup>55</sup> min<sup>55</sup>  
 eyebrow, ŋɛ<sup>55</sup> ku<sup>55</sup> (Lisu)  
 eyebrow, ŋɛ<sup>55</sup> li<sup>55</sup>  
 eyelash, ni<sup>55</sup> luŋ<sup>55</sup> min<sup>55</sup>  
 eyelid, ni<sup>55</sup> sam<sup>31</sup>  
 eyelid, double, ni<sup>55</sup> luŋ<sup>55</sup> sam<sup>31</sup> a<sup>31</sup> ni<sup>33</sup> ɕi<sup>31</sup> lim<sup>55</sup>  
 eyelid, single, ni<sup>55</sup> luŋ<sup>55</sup> sam<sup>31</sup> t<sup>h</sup>i<sup>55</sup> ɕi<sup>31</sup> lim<sup>55</sup>  
 eyesight, blurred, ni<sup>55</sup> tɕ<sup>h</sup>i<sup>31</sup> lem<sup>31</sup>
- face (east), nem<sup>31</sup> ts<sup>h</sup>ɛ<sup>55</sup> k<sup>h</sup>a<sup>53</sup>  
 face (north), nem<sup>31</sup> dzim<sup>55</sup> k<sup>h</sup>a<sup>53</sup>  
 face (south), tɕ<sup>h</sup>ni<sup>55</sup> k<sup>h</sup>a<sup>53</sup>  
 face (west), tɕ<sup>h</sup>bo<sup>55</sup> k<sup>h</sup>a<sup>53</sup>  
 face powder, ma<sup>55</sup> k<sup>h</sup>a<sup>31</sup>  
 face upward, go<sup>55</sup> la<sup>55</sup> t<sup>h</sup>a<sup>33</sup> t<sup>h</sup>a<sup>33</sup>  
 face-to-face, ma<sup>55</sup> di<sup>31</sup> guŋ<sup>55</sup>  
 face, mã<sup>55</sup>  
 facinated, be, t<sup>h</sup>i<sup>31</sup> muw<sup>53</sup> a<sup>31</sup> ba<sup>55</sup>  
 facing of quilt, ʃ<sup>31</sup> djuŋ<sup>31</sup> du<sup>31</sup> p<sup>h</sup>w<sup>55</sup> dem<sup>55</sup>  
 factory worker, kuŋ<sup>55</sup> zuŋ<sup>31</sup>  
 factory, kuŋ<sup>55</sup> ts<sup>h</sup>uŋ<sup>53</sup>  
 fade of colors, ɕaŋ<sup>31</sup> ɛ<sup>55</sup>  
 fail, be wrong, ma<sup>55</sup> du<sup>31</sup> dzɿ<sup>31</sup>  
 fail, lose (= not win), m<sup>31</sup> dzo<sup>31</sup>  
 fair weighing, a<sup>31</sup> i<sup>55</sup> luŋ<sup>55</sup> ɛ<sup>55</sup>  
 fair, just, impartial, ŋ<sup>31</sup> sa<sup>31</sup> xan<sup>55</sup>  
 fake, si<sup>31</sup> di<sup>55</sup> mm<sup>31</sup> zɿ<sup>55</sup>  
 fall (hail), t<sup>h</sup>i<sup>31</sup> ven<sup>31</sup> luŋ<sup>55</sup> dzaŋ<sup>55</sup>  
 fall (hail), t<sup>h</sup>i<sup>31</sup> ven<sup>31</sup> ka<sup>55</sup> ɕi<sup>55</sup> ŋa<sup>31</sup> dza<sup>53</sup> di<sup>33</sup>  
 fall (of tears), a<sup>31</sup> ʃu<sup>35</sup>  
 fall (rain, hail, snow), dzaŋ<sup>55</sup>  
 fall (rain), ts<sup>h</sup> dzaŋ<sup>55</sup>  
 fall (snow), dzaŋ<sup>55</sup> t<sup>h</sup>i<sup>31</sup> ven<sup>31</sup> ua<sup>33</sup>  
 fall asleep, nim<sup>55</sup> iu<sup>31</sup> (dze<sup>31</sup> ɛ<sup>31</sup>)  
 fall asleep, nim<sup>55</sup> iu<sup>31</sup> dze<sup>31</sup> ɛ<sup>31</sup>

- fall down (tree, wall), dim<sup>31</sup> (dʒi<sup>31</sup>ε<sup>31</sup>)  
 fall down (tree), pu<sup>55</sup> tan<sup>33</sup> p<sup>h</sup>o<sup>31</sup> ʃɿ<sup>55</sup>  
 fall down, a<sup>31</sup>dʒa<sup>55</sup>  
 fall down, cause to, bu<sup>31</sup>dim<sup>55</sup>, ʃi<sup>31</sup>dim<sup>55</sup>  
 fall down, collapse, p<sup>h</sup>u<sup>31</sup>dim<sup>55</sup>  
 fall down, dzim<sup>55</sup>  
 fall down, pu<sup>55</sup>tan<sup>33</sup> p<sup>h</sup>o<sup>31</sup>ʃɿ<sup>55</sup> (e.g. a tree)  
 fall down, ts<sup>h</sup>uŋ<sup>55</sup> u<sup>31</sup>  
 fall out (hair), ʔa<sup>31</sup>t<sup>h</sup>in<sup>55</sup>  
 fall over, a<sup>31</sup>t<sup>h</sup>an<sup>55</sup>  
 fall, a<sup>31</sup>t<sup>h</sup>an<sup>33</sup> > a<sup>31</sup>t<sup>h</sup>an<sup>55</sup>, ʔa<sup>33</sup>  
 fall, ʃu<sup>55</sup>da<sup>31</sup>  
 fall, tumble, a<sup>31</sup>tan<sup>55</sup>  
 false, m<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 familiar with, know well, ba<sup>31</sup>ʃɿ<sup>31</sup>so<sup>53</sup>  
 family member, t<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 family; clan, tɕ<sup>h</sup>ɿ<sup>55</sup> (t<sup>h</sup>i<sup>55</sup> dʒi<sup>31</sup> k<sup>h</sup>an<sup>55</sup>)  
 famous, buŋ<sup>31</sup>a<sup>31</sup>nɛ<sup>55</sup>  
 fan, a, di<sup>31</sup>fɿ<sup>55</sup> dem<sup>55</sup>  
 fan, to, di<sup>31</sup>fɿ<sup>55</sup>  
 fantasize, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup> ts<sup>h</sup>om<sup>55</sup>  
 far, t<sup>h</sup>i<sup>31</sup>ju<sup>33</sup>  
 farmer, la<sup>31</sup>má<sup>55</sup>ua<sup>33</sup> su<sup>55</sup>  
 farsighted, t<sup>h</sup>i<sup>31</sup>man<sup>31</sup>nɿ<sup>55</sup>luŋ<sup>55</sup>  
 fart, to, tɕ<sup>h</sup>ɿ<sup>31</sup>zɿ<sup>55</sup> u<sup>31</sup>  
 fart; flatulence, tɕ<sup>h</sup>ɿ<sup>31</sup>  
 fast (walk), a<sup>31</sup>ga<sup>55</sup>ε<sup>31</sup>, dzɿ<sup>31</sup>dʒa<sup>33</sup>  
 fast, quick, a<sup>31</sup>ga<sup>55</sup>ε<sup>31</sup>  
 fast, quick, dzɿ<sup>31</sup>dʒa<sup>53</sup>  
 fast, solid, tight, dʒo<sup>55</sup>ε<sup>31</sup>; dʒu<sup>55</sup>  
 fasten waistband, nɛm<sup>31</sup>  
 fasten, va<sup>35</sup>(u<sup>31</sup>), k<sup>h</sup>a<sup>55</sup>va<sup>31</sup>, p<sup>h</sup>a<sup>35</sup>ŋo<sup>33</sup>  
 fat (meat), ŋ<sup>31</sup>su<sup>55</sup>, su<sup>55</sup>  
 fat (person), di<sup>31</sup>ban<sup>31</sup>  
 fat, person, su<sup>31</sup> a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 father (address and citation term), a<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 father prefix, au<sup>53</sup>- (older lists)  
 father, a<sup>31</sup>p<sup>h</sup>a<sup>31</sup>  
 father; stepfather, a<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 father's elder brother's wife, a<sup>55</sup>o<sup>31</sup>ma<sup>31</sup>  
 father's married sister, a<sup>31</sup>ɿuŋ<sup>53</sup>  
 father's sister's husband, a<sup>31</sup>vu<sup>31</sup>  
 father's younger brother, a<sup>55</sup>uan<sup>31</sup>  
 father's younger brother, au<sup>53</sup>p<sup>h</sup>a<sup>31</sup>  
 father's younger brother's wife, ma<sup>55</sup>io<sup>55</sup>  
 father's older brother, a<sup>55</sup>p<sup>h</sup>a<sup>31</sup>; a<sup>55</sup>o<sup>31</sup>p<sup>h</sup>a<sup>31</sup>  
 fault; misunderstood, ma<sup>31</sup>du<sup>31</sup>



- fear, frighten, to, p<sup>h</sup>u<sup>31</sup>.ia<sup>31</sup> > p<sup>h</sup>u<sup>31</sup> za<sup>55</sup>  
 feather duster, ga<sup>31</sup>mu<sup>31</sup>ʃɿ<sup>55</sup>t<sup>h</sup>u<sup>31</sup> a<sup>31</sup>k<sup>h</sup>an<sup>55</sup>dɛm<sup>55</sup>  
 feather fan, ni<sup>55</sup> p<sup>h</sup>u<sup>55</sup>  
 feather (bird), (tɕ<sup>h</sup>a<sup>55</sup>)min<sup>55</sup>  
 February, a<sup>31</sup>ŋ<sup>55</sup> la<sup>33</sup>  
 feeble; in poor health, san<sup>55</sup>me<sup>31</sup> ɛ<sup>33</sup>  
 feed (chickens), se<sup>55</sup> ɛ<sup>55</sup> mu<sup>31</sup>  
 feed; raise, dzɿ<sup>55</sup>  
 feed someone water, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> dzɿ<sup>55</sup> u<sup>31</sup>  
 feel about for fish, ŋua<sup>55</sup>ni<sup>35</sup>u<sup>55</sup>  
 feel boated (stomach), t<sup>h</sup>i<sup>31</sup>za<sup>55</sup>  
 feel dizzy, giddy, a<sup>31</sup>xua<sup>35</sup>  
 feel, touch, som<sup>55</sup>mo<sup>55</sup>; sɔm<sup>35</sup>; so<sup>31</sup>mu<sup>31</sup>  
 fellow villager, t<sup>h</sup>i<sup>31</sup>/<sup>55</sup>dzu<sup>33</sup>a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 female, ŋ<sup>31</sup>ma<sup>55</sup>  
 female, tɕ<sup>h</sup>a<sup>31</sup> ma<sup>55</sup> za<sup>55</sup>  
 fermented glutinous rice, a<sup>31</sup>ŋm<sup>55</sup> nuŋ<sup>31</sup>  
 fence in, tɕ<sup>h</sup>a<sup>55</sup>ʃɿ<sup>31</sup>  
 fence railings, k<sup>h</sup>am<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 fence or pen, bamboo or twig, dza<sup>31</sup> xam<sup>35</sup>  
 fennel, t<sup>h</sup>o<sup>33</sup>dzɿ<sup>31</sup>k<sup>h</sup>a<sup>35</sup>  
 ferment, uan<sup>55</sup> a<sup>31</sup>ŋa<sup>53</sup>  
 fermented glutinous rice, a<sup>31</sup>ŋm<sup>55</sup> nuŋ<sup>31</sup>  
 ferry, a<sup>31</sup>su<sup>31</sup>zam<sup>53</sup>  
 fertile (soil), a<sup>31</sup>sa<sup>33</sup> ŋan<sup>55</sup>  
 fertilize, to, sa<sup>31</sup>u<sup>31</sup>  
 fertilize, to, ʔba<sup>53</sup>ŋuŋ<sup>55</sup>  
 fertilizer, fei<sup>31</sup>liau<sup>31</sup> (Ch.)  
 fester, to, ci<sup>31</sup> dzu<sup>31</sup>  
 fetch or draw (water), k<sup>h</sup>am<sup>55</sup>  
 fetus; embryo, ŋ<sup>31</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 fever, have, a<sup>31</sup>k<sup>h</sup>ɛ<sup>55</sup>  
 few, (a) little, tɕ<sup>h</sup>ɛ<sup>31</sup> mɛ<sup>55</sup>; a<sup>31</sup>lɛ<sup>33</sup>  
 field (abandoned), zɿ<sup>31</sup>bum<sup>55</sup>  
 field (dry), la<sup>31</sup> ma<sup>55</sup>  
 field (paddy), da<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 field (paddy); sometimes dry field, la<sup>31</sup>ma<sup>55</sup>  
 field boundary, la<sup>31</sup>ma<sup>55</sup> du<sup>31</sup> xan<sup>55</sup>  
 field, abandoned, zɿ<sup>31</sup>bum<sup>55</sup>  
 field mouse, tɕ<sup>h</sup>im<sup>31</sup>din<sup>55</sup>  
 field, paddy, da<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 fierce, a<sup>31</sup>k<sup>h</sup>am<sup>55</sup>ʃɿ<sup>31</sup>  
 fierce (action), ʔdzɿ<sup>31</sup>  
 fifteen, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>ai<sup>55</sup> p<sup>h</sup>an<sup>31</sup>, ts<sup>h</sup>ɿ<sup>55</sup> ŋua<sup>31</sup> (Lisu)  
 fifteen day of lunar month, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>a<sup>55</sup> p<sup>h</sup>ã<sup>31</sup>ni<sup>33</sup>  
 fifth, ti<sup>35</sup> u<sup>53</sup> (Ch.)  
 fifth, qa<sup>53</sup> u<sup>31</sup> p<sup>h</sup>an<sup>31</sup>

- fifth, ʔi<sup>55</sup>p<sup>h</sup>aŋ<sup>55</sup>p<sup>h</sup>aŋ<sup>31</sup>  
 fifth day of lunar month, sɿ<sup>31</sup>la<sup>55</sup>p<sup>h</sup>ã<sup>31</sup>ŋi<sup>33</sup>  
 fifth earthly branch, ly<sup>31</sup>nəuŋ<sup>55</sup>  
 fifty, p<sup>h</sup>aŋ<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>  
 fight, to, a<sup>31</sup>nɛ<sup>31</sup>  
 fight, vie for, ʔa<sup>31</sup>t<sup>h</sup>in<sup>31</sup>  
 fighting trenches, a<sup>31</sup>san<sup>55</sup>k<sup>h</sup>uaŋ<sup>31</sup>  
 file (for building things), ts<sup>h</sup>o<sup>55</sup> (Ch.)  
 file, to, hɛŋ<sup>31</sup>u<sup>31</sup>  
 file, ts<sup>h</sup>o<sup>55</sup>du<sup>31</sup> (Ch. Lisu)  
 fill (a bowl with rice), k<sup>h</sup>u<sup>31</sup>  
 fill (with water), s<sup>ʔ</sup>a<sup>53</sup>yo<sup>31</sup>  
 fill in (dirt), p<sup>h</sup>u<sup>31</sup>  
 fill up (a hollow), ɕi<sup>31</sup>nɛu<sup>31</sup>  
 fill up, load, sa<sup>31</sup>u<sup>31</sup>  
 fill up, tɕ<sup>h</sup>uŋ<sup>55</sup>ʔbuŋ<sup>31</sup>  
 film; movie, bō<sup>55</sup> (Burmese)  
 filter, squeeze, di<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>mu<sup>31</sup>  
 filter, strain, di<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 filter (tea), to, di<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>mu<sup>31</sup>, a<sup>31</sup>iur<sup>55</sup>dzɛ̃<sup>31</sup>  
 fin, ŋua<sup>55</sup>da<sup>33</sup>tɕ<sup>h</sup>ŋ<sup>55</sup>  
 finally, ʔŋ<sup>31</sup>ɕaŋ<sup>55</sup>t<sup>h</sup>aŋ<sup>55</sup>; t<sup>h</sup>a<sup>55</sup>t<sup>h</sup>aŋ<sup>31</sup>  
 find, to, la<sup>53</sup>t<sup>h</sup>am<sup>55</sup>a<sup>31</sup>dza<sup>31</sup>  
 fine (not wide), tɕi<sup>55</sup>sŋ<sup>33</sup>  
 fine (rice), sɿ<sup>31</sup>la<sup>31</sup>nɛm<sup>55</sup>  
 fine (thin), ua<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>  
 fine hair on human body, ŋi<sup>31</sup>sa<sup>31</sup>min<sup>55</sup>  
 finger, baby, n<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 finger, ŋi<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>  
 finger, ring, n<sup>55</sup>tɕ<sup>h</sup>im<sup>55</sup>t<sup>h</sup>i<sup>31</sup>za<sup>55</sup>  
 finger tips, ŋi<sup>55</sup>tɕ<sup>h</sup>im<sup>55</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 fingernail, ŋin<sup>55</sup>  
 fingerprint, a<sup>31</sup>vu<sup>35</sup>gam<sup>55</sup>  
 fingerprint, n<sup>55</sup>tɕ<sup>h</sup>im<sup>55</sup>t<sup>h</sup>i<sup>31</sup>za<sup>55</sup>  
 finish, complete, ʔdzɛ<sup>35</sup>, dzɯ<sup>55</sup>ɣã<sup>31</sup>  
 fire (a shot), dzɔ<sup>55</sup>k<sup>h</sup>ɛŋ<sup>31</sup>vam<sup>53</sup>  
 fire (die out), tɕ<sup>h</sup>a<sup>55</sup>ŋin<sup>55</sup>  
 fire diaster, tɕ<sup>h</sup>a<sup>31</sup>mi<sup>55</sup>dzin<sup>55</sup>ɔdɕɛ<sup>35</sup>ɛ<sup>31</sup>  
 fire dike bank, mu<sup>31</sup>zam<sup>55</sup>laŋ<sup>31</sup>  
 fire dike, mu<sup>31</sup>zam<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 fire god, spirit, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>p<sup>h</sup>u<sup>31</sup>iã<sup>33</sup>  
 fire tongs, ma<sup>33</sup>nɛm<sup>55</sup>(ma<sup>33</sup>nɛm<sup>33</sup>)  
 fire wall, mm<sup>31</sup>za<sup>31</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 fire, big, t<sup>h</sup>o<sup>55</sup>mi<sup>55</sup>a<sup>31</sup>ni<sup>33</sup>; t<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>ɕuŋ<sup>31</sup>  
 fire, small, t<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 fire, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>  
 firefly; glow worm, k<sup>h</sup>o<sup>31</sup>iã<sup>31</sup>

- firewood knife, ɕuŋ<sup>55</sup> ua<sup>31</sup> dem<sup>55</sup> ɕem<sup>31</sup>  
 firewood root, ɕuŋ<sup>55</sup> t<sup>h</sup>i<sup>m</sup><sup>33</sup>  
 firewood, tree, wood, ɕuŋ<sup>55</sup>  
 fireworks, a<sup>31</sup>iä<sup>31</sup> ven<sup>55</sup>  
 first month of lunar year, t<sup>h</sup>i<sup>55</sup>la<sup>33</sup>, s<sup>1</sup>la<sup>55</sup>  
 first, ba<sup>55</sup>ʂu<sup>31</sup>, d<sup>o</sup><sup>55</sup>; d<sup>a</sup><sup>53</sup>u<sup>31</sup> t<sup>h</sup>i<sup>31</sup> ia<sup>55</sup>  
 first, ku<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup> t<sup>h</sup>i<sup>55</sup>, e<sup>55</sup>vu<sup>55</sup>t<sup>h</sup>i<sup>31</sup>ma<sup>33</sup> (Lisu)  
 first, ti<sup>35</sup>i<sup>31</sup> (Ch.); ʔi<sup>55</sup>p<sup>h</sup>aŋ<sup>55</sup>t<sup>h</sup>i<sup>31</sup>  
 first born, o<sup>31</sup>mo<sup>55</sup>t<sup>h</sup>i<sup>55</sup>t<sup>ʂ</sup>h<sup>a</sup><sup>31</sup>  
 first day of lunar month, s<sup>1</sup>la<sup>55</sup> t<sup>h</sup>i<sup>55</sup>ni<sup>33</sup>  
 first earthly branch, a<sup>31</sup>din<sup>55</sup>nuŋ<sup>33</sup>  
 first lunar month, o<sup>31</sup>mo<sup>55</sup>s<sup>1</sup>la<sup>55</sup>  
 first one, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>i<sup>55</sup>nu<sup>31</sup>  
 first visit of a bride, me<sup>55</sup>le<sup>55</sup>mu<sup>31</sup>  
 fish (maybe blunt snout bream), a<sup>31</sup>ɕeŋ<sup>55</sup>  
 fish bait, buŋ<sup>31</sup> dza<sup>33</sup>  
 fish bone, ŋua<sup>55</sup> ba<sup>31</sup> xu<sup>55</sup>  
 fish cage, d<sup>a</sup><sup>31</sup> buŋ<sup>55</sup>  
 fish hook, xo<sup>55</sup>gi<sup>33</sup> (Lisu)  
 fish roe or spawn, ŋua<sup>55</sup> lim<sup>31</sup>  
 fish scale, ŋua<sup>55</sup> ba<sup>1</sup><sup>31</sup>  
 fish spear/fork, la<sup>31</sup> k<sup>h</sup>u<sup>55</sup>  
 fish out, to, ts<sup>h</sup>i<sup>31</sup>  
 fish smell grass, dza<sup>31</sup>b<sup>e</sup><sup>35</sup> ʔo<sup>31</sup>  
 fish stomach, ŋua<sup>55</sup>p<sup>h</sup>a<sup>33</sup>  
 fish scale, ŋua<sup>55</sup> ba<sup>1</sup><sup>31</sup>  
 fish, a<sup>31</sup>ɕeŋ<sup>55</sup>  
 fish, ŋua<sup>55</sup>  
 fish (with rod), to, a<sup>31</sup>t<sup>ɕ</sup>h<sup>uŋ</sup><sup>33</sup> (a<sup>31</sup>t<sup>ɕ</sup>h<sup>uŋ</sup><sup>35</sup>)  
 fish, to, p<sup>h</sup>u<sup>31</sup>na<sup>35</sup>  
 fish, to, p<sup>h</sup>u<sup>31</sup>ian<sup>55</sup>luŋ<sup>53</sup>  
 fisherman, ŋua<sup>55</sup>p<sup>h</sup>u<sup>31</sup>na<sup>55</sup>su<sup>55</sup>  
 fishing basket, d<sup>a</sup><sup>31</sup>buŋ<sup>55</sup>  
 fishing fork, ŋua<sup>55</sup>vam<sup>55</sup>dem<sup>55</sup>  
 fishing hook, xo<sup>55</sup>gi<sup>33</sup>  
 fishing line, buŋ<sup>31</sup> buŋ<sup>55</sup>  
 fishing rod, ŋua<sup>55</sup>p<sup>h</sup>u<sup>31</sup>na<sup>55</sup>dem<sup>55</sup>  
 fishnet, p<sup>h</sup>u<sup>31</sup>ia<sup>55</sup>  
 fist, a<sup>31</sup>vu<sup>35</sup>di<sup>31</sup> p<sup>h</sup>u<sup>31</sup>  
 five, p<sup>h</sup>aŋ<sup>31</sup>  
 five, ŋua<sup>31</sup> (Lisu)  
 fix, to, t<sup>h</sup>aŋ<sup>55</sup>a<sup>31</sup>, len<sup>35</sup>  
 flag, p<sup>h</sup>e<sup>31</sup> (Lisu)  
 flag, national, ku<sup>ɕ</sup><sup>35</sup>p<sup>h</sup>e<sup>35</sup>  
 flagstone; slabstone, luŋ<sup>55</sup> lan<sup>31</sup>  
 flail, to, ne<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>  
 flail, head, ne<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>p<sup>h</sup>ŋ<sup>55</sup>

- flame, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>tɕ<sup>h</sup>ɛ<sup>31</sup>mu<sup>31</sup>  
 flame (tongue of), tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>saŋ<sup>55</sup>  
 flash (lightning), a<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>lem<sup>31</sup>  
 flash (lightning), mo<sup>55</sup>dziŋ<sup>33</sup>  
 flashlight, tian<sup>35</sup>t<sup>h</sup>uŋ<sup>31</sup> (Ch.)  
 flat, p<sup>h</sup>a<sup>55</sup>p<sup>h</sup>a<sup>55</sup>laŋ<sup>31</sup>  
 flat, a<sup>31</sup>dza<sup>31</sup>; make flat, p<sup>h</sup>a<sup>55</sup>dza<sup>31</sup>  
 flat, become, tɕ<sup>h</sup>ɛ<sup>55</sup>tɕ<sup>h</sup>ɛ<sup>55</sup>m<sup>33</sup>  
 flat fish (e.g., blunt-snout bream), a<sup>31</sup>ɕɛŋ<sup>55</sup>  
 flat, shallow, tɕ<sup>h</sup>ɛ<sup>55</sup>tɕ<sup>h</sup>ɛ<sup>55</sup>dzo<sup>31</sup>  
 flatter obsequiously, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>k<sup>h</sup>a<sup>31</sup>ɕ<sup>h</sup>i<sup>31</sup>t<sup>h</sup>im<sup>55</sup>so<sup>53</sup>  
 flavor, taste, p<sup>h</sup>u<sup>31</sup>iɛn<sup>31</sup>  
 flax, mi<sup>55</sup>  
 flax or linen thread, ʔuam<sup>31</sup>i<sup>u</sup><sup>55</sup>  
 flax seed, mi<sup>55</sup>i<sup>u</sup><sup>31</sup>  
 flay, peel, k<sup>h</sup>aŋ<sup>31</sup>u<sup>31</sup>  
 flea, ɕ<sup>h</sup>i<sup>55</sup>ŋ<sup>31</sup> > ɕi<sup>31</sup>li<sup>31</sup>  
 flea, grass, ɕa<sup>55</sup>ts<sup>h</sup>i<sup>31</sup>ɛ<sup>35</sup>  
 flee, iɛn<sup>55</sup>(tɕi<sup>31</sup>ɛ<sup>31</sup>)  
 flesh, irritated, xua<sup>55</sup>dziŋ<sup>53</sup> (Lisu)  
 fleshy part of bird's tail, ŋ<sup>55</sup>min<sup>55</sup>  
 flimsy, m<sup>31</sup>t<sup>h</sup>om<sup>55</sup>  
 fling, toss, ʔa<sup>31</sup>p<sup>h</sup>uŋu<sup>53</sup>  
 flint, xo<sup>31</sup>bi<sup>31</sup>  
 flint stone, xo<sup>31</sup>bi<sup>31</sup>luŋ<sup>55</sup>  
 float down, a<sup>31</sup>dza<sup>55</sup>  
 float, to, ma<sup>55</sup>z<sup>h</sup>i<sup>55</sup>(u<sup>31</sup>)  
 flood, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>35</sup>bun<sup>31</sup>  
 floorboard of woven bamboo, la<sup>33</sup>dza<sup>55</sup>laŋ<sup>31</sup>  
 floorboard; floor, la<sup>33</sup>dza<sup>55</sup>  
 floor, woven, la<sup>33</sup>dza<sup>55</sup>laŋ<sup>31</sup>  
 flour sieve, dzi<sup>31</sup>ia<sup>55</sup>x<sup>h</sup>uŋ<sup>53</sup>  
 flour, bun<sup>55</sup>  
 flour, wheat, ɕa<sup>31</sup>ia<sup>31</sup>(ua<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup>)  
 flow (water), i<sup>u</sup><sup>33</sup>  
 flower (n.), ven<sup>55</sup>, ɕuŋ<sup>55</sup>ven<sup>55</sup>  
 flower (of reeds), p<sup>h</sup>u<sup>31</sup>na<sup>55</sup>li<sup>55</sup>dzuŋ<sup>31</sup>ven<sup>55</sup>  
 flower (v.), bloom, to, ɕuŋ<sup>55</sup>ven<sup>55</sup>  
 flower bud, ɕuŋ<sup>55</sup>ven<sup>55</sup>t<sup>h</sup>im<sup>31</sup>  
 flower petal, ɕuŋ<sup>55</sup>ven<sup>55</sup>ɕi<sup>31</sup>lim<sup>35</sup>tɕ<sup>h</sup>ɛm<sup>55</sup>  
 flower pot, ɕuŋ<sup>55</sup>ven<sup>55</sup>k<sup>h</sup>ɛn<sup>55</sup>dɛm<sup>55</sup>  
 flower stem, ɕuŋ<sup>55</sup>ven<sup>55</sup>dzuŋ<sup>55</sup>  
 flower, di<sup>31</sup>g<sup>h</sup>oŋ<sup>55</sup>dzaŋ<sup>35</sup>  
 flower, stalk, ɕuŋ<sup>55</sup>ven<sup>55</sup>di<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 flowers falling, ɕuŋ<sup>55</sup>ven<sup>55</sup>ʔa<sup>31</sup>dza<sup>53</sup>ɛ<sup>31</sup>  
 fluffy, su<sup>31</sup>la<sup>35</sup>  
 flustered, ts<sup>h</sup>a<sup>31</sup>ts<sup>h</sup>a<sup>31</sup>li<sup>31</sup>li<sup>31</sup>

- flute, bamboo, dzɿ<sup>31</sup>li<sup>55</sup>  
 fly (insect), ba<sup>31</sup>ɣɿm<sup>55</sup>  
 fly shit, ba<sup>33</sup>sum<sup>55</sup>pu<sup>31</sup>niŋ<sup>31</sup>  
 fly, big, ba<sup>33</sup>sum<sup>55</sup>duŋ<sup>31</sup>  
 fly, to, dem<sup>31</sup> (Lisu)  
 fly swatter, ba<sup>55</sup>som<sup>55</sup>a<sup>31</sup>ŋɛ<sup>55</sup>dem<sup>55</sup>  
 flying snake, dem<sup>31</sup>bu<sup>31</sup>  
 foam, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>ɬa<sup>31</sup>bo<sup>55</sup>  
 foam, to, i<sup>55</sup>fu<sup>53</sup>  
 foam (breaking waves), dzɿ<sup>31</sup>k<sup>h</sup>u<sup>55</sup>a<sup>31</sup>t<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 fog, io<sup>55</sup>mun<sup>55</sup>du<sup>33</sup>  
 fog spreads, ka<sup>55</sup>dzɿ<sup>55</sup>ɕim<sup>55</sup>ɛ<sup>31</sup>ŋa<sup>31</sup>  
 foggy, be, zɿ<sup>31</sup>mun<sup>55</sup>a<sup>31</sup>gã<sup>33</sup>  
 fold in corner of page, ʔi<sup>55</sup>ko<sup>33</sup>a<sup>31</sup>k<sup>h</sup>u<sup>31</sup>lim<sup>55</sup>  
 fold up, ɣɿ<sup>31</sup>ɬuŋ<sup>31</sup>tse<sup>31</sup>ni<sup>55</sup>xo<sup>31</sup>  
 fold up, pile up, tɕɛ<sup>31</sup>, di<sup>31</sup>dzuŋ<sup>31</sup>  
 fold, to, k<sup>h</sup>u<sup>31</sup>lim<sup>ʔ31</sup>u<sup>31</sup>  
 follow, to, zɿ/za<sup>31</sup>a<sup>55</sup>  
 fond of (a song), ŋã<sup>55</sup>ɣɿ<sup>31</sup>  
 food steamer, ʔbe<sup>31</sup>ni<sup>55</sup>  
 food, mu<sup>31</sup>dza<sup>31</sup>  
 food dishes, k<sup>h</sup>ɛn<sup>55</sup>  
 food turner, dzɛ<sup>31</sup>ɕin<sup>55</sup>a<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup>  
 foodstuff; food, em<sup>53</sup>dem<sup>55</sup>  
 foot, ʔa<sup>31</sup>xa<sup>35</sup>, a<sup>31</sup>xɛ<sup>33</sup>  
 foot, one (12"), t<sup>h</sup>i<sup>31</sup>xuŋ<sup>55</sup>  
 foot (measure), t<sup>h</sup>i<sup>31</sup>dzɿ<sup>55</sup>  
 foot = one-third of a meter, (t<sup>h</sup>i<sup>31</sup>)dza<sup>55</sup>  
 foot bowl, a<sup>31</sup>xa<sup>55</sup>dzɛn<sup>55</sup>dem<sup>55</sup>  
 foot of a bed, ɲim<sup>55</sup>za<sup>55</sup>a<sup>31</sup>xɛ<sup>35</sup>k<sup>h</sup>a<sup>53</sup>  
 foot of a mountain, mu<sup>31</sup>gun<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>33</sup>  
 foot; leg, ʔa<sup>31</sup>xa<sup>55</sup>  
 footprint; tracks, a<sup>31</sup>xa<sup>53</sup>ɕuŋ<sup>55</sup>a<sup>31</sup>ma<sup>55</sup>  
 football, soccer, ɕa<sup>55</sup>sam<sup>31</sup>ɣuŋ<sup>55</sup>  
 footstool, tɕa<sup>55</sup>tsu<sup>31</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 for washing clothes, ɣɿ<sup>55</sup>do<sup>31</sup>  
 forbid; not allow, m<sup>31</sup>ʔda<sup>55</sup>  
 ford, a<sup>31</sup>su<sup>31</sup>t<sup>h</sup>aŋ<sup>31</sup>  
 forearm, a<sup>31</sup>vu<sup>35</sup>tɕ<sup>h</sup>i<sup>31</sup>ŋi<sup>55</sup>  
 forearm, a<sup>31</sup>vu<sup>35</sup>duŋ<sup>55</sup>  
 forefinger, ɲ<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>  
 forehead, ma<sup>55</sup>di<sup>31</sup>gan<sup>55</sup>  
 foreign country, uai<sup>33</sup>kuɛ<sup>35</sup>  
 foreign country, a<sup>31</sup>tɕ<sup>h</sup>aŋ<sup>31</sup>kuɛ<sup>31</sup>  
 foreman, kuŋ<sup>55</sup>t<sup>h</sup>u<sup>31</sup>  
 forest, mu<sup>55</sup>xan<sup>35</sup>, ɕuŋ<sup>55</sup>xan<sup>35</sup>  
 forest, jungle, p<sup>h</sup>ɛ<sup>55</sup>mɛ<sup>53</sup>u<sup>31</sup>

- forever, ka<sup>55</sup>t<sup>h</sup>a<sup>31</sup>gu<sup>53</sup>  
 foretell the future, so<sup>33</sup>ne<sup>33</sup>  
 forge iron, a<sup>55</sup>um<sup>55</sup>  
 forge iron, um<sup>55</sup>  
 forge (things) out of iron, sa<sup>31</sup>k<sup>h</sup>an<sup>55</sup>a<sup>31</sup>ni<sup>35</sup>  
 forget, p<sup>h</sup>a<sup>55</sup>ma<sup>53</sup>  
 forgetful, p<sup>h</sup>a<sup>55</sup>ma<sup>31</sup>se<sup>31</sup>  
 forgive; ask forgiveness, ga<sup>31</sup>gu<sup>31</sup>ni<sup>33</sup>xua<sup>31;53</sup>  
 fork, η<sup>31</sup>di<sup>31</sup>k<sup>h</sup>ua<sup>55</sup>  
 forked road, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>di<sup>31</sup>ba<sup>55</sup>  
 form dew, i<sup>55</sup>nem<sup>53</sup>k<sup>h</sup>an<sup>55</sup>  
 formerly, ancient times, ma<sup>55</sup>su<sup>33</sup>; ua<sup>31</sup>su<sup>55</sup>  
 fortell the future, so<sup>33</sup>ne<sup>33</sup>  
 fortunately, o<sup>55</sup>nu<sup>31</sup>le<sup>55</sup>  
 fortune, luck, k<sup>h</sup>am<sup>31</sup>a<sup>31</sup>t<sup>h</sup>u<sup>55</sup>  
 fortune, luck, yu<sup>31</sup>tɕ<sup>h</sup>o<sup>33</sup> (Lisu)  
 forty, a<sup>31</sup>br<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>  
 four days hence, du<sup>55</sup>du<sup>55</sup>sa<sup>31</sup>ni<sup>55</sup>  
 four, br<sup>53</sup>, bi<sup>53</sup>, (bi<sup>31</sup>), li<sup>33</sup> (Lisu)  
 four kinds of herbs (almond, lotus-seed, lily seed, discorea), a<sup>31</sup>k<sup>h</sup>an<sup>31</sup>sa<sup>33</sup>la<sup>33</sup>  
 k<sup>h</sup>o<sup>55</sup>  
 fourteen, t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>ai<sup>55</sup>br<sup>53</sup>, ts<sup>h</sup>li<sup>31</sup>li<sup>33</sup> (Lisu)  
 fourth, ku<sup>31</sup>p<sup>h</sup>an<sup>55</sup>bi<sup>53</sup>, ti<sup>35</sup>si<sup>35</sup> (Ch.)  
 fourth, li<sup>33</sup>ma<sup>33</sup>t<sup>h</sup>i<sup>31</sup>ma<sup>33</sup> (Lisu)  
 fourth, da<sup>53</sup>u<sup>31</sup>br<sup>31</sup>  
 fourth earthly branch (rabbit), t<sup>h</sup>o<sup>31</sup>la<sup>55</sup>nu<sup>55</sup>  
 fox, ko<sup>31</sup>p<sup>h</sup>u<sup>33</sup>  
 fox, wildcat, da<sup>31</sup>ga<sup>31</sup>  
 fraction, qon<sup>31</sup>k<sup>h</sup>a<sup>31</sup> (used after the denominator and before the numerator)  
 fractions, qun<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 fraction, i<sup>31</sup>fe<sup>55</sup>  
 fragrant, p<sup>h</sup>u<sup>31</sup>lem<sup>31</sup>  
 frame, a, tsi<sup>55</sup>, tɕ<sup>h</sup>u<sup>35</sup>  
 frank, candid, iu<sup>55</sup>  
 freckles; pockmarks, io<sup>55</sup>dzi<sup>31</sup>  
 free from anxiety, m<sup>31</sup>p<sup>h</sup>si<sup>31</sup>ca<sup>31</sup>  
 free time, a<sup>31</sup>ts<sup>h</sup>ie<sup>55</sup>  
 freedom, ts<sup>35</sup>iu<sup>31</sup> (Ch.)  
 freeze (ground), ti<sup>31</sup>ven<sup>31</sup>dzu<sup>55</sup>; ʔa<sup>31</sup>sa<sup>31</sup>dzu<sup>55</sup>  
 freeze, ice over, ti<sup>31</sup>ven<sup>31</sup>dzu<sup>55</sup>  
 frequently, often, k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>a<sup>33</sup>ma<sup>33</sup>t<sup>h</sup>a<sup>33</sup>  
 fresh (vegetables), ʔdzen<sup>55</sup>ʔdzen<sup>55</sup>ua<sup>31</sup>  
 fried sweet snack, k<sup>h</sup>a<sup>35</sup>lim<sup>31</sup>dzi<sup>35</sup>u<sup>31</sup>mu<sup>53</sup>  
 friend, nem<sup>31</sup>ηan<sup>31</sup>  
 friend, da<sup>55</sup>ts<sup>h</sup>a<sup>55</sup>  
 friend, close, intimate, nem<sup>31</sup>nan<sup>31</sup>η<sup>55</sup>  
 frightened, stunned; shy, t<sup>h</sup>o<sup>55</sup>lin<sup>55</sup>ʔdze<sup>35</sup>

- frog, na<sup>33</sup>gã<sup>55</sup>  
 frog, large, na<sup>55</sup>geŋ<sup>55</sup>duŋ<sup>31</sup>  
 frog, small, na<sup>55</sup>geŋ<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 from, ɛ<sup>31</sup>ni<sup>55</sup>  
 from childhood, a<sup>55</sup>tɕu<sup>31</sup>la<sup>55</sup>t<sup>h</sup>a<sup>31</sup>di<sup>31</sup>  
 from morn to night, t<sup>h</sup>i<sup>55</sup>ŋi<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 front, in front, ma<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 front of Chinese jackets; lapels, be<sup>31</sup>le<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 front of clothes, na<sup>33</sup>t<sup>h</sup>aŋ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 front door (or gate), la<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>ma<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>53</sup>  
 front of body, zɿ<sup>55</sup>gu<sup>31</sup>ma<sup>55</sup>pu<sup>31</sup>k<sup>h</sup>a<sup>53</sup>  
 front, in front, ma<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 frost, have, dzan<sup>55</sup>ɛ<sup>31</sup>  
 frost, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>  
 fruit, ʂɿ<sup>33</sup>  
 fruit peel, ŋ<sup>53</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 fruit, and the like, ɕuŋ<sup>55</sup>ʂɿ<sup>33</sup>  
 fruit, bear fruit, ʂɿ<sup>33</sup>; bear fruit, ŋ<sup>31</sup>ʂɿ<sup>33</sup>dzi<sup>33</sup>  
 fry (breads), di<sup>31</sup>ts<sup>h</sup>am<sup>53</sup>  
 fry of fish, ŋua<sup>55</sup>iur<sup>31</sup>  
 fry in fat or oil, ʔdzuŋ<sup>53</sup>  
 frying pan, dza<sup>33</sup>k<sup>h</sup>o<sup>55</sup>  
 Fugong (county), ɕa<sup>55</sup>p<sup>h</sup>a<sup>55</sup>  
 full (e.g. a water vat), ɕim<sup>55</sup>bu<sup>31</sup>  
 full; filled up, (ʔ)a<sup>55</sup>buŋ<sup>31</sup>  
 full (of food), ga<sup>31</sup>  
 full beard, ba<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>  
 full moon, ʂɿ<sup>31</sup>la<sup>55</sup>p<sup>h</sup>am<sup>55</sup>  
 full of shit, ŋi<sup>55</sup>a<sup>31</sup>ʔlin<sup>35</sup>  
 full of urine, ɕa<sup>55</sup>a<sup>31</sup>ʔlin<sup>35</sup>  
 funeral, ŋi<sup>35</sup>ʂa<sup>55</sup>pe<sup>31</sup>; dza<sup>31</sup>ʂa<sup>55</sup>pe<sup>31</sup>  
 fungus, mu<sup>55</sup>gun<sup>55</sup>  
 fungus; bacterium, ʔu<sup>31</sup>du<sup>53</sup>  
 funnel, lu<sup>35</sup>tu<sup>53</sup>  
 fur, min<sup>55</sup>  
 fur, ɕa<sup>55</sup>sam<sup>31</sup>  
 fur garment, ɕa<sup>55</sup>s'an<sup>31</sup>ga<sup>31</sup>mu<sup>31</sup>  
 furniture, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>31</sup>duŋ<sup>55</sup>nen  
 fussy, ɕu<sup>35</sup>di<sup>33</sup>  
 future, ʔi<sup>55</sup>zan<sup>31</sup>  
 future aspect, bu<sup>55</sup>, ua<sup>55</sup>  
  
 gadfly, mɛ<sup>55</sup>dzi<sup>31</sup>  
 gall bladder, ŋ<sup>31</sup>da<sup>31</sup>k<sup>h</sup>ŋ<sup>55</sup>  
 gamble (for money), ɕi<sup>31</sup>p<sup>h</sup>oŋ<sup>35</sup>ɛ<sup>31</sup>  
 garden, vegetable, dza<sup>31</sup>xam<sup>35</sup>  
 gain / earn money, u<sup>31</sup>vu<sup>35</sup>di<sup>31</sup>p<sup>h</sup>u<sup>31</sup>

- gain money in business, ŋ<sup>31</sup>dzan<sup>55</sup>  
 gall bladder, ŋ<sup>31</sup>da<sup>31</sup>k<sup>h</sup>.ŋ<sup>55</sup>  
 gamble, throw dice, di<sup>31</sup>p<sup>h</sup>uŋ<sup>35</sup>u<sup>55</sup>  
 game, a<sup>31</sup>xiŋ<sup>55</sup>  
 gangplank, a<sup>31</sup>su<sup>31</sup>gu<sup>31</sup>ɿa<sup>55</sup>  
 garbage, sɿ<sup>31</sup>t<sup>h</sup>ɿn<sup>31</sup>sa<sup>55</sup>ia<sup>55</sup>  
 garden, dzɑ<sup>31</sup>ham<sup>55</sup>  
 garden, vegetable, dzɑ<sup>31</sup>xam<sup>35</sup>tɕ<sup>h</sup>u<sup>31</sup>su<sup>55</sup>  
 gargle, to, dzɛn<sup>55</sup>sɿ<sup>31</sup>  
 garlic, sɿ<sup>31</sup>bɛ<sup>33</sup>, k<sup>h</sup>ua<sup>31</sup>sui<sup>55</sup> (Lisu)  
 garment, unlined, t<sup>h</sup>i<sup>55</sup>ɕi<sup>31</sup>lim<sup>33</sup>  
 garment, upper, na<sup>33</sup>than<sup>55</sup>gua<sup>31</sup>dɛm<sup>55</sup>  
 gas (from decaying matter), san<sup>55</sup>  
 gasoline, tɕ<sup>h</sup>i<sup>35</sup>iur<sup>31</sup> (Ch.)  
 gather (firewood), ɕuŋ<sup>55</sup>ua<sup>35</sup>  
 gather (water), build up, dim<sup>33</sup>  
 gather night soil, i<sup>31</sup>na<sup>31</sup>ni<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 gather together, da<sup>33</sup>si<sup>55</sup>ɿa<sup>31</sup>  
 gather up, di<sup>31</sup>dzuŋ<sup>55</sup>di<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 gather, assemble, a<sup>31</sup>dɛ<sup>31</sup>k<sup>h</sup>om<sup>55</sup>, a<sup>31</sup>k<sup>h</sup>om<sup>35</sup>  
 gather, assemble, ʔa<sup>31</sup>ɿam<sup>31</sup>  
 gather, a<sup>31</sup>do<sup>55</sup>k<sup>h</sup>o<sup>55</sup>  
 gather, pick up (manure), t<sup>h</sup>u<sup>53</sup>  
 gather, put in order (clothes), fin<sup>31</sup>; a<sup>31</sup>k<sup>h</sup>om<sup>55</sup>  
 gaze fiercely, ni<sup>55</sup>dǎŋ<sup>31</sup>dza<sup>31</sup>ũ<sup>55</sup>  
 gecko; house lizard, ka<sup>31</sup>la<sup>31</sup>dzaŋ<sup>55</sup>  
 gem, a<sup>31</sup>p<sup>h</sup>u<sup>31</sup>luŋ<sup>55</sup>  
 gender marker (male), -p<sup>h</sup>u<sup>31</sup>  
 gender marker (female), -mu<sup>31</sup>/-ma<sup>55</sup>  
 generation, elder, ua<sup>55</sup>su<sup>31</sup>di<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>  
 generation, younger, tɕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>di<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>  
 generations, later, p<sup>h</sup>u<sup>31</sup>la<sup>55</sup>  
 generation, di<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>  
 genitive SEE possessive  
 geomancy, ʔa<sup>55</sup>m<sup>31</sup>ʔa<sup>55</sup>dza<sup>53</sup>u<sup>31</sup>  
 gesticulate, ʔa<sup>31</sup>vu<sup>35</sup>xud<sup>31</sup>ɿ<sup>55</sup>  
 get a doctor, i<sup>55</sup>suŋ<sup>55</sup>ɿuŋ<sup>53</sup>  
 get a splinter, ba<sup>55</sup>xu<sup>55</sup>iaŋ<sup>53</sup>u<sup>31</sup>  
 get accidentally separated from and lose contact, di<sup>31</sup>bɛŋ<sup>55</sup>ʔdzɛ<sup>35</sup>  
 get angry, a<sup>31</sup>mɿan<sup>55</sup>(sɛ<sup>33</sup>) (lose temper)  
 get beaten, ua<sup>31</sup>nɛ<sup>31</sup>iāŋ<sup>53</sup>  
 get demoted, ʔi<sup>55</sup>k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>i<sup>55</sup>gam<sup>55</sup>la<sup>31</sup>ʔdzɛ<sup>35</sup>  
 get dusty, ts<sup>h</sup>a<sup>31</sup>bi<sup>31</sup>a<sup>31</sup>gan<sup>53</sup>  
 get engaged, di<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>u<sup>31</sup>  
 get in bed, nɿm<sup>55</sup>za<sup>55</sup>na<sup>55</sup>k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>e<sup>31</sup>nɿu<sup>31</sup>  
 get in car, t<sup>h</sup>an<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>ɿuŋ<sup>53</sup>dzaŋ<sup>53</sup>  
 get maggots, ts<sup>h</sup>ɿ<sup>33</sup>no<sup>33</sup>



- get married, a<sup>31</sup>ci<sup>31</sup>t<sup>h</sup>in<sup>55</sup>  
 get out of bed, nim<sup>55</sup>za<sup>55;55</sup> i<sup>55</sup> k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>ε<sup>31</sup> n<sup>u</sup><sup>31</sup>  
 get out of car, t<sup>h</sup>an<sup>55</sup>t<sup>h</sup>ε<sup>h</sup>im<sup>31</sup>a<sup>31</sup>ni<sup>55</sup>la<sup>31</sup>ʃ<sup>55</sup>  
 get out of way, cin<sup>55</sup>ʃ<sup>31</sup>  
 get promoted, dan<sup>55</sup>ε<sup>31</sup>  
 get revenge, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>ε<sup>h</sup>iŋ<sup>31</sup>ũ<sup>31</sup>  
 get scolded, ŋ<sup>31</sup>xo<sup>55</sup>ũ<sup>31</sup> n<sup>u</sup><sup>55</sup>ā<sup>31</sup>  
 get seasick, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>a<sup>31</sup>xuaŋ<sup>31</sup>  
 get the shakes, cold shivers, du<sup>35</sup>g<sup>u</sup>ŋ<sup>55</sup>  
 get tired of, ni<sup>55</sup>y<sup>u</sup><sup>55</sup>  
 get up, t<sup>h</sup>in<sup>55</sup>ʃ<sup>31</sup>  
 get up, cause to, lε<sup>55</sup>t<sup>h</sup>ε<sup>h</sup>iŋ<sup>55</sup>ʃ<sup>31</sup>  
 get up early, m<sup>31</sup>ga<sup>55</sup>ga<sup>55</sup>  
 get well, gam<sup>55</sup>dzε<sup>35</sup>; gam<sup>33</sup>  
 get; acquire, t<sup>h</sup>am<sup>53</sup>  
 get, fetch, ʔu<sup>31</sup>lu<sup>35</sup>  
 get; gain, t<sup>h</sup>am<sup>55</sup>a<sup>53</sup>dza<sup>55</sup>  
 ghost, t<sup>h</sup>o<sup>33</sup>  
 ghost, spirit, phu<sup>31</sup>iā<sup>33</sup>  
 gift, present, lε<sup>31</sup>ʃu<sup>55</sup>  
 gills, ŋua<sup>55</sup>ba<sup>31</sup>  
 ginger, li<sup>55</sup>dzuŋ<sup>31</sup>  
 ginger, young, li<sup>55</sup>dzuŋ<sup>31</sup>a<sup>31</sup>maŋ<sup>55</sup>  
 gingham, ɕa<sup>55</sup>min<sup>55</sup>ma<sup>55</sup>xuŋ<sup>55</sup>  
 ginseng, zũ<sup>31</sup>sũ<sup>55</sup> (Ch.)  
 girdle around the waist (trousers), ma<sup>33</sup>dem<sup>55</sup>  
 girl, ts<sup>h</sup>a<sup>31</sup>ma<sup>31</sup>za<sup>55</sup>t<sup>h</sup>ε<sup>h</sup>en<sup>31</sup>  
 girl, ʃ<sup>31</sup>lan<sup>55</sup>za<sup>55</sup>  
 girl; daughter, t<sup>h</sup>ε<sup>h</sup>en<sup>31</sup>mu<sup>31</sup>  
 give an injection, ʔuam<sup>55</sup>ɕa<sup>53</sup>ŋu<sup>53</sup>  
 give an injection, t<sup>h</sup>u<sup>55</sup>  
 give a banquet, n<sup>u</sup><sup>31</sup>q<sup>u</sup>ŋ<sup>53</sup>u<sup>31</sup>  
 give back; pay back, t<sup>h</sup>i<sup>31</sup>ʔi<sup>31</sup>  
 give birth, q<sup>u</sup><sup>31</sup>khom<sup>31</sup>, t<sup>h</sup>u<sup>31</sup>, sunŋ<sup>35</sup>  
 give excuse, di<sup>31</sup>t<sup>h</sup>u<sup>31</sup>  
 give in to, la<sup>53</sup>k<sup>h</sup>an<sup>31</sup>dzu<sup>31</sup>ʃ<sup>55</sup>  
 give order (for food), di<sup>31</sup>k<sup>h</sup>en<sup>55</sup>  
 give present, lε<sup>31</sup>ʃu<sup>55</sup>dzu<sup>55</sup>u<sup>31</sup>  
 give to, to, ban<sup>53</sup>  
 give, dz<sup>u</sup><sup>53</sup>  
 give up, t<sup>h</sup>a<sup>53</sup>u<sup>31</sup>  
 give up attending, ʃ<sup>55</sup>va<sup>31</sup>ma<sup>31</sup>t<sup>h</sup>ε<sup>h</sup>en<sup>33</sup>t<sup>h</sup>an<sup>31</sup>ʔdze<sup>35</sup>  
 give written invitation, p<sup>h</sup>i<sup>55</sup>dza<sup>55</sup>t<sup>h</sup>iεŋ<sup>35</sup>u<sup>31</sup>  
 give, dz<sup>u</sup><sup>55</sup>, p<sup>h</sup>u<sup>31</sup>  
 gizzard, p<sup>h</sup>u<sup>31</sup>ian<sup>31</sup>  
 gizzard (chicken), k<sup>h</sup>aŋ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>  
 glass, nε<sup>55</sup>ba<sup>55</sup>

- glass goods, vi<sup>55</sup>ka<sup>31</sup> (Burmese)  
 glasses, ni<sup>55</sup> t<sup>h</sup>a<sup>55</sup> dem<sup>55</sup>  
 glittering; sparkling, p<sup>h</sup>aŋ<sup>31</sup> ga<sup>55</sup>  
 gloves, a<sup>31</sup>vu<sup>35</sup> dim<sup>55</sup>dem<sup>55</sup>  
 gloves, gr<sup>31</sup> dzaŋ<sup>31</sup>  
 glue, paste, to, a<sup>31</sup>ga<sup>55</sup> u<sup>31</sup>  
 glue, to, t<sup>h</sup>a<sup>31</sup>pə<sup>55</sup>  
 glue, dzam<sup>55</sup>  
 glutinous (sweet rice), mu<sup>31</sup>naŋ<sup>31</sup>  
 gluttonous, m<sup>31</sup>dzaŋ<sup>55</sup> ŋ<sup>33</sup>  
 gluttonous (for meat), ʔa<sup>31</sup>dzu<sup>31</sup>  
 gnat, t<sup>h</sup>ɿ<sup>33</sup> p<sup>h</sup>u<sup>31</sup>  
 gnaw; nibble, du<sup>31</sup>ju<sup>35</sup>  
 gnaw; nibble, di<sup>31</sup>sɿ n<sup>35</sup>; di<sup>31</sup>sɿ<sup>31</sup>n<sup>55</sup>  
 go, a<sup>31</sup>ba<sup>35</sup>, bu<sup>33</sup>-, bu<sup>55</sup>  
 go (to Shanghai), dzɿ<sup>53</sup>, dzɿ<sup>31</sup>, gɛ<sup>55</sup>dzɿ<sup>53</sup>  
 go around, xua<sup>31</sup>a<sup>31</sup>bo<sup>53</sup>  
 go around in a circle, dzɿ<sup>55</sup>li<sup>33</sup>xua<sup>31</sup>ʔa<sup>55</sup>  
 go back, return, ʔoŋ<sup>35</sup>; ʔo<sup>33</sup>  
 go back on a promise, a<sup>31</sup>na<sup>55</sup>  
 go backwards, a<sup>31</sup>t<sup>h</sup>aŋ<sup>33</sup> p<sup>h</sup>o<sup>31</sup>  
 go by boat, a<sup>31</sup>su<sup>31</sup>no<sup>55</sup>(<sup>33</sup>)  
 go downstairs, la<sup>31</sup>ŋ<sup>55</sup>  
 go home, luŋ<sup>55</sup>bu<sup>55</sup>e<sup>31</sup>  
 go home hunting, tɕ<sup>h</sup>im<sup>31</sup>la<sup>53</sup>u<sup>31</sup>  
 go into partnership, a<sup>31</sup>zam<sup>31</sup>  
 go on board, a<sup>31</sup>su<sup>31</sup>dzaŋ<sup>55</sup>  
 go on shore; go on a junk, a<sup>31</sup>su<sup>31</sup>dun<sup>55</sup>ni<sup>55</sup>la<sup>31</sup>ŋ<sup>55</sup>  
 go out, ba<sup>31</sup>se<sup>55</sup>bu<sup>53</sup>  
 go out of the way, xua<sup>31</sup>bu<sup>55</sup>  
 go out; emerge, sɿ<sup>31</sup>la<sup>55</sup>em<sup>55</sup>  
 go out; emerge, bu<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup> bu<sup>31</sup>  
 go past, exceed; pass, a<sup>31</sup>gu<sup>55</sup>; a<sup>31</sup>gu<sup>55</sup>li<sup>53</sup>  
 go to a country, dzɿ<sup>55</sup>za<sup>55</sup>ε<sup>55</sup>  
 go to a market, dzɿ<sup>55</sup>z/za<sup>31</sup>a<sup>55</sup>  
 go to (enter) school, a<sup>31</sup>ŋ<sup>55</sup>va<sup>31</sup>tɕ<sup>h</sup>en<sup>33</sup>bu<sup>55</sup>  
 go upstairs, na<sup>33</sup>k<sup>h</sup>a<sup>55</sup>dzaŋ<sup>55</sup>  
 go with the wind, na<sup>31</sup>bu<sup>31</sup>fin<sup>53</sup>dun<sup>55</sup>  
 goat dung, a<sup>31</sup>be<sup>55</sup>ni<sup>33</sup>  
 goat herder, nō<sup>31</sup>uā<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>53</sup>su<sup>55</sup>  
 goat meat, a<sup>31</sup>be<sup>55</sup>ca<sup>33</sup>  
 goat pen, a<sup>31</sup>be<sup>55</sup>dza<sup>31</sup>xam<sup>55</sup>  
 goat skin, a<sup>31</sup>be<sup>55</sup>sam<sup>31</sup>  
 goat wool, a<sup>31</sup>be<sup>55</sup>min<sup>55</sup>  
 goat, a<sup>31</sup>be<sup>55</sup>, be<sup>55</sup>  
 goat, baby; kid, a<sup>31</sup>be<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>

- goat, female, a<sup>31</sup>be<sup>55</sup> ma<sup>33</sup>  
 goat, male, a<sup>31</sup>be<sup>55</sup> (p<sup>h</sup>u<sup>31</sup>)  
 God, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>  
 god of wealth, mu<sup>31</sup> gam<sup>55</sup> p<sup>h</sup>u<sup>31</sup>iã<sup>33</sup>  
 gold plate, ʃl<sup>33</sup> saŋ<sup>55</sup>  
 gold, yellow, ʃl<sup>33</sup>  
 gold shop, ʃl<sup>33</sup>nen<sup>55</sup>za<sup>55</sup>  
 golden silk thread, ʃl<sup>31</sup> bu<sup>31</sup> buŋ<sup>55</sup>  
 goldsmith, ʃl<sup>33</sup>zɪm<sup>55</sup>su<sup>55</sup>  
 gong, lo<sup>31</sup>  
 Gongshān (County), kuŋ<sup>31</sup>çua<sup>55</sup>  
 gonorrhoea, mu<sup>31</sup>ts<sup>h</sup><sub>1</sub><sup>55</sup>  
 good (as a child), vu<sup>55</sup>na<sup>33</sup>  
 good (person), ʃl<sup>31</sup>la<sup>33</sup>  
 good, well, gam<sup>55</sup>  
 good, ɬa<sup>53</sup> (e<sup>31</sup>), ɬa<sup>33</sup>  
 goods, nen<sup>55</sup>  
 goose, ʔi<sup>55</sup>bu<sup>31</sup>  
 goose, wild, tç<sup>h</sup>a<sup>31</sup>go<sup>55</sup>  
 gore, tç<sup>h</sup>a<sup>31</sup>ŋa<sup>53</sup>di<sup>31</sup>tʃ<sup>h</sup><sub>1</sub><sup>33</sup>  
 gorge, tç<sup>h</sup>a<sup>31</sup>ŋa<sup>53</sup>di<sup>31</sup>tʃ<sup>h</sup><sub>1</sub><sup>33</sup>  
 gossip, to, a<sup>31</sup>ts<sup>h</sup><sub>1</sub><sup>33</sup>  
 gossip, to, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>do<sup>33</sup>mm<sup>31</sup>ʃɪn<sup>31</sup>  
 gossip about failings of others, a<sup>55</sup>du<sup>31</sup>ma<sup>31</sup>du<sup>31</sup>a<sup>31</sup>guŋ<sup>55</sup>  
 gourd ladle, mu<sup>55</sup>dʒim<sup>31</sup>  
 government, ts<sup>h</sup>uŋ<sup>55</sup>fu<sup>53</sup>  
 government office, ia<sup>31</sup> mu<sup>55</sup> (Ch.)  
 grab, arrest, seize, ŋi<sup>31</sup>ŋu<sup>31</sup>, k<sup>h</sup>a<sup>55</sup>ŋi<sup>33</sup>  
 graduate, pi<sup>31</sup>ne<sup>31</sup>ua<sup>55</sup>ʔdʒe<sup>35</sup>  
 graft, to, ʃl<sup>55</sup>dzuŋ<sup>55</sup>a<sup>31</sup>tç<sup>h</sup>in<sup>31</sup>ʔin<sup>35</sup>  
 grain, dʒi<sup>31</sup>za<sup>55</sup>  
 grain, blighted, tç<sup>h</sup>o<sup>55</sup>ʔba<sup>55</sup>  
 grain; cereals, mu<sup>31</sup>dza<sup>31</sup>  
 grains from a distillery, ua<sup>31</sup>saŋ<sup>55</sup>p<sup>h</sup>i<sup>55</sup>  
 grandchild, p<sup>h</sup>u<sup>31</sup>l<sup>55</sup>  
 granddaughter, p<sup>h</sup>u<sup>31</sup>l<sup>55</sup>  
 granary; barn; warehouse, mu<sup>31</sup>dza<sup>31</sup>tç<sup>h</sup>im<sup>31</sup>  
 grandfather (paternal), a<sup>31</sup>k<sup>h</sup>an<sup>31</sup>  
 grandfather, great, a<sup>55</sup>p<sup>h</sup>ʃl<sup>31</sup>  
 grandmother; grandmother, great, a<sup>55</sup>p<sup>h</sup>ʃl<sup>31</sup>  
 grandmother (paternal), a<sup>31</sup>tʃ<sup>h</sup><sub>1</sub><sup>31</sup>  
 grandmother (granny), a<sup>31</sup>ʃa<sup>55</sup>mu<sup>31</sup>  
 grandson, p<sup>h</sup>ɪ<sup>31</sup>l<sup>55</sup>  
 grandson, great, p<sup>h</sup>ʃl<sup>31</sup>l<sup>55</sup>  
 grandson, great great, p<sup>h</sup>ʃl<sup>31</sup>l<sup>55</sup>  
 grape, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>ʃl<sup>55</sup>

- grasp with fingers and thumbs of both hands, k<sup>h</sup>a<sup>55</sup>γa<sup>31</sup>u<sup>55</sup>  
 grass (weeds), çin<sup>33</sup>, a<sup>31</sup>dzi<sup>31</sup>  
 grass flea, çə<sup>55</sup>tsɿ<sup>31</sup>ε<sup>35</sup>  
 grass name, γa<sup>31</sup>iun<sup>55</sup>  
 grass pile, çin<sup>33</sup> buum<sup>33</sup>  
 grass, dogtail, da<sup>31</sup>grɿ<sup>31</sup> ba<sup>31</sup> t<sup>h</sup>un<sup>55</sup>  
 grass, fish smell, dza<sup>31</sup> be<sup>35</sup> yo<sup>31</sup>  
 grass, green, a<sup>31</sup>dzi<sup>31</sup> ua<sup>31</sup> n<sup>u</sup>n<sup>55</sup>  
 grass, wild, çin<sup>55</sup>  
 grassland, meadow, a<sup>31</sup>dzi<sup>31</sup> xan<sup>53</sup>  
 grasshopper, γi<sup>31</sup>t<sup>h</sup>u<sup>31</sup>  
 grave; tomb, da<sup>31</sup>gam<sup>31</sup>  
 gray, zā<sup>31</sup> zā<sup>31</sup> ba<sup>33</sup>  
 gray, p<sup>h</sup>o<sup>55</sup>mo<sup>31</sup>  
 greasy, oily, slippery, γn<sup>u</sup>n<sup>31</sup>  
 greedy, avaricious, n<sup>i</sup>m<sup>31</sup> buum<sup>35</sup>  
 greedy for food, mm<sup>31</sup> dzun<sup>55</sup> se<sup>55</sup>  
 greedy for money, hen<sup>31</sup>  
 Green Jade river, pi<sup>31</sup>tçā<sup>55</sup> (Ch.)  
 green, ni<sup>55</sup>ts<sup>h</sup>γ<sup>35</sup> (Lisu)  
 green beans, do<sup>31</sup> baγ<sup>31</sup>; do<sup>31</sup>bā<sup>31</sup>  
 green beans, mung, nu<sup>55</sup> p<sup>h</sup>u<sup>55</sup>  
 green ridge tree, tsɿ<sup>55</sup>ko<sup>55</sup>  
 greens, k<sup>h</sup>en<sup>33</sup> SEE vegetables  
 grin, dzu<sup>55</sup> se<sup>33</sup>  
 grind, hē<sup>35</sup>ū<sup>31</sup>  
 grind (pestle) (medicine), di<sup>31</sup>gzɿ<sup>31</sup>u<sup>31</sup>  
 grind, mill (rice), xua<sup>31</sup> u<sup>33</sup>  
 grind, mill (rice), la<sup>55</sup>ba<sup>5</sup>  
 grind, mill (rice), dzi<sup>53</sup> (Lisu); su<sup>55</sup>  
 grindstone (water), la<sup>31</sup> t<sup>h</sup>a<sup>55</sup> (Lisu)  
 grindstone, lu<sup>55</sup> su<sup>55</sup>  
 groin, loins, crotch, da<sup>31</sup>ban<sup>31</sup>  
 groom, mē<sup>55</sup>lē<sup>55</sup> p<sup>h</sup>u<sup>31</sup>  
 groom (for horse), mā<sup>31</sup>k<sup>h</sup>en<sup>55</sup>su<sup>55</sup>  
 grope, so<sup>31</sup> γm<sup>55</sup>  
 ground, mu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
 ground floor = descend stairs, la<sup>31</sup>bu<sup>55</sup>p<sup>h</sup>a<sup>55</sup>  
 ground; foundation, tç<sup>h</sup>im<sup>31</sup> za<sup>55</sup>  
 grove, a, t<sup>h</sup>i<sup>55</sup>ts<sup>h</sup>u<sup>31</sup>  
 grow, develop, ma<sup>31</sup> (t<sup>h</sup>ε<sup>55</sup>), ʃa<sup>53</sup>  
 grow, mature, ʃa<sup>53</sup> ni<sup>33</sup>  
 grow up, ʃa<sup>53</sup> ni<sup>33</sup> (older speakers), t<sup>h</sup>ε<sup>55</sup>, t<sup>h</sup>ε<sup>55</sup>  
 gruel; rice water, dā<sup>31</sup> buum<sup>55</sup> ts<sup>h</sup>γ<sup>31</sup>  
 guarantee, to, kua<sup>31</sup>ni<sup>33</sup>xo<sup>31</sup>  
 guarantor; sponsor, po<sup>31</sup>p<sup>h</sup>u<sup>31</sup> (1/2 Chinese)  
 guard, defend, tç<sup>h</sup>u<sup>31</sup> u<sup>31</sup>

- guard, defend, tɕ<sup>h</sup>a<sup>33</sup>se<sup>33</sup>  
 guard, keep watch, tɕ<sup>h</sup>a<sup>33</sup>ʂ<sup>31</sup>  
 guard, watch, t<sup>h</sup>iɛŋ<sup>31</sup>  
 guard, watch (house), na<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>iɛŋ<sup>31</sup> (u)  
 guess (riddle), ts<sup>h</sup>an<sup>55</sup>  
 guess right, di<sup>31</sup>dzaŋ<sup>55</sup>t<sup>h</sup>am<sup>53</sup>  
 guest, mu<sup>31</sup>nam<sup>35</sup>  
 guide, lead the way, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>ɕim<sup>55</sup>u<sup>31</sup>  
 guide, lead the way, go<sup>31</sup>lo<sup>55</sup>ɕu<sup>31</sup>gun<sup>55</sup>  
 guide, leader, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>ɕin<sup>31</sup>nin<sup>55</sup>su<sup>55</sup>  
 guilty, k<sup>h</sup>iŋ<sup>55</sup>a<sup>31</sup>nɛ<sup>31</sup>  
 gully; ravine; valley, k<sup>h</sup>a<sup>33</sup>la<sup>33</sup>k<sup>h</sup>uŋ<sup>31</sup>  
 gum in eyes, ni<sup>55</sup>tɕ<sup>h</sup>u<sup>35</sup>  
 gums, a<sup>31</sup>sa<sup>31</sup>dʒ<sup>55</sup>dɛm<sup>55</sup>  
 gun handle, dʒo<sup>55</sup>k<sup>h</sup>a<sup>33</sup>gu<sup>31</sup>  
 gun, dʒo<sup>55</sup>k<sup>h</sup>a<sup>33</sup>  
 gun, tɕ<sup>h</sup>u<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 gun, pu<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 gunpowder, dʒo<sup>55</sup>k<sup>h</sup>a<sup>33</sup>po<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup> (Lisu)  
 gunpowder; powder, tɕ<sup>h</sup>u<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>nɛ<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>
- haggle over prices, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>ɕan<sup>5</sup>  
 hail, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 hail, in<sup>55</sup>  
 hail, to, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>luŋ<sup>55</sup>dzaŋ<sup>55</sup>  
 hail (people), k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>im<sup>35</sup>  
 hair, mane, feather, min<sup>55</sup>  
 hair (head), a<sup>31</sup>ni<sup>33</sup>  
 hair whorl, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>o<sup>31</sup>.ŋn<sup>55</sup>  
 hair-do, woman's, a<sup>31</sup>ni<sup>33</sup>xuaŋ<sup>55</sup>ʂ<sup>31</sup>  
 haircut knife, a<sup>31</sup>ni<sup>55</sup>ɕi<sup>31</sup>lim<sup>55</sup>dɛm<sup>55</sup>  
 half, t<sup>h</sup>i<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 half a jin, t<sup>h</sup>i<sup>31</sup>k<sup>h</sup>a<sup>55</sup>gam<sup>55</sup>  
 half a jin, p<sup>h</sup>uŋ<sup>31</sup>luŋ<sup>55</sup>  
 half a kilogram, gam<sup>55</sup>  
 half a kilometer, t<sup>h</sup>i<sup>55</sup>du<sup>31</sup>ŋa<sup>55</sup>  
 half a kilometer, ŋi<sup>55</sup>li<sup>53</sup>  
 half a month, ʂ<sup>31</sup>la<sup>55</sup>ti<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 half an armspan, t<sup>h</sup>i<sup>31</sup>le<sup>31</sup>ba<sup>31</sup>  
 half close eye, ŋ<sup>55</sup>tɕ<sup>h</sup>im<sup>55</sup>ni<sup>55</sup>tɕ<sup>h</sup>im<sup>55</sup>u<sup>31</sup>  
 half cooked, nin<sup>31</sup>nin<sup>31</sup>m<sup>31</sup>nin<sup>31</sup>  
 half, smaller, tɕ<sup>h</sup>ɛn<sup>31</sup>t<sup>h</sup>i<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 halfway up a mountain, mo<sup>31</sup>gun<sup>55</sup>ɕi<sup>31</sup>ɕu<sup>3</sup>  
 halfway; midway, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>di<sup>31</sup>  
 hall (in school), li<sup>55</sup>t<sup>h</sup>uŋ<sup>31</sup>  
 ham, ɕa<sup>55</sup>geŋ<sup>55</sup>  
 hammer, a, tɕ<sup>h</sup>e<sup>31</sup>tsu<sup>55</sup>, du<sup>31</sup>bi<sup>55</sup>

- hammer, a, du<sup>31</sup>bi<sup>55</sup>  
 hammer, to, ʔa<sup>31</sup>ʔ<sup>h</sup>an<sup>53</sup>u<sup>31</sup>  
 hamstring, p<sup>h</sup>an<sup>55</sup>di<sup>31</sup>gu<sup>3</sup>  
 Han, hē<sup>31</sup>tʂ<sup>h</sup>l<sup>55</sup>  
 Han language, hēŋ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 Han person, hēŋ<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 hand basket, small, a<sup>31</sup>gi<sup>55</sup>dēm<sup>55</sup>dε<sup>31</sup>bun<sup>55</sup>  
 hand down (to posterity), mu<sup>31</sup>ʂn<sup>31</sup>  
 hand over, du<sup>31</sup>ba<sup>31</sup>u<sup>31</sup>  
 hand, arm, a<sup>31</sup>vu<sup>35</sup>, la<sup>33</sup>  
 handbag, a<sup>31</sup>vu<sup>35</sup>a<sup>31</sup>gi<sup>55</sup>dēm<sup>55</sup>dε<sup>55</sup>gun<sup>55</sup>  
 handful, t<sup>h</sup>i<sup>55</sup>m<sup>31</sup>t<sup>h</sup>om<sup>55</sup>  
 handfuls of (two), a<sup>31</sup>nai<sup>31</sup>bu<sup>55</sup>  
 handful (rice), m<sup>31</sup>guan<sup>55</sup>  
 handkerchief, in<sup>55</sup>çim<sup>33</sup>dēm<sup>55</sup>  
 handsome, beautiful, a<sup>31</sup>nem<sup>55</sup>, make beautiful, çi<sup>31</sup>nem<sup>53</sup>  
 handspan, the length between the thumb and middle finger, bu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
 handspan, the length between the thumb and the index finger, mu<sup>33</sup>kr<sup>33</sup>  
 hang (clothes), ka<sup>55</sup>tç<sup>h</sup>im<sup>31</sup>  
 hang (head), ts<sup>h</sup>o<sup>55</sup>ɣom<sup>55</sup>  
 hang (on wall), tç<sup>h</sup>i<sup>31</sup>ɣmu<sup>55</sup>  
 hang down, droop, dze<sup>55</sup>si<sup>31</sup>  
 hang, to, (bu<sup>55</sup>ie<sup>55</sup>)tç<sup>h</sup>un<sup>31</sup>  
 happen; occur, bā<sup>55</sup>ŋu<sup>55</sup>, lan<sup>53</sup>na<sup>31</sup>  
 happy, glad, ʂi<sup>31</sup>ŋā<sup>35</sup>  
 happy, glad, a<sup>31</sup>lim<sup>31</sup>ʂi<sup>55</sup>  
 hard, k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>55</sup>ve<sup>33</sup>  
 hard, a<sup>31</sup>xun<sup>55</sup>  
 hard secretion from nose, nim<sup>55</sup>k<sup>h</sup>u<sup>55</sup>  
 hard-shelled insect, nō<sup>31</sup>ua<sup>31</sup>du<sup>31</sup>ba<sup>31</sup>  
 hard, distressing, di<sup>31</sup>ça<sup>31</sup>  
 harelip, nai<sup>55</sup>bu<sup>31</sup>gi<sup>55</sup>  
 harmful, ʂi<sup>31</sup>la<sup>31</sup>dēm<sup>55</sup>mε<sup>31</sup>ε<sup>31</sup>  
 harmonica, ma<sup>33</sup>go<sup>33</sup> (one-fingered)  
 harmonica, tʂ<sup>h</sup>u<sup>31</sup>tʂ<sup>h</sup>u<sup>31</sup> (three-fingered)  
 harmonious, amiable, a<sup>31</sup>dū<sup>31</sup>dzi<sup>55</sup>  
 harmony, ça<sup>31</sup>di<sup>31</sup>dzi<sup>55</sup>da<sup>55</sup>  
 harrow (field), a<sup>31</sup>dza<sup>31</sup>  
 harrow, he<sup>31</sup>ŋu<sup>31</sup>; te<sup>31</sup>ŋu<sup>31</sup>; t<sup>h</sup>ε<sup>31</sup>ŋu<sup>31</sup>  
 harvest, cut off, ʂan<sup>53</sup>u<sup>31</sup>  
 harvest, a<sup>31</sup>k<sup>h</sup>om<sup>55</sup>  
 hat, straw, sa<sup>31</sup>ko<sup>55</sup>  
 hat; cap, da<sup>31</sup>mo<sup>55</sup>  
 hatch (chick), bum<sup>55</sup>u<sup>31</sup>; k<sup>h</sup>a<sup>55</sup>bum<sup>55</sup>ε<sup>31</sup>  
 hatch, cause to, du<sup>31</sup>bum<sup>55</sup>  
 hatch, incubate, ba<sup>31</sup>si<sup>31</sup>  
 hatch, incubate, a<sup>31</sup>si<sup>31</sup>u<sup>31</sup>

hate, to, ts<sup>h</sup>o<sup>55</sup> lo<sup>55</sup> (Lisu), min<sup>31</sup>a<sup>31</sup>zɿ<sup>55</sup> ‘bear a grudge’  
 hate to part with, m<sup>31</sup>zaŋu<sup>35</sup>  
 hate, regret, ɲim<sup>35</sup>; ɲim<sup>35</sup>  
 hate, regret, ni<sup>35</sup>bu<sup>53</sup>; ne<sup>35</sup>bu<sup>31</sup>  
 hasten on, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>za<sup>31</sup>ŋu<sup>31</sup>  
 hat; cap, da<sup>31</sup>mo<sup>55</sup>  
 haunches of animal, ŋ<sup>31</sup>ni<sup>55</sup>k<sup>h</sup>u<sup>55</sup>  
 have a haircut, a<sup>31</sup>ni<sup>55</sup>t<sup>h</sup>uŋ<sup>31</sup>se<sup>55</sup>  
 have a haircut, a<sup>31</sup>ni<sup>55</sup>ci<sup>31</sup>lim<sup>31</sup>ɕɿ<sup>55</sup>  
 have a holiday, faŋ<sup>35</sup>tɕa<sup>53</sup>(ni<sup>33</sup>ua<sup>31</sup>)  
 have diarrhea, p<sup>h</sup>a<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>o<sup>35</sup>u<sup>31</sup>, p<sup>h</sup>a<sup>55</sup>a<sup>31</sup>ɕɿ<sup>55</sup>u<sup>31</sup>  
 have a meeting, k<sup>h</sup>ei<sup>55</sup>xue<sup>35</sup>  
 have a runny nose, ɲim<sup>55</sup>a<sup>31</sup>ɕu<sup>31</sup>  
 have a stuffy nose, ɕɿ<sup>31</sup>na<sup>55</sup>k<sup>h</sup>uaŋ<sup>31</sup>ma<sup>31</sup>ŋua<sup>55</sup>  
 have chickenpox, na<sup>55</sup>ɕɿ<sup>55</sup>  
 have cramps, du<sup>31</sup>gu<sup>31</sup>a<sup>31</sup>du<sup>31</sup>gɯŋ<sup>55</sup>  
 have decayed teeth, a<sup>31</sup>sa<sup>31</sup>bu<sup>31</sup>luŋ<sup>55</sup>k<sup>h</sup>i<sup>53</sup>u<sup>31</sup>  
 have diarrhea, (p<sup>h</sup>a<sup>55</sup>)ɕi<sup>31</sup>ɕɿ<sup>55</sup>  
 have diarrhea, p<sup>h</sup>a<sup>55</sup>u<sup>31</sup>tɕ<sup>h</sup>o<sup>35</sup>; p<sup>h</sup>a<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>o<sup>35</sup>u<sup>31</sup>  
 have fever, a<sup>31</sup>k<sup>h</sup>ɛ<sup>55</sup>  
 have headache, a<sup>31</sup>dza<sup>35</sup>  
 have hit (the target), t<sup>h</sup>am<sup>35</sup>ba<sup>33</sup>  
 have indigestion, p<sup>h</sup>u<sup>31</sup>iɛŋ<sup>31</sup>di<sup>31</sup>gi<sup>55</sup>m<sup>31</sup>dzo<sup>31</sup>  
 have leg become lame, di<sup>31</sup>ɕa<sup>31</sup> > di<sup>31</sup>ɕa<sup>31</sup>  
 have located, la<sup>33</sup>t<sup>h</sup>am<sup>55</sup>  
 have money, qa<sup>55</sup>  
 have saliva running out mouth, (tɕ<sup>h</sup>am<sup>55</sup>)a<sup>31</sup>iuŋ<sup>31</sup>  
 have stomach, p<sup>h</sup>a<sup>55</sup>a<sup>31</sup>dza<sup>35</sup>a<sup>55</sup>  
 have the measles, na<sup>55</sup>do<sup>55</sup>  
 have time to, a<sup>31</sup>t<sup>h</sup>ā<sup>55</sup>, qa<sup>31</sup>gaŋ<sup>55</sup>  
 have tuberculosis, i<sup>31</sup>su<sup>55</sup>a<sup>31</sup>dza<sup>35</sup>  
 have wound heal, a<sup>31</sup>iaŋ<sup>55</sup>ɕɿ<sup>31</sup>tɕ<sup>h</sup>ɛŋ<sup>31</sup>ɿdzɛ<sup>35</sup>  
 have wound heal, gam<sup>33</sup>  
 have, not, mɛ<sup>33</sup>ɛ<sup>55</sup>; m<sup>31</sup>an<sup>55</sup>  
 have; be at, a<sup>31</sup>ne<sup>55</sup>  
 have, ŋo<sup>55/33</sup>  
 have; stay; remain, gu<sup>55</sup>nu<sup>31</sup>  
 hawk; kite, t<sup>h</sup>i<sup>31</sup>mu<sup>31</sup>  
 hawk; kite, t<sup>h</sup>i<sup>31</sup>mu<sup>31</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 hawthorne berry, mu<sup>31</sup>nuŋ<sup>55</sup>  
 hay room, hay barn, dza<sup>55</sup>lā<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 hay, ɕin<sup>33</sup>gā<sup>55</sup>  
 hay cutter, a<sup>31</sup>ian<sup>55</sup>dɛm<sup>55</sup>ɕɛm<sup>31</sup>  
 he two, she two, ŋ<sup>31</sup>ŋuŋ<sup>55</sup>si<sup>31</sup>, ɿũ<sup>31</sup>ŋu<sup>55</sup>si<sup>31</sup>  
 he, she, it, ŋ<sup>31</sup>(ɿũ<sup>31</sup>)  
 head, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>

- head of a bed, ɲim<sup>55</sup>za<sup>55</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 headache, dzuŋ<sup>ʔ55</sup>  
 headman, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>dzu<sup>33</sup>su<sup>55</sup>  
 headmaster of school, ɕau<sup>35</sup>tsaŋ<sup>53</sup>  
 heap or stack hay, ɕin<sup>33</sup>buŋ<sup>33</sup>  
 hear, t<sup>h</sup>o<sup>55</sup>a<sup>31</sup>dza<sup>33</sup>  
 heart, ɲi<sup>55/31</sup>ɲum<sup>31</sup>; ɲ<sup>31</sup>ɲi<sup>31</sup>ɲom<sup>31</sup>  
 heart beat, ɲi<sup>31</sup>zɲuŋ<sup>31</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 heart, disease, ɲim<sup>31</sup>a<sup>31</sup>dza<sup>35</sup>  
 heat up (cold rice), ʔa<sup>31</sup>k<sup>h</sup>ɛŋ<sup>31</sup>ɛ<sup>31</sup>  
 heavy, a<sup>31</sup>l<sup>31</sup>(ɛ<sup>31</sup>)  
 hedgehog, hɛ<sup>35</sup>pu<sup>33</sup> (Lisu)  
 heel, ʔa<sup>31</sup>xa<sup>35</sup>zɲu<sup>33</sup>  
 help each other, k<sup>h</sup>u<sup>31</sup>k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>vɛ<sup>33</sup>  
 help, to, di<sup>31</sup>baŋ<sup>31</sup>(u<sup>31</sup>), du<sup>31</sup>gu<sup>53</sup>  
 hemp cord, mi<sup>55</sup>a<sup>31</sup>xuŋ<sup>55</sup>  
 hemp seed, mi<sup>55</sup>iɲ<sup>31</sup>  
 hemp stalk, mi<sup>55</sup>lɔ<sup>55</sup>  
 hemp, mi<sup>55</sup>, i<sup>53</sup>ɲuŋ<sup>55</sup>  
 henceforth; hereafter, mu<sup>55</sup>dzim<sup>31</sup>  
 henceforth; hereafter, ʔo<sup>55</sup>ɲu<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup>  
 hen, k<sup>h</sup>a<sup>ʔ55</sup>ma<sup>33</sup>  
 hen before laying eggs, k<sup>h</sup>a<sup>55</sup>dji<sup>31</sup>p<sup>h</sup>aŋ<sup>31</sup>  
 hen calling her chicks, k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>ɕin<sup>31</sup>ɛ<sup>55</sup>  
 hen's cry before laying eggs, gu<sup>31</sup>da<sup>55</sup>ɛ<sup>31</sup>  
 herd, to, ɲi<sup>31</sup>ɲa<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 herd, to, k<sup>h</sup>o<sup>55</sup>ʔdzɲ<sup>55</sup>a<sup>31</sup>ba<sup>33</sup>  
 herd, to, k<sup>h</sup>ãŋ<sup>31</sup> > k<sup>h</sup>ɛ<sup>31</sup>ba<sup>55</sup>  
 herder, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>53</sup>su<sup>55</sup>  
 herder (goat), a<sup>31</sup>bɛ<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>53</sup>su<sup>55</sup>  
 here, ie<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 here, gam<sup>55</sup>  
 hernia, ɲi<sup>55</sup>k<sup>h</sup>om<sup>55</sup>a<sup>31</sup>dza<sup>33</sup>  
 hibernate, ɲuŋ<sup>55</sup>  
 hiccup, burp, belch, xu<sup>33</sup>u<sup>55</sup>  
 hiccup, to, di<sup>31</sup>guŋ<sup>53</sup>  
 hiccup, to, di<sup>31</sup>gu<sup>31</sup>vɛ<sup>31</sup>  
 hide (thing), ma<sup>55</sup>, ma<sup>55</sup>u<sup>31</sup>  
 hide onself, ma<sup>33</sup>ɕɿ<sup>31</sup>  
 hide, to, lim<sup>55</sup>sɛ<sup>31</sup>, mã<sup>33</sup>ɕɿ<sup>31</sup>  
 high; tall, ua<sup>55</sup>maŋ<sup>31</sup>  
 high and low, from top to bottom, ka<sup>31</sup>t<sup>h</sup>aŋ<sup>35</sup>ka<sup>31</sup>p<sup>h</sup>aŋ<sup>35</sup>  
 highway, main road, ɕi<sup>55</sup>ɿ<sup>31</sup>ɿ<sup>31</sup>t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>  
 highway, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>duŋ<sup>31</sup>  
 hill, mountain, (without vegetation) mo<sup>31</sup>guŋ<sup>55</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 hillside slope, da<sup>31</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>



- hillside, mountain slope, mu<sup>31</sup>gun<sup>55</sup>  
 himself, herself, η<sup>31</sup>luŋ<sup>55</sup>  
 hinder, get in the way, t<sup>h</sup>aŋ<sup>31</sup>u<sup>31</sup>  
 hip bones (ischium), ŋi<sup>31</sup>k<sup>h</sup>u<sup>55</sup> ɕa<sup>33</sup>.ɿu<sup>33</sup>  
 hip, da<sup>31</sup>bun<sup>31</sup>  
 hire, employ, ɣu<sup>55</sup>u<sup>31</sup>tɕ<sup>h</sup>in<sup>31</sup>  
 hire, employ, ɣu<sup>55</sup>tɕ<sup>h</sup>aŋ<sup>31</sup>  
 his, her, η<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 hit (person), slap, a<sup>31</sup>ŋɛ<sup>33</sup>  
 hit, pound, ʔa<sup>31</sup>ŋaŋ<sup>31</sup>u<sup>31</sup>  
 hit target, t<sup>h</sup>am<sup>35</sup>  
 hit the drum, ku<sup>53</sup>a<sup>31</sup>ŋɛ<sup>31</sup>u<sup>31</sup>  
 hit (iron), a<sup>55</sup>um<sup>55</sup>; ɿum<sup>55</sup> -v  
 hit (iron), duŋ<sup>55</sup>  
 hmph = make a loud noise, ŋa<sup>55</sup>ɛ<sup>31</sup>  
 hoarse, be, s'aŋ<sup>55</sup>ben<sup>55</sup>  
 hoe, k<sup>h</sup>o<sup>55</sup>mā<sup>33</sup>  
 hoe, pointed, k<sup>h</sup>o<sup>55</sup>mā<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 hoe, small, k<sup>h</sup>o<sup>55</sup>mā<sup>33</sup>tɕ<sup>h</sup>ɛm<sup>31</sup>  
 hoe, to, ɕin<sup>55</sup>ɕin<sup>31</sup>  
 hoe, wide, k<sup>h</sup>o<sup>55</sup>mā<sup>33</sup>gā<sup>31</sup>  
 hold (child), a<sup>31</sup>tɕ<sup>h</sup>o<sup>55</sup>o<sup>31</sup>; a<sup>31</sup>tɕ<sup>h</sup>u<sup>53</sup>  
 hold a worship ceremony, p<sup>h</sup>u<sup>31</sup>iā<sup>33</sup> mu<sup>31</sup> gu<sup>31</sup>  
 hold between fingers, m<sup>31</sup>t<sup>h</sup>om<sup>53</sup>  
 hold breath, saŋ<sup>55</sup>t<sup>h</sup>aŋ<sup>31</sup>  
 hold danglely in the mouth, dzu<sup>53</sup>ũ<sup>31</sup>  
 hold firmly, p<sup>h</sup>am<sup>31</sup>t<sup>h</sup>om<sup>53</sup>  
 hold funeral, maŋ<sup>31</sup>sa<sup>55</sup>u<sup>31</sup>  
 hold in fist, a<sup>31</sup>vu<sup>35</sup>m<sup>31</sup>t<sup>h</sup>om<sup>53</sup>  
 hold inside mouth, lo<sup>55</sup>mō<sup>31</sup>; lo<sup>55</sup>mo<sup>31</sup>  
 hold (flour), du<sup>31</sup>gom<sup>55</sup>  
 hold out (as a baby to urinate), dzɿ<sup>55</sup>  
 hold up, delay, dzom<sup>55</sup>  
 hold with teeth, be<sup>55</sup>lɛ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 hold up in both hands, mu<sup>31</sup>gud<sup>53</sup>u<sup>31</sup>  
 hold (pen), ɕɿ<sup>31</sup>t<sup>h</sup>in<sup>35</sup>  
 hold (pen), dzom<sup>31</sup>  
 hold in mouth, be<sup>55</sup>lɛ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 hold in mouth, lo<sup>55</sup>mō<sup>31</sup>zom<sup>55</sup>  
 hold, grasp (in fist), a<sup>31</sup>vu<sup>35</sup>m<sup>31</sup>t<sup>h</sup>om<sup>53</sup>  
 hold, grasp (knife handle), p<sup>h</sup>am<sup>31</sup>t<sup>h</sup>om<sup>53</sup>  
 hold, to, ʔa<sup>55</sup>; la<sup>53</sup>u<sup>31</sup>; laŋ<sup>55</sup>  
 hold, to, ɕi<sup>31</sup>t<sup>h</sup>in<sup>35</sup>tu<sup>35</sup>  
 hole in cloth, η<sup>31</sup>k<sup>h</sup>uaŋ<sup>3</sup>  
 hole in dirt, a<sup>31</sup>sa<sup>55</sup>k<sup>h</sup>uā<sup>31</sup>  
 hole; cave, k<sup>h</sup>uā<sup>31</sup>, η<sup>31</sup>k<sup>h</sup>uā<sup>31</sup>  
 hole, η<sup>31</sup>k<sup>h</sup>uā<sup>31</sup>, ʔo<sup>31</sup>k<sup>h</sup>uā<sup>31</sup>

- home, tɕ<sup>h</sup>im<sup>31</sup>duŋ<sup>53/55</sup>  
 honest, frank, ʃɿ<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 honest, trustworthy, lu<sup>31</sup>lu<sup>31</sup>  
 honey, k<sup>h</sup>uɑ<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup> (bee + water),  
 honeycomb, k<sup>h</sup>uɑ<sup>55</sup>p<sup>h</sup>uəm<sup>55</sup>  
 hoof (horse), mā<sup>31</sup>ɡu<sup>31</sup>ŋi<sup>31</sup>  
 hoof, ŋ<sup>31</sup>ɡo<sup>31</sup>ŋin<sup>31</sup>  
 hook, a<sup>55</sup>ɛ<sup>31</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 hook, a, buŋ<sup>31</sup>  
 hook, a, ɣu<sup>31</sup>  
 hook, to, ŋiŋu<sup>31</sup>  
 hook, to, ɣu<sup>31</sup>  
 hook at end of steelyard, ŋi<sup>33</sup>tɕ<sup>h</sup>im<sup>55</sup>dɛm<sup>55</sup>  
 hoop, a<sup>31</sup>lam<sup>31</sup> (dɛ<sup>31</sup>k<sup>h</sup>i<sup>55</sup>)  
 hoop, tɕ<sup>h</sup>uŋ<sup>55</sup>  
 horizon, mu<sup>55</sup>laŋ<sup>31</sup>t<sup>h</sup>aŋ<sup>31</sup> (sky+ t<sup>h</sup>aŋ<sup>31</sup>)  
 horizontal, cross (e.g. cross street), xam<sup>55</sup>dɑŋ<sup>55</sup>  
 horizontal log, xam<sup>33</sup>da<sup>33</sup>  
 horn (e.g. cow), ŋ<sup>31</sup>k<sup>h</sup>u<sup>55</sup>  
 horn (instrument), sau<sup>35</sup>tsɿ<sup>55</sup>  
 hornet; wasp, a<sup>31</sup>i<sup>u</sup><sup>31</sup>, t<sup>h</sup>a<sup>31</sup>lim<sup>31</sup>  
 horse bag, mā<sup>31</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 horse bridle bit, mā<sup>31</sup>ma<sup>55</sup>duŋ<sup>31</sup>dʒuŋ<sup>53</sup>dɛm<sup>55</sup>  
 horse feed, mā<sup>31</sup>dza<sup>55</sup>  
 horse-drawn cart, mā<sup>31</sup>mo<sup>55</sup>do<sup>55</sup>  
 horse, mā<sup>31</sup>, ma<sup>31</sup>  
 horse dung, mɛŋ<sup>31</sup>ŋi<sup>55</sup>  
 horse feed, mā<sup>31</sup>dza<sup>55</sup>  
 horse feed, ɕin<sup>55</sup>ɡɿ<sup>55</sup>  
 horsebeans, no<sup>55</sup>di<sup>31</sup>  
 hospital, nɛ<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 host, ŋ<sup>31</sup>k<sup>h</sup>ɑ<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 hot (water), a<sup>31</sup>k<sup>h</sup>ɛŋ<sup>55</sup>; a<sup>31</sup>k<sup>h</sup>ɛŋ<sup>53</sup>; a<sup>31</sup>k<sup>h</sup>ɛ<sup>55</sup>  
 hot, m<sup>31</sup>dʒuŋ<sup>55</sup>ʃɿ<sup>31</sup>  
 hot, spicy, si<sup>55</sup>; si<sup>35</sup>; si<sup>33</sup>  
 hot (weather), m<sup>31</sup>dʒɑŋ<sup>55</sup>  
 hot spring, tɕ<sup>h</sup>i<sup>31</sup>lim<sup>55</sup>ŋuɑ<sup>31</sup> (Lisu)  
 hot water bottle, sui<sup>55</sup>p<sup>h</sup>iŋ<sup>31</sup>  
 hour, ɡɿ<sup>31</sup>dʒuŋ<sup>55</sup>t<sup>h</sup>i<sup>31</sup>dam<sup>55</sup>; dam<sup>55</sup>  
 house roof, tɕ<sup>h</sup>im<sup>31</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 house spirit, tɕ<sup>h</sup>im<sup>31</sup>p<sup>h</sup>u<sup>31</sup>ia<sup>33</sup>  
 house, tile-roofed, ua<sup>55</sup>lɑ<sup>55</sup>bu<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 house, wooden, ɕuŋ<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 house; family; household; building, tɕ<sup>h</sup>im<sup>31</sup>  
 household, t<sup>h</sup>i<sup>55</sup>bu<sup>35</sup>  
 household cook, bu<sup>55</sup>dʒɑ<sup>31</sup>k<sup>h</sup>i<sup>55</sup>su<sup>55</sup>  
 household (people+house), a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>

- housekeeper, tɕ<sup>h</sup>im<sup>31</sup>k<sup>h</sup>aŋ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 how long (time), k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>a<sup>31</sup>  
 how many/much; several, k<sup>h</sup>a<sup>55</sup>daŋ<sup>55</sup>  
 how much (asking a price), dza<sup>31</sup>ha<sup>31</sup>k<sup>h</sup>a<sup>55</sup>daŋ<sup>55</sup>  
 how much; how many (less than ten), (ie<sup>31</sup>)daŋ<sup>55</sup>(io<sup>55</sup>)  
 how much; how many (more than ten), k<sup>h</sup>a<sup>55</sup>daŋ<sup>55</sup>  
 how?, k<sup>h</sup>a<sup>31</sup>ɕi<sup>55</sup>ua<sup>31</sup>ɕɛm<sup>55</sup>  
 how?, k<sup>h</sup>a<sup>31</sup>di<sup>55</sup>  
 huddle, curl up, k<sup>h</sup>u<sup>55</sup>k<sup>h</sup>u<sup>55</sup>ni<sup>55</sup>me<sup>31</sup>  
 Hui, ʔo<sup>55</sup>ɕa<sup>31</sup>m<sup>31</sup>k<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 hull rice, to, du<sup>53</sup>  
 hulled rice, bu<sup>55</sup>dza<sup>31</sup>si<sup>53</sup>  
 humans, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 hump on cow's neck, nō<sup>31</sup>uā<sup>31</sup>ga<sup>55</sup>lu<sup>31</sup>  
 humpbacked, da<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>di<sup>31</sup>guŋ<sup>55</sup>  
 hunchback, da<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>ɕi<sup>31</sup>guŋ<sup>31</sup>  
 hundred (100), (t<sup>h</sup>i<sup>55</sup>)ɕa<sup>55</sup>, t<sup>h</sup>i<sup>31</sup>he<sup>33</sup> (Lisu)  
 hundreds, ŋ<sup>31</sup>ɕa<sup>33</sup>  
 hundred million, t<sup>h</sup>i<sup>31</sup> (se<sup>35</sup>) mu<sup>31</sup> mu<sup>31</sup>  
 hunchback, da<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>ɕi<sup>31</sup>guŋ<sup>31</sup>  
 hung, be, ɕan<sup>31</sup>ba<sup>55</sup>  
 hungry, (p<sup>h</sup>u<sup>31</sup>.ia<sup>55</sup>) fu<sup>ʔ35</sup>  
 hungry, p<sup>h</sup>u<sup>31</sup>.ia<sup>55</sup>  
 hunt, to, ɕa<sup>33</sup>san<sup>53</sup> (meat+kill)  
 hunter, ɕa<sup>53</sup>k<sup>h</sup>a<sup>33</sup>-su<sup>55</sup>, ɕa<sup>35</sup>k<sup>h</sup>ɛ<sup>35</sup>  
 hunter, ɕa<sup>55</sup>san<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 hunting dog, go<sup>31</sup>ɿ<sup>31</sup>  
 hurry or rush (to hit the road), t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>za<sup>31</sup>u<sup>31</sup>  
 hurt, na<sup>31</sup>, dzaŋ<sup>55</sup>  
 hurt by stinging, iaŋ<sup>53</sup>ua<sup>31</sup>dza<sup>35</sup>ɛ<sup>31</sup>  
 hurt foot (grit in shoe), ɕi<sup>31</sup>ne<sup>31</sup>  
 hurt the skin, a<sup>31</sup>dza<sup>31</sup>a<sup>31</sup>bu<sup>33</sup>  
 husband and wife, ŋ<sup>31</sup>nur<sup>33</sup>suŋ<sup>55</sup>  
 husband of father's sister; aunt, au<sup>53</sup>p<sup>h</sup>a<sup>31</sup>  
 husband, laŋ<sup>31</sup>la<sup>53</sup>za<sup>31</sup>gu<sup>33</sup>  
 husband, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>  
 husband, younger sister's, t<sup>h</sup>a<sup>31</sup>ŋaŋ<sup>55</sup>  
 husband's elder brother, p<sup>h</sup>a<sup>55</sup>dza<sup>55</sup>ma<sup>31</sup>  
 husband's elder sister, p<sup>h</sup>a<sup>55</sup>dza<sup>55</sup>ma<sup>31</sup>  
 husband's father (both terms), a<sup>31</sup>ben<sup>31</sup>  
 husband's father (both terms), a<sup>55</sup>vu<sup>55</sup>  
 husband's mother (both terms), a<sup>31</sup>ni<sup>55</sup>  
 husband's younger brother, p<sup>h</sup>a<sup>55</sup>dza<sup>55</sup>ma<sup>31</sup>  
 husband's younger sister, t<sup>h</sup>a<sup>31</sup>ŋaŋ<sup>55</sup>  
 husband's mother; mother-in-law, a<sup>31</sup>ɿ<sup>35</sup>  
 husbands of sisters, p<sup>h</sup>a<sup>55</sup>dza<sup>55</sup>ma<sup>31</sup>  
 husks (rice), xa<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup>

husks, chaff, ka<sup>31</sup>tai<sup>55</sup>ʔaŋ<sup>31</sup>tseŋ<sup>55</sup>  
 hysterical, a<sup>31</sup>xua<sup>35</sup>u<sup>31</sup>

I, ŋa<sup>31</sup>, a<sup>31</sup>io<sup>31</sup>

I'm sorry. Excuse me. tue<sup>35</sup>pu<sup>31</sup>tɕ<sup>h</sup>i<sup>53</sup> (Ch.)

ice, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>dzun<sup>55</sup>

identical, alike, a<sup>31</sup>du<sup>55</sup>; a<sup>31</sup>bun<sup>55</sup>; t<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>u<sup>33</sup>tɕ<sup>h</sup>u<sup>33</sup> (the same), t<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>o<sup>55</sup>  
 tɕ<sup>h</sup>o<sup>55</sup>, tɕ<sup>h</sup>a<sup>55</sup>,

idle, free time, du<sup>31</sup>gō<sup>55</sup> (ŋa<sup>31</sup>ts<sup>h</sup>ie<sup>55</sup>)

if (=but), le<sup>33</sup>

illegitimate child, hɛ<sup>55</sup>tɕ<sup>h</sup>u<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>

illiterate, ʔi<sup>55</sup>tso<sup>35</sup>m<sup>31</sup>so<sup>53</sup>

imitate, sɿ<sup>31</sup>lam<sup>55</sup>

immediately, at once, dzɿ<sup>31</sup>dza<sup>55</sup>

immediately, a<sup>31</sup>dɛ<sup>33</sup>

impatient, irritable, nim<sup>31</sup>xom<sup>55</sup>

imperative, sɿa<sup>31</sup>zɿa<sup>31</sup>

imperative (IMP), o<sup>31</sup>, le<sup>55</sup>, p<sup>h</sup>u<sup>31</sup>

implant, embed, ɕi<sup>31</sup>ŋɛ<sup>31</sup>, p<sup>h</sup>a<sup>31</sup>da<sup>31</sup>u<sup>31</sup>

important, essential, sɿ<sup>31</sup>di<sup>31</sup>k<sup>h</sup>aŋ<sup>31</sup>, ia<sup>35</sup>tɕi<sup>55</sup> (Ch.)

imprisoned, p<sup>h</sup>am<sup>31</sup>

in addition, a<sup>31</sup>k<sup>h</sup>i<sup>31</sup>

in a mess; in a wretched state, tsau<sup>55</sup>kau<sup>55</sup>

in any case; no matter what, k<sup>h</sup>a<sup>31</sup>dʒi<sup>55</sup>gu<sup>31</sup>ŋi<sup>33</sup>

in excess of (following a number), -ka<sup>31</sup>t<sup>h</sup>aŋ<sup>55</sup>

in great numbers, tɕi<sup>31</sup>t<sup>h</sup>i<sup>53</sup>

in perfect condition, sɿ<sup>31</sup>la<sup>31</sup>nem<sup>55</sup>si<sup>33</sup>si<sup>33</sup>

in place of, in lieu of, ba<sup>31</sup>

in place of, in lieu of, k<sup>h</sup>a<sup>31</sup>

in secret, quietly, ʔi<sup>55</sup>ian<sup>31</sup>k<sup>h</sup>a<sup>53</sup>

in sequence, t<sup>h</sup>i<sup>55</sup>dun<sup>55</sup>dun<sup>53</sup>

in that way, ʔo<sup>31</sup>io<sup>35</sup>le<sup>35</sup>

in the first place... secondly, t<sup>h</sup>i<sup>55</sup>iã<sup>31</sup>ŋu<sup>31</sup>... ʔa<sup>31</sup>ni<sup>33</sup>iã<sup>31</sup>nɿ<sup>31</sup>...

in the future, ʔi<sup>55</sup>zan<sup>31</sup>

in the past, iã<sup>31</sup>

in turn, a<sup>31</sup>tɕ<sup>h</sup>in<sup>55</sup>sɿ<sup>31</sup>

in unison, together, da<sup>33</sup>si<sup>55</sup>

in vain; for nothing, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>ua<sup>33</sup>

inanimate, ma<sup>31</sup>ŋɛn<sup>55</sup>ua<sup>33</sup>

incense, ɕo<sup>55</sup>

incense burner, ɕo<sup>55</sup>va<sup>53</sup>dem<sup>55</sup>

incessantly, ma<sup>31</sup>t<sup>h</sup>an<sup>55</sup>uã<sup>33</sup>

inch, ts<sup>h</sup>uẽ<sup>35</sup> (Ch.)

inchoative (INCH), -a<sup>31</sup>ni<sup>55</sup>, a<sup>31</sup>ni<sup>35</sup>

incisors, front teeth, ma<sup>55</sup>su<sup>31</sup>k<sup>h</sup>a<sup>55</sup>a<sup>31</sup> (bu<sup>31</sup>dzɿ<sup>55</sup>)

incite, provoke, k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>o<sup>53</sup>ʔo<sup>33</sup>, tse<sup>31</sup>le<sup>33</sup> (Lisu)

incite to contention, k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>o<sup>53</sup>ʔo<sup>33</sup>

- incorrect; wrong, ma<sup>31</sup>du<sup>31</sup>  
 including, ηε<sup>31</sup>ηaŋ<sup>55</sup>, ta<sup>55</sup>ti<sup>55</sup>  
 increase, buɯ<sup>31</sup>a<sup>31</sup>ηa<sup>55</sup>  
 increase, sa<sup>33</sup>mo<sup>31</sup>  
 increase, a<sup>31</sup>nun<sup>55</sup>u<sup>31</sup>  
 increase, gain, η<sup>31</sup>dzan<sup>55</sup>dzan<sup>33</sup>  
 indeed, to one's pleasant surprise, η<sup>31</sup>li<sup>55</sup>  
 index finger, ηi<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>  
 India ink (fluid), me<sup>31</sup>tɕ<sup>h</sup>η<sup>31</sup>  
 Indian, mien<sup>55</sup>tien<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 indicative particle (IND), ε<sup>31</sup>  
 indirectly opposite, di<sup>55</sup>tɕ<sup>h</sup>η<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 inexperienced, ɕoŋ<sup>55</sup>ɕo<sup>55</sup>ηε<sup>55</sup> < 'tender'  
 individually, η<sup>31</sup>luŋ<sup>35</sup>η<sup>31</sup>  
 individuals, ua<sup>55</sup>tɕ<sup>h</sup>o<sup>55</sup>maŋ<sup>31</sup>  
 infect, to, a<sup>31</sup>tɕ<sup>h</sup>in<sup>55</sup>ɕ<sup>31</sup>  
 infected, ʔa<sup>31</sup>ga<sup>55</sup>ʔdʒε<sup>35</sup>  
 inflate, saŋ<sup>55</sup>a<sup>31</sup>t<sup>h</sup>a<sup>31</sup>  
 infuse tea, la<sup>31</sup>tɕa<sup>55</sup>dʒuŋ<sup>53</sup>ts<sup>h</sup>η<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 ingredient for Chinese medicine (rhizome?), ta<sup>55</sup>xuaŋ<sup>31</sup>  
 ingroup, a<sup>31</sup>ni<sup>35</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 inhale, ʔa<sup>31</sup>xa<sup>55</sup>ɕ<sup>31</sup>  
 inherit, bu<sup>31</sup>ɕŋ<sup>31</sup>; bu<sup>31</sup>ɕŋ<sup>55</sup>  
 initiate, pioneer, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>ɕin<sup>31</sup>  
 injection, give, t<sup>h</sup>u<sup>55</sup>  
 injection, have, ʔuam<sup>55</sup>ɕaŋ<sup>53</sup>u<sup>31</sup>  
 injure arm, ʔa<sup>31</sup>dza<sup>35</sup>a<sup>31</sup>ba<sup>33</sup>  
 ink, Chinese, me<sup>31</sup>tɕ<sup>h</sup>η<sup>31</sup>, me<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup> (1/2 Ch.)  
 ink, me<sup>31</sup>sue<sup>53</sup> (Ch.)  
 ink box, me<sup>31</sup>ʔo<sup>31</sup>  
 inn, mu<sup>31</sup>nen<sup>55</sup>ηim<sup>55</sup>za<sup>55</sup>  
 inner side of elbow = elbow, a<sup>31</sup>vu<sup>35</sup>du<sup>31</sup>k<sup>h</sup>aŋ<sup>55</sup>  
 insect, bu<sup>31</sup>luŋ<sup>55</sup>; bu<sup>31</sup>luŋ<sup>55</sup>  
 insect becoming pupa, a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 insect, hard-shelled, nɔ̃<sup>31</sup>ua<sup>31</sup>du<sup>31</sup>ba<sup>31</sup>  
 insect which eats bamboo or wood; silverfish, riceworm, ɕuŋ<sup>55</sup>lom<sup>33</sup>  
 insert (in dirt), tɕ<sup>h</sup>a<sup>55</sup>ηu<sup>31</sup>, tɕ<sup>h</sup>aŋ<sup>35</sup>, tɕ<sup>h</sup>a<sup>35</sup>; ka<sup>31</sup>tɕ<sup>h</sup>η<sup>31</sup>mo<sup>33</sup>, di<sup>33</sup>iaŋ<sup>35</sup>  
 inside corner, ɕ<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>, ʔi<sup>55</sup>ku<sup>33</sup> (Lisu)  
 inside corner, pu<sup>55</sup>tan<sup>33</sup>p<sup>h</sup>o<sup>31</sup>ɕ<sup>31</sup>  
 inside of knee, ba<sup>31</sup>p<sup>h</sup>in<sup>55</sup>dzi<sup>31</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 inside, ʔi<sup>55</sup>duŋ<sup>33</sup>, duŋ<sup>55</sup>, duŋ<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 install, erect, di<sup>31</sup>dzuŋ<sup>55</sup>, an<sup>55</sup>tsuan<sup>55</sup> (Ch.)  
 install, sa<sup>31</sup>u<sup>31</sup>  
 install; fix, an<sup>55</sup>tsuan<sup>55</sup>  
 instantive (As soon as X, Y), tɕ<sup>h</sup>a<sup>31</sup>... t<sup>h</sup>a<sup>35</sup>  
 instep, ʔa<sup>31</sup>xa<sup>35</sup>t<sup>h</sup>aŋ<sup>55</sup>

- instigate, incite, k<sup>h</sup>u<sup>31</sup>k<sup>h</sup>o<sup>55</sup>iē<sup>31</sup>k<sup>h</sup>a<sup>55</sup> tse<sup>31</sup>lē<sup>31</sup>ŋi<sup>33</sup>γa<sup>35</sup>  
instrumental (INSTR), mi<sup>55</sup>  
instrumental (INSTR), mi<sup>53</sup>qun<sup>31</sup>  
instrumental (INSTR), dzom<sup>31</sup>/dzum<sup>31</sup>ŋ<sup>55</sup>  
intelligent, bright, clever, ŋ<sup>31</sup> qa<sup>55</sup> u<sup>33</sup>  
intention, i<sup>35</sup>ŋ<sup>55</sup>  
intentionally, ma<sup>31</sup> ma<sup>31</sup> t<sup>h</sup>i<sup>55</sup>  
intercede, to, a<sup>31</sup>du<sup>55</sup>ɔ̃dzē<sup>35</sup>  
intercept, stop, to, ga<sup>55</sup>t<sup>h</sup>am<sup>53</sup>  
interest (money), γa<sup>31</sup>k<sup>h</sup>au<sup>55</sup>  
interest (money), ŋ<sup>31</sup>dzan<sup>55</sup>  
interest, profit, ɬa<sup>31</sup>dēm<sup>55</sup>  
interjection, γo<sup>55</sup>ue<sup>31</sup> (praise and admiration)  
interjection, tse<sup>31</sup> (regret or sympathy)  
interjection, pfu<sup>31</sup> (disagreement or a negative response)  
interjection, ẽ<sup>31</sup> (sigh with emotion)  
interjection, ũ<sup>31</sup> (shows understanding)  
interjection, p<sup>h</sup>e<sup>53</sup>! (phish! usually shows contempt)  
interjection, ŋ<sup>31</sup>ŋ<sup>35</sup> (expresses displeasure)  
interjection, γo<sup>55</sup>, na<sup>53</sup> (to get listener's attention)  
interjection, fiē<sup>55</sup> (sigh, futility)  
interjection, a<sup>55</sup>γu<sup>55</sup>! (hey! (see grammar))  
interjection, ɕa<sup>55</sup>, a<sup>55</sup>mi<sup>55</sup>, a<sup>55</sup>tɕu<sup>33</sup> (surprised, thrilled, stunned)  
interjection, a<sup>55</sup>iun<sup>55</sup> (ouch)  
interjection, a<sup>33</sup>tɕu<sup>33</sup>! (Gosh!)  
interjection, a<sup>31</sup>la<sup>55</sup>, la<sup>55</sup>iun<sup>55</sup> (pain, discomfort)  
interpret, k<sup>h</sup>a<sup>55</sup>ɕi<sup>31</sup>ŋin<sup>55</sup>  
intestinal worm, p<sup>h</sup>a<sup>55</sup>bu<sup>31</sup>zon<sup>31</sup>  
intestine, large, p<sup>h</sup>u<sup>31</sup>iū<sup>55</sup> ŋan<sup>55</sup>  
intestine, small, p<sup>h</sup>u<sup>31</sup>iū<sup>55</sup> ba<sup>55</sup>  
intestines, p<sup>h</sup>u<sup>31</sup>iū<sup>55</sup>  
introduce, present (people), ɕi<sup>31</sup> ŋin<sup>55</sup>  
inundate, to, ŋim<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
invitation, p<sup>h</sup>i<sup>55</sup>dza<sup>55</sup>  
invite, entertain (guests), tɕ<sup>h</sup>ã<sup>31</sup> ỹ<sup>31</sup>  
invoice, fa<sup>31</sup>p<sup>h</sup>iau<sup>35</sup> (Ch.)  
involuntary, ŋi<sup>55</sup>luŋ<sup>55</sup> sam<sup>31</sup>a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
iron, ɕa<sup>31</sup>k<sup>h</sup>an<sup>55</sup> > ɕa<sup>31</sup>k<sup>h</sup>ē<sup>55</sup>  
iron, wrought, xu<sup>55</sup>mi<sup>55</sup>  
iron, wrought, ɕa<sup>31</sup>k<sup>h</sup>ē<sup>55</sup>ŋin<sup>55</sup>  
irrigate, a<sup>31</sup>tɕ<sup>h</sup>em<sup>53</sup>  
issue salary, γu<sup>55</sup>di<sup>31</sup>p<sup>h</sup>u<sup>55</sup>dzɿ<sup>53</sup>u<sup>31</sup>  
it sells well, nɛm<sup>33</sup>san<sup>55</sup>ɛ<sup>31</sup>  
itch, bu<sup>31</sup>san<sup>55</sup>  
itch, have, k<sup>h</sup>a<sup>55</sup>dē<sup>31</sup>dzu<sup>55</sup>  
ivory, mo<sup>31</sup>gu<sup>31</sup>a<sup>31</sup>sa<sup>31</sup>

- jack-of-all-trades, ka<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>gu<sup>31</sup>so<sup>55</sup>mu<sup>53</sup>  
 jackal, yi<sup>31</sup>t<sup>h</sup>o<sup>35</sup> (Lisu)  
 jackal, i<sup>31</sup>ʔdzun<sup>55</sup>  
 jacket, lined, a<sup>31</sup>ni<sup>33</sup>ci<sup>31</sup>lim<sup>33</sup>  
 jade, y<sup>35</sup>ʂɿ<sup>31</sup>  
 jail, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>p<sup>h</sup>am<sup>55</sup>za<sup>55</sup>  
 jailor, p<sup>h</sup>am<sup>31</sup>ba<sup>31</sup>tɕ<sup>h</sup>im<sup>35</sup>su<sup>55</sup>  
 January, t<sup>h</sup>i<sup>55</sup>la<sup>33</sup>, t<sup>h</sup>i<sup>55</sup>ʂɿ<sup>31</sup>la<sup>55</sup>  
 jar, earthen, tɕ<sup>h</sup>un<sup>55</sup>  
 jar, earthenware, sa<sup>55</sup>dem<sup>55</sup>  
 jar, large and open-mouthed, be<sup>31</sup>t<sup>h</sup>ɿ<sup>55</sup>  
 jar, large and open-mouthed, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>35</sup>ɕun<sup>55</sup>ɕem<sup>55</sup>  
 jaw bone, mu<sup>31</sup>ɣam<sup>55</sup>  
 jaw; chin; cheek, mu<sup>31</sup>gi<sup>31</sup>  
 jealous, envious, ni<sup>55</sup>ŋan<sup>55</sup>  
 jealous, envious, nim<sup>31</sup>zɿ<sup>55</sup>u<sup>31</sup>  
 jewelry, a<sup>31</sup>bɿ<sup>55</sup>dem<sup>55</sup>  
 Jiarong, ŋ<sup>31</sup>ʂɿ<sup>55</sup>  
 jiggle the feet, a<sup>31</sup>nem<sup>55</sup>  
 jin, a measure of, gam<sup>55</sup>; t<sup>h</sup>i<sup>31</sup>gam<sup>55</sup>  
 jins, two, a<sup>31</sup>ni<sup>55</sup>gam<sup>55</sup>  
 Job's tears, tɕ<sup>h</sup>a<sup>31</sup>m<sup>55</sup>bu<sup>31</sup>si<sup>31</sup>  
 join two ends of rope, ʂɿ<sup>31</sup>t<sup>h</sup>in<sup>55</sup>  
 join, attend, zam<sup>31</sup>ʂɿ<sup>55</sup>, ts<sup>h</sup>an<sup>55</sup>tɕa<sup>55</sup> (Ch.)  
 join, link, ne<sup>55</sup>k<sup>h</sup>ua<sup>31</sup>  
 joint, ŋ<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>  
 joke, a<sup>31</sup>tʂ<sup>h</sup>ɿ<sup>55</sup>  
 joke (verbally), le<sup>31</sup>ʂɿ<sup>31</sup>t<sup>h</sup>i<sup>55</sup>in<sup>55</sup>le<sup>31</sup>ʂɿ<sup>31</sup>a<sup>31</sup>xi<sup>55</sup>  
 joyful, delighted, ŋa<sup>31</sup>ɛ<sup>55</sup>  
 jug; jar; can, de<sup>31</sup>tɕ<sup>h</sup>u<sup>55</sup>  
 jug, tɕ<sup>h</sup>un<sup>55</sup>  
 judge, a, k<sup>h</sup>a<sup>55</sup>ni<sup>55</sup>su<sup>55</sup>  
 judge, to, k<sup>h</sup>a<sup>55</sup>ni<sup>55</sup>u<sup>31</sup>  
 juice, tʂ<sup>h</sup>ɿ<sup>31</sup>  
 July, ʂɿ<sup>55</sup>la<sup>55</sup>  
 jump, ʂɿ<sup>31</sup>lam<sup>55</sup>  
 jump, t<sup>h</sup>i<sup>31</sup>zɿ<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 jump, lu<sup>31</sup>tu<sup>35</sup>a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 jump, descend, k<sup>h</sup>o<sup>31</sup>k<sup>h</sup>om<sup>55</sup>  
 jump rope, a<sup>31</sup>xun<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 June, ku<sup>55</sup>la<sup>55</sup>  
 just now, tɕ<sup>h</sup>ɛ<sup>31</sup>mɛ<sup>55</sup>sa<sup>55</sup>nu<sup>31</sup>  
 just now, iɛ<sup>55</sup>san<sup>31</sup>nu<sup>31</sup>  
 just now; a moment ago, tɕ<sup>h</sup>ɛ<sup>31</sup>mɛ<sup>55</sup>

keep company with, ŋ<sup>31</sup>da<sup>55</sup>tʂ<sup>h</sup>a<sup>55</sup>xua<sup>31</sup>ʂɿ<sup>31</sup>  
 keep for oneself, ga<sup>35</sup>u<sup>31</sup>

- keep secret; conceal, maŋ<sup>53</sup>ũ<sup>31</sup>  
 keep, to, k<sup>h</sup>ε<sup>55</sup>geŋ<sup>31</sup>  
 kernel, de<sup>31</sup>gɾ<sup>55</sup>qan<sup>31</sup>  
 kernel, nut, ŋ<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>, ʔo<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 kerosene, tã<sup>35</sup>ts<sup>h</sup>u<sup>31</sup> (Burmese)  
 kerosene, me<sup>31</sup>i<sup>u</sup><sup>31</sup>  
 kettle, pot, sui<sup>55</sup>fu<sup>31</sup> (Ch.)  
 key, (a<sup>31</sup>)p<sup>h</sup>i<sup>35</sup>du<sup>55</sup>  
 key, su<sup>55</sup>t<sup>h</sup>u<sup>31</sup>  
 kick, (a<sup>31</sup>)dʒim<sup>55</sup> (u<sup>31</sup>); dim<sup>55</sup>  
 kick (as a horse), ma<sup>31</sup>di m<sup>53</sup>  
 kid (goat), a<sup>31</sup>bε<sup>55</sup>tç<sup>h</sup>εn<sup>31</sup>  
 kidney, ʔŋ<sup>31</sup>ts<sup>h</sup>ɿ<sup>31</sup>za<sup>55</sup>  
 kidney = lungs, i<sup>31</sup>su<sup>55</sup>  
 kill (chicken), san<sup>55</sup> (u<sup>31</sup>)  
 kiln, charcoal, xun<sup>31</sup>su<sup>31</sup>mu<sup>55</sup>za<sup>55</sup>  
 kind, good, decent, ŋim<sup>31</sup>ʂ<sup>31</sup>la<sup>33</sup>  
 kind, polite, amiable, ŋuŋ<sup>55</sup>ε<sup>31</sup>  
 kind of medicine, taŋ<sup>55</sup>kui<sup>55</sup>  
 kindling, tinder, tç<sup>h</sup>ε<sup>31</sup>mi<sup>55</sup>lim<sup>53</sup>  
 kinds, tç<sup>h</sup>ɿ<sup>31</sup>  
 kiss (a child), tç<sup>h</sup>im<sup>55</sup>  
 kitchen ashes, p<sup>h</sup>u<sup>31</sup>ie<sup>31</sup>  
 kitchen god (rock spirit), xua<sup>55</sup>tç<sup>h</sup>ɿ<sup>31</sup>  
 kitchen, a<sup>31</sup>gɾ<sup>55</sup>k<sup>h</sup>in<sup>55</sup>tç<sup>h</sup>im<sup>31</sup>  
 kitchen stove, mu<sup>55</sup>z/zam<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 kite (bird), t<sup>h</sup>i<sup>31</sup>mu<sup>31</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 kitten, mu<sup>31</sup>ni<sup>31</sup>tç<sup>h</sup>εn<sup>31</sup>  
 knead (food), p<sup>h</sup>a<sup>31</sup>na<sup>31</sup>ŋu<sup>31</sup>  
 knead (dough), a<sup>31</sup>na<sup>31</sup>u<sup>31</sup>  
 knead (dough), a<sup>31</sup>tç<sup>h</sup>uŋ<sup>31</sup>  
 knee cap, ba<sup>31</sup>p<sup>h</sup>in<sup>55</sup>da<sup>31</sup>k<sup>h</sup>am<sup>55</sup>  
 knee, ba<sup>31</sup>p<sup>h</sup>in<sup>55</sup> (p<sup>h</sup>a<sup>31</sup>pi<sup>55</sup>)  
 kneel, gu<sup>31</sup>ŋi<sup>55</sup>  
 knife back, çem<sup>31</sup>da<sup>31</sup>guŋ<sup>31</sup>  
 knife blade, çem<sup>31</sup>sa<sup>31</sup>  
 knife face, çem<sup>31</sup>p<sup>h</sup>am<sup>55</sup>  
 knife for cutting hair, a<sup>31</sup>ni<sup>55</sup>ci<sup>31</sup>lim<sup>55</sup>dem<sup>55</sup> (ci<sup>55</sup>tç<sup>h</sup>uŋ<sup>55</sup>)  
 knife for hay cutting, a<sup>31</sup>ɾan<sup>55</sup>dem<sup>55</sup>çem<sup>31</sup>  
 knife handle, çem<sup>31</sup>da<sup>31</sup>guŋ<sup>31</sup>dʒɿn<sup>55</sup>  
 knife opening, çem<sup>31</sup>sa<sup>31</sup>  
 knife point, çem<sup>31</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 knife, çem<sup>31</sup>  
 knife, dɔŋ<sup>55</sup>  
 knife, ci<sup>55</sup>tç<sup>h</sup>ɿ<sup>33</sup>, ci<sup>35</sup>tç<sup>h</sup>ɿ<sup>31</sup>  
 knife, long, dʒa<sup>31</sup>ma<sup>31</sup>  
 knife point, çem<sup>31</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>



- knife, short, ɕem<sup>31</sup> t<sup>h</sup>an<sup>55</sup> dɔŋ<sup>55</sup>  
 knife, small, ɕi<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>33</sup>  
 knife, short sword, ɕem<sup>31</sup> t<sup>h</sup>an<sup>55</sup> dɔŋ<sup>55</sup>  
 knife, vegetable, k<sup>h</sup>en<sup>33</sup> a<sup>31</sup> zan<sup>55</sup> dem<sup>55</sup>, ɕem<sup>31</sup>  
 knit, to (cf. braid), ʔban<sup>53</sup>  
 knit the eyebrows, ma<sup>55</sup> tɕɿŋ<sup>55</sup> du<sup>31</sup>  
 knight, legendary, le<sup>31</sup> bu<sup>55</sup>  
 knit (eyebrows), ma<sup>55</sup> tɕɿŋ<sup>55</sup> du<sup>3</sup>  
 knitting needle, ie<sup>31</sup> ni<sup>55</sup>  
 knitting needle, ŋ<sup>31</sup> t<sup>h</sup>im<sup>55</sup>  
 knitting wool, ɕa<sup>55</sup> min<sup>31</sup> buŋ<sup>55</sup>  
 knock against, beat, ɣom<sup>55</sup>  
 knock at door, na<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> a<sup>31</sup> ŋaŋ<sup>31</sup> u<sup>31</sup>  
 knot; button, ga<sup>55</sup> ta<sup>55</sup>  
 knot on string/rope, ŋ<sup>31</sup> t<sup>h</sup>im<sup>55</sup>, t<sup>h</sup>im<sup>55</sup>  
 knot, to, ŋ<sup>31</sup> t<sup>h</sup>im<sup>55</sup> t<sup>h</sup>im<sup>33</sup>, t<sup>h</sup>im<sup>55</sup>  
 knotty, di<sup>31</sup> ɕa<sup>55</sup>  
 know (things), a<sup>31</sup> ŋuŋ<sup>31</sup> u<sup>31</sup>  
 know, ni<sup>55</sup>, cause to, ɕi<sup>31</sup> ni<sup>55</sup>  
 know, recognize, a<sup>31</sup> so<sup>55</sup>  
 know; understand, so<sup>53</sup>  
 knuckles, (a<sup>31</sup> vu<sup>55</sup>) ni<sup>31</sup> tɕ<sup>h</sup>im<sup>55</sup> tɕ<sup>h</sup>i<sup>31</sup> ni<sup>55</sup>  
 Kong Mountain, kuŋ<sup>31</sup> ɕua<sup>55</sup>  
 kowtow, to, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> t<sup>h</sup>im<sup>31</sup> ɕɿ<sup>33</sup>  
 Kunming, k<sup>h</sup>u<sup>55</sup> min<sup>31</sup> (Ch.)
- lace, ɕuŋ<sup>55</sup> ven<sup>55</sup> ma<sup>55</sup> xuŋ<sup>55</sup>  
 lace (shoes), gɿ<sup>31</sup>  
 lack, be short of, k<sup>h</sup>o<sup>55</sup> gi<sup>55</sup>  
 lacquer, tɕɿ<sup>55</sup> dzɿ<sup>31</sup>  
 lacquerware, tɕɿ<sup>55</sup> dzɿ<sup>31</sup> a<sup>31</sup> ma<sup>55</sup> so<sup>31</sup> mu<sup>53</sup>  
 ladder, luŋ<sup>31</sup> dɔŋ<sup>53</sup> -v  
 laddle, wooden, mu<sup>55</sup> dzim<sup>31</sup>  
 ladle water, bail, doŋ<sup>53</sup> u<sup>55</sup>, do<sup>55</sup>  
 ladle, scoop out, k<sup>h</sup>am<sup>53</sup>  
 lake, ɕa<sup>55</sup> dɔm<sup>55</sup>, tɕ<sup>h</sup>ɿ<sup>31</sup> dɔm<sup>55</sup>  
 lamb, a<sup>31</sup> iaŋ<sup>31</sup> tɕ<sup>h</sup>en<sup>31</sup>  
 lame, di<sup>31</sup> ɕa<sup>31</sup>  
 lame person; cripple, ʔa<sup>31</sup> xa<sup>35</sup> di<sup>31</sup> ɕa<sup>31</sup>  
 lamp (oil lamp), tɕ<sup>h</sup>ɿ<sup>31</sup> mi<sup>55</sup> ve<sup>33</sup> dem<sup>55</sup>  
 lamp, hanging, bu<sup>55</sup> le<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>31</sup>, tɕ<sup>h</sup>i<sup>31</sup> ʔmu<sup>55</sup>  
 land boundary, mu<sup>31</sup> du<sup>31</sup> xaŋ<sup>53</sup>  
 land, once cultivated but now abandoned, zɿ<sup>31</sup> buŋ<sup>55</sup>  
 land, to, di<sup>31</sup> tɕ<sup>h</sup>iŋ<sup>55</sup> ba<sup>31</sup> sam<sup>53</sup>  
 land plane, ʔa<sup>31</sup> ŋaŋ<sup>35</sup> iaŋ<sup>35</sup> ɕɿ<sup>31</sup> la<sup>31</sup> di<sup>35</sup>  
 land (virgin), tɕ<sup>h</sup>u<sup>31</sup> ɣa<sup>31</sup>  
 landowner, ti<sup>35</sup> tsu<sup>53</sup>

- landslide, a<sup>31</sup> diŋ<sup>55</sup>  
 lane, alley, dzɿ<sup>55</sup> tɕ<sup>h</sup>ɛŋ<sup>31</sup>  
 language, k<sup>h</sup>a<sup>55/33</sup>  
 lap, p<sup>h</sup>an<sup>55</sup> t<sup>h</sup>uŋ<sup>31</sup>  
 lapel, front of Chinese jacket, bɛ<sup>31</sup>lɛ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 lard; pig fat, ʔo<sup>55</sup> su<sup>53</sup>  
 largely, t<sup>h</sup>a<sup>31</sup>lu<sup>55</sup>  
 last month, ma<sup>55</sup> su<sup>31</sup>k<sup>h</sup>a<sup>55</sup>ɣɿ<sup>31</sup>la<sup>55</sup>  
 last night, tɕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>ɣɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 last one, ŋ<sup>31</sup>t<sup>h</sup>an<sup>55</sup>t<sup>h</sup>an<sup>33</sup>t<sup>h</sup>i<sup>55</sup>nu<sup>31</sup>  
 last, ʔi<sup>55</sup>ian<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 late (come late), tɕ<sup>h</sup>ɿ<sup>31</sup>tau<sup>55</sup> (Ch.)  
 late, ko<sup>55</sup>mm<sup>31</sup>dzɿ<sup>55</sup>(a<sup>31</sup>ba<sup>31</sup>)  
 later, ʔi<sup>31</sup>p<sup>h</sup>an<sup>55</sup>  
 later, ʔi<sup>55</sup>ian<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 later generation, p<sup>h</sup>u<sup>31</sup>la<sup>55</sup>  
 laterite (red soil or clay), a<sup>31</sup>sa<sup>55</sup>bu<sup>31</sup>se<sup>55</sup>  
 laugh, to, (a<sup>31</sup>)xi<sup>55</sup>  
 laugh, to, ʔa<sup>31</sup>xa<sup>31</sup>o<sup>55</sup>  
 laundryman, ga<sup>31</sup>mu<sup>31</sup>ʔa<sup>31</sup>dʒɛŋ<sup>55</sup>su<sup>55</sup>  
 lax, loose, slack, gu<sup>55</sup>ɛ<sup>31</sup>  
 lay aside, tɕ<sup>h</sup>o<sup>33</sup>ua<sup>33</sup>da<sup>33</sup>  
 lay bricks, dʒi<sup>31</sup>dzuŋ<sup>31</sup>  
 lay egg, lim<sup>35</sup>(u<sup>31</sup>)  
 lay foundation, tɕ<sup>h</sup>im<sup>31</sup>za<sup>55</sup>du<sup>33</sup>u<sup>31</sup>/dv<sup>33</sup>u<sup>31</sup>  
 lazy, a<sup>31</sup>ba<sup>55</sup>; a<sup>31</sup>bɛŋ<sup>53</sup>  
 lazy, ʔŋ<sup>31</sup>bu<sup>55</sup>  
 lazy, a<sup>31</sup>lim<sup>31</sup>ɣɿ<sup>55</sup>  
 lead (cow), ɕin<sup>31</sup>; ɕi<sup>31</sup>nuŋ<sup>31</sup>  
 lead, guide, to, ɕi<sup>31</sup>no<sup>31</sup>; ɕin<sup>31</sup>; ɕin<sup>31</sup>u<sup>31</sup>; ʔa<sup>31</sup>ɕin<sup>33</sup>  
 leaf lettuce, k<sup>h</sup>ɛŋ<sup>55</sup>mu<sup>31</sup>ŋan<sup>31</sup>  
 leaf (tree), dzi<sup>33</sup>ɕɛm<sup>55</sup>  
 leaf; clf. for two dimensional flat rigid things, ɕɛm<sup>55</sup>  
 leak (water), a<sup>31</sup>i<sup>55</sup>u<sup>31</sup>  
 lean (meat), skinny (person), nɛ<sup>33</sup>  
 lean on, nam<sup>33</sup>ɣɿ<sup>31</sup>  
 lean on pillow, ma<sup>55</sup>k<sup>h</sup>om<sup>33</sup>k<sup>h</sup>a<sup>31</sup>nam<sup>55</sup>ɣɿ<sup>31</sup>  
 learn, tɕ<sup>h</sup>ɛŋ<sup>31</sup>  
 learn to read and write (elementary school), ɕy<sup>31</sup>ɕy<sup>31</sup>, ɕye<sup>31</sup>ɕi<sup>31</sup> (Ch.)  
 leather clothing, ɕa<sup>55</sup>sam<sup>31</sup>ga<sup>31</sup>mu<sup>31</sup>  
 leather shoes, ɕa<sup>55</sup>sam<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>33</sup>ni<sup>33</sup>  
 leave, tɕ<sup>h</sup>ɿ<sup>55</sup>se<sup>31</sup>  
 leave security, po<sup>33</sup>  
 leave security, dzɿ<sup>35</sup>nei<sup>55</sup>io<sup>55</sup>  
 leave with (in somebody's care), a<sup>31</sup>k<sup>h</sup>um<sup>31</sup>za<sup>55</sup>  
 leech (water), nin<sup>55</sup>  
 leeks, dzi<sup>55</sup>ɕɛm<sup>55</sup>bu<sup>55</sup>mu<sup>55</sup>dim<sup>55</sup>

- leeks, chive, sa<sup>31</sup>bŋ<sup>55</sup> (wild)  
 left handed, le<sup>31</sup>γu<sup>55</sup> p<sup>h</sup>u<sup>31</sup>  
 left over, remain, ʔa<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 left side, m<sup>31</sup>dzaŋ<sup>31</sup> k<sup>h</sup>a<sup>55</sup>, le<sup>31</sup>γu<sup>55</sup> (Lisu)  
 leftovers, k<sup>h</sup>en<sup>55</sup> ɕin<sup>55</sup>  
 leg, p<sup>h</sup>an<sup>33</sup> (t<sup>h</sup>uŋ<sup>33</sup>)  
 leg hair, p<sup>h</sup>an<sup>55</sup> min<sup>55</sup>  
 leg, thigh, p<sup>h</sup>an<sup>55</sup>  
 legal wife, mu<sup>31</sup>dzu<sup>31</sup> mu<sup>31</sup>  
 leggings, p<sup>h</sup>an<sup>55</sup> dem<sup>55</sup>  
 leggings, a<sup>31</sup>xa<sup>35</sup>xuaŋ<sup>55</sup>  
 lend money on usury, ʔdem<sup>55</sup> di<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>31</sup> u<sup>31</sup>  
 lend out, ŋa<sup>53</sup> u<sup>31</sup>  
 length, iã<sup>33</sup> za<sup>55</sup>, nã<sup>33</sup> za<sup>55</sup>  
 length of fist plus width of finger, gu<sup>31</sup>  
 lenient; forgive, a<sup>55</sup> gu<sup>31</sup>; ga<sup>31</sup> gu<sup>31</sup>  
 leopard, i<sup>31</sup>dzuŋ<sup>55</sup>, la<sup>31</sup> mu<sup>55</sup> du<sup>31</sup> (Lisu)  
 leprosy, have, a<sup>31</sup>dza<sup>55</sup> tɕ<sup>h</sup>in<sup>55</sup> ɕɿ<sup>31</sup>  
 letter (mail), le<sup>31</sup> ɕu<sup>55</sup> (Lisu), ɕɿ<sup>55</sup> va<sup>31</sup> le<sup>31</sup> ɕu<sup>55</sup>  
 level, flat, ŋ<sup>31</sup> sa<sup>31</sup> xan<sup>55</sup>; ŋ<sup>31</sup> sa<sup>31</sup> xen<sup>55</sup>  
 level up, di<sup>31</sup> dzin<sup>31</sup>  
 le<sup>31</sup> bu<sup>31</sup> p<sup>h</sup>e<sup>31</sup> lem<sup>31</sup> (Lisu)  
 li (mile), i<sup>31</sup>li<sup>53</sup> (Ch.)  
 lice comb (double-edged, fine-toothed), a<sup>31</sup>ɕɿ<sup>55</sup> bu<sup>31</sup> dɕɿ<sup>55</sup>  
 lice, have, ɕuŋ<sup>55</sup> ŋo<sup>31</sup> e<sup>31</sup>  
 lick, ɬa<sup>55</sup> ŋu<sup>31</sup>, ha<sup>55</sup> dzu<sup>31</sup> ŋu<sup>33</sup>  
 lick, lap, laŋ<sup>55</sup>, ɬaŋ<sup>55</sup>  
 lid; cover, de<sup>31</sup> dza<sup>33</sup> k<sup>h</sup>om<sup>55</sup>  
 lid; cover, de<sup>31</sup> tɕ<sup>h</sup>u<sup>55</sup> k<sup>h</sup>um<sup>31</sup>  
 lie down, bu<sup>55</sup> t<sup>h</sup>aŋ<sup>55</sup> ɕɿ<sup>31</sup>; t<sup>h</sup>aŋ<sup>33</sup> se<sup>33</sup>  
 lie flat on stomach, ground, mo<sup>31</sup> ni<sup>33</sup> ya<sup>55</sup> ɕɿ<sup>31</sup>  
 lie, to, nim<sup>55</sup> e<sup>55</sup>  
 life, saŋ<sup>55</sup> buŋ<sup>55</sup>, gu<sup>33</sup> t<sup>h</sup>a<sup>35</sup>  
 lift, ŋa<sup>31</sup> u<sup>31</sup>; ŋaŋu<sup>31</sup>  
 lift (head), ts<sup>h</sup>aŋ<sup>55</sup> a<sup>31</sup> ɕɿ<sup>55</sup>  
 lift open (a lid), hãŋ<sup>31</sup>, hã<sup>55</sup> ɕɿ<sup>31</sup>  
 lift; carry, a<sup>31</sup> gi<sup>31</sup>  
 lift up; hold up, p<sup>h</sup>a<sup>31</sup> gi<sup>35</sup> gu<sup>31</sup>  
 lift up (from bottom), xur<sup>33</sup> u<sup>55</sup>  
 lifting cord of a steelyard, ŋe<sup>31</sup> dem<sup>55</sup> a<sup>31</sup> xuŋ<sup>55</sup>  
 light (fire), dzu<sup>31</sup> u<sup>31</sup>; dzu<sup>31</sup>  
 light (fire), fẽŋ<sup>31</sup> u<sup>31</sup>  
 light (fire), lim<sup>55</sup>  
 light (firewood), fẽŋ<sup>53</sup>; veŋ<sup>31</sup> u<sup>31</sup>  
 light (from moon), p<sup>h</sup>aŋ<sup>31</sup> ʔga<sup>55</sup>  
 light (lamp), fe<sup>31</sup>, ve<sup>31</sup>  
 light (weight), a<sup>31</sup> naŋ<sup>31</sup> (e<sup>31</sup>) > (a<sup>31</sup>) nã<sup>31</sup> (e<sup>31</sup>)

- light bulb, tuŋ<sup>55</sup> p<sup>h</sup>an<sup>35</sup>  
 light, a, tɕ<sup>h</sup>ɛ<sup>31</sup> mi<sup>55</sup> vɛ<sup>33</sup> dɛm<sup>55</sup>  
 lightning, mu<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>31</sup> a<sup>31</sup> tɕ<sup>h</sup>i<sup>31</sup> lɛm<sup>31</sup>  
 lightning (flash), ʔa<sup>31</sup> tɕ<sup>h</sup>i<sup>31</sup> lɛm<sup>31</sup>  
 like, to, nɑ<sup>55</sup> ɕɿ<sup>31</sup>  
 like, to, ɕɿ<sup>31</sup> ŋaŋ<sup>55</sup> ɕɿ<sup>31</sup>  
 like that, xo<sup>33</sup> io<sup>55</sup>, xo<sup>33</sup> io<sup>55</sup>, ʔo<sup>55</sup> ŋu<sup>31</sup>, ʔo<sup>35</sup> di<sup>33</sup>, ʔo<sup>55</sup> ŋu<sup>31</sup>, o<sup>31</sup> io<sup>55</sup>  
 lily, a<sup>31</sup> k<sup>h</sup>u<sup>55</sup>  
 lily flower, dried, k<sup>h</sup>ɛn<sup>55</sup> ven<sup>55</sup>  
 limbs (arms and legs), bɿ<sup>31</sup> bu<sup>55</sup>  
 lime, ɕɿ<sup>31</sup> xue<sup>55</sup> (Ch.), ɕɿ<sup>31</sup> xue<sup>55</sup> ʃo<sup>35</sup> xi<sup>44</sup>  
 lime, luŋ<sup>55</sup> ua<sup>55</sup> tɕ<sup>h</sup>i<sup>31</sup>  
 lime, la<sup>55</sup> xu<sup>31</sup>  
 limp, to, a<sup>31</sup> xa<sup>35</sup> di<sup>31</sup> ɕaŋ<sup>31</sup> dzɿ<sup>55</sup>  
 line, gu<sup>31</sup> lu<sup>31</sup>  
 line a garment, mu<sup>55</sup> dzu<sup>31</sup>  
 line made by carpenter's ink, mɛ<sup>31</sup> buŋ<sup>55</sup>  
 line up, queque up, ŋ<sup>31</sup> t<sup>h</sup>i<sup>55</sup> zaŋ<sup>55</sup> ua<sup>31</sup>  
 line up, p<sup>h</sup>ɛ<sup>31</sup> tue<sup>35</sup>  
 linen, mi<sup>55</sup> ma<sup>33</sup> xuŋ<sup>55</sup>  
 linen thread, uam<sup>31</sup> ju<sup>55</sup>, mi<sup>55</sup> buŋ<sup>55</sup>  
 lining (of clothes), ʔi<sup>55</sup> dʊŋ<sup>33</sup> k<sup>h</sup>a<sup>55</sup>  
 lining (of clothes), id<sup>55</sup> dʊŋ<sup>33</sup> na<sup>33</sup> t<sup>h</sup>aŋ<sup>55</sup>  
 lion, ɕɿ<sup>55</sup> tse<sup>31</sup> (Ch.)  
 lip, bottom, ka<sup>31</sup> p<sup>h</sup>aŋ<sup>55</sup> ni<sup>55</sup> bu<sup>31</sup>  
 lip, top, ka<sup>31</sup> t<sup>h</sup>aŋ<sup>55</sup> ni<sup>55</sup> bu<sup>31</sup>  
 lips, ni<sup>55</sup> bu<sup>31</sup>  
 liquor, ma<sup>55</sup> guŋ<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>31</sup>  
 listen, t<sup>h</sup>o<sup>53/55</sup>  
 listen, eavesdrop, k<sup>h</sup>a<sup>55</sup> ma<sup>55</sup> t<sup>h</sup>o<sup>31</sup> o<sup>33</sup>  
 Lisu, ŋ<sup>31</sup> ɕɿ<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>55</sup>  
 liter, p<sup>h</sup>ɛn<sup>55</sup>  
 liters, two, a<sup>31</sup> ni<sup>55</sup> p<sup>h</sup>ɛn<sup>55</sup>  
 literate, ʔi<sup>55</sup> tso<sup>35</sup> so<sup>53</sup>  
 liver, bu<sup>31</sup> ɕin<sup>33</sup>  
 livestock, i<sup>31</sup> ŋaŋ<sup>31</sup>  
 lizard, bu<sup>31</sup> tɕ<sup>h</sup>iŋ<sup>55</sup>  
 lizard, bu<sup>31</sup> ɕɿŋ<sup>55</sup>  
 loach, ni<sup>55</sup> dzɿ<sup>31</sup> ŋua<sup>55</sup>  
 load, to, sa<sup>35</sup>, sa<sup>31</sup> u<sup>31</sup>, dzaŋ<sup>35</sup>  
 load carried by pack animal, mā<sup>31</sup> nen<sup>55</sup> ɕa<sup>31</sup>  
 load on animal's back, tɕi<sup>35</sup>  
 loaf, to; be lazy, a<sup>31</sup> bā<sup>33</sup>  
 location, mu<sup>31</sup> gam<sup>53</sup>  
 locative (LOC), k<sup>h</sup>a<sup>31</sup>, dʊŋ<sup>55</sup> k<sup>h</sup>a<sup>31</sup>, t<sup>h</sup>aŋ<sup>55</sup>, p<sup>h</sup>aŋ<sup>33</sup>, sa<sup>31</sup>  
 lock (door), so<sup>55</sup> (Ch.)  
 lock (door), so<sup>55</sup> ni<sup>33</sup> ʔo<sup>31</sup>

- lock, so<sup>55</sup>t<sup>h</sup>u<sup>31</sup> (Lisu)  
 locomotive (engine), me<sup>33</sup>t<sup>h</sup>a<sup>55</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 locust, da<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 loess (yellow earth), a<sup>31</sup>sa<sup>55</sup>ŋaŋ<sup>55</sup>  
 lonely, ts<sup>h</sup>o<sup>55</sup>ti<sup>55</sup> (Lisu)  
 lonely, no<sup>33</sup>m<sup>31</sup>na<sup>55</sup>ʂi<sup>31</sup>  
 Lolo, la<sup>35</sup>lo<sup>33</sup>p<sup>h</sup>u<sup>31</sup>  
 long ago, long since, tɕ<sup>h</sup>ɛ<sup>31</sup>me<sup>53</sup>  
 long boots, ɕa<sup>55</sup>sam<sup>31</sup>gŋ<sup>55</sup>dɛm<sup>55</sup>  
 long lunar month, ʂi<sup>31</sup>la<sup>55</sup>ta<sup>33</sup>  
 long narrow pieces, clf., k<sup>h</sup>o<sup>55</sup>  
 long overcoat, ga<sup>31</sup>mu<sup>31</sup>duŋ<sup>31</sup>  
 long since, long ago, tɕ<sup>h</sup>ɛ<sup>31</sup>me<sup>53</sup>, o<sup>31</sup>mo<sup>35</sup>  
 long time, k<sup>h</sup>a<sup>55</sup>ni<sup>55</sup>  
 long time, mu<sup>55</sup>ia<sup>55</sup>  
 long wooden bench, tɕa<sup>55</sup>tsu<sup>31</sup>ua<sup>55</sup>na<sup>31</sup>  
 long-legged spider, du<sup>31</sup>ba<sup>31</sup>  
 long, sharp, protruding teeth, a<sup>31</sup>sa<sup>31</sup>ɕi<sup>31</sup>lim<sup>55</sup>  
 long, ua<sup>55</sup>iāŋ<sup>31</sup> > ua<sup>55</sup>iā<sup>31</sup>; ŋā<sup>31</sup>  
 look after, care for, di<sup>31</sup>ɕa<sup>55</sup>u<sup>31</sup>  
 look after, tɕo<sup>55</sup>fu<sup>55</sup>  
 look after one's self, a<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>ŋo<sup>55</sup>tɕ<sup>h</sup>o<sup>31</sup>  
 look distracted, stunned, p<sup>h</sup>u<sup>31</sup>zɛ<sup>55</sup>  
 look down upon, dzaŋ<sup>44</sup>m<sup>31</sup>t<sup>h</sup>ɛm<sup>31</sup>  
 look for; seek, la<sup>33</sup>; ɬa<sup>55</sup>u<sup>31</sup>; ɬau<sup>53</sup>  
 look for another's faults, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>ma<sup>31</sup>du<sup>31</sup>la<sup>55</sup>u<sup>31</sup>  
 look in mirror, za<sup>31</sup>u  
 look like, resemble, ŋo<sup>55</sup>di<sup>55</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 look sideways, ni<sup>55</sup>luŋ<sup>5</sup>  
 look through corners of eyes, dzi<sup>31</sup>dzi<sup>31</sup>  
 look through corners of eyes, ʔdza<sup>31</sup>ŋɛ<sup>33</sup>  
 look inclined, dzi<sup>31</sup>dzi<sup>31</sup>ʔdza<sup>31</sup>ŋɛ<sup>33</sup> (Lisu)  
 look, dza<sup>55</sup>(u<sup>31</sup>), dzaŋ<sup>55</sup>; something to read, dzaŋ<sup>55</sup>dɛm<sup>55</sup>  
 loom, threaded, ma<sup>33</sup>xuŋ<sup>55</sup>zan<sup>55</sup>dɛm<sup>55</sup>  
 loose, not tight, gue<sup>53</sup>ɛ<sup>31</sup>  
 loquat, bu<sup>55</sup>tɕ<sup>h</sup>i<sup>53</sup>li<sup>33</sup>  
 lose baby teeth, a<sup>31</sup>sa<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>55</sup>  
 lose (=not win), m<sup>33</sup>dzo<sup>33</sup>  
 lose something, p<sup>h</sup>a<sup>55</sup>maŋ<sup>33</sup>  
 lose something, ʔa<sup>31</sup>dza<sup>55</sup>ʔdza<sup>35</sup>  
 lose something, a<sup>31</sup>ma<sup>55</sup>  
 lose, to, a<sup>31</sup>maŋ<sup>55</sup>  
 lose, to, ʂi<sup>31</sup>pe<sup>35</sup>  
 lose, misplace, tɕ<sup>h</sup>o<sup>33</sup>  
 lost face, disgraced, ma<sup>55</sup>tɕ<sup>h</sup>o<sup>31</sup>u  
 lotus, yellow, men<sup>55</sup>  
 louse, ɕuŋŋ<sup>55</sup>

- louse (egg), ɕuŋ<sup>55</sup> lim<sup>31</sup>  
 love, nɑ<sup>55</sup> ʂuŋ<sup>55</sup> ɛ<sup>55</sup> (each other)  
 love each other, a<sup>31</sup> ɕuŋ<sup>31</sup> ɛ<sup>55</sup>  
 love (a child), a<sup>31</sup> lim<sup>31</sup> ʂɿ<sup>33</sup>  
 love (a child), nɪm<sup>31</sup> a<sup>31</sup> dza<sup>35</sup>  
 love each other (man and woman), ŋɑ<sup>55</sup> ʂuŋ<sup>55</sup> ɛ<sup>55</sup>  
 love; fond of, nɑ<sup>55</sup> (ʂɿ<sup>31</sup>)  
 lover, ts<sup>h</sup> o<sup>33</sup> k<sup>h</sup> i<sup>33</sup>  
 low; short, tɕ<sup>h</sup> i<sup>55</sup> nɪm<sup>31</sup>  
 lower back, da<sup>55</sup> guŋ<sup>31</sup> p<sup>h</sup> aŋ<sup>33</sup>  
 lower course of a river, tɕ<sup>h</sup> o<sup>31</sup> ŋuɑ<sup>31</sup> sa<sup>31</sup>  
 lower course of a river, ŋi<sup>55</sup> k<sup>h</sup> a<sup>55</sup>  
 lower jaw bone, mu<sup>31</sup> ɣam<sup>55</sup>  
 lower leg, ŋa<sup>31</sup> xa<sup>35</sup> t<sup>h</sup> uŋ<sup>31</sup>  
 lower lip, ka<sup>31</sup> p<sup>h</sup> aŋ<sup>55</sup> nɪ<sup>55</sup> bu<sup>31</sup>  
 lower part of body, i<sup>55</sup> k<sup>h</sup> a<sup>55</sup> t<sup>h</sup> aŋ<sup>55</sup> n<sup>h</sup> u<sup>31</sup> tʂ<sup>h</sup> a<sup>55</sup> tʂ<sup>h</sup> a<sup>55</sup>  
 lower part of cheek, ba<sup>31</sup> tɕɑ<sup>35</sup>  
 lower tooth, ka<sup>31</sup> p<sup>h</sup> aŋ<sup>55</sup> a<sup>31</sup> sa<sup>31</sup>  
 lucky, ɣu<sup>31</sup> tɕ<sup>h</sup> o<sup>55</sup> ni<sup>33</sup> ɛ<sup>55</sup>  
 luggage, nen<sup>55</sup>  
 luggage, to pack, nen<sup>55</sup> p<sup>h</sup> aŋ<sup>31</sup>  
 lumber, timber, ɕuŋ<sup>55</sup> duŋ<sup>55</sup>  
 lunar eclipse, ʂɿ<sup>31</sup> la<sup>55</sup> dɛ<sup>31</sup> grɿ<sup>55</sup> ɛm<sup>53</sup>  
 lunar month (long), ʂɿ<sup>31</sup> la<sup>55</sup> ta<sup>33</sup>  
 lunar month (short), ʂɿ<sup>31</sup> la<sup>55</sup> tɕ<sup>h</sup> ɛn<sup>31</sup>  
 lunar month, eleventh day of, t<sup>h</sup> i<sup>31</sup> ts<sup>h</sup> a<sup>55</sup> p<sup>h</sup> a<sup>31</sup> nɪ<sup>33</sup>  
 lunar month, eleventh day of, t<sup>h</sup> i<sup>31</sup> ts<sup>h</sup> a<sup>55</sup> t<sup>h</sup> i<sup>55</sup> nɪ<sup>33</sup>  
 lunar month, first day of, ʂɿ<sup>31</sup> la<sup>55</sup> t<sup>h</sup> i<sup>55</sup> nɪ<sup>33</sup>  
 lunar month, sixteenth day of, t<sup>h</sup> i<sup>31</sup> ts<sup>h</sup> a<sup>55</sup> kuŋ<sup>55</sup> nɪ<sup>33</sup>  
 lunar month, third day of, ʂɿ<sup>31</sup> la<sup>55</sup> suŋ<sup>33</sup> nɪ<sup>55</sup>  
 lunar month, thirtieth day of, suŋ<sup>31</sup> ts<sup>h</sup> a<sup>55</sup> nɪ<sup>33</sup>  
 lunar month, twentieth day of, a<sup>31</sup> nɪ<sup>33</sup> ts<sup>h</sup> a<sup>55</sup> nɪ<sup>33</sup>  
 lunar, month, fifth day of, ʂɿ<sup>31</sup> la<sup>55</sup> p<sup>h</sup> a<sup>31</sup> nɪ<sup>33</sup>  
 lunar, month, second day of, ʂɿ<sup>31</sup> la<sup>55</sup> a<sup>31</sup> nɪ<sup>55</sup> nɪ<sup>55</sup>  
 lunatic; madman, a<sup>31</sup> xua<sup>35</sup> u<sup>31</sup>  
 lungs, i<sup>31</sup> su<sup>55</sup>, bu<sup>31</sup> ʂu<sup>31</sup>  
 lure, to, p<sup>h</sup> ɛ<sup>55</sup> nɪ<sup>31</sup> uɑ<sup>31</sup>  
 lure, seduce, fool, nɪ<sup>31</sup> m<sup>55</sup>  
 lute-like instrument with fretted fingerboard, tɕi<sup>55</sup> bu<sup>55</sup> (Lisu)  
 lycium, mu<sup>31</sup> ɕaŋ<sup>55</sup>  
  
 mace, 1/10 of a tael, t<sup>h</sup> i<sup>31</sup> ɕuŋ<sup>55</sup>  
 machine gun, mu<sup>31</sup> ʂɿ<sup>55</sup> ga<sup>53</sup>  
 machine, tɕi<sup>33</sup> tɕ<sup>h</sup> i<sup>35</sup> (Ch.)  
 madman; lunatic, a<sup>31</sup> xua<sup>35</sup> u<sup>31</sup>  
 maggot (in rotten wood), ɕɑ<sup>55</sup> tʂɿ<sup>55</sup> p<sup>h</sup> u<sup>31</sup>  
 maggot, tɕ<sup>h</sup> i<sup>55</sup> p<sup>h</sup> u<sup>31</sup>

- magpie, a<sup>31</sup>ne<sup>55</sup>tɕa<sup>31</sup>tɕa<sup>31</sup>  
 mail, to, giɛn<sup>35</sup>  
 mail a letter, ʂɿ<sup>55</sup>va<sup>31</sup>ɛ<sup>31</sup>ʂu<sup>55</sup>di<sup>31</sup>ba<sup>31</sup>u<sup>31</sup>  
 main stock; bow, t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 maize, corn (green), mu<sup>55</sup>xye<sup>31</sup>  
 make a cry, a<sup>31</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 make a decoction, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>a<sup>31</sup>h<sup>h</sup>in<sup>55</sup>so<sup>31</sup>nu<sup>53</sup>  
 make a landing, di<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>55</sup>k<sup>h</sup>a<sup>31</sup>zam<sup>53</sup>  
 make a loud noise, na<sup>55</sup>; nã<sup>55</sup>  
 make a pocket, p<sup>h</sup>a<sup>55</sup>du<sup>55</sup>  
 make a racket, ʔa<sup>31</sup>xi<sup>55</sup>  
 make a visit (to friends), t<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>31</sup>dza<sup>53</sup>u<sup>31</sup>  
 make a wrinkle, ga<sup>31</sup>mu<sup>31</sup>ŋ<sup>31</sup>p<sup>h</sup>ŋn<sup>55</sup>  
 make bed, p<sup>h</sup>u<sup>31</sup>lu<sup>31</sup>  
 make, build, lɛ<sup>35</sup>  
 make carpenter's line with ink marker, ma<sup>31</sup>bun<sup>55</sup>di<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 make clothes, ga<sup>31</sup>mu<sup>31</sup>ʔo<sup>53</sup>  
 make cool, di<sup>31</sup>tɕ<sup>h</sup>ɛm<sup>31/35</sup>  
 make crooked, go<sup>31</sup>luŋ<sup>31</sup>ʔdʒi<sup>31</sup>ɛ<sup>33</sup>  
 make dirty, ŋaŋ<sup>55</sup>ʔdʒi<sup>31</sup>ɛ<sup>31</sup>  
 make fire, di<sup>31</sup>gwaŋ<sup>31</sup>u<sup>31</sup>  
 make friends, nem<sup>31</sup>naŋ<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>  
 make friends with, ʔa<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>  
 make gesture, a<sup>31</sup>vu<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>vɛ<sup>33</sup>ʂɿ<sup>33</sup>  
 make lines with, mu<sup>55</sup>na<sup>31</sup>bun<sup>55</sup>di<sup>31</sup>p<sup>h</sup>uŋ<sup>53</sup>  
 make mattress of rice stalks, ɕin<sup>55</sup>nien<sup>31</sup>u<sup>31</sup>  
 make nest, ɕaŋ<sup>31</sup>ɕaŋ<sup>31</sup>  
 make obeisance to, t<sup>h</sup>i<sup>h</sup>im<sup>31</sup>ʂɿ<sup>55</sup>  
 make partner, da<sup>55</sup>ts<sup>h</sup>a<sup>55</sup>  
 make pleats, k<sup>h</sup>u<sup>31</sup>lim<sup>31</sup>  
 make soft, a<sup>31</sup>nã<sup>31</sup>ŋu<sup>31</sup>  
 make someone angry, ʔa<sup>31</sup>mun<sup>55</sup>  
 make something stand upright, ɕɛ<sup>31</sup>ɕaŋ<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup>  
 make straight, a<sup>31</sup>zã<sup>55</sup>ŋu<sup>31</sup>  
 make straight, ts<sup>h</sup>o<sup>55</sup>ts<sup>h</sup>aŋ<sup>31</sup>ʔa<sup>31</sup>zaŋu<sup>53</sup>  
 make up a prescription, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>zam<sup>35</sup>  
 make up oneself, a<sup>31</sup>brɿ<sup>55</sup>ʂɿ<sup>31</sup>  
 make up the proper amount, a<sup>31</sup>di<sup>31</sup>k<sup>h</sup>om<sup>31</sup>  
 make way for, give way for, ɕi<sup>31</sup>in<sup>31</sup>  
 make way; yield, ʂɿ<sup>31</sup>zɿn<sup>31</sup>ʂɿ<sup>55</sup>  
 make wet, p<sup>h</sup>a<sup>55</sup>maŋ<sup>33</sup>  
 make wine; brew beer, ŋu<sup>31</sup>ɕi<sup>31</sup>bu<sup>31</sup>m<sup>55</sup>  
 make, build, io<sup>55</sup>mun<sup>55</sup>  
 make or write (book), ʂɿ<sup>55</sup>va<sup>31</sup>a<sup>31</sup>zu<sup>53</sup>  
 make, manufacture, io<sup>55</sup>mun<sup>55</sup>  
 malaria; ague, tɕ<sup>h</sup>i<sup>53</sup>xu<sup>53</sup>a<sup>31</sup>dza<sup>35</sup>  
 malaria; ague, (di<sup>31</sup>gwaŋ<sup>55</sup>)dzaŋ<sup>35</sup> > (a<sup>31</sup>)dzaũ<sup>55</sup>

- male, man = married man, guɑ<sup>31</sup> tɕ<sup>h</sup>a<sup>55</sup>  
 male, ɲ<sup>31</sup>gu<sup>55</sup>  
 manage, control, kuɑ<sup>31</sup>  
 manage, run, a<sup>31</sup>dʒɑ<sup>55</sup>u<sup>31</sup>  
 manage, run (house), tɕ<sup>h</sup>im<sup>31</sup>kuɑ<sup>31</sup>li<sup>35</sup>xo<sup>33</sup>  
 Mandarin orange, small, zɿ<sup>31</sup>ma<sup>55</sup>tɕu<sup>55</sup>  
 mane (horse), mǎ<sup>31</sup>min<sup>55</sup>  
 mange, have, xu<sup>31</sup>tɕ<sup>h</sup>i<sup>35</sup>  
 manger, maa<sup>31</sup>tɕi<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 manger, maa<sup>31</sup>dʒɑ<sup>31</sup>xam<sup>55</sup>  
 mantis, nem<sup>31</sup>ŋɑŋ<sup>55</sup>  
 manure, ta<sup>35</sup>fū<sup>35</sup> (Ch.)  
 many, buɑ<sup>31</sup>  
 map, mu<sup>31</sup>t<sup>h</sup>u<sup>31</sup>, mu<sup>31</sup>dʒi<sup>31</sup>  
 March, suɑ<sup>31</sup>la<sup>55</sup>  
 mare, mā<sup>31</sup>ma<sup>55</sup>  
 mark, to; make a mark, di<sup>31</sup>zan<sup>55</sup>dɛm<sup>55</sup>  
 mark, sign, di<sup>31</sup>xan<sup>55</sup>dɛm<sup>55</sup>; dʒi<sup>31</sup>xen<sup>55</sup>  
 market, kai<sup>55</sup>tsɿ<sup>33</sup> (Ch.)  
 market, town, city, dʒɿ<sup>55</sup>  
 marriage based relationships, dʒɛ<sup>31</sup>pa<sup>55</sup>  
 married, get, di<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>35</sup>  
 marrow, ʂɑ<sup>31</sup>k<sup>h</sup>o<sup>53</sup>k<sup>h</sup>o<sup>31</sup>luŋ<sup>55</sup>  
 marrow, tɕ<sup>h</sup>uŋ<sup>31</sup>mu<sup>31</sup>guŋ<sup>55</sup>  
 marry (take a wife), dʒo<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup>ma<sup>55</sup>ua<sup>31</sup>ʂɿ<sup>31</sup>  
 marry (take a wife), mu<sup>31</sup>na<sup>35</sup>gu<sup>31</sup>ŋ<sup>55</sup>  
 marry, take a wife, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>ua<sup>31</sup>  
 marry (take a husband), ʂɿ<sup>31</sup>lap<sup>35</sup>  
 marry (a woman), lu<sup>31</sup>u<sup>55</sup>  
 marry (of woman), di<sup>31</sup>tɕū<sup>55</sup>ū<sup>31</sup>  
 marry (take a husband), a<sup>31</sup>vu<sup>35</sup>a<sup>31</sup>ɕi<sup>31</sup>t<sup>h</sup>i<sup>55</sup>  
 mason, luŋ<sup>55</sup>ɣom<sup>55</sup>su<sup>55</sup>  
 massage back by pounding, da<sup>31</sup>guŋ<sup>31</sup>ɣum<sup>55</sup>  
 master of a trade, ʂɿ<sup>31</sup>lam<sup>55</sup>su<sup>55</sup>  
 master; host, ɲ<sup>31</sup>k<sup>h</sup>ɑ̃<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 mat, ɕi<sup>55</sup>p<sup>h</sup>i<sup>55</sup>  
 mat covering small boats, a<sup>31</sup>su<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 mat, palm fiber, p<sup>h</sup>am<sup>31</sup>  
 mat; pad, p<sup>h</sup>u<sup>31</sup>lu<sup>55</sup>dɛm<sup>55</sup>  
 mat; pad; cushion, ɕi<sup>31</sup>nɛ<sup>55</sup>dɛm<sup>55</sup>  
 match; competition, a<sup>31</sup>lin<sup>55</sup>  
 matches, tɕ<sup>h</sup>e<sup>31</sup>mi<sup>55</sup>nɛ<sup>55</sup>dɛm<sup>55</sup>; xo<sup>55</sup>ts<sup>h</sup>ai<sup>31</sup> (Ch.)  
 matchmake, to, ɕi<sup>55</sup>k<sup>h</sup>u<sup>31</sup>  
 matchmaker, k<sup>h</sup>u<sup>55</sup>ni<sup>31</sup>ua<sup>31</sup>su<sup>55</sup>  
 mate, copulate, ɣo<sup>55</sup>iur<sup>31</sup>sa<sup>31</sup>u<sup>31</sup>  
 maternal, a<sup>31</sup>ts<sup>h</sup>ɑŋ<sup>31</sup>  
 maternal, a<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>



- matter, sɿ<sup>35</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>  
 mattress made of rice stalks, ɕin<sup>55</sup>niɛŋ<sup>31</sup>u  
 mattress; mat; pad, p<sup>h</sup>u<sup>31</sup>lu<sup>55</sup>dɛm<sup>55</sup>  
 may, ɕa<sup>55</sup>ɛ<sup>31</sup>  
 May, p<sup>h</sup>ā<sup>31</sup>la<sup>55</sup>  
 May I ask? zɿn<sup>55</sup>ā<sup>31</sup>li<sup>55</sup>  
 maybe, le<sup>55</sup>m<sup>31</sup>zɿ<sup>55</sup>  
 meadow, grassland, a<sup>31</sup>dzɿ<sup>31</sup>xaŋ<sup>53</sup>  
 meal, early; breakfast, a<sup>31</sup>sā<sup>55</sup>p<sup>h</sup>i<sup>31</sup>  
 meal, late; supper; dinner, a<sup>31</sup>ʂɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>i<sup>31</sup>  
 meal, midday, a<sup>31</sup>iā<sup>55</sup>p<sup>h</sup>i<sup>31</sup>  
 mean-spirited, mu<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>  
 measure (rice), p<sup>h</sup>ɛŋ<sup>55</sup>u<sup>31</sup>  
 measure (cloth), a<sup>31</sup>lin<sup>55</sup>(nu<sup>31</sup>)  
 measure, one tenth of a catty (one catty equals half a kilogram), luŋ<sup>55</sup>  
 measure of length, i<sup>31</sup>li<sup>53</sup>  
 measure, one third of a centimeter, ɕuŋ<sup>55</sup>  
 meat, fatty, ɕa<sup>33</sup>su<sup>55</sup>  
 meat, lean, ɕa<sup>33</sup>nɛ<sup>55</sup>  
 meat, piece of, ɕa<sup>33</sup>p<sup>h</sup>iŋ<sup>33</sup>  
 meat, raw, ɕa<sup>33</sup>dʒim<sup>31</sup>  
 meat shop, ɕa<sup>55</sup>vɛn<sup>55</sup>za<sup>55</sup>  
 meat, shredded, ɕa<sup>33</sup>bun<sup>55</sup>  
 meat, sliced, ɕa<sup>33</sup>lan<sup>55</sup>  
 meat soup, ɕa<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup>  
 meat; flesh, ɕa<sup>33</sup>  
 mechanism, k<sup>h</sup>o<sup>33</sup>tɕ<sup>h</sup>iŋ<sup>55</sup>  
 mediate, k<sup>h</sup>a<sup>33</sup>ni<sup>53</sup>ŋu<sup>31</sup>  
 mediator, go-between, di<sup>31</sup>ɕu<sup>31</sup>ua<sup>33</sup>su<sup>55</sup>  
 medicine, tsi<sup>31</sup>, nɛ<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup> (Lisu)  
 medicine, liquid, nɛ<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup>a<sup>31</sup>n<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>  
 medium; middling, di<sup>31</sup>ɕu<sup>31</sup>(lam<sup>53</sup>)  
 medlar seed, ke<sup>31</sup>sɛn<sup>55</sup>ɕaŋ<sup>55</sup>  
 meet, to, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 meet with, zaŋ<sup>55</sup>  
 meet by chance, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>a<sup>31</sup>dʒaŋ<sup>31</sup>  
 meet by chance, zaŋ<sup>55</sup>dʒaŋ<sup>53</sup>  
 meet, to, a<sup>31</sup>p<sup>h</sup>u<sup>53</sup>  
 meeting dismissed, t<sup>h</sup>aŋ<sup>55</sup>ɿdzɿ<sup>35</sup>  
 melon, gourd, a<sup>31</sup>gun<sup>55</sup>  
 melon seed, o<sup>55</sup>ba<sup>35</sup>  
 melon seed, a<sup>31</sup>gun<sup>55</sup>mu<sup>31</sup>n<sup>u</sup>ŋ<sup>55</sup>  
 melt (snow, etc.), grɿ<sup>55</sup>dʒɛ<sup>35</sup>  
 melt, to, dzɿm<sup>31</sup>di<sup>31</sup>bi<sup>55</sup>u<sup>31</sup>  
 melt; thaw, sɿ<sup>31</sup>maŋ<sup>55</sup>(u<sup>31</sup>)  
 member (committee), u<sup>55</sup>ie<sup>31</sup>  
 menace; threaten, p<sup>h</sup>u<sup>31</sup>za<sup>55</sup>u<sup>31</sup>ɛ<sup>33</sup>

- mend (cloth), di<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>33</sup> ʔɔ̃<sup>55</sup>  
mend, repair, a<sup>31</sup> min<sup>55</sup> u<sup>31</sup>  
menses, le<sup>31</sup> bi<sup>55</sup> ɕu<sup>33</sup>  
menstruation, le<sup>31</sup> (bi<sup>55</sup> nɯ<sup>33</sup>)  
merchant, ʔa<sup>31</sup> la<sup>55</sup> u<sup>33</sup> su<sup>55</sup>  
mercury, sui<sup>55</sup> in<sup>31</sup>  
mesh, p<sup>h</sup>u<sup>31</sup> ia<sup>55</sup> ni<sup>55</sup> (luŋ<sup>55</sup>)  
messy, ʔŋ<sup>31</sup> bu<sup>55</sup>  
messy, chaotic, a<sup>31</sup> du<sup>55</sup> k<sup>h</sup>u<sup>31</sup>  
metamorphosis, tɕ<sup>h</sup> in<sup>31</sup> se<sup>55</sup>  
meteor, k<sup>h</sup>o<sup>31</sup> ni<sup>55</sup> ni<sup>33</sup>  
method, way, pan<sup>35</sup> fa<sup>31</sup>  
mew, to, mu<sup>31</sup> ni<sup>31</sup> nən<sup>55</sup> ɛ  
midday; noon, a<sup>31</sup> iã<sup>55</sup> mu<sup>31</sup> luŋ<sup>31</sup>  
midday or noon, a<sup>31</sup> ian<sup>35</sup> mu<sup>31</sup> luŋ<sup>31</sup> p<sup>h</sup> i<sup>31</sup>; a<sup>31</sup> iã<sup>55</sup> p<sup>h</sup> i<sup>31</sup>  
middle finger, di<sup>31</sup> ɕu<sup>31</sup> ni<sup>55</sup> tɕ<sup>h</sup> im<sup>55</sup>  
middle of the month, sɿ<sup>31</sup> la<sup>55</sup> di<sup>31</sup> ɕu<sup>31</sup>  
middle, central, center, di<sup>31</sup> ɕu<sup>31</sup>  
middle reaches of river, tɕ<sup>h</sup>o<sup>31</sup> ŋua<sup>31</sup> ɕu<sup>31</sup> ɕu<sup>31</sup>  
midnight, t<sup>h</sup> i<sup>55</sup> ɕa<sup>55</sup> guŋ<sup>31</sup>  
midnight snack, a<sup>31</sup> dzi<sup>55</sup> gŋ<sup>55</sup> ɣn<sup>55</sup> t<sup>h</sup> u<sup>31</sup> yu<sup>31</sup>  
midwife, tɕ<sup>h</sup> a<sup>55</sup> ma<sup>55</sup> di<sup>31</sup> k<sup>h</sup> uŋ<sup>31</sup> t<sup>h</sup> a<sup>35</sup> lu<sup>55</sup> su<sup>55</sup>  
military uniform, iu<sup>31</sup> ga<sup>31</sup> mu<sup>31</sup>  
milk (from breast), a<sup>31</sup> tɕ<sup>h</sup> u<sup>55</sup> tɕ<sup>h</sup> i<sup>31</sup>  
milk, a<sup>31</sup> ts<sup>h</sup> i<sup>55</sup> tɕ<sup>h</sup> a<sup>31</sup>  
milk, cow's, a<sup>31</sup> tɕ<sup>h</sup> u<sup>55</sup> tɕ<sup>h</sup> i<sup>31</sup>  
milk, to, di<sup>31</sup> tɕ<sup>h</sup> im<sup>31</sup>  
milk, to, a<sup>31</sup> ɕi<sup>31</sup> lin<sup>55</sup>  
milk teeth, baby, de<sup>31</sup> gŋ<sup>55</sup> a<sup>31</sup> sa<sup>31</sup>  
mill, a, la<sup>31</sup> t<sup>h</sup> a<sup>55</sup> (tɕ<sup>h</sup> im<sup>31</sup>) (Lisu)  
mill, a, ŋ<sup>31</sup> luŋ<sup>55</sup> la<sup>31</sup> t<sup>h</sup> a<sup>55</sup>  
mill, grind, su<sup>55</sup>  
millet, barnyard grass, tɕo<sup>55</sup> ba<sup>55</sup>  
millet, dzɿ<sup>31</sup> ia<sup>33</sup>  
millet, tɕ<sup>h</sup> ɛ<sup>31</sup> ʔem<sup>55</sup>  
mine, ɕi<sup>55</sup> nɛ<sup>55</sup> tsɿ<sup>31</sup>  
minority; ethnic group, tɕ<sup>h</sup> i<sup>55</sup>  
mint, ʔa<sup>31</sup> k<sup>h</sup> u<sup>55</sup>  
mirror, ma<sup>55</sup> dzan<sup>31</sup> dem<sup>55</sup>, nɛ<sup>55</sup> ba<sup>55</sup> (Lisu)  
miscarriage, a<sup>31</sup> iau<sup>53</sup>  
mischievous, zɿ<sup>31</sup> gu<sup>55</sup>  
miss the target, du<sup>31</sup> tɕ<sup>h</sup> in<sup>53</sup>  
miss; remember with longing, ts<sup>h</sup> om<sup>53</sup>; miss each other, a<sup>31</sup> ts<sup>h</sup> om<sup>55</sup>  
mistake, a<sup>31</sup> ɕɛ<sup>31</sup> nɛ<sup>31</sup>  
mistress, ŋ<sup>31</sup> k<sup>h</sup> a<sup>55</sup> mu<sup>31</sup>  
mistress, a<sup>31</sup> ts<sup>h</sup> an<sup>31</sup> ien<sup>55</sup> u<sup>31</sup>  
mix, to, sɿ<sup>55</sup>

- mix, to, ʔa<sup>31</sup>zom<sup>31</sup>  
 mix (dough), a<sup>31</sup>nan<sup>31</sup>u  
 mixed buckwheat balls, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> ua<sup>55</sup> tʂ<sup>h</sup>ɿ<sup>31</sup> g.ŋ<sup>55</sup>  
 Mizhina /Mizhìnà/ (place name), mi<sup>31</sup>dzi<sup>55</sup>na<sup>31</sup>  
 moan, to, a<sup>31</sup>dza<sup>31</sup>san<sup>55</sup>  
 modern times, present, ε<sup>55</sup>t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>uŋ<sup>55</sup>  
 modest, unassuming, m<sup>31</sup>t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>an<sup>31</sup> ʂɿ<sup>55</sup>  
 modest, unassuming, ŋim<sup>31</sup> xom<sup>55</sup>  
 molar, a<sup>31</sup>sa<sup>31</sup>mu<sup>31</sup> dzuŋ<sup>31</sup>  
 mold, to, ʔŋ<sup>31</sup>bum<sup>55</sup>bum<sup>55</sup>  
 mole; nevus, ts<sup>h</sup>a<sup>31</sup> ne<sup>55</sup> (Lisu)  
 monastery, p<sup>h</sup>u<sup>31</sup>iã<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 monetary penalty, dza<sup>31</sup>xa<sup>31</sup>fa<sup>35</sup>u<sup>31</sup>  
 money, dza<sup>31</sup> xa<sup>31</sup>  
 money changer, dza<sup>31</sup>xa<sup>31</sup>di<sup>31</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>za<sup>55</sup>  
 monkey, ŋi<sup>31</sup>sa<sup>31</sup>  
 monster, goblin, la<sup>31</sup>t<sup>h</sup>in<sup>31</sup>, la<sup>31</sup> tin<sup>31</sup>  
 month after, t<sup>h</sup>i<sup>55</sup>sɿ<sup>31</sup>la<sup>53</sup>bu<sup>31</sup>a<sup>31</sup>ni<sup>33</sup>  
 month, half a, sɿ<sup>31</sup>la<sup>55</sup> ti<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 month, last, ma<sup>55</sup>ʂu<sup>31</sup>k<sup>h</sup>a<sup>55</sup>sɿ<sup>31</sup>la<sup>55</sup>; xxx; ma<sup>55</sup>ε<sup>31</sup>k<sup>h</sup>a<sup>55</sup>sɿ<sup>31</sup>la<sup>55</sup>  
 month, next, k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>an<sup>55</sup>sɿ<sup>31</sup>la<sup>55</sup>  
 month, this, iε<sup>55</sup>sɿ<sup>31</sup>la<sup>55</sup>  
 months after, ba<sup>31</sup> ʂɿ<sup>31</sup> ti<sup>55</sup> san<sup>31</sup> sɿ<sup>31</sup> la<sup>55</sup>  
 months before, du<sup>55</sup>san<sup>31</sup>ua<sup>55</sup>ʂu<sup>31</sup>sɿ<sup>31</sup>la<sup>55</sup>  
 moo, sound of a cow, mā<sup>35</sup>  
 mood (mood), -nu<sup>31</sup>  
 moon; month, sɿ<sup>31</sup>la<sup>55</sup>, sa<sup>31</sup>la<sup>55</sup>  
 moon cake, mu<sup>31</sup>nan<sup>31</sup>k<sup>h</sup>o<sup>53</sup>  
 moon light, sɿ<sup>31</sup>la<sup>55</sup>p<sup>h</sup>an<sup>31</sup> ʔga<sup>55</sup>  
 more or less, t<sup>h</sup>a<sup>31</sup>lu<sup>ʔ55</sup> iε<sup>33</sup>  
 more or less, na<sup>55</sup>k<sup>h</sup>u<sup>55</sup>i<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 more than, da<sup>31</sup>t<sup>h</sup>an<sup>55</sup>  
 more than, extra, ka<sup>31</sup>(an)<sup>55</sup>  
 more than ten, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>a<sup>55</sup> dan<sup>31</sup>  
 more than twenty, a<sup>31</sup>ni<sup>55</sup> ts<sup>h</sup>a<sup>55</sup> k<sup>h</sup>a<sup>55</sup> t<sup>h</sup>an<sup>55</sup>  
 morning star, ne<sup>31</sup>ku<sup>55</sup> (Lisu)  
 morning, a<sup>31</sup>san<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 morning, clf., san<sup>31</sup>  
 morning, this, de<sup>55</sup>san<sup>31</sup>  
 mortar (stone), dza<sup>31</sup>p<sup>h</sup>an<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 mortgage, to, dzɿn<sup>55</sup>io<sup>55</sup>, po<sup>33</sup> (Lisu)  
 mosquito, small, black, ba<sup>33</sup>sum<sup>55</sup>çi<sup>55</sup>  
 mosquito, xã<sup>31</sup>t<sup>h</sup>o<sup>35</sup> (Lisu)  
 mosquito bite, di<sup>31</sup>p<sup>h</sup>u<sup>31</sup>u<sup>31</sup>  
 mosquito net, ba<sup>33</sup>som<sup>55</sup>di<sup>31</sup>ga<sup>33</sup>dɛm<sup>55</sup>  
 moss, p<sup>h</sup>ɛn<sup>33</sup>dʒɿ

- most = very, a<sup>31</sup>k<sup>h</sup>u<sup>55</sup>  
 moth, ɕuŋ<sup>55</sup> .ɔm<sup>33</sup>  
 mother (address term), a<sup>31</sup>mu<sup>31</sup>  
 mother; stepmother, a<sup>31</sup>mu<sup>31</sup>  
 mother's brother, a<sup>55</sup>vu<sup>55</sup>  
 mother's brother; uncle, a<sup>31</sup>ben<sup>31</sup>  
 mother's brother's wife, a<sup>55</sup>ŋi<sup>55</sup>  
 mother's sister (married), a<sup>55</sup>o<sup>55</sup>ma<sup>55</sup>  
 mother's sister (unmarried), a<sup>55</sup>io<sup>31</sup>  
 mother's sister's husband, a<sup>55</sup>o<sup>55</sup>p<sup>h</sup>a<sup>31</sup>  
 mother's brother, a<sup>55</sup>ben<sup>31</sup>  
 motion toward center of action, verb + -a<sup>31</sup>ie<sup>55</sup>, -a<sup>31</sup>na<sup>55</sup>, -a<sup>31</sup>ɕa<sup>55</sup>, or -lɔ<sup>31</sup>  
 motion away from the center of action, verb + -a<sup>31</sup>ba<sup>55</sup>, -a<sup>31</sup>la<sup>31</sup>, -ɕaŋ<sup>55</sup>, or -lu<sup>55</sup>  
 motion downwards, a<sup>31</sup>ɕa<sup>55</sup>, a<sup>31</sup>la<sup>31</sup>  
 motion upwards, ɕaŋ<sup>55</sup>, a<sup>31</sup>na<sup>55</sup>  
 motionlessly, ma<sup>31</sup>ŋen<sup>55</sup> ua<sup>33</sup>  
 moult, to, min<sup>55</sup>a<sup>31</sup>t<sup>h</sup>in<sup>55</sup>  
 mound, a<sup>31</sup>sa<sup>55</sup> ts<sup>h</sup>uŋ<sup>31</sup>  
 mound, hill, mo<sup>31</sup>guŋ<sup>55</sup> tɕ<sup>h</sup>en<sup>31</sup>  
 mound (land), clf., xaŋ<sup>35</sup>  
 mountain, north or shady side, p<sup>h</sup>u<sup>31</sup>dzam<sup>31</sup>  
 mountain, snow-capped, t<sup>h</sup>i<sup>31</sup> ven<sup>31</sup>mu<sup>31</sup> guŋ<sup>55</sup>  
 mountain, south or sunny side, p<sup>h</sup>u<sup>31</sup>lim<sup>55</sup>  
 mountain, ɾ<sup>31</sup> ʔuŋ<sup>55</sup> (older speakers), z<sup>1</sup> ʔuŋ<sup>55</sup>, mu<sup>31</sup>guŋ<sup>55</sup>  
 mountain, bamboo, t<sup>h</sup>i<sup>31</sup>ma<sup>31</sup>  
 mountain, shady or north side, p<sup>h</sup>u<sup>31</sup>lim<sup>55</sup>  
 mountain, sunny or south side, p<sup>h</sup>u<sup>31</sup>dzam<sup>31</sup>  
 mountain foot, mu<sup>31</sup>guŋ<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>33</sup>  
 mountain goat, female, a<sup>31</sup>iaŋ<sup>31</sup>ma<sup>33</sup>  
 mountain goat, female, a<sup>31</sup>bɛ<sup>55</sup>ma<sup>33</sup>  
 mountain goat, male, a<sup>31</sup>iaŋ<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 mountain peak, z<sup>1</sup>ʔuŋ<sup>55</sup>du<sup>33</sup>, m<sup>55</sup>t<sup>h</sup>am<sup>55</sup>  
 mountain peak, top, z<sup>1</sup>ʔuŋ<sup>55</sup>sa<sup>31</sup>  
 mountain road, z<sup>1</sup>ʔuŋ<sup>55</sup>t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>  
 mountain slope, hillside, (de<sup>31</sup>)ɕaŋ<sup>31</sup>ɕaŋ<sup>55</sup>  
 mourning apparel, p<sup>h</sup>ɔa<sup>31</sup>ɕa<sup>31</sup>ga<sup>55</sup>mu<sup>55</sup>  
 mouse, field, tɕ<sup>h</sup>im<sup>31</sup>din<sup>55</sup> (house+rat)  
 mouth, corners of, ŋi<sup>55</sup>bu<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>33</sup>  
 mouth, ma<sup>55</sup>duŋ<sup>31</sup>  
 mouth, ŋa<sup>55</sup>k<sup>h</sup>ɔ<sup>35</sup>; ŋi<sup>55</sup>-  
 move, a<sup>31</sup>ŋen<sup>55</sup>, dzo<sup>31</sup>  
 move, to, tɕ<sup>h</sup>im<sup>31</sup>a<sup>31</sup>tɕ<sup>h</sup>in<sup>55</sup>ɕ<sup>1</sup>  
 move, cause to, p<sup>h</sup>a<sup>31</sup>ŋen<sup>55</sup>ɕ<sup>1</sup>  
 move, shift, ɕin<sup>53</sup>  
 move, transfer (troops), tiau<sup>35</sup> (Ch.)  
 move (chair), a<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>55</sup> > a<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup> ɔ̃<sup>31</sup>

- movies, tsi<sup>31</sup>  
 movies, bō<sup>55</sup>  
 mu = 0.0667 hectares, t<sup>h</sup>i<sup>55</sup>ʂu<sup>31</sup>  
 much, buam<sup>31</sup>  
 mud playing, a<sup>31</sup>sa<sup>55</sup>a<sup>31</sup>hi<sup>55</sup>ε<sup>31</sup>  
 mud, dzɿ<sup>55</sup> dzam<sup>31</sup>  
 muddled, confused, m<sup>31</sup>xuŋ<sup>31</sup>  
 muddy (water), ʔa<sup>31</sup>zom<sup>31</sup>li<sup>33</sup>k<sup>h</sup>am<sup>55</sup>ʂɿ<sup>31</sup>dzɿ<sup>53</sup>u<sup>31</sup>  
 muddy, turbid, k<sup>h</sup>am<sup>55</sup>k<sup>h</sup>am<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
 muddy, turbid, k<sup>h</sup>am<sup>55</sup>k<sup>h</sup>am<sup>55</sup>(tʂ<sup>h</sup>ɿ<sup>31</sup>)  
 Mugujia, mu<sup>31</sup>gun<sup>55</sup>dzaŋ<sup>31</sup>  
 mugwort, Chinese, ʂɿ<sup>31</sup>mo<sup>33</sup>  
 mulberry tree, bu<sup>31</sup>dza<sup>31</sup>dzuŋ<sup>55</sup>, a<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>  
 mule, lo<sup>55</sup>tsu<sup>55</sup> (Ch.)  
 multiply, i<sup>55</sup>fu<sup>55</sup>so<sup>31</sup>ni<sup>55</sup>yo<sup>31</sup>  
 muntjac (deer), ʂɿ<sup>31</sup>zɿ<sup>31</sup>  
 murder, a<sup>31</sup>ts<sup>h</sup>uŋ<sup>31</sup>san<sup>53</sup>  
 muscles, ŋ<sup>31</sup>ʂa<sup>55</sup>nε<sup>55</sup>  
 mushroom, a<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>mu<sup>55</sup>  
 mushroom, straw-, mu<sup>31</sup>k<sup>h</sup>am<sup>55</sup>  
 mushroom, fungus, edible, mu<sup>31</sup>gun<sup>55</sup>  
 mushroom; fungus, mu<sup>55</sup>dim<sup>55</sup>  
 mushroom, k. of, mo<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 mushroom, k. of, tɕa<sup>31</sup>mu<sup>31</sup>t<sup>h</sup>ia<sup>35</sup>lu<sup>55</sup>  
 mushroom, k. of, a<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>mu<sup>55</sup>dim<sup>55</sup>  
 mushroom, k. of, m<sup>55</sup>bu<sup>31</sup>si<sup>31</sup>  
 mushroom, k. of, mu<sup>35</sup>ku<sup>33</sup>  
 mushroom, k. of, dzɿ<sup>55</sup>ɕem<sup>55</sup>buam<sup>55</sup>mu<sup>55</sup>dim<sup>55</sup>  
 mushroom, k. of, mu<sup>55</sup>ti<sup>33</sup>li<sup>33</sup>  
 mushroom, k. of, da<sup>31</sup>so<sup>55</sup>mu<sup>35</sup>dim<sup>55</sup>  
 mushroom, k. of, k<sup>h</sup>a<sup>55</sup>su<sup>35</sup>mu<sup>55</sup>dim<sup>55</sup>  
 musical instrument, io<sup>31</sup>tɕ<sup>h</sup>i<sup>35</sup> (Ch.)  
 musk deer, la<sup>31</sup>xo<sup>31</sup> (Lisu); t<sup>h</sup>a<sup>31</sup>la<sup>55</sup> (doe)  
 musk; moschus (Chinese medicine), a<sup>31</sup>sum<sup>55</sup>; ʔla<sup>31</sup>sum<sup>55</sup>  
 mustard greens, ʔo<sup>31</sup>nε<sup>55</sup>  
 mustard greens, ʔo<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 mustard greens, la<sup>31</sup>ts<sup>h</sup>u<sup>31</sup>di<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 mute, become, ʂaŋ<sup>55</sup>bεn<sup>55</sup>  
 mute; dumb, di<sup>31</sup>baŋ<sup>55</sup>  
 mute; dumb, mute; dumb, k<sup>h</sup>a<sup>31</sup>bεn<sup>55</sup>  
 mutual, a<sup>31</sup>-  
 mutual, help each other, k<sup>h</sup>u<sup>31</sup>k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>i<sup>31</sup>ve<sup>3</sup>  
 mutton, a<sup>31</sup>iaŋ<sup>31</sup>ɕa<sup>33</sup>  
 mutton, a<sup>31</sup>bε<sup>55</sup>ɕa<sup>33</sup>  
 muzzle (of gun), dzo<sup>55</sup>k<sup>h</sup>ã<sup>33</sup>k<sup>h</sup>uã<sup>31</sup>  
 my, a<sup>31</sup>io<sup>31</sup>k<sup>h</sup>a<sup>31</sup>, ŋa<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 myself, a<sup>31</sup>io<sup>31</sup>luŋ<sup>55</sup>

- nail, a, xo<sup>33</sup> tsɿ<sup>55</sup> (Lisu)  
 nail, to, a<sup>31</sup> t<sup>h</sup>ã<sup>55</sup> u<sup>31</sup>  
 nail onto, t<sup>h</sup>aŋ<sup>31</sup> -i  
 nail, fingernail, n̩in<sup>55</sup>  
 naked, (da<sup>31</sup> guŋ<sup>31</sup>) tɕ<sup>h</sup>a<sup>55</sup>  
 name someone or something, buŋ<sup>31</sup> tɛn<sup>55</sup> (lɛn<sup>55</sup>)  
 name, buŋ<sup>31</sup>, b.ɯŋ<sup>31</sup>  
 name, a, ŋɛ<sup>31</sup> ŋu<sup>31</sup>, a<sup>31</sup> nuŋ<sup>31</sup>  
 name, number, mark, ba<sup>31</sup> la<sup>55</sup>  
 nape, back of neck, go<sup>31</sup> lo<sup>53</sup> duŋ<sup>55</sup>  
 narrow (road), tɕi<sup>55</sup> p<sup>h</sup>i<sup>55</sup>  
 national flag, kuɛ<sup>35</sup> p<sup>h</sup>ɛ<sup>35</sup> (Ch.)  
 native village, tɕ<sup>h</sup>im<sup>31</sup> za<sup>55</sup>  
 naughty, ɕɛ<sup>31</sup> ɕi<sup>55</sup> ɛ<sup>31</sup>  
 naughty, po<sup>55</sup> p<sup>h</sup>.ŋ<sup>53</sup>  
 naughty; mischievous, ɕɛ<sup>31</sup> ɕi<sup>55</sup> ɛ<sup>31</sup>  
 nauseating, duŋ<sup>55</sup> a<sup>31</sup> k<sup>h</sup>om<sup>35</sup>  
 navel, ben<sup>33</sup> t<sup>h</sup>u<sup>55</sup>  
 near, ŋi<sup>55</sup> dza<sup>53</sup> > ŋi<sup>33</sup> dza<sup>33</sup>  
 near childbirth, ŋ<sup>31</sup> tɕ<sup>h</sup>ɛn<sup>31</sup> di<sup>31</sup> k<sup>h</sup>om<sup>55</sup> ɣɿ<sup>31</sup> t<sup>h</sup>a<sup>31</sup> t<sup>h</sup>u<sup>35</sup> ni<sup>33</sup>  
 nearby, ŋi<sup>55</sup> dza<sup>55</sup> (ba<sup>31</sup>)  
 neat, tidy, tɕ<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>a<sup>55</sup>  
 neck bone, go<sup>31</sup> io<sup>53</sup> sa<sup>53</sup> zu<sup>33</sup>  
 neck tumor, du<sup>31</sup> ba<sup>ŋ</sup><sup>55</sup>  
 neck, go<sup>31</sup> io<sup>53</sup>, go<sup>31</sup> lo<sup>55</sup>  
 necklace, zɿ<sup>31</sup> luŋ<sup>35</sup>, zu<sup>31</sup> luŋ<sup>35</sup>, i<sup>31</sup> luŋ<sup>35</sup>  
 needle (sewing), ʔuam<sup>55</sup>  
 neigh (horse), cry (of animal), nã<sup>55</sup>  
 neighbor, t<sup>h</sup>i<sup>55</sup> dzu<sup>33</sup> ts<sup>h</sup>aŋ<sup>31</sup>  
 neighbor, k<sup>h</sup>a<sup>55</sup> gu<sup>31</sup> a<sup>31</sup> ts<sup>h</sup>aŋ<sup>31</sup>  
 neighbor, tɕ<sup>h</sup>im<sup>31</sup> zaŋ<sup>31</sup> k<sup>h</sup>a<sup>55</sup> du<sup>31</sup> a<sup>31</sup> ts<sup>h</sup>aŋ<sup>31</sup>  
 neighboring, next door, k<sup>h</sup>u<sup>31</sup> k<sup>h</sup>a<sup>55</sup>  
 nephew; niece, ŋa<sup>31</sup> saŋ<sup>31</sup>  
 nervous, ba<sup>31</sup> ɣɿ<sup>31</sup> di<sup>31</sup> dzaŋ<sup>31</sup>  
 nest for birds, tɕ<sup>h</sup>a<sup>55</sup> daŋ<sup>31</sup>  
 nest, tɕ<sup>h</sup>a<sup>55</sup> daŋ<sup>31</sup>  
 nest, a, n̩in<sup>55</sup> ua<sup>31</sup> dzi<sup>31</sup> ɛ<sup>31</sup>  
 nest, to, n̩in<sup>55</sup> ua<sup>31</sup> dzi<sup>31</sup> ɛ<sup>31</sup>  
 net (e.g., fishing), p<sup>h</sup>u<sup>31</sup> ia<sup>55</sup>  
 net (weave), p<sup>h</sup>u<sup>31</sup> ia<sup>55</sup> ʔban<sup>55</sup>  
 new (clothes), ŋ<sup>31</sup> se<sup>55</sup>, se<sup>55</sup>  
 New Year, ŋ<sup>31</sup> nuŋ<sup>55</sup> se<sup>55</sup>  
 newspaper, pau<sup>35</sup> tsɿ<sup>53</sup>, pau<sup>31</sup> tsɿ<sup>55</sup>  
 next, k<sup>h</sup>a<sup>55</sup> p<sup>h</sup>aŋ<sup>35</sup>  
 next = before, ma<sup>55</sup> ɕu<sup>31</sup> k<sup>h</sup>a<sup>53</sup>  
 next to, nearby, di<sup>33</sup> tɕ<sup>h</sup>iŋ<sup>55</sup> da<sup>33</sup>  
 nickname, a<sup>31</sup> k<sup>h</sup>ua<sup>31</sup> buŋ<sup>55</sup>

- niece; brother's daughter, bu<sup>31</sup>du<sup>53</sup>  
 night, du<sup>31</sup>a<sup>31</sup>vi<sup>53</sup>  
 night, a<sup>31</sup>ʃ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 night, deep in the, a<sup>31</sup>ca<sup>55</sup>gun<sup>31</sup>  
 night, last, tɕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>ʃ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 night, iaŋ<sup>55</sup>  
 night (whole), t<sup>h</sup>i<sup>55</sup>iaŋ<sup>55</sup>di<sup>33</sup>  
 night falls, ɬu<sup>31</sup>a<sup>31</sup>ni<sup>55</sup>  
 night school, a<sup>31</sup>vam<sup>55</sup>ɛ<sup>31</sup>  
 nine, du<sup>31</sup>gu<sup>31</sup>, ku<sup>55</sup> (Lisu)  
 nineteen, t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>ai<sup>55</sup>du<sup>31</sup>gu<sup>31</sup>, ts<sup>h</sup>ɿ<sup>31</sup>ku<sup>55</sup> (Lisu)  
 nineth, ti<sup>35</sup>tɕu<sup>53</sup>  
 ninth early branch (monkey), ni<sup>31</sup>sa<sup>31</sup>nuŋ<sup>55</sup>  
 ninety, du<sup>31</sup>gu<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>  
 nipple, teat, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 nit (louse egg), ɕuŋ<sup>755</sup>lim<sup>31</sup>  
 nitre; saltpetre, po<sup>55</sup>na<sup>55</sup>tsɿ<sup>31</sup> (Lisu)  
 nod (head), ŋom<sup>55</sup>ŋom<sup>55</sup>; ŋom<sup>31</sup>ʃ<sup>55</sup>  
 nod, to, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>fɛ<sup>31</sup>ũ<sup>31</sup>  
 noisy, k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>ɛm<sup>31</sup>ʃ<sup>55</sup>  
 nonpoison arrow, p<sup>h</sup>a<sup>55</sup>ɬaŋ<sup>55</sup>  
 nominalizers (NOM), -o<sup>55</sup>, -o<sup>31</sup>, -u<sup>55</sup>, -u<sup>31</sup>, dem<sup>55</sup>, za<sup>55</sup>, su<sup>55</sup>; ŋ<sup>31</sup>-, ʔŋ<sup>31</sup>-  
 noodles from bean or sweet potato starch, fun<sup>55</sup>t<sup>h</sup>iau<sup>31</sup> (Ch.)  
 noodles (string), ɕa<sup>31</sup>ɿa<sup>31</sup>bun<sup>55</sup> (k<sup>h</sup>a<sup>53</sup>mɛ<sup>35</sup>)  
 noodles, fried, de<sup>31</sup>bo<sup>55</sup>ua<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>  
 noodles, k<sup>h</sup>a<sup>53</sup>mɛ<sup>35</sup>  
 noon, a<sup>31</sup>iã<sup>35</sup>mu<sup>31</sup>ɿuŋ<sup>31</sup>  
 noose (to catch game), ɕa<sup>33</sup>xuŋ<sup>55</sup>  
 north, tɕi<sup>31</sup>bo<sup>55</sup>  
 north wind, tɕ<sup>h</sup>i<sup>31</sup>bo<sup>55</sup>na<sup>31</sup>bu<sup>31</sup>  
 north to south, east to west, tɕ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup>bo<sup>55</sup>  
 nose bleed, ʃ<sup>31</sup>na<sup>55</sup>ɕu<sup>33</sup>  
 nose hair, ʃ<sup>31</sup>na<sup>55</sup>min<sup>33</sup>  
 nose ridge, ʃ<sup>31</sup>na<sup>55</sup>gun<sup>31</sup>  
 nose ring of a cow, na<sup>55</sup>kã<sup>55</sup>  
 nose, ʃ<sup>31</sup>na<sup>55</sup>  
 nostril, ʃ<sup>31</sup>na<sup>55</sup>k<sup>h</sup>uã<sup>31</sup>  
 not be, m<sup>31</sup>zɿ<sup>55</sup>  
 not be at, m<sup>31</sup>no<sup>33</sup>  
 not enough; insufficient, ʔa<sup>31</sup>dzim<sup>55</sup>  
 not cold, not hot, ma<sup>31</sup>m<sup>31</sup>dzaŋ<sup>55</sup>ma<sup>31</sup>k<sup>h</sup>ɛ<sup>55</sup>  
 not only...but also..., t<sup>h</sup>ia<sup>35</sup>m<sup>31</sup>a<sup>35</sup>...  
 not permitted, m<sup>31</sup>da<sup>55</sup>dzi<sup>31</sup>  
 not the same, not identical, ma<sup>31</sup>du<sup>55</sup>  
 not willing, m<sup>31</sup>na<sup>55</sup>ɕuŋ<sup>55</sup>  
 not worry, nim<sup>31</sup>t<sup>h</sup>a<sup>31</sup>p<sup>h</sup>ʃ<sup>31</sup>ɕa<sup>31</sup>  
 not, negative, m<sup>31</sup>

- notebook, ɲ<sup>31</sup>t<sup>h</sup>am<sup>55</sup>  
 notify, inform, t<sup>h</sup>uŋ<sup>55</sup>t<sup>ʂ</sup>ɿ<sup>55</sup>  
 November, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>ai<sup>53</sup> t<sup>h</sup>i<sup>55</sup> la<sup>55</sup>  
 now; at present, a<sup>31</sup>p<sup>h</sup>i<sup>55</sup>ŋie<sup>31</sup> p<sup>h</sup>i<sup>55</sup>  
 now, ie<sup>55</sup>san<sup>55</sup>nur<sup>31</sup>; ie<sup>31</sup>; a<sup>31</sup>p<sup>h</sup>i<sup>55</sup>; ie<sup>31</sup> p<sup>h</sup>i<sup>55</sup>  
 Nu language, a<sup>31</sup>nun<sup>31</sup> k<sup>h</sup>a<sup>55</sup>  
 Nu (person), a<sup>31</sup>nun<sup>31</sup>t<sup>ʂ</sup>ɿ<sup>55</sup>  
 Nu nationality, a<sup>31</sup>nun<sup>31</sup> t<sup>ʂ</sup>ɿ<sup>h</sup><sup>55</sup>  
 Nùjiāng River (Salween), a<sup>31</sup>nun<sup>31</sup> t<sup>ʂ</sup>h<sup>u</sup><sup>31</sup> mu<sup>31</sup>  
 numb, t<sup>ʂ</sup>ɿ<sup>h</sup>ɛn<sup>55</sup>; t<sup>ʂ</sup>ɿ<sup>h</sup>ɛn<sup>35</sup>  
 numeral on clock, p<sup>h</sup>an<sup>31</sup>ɕun<sup>55</sup>  
 nunnery, t<sup>h</sup>i<sup>31</sup>vɛn<sup>31</sup>g<sup>u</sup>ŋ<sup>55</sup>t<sup>ʂ</sup>ɿ<sup>h</sup>im<sup>31</sup> ?  
 nuptial chamber, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>se<sup>55</sup>kuan<sup>55</sup>
- o'clock, (one) hour, t<sup>h</sup>i<sup>55</sup>so<sup>31</sup>  
 oar, a<sup>31</sup>v<sup>i</sup>i<sup>55</sup>  
 object (OBJ), k<sup>h</sup>a<sup>31</sup>, ba<sup>31</sup>  
 observe festival, k<sup>h</sup>o<sup>31</sup>ɿ<sup>31</sup>  
 obstinate, stubborn, n<sup>i</sup>m<sup>31</sup> k<sup>h</sup>a<sup>33</sup>  
 obverse; right side; front; ahead, ma<sup>55</sup> ʂu<sup>31</sup> k<sup>h</sup>a<sup>55</sup>  
 occupy, ga<sup>35</sup>o<sup>31</sup>  
 occur, happen, b<sup>a</sup><sup>55</sup>n<sup>u</sup><sup>55</sup>  
 occur, happen, ɲan<sup>55</sup>a<sup>31</sup>na<sup>33</sup>  
 October, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>ai<sup>55</sup> la<sup>55</sup>  
 off white, p<sup>h</sup>o<sup>55</sup> mo<sup>31</sup>  
 offend, li<sup>31</sup> i<sup>31</sup>  
 offer, dedicate, ɕun<sup>53</sup>  
 officer, iu<sup>31</sup> d<sup>ʒ</sup>a<sup>33</sup>su<sup>55</sup>  
 official, dzu<sup>31</sup>u<sup>31</sup>  
 oil palm, a<sup>31</sup>li<sup>35</sup>  
 oil soup, ɕa<sup>55</sup>t<sup>ʂ</sup>ɿ<sup>h</sup><sup>31</sup>  
 oil, grease, lard, xua<sup>35</sup>iu<sup>31</sup>  
 oil, ɲ<sup>31</sup>su<sup>53</sup>  
 oil, rapeseed, k<sup>h</sup>ɛn<sup>55</sup> su<sup>55</sup>  
 oil, vegetable or plant, ɲ<sup>31</sup>su<sup>53</sup>  
 oil, walnut, bu<sup>31</sup>iu<sup>55</sup>  
 oil; grease, xua<sup>35</sup>iu<sup>31</sup> (Ch.)  
 ointment, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>a<sup>31</sup>ma<sup>55</sup>dem<sup>55</sup>  
 ointment, rub on, ɕa<sup>55</sup>su<sup>55</sup>ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>a<sup>31</sup>ma<sup>55</sup>ɿ<sup>55</sup>  
 old (clothes), ɿ<sup>55</sup>  
 old (person, vegetables), t<sup>h</sup>i<sup>31</sup> man<sup>31</sup>  
 old man, di<sup>53</sup> t<sup>ʂ</sup>ɿ<sup>h</sup>an<sup>31</sup> za<sup>55</sup>  
 old man, old person, a<sup>31</sup>ʂa<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 old person, adult, a<sup>31</sup>ʂa<sup>55</sup>  
 old person, a<sup>31</sup>ʂa<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 old woman, a<sup>31</sup>ʂa<sup>55</sup>mu<sup>31</sup>  
 old, ɲ<sup>31</sup>ɿ<sup>55</sup>



- oldness, ŋ<sup>31</sup>ŋ<sup>55</sup>  
 on credit, buy or sell, ʔdɛm<sup>55</sup>  
 on friendly terms, a<sup>31</sup>di<sup>31</sup>dʒ<sup>55</sup>ʂ<sup>31</sup>  
 on purpose; perversely, ma<sup>31</sup>ma<sup>31</sup>di<sup>33</sup>  
 on the other side of (a river), di<sup>31</sup>xanɯ<sup>31</sup>  
 on top of, t<sup>h</sup>an<sup>55</sup>  
 on verge of, dʒ<sup>31</sup>dzu<sup>55</sup>  
 once; ever, iaŋ<sup>31</sup>  
 once; one, t<sup>h</sup>i<sup>55</sup>  
 one and a half, t<sup>h</sup>i<sup>31</sup>nɯ<sup>31</sup> t<sup>h</sup>i<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 one half, t<sup>h</sup>i<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 one jin and a half, t<sup>h</sup>i<sup>55</sup>gam<sup>55</sup> t<sup>h</sup>i<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 one o'clock, t<sup>h</sup>i<sup>55</sup>so<sup>31</sup>  
 one pace, a step, t<sup>h</sup>i<sup>31</sup>gam<sup>33</sup>  
 one part, i<sup>31</sup>fun<sup>55</sup>  
 one person boat; dugong boat out of trunk of a tree, k<sup>h</sup>o<sup>31</sup>ʂ<sup>55</sup> a<sup>31</sup>su<sup>31</sup>  
 one week, t<sup>h</sup>i<sup>31</sup>ʂ<sup>31</sup> ni<sup>55</sup> (Lisu)  
 one-by-one (people), t<sup>h</sup>i<sup>31</sup>io<sup>55</sup>t<sup>h</sup>i<sup>31</sup>io<sup>55</sup>  
 one-cupped-hand-worth, m<sup>31</sup>guan<sup>53</sup>  
 one-cupped-hand-worth, t<sup>h</sup>i<sup>55</sup>mo<sup>31</sup>guan<sup>53</sup>  
 one-tenth of a tael, ɕun<sup>55</sup>  
 one-third of a meter, (t<sup>h</sup>i<sup>31</sup>)dʒa<sup>55</sup> (Lisu)  
 one, t<sup>h</sup>i<sup>55</sup>, t<sup>h</sup>i<sup>31</sup> (Lisu)  
 oneself, ŋ<sup>31</sup>luŋ<sup>55</sup>  
 onion, green, k<sup>h</sup>a<sup>55</sup>su<sup>35</sup>mu<sup>55</sup>dim<sup>55</sup>  
 onion, scallions, ts<sup>h</sup>o<sup>55</sup> (Ch.)  
 only = one, a<sup>31</sup>t<sup>h</sup>i<sup>31</sup>  
 only, si<sup>55</sup>, ɛ<sup>31</sup>si<sup>55</sup>, tcha<sup>35</sup>iun<sup>31</sup>  
 open (a book), (ʂ<sup>55</sup>va<sup>31</sup>)p<sup>h</sup>un<sup>55</sup>(ŋa<sup>31</sup>u<sup>31</sup>)  
 open (a shop), na<sup>31</sup>tɕ<sup>h</sup>un<sup>55</sup>p<sup>h</sup>un<sup>53</sup>  
 open (an umbrella), mo<sup>55</sup>p<sup>h</sup>ɛn<sup>55</sup>mo<sup>31</sup>ʂ<sup>55</sup>  
 open (an umbrella), p<sup>h</sup>ɛn<sup>53</sup>  
 open (bag), t<sup>h</sup>a<sup>31</sup>o<sup>55</sup>  
 open (door, lid), to, p<sup>h</sup>un<sup>55</sup> (u<sup>31</sup>)  
 open (door), t<sup>h</sup>iɛŋu<sup>31</sup>  
 open (mouth), a<sup>55</sup>  
 open (mouth), k<sup>h</sup>a<sup>55</sup>  
 open (mouth), xa<sup>33</sup>ʂ<sup>31</sup>  
 open eyes wide, da<sup>33</sup>dǎŋ<sup>31</sup>  
 open eyes, ni<sup>55</sup>luŋ<sup>55</sup> ʔdʒɛ<sup>31</sup>lin<sup>55</sup>  
 open out, separate, k<sup>h</sup>a<sup>55</sup>gu<sup>31</sup>u<sup>31</sup>  
 open stall, ɕun<sup>55</sup>ʂ<sup>31</sup>  
 open up wasteland, tɕ<sup>h</sup>a<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 open, p<sup>h</sup>un<sup>35</sup>(u<sup>31</sup>)  
 open, tear up, p<sup>h</sup>o<sup>33</sup>ʔo<sup>55</sup>  
 open; unfold; turn, p<sup>h</sup>un<sup>55</sup>; p<sup>h</sup>un<sup>55</sup> u<sup>31</sup>  
 opening, m<sup>31</sup>dʒa<sup>35</sup>u<sup>31</sup>

- operate on, bi<sup>55</sup>u<sup>55</sup>  
 operation, an, zɿ<sup>31</sup>gu<sup>31</sup>ɣa<sup>53</sup>a<sup>55</sup>  
 opinion, i<sup>35</sup>tɕen<sup>35</sup>  
 opium, ga<sup>55</sup>ni<sup>55</sup> a<sup>31</sup>iã<sup>31</sup>  
 oppose, fen<sup>55</sup>tue<sup>35</sup>  
 opposite, across from, lu<sup>55</sup> lu<sup>35</sup> k<sup>h</sup>a<sup>55</sup>  
 opposite, k<sup>h</sup>u<sup>31</sup>tɕ<sup>h</sup>ɛ<sup>53</sup>  
 optative (OPT), lɛ<sup>55</sup> - - lie<sup>31</sup>, la<sup>31</sup> - - lie<sup>31</sup>  
 or, me<sup>33</sup>, si<sup>55</sup>  
 orangutan, ga<sup>55</sup>gu<sup>31</sup> (Lisu)  
 orchard, ɕuŋ<sup>55</sup>ɣɿ<sup>31</sup>dza<sup>31</sup>ham<sup>55</sup>  
 order food in restaurant, k<sup>h</sup>en<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>ɣa<sup>31</sup>sen<sup>55</sup>  
 ordinal marker, ku<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup> + number  
 ordinal prefix, ɣi<sup>55</sup>p<sup>h</sup>aŋ<sup>55</sup> + number  
 origin, ua<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 originally, ɣi<sup>55</sup>zuŋ<sup>31</sup>  
 originally, at first, ba<sup>55</sup>su<sup>31</sup>  
 originally, at first, ŋ<sup>31</sup>mo<sup>55</sup> a<sup>33</sup>  
 orphan, di<sup>31</sup>tɕ<sup>h</sup>u<sup>55</sup>  
 others, a<sup>31</sup>k<sup>h</sup>i<sup>31</sup>  
 others, other people, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 others, other people, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 otter, ŋua<sup>55</sup>la<sup>31</sup> (Lisu)  
 ouch, a<sup>55</sup>la<sup>55</sup>!  
 ought to, should, a<sup>31</sup>nɛm<sup>55</sup>  
 ours (excl.), a<sup>31</sup>iuŋ<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 ours (incl.), a<sup>31</sup>ni<sup>35</sup>k<sup>h</sup>a<sup>31</sup>  
 outer ear, a<sup>31</sup>na<sup>31</sup>di<sup>55</sup>tɕiŋ<sup>55</sup>  
 outer part of clothes, na<sup>33</sup>t<sup>h</sup>aŋ<sup>55</sup> k<sup>h</sup>a<sup>55</sup>  
 outer room, ɣe<sup>55</sup>ba<sup>31</sup>ɕuŋ<sup>55</sup> k<sup>h</sup>uã<sup>55</sup>  
 outside, (i<sup>55</sup>)di<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>55</sup>  
 outside of garment, n<sup>33</sup>t<sup>h</sup>aŋ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 outside corner, a<sup>31</sup>dzuŋ<sup>55</sup>  
 outside, surroundings, (ɣi<sup>55</sup>)di<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 outsider, o<sup>31</sup>nu<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 oval shaped, t<sup>h</sup>o<sup>55</sup>t<sup>h</sup>aŋ<sup>31</sup>  
 over there, ɣo<sup>55</sup>ŋu<sup>31</sup>  
 over twenty, a<sup>31</sup>ni<sup>55</sup>ts<sup>h</sup>a<sup>55</sup>  
 over; top; last, na<sup>33</sup>tɕ<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>55</sup>, t<sup>h</sup>aŋ<sup>53</sup>  
 overcooked, burnt, ɣm<sup>55</sup>bu<sup>31</sup>dzi<sup>31</sup>ɛ<sup>31</sup>  
 overflow, to, a<sup>31</sup>su<sup>31</sup>ŋa<sup>31</sup>ts<sup>h</sup>aŋ<sup>55</sup> a<sup>31</sup>iu<sup>55</sup>  
 overflow, spill, di<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>55</sup>ɣa<sup>31</sup>su<sup>31</sup>  
 overgrown = old, t<sup>h</sup>i<sup>31</sup>maŋ<sup>31</sup>  
 overnight, t<sup>h</sup>i<sup>31</sup>iaŋ<sup>55</sup>di<sup>31</sup>xaŋ<sup>31</sup>ũ<sup>31</sup>  
 overthrow, down, bu<sup>55</sup>t<sup>h</sup>aŋ<sup>53</sup>a<sup>31</sup>ne<sup>35</sup>ba<sup>55</sup>  
 owe (debt), ɣdɛm<sup>55</sup>  
 owe, haŋ<sup>53</sup>u<sup>31</sup>

- owl, ka<sup>55</sup>p<sup>h</sup>u<sup>55</sup>  
 ox, bull, nō<sup>31</sup>uā<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 ox horn bee, ma<sup>35</sup>dzɿ<sup>31</sup> (Lisu)  
 ox, wild, ɕa<sup>55</sup>p<sup>h</sup>u<sup>31</sup>
- pad, to, ɕi<sup>31</sup>neŋ<sup>31</sup>ũ<sup>31</sup>  
 padded jacket, da<sup>31</sup>ʔuŋ<sup>55</sup>ga<sup>31</sup>mu<sup>31</sup>  
 paddle, row, a<sup>31</sup>su<sup>31</sup>zam<sup>53</sup>  
 paddy (rice), dzɿ<sup>31</sup>ia<sup>53</sup>so<sup>55</sup>, dzɿ<sup>31</sup>ia<sup>33</sup>so<sup>55</sup>  
 pagoda, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>im<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 pain, suffering, nim<sup>31</sup>a<sup>31</sup>dza<sup>55</sup>  
 painful, a<sup>31</sup>dza<sup>55</sup>(ŋu<sup>31</sup>) > a<sup>31</sup>dzãŋ<sup>55</sup>  
 paint (house), tɕi<sup>55</sup>dzɿ<sup>31</sup>dza<sup>55</sup>u<sup>31</sup>  
 paint or draw picture, xua<sup>35</sup>xua<sup>35</sup>  
 paint, da<sup>31</sup>k<sup>h</sup>i<sup>55</sup>ʂu<sup>55</sup>  
 paint, to, ʔa<sup>35</sup>maŋ<sup>55</sup>u<sup>55</sup>/maŋu<sup>55</sup>  
 paint, ʔa<sup>31</sup>ŋɕ<sup>35</sup>  
 paint; lacquer, da<sup>31</sup>k<sup>h</sup>ɿ<sup>55</sup>(ʂu<sup>55</sup>)  
 pair; clf., dzui<sup>55</sup>  
 pajamas, nim<sup>55</sup>t<sup>h</sup>a<sup>35</sup>gua<sup>55</sup>dɛm<sup>55</sup>ga<sup>31</sup>mu<sup>31</sup>  
 palm (leaf), p<sup>h</sup>am<sup>31</sup>  
 palm of hand, a<sup>31</sup>vu<sup>35</sup>p<sup>h</sup>am<sup>55</sup>  
 palm print, a<sup>31</sup>vu<sup>35</sup>p<sup>h</sup>am<sup>55</sup>bun<sup>55</sup>  
 palm tree, a<sup>31</sup>dze<sup>55</sup>dzun<sup>55</sup>  
 palm, lines of, a<sup>31</sup>vu<sup>35</sup>bun<sup>55</sup>  
 palm, middle of, a<sup>31</sup>vu<sup>35</sup>pam<sup>55</sup>ɕu<sup>31</sup>ɕu<sup>31</sup>  
 palm; sole, p<sup>h</sup>am<sup>55</sup>  
 pancake, maize or millet, pin<sup>55</sup>tsɿ<sup>33</sup> (Ch.)  
 pancreas, ŋ<sup>31</sup>t<sup>h</sup>i<sup>31</sup>ven<sup>55</sup>  
 pant, gasp, saŋ<sup>55</sup>a<sup>31</sup>t<sup>h</sup>uŋ<sup>31</sup>; a<sup>31</sup>p<sup>h</sup>uŋ<sup>31</sup>  
 pant; gasp, a<sup>31</sup>p<sup>h</sup>uŋ<sup>35</sup>  
 pants, ɕa<sup>33</sup>mã<sup>55</sup>(t<sup>h</sup>uŋ<sup>55</sup>); ɕa<sup>31</sup>mɛ<sup>55</sup>  
 paper, ʂɿ<sup>55</sup>va<sup>31</sup>a<sup>31</sup>zu<sup>33</sup>dɛm<sup>55</sup>  
 parcel or sack (of things), t<sup>h</sup>i<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 pare, peel (with knife), ɕɛm<sup>55</sup>  
 parents; father and mother, a<sup>31</sup>p<sup>h</sup>u<sup>31</sup>a<sup>31</sup>mu<sup>31</sup>  
 parrot, a<sup>55</sup>dzi<sup>31</sup>sa<sup>55</sup> (Lisu)  
 part from, leave, a<sup>31</sup>di<sup>31</sup>ba<sup>55</sup>/baŋ<sup>55</sup>  
 partial to and side with, nam<sup>31</sup>  
 partial, biased, a<sup>31</sup>m<sup>55</sup>t<sup>h</sup>ɿ<sup>31</sup>ua<sup>31</sup>  
 particle (PRT), ne<sup>33</sup>, se<sup>33</sup>  
 partition, wooden, (tɕ<sup>h</sup>im<sup>31</sup>)di<sup>31</sup>xan<sup>31</sup>  
 partition, wooden, ʂɿ<sup>55</sup>lan<sup>33</sup>da<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>ʂɿ<sup>55</sup>lan<sup>33</sup>da<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 pass (by a place), go through, li<sup>53</sup>  
 pass by (e.g., two years), ʎiɛ<sup>53</sup>a<sup>31</sup>ba<sup>33</sup>  
 pass entrance exam, k<sup>h</sup>au<sup>55</sup>ʂɿ<sup>55</sup>gan<sup>55</sup>ɿdze<sup>35</sup>  
 pass into the womb, o<sup>31</sup>mo<sup>55</sup>t<sup>h</sup>i<sup>31</sup>io<sup>55</sup>ŋu<sup>31</sup>

- pass on to, ɕi<sup>31</sup> ba<sup>31</sup> u<sup>31</sup>  
 pass; exceed, lie<sup>53</sup> ba<sup>33</sup>  
 pass; exceed, ŋ<sup>31</sup> dzan<sup>55</sup>  
 passable; indifferent, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 past marker, ie<sup>31</sup>  
 paste on (stamp), iu<sup>31</sup>p<sup>h</sup>iau<sup>35</sup>zam<sup>53</sup>  
 paste something up, t<sup>h</sup>a<sup>31</sup> o<sup>55</sup>  
 paste, stick, glue, dzam<sup>53</sup>  
 pastry, cake, pin<sup>55</sup>tsɿ<sup>33</sup>  
 pasture; grazing land, ŋi<sup>31</sup> na<sup>31</sup> sɿ<sup>33</sup> lã<sup>55</sup> mu<sup>53/55</sup>  
 pat (on the shoulder), a<sup>31</sup>na<sup>31</sup>  
 patch, t<sup>h</sup>i<sup>31</sup> tɕ<sup>h</sup>i<sup>55</sup> k<sup>h</sup>uã<sup>31</sup>  
 path, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup> tɕ<sup>h</sup>en<sup>31</sup>  
 paths between fields, da<sup>31</sup>p<sup>h</sup>u<sup>55</sup>dãŋ<sup>55</sup>  
 patience, ŋim<sup>31</sup>ŋu<sup>55</sup>ɛ<sup>31</sup>  
 patient, forbearing, dzu<sup>31</sup> se<sup>55</sup>  
 patient, ŋim<sup>31</sup> ŋuŋ<sup>55</sup>  
 patient, sick person, ts<sup>h</sup>a<sup>53</sup>na<sup>55</sup>  
 pave, lay, p<sup>h</sup>u<sup>31</sup>lu<sup>53</sup>  
 pay attention, a<sup>31</sup>dza<sup>33</sup> ʃɿ<sup>31</sup>  
 pay for, tʃi<sup>31</sup>liu<sup>53</sup>  
 pay for; compensate, ŋ<sup>31</sup> dzan<sup>31</sup>  
 pay for; compensate, tʃi<sup>31</sup>liu<sup>53</sup>, t<sup>h</sup>i<sup>31</sup>liu<sup>31</sup>  
 pay in restaurant, sua<sup>55</sup>ni<sup>55</sup>ua<sup>55</sup>  
 pay respect to God, p<sup>h</sup>u<sup>31</sup>iã<sup>33</sup> mu<sup>31</sup>gu<sup>31</sup>  
 pay taxes, i<sup>55</sup>ʃu<sup>55</sup>za<sup>31</sup>a<sup>31</sup>  
 pay tuition, tɕ<sup>h</sup>en<sup>55</sup>di<sup>31</sup>p<sup>h</sup>u<sup>55</sup>sa<sup>31</sup>u<sup>31</sup>  
 payment to porter, ɕa<sup>31</sup>zɿ<sup>35</sup> di<sup>31</sup> p<sup>h</sup>u<sup>35</sup>  
 peace, t<sup>h</sup>ɛ<sup>35</sup>p<sup>h</sup>iŋ<sup>31</sup> (Ch.)  
 peach, mu<sup>31</sup>sɿm<sup>31</sup>  
 peak, highest point, ma<sup>31</sup>na<sup>53</sup>  
 peak, mo<sup>31</sup>gun<sup>55</sup>t<sup>h</sup>aŋ<sup>55</sup>  
 peanut, xua<sup>55</sup>sui<sup>55</sup> (Ch.)  
 pear-leaved crab apple, t<sup>h</sup>im<sup>31</sup>  
 pear-shaped crab, t<sup>h</sup>im<sup>31</sup>  
 pear, ʃɿ<sup>33</sup>tɕ<sup>h</sup>o<sup>55</sup>  
 peas, do<sup>31</sup>ts<sup>h</sup>i<sup>31</sup> (Lisu)  
 peasant, la<sup>31</sup> ma<sup>55</sup> ua<sup>33</sup> su<sup>55</sup>  
 pebble, dzi<sup>31</sup>ha<sup>31</sup>luŋ<sup>55</sup>  
 peck (dry measure), duŋ<sup>55</sup>  
 peck at, ʔa<sup>31</sup>dʒɛn<sup>55</sup>  
 peck, to, a<sup>31</sup>ɣgia<sup>31</sup>n<sup>55</sup>  
 peddler, ʔo<sup>31</sup>la<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>ua<sup>55</sup>su<sup>55</sup>  
 peel (of skin), sun<sup>53</sup>u<sup>31</sup>  
 peel (of thunder), (mu<sup>55</sup>)da<sup>ʔ55</sup>  
 peel, skin, to, k<sup>h</sup>in<sup>55</sup> (bark), sam<sup>31</sup> (sheep)  
 peel (with peeler or knife), ɕem<sup>55</sup>

- peel; rind, ʔŋ<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 peep, to, k<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>dza<sup>31</sup>ũ<sup>55</sup>  
 pen (fountain), kaŋ<sup>55</sup>pi<sup>31</sup>; pi<sup>33</sup> (Ch.)  
 pen for cows, nō<sup>31</sup>uā<sup>31</sup>dza<sup>31</sup>xam<sup>35</sup>  
 pen for draught animals, mā<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 pen for sheep or goats, a<sup>31</sup>bɛ<sup>55</sup>dza<sup>31</sup>xam<sup>35</sup>  
 pen, in (sheep), p<sup>h</sup>am<sup>31</sup>  
 pencil, tɕ<sup>h</sup>ã<sup>55</sup>pi<sup>31</sup> (Ch.)  
 pencil sharpener, tɕ<sup>h</sup>ɛn<sup>55</sup>pi<sup>53</sup>ɕem<sup>53</sup>  
 penis, tɕ<sup>h</sup>u<sup>33</sup>(lu<sup>55</sup>)  
 penis (euphemistic, baby term), bu<sup>31</sup>luŋ<sup>55</sup>  
 people, zuŋ<sup>31</sup>min<sup>31</sup>  
 pepper tree (female), dzi<sup>53</sup>dzuŋ<sup>55</sup>mu<sup>31</sup>  
 pepper tree (male), dzi<sup>53</sup>dzuŋ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 pepper, black, so<sup>55</sup>so<sup>33</sup>  
 pepper, wild, a<sup>31</sup>dzam<sup>55</sup>  
 perfective aspect, t<sup>h</sup>aŋ<sup>55</sup>  
 perfective aspect, dzi<sup>55</sup>  
 perform cupping, tɕ<sup>h</sup>im<sup>53</sup>  
 perish, die out, sɿ<sup>31</sup>ma<sup>55</sup>u<sup>31</sup>  
 persimmon, t<sup>h</sup>a<sup>55</sup>dzi<sup>31</sup>  
 person, (a<sup>31</sup>)ts<sup>h</sup>aŋ<sup>31</sup>  
 person from another province, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>mu<sup>31</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 person wearing glasses, ni<sup>55</sup>luŋ<sup>55</sup>t<sup>h</sup>a<sup>31</sup>so<sup>5</sup>mu<sup>53</sup>  
 persuade, to, k<sup>h</sup>o<sup>55</sup>u<sup>31</sup>  
 pestle, rice, sa<sup>33</sup>brɿ<sup>31</sup>  
 pestle, dza<sup>31</sup>p<sup>h</sup>aŋ<sup>31</sup>  
 pet name, buŋ<sup>31</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 petals of a flower, ɕuŋ<sup>55</sup>vɛn<sup>55</sup>ɕi<sup>31</sup>lim<sup>35</sup>tɕ<sup>h</sup>ɛm<sup>55</sup>  
 pheasant, na<sup>31</sup>za<sup>55</sup>  
 pheasant, ts<sup>h</sup>u<sup>31</sup>ma<sup>53</sup>  
 phlegm, tɕ<sup>h</sup>im<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 phlegm; sputum, dza<sup>55</sup>xaŋ<sup>55</sup>  
 photograph, ts<sup>h</sup>o<sup>55</sup>dzi<sup>31</sup> (Lisu)  
 photograph, ɕaŋ<sup>35</sup>p<sup>h</sup>ien<sup>35</sup>  
 pick (fruit); pluck; select, som<sup>55</sup>mu<sup>31</sup>  
 pick at, scrape, k<sup>h</sup>o<sup>31</sup>lo<sup>35</sup>  
 pick out, a<sup>31</sup>p<sup>h</sup>i<sup>31</sup>u<sup>31</sup>  
 pick teeth, a<sup>31</sup>sa<sup>31</sup>ni<sup>55</sup>k<sup>h</sup>o<sup>31</sup>ŋo<sup>31</sup>ŋi<sup>55</sup>  
 pick up with chopsticks (vegetables), a<sup>31</sup>p<sup>h</sup>i<sup>35</sup>, tɕ<sup>h</sup>uŋ<sup>53</sup>  
 pick up, t<sup>h</sup>u<sup>55</sup>u<sup>31</sup>  
 pick, zom<sup>35</sup>  
 pickle in salt, ã<sup>55</sup> (Lisu)  
 pickle in salt, m<sup>31</sup>tɕ<sup>h</sup>om<sup>53</sup>  
 pickled Chinese cabbage, k<sup>h</sup>ɛn<sup>33</sup>mu<sup>31</sup>tɕ<sup>h</sup>um<sup>55</sup>  
 picture; draw a picture, xua<sup>35</sup> (Ch.)

- piece, to, ian<sup>31</sup>  
 pierce, to, η<sup>31</sup>la<sup>55</sup>gua<sup>31</sup>ʃɿ<sup>35</sup>li<sup>31</sup>  
 pierce, to, go<sup>53</sup>tʰi<sup>31</sup>kʰen<sup>55</sup>  
 pierce, stab, ɕu<sup>55</sup>iur<sup>31</sup>  
 pierce, stick into, tɕ<sup>h</sup>a<sup>53</sup>ηu<sup>31</sup>  
 piece of meat (slice), ɕa<sup>33</sup>pʰin<sup>33</sup>  
 pierce the ear (lobe), a<sup>31</sup>na<sup>31</sup>iur<sup>55</sup>ʃɿ<sup>31</sup>  
 pierce the nose of a cow, na<sup>55</sup>kʰɛŋ<sup>55</sup>iur<sup>55</sup>u<sup>31</sup>  
 pierce, insert, la<sup>55</sup>kʰuŋ<sup>31</sup>  
 pierce through, tʰo<sup>55</sup>lan<sup>55</sup>u<sup>55</sup>  
 pig feed ladle, ʔo<sup>55</sup>dza<sup>31</sup>do<sup>55</sup>dɛm<sup>55</sup>  
 pig feed trough, ʔo<sup>55</sup>dzi<sup>31</sup>kʰuŋ<sup>31</sup>  
 pig feet, ʔo<sup>55</sup>ʔa<sup>31</sup>xa<sup>35</sup>  
 pig heart, ʔo<sup>55</sup>ni<sup>31</sup>zuum<sup>31</sup>  
 pig iron, xu<sup>55</sup>dzi<sup>31</sup>  
 pig liver, ʔo<sup>55</sup>bu<sup>31</sup>ɕin<sup>55</sup>  
 pig lungs, ʔo<sup>55</sup>su<sup>31</sup>su<sup>55</sup>  
 pig manure, ʔo<sup>55</sup>ni<sup>33</sup>  
 pig meat (pork), ʔo<sup>55</sup>ɕa<sup>33</sup>  
 pig or hog bristles, ʔo<sup>55</sup>min<sup>55</sup>  
 pig pen (fence), ʔo<sup>55</sup>dza<sup>31</sup>xam<sup>55</sup>  
 pig stomach, ʔo<sup>55</sup>pʰu<sup>31</sup>ien<sup>31</sup>  
 pig tender, pig keeper, ʔo<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>33</sup>su<sup>55</sup>  
 pig tongue, ʔo<sup>55</sup>pʰu<sup>31</sup>ɛ<sup>31</sup>  
 pig urine, ba<sup>55</sup>pʰu<sup>31</sup>  
 pig, wild, pʰu<sup>55</sup>nam<sup>53</sup>  
 pig, fat, ʔo<sup>55</sup>dzi<sup>31</sup>  
 pig, ʔo<sup>55</sup>  
 pigeon; dove, da<sup>31</sup>fri<sup>55</sup>  
 piglet, ʔo<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 piglet; shoat, ʔo<sup>55</sup>dzi<sup>31</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 pigment, tʃɿ<sup>55</sup>dzi<sup>31</sup>  
 pigpen, pigsty, ʔo<sup>55</sup>dza<sup>31</sup>xam<sup>55</sup>  
 pigtail, mu<sup>31</sup>dzuŋ<sup>55</sup>  
 pile earth around the roots of a new plant, ʔa<sup>31</sup>sa<sup>55</sup>pʰu<sup>31</sup>; η<sup>31</sup>dzuŋ<sup>55</sup>pʰu<sup>31</sup>;  
 di<sup>31</sup>dzuŋu<sup>31</sup>  
 pile, heap (dirt), bum<sup>55</sup>  
 pile, heap; clf. for piles, bum<sup>55/33</sup>  
 pile up, tɕɛ<sup>31</sup>  
 pile up, (dʒɛ<sup>35</sup>)di<sup>31</sup>dzuŋ<sup>31</sup>  
 pile up, η<sup>31</sup>bum<sup>55</sup>bum<sup>31</sup>  
 pile, pile up, bom<sup>55</sup>  
 piles, hemorrhoids, ni<sup>31</sup>kʰu<sup>55</sup>dza<sup>55</sup>mu<sup>55</sup>  
 pill, nɛ<sup>55</sup>tsʰɿ<sup>31</sup>ɿuŋ<sup>55</sup> (Lisu)  
 pills, balls, nɛ<sup>55</sup>tsʰɿ<sup>31</sup>ɿuŋ<sup>55</sup>  
 pillar, ba<sup>33</sup>za<sup>33</sup>mu<sup>31</sup>

- pilose antler core, a<sup>31</sup> dzuŋ<sup>53</sup> k<sup>h</sup>u<sup>55</sup>  
 pilose antler core, ɕa<sup>33</sup> k<sup>h</sup>u<sup>33</sup>  
 pillow, ma<sup>55</sup> k<sup>h</sup>om<sup>33</sup>  
 pillow case, ma<sup>55</sup> k<sup>h</sup>om<sup>33</sup> di<sup>31</sup> p<sup>h</sup>u<sup>55</sup> dem<sup>55</sup>  
 pimple, zit, io<sup>55</sup> dzɿ<sup>31</sup>  
 pincer, to, a<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>31</sup>  
 pincers, fire tongs, ma<sup>33</sup> nɛm<sup>33</sup>  
 pinch, tɕ<sup>h</sup>iŋ<sup>33</sup>  
 pinch, to, ʂan<sup>31</sup>  
 pinch (e.g., leg), xua<sup>55</sup> ŋu<sup>31</sup>  
 pinch, nip (with fingers), m<sup>31</sup> t<sup>h</sup>om<sup>55/53</sup>  
 pinch, shoes, k<sup>h</sup>u<sup>55</sup> ŋi<sup>33</sup> tɕ<sup>h</sup>ɛ<sup>33</sup>  
 pine cone, ʂɿ<sup>31</sup> iu<sup>33</sup> t<sup>h</sup>im<sup>31</sup>  
 pine needle, ʂɿ<sup>31</sup> iu<sup>33</sup> ba<sup>55</sup> xu<sup>55</sup>  
 pine nut, ʂɿ<sup>31</sup> iu<sup>33</sup> ʂɿ<sup>55</sup>  
 pine torches, ʂɿ<sup>31</sup> iu<sup>33</sup>  
 pine tree, de<sup>53</sup> guaŋ<sup>55</sup>, gueŋ<sup>53</sup>, ʂɿ<sup>31</sup> iu<sup>33</sup>  
 pine tree, ʂɿ<sup>31</sup> iu<sup>33</sup> dzuŋ<sup>55</sup>  
 pink, zā<sup>31</sup> zā<sup>31</sup> bu<sup>31</sup> si<sup>55</sup>  
 pint, 1/10 peck, p<sup>h</sup>ɛŋ<sup>55</sup>  
 piss, pee, zɿ<sup>33</sup>  
 pistol, dzo<sup>55</sup> k<sup>h</sup>a<sup>33</sup> tɕ<sup>h</sup>ɛn<sup>31</sup>  
 pit (fire pit frame), xam<sup>31</sup> dzan<sup>55</sup>  
 pit of stomach, p<sup>h</sup>a<sup>33</sup> dzim<sup>55</sup>  
 pit; stone, ŋɿ<sup>31</sup> iu<sup>31</sup>  
 pit (fruit) = seed, luŋ<sup>55</sup>  
 pit of stomach, p<sup>h</sup>a<sup>33</sup> dzim<sup>55</sup>  
 pitch dark, tɕ<sup>h</sup>uŋ<sup>55</sup> ma<sup>53</sup> ŋi<sup>33</sup>  
 pitiable, poor, di<sup>31</sup> ɕa<sup>55</sup> m<sup>31</sup> za<sup>55</sup>  
 pity, piteous, di<sup>31</sup> ɕa<sup>55</sup> ɛ<sup>31</sup>  
 place to rest, di<sup>55</sup> gā<sup>55</sup> za<sup>55</sup>  
 place under, to, ɕi<sup>31</sup> nɛ<sup>55</sup>  
 place, mu<sup>31</sup>  
 place, za<sup>55</sup>  
 place; site, mu<sup>31</sup> gam<sup>53</sup>  
 placenta, ŋi<sup>55</sup> du<sup>31</sup>  
 plain, a, ta<sup>55</sup> k<sup>h</sup>uŋ<sup>31</sup>  
 plaintain, a<sup>31</sup> ɕuŋ<sup>31</sup>  
 plaintain (grass), a<sup>31</sup> dzuŋ<sup>55</sup> nan<sup>31</sup>  
 plane, carpenter's, p<sup>h</sup>ɿ<sup>55</sup> du<sup>31</sup> (Lisu)  
 plane, aircraft, dzɿ<sup>31</sup> hiŋ<sup>55</sup>  
 plane, aircraft, dem<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 plane, to, p<sup>h</sup>ɿ<sup>55</sup>  
 plant rice, to, tɕ<sup>h</sup>a<sup>55</sup> ŋɿ<sup>31</sup>  
 plant (vegetables), k<sup>h</sup>ɛn<sup>53</sup> u<sup>31</sup>  
 plant, transplant, k<sup>h</sup>ɛn<sup>55</sup>; k<sup>h</sup>ɛn<sup>53</sup> u<sup>31</sup>  
 plaster, a, nɛ<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup> dzam<sup>55</sup> dem<sup>55</sup>

- plaster for treating sprains, na<sup>55</sup>lu<sup>55</sup>ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>  
 plaster, apply a, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>dzam<sup>55</sup>ʂɿ<sup>31</sup>  
 plate, a, be<sup>33</sup>  
 plate, a, k<sup>h</sup>en<sup>55</sup>bē<sup>55</sup>  
 plate, small, be<sup>33</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 play, a, ɕi<sup>35</sup>  
 play (ball), (p<sup>h</sup>i<sup>31</sup>tɕ<sup>h</sup>u<sup>31</sup>)a<sup>31</sup>ne<sup>31</sup>a<sup>31</sup>  
 play (bamboo flute), dʒi<sup>31</sup>li<sup>31</sup>  
 play (cards), (p<sup>h</sup>u<sup>55</sup>k<sup>h</sup>ɛ<sup>31</sup>)a<sup>31</sup>ne<sup>35</sup>  
 play flute, (dʒi<sup>31</sup>lo<sup>31</sup>)min<sup>53</sup>  
 play bowed instrument, ʂan<sup>33</sup>u<sup>31</sup>  
 play chess, ɕa<sup>35</sup>tɕ<sup>h</sup>i<sup>31</sup>  
 play the Er-hu, ʂan<sup>33</sup>u<sup>31</sup>  
 play finger-guessing game, a<sup>55</sup>da<sup>31</sup>ʂɿ<sup>31</sup> (Lisu)  
 play hide-and-seek, ma<sup>33</sup>ʂɿ<sup>55</sup>ba<sup>31</sup>la<sup>53</sup>u<sup>31</sup>  
 play janken (paper, scissors, rock), a<sup>55</sup>da<sup>31</sup>ʂɿ<sup>31</sup>  
 play marbles, po<sup>55</sup>i<sup>31</sup>tɕ<sup>h</sup>u<sup>31</sup>di<sup>31</sup>p<sup>h</sup>uŋ<sup>35</sup>  
 play musical instrument, min<sup>53</sup>  
 play on swing, tɕ<sup>h</sup>uŋ<sup>33</sup>  
 play tug-of-war, a<sup>31</sup>xuŋ<sup>55</sup>bun<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 play, to, a<sup>31</sup>ts<sup>h</sup>i<sup>55</sup>i<sup>31</sup>  
 playground, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>za<sup>55</sup>dʒaŋ<sup>31</sup>  
 pledge, guarantee, po<sup>55</sup>tsum<sup>35</sup> (Ch.)  
 pliers, ma<sup>33</sup>ne<sup>55</sup>  
 plow (field), ts<sup>h</sup>o<sup>33</sup>o<sup>55</sup>  
 plow (field), la<sup>31</sup>ma<sup>55</sup>k<sup>h</sup>en<sup>55</sup>  
 plow furrow, dzo<sup>55</sup>k<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>a<sup>31</sup>  
 plow handle, dzo<sup>55</sup>k<sup>h</sup>i<sup>55</sup>k<sup>h</sup>ɿ<sup>31</sup>  
 plow point, dzo<sup>55</sup>k<sup>h</sup>i<sup>55</sup>  
 plow shaft, dzo<sup>55</sup>k<sup>h</sup>i<sup>55</sup>k<sup>h</sup>i<sup>31</sup>  
 plow share, ts<sup>h</sup>o<sup>31</sup>ʔo<sup>33</sup>  
 plow share, dzo<sup>55</sup>di<sup>55</sup>  
 pluck, to, k<sup>h</sup>a<sup>55</sup>neŋu<sup>35</sup>  
 pluck, to, t<sup>h</sup>u<sup>55</sup>  
 pluck (flowers), luŋu<sup>53</sup>  
 pluck the lute, min<sup>53</sup>  
 pluck with fingers, di<sup>31</sup>p<sup>h</sup>uŋ<sup>53</sup>  
 pluck; tear; separate, a<sup>31</sup>se<sup>55</sup>  
 plum, tsɿ<sup>55</sup>pi<sup>31</sup>li<sup>31</sup>  
 plum, li<sup>55</sup>tsɿ<sup>55</sup>  
 plunder (property), t<sup>h</sup>in<sup>55</sup>  
 plural (PL), mu<sup>53</sup> (animate and inanimate nouns)  
 plural (PL), ʒi<sup>31</sup>ŋu<sup>31</sup> (restricted to animate nouns)  
 pocket, burlap, mi<sup>55</sup>xuŋ<sup>55</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 pocket, cloth, ɕa<sup>55</sup>sam<sup>31</sup>k<sup>h</sup>ɿ<sup>55</sup>  
 pocket, k<sup>h</sup>ɿ<sup>55</sup>  
 pocket, p<sup>h</sup>a<sup>53</sup>du<sup>55</sup>



- pocket money, small change, dza<sup>31</sup>xa<sup>31</sup>lan<sup>55</sup> tɕ<sup>h</sup>ɛn<sup>31</sup> p<sup>h</sup>u<sup>55</sup>xu<sup>3</sup>  
 pockmarked person, ka<sup>31</sup>la<sup>31</sup>brɿ<sup>31</sup>mã<sup>55</sup>  
 pod (bean), tɕ<sup>h</sup>uŋ<sup>31</sup>  
 pod, a<sup>31</sup>no<sup>55</sup>t<sup>h</sup>im<sup>31</sup>  
 point (finger), to, ʃ<sup>31</sup>t<sup>h</sup>u<sup>31</sup>  
 point of foot, ɲ<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 point, tip, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>ɛ<sup>55</sup>  
 pointed, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>ɛ<sup>55</sup>  
 pointed; sharp, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>(ɛ<sup>55</sup>); ts<sup>h</sup>ɛ<sup>55</sup>ts<sup>h</sup>ɛ<sup>31</sup>  
 pointedness, a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup>o<sup>55</sup>  
 poison arrow, p<sup>h</sup>u<sup>31</sup>la<sup>55</sup>(so<sup>31</sup>mu<sup>53</sup>)  
 poison, p<sup>h</sup>u<sup>31</sup>la<sup>55</sup>, pu<sup>31</sup>la<sup>55</sup>  
 poison fish, to, ɲu<sup>55</sup>du<sup>55</sup>  
 poisoned, vi<sup>55</sup>(ɛ<sup>31</sup>)  
 poke, to, ʔa<sup>31</sup>t<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 poke, to, ɕin<sup>53</sup>  
 pole a boat, punt, a<sup>31</sup>su<sup>31</sup>ian<sup>55</sup>  
 pole for carrying people, a<sup>31</sup>tshan<sup>31</sup>a<sup>31</sup>gi<sup>31</sup>dɛm<sup>55</sup>  
 pole, carrying, ts<sup>h</sup>ɿ<sup>31</sup>  
 policeman, di<sup>31</sup>dʒɛm<sup>55</sup>su<sup>55</sup>  
 polish, to, ʔdʒi<sup>55</sup>li<sup>55</sup>ua<sup>55</sup>ɕin<sup>53</sup>  
 polish (with whetstone), la<sup>31</sup>t<sup>h</sup>a<sup>55</sup> (Lisu)  
 pond, pool, ts<sup>h</sup>ɿ<sup>31</sup>qom<sup>55</sup>  
 pond, pool, ɲan<sup>35</sup>tɕ<sup>h</sup>i<sup>31</sup>kɔŋ<sup>53</sup>  
 poor, di<sup>31</sup>ɕa<sup>31</sup>  
 poor (land), m<sup>31</sup>ɬa<sup>55</sup> (not+good)  
 poor people, di<sup>31</sup>ɕa<sup>31</sup>mu<sup>53</sup>  
 pop, to, ba<sup>31</sup>ɛ<sup>31</sup>ni<sup>33</sup>  
 porcupine, hɛ<sup>53</sup>pu<sup>33</sup>  
 pork, ʔo<sup>55</sup>ɕa<sup>33</sup>  
 porter, nɛn<sup>55</sup>a<sup>31</sup>gin<sup>55</sup>su<sup>55</sup>  
 portion, i<sup>31</sup>fɛŋ<sup>55</sup>  
 porridge; gruel, (dʒi<sup>31</sup>ja<sup>35</sup>) da<sup>31</sup>bun<sup>55</sup>grɿ<sup>55</sup>  
 positive, ɕa<sup>31</sup>ge<sup>55</sup>, tɕi<sup>31</sup>tɕi<sup>31</sup> (Ch.)  
 possessive (POSS), k<sup>h</sup>a<sup>31</sup>, ni<sup>55</sup>  
 possessive, ba<sup>31</sup>  
 possessive particle, k<sup>h</sup>a<sup>31</sup>ie<sup>55</sup>  
 possessive prefix (first person), a<sup>31</sup>  
 possessive prefix (second person), ɲu<sup>31</sup>, ɲi<sup>31</sup>, ni<sup>55</sup>  
 possessive prefix (third person), ɲ<sup>31</sup>  
 possible, probable, t<sup>h</sup>a<sup>31</sup>lu<sup>55</sup>  
 post office, iu<sup>31</sup>tien<sup>35</sup>tɕu<sup>31</sup>  
 post; pillar, ba<sup>33</sup>za<sup>33</sup>mu<sup>31</sup>  
 post; pillar; house, t<sup>h</sup>u<sup>31</sup>iun<sup>55</sup>  
 posters, notices, dzam<sup>55</sup>  
 pot soot, ɲi<sup>31</sup>k<sup>h</sup>u<sup>55</sup>t<sup>h</sup>an<sup>31</sup>  
 pot, aluminum, le<sup>35</sup>dʒa<sup>33</sup>k<sup>h</sup>o<sup>55</sup>

- pot, clay, de<sup>31</sup> tɕ<sup>h</sup>u<sup>55</sup>  
 pot, copper, k<sup>h</sup>a<sup>31</sup> mu<sup>55</sup>  
 pot, flower, ɕuŋ<sup>55</sup> ven<sup>55</sup> k<sup>h</sup>en<sup>55</sup> dem<sup>55</sup>  
 pot, flower, ɕu<sup>55</sup> ven<sup>55</sup> bɛ<sup>31</sup>  
 pot, iron, ɕa<sup>31</sup> k<sup>h</sup>ɛ<sup>55</sup> dza<sup>33</sup> k<sup>h</sup>o<sup>55</sup>  
 pot; wok, dza<sup>33</sup> k<sup>h</sup>o<sup>55</sup>  
 pot, va<sup>55</sup>  
 potato, hɛ<sup>31</sup> gi<sup>35</sup>  
 potato, sweet; red potato, a<sup>55</sup> mu<sup>33</sup> (Lisu)  
 poultry, dem<sup>31</sup> u<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>31</sup> su<sup>55</sup>  
 pound to pieces (garlic), k<sup>h</sup>o<sup>55</sup> o<sup>55</sup>  
 pound (millet), du<sup>53</sup>, du<sup>55</sup>  
 pound (using pestle), du<sup>55</sup> u<sup>31</sup>  
 pound (using pestle), dza<sup>31</sup> p<sup>h</sup>aŋ<sup>31</sup>  
 pound, tap, ɣum<sup>55</sup>  
 pound, thump (earth), du<sup>55</sup> u<sup>31</sup>  
 pound, to, k<sup>h</sup>o<sup>35</sup>(u<sup>31</sup>)  
 pour (e.g. into bottle), sam<sup>53</sup>, ts<sup>h</sup>uŋ<sup>55</sup> (pour down)  
 pour or throw out (water), bo<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>53</sup>  
 pour tea, ts<sup>h</sup>ɿ<sup>31</sup> k<sup>h</sup>a<sup>55</sup> ɿuŋ<sup>53</sup>  
 pour, to, ts<sup>h</sup>uŋ<sup>55</sup>  
 pout the lips, ni<sup>55</sup> bu<sup>31</sup> dzu<sup>55</sup> dzu<sup>31</sup> u<sup>a</sup><sup>31</sup>  
 powder (face), ʔua<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>31</sup> (Burmese)  
 powder the face, ma<sup>55</sup> k<sup>h</sup>a<sup>31</sup> a<sup>31</sup> ma<sup>55</sup>  
 powdered medicine, ɕuŋ<sup>55</sup> k<sup>h</sup>i<sup>55</sup> ne<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup>  
 powdered thread, mu<sup>55</sup> na<sup>31</sup> buŋ<sup>55</sup>  
 practice prostitution, la<sup>31</sup> bi<sup>55</sup> nem<sup>55</sup>  
 practice, to, tɕ<sup>h</sup>en<sup>31</sup> ɕɿ<sup>55</sup>  
 precipice, overhanging cliff, a<sup>31</sup> p<sup>h</sup>aŋ<sup>55</sup>  
 pregnant, be, ŋ<sup>31</sup> tɕ<sup>h</sup>en<sup>31</sup> no<sup>55</sup> za<sup>55</sup>  
 pregnant, be, zu<sup>31</sup> gu<sup>31</sup> ʔa<sup>31</sup> ɿ<sup>55</sup>  
 pregnant, be, ŋ<sup>31</sup> tɕ<sup>h</sup>en<sup>31</sup> zɿ<sup>55</sup> u<sup>31</sup>  
 pregnant, be, vi<sup>55</sup> ka<sup>ɿ</sup><sup>31</sup>  
 pregnant, be, zɿ<sup>31</sup> gu<sup>31</sup> a<sup>31</sup> ɿa<sup>55</sup> dze<sup>35</sup> (advanced pregnancy)  
 premature birth, ɕɿ<sup>31</sup> ɿa<sup>55</sup> m<sup>31</sup> ɿ<sup>h</sup>u<sup>31</sup> di<sup>31</sup> k<sup>h</sup>om<sup>31</sup>  
 prepare, to, p<sup>h</sup>a<sup>31</sup> sam<sup>55</sup> ɕɿ<sup>31</sup>  
 prepare, get ready to, ba<sup>31</sup> u<sup>a</sup><sup>55</sup>, a<sup>31</sup> suŋ<sup>31</sup>  
 prepare, get ready, di<sup>31</sup> da<sup>31</sup> mo<sup>31</sup>, dza<sup>31</sup> gu<sup>31</sup> (Lisu)  
 prescribe medicine, ne<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup> dzɿ<sup>55</sup> u<sup>31</sup>  
 present a glass of wine, nu<sup>31</sup> dzu<sup>31</sup>  
 press (with finger), a<sup>31</sup> dza<sup>31</sup> u<sup>31</sup>  
 press down, pa<sup>31</sup> dza<sup>31</sup> u<sup>31</sup>; ʔa<sup>31</sup> dza<sup>31</sup> u<sup>31</sup>  
 press flat, ʔa<sup>31</sup> dza<sup>31</sup> u<sup>31</sup> ɿi<sup>31</sup> tɕ<sup>h</sup>ɛ<sup>55</sup> ni<sup>55</sup> tɕ<sup>h</sup>ɛ<sup>55</sup>  
 press clothing, a<sup>31</sup> ni<sup>33</sup> ɕi<sup>31</sup> lim<sup>33</sup>  
 press, a<sup>31</sup> dza<sup>33</sup>, dzim<sup>33</sup>  
 pretend, nim<sup>55</sup> t<sup>h</sup>i<sup>31</sup> p<sup>h</sup>iŋ<sup>55</sup> ɕɿ<sup>31</sup>  
 prevent, proscibe, k<sup>h</sup>aŋ<sup>31</sup> u<sup>31</sup>

- previous, t<sup>h</sup>i<sup>55</sup>saŋ<sup>31</sup>  
 previously, ma<sup>55</sup>ʂu<sup>33</sup>ua<sup>33</sup>ʂu<sup>55</sup>  
 preying mantis, nem<sup>31</sup>naŋ<sup>55</sup>  
 price drop, di<sup>31</sup>p<sup>h</sup>u<sup>55</sup>a<sup>31</sup>dza<sup>35</sup>  
 price rise, di<sup>55</sup>p<sup>h</sup>u<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 price, ŋ<sup>31</sup>di<sup>31</sup>p<sup>h</sup>u<sup>35</sup>, ŋ<sup>31</sup>di<sup>31</sup>pu<sup>35</sup>  
 prices (to drop of), di<sup>55</sup>p<sup>h</sup>u<sup>55</sup>daŋ<sup>55</sup>  
 prick, stab, ia<sup>55</sup>ŋu<sup>33</sup>ca<sup>55</sup>ŋu<sup>33</sup>, tɕ<sup>h</sup>i<sup>33</sup>  
 prick, to, ca<sup>55</sup>ŋv<sup>31</sup>; ia<sup>55</sup>ŋv<sup>33</sup>  
 prickly ash, dzi<sup>53</sup>dzuŋ<sup>55</sup>  
 printed cotton, ɕuŋ<sup>55</sup>ven<sup>55</sup>ma<sup>55</sup>xuŋ<sup>55</sup>  
 prisoner, tsu<sup>55</sup>dzu<sup>31</sup>su<sup>55</sup> (Lisu)  
 prisoner, a<sup>31</sup>ʒe<sup>31</sup>mu<sup>55</sup>  
 probably, most likely, bam<sup>55</sup>ŋu<sup>31</sup>  
 probably, t<sup>h</sup>a<sup>31</sup>lu<sup>ʔ55</sup>  
 probe, di<sup>33</sup>dzaŋ<sup>55</sup>  
 problem, question, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>  
 procure abortion, ŋ<sup>31</sup>tɕ<sup>h</sup>en<sup>31</sup>san<sup>53</sup>  
 produce, to, t<sup>h</sup>o<sup>55</sup>  
 profitless business, o<sup>31</sup>la<sup>55</sup>ua<sup>55</sup>m<sup>31</sup>le<sup>31</sup>  
 progressive aspect, e<sup>55</sup>  
 promise, consent, ʔa<sup>31</sup>t<sup>h</sup>aŋ<sup>31</sup>  
 promise, to, ŋa<sup>33</sup>li<sup>55</sup>ve<sup>55</sup>  
 prop up, stretch out, p<sup>h</sup>en<sup>53</sup>  
 prop up; support, dzom<sup>31</sup>  
 prop up; support, di<sup>31</sup>baŋ<sup>53</sup>u  
 propagate, ɕye<sup>55</sup>ts<sup>h</sup>u<sup>31</sup>  
 propagate, disseminate, ɕye<sup>55</sup>ts<sup>h</sup>u<sup>31</sup> (Ch.)  
 propagate, dzan<sup>55</sup>  
 prosperous business, o<sup>31</sup>la<sup>55</sup>ua<sup>55</sup>le<sup>31</sup>  
 prostitute, nem<sup>55</sup>su<sup>55</sup>  
 prostrate, to, ma<sup>55</sup>ʂi<sup>31</sup>  
 prostrate, to, di<sup>31</sup>dʒem<sup>31</sup>li<sup>31</sup>vam<sup>53</sup>  
 prostrate oneself, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>im<sup>31</sup>ʂi<sup>55</sup>  
 protect, safeguard, a<sup>31</sup>dza<sup>33</sup>u<sup>31</sup>; p<sup>h</sup>a<sup>31</sup>dza<sup>31</sup>u<sup>31</sup>  
 protruding, dzu<sup>33</sup>dzum<sup>55</sup>  
 proud; boast, flaunt, di<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>se<sup>55</sup>  
 province, suŋ<sup>53</sup> > sũ<sup>53</sup> (Ch.)  
 province, sã<sup>53</sup>  
 prow of boat, a<sup>31</sup>su<sup>31</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 pry open, ba<sup>31</sup>p<sup>h</sup>i<sup>31</sup>u<sup>31</sup>, go<sup>55</sup>t<sup>h</sup>in<sup>35</sup>, ŋa<sup>31</sup>  
 pubic hair, su<sup>55</sup>maŋ<sup>55</sup>  
 public bath house, zɿ<sup>31</sup>gu<sup>31</sup>dʒen<sup>55</sup>za<sup>55</sup>  
 puddle (of mud), t<sup>h</sup>om<sup>31</sup>  
 puffy and soft, a<sup>31</sup>p<sup>h</sup>um<sup>55</sup>  
 pull down (house), tɕ<sup>h</sup>im<sup>31</sup>p<sup>h</sup>uŋ<sup>53</sup>  
 pull (drawer), ʂan<sup>31</sup>

- pull each other, a<sup>31</sup>ʃan<sup>33</sup>, ɕa<sup>31</sup>na<sup>31</sup>  
 pull grass; weed, k<sup>h</sup>ẽ<sup>31</sup> u<sup>31</sup>, in<sup>53</sup>  
 pull out rotten ones, sa<sup>55</sup> nu<sup>31</sup>  
 pull out, stretch, ba<sup>31</sup> k<sup>h</sup>ɑ̃<sup>53</sup> u<sup>31</sup>  
 pull (quilt) over, k<sup>h</sup>o<sup>55</sup> mo<sup>55</sup> ua<sup>33</sup> ʃɿ<sup>31</sup>  
 pull out, k<sup>h</sup>ẽ<sup>31</sup> ũ<sup>31</sup>  
 pull (string, lever), nɛ<sup>31</sup> u<sup>31</sup>  
 pull tendon; cramp, du<sup>31</sup> gu<sup>31</sup> a<sup>31</sup> du<sup>31</sup> gun<sup>55</sup>  
 pull up (weeds), k<sup>h</sup>ẽ<sup>31</sup> u<sup>31</sup>  
 pull, drag, ʃan<sup>31</sup> u<sup>31</sup>  
 pulse, beat, ni<sup>31</sup> zom<sup>31</sup> a<sup>31</sup> ts<sup>h</sup>an<sup>31</sup>  
 pumpkin; cushaw, a<sup>31</sup> gun<sup>55/53</sup>  
 punch a hole, perforate, ɿŋ<sup>31</sup> k<sup>h</sup>uan<sup>31</sup> iu<sup>53</sup> u<sup>31</sup>  
 puncture, k<sup>h</sup>uan<sup>31</sup>  
 punish, fa<sup>31</sup>  
 punish, du<sup>31</sup> ban<sup>31</sup>  
 punt pole, a<sup>31</sup> su<sup>31</sup> ian<sup>55</sup> u<sup>55</sup> dem<sup>55</sup>  
 punt pole, dzi<sup>33</sup> k<sup>h</sup>un<sup>33</sup>  
 pupa, ŋ<sup>31</sup> ɕun<sup>55</sup>, ɿo<sup>31</sup> ɕun<sup>55</sup>  
 pupil (of eye), ni<sup>55</sup> lun<sup>55</sup> tɕ<sup>h</sup>en<sup>31</sup>  
 puppy, de<sup>31</sup> gŋ<sup>33</sup> tɕ<sup>h</sup>en<sup>31</sup>  
 pure, unsullied, ɕun<sup>55</sup> ba<sup>55</sup>  
 purse lips to show contempt or disapproval, ni<sup>55</sup> bu<sup>31</sup> p<sup>h</sup>a<sup>55</sup> p<sup>h</sup>a<sup>55</sup> lan<sup>31</sup> ua<sup>31</sup>  
 purslance, greens, bi<sup>31</sup> ɕu<sup>55</sup> di<sup>31</sup> mu<sup>31</sup> nem<sup>31</sup>  
 pursue, ʃa<sup>31</sup> u<sup>31</sup>  
 pursue, chase, za<sup>ɿ53</sup>  
 pus, ʃɿ<sup>31</sup> dzu<sup>31</sup>  
 push, a<sup>31</sup> nu<sup>55</sup> xua<sup>31</sup> ɛ<sup>55</sup>  
 push forward, do<sup>31</sup>  
 push forward, ma<sup>55</sup> pu<sup>31</sup> k<sup>h</sup>a<sup>55</sup> do<sup>31</sup>  
 push; shove; press, do<sup>31</sup>  
 put (soil) on; patch, clf., p<sup>h</sup>u<sup>31</sup>  
 put (somewhere), gen<sup>55</sup>  
 put (somewhere), tɕ<sup>h</sup>un<sup>35</sup>  
 put aside, lay up, gen<sup>31</sup> u<sup>55</sup>  
 put away, tidy, ba<sup>31</sup> k<sup>h</sup>om<sup>53</sup>  
 put dead into coffin, gu<sup>31</sup> dun<sup>55</sup> sa<sup>31</sup> u<sup>31</sup>  
 put hoop or band around, de<sup>31</sup> k<sup>h</sup>i<sup>55</sup> dim<sup>55</sup>  
 put in order, arrange, k<sup>h</sup>a<sup>55</sup> gen<sup>31</sup>  
 put in, sa<sup>31</sup> u<sup>31</sup>  
 put on (a shawl), tɕ<sup>h</sup>a<sup>55</sup>  
 put on (a shawl), ua<sup>55</sup>  
 put on (clothes), wear, gua<sup>31</sup>  
 put on airs, ʃɿ<sup>31</sup> dzu<sup>31</sup>  
 put on clothesline, lam<sup>55</sup>  
 put on correctly, lu<sup>35</sup> lu<sup>35</sup>  
 put on credit, (dza<sup>31</sup> ha<sup>55</sup>) ɿ dem<sup>53</sup>

put on (hat, cap), ɲõ<sup>31</sup>ʂɿ<sup>55</sup>, ʔoŋ<sup>55</sup>  
 put on (hat) SEE wear (hat)  
 put on (hat), ʔoŋ<sup>55</sup>  
 put on airs, ʂɿ<sup>31</sup> dzu<sup>31</sup>  
 put on correctly, straight, lu<sup>35</sup> lu<sup>35</sup>  
 put one's hand on something for support, dzum<sup>31</sup>ʂɿ<sup>55</sup>  
 put one's hand on something for support, di<sup>31</sup>baŋ<sup>55</sup>ʂɿ<sup>31</sup>  
 put something under something, ɕi<sup>55</sup> ɲɛ<sup>53</sup> u<sup>31</sup>  
 put out (fire) = kill fire, san<sup>53</sup>  
 put out (fire), ʂɿ<sup>31</sup>  
 put out for sale (in an open stall), o<sup>55</sup>k<sup>h</sup>a<sup>31</sup> dʒuŋ<sup>55</sup>ʂɿ<sup>31</sup>  
 put out to pasture or graze, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 put out to pasture or graze, ʂɿ<sup>31</sup>la<sup>31</sup>u<sup>31</sup>  
 put something under, (maŋ<sup>55</sup>)ɕi<sup>31</sup>ɲɛ<sup>31</sup>(ũ<sup>31</sup>)  
 put together, k<sup>h</sup>om<sup>31</sup>  
 put under armpit, ha<sup>55</sup>dʒuŋ<sup>35</sup>  
 put up, nam<sup>33</sup>  
 put, cause to, ʂɿ<sup>31</sup>-lan<sup>35</sup>  
 put, place, k<sup>h</sup>a<sup>55</sup>gen<sup>35</sup>  
 put; place, gen<sup>31</sup>  
 put; place, sau<sup>53</sup>  
 puttee (leg wrappings), a<sup>31</sup>xe<sup>35</sup>xuan<sup>55</sup>dɛm<sup>55</sup>  
 puttee (leg wrappings; leggings), tɕ<sup>h</sup>i<sup>31</sup>xu<sup>35</sup>  
 python, ʔlan<sup>55</sup>, lan<sup>55</sup>

Qiang, ʔo<sup>55</sup>ɕa<sup>31</sup>m<sup>31</sup>k<sup>h</sup>i<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 Qiang language, ma<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup> (?)  
 Qiúrén (Chinese minority), Derung, cf. Dulong, ma<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup> p<sup>h</sup>u<sup>31</sup>  
 quack, to, ka<sup>31</sup>ka<sup>55</sup>naŋ<sup>55</sup>ɛ<sup>31</sup>  
 quality (of things), tɕ<sup>h</sup>ɿ<sup>31</sup>lian<sup>35</sup>ɿa<sup>33</sup>  
 quarrel, to, (ma<sup>55</sup>du<sup>31</sup>mi<sup>55</sup>) a<sup>31</sup>san<sup>55</sup>  
 quench thirst, dʒi<sup>31</sup> m<sup>55</sup> dʒi<sup>31</sup>ɛ<sup>33</sup>  
 question (Q), le<sup>53</sup>, k<sup>h</sup>a<sup>55</sup>, mɛ<sup>31</sup>, dɿa<sup>53</sup>  
 quick, dza<sup>33</sup>; very quick, dʒɿ<sup>31</sup> dza<sup>33</sup>  
 quick, fast, di<sup>31</sup>dzan<sup>31</sup>  
 quickly, du<sup>31</sup> dzan<sup>31</sup>  
 quicksilver, su<sup>55</sup> iu<sup>31</sup>  
 quietly, stealthily, k<sup>h</sup>a<sup>31</sup> mǎ<sup>55</sup> ua<sup>33</sup>  
 quilt facing (lining), ʂɿ<sup>31</sup>dʒuŋ<sup>31</sup>du<sup>31</sup>p<sup>h</sup>u<sup>55</sup>dɛm<sup>55</sup>  
 quilt, ʂɿ<sup>31</sup>dʒuŋ<sup>31</sup>  
 quiver, t<sup>h</sup>a<sup>31</sup>ma<sup>55</sup> da<sup>31</sup> k<sup>h</sup>uan<sup>55</sup>, da<sup>31</sup>k<sup>h</sup>uǎ<sup>33</sup>duŋ<sup>55</sup>

rabbit, hare, t<sup>h</sup>o<sup>33</sup> la<sup>55</sup> (Lisu)  
 rabid dog, dɛ<sup>31</sup>gɿ<sup>55</sup> a<sup>31</sup>xuan<sup>35</sup>  
 radish, la<sup>31</sup> ts<sup>h</sup>u<sup>33</sup> di<sup>31</sup> p<sup>h</sup>u<sup>31</sup>  
 radish, la<sup>31</sup>bɔ<sup>53</sup>  
 reflexive, luŋ<sup>55</sup>, ɲ<sup>31</sup>luŋ<sup>55</sup>(ɲ<sup>31</sup>), -ʂɿ<sup>31</sup>, -ɕu<sup>31</sup>

raft, t<sup>h</sup>a<sup>31</sup> ua<sup>55</sup> a<sup>31</sup> su<sup>31</sup>  
 rafter, la<sup>31</sup> bu<sup>55</sup> xam<sup>55</sup> dem<sup>55</sup>  
 railings, k<sup>h</sup>am<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 railings, ʔa<sup>31</sup>vu<sup>55</sup> dzom<sup>31</sup>ʃɿ<sup>55</sup>  
 railings, dza<sup>55</sup>ŋa<sup>31</sup> dza<sup>31</sup> xam<sup>35</sup>  
 railroad, railway, ɕa<sup>31</sup> k<sup>h</sup>ɛ<sup>55</sup> t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>  
 rain, to, ts<sup>h</sup>ɿ<sup>31</sup> dzaŋ<sup>55</sup>  
 rain, to, dza<sup>ʔ</sup><sup>55</sup>  
 rain, ts<sup>h</sup>ɿ<sup>31</sup>  
 rain, heavy, ts<sup>h</sup>ɿ<sup>55</sup>duŋ<sup>31</sup>  
 rainbow, mu<sup>55</sup> bɛ<sup>35</sup> buŋ<sup>55</sup>  
 raincoat, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> ga<sup>31</sup> mu<sup>31</sup>  
 raincoat, straw, p<sup>h</sup>um<sup>31</sup>  
 raincoat, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> ga<sup>31</sup> mu<sup>31</sup>  
 rain hat (bamboo), a<sup>31</sup> lam<sup>31</sup> da<sup>31</sup> mo<sup>55</sup>  
 rainy day, ts<sup>h</sup>ɿ<sup>31</sup> dzaŋ<sup>55</sup> ŋi<sup>33</sup>  
 raise (blister), a<sup>31</sup> p<sup>h</sup>um<sup>55</sup> p<sup>h</sup>um<sup>55</sup>  
 raise (chickens, etc.), di<sup>31</sup> k<sup>h</sup>om<sup>35</sup>  
 raise (children), tɕ<sup>h</sup>ɿ<sup>31</sup> ma<sup>55</sup> di<sup>31</sup> k<sup>h</sup>om<sup>31</sup>  
 raise (flag), ts<sup>h</sup>ɛ<sup>53</sup> ni<sup>31</sup>  
 raise (head), hã<sup>55</sup> ʃɿ<sup>31</sup>  
 raise hand, dzu<sup>55</sup> ʃɿ<sup>31</sup>  
 raise money, dʒi<sup>31</sup> k<sup>h</sup>om<sup>31</sup>  
 raise (the tail), ʔa<sup>31</sup> hãŋ<sup>55</sup>  
 raise the warp of the rod, mu<sup>55</sup> dan<sup>31</sup>  
 raise, lift, dzu<sup>55</sup> ʃɿ<sup>31</sup>  
 raise, to, a<sup>31</sup> gie<sup>55</sup> ũ<sup>31</sup>  
 rake (fields), a<sup>31</sup> z/zom<sup>31</sup>; a<sup>31</sup> zom<sup>31</sup>  
 ram (male sheep), a<sup>31</sup> ian<sup>31</sup> p<sup>h</sup>u<sup>31</sup>  
 ransom, redeem, dzɿn<sup>55</sup> a<sup>31</sup> io<sup>33</sup>  
 rapeseed; canola, ka<sup>31</sup> ɕam<sup>55</sup> iu<sup>31</sup> su<sup>31</sup>  
 rapeseed, dzɿ<sup>31</sup> dzɿ<sup>31</sup> ŋi<sup>55</sup> ũ<sup>31</sup>  
 rapeseed oil, k<sup>h</sup>ɛn<sup>55</sup> su<sup>55</sup>  
 rat, bamboo, k<sup>h</sup>am<sup>55</sup> a<sup>31</sup> din<sup>55</sup>  
 rat, mouse, a<sup>31</sup> din<sup>55</sup>  
 rat, rodent, ru<sup>53</sup> pɔ<sup>31</sup>  
 rat, white-tailed, ba<sup>31</sup> din<sup>55</sup>  
 rat (long-tailed), gu<sup>31</sup> lu<sup>55</sup>  
 rat (flying), p<sup>h</sup>u<sup>31</sup> dzɿ<sup>55</sup>  
 rat, k. of, t<sup>h</sup>o<sup>31</sup> dzin<sup>31</sup> dzu<sup>55</sup>  
 rat, k. of, ts<sup>h</sup>ɿ<sup>31</sup> ŋm<sup>55</sup>  
 rat, k. of, ts<sup>h</sup>ɿ<sup>31</sup> dzun<sup>31</sup>  
 rat, k. of, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> a<sup>31</sup> din<sup>55</sup>  
 rat, k. of, ts<sup>h</sup>ɿ<sup>31</sup> la<sup>55</sup>  
 rat, k. of, dzɿ<sup>31</sup> su<sup>31</sup>  
 rat, k. of, tɕa<sup>55</sup> xo<sup>55</sup>  
 rat, k. of, bu<sup>31</sup> tɕ<sup>h</sup>i<sup>53</sup>

rattan bridge, di<sup>31</sup> ba<sup>31</sup>  
 ravine, pit, mo<sup>31</sup> guŋ<sup>55</sup> t<sup>h</sup>u<sup>55</sup> dzaŋ<sup>55</sup>  
 raw (meat), ɕa<sup>55</sup> dzim<sup>55</sup>  
 raw; green, ŋ<sup>31</sup> dzim<sup>31</sup>  
 reach, arrive, t<sup>h</sup>u<sup>31</sup> (i<sup>53</sup>); t<sup>h</sup>u<sup>31</sup> ʔdʒe<sup>35</sup>  
 reach (upward), zɿŋ<sup>53</sup>  
 read (a book), ʃɿ<sup>55</sup> va<sup>31</sup> va<sup>31</sup> dza<sup>53</sup> u<sup>31</sup>  
 read (a newspaper), pau<sup>35</sup> tʃɿ<sup>53</sup> dza<sup>43</sup> u<sup>31</sup>  
 read aloud, ʃɿ<sup>31</sup> zu<sup>31</sup> u<sup>31</sup>  
 read, to, su<sup>31</sup> zu<sup>31</sup> u<sup>31</sup>  
 read, to, tɕ<sup>h</sup>ɛŋ<sup>31</sup>  
 ready, done, a<sup>31</sup> du<sup>31</sup> ɛ<sup>33</sup>  
 real, tɕ<sup>h</sup>uŋ<sup>55</sup>  
 really, certainly, si<sup>31</sup> si<sup>31</sup> ɬa<sup>53</sup>  
 reap, to, ʃan<sup>53</sup>  
 rear, raise, breed, di<sup>31</sup> k<sup>h</sup>om<sup>31</sup>  
 rebel, revolt, ts<sup>h</sup>au<sup>35</sup> fan<sup>53</sup> (Ch.)  
 recede (of water), bɛŋ<sup>55</sup>  
 recipient markers, k<sup>h</sup>a<sup>31</sup>, ba<sup>31</sup>  
 reciprocal (REC), a<sup>31</sup>  
 receipt issued with sale, fa<sup>31</sup> p<sup>h</sup>iau<sup>35</sup>  
 receive, a<sup>31</sup> k<sup>h</sup>om<sup>53</sup>  
 receive, get, lu<sup>31</sup> t<sup>h</sup>am<sup>55</sup> u<sup>31</sup>; ŋa<sup>31</sup> kum<sup>55</sup>  
 receive telephone call, tien<sup>55</sup> xud<sup>55</sup> to<sup>53</sup>  
 recently, a<sup>31</sup> p<sup>h</sup>i<sup>55</sup>  
 recently, ie<sup>55</sup> sã<sup>55</sup> ŋu<sup>31</sup>  
 reception room, mu<sup>31</sup> nɛm<sup>35</sup> k<sup>h</sup>uaŋ<sup>55</sup>  
 recipient, ba<sup>31</sup>  
 recite lessons from memory, ʃɿ<sup>55</sup> va<sup>31</sup> pu<sup>35</sup> ni<sup>33</sup> ʔo<sup>31</sup>  
 recite scripture, t<sup>h</sup>i<sup>31</sup> vɛŋ<sup>31</sup> guŋ<sup>53</sup> (God+discuss)  
 reckon accounts, sua<sup>55</sup> tʃaŋ<sup>55</sup> ua<sup>55</sup>  
 recognize, so<sup>53</sup>  
 record, ʔa<sup>31</sup> zu<sup>55</sup> a<sup>31</sup> dɿŋ<sup>53</sup>  
 red (become), red, tsa<sup>35</sup> si<sup>55</sup>, bu<sup>31</sup> si<sup>55</sup>  
 red, si<sup>55</sup>, bu<sup>31</sup> si<sup>55</sup>, tsa<sup>35</sup> si<sup>55</sup>  
 redness, bu<sup>31</sup> si<sup>55</sup> u<sup>55</sup>  
 reduce, to, ʔa<sup>31</sup> k<sup>h</sup>a<sup>31</sup> u<sup>31</sup>  
 red-spotted lizard, a<sup>31</sup> no<sup>55</sup> bu<sup>31</sup> si<sup>31</sup>  
 reed, a<sup>31</sup> suŋ<sup>55</sup>  
 refine (steel), ʃa<sup>31</sup> k<sup>h</sup>a<sup>55</sup> dʒi<sup>31</sup> gŋ<sup>31</sup>  
 refine oil, k<sup>h</sup>an<sup>55</sup>  
 refuse by making excuses, ia<sup>55</sup> ŋ<sup>31</sup> k<sup>h</sup>a<sup>55</sup> ʔa<sup>31</sup> t<sup>h</sup>an<sup>55</sup>  
 regret, m<sup>31</sup> ni<sup>55</sup> dzɿ<sup>31</sup>  
 rein in, di<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>53</sup>  
 reins, mã<sup>31</sup> a<sup>31</sup> xuŋ<sup>55</sup>  
 relatively, lɛ<sup>55</sup>-

- relatives, tʂ<sup>h</sup>ɿ<sup>55</sup> zuŋ<sup>55</sup>  
 relationship, a<sup>31</sup>du<sup>55</sup>  
 release, set free, sɿ<sup>31</sup>lan<sup>31</sup>u<sup>31</sup>  
 remain in, mi<sup>55</sup>ma<sup>31</sup>  
 remain, dzɿ<sup>33</sup>  
 remarry (of woman), a<sup>31</sup>p<sup>h</sup>i<sup>55</sup>t<sup>h</sup>i<sup>55</sup>t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>an<sup>55</sup>lu<sup>55</sup>  
 remember (clearly), ts<sup>h</sup>om<sup>55</sup>a<sup>31</sup>dzu<sup>31</sup>; ts<sup>h</sup>om<sup>53</sup>a<sup>31</sup>dzuŋ<sup>55</sup>ɛ<sup>31</sup>  
 remember = think, ts<sup>h</sup>om<sup>55/53</sup>  
 remember or record, ʔgam<sup>55</sup>  
 remember, ts<sup>h</sup>om<sup>55</sup>a<sup>31</sup>ŋi<sup>55</sup>  
 remind, se<sup>31</sup>ʔuŋ<sup>55</sup>  
 remove (feathers), bin<sup>53</sup>  
 remove; pull out, k<sup>h</sup>ɛ<sup>31</sup>ũ<sup>31</sup>  
 rent (for room/house), tɕ<sup>h</sup>im<sup>31</sup>di<sup>31</sup>p<sup>h</sup>u<sup>35</sup>  
 rent field, la<sup>31</sup>ma<sup>55</sup>ŋa<sup>31</sup>a<sup>55</sup>  
 rent field, po<sup>53</sup>u<sup>31</sup>  
 repair, to, io<sup>55</sup>mun<sup>31</sup>  
 repair, manufacture, zo<sup>31</sup>mun<sup>31</sup>  
 repay (debt), t<sup>h</sup>i<sup>31</sup>liu<sup>31</sup> cf. 'retaliate'  
 repeat, dzo<sup>35</sup>dzo<sup>33</sup>  
 repeatedly; again and again, ŋ<sup>31</sup>dzan<sup>31</sup>m<sup>31</sup>k<sup>h</sup>ua<sup>55</sup>  
 rescue, save (somebody), tɕu<sup>35</sup> (Ch.), ʂɿ<sup>31</sup>t<sup>h</sup>i<sup>31</sup>nu<sup>55</sup>  
 resemble, tɕ<sup>h</sup>ɛ<sup>33</sup>  
 resin, rosin, ʂɿ<sup>31</sup>lu<sup>33</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
 respect, to, a<sup>31</sup>p<sup>h</sup>u<sup>33</sup>u<sup>55</sup>  
 respond verbally, a<sup>31</sup>t<sup>h</sup>an<sup>31</sup>a<sup>31</sup>ni<sup>33</sup>  
 rest, di<sup>31</sup>gã<sup>55</sup>, di<sup>31</sup>ŋã<sup>55</sup>, du<sup>31</sup>ŋa<sup>55</sup>  
 restaurant, bu<sup>55</sup>dza<sup>31</sup>ɛm<sup>31</sup>za<sup>55</sup>  
 restrict diet, ʂɿ<sup>31</sup>dan<sup>31</sup>ʂɿ<sup>55</sup>  
 resumative ('She has recovered and is eating'), dze<sup>35</sup>  
 retaliate, t<sup>h</sup>i<sup>31</sup>li<sup>31</sup>u<sup>31</sup> cf. 'repay'  
 retreat (military), ʔi<sup>55</sup>ɿ/zoŋ<sup>31</sup>k<sup>h</sup>a<sup>53</sup>a<sup>31</sup>t<sup>h</sup>an<sup>55</sup>  
 retreat; move back, a<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>; a<sup>31</sup>t<sup>h</sup>uŋ<sup>33</sup>p<sup>h</sup>o<sup>31</sup>  
 return, go back, lo<sup>55</sup>  
 return (home), a<sup>31</sup>t<sup>h</sup>an<sup>55</sup>  
 return (money), repay debt, t<sup>h</sup>i<sup>31</sup>li<sup>31</sup>  
 return (a pen), ʔa<sup>31</sup>t<sup>h</sup>an<sup>55</sup>p<sup>h</sup>o<sup>31</sup>  
 return a visit, ŋ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>gu<sup>31</sup>dza<sup>55</sup>u<sup>31</sup>  
 return animals to the pen, p<sup>h</sup>am<sup>55</sup>  
 return to laity, a<sup>31</sup>lam<sup>31</sup>ban<sup>55</sup>su<sup>55</sup>  
 return (things), p<sup>h</sup>a<sup>31</sup>t<sup>h</sup>an<sup>55</sup>p<sup>h</sup>o<sup>31</sup> (give back)  
 return, cause to, ʔa<sup>31</sup>t<sup>h</sup>an<sup>55</sup>bu<sup>55</sup>  
 reveal, to, lan<sup>53</sup>  
 reverse side, na<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>k<sup>h</sup>a<sup>53</sup>  
 reverse; wrong side; opposite, ʔi<sup>55</sup>ian<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 revive, bring back to life, a<sup>31</sup>k<sup>h</sup>uŋ<sup>55</sup>



- revolve, gyrate, xua<sup>31</sup>u<sup>55</sup>  
 revolution, ke<sup>31</sup>min<sup>35</sup>  
 reward, to, tɕaŋ<sup>55</sup>li<sup>55</sup>  
 reward, to, bu<sup>31</sup>sɿn<sup>33</sup>dʒɿu<sup>53</sup>  
 rhetorical question (RQ), ɕa<sup>53</sup>, laŋ<sup>31</sup>  
 rhizome of Chinese gold thread, men<sup>55</sup>  
 rib, dem<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>  
 rice (large), bu<sup>55</sup>dʒa<sup>31</sup>si<sup>55</sup>  
 rice (uncooked), dʒi<sup>31</sup>?  
 rice crust (in pot), dʒa<sup>31</sup>xin<sup>55</sup>  
 rice ladle, min<sup>55</sup>dʒim<sup>31</sup>  
 rice pestle, sa<sup>55</sup>bui<sup>31</sup>; sa<sup>33</sup>bɿŋ<sup>3</sup>  
 rice plant, paddy, dʒɿ<sup>31</sup>ia<sup>33</sup>so<sup>55</sup>  
 rice pounder, tɕ<sup>h</sup>a<sup>31</sup>p<sup>h</sup>aŋ<sup>31</sup>  
 rice shoots, li<sup>55</sup>dza<sup>53</sup>  
 rice straw, zɿ<sup>31</sup>ia<sup>33</sup>lã<sup>55</sup>  
 rice thread, dʒi<sup>31</sup>.ia<sup>31</sup>ua<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 rice to bloom, ɕuŋ<sup>55</sup>ven<sup>55</sup>ven<sup>55</sup>  
 rice water; gruel, ɕa<sup>31</sup>bu<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 rice, cold, a<sup>31</sup>gɿ<sup>55</sup>ɕin<sup>55</sup>  
 rice, cooked, a<sup>31</sup>gɿ<sup>55</sup>sa<sup>55</sup>  
 rice, cooked, bu<sup>55</sup>dʒa<sup>31</sup>  
 rice, cooked, dʒi<sup>31</sup>.ia<sup>55</sup>gɿ<sup>55</sup>  
 rice, cooked, ga<sup>55</sup>ɕa<sup>55</sup>  
 rice, polished blutinous, mu<sup>33</sup>ŋaŋ<sup>31</sup>  
 rice, sweet, ɿa<sup>31</sup>mu<sup>55</sup>ka<sup>55</sup>ŋu<sup>31</sup>  
 rice, white, dʒɿ<sup>31</sup>za<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 rice; food, bu<sup>55</sup>dʒa<sup>31</sup>  
 rice; millet, dʒɿ<sup>31</sup>za<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup> (rice), bu<sup>55</sup>dʒa<sup>31</sup>si<sup>53</sup> (grain)  
 rich, m<sup>31</sup>gam<sup>31</sup>, mu<sup>31</sup>gam<sup>31</sup>  
 rich, person, mu<sup>31</sup>gam<sup>31</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 rich; wealthy, dʒa<sup>31</sup>xu<sup>31</sup>a<sup>31</sup>ɕa<sup>55</sup>  
 riddle, a<sup>55</sup>di<sup>31</sup>dzaŋ<sup>31</sup>  
 ride (horse), du<sup>31</sup>dzu<sup>31</sup>, ɕɿ<sup>55</sup> (cause)  
 ride a sedan chair, a<sup>31</sup>gin<sup>55</sup>dem<sup>55</sup>l<sup>h</sup>aŋ<sup>53</sup>no<sup>55</sup>  
 ride in a car, t<sup>h</sup>aŋ<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>no<sup>33</sup>  
 ridge of building, a<sup>31</sup>dʒɿ<sup>31</sup>zɿ<sup>55</sup>gun<sup>31</sup>  
 ridge of nose, ɕɿ<sup>31</sup>na<sup>55</sup>gun<sup>31</sup>  
 redicule sarcastically, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>k<sup>h</sup>a<sup>31</sup>ɕi<sup>31</sup>zɿuŋ<sup>55</sup>tɕ<sup>h</sup>a<sup>31</sup>  
 rifle butt, dzo<sup>55</sup>k<sup>h</sup>ã<sup>33</sup>gun<sup>31</sup>  
 rifle, pu<sup>33</sup>tɕ<sup>h</sup>aŋ<sup>55</sup> (Ch.)  
 right hand seat, k<sup>h</sup>a<sup>31</sup>p<sup>h</sup>aŋ<sup>33</sup>k<sup>h</sup>a<sup>55</sup>  
 right hand, a<sup>31</sup>vu<sup>35</sup>dʒaŋ<sup>55</sup>bu<sup>55</sup>ŋu<sup>31</sup>  
 right; obverse side, ma<sup>55</sup>ɕu<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 right; obverse side, i<sup>55</sup>dun<sup>31</sup>k<sup>h</sup>a<sup>53</sup>  
 right side, dʒaŋ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>, le<sup>31</sup>ie<sup>55</sup> (Lisu)  
 right, privilege, dʒɿ<sup>55</sup>ua<sup>31</sup> (Lisu)

- right away, gu<sup>33</sup>  
 ring for finger, ni<sup>31</sup> tɕ<sup>h</sup>im<sup>55</sup> gɿ<sup>55</sup> dɛm<sup>55</sup>  
 ring for finger, ni<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> dɛm<sup>55</sup>  
 rinse, flush, ʔa<sup>31</sup> t<sup>h</sup>a<sup>31</sup>  
 rinse (mouth), ʔa<sup>31</sup> tɕ<sup>h</sup>o<sup>31</sup> ʔo<sup>31</sup> ʂ<sup>35</sup>  
 rinse (mouth), ma<sup>55</sup> duŋ<sup>31</sup> a<sup>31</sup> tɕ<sup>h</sup>i<sup>31</sup> lo<sup>31</sup> o<sup>31</sup>  
 rip, tear (paper), sã<sup>53</sup> u<sup>31</sup>, zã<sup>53</sup> u<sup>31</sup>  
 ripe; cooked, sum<sup>55</sup> bu<sup>31</sup>  
 ripe, mature; cooked, nin<sup>31</sup>  
 rise (sun), to, nem<sup>31</sup> ts<sup>h</sup>ɛ<sup>53</sup> ɛ<sup>31</sup> ni<sup>33</sup>  
 rise (of waves), dʒi<sup>31</sup> k<sup>h</sup>u<sup>55</sup> li<sup>53</sup> ɛ<sup>31</sup>; nɔ<sup>33</sup>  
 rise, expand, swell, dʒi<sup>31</sup>  
 rise (water), buŋ<sup>31</sup> a<sup>31</sup> ni<sup>55</sup>  
 river (big), tɕ<sup>h</sup>o<sup>31</sup> ŋua<sup>31</sup> dʒuŋ<sup>31</sup>  
 river (little), tɕ<sup>h</sup>o<sup>31</sup> ŋua<sup>31</sup> tɕ<sup>h</sup>ɛn<sup>31</sup>  
 river deer, t<sup>h</sup>a<sup>31</sup> la<sup>55</sup>  
 river, tɕ<sup>h</sup>o<sup>31</sup> ŋua<sup>31</sup>, tɕ<sup>h</sup>u<sup>31</sup> mu<sup>31</sup>  
 rob; plunder, t<sup>h</sup>in<sup>53</sup> t<sup>h</sup>in<sup>55</sup>; t<sup>h</sup>in<sup>53</sup>  
 road, macadam (for vehicles), mo<sup>55</sup> do<sup>55</sup> t<sup>h</sup>i<sup>31</sup> ɪa<sup>31</sup>  
 road, path, t<sup>h</sup>i<sup>31</sup> ɪa<sup>31</sup> > t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>  
 road (for horses), ɕi<sup>55</sup> li<sup>31</sup> li<sup>31</sup> t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>  
 roar (as lion), a<sup>31</sup> k<sup>h</sup>an<sup>31</sup> ŋan<sup>53</sup>  
 roast in sun, ʔam<sup>53</sup>, lam<sup>35</sup>  
 roast, to, ʔim<sup>55</sup> ʂ<sup>31</sup>  
 roast, to, tɕ<sup>h</sup>ɛ<sup>31</sup> mi<sup>55</sup>  
 robber, nen<sup>31</sup> t<sup>h</sup>in<sup>31</sup> su<sup>55</sup>  
 robe, long gown, da<sup>31</sup> ʔuŋ<sup>55</sup> ga<sup>31</sup> mu<sup>31</sup> duŋ<sup>31</sup>  
 rock bee, a<sup>31</sup> ia<sup>55</sup>  
 rock cave, luŋ<sup>55</sup> k<sup>h</sup>uã<sup>31</sup> (rock+hole)  
 rock cave, zɿ<sup>31</sup> ʔuŋ<sup>55</sup> k<sup>h</sup>uã<sup>31</sup>  
 rock pile, luŋ<sup>55</sup> di<sup>31</sup> gum<sup>55</sup>  
 rock sugar, pin<sup>55</sup> t<sup>h</sup>a<sup>31</sup>  
 rock, luŋ<sup>55</sup> duŋ<sup>31</sup>  
 rock, sway, a<sup>31</sup> nɛm<sup>55</sup>; ʔa<sup>31</sup> nɛm<sup>35</sup> (ʂ<sup>31</sup>)  
 rod, xam<sup>33</sup> da<sup>33</sup>, ʂ<sup>55</sup> k<sup>h</sup>o<sup>55/35</sup>  
 rodent, k. of, bu<sup>31</sup> tɕ<sup>h</sup>i<sup>53</sup>  
 roll (cloth), clf., doŋ<sup>55</sup>/duŋ<sup>55</sup>  
 roll about, p<sup>h</sup>o<sup>35</sup> lo<sup>33</sup>  
 roll about, t<sup>h</sup>an<sup>33</sup> ʂ<sup>31</sup>  
 roll down, dislodge, pu<sup>55</sup> tan<sup>55</sup> nu<sup>31</sup>, a<sup>31</sup> tan<sup>55</sup> p<sup>h</sup>o<sup>31</sup> lo<sup>53</sup> (Lisu), t<sup>h</sup>an<sup>33</sup> se<sup>33</sup>  
 roll up (cloth), k<sup>h</sup>u<sup>31</sup> lim<sup>35</sup>; lim<sup>35</sup>  
 roll up (sleeves), k<sup>h</sup>u<sup>31</sup> lim<sup>31</sup> ʂ<sup>31</sup>  
 roll, to, a<sup>31</sup> tan<sup>55</sup>; t<sup>h</sup>an<sup>53</sup>; t<sup>h</sup>an<sup>55</sup> ‘roll into a ball with the hands’  
 roll, to, a<sup>31</sup> tan<sup>55</sup> p<sup>h</sup>o<sup>31</sup> lo<sup>53</sup>  
 roll, to, gin<sup>31</sup> u<sup>31</sup>  
 roll, to, p<sup>h</sup>o<sup>31</sup> lo<sup>53</sup> le<sup>55</sup>  
 roll, to, pu<sup>55</sup> tan<sup>55</sup> nu<sup>31</sup>

- rolled buckwheat, p<sup>h</sup>o<sup>31</sup>ua<sup>55</sup> su<sup>31</sup> lu<sup>31</sup>  
 roof beam, la<sup>31</sup> bu<sup>55</sup> gu<sup>31</sup>  
 roof, tɕ<sup>h</sup>im<sup>31</sup>la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 roof, to, dzim<sup>55</sup>  
 room (of house), tɕ<sup>h</sup>im<sup>31</sup>k<sup>h</sup>uā<sup>55</sup>, k<sup>h</sup>uaŋ<sup>55</sup>  
 room or hotel, rent, tɕ<sup>h</sup>im<sup>31</sup>di<sup>31</sup>p<sup>h</sup>u<sup>35</sup>  
 room, inner, na<sup>55</sup>ba<sup>31</sup>ɕuŋ<sup>55</sup>k<sup>h</sup>uā<sup>55</sup>  
 room, living, tɕ<sup>h</sup>im<sup>31</sup>duŋ<sup>31</sup>  
 room, outer, ʔe<sup>55</sup>ba<sup>31</sup>ɕuŋ<sup>55</sup>k<sup>h</sup>uā<sup>55</sup>  
 rooster, dɛ<sup>31</sup>gu<sup>35</sup>  
 root, bamboo, k<sup>h</sup>am<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 root, ɕuŋ<sup>55</sup>ɿu<sup>33</sup>, gu<sup>31</sup>  
 root, to, ts<sup>h</sup>o<sup>55</sup>o<sup>55</sup>  
 root, tuber, ia<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 rope bridge support, a<sup>31</sup>vɿ<sup>55</sup>  
 rope cable connection, lo<sup>33</sup>dza<sup>35</sup>  
 rope ladder, a<sup>31</sup>xum<sup>55</sup>  
 rope, string, a<sup>31</sup>xuŋ<sup>55</sup>  
 rope; clf. for three dimensional thin flexible things, buŋ<sup>33</sup>  
 rosin, ʂɿ<sup>31</sup>ɿu<sup>33</sup>tɕ<sup>h</sup>ɿ<sup>31</sup> (Lisu)  
 rot, cause to, si<sup>31</sup>bu<sup>31</sup>  
 rot, to, ŋ<sup>31</sup>bu<sup>55</sup>; bu<sup>31</sup>  
 rotten, mushy (watermelon), ŋ<sup>31</sup>bu<sup>55</sup>  
 rough (road), dzɿ<sup>55</sup>di<sup>31</sup>ɕa<sup>55</sup>  
 rough horse play at wedding, a<sup>31</sup>ts<sup>h</sup>i<sup>33</sup>kuŋ<sup>55</sup>  
 round root, ie<sup>31</sup>ts<sup>h</sup>u<sup>31</sup>di<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 round, li<sup>55</sup>gi<sup>31</sup>li<sup>33</sup>  
 roundworm; ascarid, p<sup>h</sup>a<sup>55</sup>bu<sup>31</sup>ɿoŋ<sup>31</sup>  
 rout or dig with snout (pig), ʔo<sup>55</sup>ts<sup>h</sup>o<sup>33</sup>o<sup>55</sup>  
 row (a boat), (a<sup>31</sup>su<sup>31</sup>) zam<sup>55/53</sup>, zam<sup>55</sup>  
 row (of houses), (t<sup>h</sup>i<sup>55</sup>)dzɿ<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup>  
 row call, buŋ<sup>31</sup>guŋ<sup>53</sup>  
 row, to, a<sup>31</sup>su<sup>31</sup>a<sup>31</sup>vɿ<sup>55</sup>  
 rub in, ɕi<sup>55</sup>ŋuŋ<sup>31</sup>  
 rub, a<sup>31</sup>ne<sup>35</sup>  
 rub; massage, a<sup>31</sup>na<sup>31</sup>ũ<sup>3</sup>  
 rub, to, ɕin<sup>55</sup>u<sup>31</sup>  
 rub, to, a<sup>31</sup>xan<sup>31</sup>u<sup>33</sup>  
 rub; wipe; scrape, ɕin<sup>31</sup>  
 rub repeatedly with hands, ŋu<sup>55</sup>ŋu<sup>31</sup>ŋu<sup>55</sup>ŋu<sup>31</sup>; ŋu<sup>55</sup>u<sup>31</sup>  
 rub (skin), p<sup>h</sup>ɛ<sup>31</sup>ne<sup>31</sup>ŋu<sup>31</sup>  
 rubbarb, ta<sup>55</sup>xuaŋ<sup>31</sup> (Ch.)  
 rubber, nu<sup>31</sup>du<sup>55</sup>  
 rubbing board for washing clothes, ɕ<sup>31</sup>a<sup>55</sup>s<sup>31</sup>am<sup>31</sup>a<sup>31</sup>nan<sup>31</sup>u<sup>31</sup>  
 rudder, ʂɿ<sup>55</sup>lan<sup>31</sup>  
 ruin, waste, ʂɿ<sup>31</sup>man<sup>55</sup>  
 ruin (clothes), gan<sup>55</sup>ʔdʒɛ<sup>35</sup>

ruler, a<sup>31</sup>lin<sup>55</sup> dem<sup>55</sup>  
 rules, customs, η<sup>31</sup>iã<sup>33</sup>, kue<sup>55</sup>tçy<sup>33/31</sup> (Ch.)  
 ruminate, na<sup>31</sup>ε<sup>33</sup>; ?na<sup>31</sup> (ε<sup>31</sup>)  
 ruminate, a<sup>31</sup>t<sup>h</sup>an<sup>33</sup>  
 rummage, to, p<sup>h</sup>a<sup>53</sup>u<sup>31</sup>  
 run, to, ba<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 run against, a<sup>31</sup>γom<sup>55</sup>  
 run down, shabby, η<sup>31</sup>mã<sup>55</sup>  
 run (as color runs), ç'a<sup>31</sup>ηe<sup>55</sup>  
 run (fast), jump, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>  
 run away, flee, ien<sup>55</sup>?dzε<sup>35</sup>  
 rush on, ha<sup>55</sup>dza<sup>31</sup>  
 rust, dzɿ<sup>31</sup>dza<sup>31</sup>  
 rust, to, dzi<sup>31</sup>k<sup>h</sup>u<sup>55</sup>u<sup>31</sup>

sack, bag, sa<sup>31</sup>u<sup>31</sup>  
 sackcloth; burlap, dzi<sup>31</sup>dza<sup>55</sup>p<sup>h</sup>a<sup>33</sup>  
 sacrifice (to spirits), (p<sup>h</sup>u<sup>31</sup>iã<sup>33</sup>)m<sup>31</sup>gu<sup>31</sup>  
 sacrifice, m<sup>31</sup>gu<sup>31</sup> (Lisu), di<sup>31</sup>k<sup>h</sup>u<sup>35</sup>  
 sad, worried, p<sup>h</sup>η<sup>31</sup>ça<sup>31</sup>a<sup>33</sup>  
 saddle, mã<sup>31</sup>nɛn<sup>33</sup>  
 salary, γu<sup>55</sup>di<sup>31</sup>p<sup>h</sup>u<sup>55</sup>lu<sup>35</sup>  
 saliva, tç<sup>h</sup>η<sup>55</sup>  
 saliva (clear), tç<sup>h</sup>in<sup>55</sup>a<sup>31</sup>iun<sup>31</sup>  
 salt, sɿ<sup>31</sup>lan<sup>55</sup>  
 salted egg, k<sup>h</sup>a<sup>55</sup>lim<sup>31</sup>m<sup>31</sup>tç<sup>h</sup>om<sup>55</sup>  
 salted fish, ηua<sup>55</sup>m<sup>31</sup>tç<sup>h</sup>om<sup>55</sup>  
 salty, k<sup>h</sup>a<sup>33</sup> (kum<sup>31</sup>)  
 salute, to, t<sup>h</sup>im<sup>31</sup>sɿ<sup>31</sup>  
 same, a<sup>31</sup>du<sup>55</sup>ε<sup>31</sup>  
 same, not the, ma<sup>31</sup>du<sup>55</sup>  
 sand, a<sup>31</sup>tç<sup>h</sup>η<sup>55</sup>  
 sandy beach, a<sup>31</sup>tç<sup>h</sup>η<sup>55</sup>dzun<sup>31</sup>  
 sandals, straw, sɿ<sup>55</sup>pi<sup>55</sup>tç<sup>h</sup>η<sup>33</sup>ηi<sup>33</sup> (Lisu)  
 sap, çuη<sup>55</sup>tç<sup>h</sup>a<sup>31</sup>ηa<sup>55</sup>lan<sup>53</sup>u<sup>31</sup>  
 sarcastically, ironically, ma<sup>31</sup>ma<sup>31</sup>  
 satin, bu<sup>31</sup>ga<sup>31</sup>mu<sup>31</sup>  
 satisfied, be, sɿ<sup>31</sup>na<sup>33</sup>çuη<sup>55</sup>ε<sup>31</sup>  
 satisfy (conditions), ?a<sup>31</sup>du<sup>31</sup>a<sup>31</sup>ni<sup>33</sup>  
 saucer of lamp, mε<sup>31</sup>iu<sup>31</sup>vε<sup>35</sup>dem<sup>55</sup>  
 sausage, ça<sup>33</sup>p<sup>h</sup>u<sup>31</sup>iu<sup>55</sup>  
 save; be thrifty, tçε<sup>31</sup>io<sup>31</sup>  
 save money, dza<sup>31</sup>xa<sup>31</sup>a<sup>31</sup>k<sup>h</sup>om<sup>35</sup>  
 save money, ?a<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 savory, appetizing, εm<sup>55</sup>mu<sup>31</sup>lim<sup>31</sup>  
 saw, a/to, γu<sup>31</sup>du<sup>31</sup> (Lisu)  
 saw, to, γu<sup>31</sup>ni<sup>33</sup>vε<sup>35</sup>

- saw, ʔu<sup>31</sup> du<sup>55</sup>  
 sawdust, ʔi<sup>55</sup> p<sup>h</sup>u<sup>31</sup>, uɑ<sup>55</sup> tʂ<sup>h</sup>ʅ<sup>31</sup>  
 sawdust, ŋ<sup>31</sup> ʂ<sup>1</sup><sup>55</sup>  
 say, speak, t<sup>h</sup>i<sup>31</sup> zɿm<sup>33</sup> u<sup>31</sup>, vɛ<sup>33</sup>  
 say, t<sup>h</sup>im<sup>35</sup>  
 scabies, xu<sup>31</sup> tɕ<sup>h</sup>i<sup>35</sup> (Lisu)  
 scald head, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> dʒɑ<sup>55</sup> ma<sup>55</sup>  
 scald oneself, ʔɑ<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> ʔdʒɛ<sup>35</sup>  
 scald with hot water, s'ɑn<sup>53</sup>  
 scald, burn, ʔɑ<sup>31</sup> k<sup>h</sup>ɛŋ<sup>53</sup>  
 scale pan, ŋɛ<sup>31</sup> dɛm<sup>55</sup> a<sup>31</sup> hĩ<sup>35</sup>  
 scale SEE fish scale  
 scale, t<sup>h</sup>i<sup>55</sup> ɡɑm<sup>55</sup>  
 scale, ŋi<sup>33</sup> dɛm<sup>55</sup>  
 scale or balance, ŋɛ<sup>31</sup> dɛm<sup>55</sup> a<sup>31</sup> xuŋ<sup>55</sup>  
 scale pan, ŋɛ<sup>31</sup> dɛm<sup>55</sup> a<sup>31</sup> hĩ<sup>35</sup>  
 scalp, a<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> tɕ<sup>h</sup>in<sup>55</sup>  
 scapula; shoulder blade, zɑ<sup>31</sup> ɡã<sup>55</sup> sa<sup>33</sup> zu<sup>33</sup>  
 scar, dʒɑ<sup>53</sup> ma<sup>55</sup> du<sup>31</sup>  
 scar, kɔʔ<sup>55</sup>  
 scar, long, dʒɑ<sup>31</sup> ma<sup>55</sup>  
 scarcely, barely, t<sup>h</sup>i<sup>31</sup>  
 scarf, head, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> xuɑŋ<sup>55</sup> dɛm<sup>55</sup>  
 scarf, xuɑ<sup>53</sup> ŋu<sup>31</sup>  
 scarf; handkerchief, ʔo<sup>55</sup> lu<sup>35</sup> (men's), ʔo<sup>55</sup> t<sup>h</sup>u<sup>35</sup> (woman's)  
 scatter, disperse, a<sup>31</sup> ɡɑ, ʔdʒi<sup>31</sup> ɛ<sup>33</sup>, k<sup>h</sup>ã<sup>31</sup> u<sup>31</sup>  
 school, ʂ<sup>1</sup><sup>55</sup> vɑ<sup>31</sup> tɕ<sup>h</sup>ɛn<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 school begins, k<sup>h</sup>ɛ<sup>55</sup> ɕo<sup>31</sup>  
 schoolmate, tɕ<sup>h</sup>ɛn<sup>55</sup> da<sup>55</sup> tʂ<sup>h</sup>ɑŋ<sup>31</sup>  
 scissors, ts<sup>h</sup>u<sup>31</sup> (tɛ<sup>55</sup>) (Lisu < Ch.)  
 scissors, ts<sup>h</sup>u<sup>31</sup> ŋi<sup>55</sup> ɣo<sup>31</sup>  
 scold, to, nɑ<sup>55</sup> ɛ<sup>31</sup>  
 scold, to, ka<sup>33</sup> ʂ<sup>1</sup><sup>33</sup>  
 scold, to, p<sup>h</sup>u<sup>31</sup> lu<sup>31</sup> ʔũ<sup>31</sup>  
 scoop out of water, ts<sup>h</sup>i<sup>31</sup> u<sup>31</sup>  
 scoop up (fish), drag for, do<sup>31</sup> ʔo<sup>33</sup>  
 scoop (water), do<sup>ʔ</sup><sup>55</sup>  
 scoop up off the water, ʔɑ<sup>31</sup> p<sup>h</sup>iu<sup>31</sup>  
 scoop, draw (water), k<sup>h</sup>ɑm<sup>53</sup>  
 scorched, ʂɿm<sup>55</sup> bu<sup>31</sup> dʒi<sup>31</sup> ɛ<sup>31</sup>  
 scour, rub, a<sup>31</sup> xɑn<sup>31</sup> u<sup>33</sup>  
 scowl, to, p<sup>h</sup>u<sup>31</sup> n.ŋ<sup>55</sup> ma<sup>55</sup>  
 scratch (chicken scratch for food), zɿŋ<sup>31</sup> ɛ<sup>55</sup>  
 scratch for food, ɿ<sup>31</sup> ɛ<sup>55</sup>  
 scam, to, ɕɛn<sup>53</sup>  
 scrape; scratch; scale (a fish); shave (pig), xo<sup>31</sup> ʔo<sup>55</sup>; xu<sup>31</sup> ʔu<sup>55</sup>; xo<sup>33</sup>  
 scratch (of chicken), zɿŋ<sup>31</sup> ɛ<sup>55</sup>

- scratch (itch), xo<sup>31</sup>ʔo<sup>55</sup>  
 screen (leaves), to, di<sup>33</sup>ga<sup>55</sup>u<sup>31</sup>  
 screw, a, lo<sup>31</sup>ʃ<sup>55</sup>tiŋ<sup>55</sup>  
 screw, to, xud<sup>53</sup>ŋu<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 screwdriver, tɕ<sup>h</sup>i<sup>55</sup>tsɿ<sup>55</sup>  
 scrotum, ʈa<sup>31</sup>baŋ<sup>55</sup>  
 skull, a<sup>31</sup>sur<sup>31</sup>a<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup>  
 sea, ocean, tɕ<sup>h</sup>ɿ<sup>55</sup>dom<sup>55</sup>ɕuŋ<sup>31</sup>  
 seal, to, dzu<sup>31</sup>a<sup>31</sup>dza<sup>31</sup>u<sup>31</sup>  
 seal, cover, to, t<sup>h</sup>aŋ<sup>31</sup>  
 seal (for a letter), a, dzu<sup>31</sup>a<sup>31</sup>dza<sup>55</sup>dɛm<sup>55</sup>  
 seal envelope, ʃ<sup>55</sup>va<sup>31</sup>le<sup>31</sup>ʃu<sup>55</sup>di<sup>31</sup>k<sup>h</sup>am<sup>31</sup>  
 seal, stamp, a, buŋ<sup>31</sup>a<sup>31</sup>dza<sup>55</sup>dɛm<sup>55</sup>  
 search (person), k<sup>h</sup>a<sup>31</sup>som<sup>ʔ</sup><sup>35</sup>  
 search (mountain), mīŋ<sup>35</sup>  
 seashore, tɕ<sup>h</sup>u<sup>31</sup>mu<sup>31</sup>sa<sup>31</sup>  
 seaweed, gua<sup>31</sup>tɕ<sup>h</sup>aŋ<sup>55</sup>  
 second, qa<sup>53</sup>u<sup>31</sup>a<sup>31</sup>ni<sup>55</sup>  
 second (day); next (day), ʔi<sup>55</sup>p<sup>h</sup>aŋ<sup>55</sup>a<sup>31</sup>ni<sup>55</sup>  
 second, ku<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup>a<sup>31</sup>ni<sup>55</sup>, ti<sup>35</sup>ɛ<sup>35</sup> (Ch.), ni<sup>31</sup>ma<sup>33</sup>t<sup>h</sup>i<sup>31</sup>ma<sup>33</sup> (Lisu)  
 second day, a<sup>31</sup>ni<sup>33</sup>ni<sup>33</sup>  
 second day of lunar calendar, ʃ<sup>31</sup>la<sup>55</sup>a<sup>31</sup>ni<sup>55</sup>ni<sup>55</sup>  
 second earthly branch (cow), nū<sup>31</sup>uā<sup>31</sup>nun<sup>55</sup>  
 second wife, mu<sup>31</sup>li<sup>33</sup>mu<sup>31</sup>  
 secret, k<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>  
 secretion in the eye, ŋ<sup>33</sup>tɕ<sup>h</sup>u<sup>53</sup>  
 secretly; on the sly, tɕ<sup>h</sup>i<sup>55</sup>ɕu<sup>31</sup>  
 section (of bamboo between two joints), clf., tuŋ<sup>55</sup>; tan<sup>55</sup>; t<sup>h</sup>uŋ<sup>55</sup>  
 section (of bamboo between two joints), clf., gam<sup>55</sup>  
 section (of bamboo between two joints), clf., tɕ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>  
 section (road), clf., yom<sup>33</sup>  
 sedan chair, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>a<sup>31</sup>gi<sup>55</sup>dɛm<sup>55</sup>  
 sedan chair, xua<sup>31</sup>kā<sup>55</sup> (Ch.)  
 sedan chair, carry, a<sup>31</sup>gin<sup>55</sup>dɛm<sup>55</sup>a<sup>31</sup>gi<sup>31</sup>a<sup>31</sup>  
 see visitor off, mu<sup>31</sup>nɛm<sup>35</sup>ɕin<sup>31</sup>u<sup>31</sup>  
 see, dza<sup>55</sup>, dza(u)<sup>53</sup>, za<sup>55</sup>; za<sup>31</sup>dza<sup>55</sup>  
 see through, dzaŋ<sup>55</sup>t<sup>h</sup>am<sup>53</sup>  
 seed of Asiatic plantain, a<sup>31</sup>dzuŋ<sup>55</sup>nā<sup>31</sup>  
 seed, ʔŋ<sup>31</sup>iu<sup>31</sup>, iu<sup>31</sup>  
 seedling, sprout, li<sup>55</sup>dza<sup>53</sup> (Lisu)  
 seeds (reserve), liu<sup>53</sup>  
 seek refuge from, a<sup>31</sup>san<sup>55</sup>t<sup>h</sup>a<sup>35</sup>ma<sup>55</sup>ʃ<sup>31</sup>  
 seek; look for, la<sup>53</sup>a<sup>55</sup>, ʈau<sup>53</sup>  
 seize, to, t<sup>h</sup>iŋ<sup>ʔ</sup><sup>55</sup>  
 seize, to, ni<sup>55</sup>t<sup>h</sup>am<sup>31</sup>  
 seize and arrest, k<sup>h</sup>a<sup>55</sup>va<sup>35</sup>u<sup>31</sup>  
 seize, take, carry, ɕu<sup>55</sup>tɕ<sup>h</sup>iŋ<sup>31</sup>nun<sup>55</sup>

- select and delegate, depute, p<sup>h</sup>ε<sup>31</sup> (Ch.)  
 select, pick, a<sup>31</sup>se<sup>31</sup>ηu<sup>31</sup>  
 select seed, a<sup>31</sup>su<sup>31</sup>  
 self, η<sup>31</sup>lo<sup>33</sup>lu<sup>55</sup>  
 self-designation for minorities, a<sup>31</sup>nun<sup>31</sup> t<sup>ɕ</sup>h<sup>55</sup>  
 sell, ηem<sup>33</sup> (ε), ηem<sup>31</sup> (imperative), n<sup>h</sup>em<sup>55</sup>, nem<sup>31</sup>  
 sell rice, dz<sup>31</sup>z<sup>55</sup>t<sup>ɕ</sup>h<sup>55</sup>a<sup>55</sup>ven<sup>35</sup>  
 semen, ɕa<sup>31</sup>du<sup>55</sup> t<sup>ɕ</sup>h<sup>31</sup>  
 send an invitation, p<sup>h</sup>i<sup>55</sup>dza<sup>55</sup>h<sup>55</sup>i<sup>h</sup>en<sup>35</sup>u<sup>31</sup>  
 send (letter), di<sup>31</sup>bun<sup>31</sup>  
 send (money), dza<sup>31</sup>x<sup>31</sup>di<sup>31</sup>ba<sup>31</sup>u<sup>31</sup>  
 send (thing), sa<sup>33</sup>bo<sup>33</sup>, a<sup>31</sup>bo<sup>33</sup>  
 send (gift), dz<sup>31</sup>u<sup>55</sup>sa<sup>55</sup>ba<sup>31</sup>  
 send off, see off, ɕin<sup>33</sup>bo<sup>55</sup>  
 send the betrothed presents, t<sup>ɕ</sup>h<sup>55</sup>a<sup>31</sup>ma<sup>55</sup>di<sup>31</sup>p<sup>h</sup>u<sup>55</sup>dz<sup>31</sup>u<sup>55</sup>  
 send, to, di<sup>31</sup>k<sup>h</sup>en<sup>53</sup>  
 senile, t<sup>h</sup>i<sup>31</sup>ma<sup>31</sup>  
 sentence, speech, utterances, clf., t<sup>ɕ</sup>h<sup>55</sup>u<sup>55</sup>  
 separate, t<sup>ɕ</sup>h<sup>55</sup>a<sup>55</sup>  
 separate, ʔa<sup>31</sup>di<sup>31</sup>ba<sup>55</sup>  
 separately, t<sup>h</sup>i<sup>31</sup>io<sup>55</sup>h<sup>55</sup>i<sup>h</sup>o<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 separate (causative), di<sup>31</sup>ba<sup>33</sup>u<sup>55</sup>  
 September, du<sup>31</sup>gu<sup>31</sup>la<sup>55</sup>  
 seriously ill, ba<sup>31</sup>ɕi<sup>31</sup>a<sup>31</sup>dza<sup>35</sup>a<sup>55</sup>  
 servant; lackey, dzu<sup>31</sup>ɕen<sup>55</sup>  
 serve a meal, bu<sup>35</sup>dz<sup>55</sup>em<sup>53</sup>  
 serve, act as, xua<sup>55</sup>ɕi<sup>31</sup>  
 serve, act as, ua<sup>55</sup>ɕi<sup>31</sup>  
 sesame, mo<sup>55</sup>k<sup>h</sup>u<sup>55</sup>  
 sesame oil, bu<sup>31</sup>i<sup>u</sup><sup>53</sup>  
 set a snare, xo<sup>31</sup>dzim<sup>55</sup>  
 set fish free, ηua<sup>55</sup>ɕi<sup>31</sup>lan<sup>31</sup>u<sup>31</sup>  
 set off firecrackers, t<sup>h</sup>o<sup>31</sup>γu<sup>31</sup>po<sup>55</sup>ɕi<sup>31</sup>lan<sup>35</sup>  
 set (sun) = sink, go down, dzim<sup>55</sup>, a<sup>31</sup>dzim<sup>55</sup>  
 set on fire, t<sup>h</sup>i<sup>31</sup>ta<sup>55</sup>u<sup>31</sup>  
 set one's mind at rest, be relieved, t<sup>h</sup>a<sup>31</sup>p<sup>h</sup>i<sup>31</sup>ɕa<sup>31</sup>  
 set table, t<sup>ɕ</sup>a<sup>55</sup>ts<sup>ɕ</sup>u<sup>31</sup>ɕun<sup>53</sup>u<sup>31</sup>  
 set up a bed, n<sup>h</sup>im<sup>55</sup>za<sup>55</sup>t<sup>h</sup>i<sup>55</sup>k<sup>h</sup>aa<sup>31</sup>zo<sup>31</sup>mun<sup>31</sup>  
 set up frame, a<sup>31</sup>ve<sup>55</sup>dzim<sup>35</sup>ε  
 set up pillars, t<sup>h</sup>i<sup>31</sup>zu<sup>55</sup>t<sup>ɕ</sup>h<sup>55</sup>an<sup>53</sup>u<sup>31</sup>  
 sever (a rope); cut off, t<sup>h</sup>u<sup>55</sup>ʔ<sup>53</sup>; t<sup>h</sup>u<sup>55</sup><sup>33</sup>  
 several, η<sup>31</sup> - (e.g. η<sup>31</sup>ɕa<sup>55</sup> 'several hundreds')  
 several, ɕan<sup>31</sup>  
 seven, ɕi<sup>31</sup>ni<sup>55</sup> > ɕi<sup>31</sup>ni<sup>35</sup>, ɕi<sup>31</sup> (Lisu)  
 seven sisters stars, ɕi<sup>31</sup>ni<sup>55</sup>ɕi<sup>31</sup>vi<sup>55</sup>  
 seventeen, t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>ai<sup>55</sup>ɕi<sup>31</sup>ni<sup>35</sup>, ts<sup>h</sup>ɕi<sup>31</sup> (Lisu)  
 seventh, ti<sup>35</sup>t<sup>ɕ</sup>h<sup>31</sup>

- seventh, dɑ<sup>53</sup>u<sup>31</sup>ɣn<sup>35</sup>  
 seventh early branch (horse), mǎ<sup>31</sup>nɯŋ<sup>55</sup>  
 seventy, ɣn<sup>35</sup>ts<sup>h</sup>a<sup>55</sup>  
 severe, pi<sup>31</sup>pi<sup>31</sup>  
 sew (cloth), patch, p<sup>h</sup>a<sup>53</sup>(u<sup>31</sup>)  
 sew on (button), t<sup>h</sup>ǎ<sup>31</sup>(u<sup>31</sup>)  
 sexual intercourse (common term), a<sup>31</sup>ɣu<sup>55</sup>  
 sexual intercourse (euphemism), a<sup>31</sup>ua<sup>55</sup>  
 sexually harrass, k<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>mi<sup>31</sup>  
 shack, thatched, a<sup>31</sup>dʒɿ<sup>31</sup>a<sup>31</sup>vẽ<sup>55</sup>  
 shackles, ɕam<sup>31</sup>xuŋ<sup>55</sup>  
 shadow, ɲ<sup>31</sup>la<sup>31</sup>bǎ<sup>55</sup>, ɣu<sup>55</sup>(Lisu), ɣu<sup>55</sup>(ɲo<sup>53</sup>)  
 shady side (of mountain), p<sup>h</sup>u<sup>31</sup>dzam<sup>31</sup>  
 shake (head), a<sup>31</sup>nɛm<sup>55</sup>, u<sup>31</sup>nɛm<sup>55</sup>  
 shake hands, a<sup>31</sup>vu<sup>55</sup>ɕi<sup>31</sup>t<sup>h</sup>in<sup>35</sup>  
 shake off (dust), ʔa<sup>31</sup>gan<sup>53</sup>u<sup>31</sup>  
 shake one's head, xua<sup>31</sup>ɣi<sup>55</sup>  
 shake open, spread, k<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 shake out, a<sup>31</sup>k<sup>h</sup>aŋ<sup>53</sup>ũ<sup>31</sup>  
 shake, io<sup>33</sup>pun<sup>55</sup>  
 shake, to, a<sup>31</sup>nɛm<sup>55</sup>, a<sup>31</sup>nɛn<sup>55</sup>  
 shallow basket, la<sup>35</sup>dʒu<sup>31</sup>  
 shallow (water), m<sup>31</sup>nɯŋ<sup>31</sup>  
 shaman, da<sup>31</sup>ɣi<sup>55</sup>phu<sup>31</sup>  
 shame; shy, ɕaŋ<sup>55</sup>  
 shameless, ɣi<sup>31</sup>iaŋ<sup>35</sup>m<sup>31</sup>so<sup>55</sup>  
 shampoo the hair, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>dʒɛn<sup>55</sup>  
 shape of something collapsed, p<sup>h</sup>a<sup>55</sup>p<sup>h</sup>a<sup>55</sup>laŋ<sup>31</sup>laŋ<sup>31</sup>  
 sharp (knife), t<sup>h</sup>u<sup>31</sup>, si<sup>55</sup>si<sup>55</sup>  
 sharpen, grind, xǎ<sup>23</sup>ŋu<sup>31</sup>  
 shave, muŋ<sup>55</sup>  
 shave beard, mu<sup>31</sup>tsɿ<sup>55</sup>ɕi<sup>31</sup>lim<sup>31</sup>sɛ<sup>55</sup>  
 shave head, have a haircut, ɕi<sup>31</sup>lim<sup>31</sup>ɣi<sup>55</sup>  
 shave the head bald, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>a<sup>55</sup>ɕi<sup>31</sup>lim<sup>31</sup>ɣi<sup>55</sup>  
 shavings, ɕuŋ<sup>55</sup>t<sup>h</sup>uŋ<sup>31</sup>  
 sheath; scabbard, ɕɛm<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 shed tears, ʔa<sup>31</sup>iui<sup>31</sup>  
 shed tears, p<sup>h</sup>ɣi<sup>31</sup>a<sup>31</sup>su<sup>31</sup>  
 sheep herder, a<sup>31</sup>bɛ<sup>55</sup>a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>53</sup>su<sup>55</sup>  
 sheep or goat pen, a<sup>31</sup>bɛ<sup>55</sup>dʒa<sup>31</sup>xam<sup>35</sup>  
 sheepfold fence, a<sup>31</sup>bɛ<sup>55</sup>dʒa<sup>31</sup>xam<sup>35</sup>  
 sheep skin, a<sup>31</sup>iaŋ<sup>31</sup>sam<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 sheep skin (vest), a<sup>31</sup>bɛ<sup>55</sup>sam<sup>31</sup>  
 sheep, a<sup>31</sup>iaŋ<sup>31</sup>  
 shell, peel, sam<sup>31</sup>sam<sup>35</sup>  
 shell of a boat, ɕa<sup>55</sup>sam<sup>31</sup>a<sup>31</sup>su<sup>31</sup>  
 shell (peanuts), to, k<sup>h</sup>aŋ<sup>31</sup>u<sup>31</sup>



shell, peel, k<sup>h</sup>in<sup>55</sup>nuŋ<sup>31</sup>; k<sup>h</sup>in<sup>55</sup>  
 shield, a<sup>31</sup>dʒɑ<sup>53</sup>  
 shinbone, a<sup>31</sup>xa<sup>35</sup>gʊŋ<sup>31</sup>  
 shine (mirror), za<sup>31</sup>u<sup>31</sup>  
 shine (sun), ʒa<sup>31</sup>u<sup>31</sup>t<sup>h</sup>im<sup>31</sup>  
 shine (sun); roast in sun, ʔam<sup>55</sup>; ʔam<sup>53</sup>  
 shiny, mu<sup>55</sup>lan<sup>31</sup>tʂ<sup>h</sup>a<sup>55</sup>  
 shiny, shining, ʔga<sup>53</sup>ni<sup>33</sup>  
 shirt, i<sup>55</sup>duŋ<sup>31</sup>gʊa<sup>31</sup>dɛm<sup>55</sup>  
 shit, fly, ba<sup>33</sup>sum<sup>55</sup>pu<sup>31</sup>niŋ<sup>31</sup>  
 shiver, tremble, to, a<sup>31</sup>nɛm<sup>55</sup>ɛ<sup>55</sup>  
 shoelaces, a<sup>31</sup>xuŋ<sup>55</sup>  
 shoes, a<sup>31</sup>xa<sup>55</sup>gɿ<sup>55</sup>dɛm<sup>55</sup>  
 shoes, cloth, ma<sup>31</sup>xuŋ<sup>55</sup>tʂ<sup>h</sup>ni<sup>33</sup>  
 shoes, leather, ɕa<sup>55</sup>sam<sup>31</sup>tʂ<sup>h</sup>ni<sup>33</sup>  
 shoot arrow, small arms, vam<sup>55</sup>  
 shoot arrow, t<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>fam<sup>55</sup> (vam<sup>55</sup>)  
 shoot, fire gun, bo<sup>55</sup>  
 shoot, vam<sup>55</sup>; shoot each other, a<sup>31</sup>vam<sup>55</sup>  
 shoot the target, vam<sup>53</sup>du<sup>31</sup>dʒaŋ<sup>31</sup>ũ<sup>31</sup>  
 shoot with gun, dʒo<sup>55</sup>k<sup>h</sup>an<sup>33</sup>van<sup>53</sup>  
 shop selling salt, sɿ<sup>31</sup>lan<sup>55</sup>ven<sup>35</sup>za<sup>53</sup>  
 shop; store, ven<sup>55</sup>za<sup>55</sup>  
 shopkeeper, nen<sup>55</sup>ŋ<sup>31</sup>k<sup>h</sup>an<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 short, t<sup>h</sup>uŋ<sup>55</sup>  
 short lunar month, sɿ<sup>31</sup>la<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 short person; dwarf, tɕ<sup>h</sup>i<sup>55</sup>nim<sup>31</sup>  
 short, tɕi<sup>55</sup>t<sup>h</sup>uŋ<sup>55</sup>  
 short knife/sword, ɕem<sup>31</sup>t<sup>h</sup>an<sup>55</sup>dɔŋ<sup>55</sup>  
 shortcoming, tɕ<sup>h</sup>ye<sup>31</sup>tian<sup>53</sup>  
 shorts, ɕa<sup>33</sup>mã<sup>55</sup>t<sup>h</sup>uŋ<sup>55</sup>  
 should, a<sup>31</sup>nem<sup>55</sup>, dzɿ<sup>33</sup>, ɿ<sup>33</sup>  
 should go, dzɿ<sup>55</sup>li<sup>55</sup>a<sup>31</sup>ne<sup>33</sup>  
 shoulder, za<sup>31</sup>gã<sup>55</sup>  
 shoulder blade, scapula, za<sup>31</sup>gã<sup>55</sup>sa<sup>33</sup>zu<sup>31</sup>  
 shoulder, to, a<sup>31</sup>sen<sup>31</sup>u  
 shout, cry out, ʔguŋ<sup>53</sup>u<sup>31</sup>, guŋ<sup>53</sup>, ʂɿ<sup>31</sup>dzɿ<sup>55</sup>  
 shout, make (someone), t<sup>h</sup>i<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 shout, make (someone), t<sup>h</sup>i<sup>31</sup>dam<sup>55</sup>  
 shout, to, iaŋ<sup>55</sup>ɛ<sup>31</sup>  
 shovel, ts<sup>h</sup>en<sup>55</sup>tsɿ<sup>31</sup>  
 shovel, tɕu<sup>55</sup>p<sup>h</sup>ie<sup>55</sup>  
 shovel, spade, to, xo<sup>31</sup>o<sup>55</sup>  
 show up for, a<sup>31</sup>vzɿ<sup>55</sup>  
 shredded meat, ɕa<sup>33</sup>bun<sup>55</sup>  
 shrink (e.g., clothes), a<sup>31</sup>qi<sup>31</sup>ʔguŋ<sup>55</sup>  
 shrivelled, shrunken, tɕ<sup>h</sup>im<sup>53</sup>

- shut (mouth), (di<sup>31</sup>)tɕ<sup>hi</sup>m<sup>55</sup>  
 shut someone up, p<sup>h</sup>am<sup>53</sup>  
 shuttle, mi<sup>55</sup> gin<sup>31</sup>  
 shuttlecock, k<sup>h</sup>a<sup>55</sup> min<sup>33</sup> a<sup>31</sup> li<sup>55</sup> dɛm<sup>55</sup>  
 shy, coy, ʃɿ<sup>33</sup> ɕaŋ<sup>55</sup> t<sup>h</sup>a<sup>31</sup> ɕaŋ<sup>55</sup> ʃɿ<sup>31</sup>  
 shy, bashful, ʃɿ<sup>31</sup> laŋ<sup>55</sup>, ʃɿ<sup>33</sup> ɕaŋ<sup>55</sup> t<sup>h</sup>a<sup>31</sup> ɕaŋ<sup>55</sup>  
 siblings of father's brothers, p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 siblings of father's sisters; of mother's brothers and sisters, t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup>  
 sick, be, a<sup>31</sup> dza<sup>53</sup> (u<sup>31</sup>)  
 sick, ill, hurt, ts<sup>h</sup>a<sup>53</sup> na<sup>55</sup>  
 sickness, ŋa<sup>31</sup> dzau<sup>35</sup>  
 sickle, lo<sup>55</sup> mɔŋ<sup>31</sup>  
 sickle with a saw, io<sup>55</sup> mǎ<sup>33</sup>  
 side (n.), (di<sup>31</sup>)tɕ<sup>hi</sup>i<sup>55</sup>  
 side rooms, ʔa<sup>31</sup> ve<sup>55</sup> tɕ<sup>hi</sup>m<sup>31</sup>  
 side sword, dza<sup>31</sup> mǎ<sup>31</sup>  
 side, di<sup>33</sup> tɕ<sup>hi</sup>i<sup>55</sup> (k<sup>h</sup>a<sup>33</sup>)  
 sideburns, ba<sup>31</sup> tɕ<sup>hi</sup>i<sup>31</sup>  
 sidewalk, a<sup>31</sup> ts<sup>h</sup>aŋ<sup>31</sup> dzɿ<sup>55</sup> t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>  
 sieve; sifter, ua<sup>55</sup> tɕi<sup>55</sup>  
 sift (grain), xun<sup>53</sup> u<sup>31</sup>; xun<sup>53</sup>  
 sign, to, buŋ<sup>31</sup> p<sup>h</sup>a<sup>31</sup> zu<sup>53</sup>  
 silent, k<sup>h</sup>a<sup>55</sup> ma<sup>31</sup> saŋ<sup>55</sup> ma<sup>31</sup> ʃɿ<sup>31</sup>  
 silk fabric, bu<sup>31</sup> ma<sup>33</sup> xun<sup>55</sup>  
 silk fabric, bu<sup>55</sup> ga<sup>31</sup> mu<sup>55</sup>  
 silk thread, bu<sup>33</sup> vam<sup>55</sup> zur<sup>33</sup> bu<sup>31</sup> buŋ<sup>55</sup>  
 silkworm, bu<sup>31</sup> bu<sup>31</sup> luŋ<sup>55</sup>  
 silkworm chrysalis, ʔo<sup>31</sup> ɕuŋ<sup>55</sup>  
 silver dollar, dza<sup>31</sup> xa<sup>31</sup> laŋ<sup>55</sup>  
 silver, p<sup>h</sup>u<sup>55</sup>  
 silver, xe<sup>31</sup>  
 silversmith, dza<sup>31</sup> xa<sup>55</sup> zɿm<sup>55</sup> su<sup>55</sup> (Lisu)  
 simmer, roast in hot ashes, p<sup>h</sup>a<sup>31</sup> k<sup>h</sup>i<sup>31</sup> u<sup>31</sup> ɛ<sup>55</sup> gu<sup>55</sup>  
 simpleton, ŋ<sup>31</sup> ts<sup>h</sup>u<sup>55</sup>  
 since (time), k<sup>h</sup>uŋ<sup>31</sup> ni<sup>33</sup>  
 sing (song), mu<sup>31</sup> gua<sup>33</sup> gua<sup>55</sup> (Lisu)  
 sing, to, m<sup>31</sup> ɕɛm<sup>55</sup> ua<sup>33</sup>, gua<sup>55</sup> (Lisu)  
 sing, to, bu<sup>31</sup> zu<sup>55</sup>  
 sing role in opera, he<sup>55</sup> ts<sup>h</sup>ɿ<sup>31</sup> la<sup>55</sup> su<sup>55</sup>  
 single child, t<sup>h</sup>i<sup>55</sup> io<sup>55</sup> a<sup>31</sup> t<sup>h</sup>i<sup>55</sup>  
 single crown of the head, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> t<sup>h</sup>i<sup>55</sup> k<sup>h</sup>o<sup>31</sup> zɿn<sup>55</sup>  
 sink into; sunken; dented, ɕuŋ<sup>55</sup> dzi<sup>31</sup> ɛ<sup>55</sup>  
 sink, to, dzuŋ<sup>55</sup> a<sup>31</sup> ba<sup>33</sup>  
 siskin; titmouse, tʃɿu<sup>55</sup> ʔgeŋ<sup>55</sup>  
 sister (older), dze<sup>31</sup> p<sup>h</sup>i<sup>55</sup>  
 sister (younger) (citation form), (ŋ<sup>31</sup>)t<sup>h</sup>a<sup>31</sup> ŋaŋ<sup>55</sup>  
 sister, elder (address; appellation), (dza<sup>31</sup>)p<sup>h</sup>i<sup>55</sup>

- sister's son, sa<sup>55</sup> dza<sup>31</sup>  
 sister's term for brother, p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 sisters = younger sibling, t<sup>h</sup>a<sup>31</sup> nan<sup>55</sup>  
 sisters, dza<sup>31</sup> p<sup>h</sup>i<sup>55</sup>  
 sit, go<sup>55</sup> na<sup>33</sup>  
 sit, dzu<sup>33</sup>  
 sit (imp.), ŋo<sup>55</sup>, ŋo<sup>55</sup>  
 sit down, no<sup>33</sup>, ŋo<sup>55</sup>; ʔi<sup>31</sup> k<sup>h</sup>a<sup>55</sup> no<sup>33</sup>  
 sit up, tɕ<sup>h</sup>in<sup>55</sup> ʂɿ<sup>31</sup>  
 six, kuŋ<sup>55</sup>, tʂo<sup>53</sup> (Lisu)  
 sixteen, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>ai<sup>55</sup> kuŋ<sup>55</sup>, ts<sup>h</sup>ɿ<sup>31</sup> tʂo<sup>53</sup> (Lisu)  
 sixteenth day of lunar month, t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>a<sup>55</sup> kuŋ<sup>55</sup> ŋi<sup>33</sup>  
 sixth, qa<sup>53</sup> u<sup>31</sup> kuŋ<sup>55</sup>  
 sixth, ti<sup>35</sup> lu<sup>31</sup> (Ch.)  
 sixth early branch (snake), bu<sup>31</sup> ŋuŋ<sup>55</sup>  
 sixty, kuŋ<sup>55</sup> ts<sup>h</sup>a<sup>55</sup>  
 skin diseases, sa<sup>55</sup> p<sup>h</sup>o<sup>31</sup> a<sup>31</sup> dza<sup>35</sup>  
 skin ulcers, scabies, da<sup>33</sup> dzu<sup>55</sup>  
 skin, sa<sup>55</sup> p<sup>h</sup>o<sup>31</sup>  
 skin (cattle), sam<sup>31</sup>  
 skip, to, ta<sup>35</sup> du<sup>31</sup> ʂɿ<sup>31</sup> lam<sup>55</sup> se<sup>55</sup>  
 skirt; petticoat, ʂɿ<sup>31</sup> ŋm<sup>31</sup>  
 skull, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> da<sup>31</sup> k<sup>h</sup>am<sup>55</sup>  
 skull-shaped block, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> da<sup>31</sup> k<sup>h</sup>am<sup>55</sup>  
 sky, heaven, mu<sup>55</sup> laŋ<sup>31</sup>; mu<sup>55</sup>  
 slanting, dzɿ<sup>31</sup> dzɿ<sup>31</sup> (Lisu)  
 slanting, leaning, di<sup>55</sup> tɕ<sup>h</sup>iŋ<sup>53</sup>  
 slap, to, ba<sup>31</sup> ta<sup>55</sup> a<sup>31</sup> ŋi<sup>31</sup> u<sup>31</sup>  
 slaughter, to, san<sup>55</sup> (= kill)  
 slaver, covet, tʂ<sup>h</sup>ŋ<sup>55</sup> a<sup>31</sup> iuŋ<sup>31</sup>  
 sleep-walk, maŋ<sup>55</sup> bi<sup>31</sup>  
 sleep, ŋim<sup>55</sup> (nim<sup>55</sup>)  
 sleep, cause to, ɕi<sup>31</sup> ŋim<sup>55</sup>; ŋim<sup>55</sup>; ŋi<sup>55</sup> mi<sup>31</sup>  
 sleep (of silkworm), bu<sup>31</sup> bu<sup>31</sup> ŋuŋ<sup>55</sup> qaŋ<sup>31</sup> zuŋ<sup>55</sup> se<sup>31</sup>  
 sleep on side, ʔi<sup>55</sup> dzi<sup>31</sup> ŋi<sup>55</sup> me<sup>33</sup>  
 sleep on stomach, mo<sup>31</sup> ni<sup>33</sup> ya<sup>55</sup> ʂɿ<sup>31</sup> li<sup>31</sup> ŋi<sup>55</sup> iu<sup>31</sup>  
 sleep talk, maŋ<sup>55</sup> bi<sup>31</sup> = sleep walk  
 sleep, take a nap, a<sup>31</sup> ŋaŋ<sup>35</sup> a<sup>55</sup> nim<sup>55</sup>  
 sleep with back down, ga<sup>31</sup> la<sup>55</sup> t<sup>h</sup>a<sup>31</sup> t<sup>h</sup>a<sup>31</sup> ŋi<sup>55</sup> me<sup>33</sup>  
 sleepwalk, maŋ<sup>55</sup> bi<sup>31</sup>  
 sleepy, ŋi<sup>55</sup> t<sup>h</sup>i<sup>31</sup> ŋu<sup>53</sup>  
 sleeve, ga<sup>31</sup> la<sup>31</sup> duŋ<sup>55</sup>  
 sleeve, tʂ<sup>h</sup>ɿ<sup>55</sup> k<sup>h</sup>u<sup>31</sup>  
 sliced meat, ɕa<sup>33</sup> laŋ<sup>55</sup>  
 slices, buckwheat, p<sup>h</sup>o<sup>31</sup> ua<sup>55</sup> su<sup>31</sup> lu<sup>31</sup>  
 slide, a, ʂɿ<sup>31</sup> luŋ<sup>55</sup> dem<sup>55</sup>  
 slide, to, a<sup>31</sup> vi<sup>55</sup>

- slide, a, a<sup>31</sup>vz<sub>1</sub><sup>55</sup>  
 slide through, as oar through water, vii<sup>55</sup>  
 slide door, drawer, na<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>iɛŋ<sup>31</sup>u<sup>31</sup>  
 slide down a slide, s<sub>1</sub><sup>31</sup>luŋ<sup>55</sup>s<sub>1</sub><sup>31</sup>  
 slide helper (rear), ŋ<sup>31</sup>ga<sup>35</sup>lu<sup>31</sup>  
 slide rope, ma<sup>33</sup>-dem<sup>55</sup>  
 slide groove, dʒi<sup>55</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 sliding cable chain, a<sup>31</sup>lan<sup>55</sup>  
 sliding weight in steelyard, ŋɛ<sup>31</sup>dem<sup>55</sup>[uŋ<sup>55</sup>]  
 slightly, somewhat, lɛ<sup>55</sup>  
 slingshot, tan<sup>35</sup>kuŋ<sup>55</sup>  
 slip, to, tɕ<sup>h</sup>ɛ<sup>53</sup>; tɕ<sup>h</sup>ɛ̃<sup>53</sup>  
 slip to one side, k<sup>h</sup>u<sup>31</sup>k<sup>h</sup>a<sup>55</sup>ɕin<sup>55</sup>ɕu<sup>31</sup>  
 slip away, tɕ<sup>h</sup>ɛ̃<sup>53</sup>  
 slippery, di<sup>31</sup>gu<sup>33</sup>  
 slippery, cause to be, s<sub>1</sub><sup>31</sup>-luŋ<sup>35</sup>  
 slope; slant, lu<sup>31</sup>ka<sup>35</sup>poŋ<sup>53</sup>  
 sloppy = passable, a<sup>31</sup>ts<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 slough off skin, tɕ<sup>h</sup>iŋ<sup>53</sup>  
 slow cf. late, a<sup>31</sup>nan<sup>35</sup>  
 slow (walk), a<sup>31</sup>iā<sup>35</sup>(si<sup>31</sup>)  
 slowly, gradually, a<sup>31</sup>ian<sup>35</sup>(s<sub>1</sub><sup>31</sup>/si<sup>31</sup>)  
 slowly, slow, sluggish, a<sup>31</sup>iāŋ<sup>55</sup>iāŋ<sup>55</sup>s<sub>1</sub><sup>31</sup>  
 slurp, to, tɕ<sup>h</sup>im<sup>55</sup>ɛ<sup>31</sup>  
 sly, cunning, s<sub>1</sub><sup>31</sup>s<sub>1</sub><sup>55</sup>sɛ<sup>31</sup>  
 slyly, k<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>ua<sup>31</sup>  
 smack one's lips, di<sup>31</sup>dan<sup>31</sup>u<sup>31</sup>  
 small dike-like area surrounding the dugout area for cooking, mu<sup>31</sup>zam<sup>55</sup>  
     k<sup>h</sup>uŋ<sup>55</sup>lan<sup>31</sup>  
 small, become, tɕ<sup>h</sup>i<sup>55</sup>la<sup>55</sup>a<sup>31</sup>p<sup>h</sup>o<sup>55</sup>  
 small but conceited, di<sup>31</sup>p<sup>h</sup>a<sup>31</sup>  
 small change; dʒa<sup>31</sup>xa<sup>31</sup>lan<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 small change, p<sup>h</sup>u<sup>55</sup>xu<sup>31</sup>(Lisu)  
 small dishes of food, k<sup>h</sup>ɛn<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 small, tɕ<sup>h</sup>i<sup>55</sup>la<sup>55</sup>  
 small (of back), da<sup>55</sup>gun<sup>31</sup>dʒim<sup>55</sup>  
 small (one), tɕ<sup>h</sup>ɛn<sup>31</sup>  
 smallpox, na<sup>33</sup>do<sup>33</sup>(Lisu)  
 smash, break, s<sub>1</sub><sup>31</sup>xuam<sup>53</sup>  
 smash, break, ŋ<sup>31</sup>s<sub>1</sub><sup>31</sup>ɛ<sup>31</sup>t<sup>h</sup>am<sup>53</sup>  
 smash (bowl), k<sup>h</sup>a<sup>55</sup>ɣa<sup>55</sup>; ga<sup>55</sup>  
 smash, cause to, s<sub>1</sub><sup>31</sup>ga<sup>55</sup>  
 smash, strike, break, k<sup>h</sup>o<sup>31</sup>ʔo<sup>55</sup>ŋa<sup>31</sup>di<sup>31</sup>mu<sup>55</sup>  
 smell (fishy), p<sup>h</sup>u<sup>31</sup>m<sup>31</sup>lem<sup>31</sup>ɛ<sup>55</sup>  
 smell, to, p<sup>h</sup>u<sup>31</sup>lem<sup>55</sup>u<sup>31</sup>  
 smell, sniff, p<sup>h</sup>u<sup>31</sup>lem<sup>55</sup>u<sup>31</sup>  
 smell, taste, lim<sup>31</sup>

- smelt (copper), dʒi<sup>31</sup>gɾɿ<sup>31</sup>u<sup>3</sup>  
 smelt (iron), ts<sup>h</sup>e<sup>31</sup>  
 smelt (iron), di<sup>31</sup>dzɿu<sup>31</sup>  
 smile, to, ba<sup>31</sup>ni<sup>31</sup>a<sup>31</sup>xi<sup>55</sup>  
 smoke (cigarette), tɕ<sup>h</sup>im<sup>53</sup>  
 smoke (cigarette), a<sup>31</sup>ian<sup>31</sup>  
 smoke (fire), tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>31</sup>ɣom<sup>55</sup>  
 smoke (oil), a<sup>31</sup>iã<sup>31</sup>  
 smoke (cook), a<sup>31</sup>k<sup>h</sup>iɛŋ<sup>31</sup>u<sup>55</sup>  
 smoke tobacco, a<sup>31</sup>ɲɔ<sup>31</sup>  
 smoke, to, a<sup>31</sup>dzɿuŋ<sup>31</sup>; a<sup>31</sup>dzɿuŋ<sup>31</sup>  
 smooth, sɿŋ<sup>55</sup> sɿŋ<sup>55</sup> tɕ<sup>h</sup>ã<sup>31</sup>; sɿ<sup>55</sup>  
 smooth, glossy, tɕ<sup>h</sup>ɛ<sup>55</sup>  
 smother (charcoal), da<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 snail, bu<sup>31</sup>nu<sup>ɔ</sup><sup>55</sup> (Lisu)  
 snake slough, bu<sup>31</sup>tɕ<sup>h</sup>in<sup>55</sup>  
 snake, bu<sup>31</sup>  
 snake, flying, dem<sup>31</sup>bu<sup>31</sup>  
 snake, poisonous, bu<sup>31</sup>tɕ<sup>h</sup>ã<sup>55</sup>  
 snap fingers, ɲ<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup> dʒi<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 snap (a thread), ɕi<sup>31</sup>ʔden<sup>55</sup>  
 snap or break (stick), lu<sup>55</sup>ɲu<sup>31</sup>; p<sup>h</sup>u<sup>55</sup>luŋ<sup>55</sup>ũ<sup>55</sup>  
 snap (thread, rope), a<sup>31</sup>ʔden<sup>55</sup>  
 sneeze, a<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 sneeze, ʔa<sup>31</sup>k<sup>h</sup>uŋ<sup>55</sup>  
 snore, sɿ<sup>31</sup>na<sup>55</sup> na<sup>55</sup>ɛ<sup>31</sup>  
 snot, ɲim<sup>55</sup>  
 snow melts, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup> gɾɿ<sup>55</sup> a<sup>31</sup>ni<sup>33</sup>  
 snow pea pod, do<sup>31</sup>ts<sup>h</sup>i<sup>31</sup>  
 snow, frost, ice, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>  
 snow, to, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup> dzan<sup>55</sup>  
 snow-capped, t<sup>h</sup>i<sup>31</sup>ven<sup>31</sup>mu<sup>31</sup>gun<sup>55</sup>  
 so, ʔe<sup>33</sup>li<sup>33</sup>  
 soak, fu<sup>35</sup>  
 soak, bubble, a<sup>31</sup>p<sup>h</sup>um<sup>55</sup>  
 soak, flood, dzɿuŋ<sup>55</sup>iur<sup>31</sup>  
 soak, immerse, ʔdzɿu<sup>55</sup>ɲu<sup>31</sup>  
 soak, steep (tea), m<sup>31</sup>ts<sup>h</sup>om<sup>44</sup>dzɿuŋ<sup>53</sup>  
 soap, perfumed, i<sup>31</sup>tsɿ<sup>55</sup> (Ch.)  
 soap, ʔua<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>  
 soap, sɿ<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup> dzen<sup>31</sup>dem<sup>55</sup>, ts<sup>h</sup>a<sup>31</sup>pi<sup>55</sup>io<sup>55</sup> (Bs)  
 soccer, ɕa<sup>55</sup>sam<sup>31</sup>luŋ<sup>55</sup>  
 social intercourse, k<sup>h</sup>u<sup>31</sup>k<sup>h</sup>a<sup>55</sup>iɛ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>dzɿ<sup>55</sup>ɛ<sup>31</sup>  
 socks, ua<sup>31</sup>tsɿ<sup>55</sup> (Ch.)  
 soil, earth, a<sup>31</sup>sa<sup>55</sup>  
 solar eclipse, nem<sup>31</sup>dze<sup>31</sup>gzɿ<sup>55</sup> zɛm<sup>53</sup>  
 soldier, iur<sup>31</sup> (t<sup>h</sup>i<sup>55</sup>io<sup>53</sup>)

- soldier, be or become a, iu<sup>31</sup>ua<sup>33</sup>se<sup>33</sup>  
 sole (foot), a<sup>31</sup>xa<sup>53</sup>p<sup>h</sup>am<sup>55</sup>  
 solid, congealed, k<sup>h</sup>an<sup>55</sup>  
 solidify, ʔŋ<sup>31</sup>p<sup>h</sup>um<sup>55</sup>  
 soft, ŋum<sup>55</sup>  
 soft, a<sup>31</sup>ŋa<sup>31</sup>  
 solar eclipse, nem<sup>31</sup>de<sup>31</sup>gŋ<sup>55</sup>em<sup>53</sup>  
 sole of foot, ʔa<sup>31</sup>xa<sup>35</sup>p<sup>h</sup>am<sup>55</sup>  
 solid food, mu<sup>31</sup>dzaŋ<sup>55</sup>  
 solidify, ʔŋ<sup>31</sup>p<sup>h</sup>um<sup>55</sup>  
 some others, k<sup>h</sup>u<sup>55</sup>te<sup>h</sup>o<sup>31</sup>mu<sup>55</sup>  
 some, a few (t<sup>h</sup>i<sup>55</sup>)ba<sup>31</sup>mu<sup>53</sup>, (t<sup>h</sup>i<sup>55</sup>)ba<sup>33</sup>  
 somebody, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>ts<sup>h</sup>ŋ<sup>55</sup>  
 somersault, to, a<sup>31</sup>xuŋ<sup>55</sup>bun<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 sometimes, t<sup>h</sup>i<sup>55</sup>so<sup>33</sup>  
 sometimes one way, sometimes another, k<sup>h</sup>u<sup>55</sup>don<sup>55</sup>ie<sup>55</sup>don<sup>55</sup>  
 son-in-law, ma<sup>55</sup>vu<sup>31</sup> (Lisu)  
 son; child, te<sup>h</sup>en<sup>31</sup>, te<sup>h</sup>en<sup>31</sup>p<sup>h</sup>u<sup>31</sup>  
 song, folksong, (mu<sup>31</sup>ɕem<sup>55</sup>)tu<sup>55</sup>ŋ<sup>31</sup> (Lisu)  
 song, mo<sup>33</sup>gua<sup>33</sup> (Lisu)  
 son's daughter, p<sup>h</sup>ŋ<sup>31</sup>ŋ<sup>55</sup>  
 son's son, p<sup>h</sup>ŋ<sup>31</sup>ŋ<sup>55</sup>  
 sons and daughters, te<sup>h</sup>en<sup>31</sup>  
 sooner or later, k<sup>h</sup>a<sup>55</sup>te<sup>h</sup>o<sup>31</sup>gu<sup>55</sup>  
 soot (of a pan), dza<sup>31</sup>k<sup>h</sup>o<sup>55</sup>ni<sup>31</sup>hãŋ<sup>55</sup>  
 soot (of a pot), ŋi<sup>31</sup>k<sup>h</sup>u<sup>55</sup>l<sup>h</sup>aŋ<sup>31</sup>  
 sorceress, da<sup>31</sup>ŋ<sup>55</sup>p<sup>h</sup>u<sup>31</sup> (Lisu)  
 sore (leg), dzun<sup>33</sup>  
 sorghum, dze<sup>55</sup>sin<sup>31</sup> > dze<sup>55</sup>si<sup>31</sup>  
 sort out vegetables, ba<sup>31</sup>si<sup>31</sup>u  
 soul, spirit, p<sup>h</sup>u<sup>31</sup>la<sup>31</sup>  
 sound, saŋ<sup>55</sup>, xo<sup>35</sup>ŋu<sup>33</sup>saŋ<sup>55</sup>  
 sound of a sheep baaing, me<sup>55</sup>me<sup>55</sup>ua<sup>33</sup>  
 sound of fluttering, dji<sup>31</sup>ŋ<sup>55</sup>ŋ<sup>55</sup>u<sup>31</sup>  
 sound of goat, me<sup>55</sup>me<sup>55</sup>ua<sup>31</sup>  
 sound of leaves falling, ʂud<sup>31</sup>ʂua<sup>31</sup>ua<sup>33/55</sup>  
 sound of mud or rocks falling down mountain, ko<sup>31</sup>lo<sup>31</sup>ko<sup>31</sup>lo<sup>31</sup>ua<sup>33</sup>  
 sound of mud flowing, do<sup>31</sup>lo<sup>31</sup>do<sup>31</sup>lo<sup>31</sup>ua<sup>55</sup>  
 sound of running water, xua<sup>31</sup>xua<sup>31</sup>ua<sup>55</sup>  
 sound of small gun, bo<sup>55</sup>  
 sound of wind or heavy sleeper, ɕya<sup>55</sup>ɕya<sup>55</sup>ua<sup>33</sup>  
 sound of wind, ɕya<sup>55</sup>ɕya<sup>55</sup>ua<sup>33</sup>  
 sound the gong, lo<sup>31</sup>a<sup>31</sup>ŋe<sup>31</sup>u<sup>31</sup>  
 soup, oil, ɕa<sup>55</sup>ts<sup>h</sup>ŋ<sup>31</sup>  
 soup, ŋ<sup>31</sup>ts<sup>h</sup>ŋ<sup>31</sup>  
 soup bowl, small, k<sup>h</sup>en<sup>55</sup>ts<sup>h</sup>ŋ<sup>31</sup>heŋ<sup>55</sup>  
 soup bowl, big, k<sup>h</sup>en<sup>55</sup>ts<sup>h</sup>ŋ<sup>31</sup>ta<sup>55</sup>u<sup>31</sup>ta<sup>55</sup>am<sup>53</sup>

- soup, vegetable, k<sup>h</sup>en<sup>33</sup> tʂ<sup>h</sup>ɿ<sup>31</sup>  
sour, m<sup>31</sup>tʂ<sup>h</sup>u<sup>m</sup><sup>55</sup>; make sour, p<sup>h</sup>am<sup>31</sup>tʂ<sup>h</sup>u<sup>m</sup><sup>55</sup>  
sour, m<sup>31</sup>tʂ<sup>h</sup>u<sup>m</sup><sup>55</sup>  
sour, a<sup>31</sup>sɛ<sup>55</sup>  
sour, suan<sup>55</sup>ts<sup>h</sup>u<sup>35</sup>  
source, k<sup>h</sup>u<sup>ɿ</sup><sup>31</sup>ne<sup>55</sup>, ne<sup>55</sup>  
south, tʂi<sup>31</sup>ni<sup>55</sup>, tʂ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>  
south wind, tʂ<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>na<sup>31</sup>bu<sup>31</sup>  
sow; plant, ba<sup>31</sup>ŋu<sup>55</sup>  
sow (seeds), m<sup>31</sup>dza<sup>31</sup>i<sup>u</sup><sup>31</sup>, ba<sup>ɿ</sup><sup>31</sup>ũ<sup>55</sup>  
sow (seeds), i<sup>u</sup><sup>31</sup>k<sup>h</sup>ɛ<sup>n</sup><sup>55</sup>  
sow (pig), ʔo<sup>55</sup>ma<sup>33</sup>  
soy sauce, tʂaŋ<sup>35</sup>i<sup>u</sup><sup>31</sup> (Ch.)  
soybean juice, a<sup>31</sup>noŋ<sup>55</sup>du<sup>31</sup>zu<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
soybean sprouts, a<sup>31</sup>no<sup>55</sup>su<sup>55</sup>  
soybeans, a<sup>31</sup>no<sup>55</sup> (= beans)  
space between the fingers, a<sup>31</sup>vu<sup>35</sup>p<sup>h</sup>am<sup>55</sup>bu<sup>ɿ</sup><sup>55</sup>  
space between the toes, ni<sup>31</sup>tʂ<sup>h</sup>im<sup>55</sup>k<sup>h</sup>ua<sup>ɿ</sup><sup>31</sup>  
spacious, roomy, ua<sup>55</sup>ga<sup>ɿ</sup><sup>31</sup>  
spacious, tʂi<sup>55</sup>p<sup>h</sup>i<sup>55</sup>  
span from fingertip to fingertip of out stretched arms, (t<sup>h</sup>i<sup>55</sup>)lam<sup>55</sup>  
span from thumb to forefinger, bu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
span from thumb to forefinger, mu<sup>33</sup>k<sup>h</sup>ɿ<sup>33</sup>  
span, arm-, clf., t<sup>h</sup>ɔ<sup>n</sup><sup>55</sup>  
spark, tʂ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>k<sup>h</sup>o<sup>31</sup>ni<sup>55</sup>  
sparrow, gua<sup>31</sup>ku<sup>55</sup>  
sparrow, k. of, bu<sup>31</sup>ts<sup>h</sup>ɿ<sup>ɿ</sup><sup>55</sup>  
sparrow, la<sup>55</sup>dzɿ<sup>33</sup>so<sup>55</sup> (gua<sup>31</sup>ku<sup>55</sup>)  
sparrow, long-tailed, bu<sup>31</sup>t<sup>h</sup>u<sup>55</sup>  
spatula (= pot shovel), dzɛ<sup>31</sup>ʂin<sup>55</sup>a<sup>31</sup>p<sup>h</sup>a<sup>ɿ</sup><sup>55</sup>  
speak, gen<sup>31</sup>  
speak; talk, t<sup>h</sup>i<sup>31</sup>zɿ<sup>m</sup><sup>33</sup>  
speak; talk, t<sup>h</sup>i<sup>31</sup>mu<sup>55</sup>  
speak; talk, tʂ<sup>h</sup>im<sup>35</sup>; k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>im<sup>31</sup>ʂɿ<sup>55</sup>  
speak sarcastically, ma<sup>31</sup>ma<sup>31</sup>dʒi<sup>55</sup>  
spear, long, mu<sup>31</sup>gi<sup>u</sup><sup>55</sup> > mɛ<sup>31</sup>gu<sup>ɿ</sup><sup>55</sup>  
special, particular, ba<sup>31</sup>ʂɿ<sup>31</sup>; a<sup>31</sup>bo<sup>31</sup>ã<sup>55</sup>  
spells, curses, mu<sup>55</sup>dza<sup>31</sup>u<sup>31</sup>  
spend money, dza<sup>31</sup>xa<sup>31</sup>dzom<sup>31</sup>ʂɿ<sup>53</sup>  
sperm, semen, ʂa<sup>31</sup>du<sup>ɿ</sup><sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
spices, m<sup>31</sup>lim<sup>31</sup>(ma<sup>55</sup>)  
spicy, hot, si<sup>55</sup>(ɛ<sup>31</sup>)  
spider web, di<sup>55</sup>ba<sup>35</sup>t<sup>h</sup>ɿ<sup>31</sup>za<sup>55</sup>  
spider, di<sup>55</sup>ba<sup>35</sup>  
spider, du<sup>31</sup>ba<sup>31</sup>lim<sup>31</sup>  
spider, long-legged, du<sup>31</sup>ba<sup>31</sup>  
spider web, di<sup>31</sup>ba<sup>31</sup>t<sup>h</sup>i<sup>31</sup>ba<sup>ɿ</sup><sup>55</sup>t<sup>h</sup>i<sup>31</sup>za<sup>ɿ</sup><sup>55</sup>

- spiked millet, dzɿ<sup>31</sup>ia<sup>33</sup>  
spin, ɕa<sup>31</sup>ŋ<sup>55</sup>  
spin (thread, yarn), ŋu<sup>55</sup>ŋu<sup>31</sup>  
spinach, k<sup>h</sup>u<sup>31</sup>dzɿ<sup>55</sup>  
spine; backbone, da<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>mu<sup>31</sup>gun<sup>55</sup>  
spine; backbone, dɕ<sup>31</sup>gun<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
spinning wheel, tɕ<sup>h</sup>ɛ<sup>35</sup>lɛ<sup>31</sup>  
spiral, circle around, xua<sup>31</sup>u<sup>55</sup>  
spiral, circle, wheel, xua<sup>31</sup>u<sup>55</sup> > xuan<sup>53</sup>  
spirit; god; deity, gu<sup>31</sup>mu<sup>55</sup>  
spirit, p<sup>h</sup>u<sup>31</sup>ioŋ<sup>53</sup>  
spit; saliva, tɕ<sup>h</sup>ŋ<sup>55</sup>  
spit (water), to, p<sup>h</sup>ŋ<sup>31</sup>  
spit, tɕ<sup>h</sup>im<sup>55</sup> > tɕ<sup>h</sup>im<sup>33</sup>  
spit, to, dza<sup>55</sup>xan<sup>55</sup>p<sup>h</sup>ɕ<sup>31</sup>u<sup>31</sup>  
spittoon, tɕ<sup>h</sup>im<sup>31</sup>p<sup>h</sup>ɕ<sup>31</sup>dem<sup>55</sup>  
splash, zam<sup>53</sup>u<sup>31</sup>, sam<sup>55</sup>u<sup>31</sup>  
spleen, ŋ<sup>31</sup>t<sup>h</sup>i<sup>31</sup>ven<sup>55</sup>, ʔo<sup>31</sup>t<sup>h</sup>i<sup>31</sup>ven<sup>55</sup>  
split (bamboo pole), p<sup>h</sup>o<sup>55</sup>ʔo<sup>55</sup>  
split (bamboo strips), k<sup>h</sup>a<sup>55</sup>ʔa<sup>31</sup>o<sup>31</sup>  
split firewood, a<sup>31</sup>tɕi<sup>33</sup>  
split in two (e.g., bamboo strips), tɕ<sup>h</sup>em<sup>53</sup>  
split open (wall), ʔgã<sup>55</sup>dʒɛ<sup>3</sup>, dzi<sup>55</sup>ɛ<sup>31</sup> (fissure)  
split open, a<sup>31</sup>tɕ<sup>h</sup>in<sup>33</sup>u<sup>33</sup>  
split open, rend, ŋ<sup>31</sup>ban<sup>31</sup>dzi<sup>ʔ55</sup>  
split, burst, t<sup>h</sup>o<sup>55</sup>da<sup>55</sup>  
split, chop, sa<sup>31</sup>mo<sup>31</sup>  
split, chop, ʔa<sup>31</sup>tɕ<sup>h</sup>i<sup>53;33</sup>; tɕ<sup>h</sup>i<sup>35</sup>  
split, divide, a<sup>31</sup>ni<sup>55</sup>p<sup>h</sup>an<sup>31</sup>  
spoiled (rice), sur<sup>31</sup>iɛ<sup>35</sup>  
sponge iron, ɕa<sup>31</sup>k<sup>h</sup>ɛ<sup>55</sup>dʒim<sup>31</sup>  
spoon, a<sup>31</sup>p<sup>h</sup>an<sup>55</sup>, a<sup>31</sup>pan<sup>55</sup>  
spoon, wooden, mu<sup>55</sup>dʒim<sup>31</sup>  
spray (liquid), a<sup>31</sup>t<sup>h</sup>a<sup>31</sup>  
sprinkle, fall down, ba<sup>ʔ31</sup>ũ<sup>55</sup>  
sprout (ear of grain), ŋ<sup>31</sup>nem<sup>55</sup>a<sup>31</sup>lin<sup>55</sup>  
spread; unfold, k<sup>h</sup>an<sup>31</sup>u<sup>31</sup>  
spread (paint), a<sup>31</sup>ʔŋɛ<sup>35</sup>  
spread out (grain), di<sup>31</sup>p<sup>h</sup>uŋ<sup>53</sup>  
spread; extend; unfold, p<sup>h</sup>u<sup>31</sup>lu<sup>55</sup>  
spread, to, k<sup>h</sup>an<sup>31</sup>u<sup>31</sup>  
spring water, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>35</sup>bo<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
spring, hot, tɕ<sup>h</sup>i<sup>31</sup>lim<sup>55</sup>ŋua<sup>31</sup>  
sprinkle, (a<sup>31</sup>gã<sup>55</sup>dʒi<sup>31</sup>ɛ<sup>33</sup>)k<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
sprinkle, fall down, ba<sup>ʔ31</sup>ũ<sup>55</sup>  
sprout, germinate, lan<sup>55</sup>a<sup>31</sup>nu<sup>31</sup>  
sprout, germinate, la<sup>31</sup>su<sup>31</sup>iu<sup>31</sup>



- sprout, germinate, a<sup>31</sup>man<sup>55</sup>; man<sup>31</sup>  
 spurt, a<sup>31</sup>t<sup>h</sup>u<sup>31</sup>u<sup>31</sup>  
 square (desk, table), bɿ<sup>31</sup>tɕ<sup>h</sup>ã<sup>55</sup>  
 squat, tso<sup>55</sup>tso<sup>33</sup>nun<sup>53</sup>, go<sup>55</sup>no<sup>33</sup>li<sup>33</sup>  
 squat, tso<sup>55</sup>tso<sup>33</sup>no<sup>33</sup>  
 squeeze in, bu<sup>31</sup>lin<sup>55</sup>bu<sup>31</sup>  
 squeeze out, do<sup>31</sup>a<sup>31</sup>nɿ<sup>55</sup>  
 squeeze, to, ʔa<sup>31</sup>dza<sup>31</sup>u  
 squeeze, to, a<sup>31</sup>do<sup>31</sup>  
 squid, ŋua<sup>35</sup>  
 squint, tɕ<sup>h</sup>u<sup>55</sup>mu<sup>35</sup>  
 squirrel, ground; suslik, k<sup>h</sup>ua<sup>31</sup>ɿam<sup>55</sup>  
 squirrel, ts<sup>h</sup>ɿ<sup>31</sup>tɕ<sup>h</sup>an<sup>55</sup>, tɕa<sup>55</sup>xom<sup>31</sup>/tɕa<sup>55</sup>xom<sup>31</sup>, tɕa<sup>55</sup>xom<sup>33</sup>tɕa<sup>55</sup>xom<sup>33</sup>/tʃa<sup>55</sup>xom<sup>33</sup>  
 stab, pierce, ba<sup>31</sup>xu<sup>55</sup>ian<sup>55</sup>u<sup>31</sup>  
 stable (for horses), mǎ<sup>31</sup>p<sup>h</sup>am<sup>55</sup>zu<sup>55</sup>  
 stable (for horses), mǎ<sup>31</sup>dza<sup>31</sup>xam<sup>35</sup>  
 staircase, ladder to roof, go<sup>33</sup>z/ɿa<sup>55</sup>  
 stairs (wooden), go<sup>33</sup>za<sup>55</sup>  
 stairs (stone steps), lun<sup>55</sup>o<sup>33</sup>za<sup>55</sup>  
 stalk, stem, ŋ<sup>31</sup>dzuŋ<sup>55</sup>  
 stallion, mǎ<sup>31</sup>gu<sup>55</sup>  
 stammerer; stutterer, k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>dɿan<sup>31</sup>  
 stamp, a, iu<sup>31</sup>p<sup>h</sup>iau<sup>35</sup>  
 stamp, a seal, buŋ<sup>31</sup>a<sup>31</sup>dza<sup>55</sup>dem<sup>55</sup>  
 stamp (one's foot), ʔa<sup>31</sup>dim<sup>53</sup>  
 stand, som<sup>31</sup>ʃɿ<sup>55</sup>, zom<sup>55</sup>  
 stand on ceremony, ɕan<sup>55</sup>ʃɿ<sup>31</sup>  
 stand up, de<sup>31</sup>dɿan<sup>31</sup>som<sup>31</sup>ʃɿ<sup>55</sup>  
 stand; rest, ʃɿ<sup>31</sup>zom<sup>31</sup>(ʃɿ<sup>55</sup>)  
 stand; rise, tɕ<sup>h</sup>in<sup>31</sup>nɿu<sup>55</sup>  
 star, k<sup>h</sup>o<sup>31</sup>nɿi<sup>55</sup>  
 starch, ʃɿ<sup>55</sup>lan<sup>31</sup>  
 stare, dʒɛ<sup>31</sup>lin<sup>55</sup>  
 start, to, xua<sup>55</sup>di<sup>33</sup>dzan<sup>31</sup>u<sup>31</sup>  
 start a rumor, p<sup>h</sup>o<sup>55</sup>ɛ<sup>33</sup>  
 start or drive a car, ʃɿ<sup>55</sup>ni<sup>33</sup>yo<sup>31</sup>  
 start on a journey, tɕ<sup>h</sup>in<sup>31</sup>ɕu<sup>35</sup>ɛ<sup>31</sup>  
 start serving a banquet, k<sup>h</sup>en<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>dɿun<sup>53</sup>u<sup>31</sup>  
 startle, disturb, t<sup>h</sup>o<sup>31</sup>nɿen<sup>53</sup>  
 state, public side, a<sup>31</sup>dɿan<sup>55</sup>ba<sup>33</sup>  
 stationary, a<sup>31</sup>u<sup>53</sup>dem<sup>55</sup>ʃɿ<sup>53</sup>va<sup>31</sup>  
 stative ('Hold this!'), ni<sup>33</sup>  
 stative particle, ɛ<sup>31</sup>  
 stay at inn = sleep, nɿim<sup>55</sup>  
 stay, no<sup>33</sup>, n<sup>o</sup><sup>31</sup>iuŋ<sup>55</sup> (overnight)  
 steady, reliable, dɿun<sup>55</sup>dɿun<sup>55</sup> > dɕɛ<sup>31</sup>dɿun<sup>55</sup>  
 steal (money), k<sup>h</sup>u<sup>33</sup>

- steam (bun), sɿ<sup>31</sup> mu<sup>31</sup>  
 steam-cage, ʔbe<sup>31</sup> ni<sup>55</sup>  
 steam, water vapor, tɕ<sup>h</sup> a<sup>31</sup> ŋa<sup>35</sup> saŋ<sup>55</sup>  
 steamboat, ts<sup>h</sup> a<sup>31</sup> p<sup>h</sup> o<sup>31</sup> (Burmese)  
 steamed buckwheat, p<sup>h</sup> o<sup>31</sup> ua<sup>55</sup> laŋ<sup>55</sup>  
 steamed bun, ɕa<sup>31</sup> la<sup>31</sup> p<sup>h</sup> uŋ<sup>55</sup>  
 steamed stuffed bun, pau<sup>55</sup> tsɿ<sup>33</sup> (Ch.)  
 steamer for food, ʔbe<sup>31</sup> ni<sup>55</sup> (p<sup>h</sup> u<sup>31</sup> lu<sup>31</sup> dem<sup>55</sup>)  
 steel for flint, xo<sup>31</sup> bi<sup>31</sup>  
 steel, ɕa<sup>31</sup> k<sup>h</sup> ɛ<sup>55</sup> gam<sup>55</sup>  
 steel making, ɕa<sup>31</sup> k<sup>h</sup> a<sup>55</sup> dʒi<sup>31</sup> gɿ<sup>31</sup>  
 steelyard sliding weights, ŋɛ<sup>31</sup> dem<sup>55</sup> ɣuŋ<sup>55</sup>  
 steelyard weight marks, ŋɛ<sup>31</sup> ni<sup>55</sup> luŋ<sup>55</sup>  
 steelyard, large, ŋi<sup>53</sup> dem<sup>55</sup> ua<sup>55</sup> duŋ<sup>31</sup>  
 steelyard, ni<sup>31</sup> dem<sup>55</sup>  
 steelyard, small, ŋi<sup>53</sup> dem<sup>55</sup> tɕ<sup>h</sup> ɛn<sup>31</sup>  
 steep, da<sup>31</sup> tɕ<sup>h</sup> ɛ<sup>31</sup>; da<sup>31</sup> tɕ<sup>h</sup> ɛn<sup>31</sup>  
 step on, k<sup>h</sup> a<sup>55</sup> ɕuŋ<sup>55</sup>  
 step on, trample, ɕuŋ<sup>53</sup>  
 step over, across, ɕa<sup>55</sup> ʔb.ɿuŋ<sup>35</sup>, ɕa<sup>55</sup> ʔb.ɿuŋ<sup>35</sup>  
 steps, flight of, p<sup>h</sup> u<sup>31</sup> za<sup>55</sup> gam<sup>55</sup>  
 stern, a<sup>31</sup> su<sup>31</sup> ni<sup>55</sup> tɕ<sup>h</sup> uŋ<sup>55</sup>  
 stepfather, a<sup>31</sup> p<sup>h</sup> u<sup>31</sup>  
 stepmother (both terms), ʔa<sup>31</sup> mu<sup>31</sup>  
 steps (flight of), p<sup>h</sup> u<sup>31</sup> za<sup>55</sup> gam<sup>55</sup>  
 stern (boat); rudder, a<sup>31</sup> su<sup>31</sup> ni<sup>55</sup> tɕ<sup>h</sup> uŋ<sup>55</sup>  
 stew (congee), k<sup>h</sup> in<sup>53</sup>  
 stew, to, ɕa<sup>31</sup> ko<sup>55</sup> k<sup>h</sup> in<sup>53</sup>  
 stick down (envelope), ʔa<sup>31</sup> ga<sup>53</sup>  
 stick out tongue, p<sup>h</sup> u<sup>31</sup> le<sup>31</sup> tɕ<sup>h</sup> uŋ<sup>55</sup> ɕɿ<sup>31</sup>  
 stick, a, ɕa<sup>31</sup> tɕ<sup>h</sup> uŋ<sup>31</sup>  
 stick, to, a<sup>31</sup> maŋ<sup>55</sup> u<sup>55</sup>  
 sticks, poles, guns, k<sup>h</sup> o<sup>55</sup>  
 sticky, glutinous, ʔa<sup>31</sup> ga<sup>53</sup>  
 stiff or numb (freeze), ɕu<sup>53</sup> u<sup>31</sup>  
 still, tɕ<sup>h</sup> ɿ<sup>31</sup>  
 sting (bee), to, mǎ<sup>33</sup> a<sup>55</sup>  
 sting, to, bu<sup>31</sup> bu<sup>31</sup> luŋ<sup>55</sup>  
 sting (bee), sɿ<sup>31</sup> la<sup>55</sup>  
 stop (of rain), nem<sup>31</sup> ts<sup>h</sup> ɿ<sup>55</sup>  
 stir-fried noodles, de<sup>31</sup> bo<sup>55</sup> ua<sup>55</sup> tɕ<sup>h</sup> ɿ<sup>31</sup>  
 stir-fry (vegetables), p<sup>h</sup> aŋ<sup>31</sup> ũ<sup>31</sup>  
 stir-fry = cook, k<sup>h</sup> in<sup>53</sup>  
 stir, mix, a<sup>31</sup> man<sup>53</sup>  
 stirrups, a<sup>31</sup> xa<sup>35</sup> ɕuŋ<sup>55</sup> dem<sup>55</sup>  
 stock (bow), k<sup>h</sup> uŋ<sup>55</sup>  
 stomach, nu<sup>31</sup> pəm<sup>55</sup>

- stomach, abdomen, p<sup>h</sup>u<sup>31</sup>iɛn<sup>31</sup>  
 stomach, belly, p<sup>h</sup>a<sup>53</sup>; p<sup>h</sup>a<sup>33</sup> dzim<sup>55</sup>  
 stone, rock, (ŋ<sup>31</sup>)luŋ<sup>55</sup>; ʔo<sup>31</sup> luŋ<sup>55</sup>  
 stone mortar, dza<sup>31</sup>p<sup>h</sup>aŋ<sup>31</sup> p<sup>h</sup>u<sup>55</sup>  
 stone steps, luŋ<sup>55</sup>p<sup>h</sup>u<sup>31</sup>za<sup>55</sup>gam<sup>55</sup>  
 stool and bench, tɕeŋ<sup>55</sup>tsu<sup>31</sup> > tɕɛ<sup>55</sup>tsu<sup>31</sup> (Lisu)  
 stoop, to, tɕ<sup>h</sup>o<sup>55</sup>guŋ<sup>55</sup>  
 stop breathing (die), saŋ<sup>55</sup>dɛn<sup>55</sup>  
 stop the flow of water, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>l<sup>h</sup>aŋ<sup>31</sup>  
 stop the flow of water, ba<sup>55</sup>l<sup>h</sup>aŋ<sup>31</sup>  
 stop (wind), di<sup>31</sup>gã<sup>55</sup>, ga<sup>55</sup>na<sup>33</sup>  
 stop up (hole), a<sup>31</sup>dãŋ<sup>31</sup>u<sup>31</sup>, l<sup>h</sup>aŋ<sup>31</sup>u<sup>31</sup>  
 stop; suspend, dzɿn<sup>55</sup>dzi<sup>31</sup>ɛ<sup>33</sup>, di<sup>31</sup>ŋaŋ<sup>55</sup>  
 stop, to, t<sup>h</sup>a<sup>33</sup>o<sup>33</sup>  
 stop, call off, dzɿn<sup>55</sup>dzi<sup>31</sup>ɛ<sup>33</sup>  
 stop, call off, di<sup>31</sup>ŋaŋ<sup>55</sup>  
 store (grain), a<sup>31</sup>k<sup>h</sup>om<sup>35</sup>  
 storehouse, mu<sup>31</sup>dza<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 storey, t<sup>h</sup>i<sup>55</sup>ts<sup>h</sup>aŋ<sup>55</sup>  
 storey, ɕi<sup>31</sup>lim<sup>33</sup>  
 storey (building), la<sup>31</sup>bu<sup>55</sup>  
 story, tale, mu<sup>31</sup>ɕɿn<sup>55</sup>  
 stove; kitchen, lo<sup>35</sup>tsɔ<sup>31</sup> (Ch.)  
 stove; kitchen, tɕ<sup>h</sup>ɛ<sup>31</sup>mi<sup>55</sup>dɔm<sup>31</sup>  
 stove, p<sup>h</sup>u<sup>31</sup>iɛ<sup>31</sup>  
 straddle, a<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>ɕɿ<sup>31</sup>  
 straddle, ɕa<sup>55</sup>bun<sup>31</sup>  
 straight, tɕ<sup>h</sup>uŋ<sup>35</sup>, tɕ<sup>h</sup>uŋ<sup>53</sup>, tɕ<sup>h</sup>uŋ<sup>31</sup>  
 straight, dzu<sup>55</sup>dzu<sup>31</sup>  
 straight, dɛ<sup>31</sup>dãŋ<sup>31</sup>  
 straight, upright, tɕ<sup>h</sup>uŋ<sup>35</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 straightforward, honest, frank, a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>dun<sup>55</sup>  
 straighten collar, ɬu<sup>31</sup>lu<sup>35</sup>  
 strain away liquid, di<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 strain away solid, a<sup>31</sup>i<sup>u</sup><sup>55</sup>dʒɛ<sup>31</sup>  
 strain; filter (by dripping), a<sup>31</sup>i<sup>u</sup><sup>55</sup>dʒɛ<sup>31</sup>  
 strainer, colander, ŋi<sup>31</sup>ɕu<sup>31</sup>  
 strand, saŋ<sup>55</sup>a<sup>31</sup>  
 strange, aŋ<sup>55</sup>ga<sup>31</sup>ɛ<sup>31</sup>  
 strange, odd, ʔaŋ<sup>55</sup>ga<sup>31</sup>u<sup>31</sup>  
 stranger, m<sup>31</sup>so<sup>55</sup>mu<sup>55</sup>a<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>  
 strangle, a<sup>31</sup>xuŋ<sup>55</sup>mi<sup>53</sup>du<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 strap (for carrying a baby), bu<sup>31</sup>lu<sup>31</sup>  
 strap (for carrying a baby), tɕ<sup>h</sup>a<sup>55</sup>p<sup>h</sup>a<sup>53</sup>  
 straw, ɕin<sup>33</sup>gã<sup>55</sup>  
 straw bundles, lã<sup>55</sup>  
 straw hat, sa<sup>31</sup>ko<sup>55</sup>

- straw, rice, dzɿ<sup>31</sup> ia<sup>33</sup> lã<sup>55</sup>  
 straw sandals, sɿ<sup>55</sup> pi<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>33</sup> ni<sup>33</sup>  
 street, dzɿ<sup>55</sup> t<sup>h</sup>i<sup>31</sup> za<sup>31</sup>  
 streetcar stop, t<sup>h</sup>an<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup> di<sup>31</sup> gan<sup>55</sup> za<sup>55</sup>  
 strength, ɬa<sup>33</sup> za<sup>55</sup>  
 strength, san<sup>55</sup> (a<sup>31</sup> dɤ<sup>55</sup> ɛ<sup>31</sup>)  
 stretch back, ŋi<sup>55</sup> zan<sup>31</sup> k<sup>h</sup>a<sup>55</sup> dzu<sup>33</sup> ɕɿ<sup>31</sup>  
 stretch (when yawning), li<sup>31</sup> dzu<sup>55</sup>  
 stretch downward, to, i<sup>31</sup> k<sup>h</sup>a<sup>55</sup> dzu<sup>33</sup> ɕɿ<sup>31</sup>  
 stretch forward, ma<sup>55</sup> ɕu<sup>31</sup> k<sup>h</sup>a<sup>55</sup> dzu<sup>33</sup> ɕɿ<sup>31</sup>, dzu<sup>33</sup>  
 stretch (hand), ɕɿn<sup>55</sup>  
 stretch out, stick out, dzu<sup>55</sup> ɕɿ<sup>31</sup>  
 stretch out hand, dzu<sup>31</sup> iun<sup>55</sup>  
 stride forward, a<sup>31</sup> tɕ<sup>h</sup>a<sup>55</sup> (ɕɿ<sup>31</sup>)  
 strike (match), a<sup>31</sup> nɛ<sup>31</sup> u<sup>55</sup>  
 strike (table), a<sup>31</sup> nɛ<sup>31</sup> u<sup>31</sup>  
 strike, knock, ɤam<sup>53</sup>  
 strike, hit, bi<sup>31</sup> ti<sup>55</sup>, van<sup>35</sup>  
 strike, hit, attack, bi<sup>31</sup> ti<sup>55</sup>  
 string, t<sup>h</sup>a<sup>31</sup> na<sup>31</sup> la<sup>31</sup> p<sup>h</sup>un<sup>55</sup>  
 string button (bow), t<sup>h</sup>a<sup>31</sup> na<sup>55</sup> pu<sup>55</sup>  
 string (of beads), (t<sup>h</sup>i<sup>55</sup>) k<sup>h</sup>u<sup>31</sup> lim<sup>55</sup>  
 string instrument, hi<sup>55</sup> hã<sup>31</sup> bu<sup>55</sup>  
 stringed instrument, hi<sup>55</sup> hã<sup>31</sup>  
 strip desk, tɕɛ<sup>55</sup> tsu<sup>31</sup> tɕo<sup>31</sup> tsɿ<sup>55</sup>  
 stroll, walk, a<sup>31</sup> vu<sup>33</sup> ɰdze<sup>35</sup>  
 strong (very), san<sup>55</sup> a<sup>31</sup> dɤ<sup>55</sup> ɛ<sup>31</sup>, t<sup>h</sup>a<sup>33</sup>  
 strong, durable, dɔ<sup>55</sup> ɛ<sup>31</sup>  
 strong, durable, t<sup>h</sup>om<sup>55</sup>  
 strong, san<sup>55</sup> a<sup>31</sup> dɤ<sup>55</sup>  
 strong, zɿ<sup>31</sup> gu<sup>31</sup> sɿ<sup>31</sup> la<sup>55</sup> ɛ<sup>31</sup>  
 struck by lightning, mo<sup>55</sup> xa<sup>55</sup> la<sup>55</sup> ɰda<sup>35</sup> ni<sup>33</sup>  
 stubborn, ŋ<sup>31</sup> ts<sup>h</sup>om<sup>53</sup> dun<sup>53</sup> na<sup>31</sup> lin<sup>31</sup>  
 stuck, cause to be, si<sup>31</sup> ga<sup>55</sup> (older speakers) > ga<sup>55</sup>/ka<sup>55</sup> (younger speakers)  
 student; pupil, tɕ<sup>h</sup>en<sup>33</sup> su<sup>55</sup>  
 study, learn, tɕ<sup>h</sup>en<sup>31</sup>, cye<sup>31</sup> ɕi<sup>31</sup> (Ch.)  
 study, to, sɿ<sup>31</sup> zu<sup>31</sup> u<sup>31</sup>  
 stuff; stop up, ɕu<sup>31</sup> ɕi<sup>31</sup>; cye<sup>31</sup> ɕi<sup>31</sup>  
 stuffy, (nim<sup>31</sup> dun<sup>53</sup>) p<sup>h</sup>am<sup>35</sup>  
 stumble, a<sup>31</sup> xu<sup>31</sup> lam<sup>55</sup>  
 stump, pole, t<sup>h</sup>i<sup>31</sup> zu<sup>55</sup>, xam<sup>55</sup> guã<sup>31</sup>  
 stupid, dumb, nɛ<sup>31</sup> ts<sup>h</sup>u<sup>55</sup>  
 stupid and ignorant, ŋ<sup>31</sup> ts<sup>h</sup>u<sup>55</sup> a<sup>31</sup> ts<sup>h</sup>an<sup>31</sup>  
 stutterer, stammer, k<sup>h</sup>a<sup>55</sup> a<sup>31</sup> dɤ<sup>31</sup>  
 subdue, to, k<sup>h</sup>u<sup>31</sup> mu<sup>31</sup> ɰa<sup>31</sup> na<sup>31</sup> u<sup>31</sup>  
 submerge, to, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> dun<sup>55</sup> a<sup>31</sup> tɕ<sup>h</sup>o<sup>31</sup>/tɕ<sup>h</sup>o<sup>31</sup>  
 subtract, to, ba<sup>31</sup> k<sup>h</sup>a<sup>31</sup>

- subtract, to, lu<sup>31</sup>  
 substitute, cf. take place of, ʔo<sup>55</sup>dʒuŋ<sup>3</sup>  
 succeed, da<sup>53</sup>  
 succeed, a<sup>31</sup>du<sup>31</sup>ε<sup>33</sup>; a<sup>55</sup>du<sup>31</sup>ʔdʒε<sup>35</sup>  
 success, dʒo<sup>31</sup>  
 such a, what a, ie<sup>55</sup>dan<sup>55</sup>  
 suck (milk), tɕ<sup>h</sup>imɿ<sup>ʔ55</sup>ε<sup>31</sup>  
 suck in nose mucus, nɪm<sup>55</sup>tɕ<sup>h</sup>im<sup>53</sup>  
 suck one's fingers, to, tɕ<sup>h</sup>imɿ<sup>ʔ55</sup>ε<sup>31</sup>  
 suck, to, san<sup>55</sup>ɿ<sup>h</sup>i<sup>33</sup>mu<sup>55</sup>  
 suckle, nurse, a<sup>31</sup>tɕ<sup>h</sup>u<sup>55</sup>dʒɿ<sup>55</sup>em<sup>55</sup>  
 sudden shower with the sun shining, xã<sup>55</sup>dzo<sup>31</sup>  
 suddenly, abruptly, t<sup>h</sup>i<sup>55</sup>sua<sup>31</sup>li<sup>55</sup>  
 suddenly, t<sup>h</sup>i<sup>33</sup>dam<sup>55</sup>di<sup>33</sup>  
 sue, k<sup>h</sup>a<sup>55</sup>a<sup>31</sup>k<sup>h</sup>o<sup>55</sup>  
 suffer losses in business, ŋ<sup>31</sup>dzan<sup>55</sup>  
 sugar, crystal, pin<sup>55</sup>t<sup>h</sup>ã<sup>31</sup> (Ch.)  
 sugar, k<sup>h</sup>ua<sup>55</sup>tɕ<sup>h</sup>i<sup>31</sup>  
 sugar, ɕya<sup>55</sup>dʒε<sup>31</sup>  
 sugar, white, ɕya<sup>55</sup>dʒε<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup> (Lisu)  
 sugar, white, pe<sup>31</sup>t<sup>h</sup>ã<sup>31</sup> (Ch.)  
 sugarcane (liquid), ma<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>; ma<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 suitable, appropriate, a<sup>31</sup>du<sup>31</sup>ε<sup>55</sup>, a<sup>31</sup>du<sup>33</sup>  
 suitcase, ɕa<sup>55</sup>sam<sup>31</sup>ka<sup>35</sup>i  
 summer, a<sup>31</sup>ke<sup>55</sup>du<sup>31</sup>gam<sup>53</sup>  
 summer (hot weather), mu<sup>31/33</sup>zu<sup>31</sup>  
 summon, guŋ<sup>55</sup>u<sup>31</sup>io<sup>35</sup>  
 sun (clothes), lam<sup>55</sup>  
 sun comes out, ts<sup>h</sup>ε<sup>53</sup> (cf. rises)  
 sun, nɛm<sup>31</sup>  
 sunbathe, lim<sup>55</sup>  
 Sunday, di<sup>31</sup>yan<sup>55</sup>ni<sup>33</sup>  
 sunflower, o<sup>55</sup>ba<sup>35</sup>; o<sup>55</sup>ba<sup>53</sup> (Lisu)  
 sunken, dented, ɕuŋ<sup>55</sup>dzi<sup>31</sup>ε<sup>55</sup>, k<sup>h</sup>o<sup>55</sup>k<sup>h</sup>o<sup>31</sup>ioŋ<sup>31</sup>  
 sunlight, nɛm<sup>55</sup>  
 sunlight, sunshine, nɛm<sup>31</sup>buŋ<sup>55</sup>  
 sunrise, nɛm<sup>31</sup>ts<sup>h</sup>ε<sup>53</sup>ε<sup>31</sup>ni<sup>33</sup>; nɛm<sup>31</sup>ts<sup>h</sup>ε<sup>53</sup>ni<sup>33</sup>  
 sunset, du<sup>55</sup>zom<sup>31</sup>  
 supplicative (SUP), la<sup>55</sup>, lie<sup>31</sup>  
 suppress, repress, xam<sup>55</sup>dʒa<sup>31</sup>  
 surface of water, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>53</sup>t<sup>h</sup>an<sup>53</sup>  
 supper; dinner, a<sup>31</sup>ɕɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>p<sup>h</sup>i<sup>31</sup>  
 support somebody, ɕan<sup>55</sup>  
 support with hand, la<sup>55</sup>k<sup>h</sup>uŋ<sup>31</sup>  
 support, raise, di<sup>31</sup>k<sup>h</sup>om<sup>31</sup>li<sup>33</sup>ɿ<sup>31</sup>k<sup>h</sup>uŋ<sup>33</sup>  
 surname; be surnamed, tɕ<sup>h</sup>ɿ<sup>55</sup>  
 surpass, exceed, ŋ<sup>31</sup>dzan<sup>55</sup>, lie<sup>53</sup>ba<sup>33</sup>

- surrender, to, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>i<sup>m</sup><sup>31</sup>i<sup>55</sup>  
surrender, to, la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>t<sup>h</sup>i<sup>m</sup><sup>31</sup>ʂa<sup>55</sup>  
surround, tɕo<sup>55</sup>  
surround, tɕo<sup>55</sup>ni<sup>33</sup>ua<sup>31</sup>ba<sup>55</sup>tʃo<sup>55</sup>zɿ<sup>44</sup>  
surround, tɕu<sup>55</sup>ni<sup>33</sup>ua<sup>31</sup>dzu<sup>55</sup>  
suspension bridge, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>go<sup>31</sup>zã<sup>55</sup>  
swallow (bird), ma<sup>55</sup>da<sup>31</sup>fŋ<sup>55</sup>  
swallow, to, (go<sup>55</sup>)maŋ<sup>53</sup>u<sup>31</sup>  
swallow (dry), to, fi<sup>33</sup>  
swamp, dʒi<sup>55</sup>dʒam<sup>31</sup>  
swan, ʔo<sup>55</sup>  
swat a fly, ba<sup>31</sup>som<sup>55</sup>a<sup>31</sup>nɛ<sup>31</sup>  
sway, swing, a<sup>31</sup>lɛ<sup>55</sup>ʂɿ<sup>31</sup>  
sway, not steady, a<sup>31</sup>nɛm<sup>55</sup>  
sway, to, a<sup>31</sup>lɛ<sup>55</sup>ʂɿ<sup>31</sup>, a<sup>31</sup>gi<sup>31</sup>li<sup>33</sup> (rock)  
swear, curse (at people), na<sup>55</sup>ɛ<sup>31</sup>  
sweat, perspire, in<sup>55</sup>in<sup>55</sup>nɛ<sup>31</sup>  
sweat (n.) (v.), in<sup>55</sup>  
sweater, woolen, a<sup>31</sup>bɛ<sup>55</sup>min<sup>55</sup>ga<sup>31</sup>mu<sup>31</sup>  
sweep floor, di<sup>31</sup>k<sup>h</sup>i<sup>n</sup><sup>31</sup>u<sup>31</sup>, t<sup>h</sup>i<sup>ɛ</sup><sup>31</sup>u<sup>31</sup>  
sweep the grave, to, da<sup>31</sup>gam<sup>31</sup>dza<sup>53</sup>u<sup>31</sup>  
sweep the chimney, a<sup>31</sup>go<sup>31</sup>luŋ<sup>55</sup>  
sweet, k<sup>h</sup>ɿ<sup>53</sup>  
swell (tissue), gaŋ<sup>55</sup> > gaŋ<sup>33</sup>  
swill; pig feed, ʔo<sup>55</sup>dza<sup>33</sup>  
swim, to, laŋ<sup>31</sup> > lã<sup>31</sup>  
swimming bladder, ŋua<sup>55</sup>da<sup>33</sup>ba<sup>55</sup>  
swollen, gaŋ<sup>55</sup>  
swing, a, bu<sup>55</sup>la<sup>31</sup>  
swing, sway, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
swing, to, bu<sup>55</sup>la<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>ʂɿ<sup>31</sup>  
swing-to-and-fro, nɛ<sup>55</sup>mɛ<sup>31</sup>nɛ<sup>55</sup>  
syphilis, gam<sup>31</sup>luŋ<sup>31</sup>  
system, va<sup>31/35</sup>
- table leg, tɕɛ<sup>55</sup>tsu<sup>31</sup>a<sup>31</sup>xa<sup>35</sup>, tɕo<sup>31</sup>tsɿ<sup>55</sup>a<sup>31</sup>xa<sup>35</sup>  
table, desk, sa<sup>31</sup>la<sup>55</sup> (Lisu)  
table, tɕɛ<sup>55</sup>tsɿ<sup>31</sup>; -tɕa<sup>55</sup>tsu<sup>55</sup>; tɕa<sup>55</sup>tsɿ/wu<sup>31</sup>-; tɕɛ<sup>55</sup>tsu<sup>31</sup> -  
tablet; pill, nɛ<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>laŋ<sup>55</sup> (Lisu)  
taboo, m<sup>31</sup>gam<sup>55</sup>  
tadpole, na<sup>33</sup>gã<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
tael = 50 grams, measure word, t<sup>h</sup>i<sup>31</sup>luŋ<sup>55</sup>  
taels of liquor, two, a<sup>31</sup>ni<sup>55</sup>luŋ<sup>55</sup>nɛ<sup>31</sup>  
tail, bird, tɕ<sup>h</sup>a<sup>55</sup>ni<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
tail, fish, ŋua<sup>33</sup>ni<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
tail, horse, mã<sup>31</sup>ni<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
tail, ni<sup>31/33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>, ŋ<sup>31</sup>ni<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>

- tailor; dressmaker, ga<sup>31</sup>mu<sup>31</sup>p<sup>h</sup>a<sup>55</sup>su<sup>55</sup>  
 take a beating, a<sup>31</sup>ne<sup>35</sup>t<sup>h</sup>am<sup>53</sup>  
 take a ferry, a<sup>31</sup>su<sup>31</sup>dzaŋ<sup>55</sup>ŋ<sup>31</sup>  
 take a husband, di<sup>31</sup>tɕu<sup>55</sup>u<sup>31</sup>  
 take a husband, ŋ<sup>31</sup>lã<sup>35</sup>  
 take a picture, dʒi<sup>31</sup>a<sup>31</sup>dʒa<sup>55</sup>u<sup>31</sup>  
 take a step, ɕa<sup>55</sup>ban<sup>35</sup>  
 take a test, k<sup>h</sup>au<sup>55</sup>ŋ<sup>55</sup>  
 take a wife, dʒo<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup>ma<sup>55</sup>ua<sup>31</sup>ŋ<sup>31</sup>  
 take an oath, m<sup>31</sup>dʒan<sup>55</sup>ɛ<sup>31</sup> > m<sup>31</sup>dʒa<sup>31</sup>u  
 take apart (cloth), open, p<sup>h</sup>u<sup>55</sup>ŋu<sup>31</sup>  
 take apart, p<sup>h</sup>a<sup>31</sup>dʒa<sup>55</sup>ŋ<sup>31</sup>  
 take away, ʔa<sup>55</sup>a<sup>31</sup>bo<sup>33</sup>  
 take care of; be careful, p<sup>h</sup>a<sup>31</sup>dʒan<sup>55</sup>ŋ<sup>31</sup>  
 take care of; be careful, p<sup>h</sup>a<sup>31</sup>dʒa<sup>55</sup>ŋ<sup>31</sup>  
 take cooked rice out of pot and put into a bowl, k<sup>h</sup>am<sup>53</sup>  
 take in fingers, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>31</sup>  
 take liberties with a woman, k<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>ni<sup>31</sup>mi<sup>31</sup>  
 take medicine = eat, ne<sup>55</sup>ts<sup>h</sup>ɿ<sup>31</sup>em<sup>55</sup>  
 take note of, pay attention to, a<sup>31</sup>k<sup>h</sup>am<sup>35</sup>  
 take off (clothes), (dʒu<sup>55</sup>)tɕ<sup>h</sup>i<sup>31</sup>ŋuŋ<sup>55</sup>, tɕ<sup>h</sup>i<sup>55</sup>  
 take out (water); pump (water), ʂan<sup>31</sup>; ɕan<sup>31</sup>  
 take out, a<sup>31</sup>se<sup>55</sup>  
 take place of, ŋ<sup>31</sup>dʒan<sup>31</sup>  
 take the opportunity, ie<sup>55</sup>ʂan<sup>55</sup>ŋu<sup>31</sup>  
 take toward, ʔa<sup>55</sup>a<sup>31</sup>io<sup>33</sup>  
 take turns, ʔa<sup>31</sup>tɕ<sup>h</sup>iŋ<sup>55</sup>ŋ<sup>31</sup>  
 take, ʔa<sup>55</sup>, la<sup>55</sup>; ʔu<sup>53</sup> (imperative)  
 take root, ŋ<sup>31</sup>zu<sup>33</sup>a<sup>31</sup>lin<sup>55</sup>  
 take with hand, ɕi<sup>55</sup>h<sup>i</sup>in<sup>55</sup>  
 taken aback, stare blankly, p<sup>h</sup>u<sup>31</sup>ze<sup>55</sup>  
 talk to one's self, ŋ<sup>31</sup>luŋ<sup>55</sup>ŋ<sup>31</sup>bu<sup>31</sup>  
 tall person, ua<sup>55</sup>tɕ<sup>h</sup>o<sup>55</sup>man<sup>31</sup>  
 tamp (ground), ram, pound, a<sup>31</sup>ʔdzu<sup>31</sup>u<sup>31</sup>  
 tan (hide), to, a<sup>31</sup>na<sup>31</sup>  
 tan, to, ɕa<sup>55</sup>sam<sup>31</sup>a<sup>31</sup>na<sup>31</sup>u<sup>31</sup>  
 tangerine, zɿ<sup>31</sup>ma<sup>55</sup>tɕu<sup>55</sup>  
 tapioca, mu<sup>31</sup>t<sup>h</sup>ia<sup>35</sup>lu<sup>55</sup>  
 tares, tɕ<sup>h</sup>o<sup>55</sup>ʔba<sup>55</sup>  
 target, di<sup>31</sup>dʒan<sup>33</sup>dɛm<sup>55</sup>  
 taro; sweet potato, k<sup>h</sup>u<sup>31</sup>dzu<sup>55</sup>  
 tart, p<sup>h</sup>a<sup>55</sup>  
 tartar, a<sup>31</sup>sa<sup>31</sup>ni<sup>55</sup>  
 tassel; fringe, nem<sup>55</sup>  
 taste (a bite), di<sup>31</sup>dʒan<sup>31</sup>u<sup>31</sup> > di<sup>31</sup>dʒã<sup>31</sup>(ũ<sup>31</sup>)  
 taste bitter (in the mouth), ma<sup>55</sup>dun<sup>31</sup>k<sup>h</sup>a<sup>33</sup>(<sup>55</sup>)  
 tasty = fragrant, p<sup>h</sup>u<sup>31</sup>lem<sup>31</sup>

- tattered, run down, ŋ<sup>31</sup>mã<sup>55</sup>  
taxes, ŋ<sup>31</sup>dzan<sup>55</sup>, sue<sup>55</sup> (Ch.)  
tea cakes, la<sup>31</sup>tɕa<sup>55</sup> laŋ<sup>55</sup>  
tea leaves (pressed in a bowl shape, produced in Yunnan), la<sup>31</sup>tɕa<sup>55</sup> p<sup>h</sup>uən<sup>55</sup>  
tea plant, la<sup>31</sup> tɕa<sup>55</sup> dzuŋ<sup>55</sup>  
tea tray, k<sup>h</sup>ɛn<sup>33</sup> bɛŋ<sup>55</sup>  
tea, la<sup>31</sup>tɕa<sup>55</sup>  
tea house, tsɿ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>ŋ<sup>55</sup>za<sup>55</sup>  
tea leaves shop, ts<sup>h</sup>ɿ<sup>31</sup>xan<sup>55</sup>vɛn<sup>55</sup>za<sup>55</sup>  
tea snack, la<sup>31</sup>tɕa<sup>55</sup>ŋ<sup>55</sup>  
teach, educate, learn, sɿ<sup>31</sup>lam<sup>55</sup>u<sup>31</sup>, tɕa<sup>35</sup>io<sup>31</sup> (Ch.)  
teach, to, sɿ<sup>31</sup> lam<sup>55</sup> (u<sup>31</sup>)  
teacher, sɿ<sup>31</sup>lam<sup>55</sup> su<sup>55</sup>  
team or line of people or animals, t<sup>h</sup>i<sup>55</sup>zɿ<sup>53</sup>  
teapot, tɕ<sup>h</sup>a<sup>31</sup> fu<sup>31</sup> (Ch.)  
tear, to, tɕ<sup>h</sup>o<sup>55</sup> ɿã<sup>55</sup>  
tear, rip (paper), sã<sup>53</sup>u<sup>31</sup> > ɿau<sup>53</sup>  
tears, p<sup>h</sup>ɿ<sup>33</sup>  
tease (child), a<sup>31</sup>li<sup>31</sup> u<sup>55</sup>  
tease, play with a child, tɕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>a<sup>31</sup>xin<sup>55</sup>ɿɿ<sup>31</sup>dzu<sup>55</sup>u  
telephone, a, tien<sup>55</sup>xua<sup>55</sup>  
telephone, to, tien<sup>55</sup>xua<sup>55</sup>a<sup>55</sup>ŋi<sup>31</sup>u<sup>31</sup>  
television, tian<sup>35</sup>ɿɿ<sup>35</sup>tɕi<sup>55</sup>  
tell a lie, ŋim<sup>35</sup>  
tell a story, m<sup>31</sup>sɿn<sup>31</sup>  
tell a story, a<sup>31</sup>k<sup>h</sup>am<sup>35</sup>  
tell fortune, so<sup>53</sup> nɛ<sup>33</sup>  
tell fortune, ŋ<sup>31</sup>ŋi<sup>33</sup>di<sup>31</sup>xɛn<sup>55</sup>  
tell tales, k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
tell, to, ɕi<sup>31</sup> ŋin<sup>53</sup> u<sup>31</sup>  
temper, ɕu<sup>35</sup>  
temper, to, ts<sup>h</sup>e<sup>31</sup>  
temporal (TEMP), t<sup>h</sup>a<sup>35</sup>, gw<sup>55</sup>t<sup>h</sup>a<sup>35</sup>  
temple, a<sup>31</sup>ɿɿ<sup>31</sup> tɕ<sup>h</sup>im<sup>31</sup>  
temple, p<sup>h</sup>u<sup>31</sup>iã<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup> (spirit+house)  
temple, dza<sup>55</sup>dza<sup>33</sup>lu<sup>55</sup>  
temple curator, ɿ<sup>33</sup>du<sup>33</sup>su<sup>55</sup>  
temples, a<sup>31</sup>na<sup>31</sup>t<sup>h</sup>uŋ<sup>55</sup>  
temporarily, dzɿ<sup>31</sup>dzu<sup>55</sup>  
temporary bridge, go<sup>31</sup>zã<sup>55</sup>(zo<sup>31</sup>muən<sup>31</sup>zã)  
ten thousand, (t<sup>h</sup>i<sup>55</sup>)mu<sup>31</sup>  
ten, (t<sup>h</sup>i<sup>55</sup>)ts<sup>h</sup>a<sup>55</sup>; ts<sup>h</sup>ai<sup>55</sup>; ts<sup>h</sup>ɿ<sup>55</sup> (Lisu)  
ten cents, dime, i<sup>35</sup>tɕo<sup>31</sup>  
ten feet (measure word), i<sup>31</sup>tsan<sup>35</sup>  
ten odd, t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>a<sup>55</sup> dɕan<sup>31</sup>  
ten thousand, t<sup>h</sup>i<sup>55</sup>mu<sup>31</sup>  
ten thousand, t<sup>h</sup>i<sup>31</sup> k<sup>h</sup>uən<sup>55</sup>



tend cattle,  $\eta i^{31} \eta a^{31} a^{31} t\epsilon^h u\eta^{31}$   
 tend ducks,  $i\eta^{31} \epsilon\eta^{55} k^h a\eta^{31} u^{31}$   
 tend pigs,  $\gamma o^{55} k^h a\eta^{31} u^{31}$   
 tender (vegetables),  $\epsilon u\eta^{55}$ ,  $\epsilon o\eta^{55}$   $\epsilon o\eta^{55}$   
 tender, young,  $d\zeta en^{55}$   
 tendon, nerve, vein,  $du^{31} gu^{31}$   
 tenon (on crossbow),  $t^h a^{31} na^{55} tso^{35}$   
 tense, tight, taut,  $a^{31} di^{31} t\epsilon^h u\eta^{55}$   
 tent,  $a^{31} v\tilde{\epsilon}^{55}$   
 tent or shed set up for plays,  $ts^h a\eta^{35} \epsilon i^{35} a^{31} v\tilde{\epsilon}^{55}$   
 tenth,  $ti^{35} \eta^{31}$   
 tenth,  $da^{53} u^{31} t^h i^{31} ts^h a^{55}$   
 tenth earthly branch (chicken),  $k^h a^{55} \eta u\eta^{33}$   
 terminative,  $\gamma a^{31} p^h i^{55}$   
 terrace,  $nem^{31} lim^{55} za^{55} dzu^{55} t\epsilon^h im^{31}$   
 terrible,  $p^h u^{31} za^{55} \epsilon^{31}$   
 testicles,  $k^h a^{55} lim^{31}$   
 testicles; penis,  $t\epsilon^h i^{55} lim^{31}$   
 thank,  $\epsilon a^{55} m\tilde{o}^{33}$ ,  $la^{31} \eta^{31} go^{35}$   
 that end,  $k^h u^{33} t\epsilon^h a^{33} k^h a^{55}$   
 that kind of,  $na^{55} t\epsilon^h o^{31} mu^{53}$   
 that reason,  $k^h u^{33} t\epsilon^h a^{33} k^h a^{55}$ ,  $na^{55} t^h an^{55}$   
 that side,  $na^{55} k^h a^{31}$ ,  $k^h u^{31} k^h a^{55}$   
 that way,  $k^h u^{33} io^{55}$  (far),  $na^{33}$  ( $io^{55}$ ) (remote)  
 that,  $k^h u^{55}$  (far),  $na^{55}$  (near)  
 that (up there),  $na^{55}$   
 that (down there),  $\gamma i^{55}$   
 that (over there),  $\gamma o^{55}$   
 that way (far and near),  $na^{31} io^{55}$   
 that way (far and near),  $k^h u^{33} io^{55}$   
 that (yonder),  $k^h u^{55}$   
 thatch rushes,  $\gamma a^{33} dz\eta^{31}$   
 thatched hay shed,  $a^{31} dz\eta^{31} a^{31} v\tilde{\epsilon}^{55}$   
 tatched storehouse,  $a^{31} d\zeta i^{31} t\epsilon^h im^{31}$   
 the limit,  $dz\eta^{53}$   
 the more... the more...,  $le^{31} xud^{55} \dots le^{31} xud^{55} \dots$   
 theater, a,  $\epsilon i^{35} dzan^{53} za^{55}$   
 theirs,  $\eta^{31} \eta u\eta^{55} k^h a^{31}$   
 then,  $gu^{33} t^h a^{35}$ ,  $m^{31} d\zeta a^{35}$ ,  $m^{31} d\zeta a^{33}$   
 then and only then,  $t\epsilon^h \epsilon^{33}$   
 then and only then,  $t^h i^{31}$   
 there,  $na^{55} k^h a^{31} gam^{55}$ ,  $\gamma o^{55}$   
 there,  $na^{55} k^h a^{31}$   
 there,  $gam^{55}$   
 there are (people), have,  $no^{33}$   
 there is a fire,  $t\epsilon^h a^{31} mi^{55} a^{31} \epsilon in^{55} \epsilon^{31} ni^{33}$   
 there is a storm,  $na^{31} bu^{31} ba^{31} \eta^{31} fin^{55}$

- therefore, ʔo<sup>33</sup>tɕ<sup>h</sup>o<sup>31</sup>lan<sup>53</sup>  
 therefore, then, li<sup>31</sup>  
 these, iɛ<sup>55</sup> mu<sup>53</sup>  
 they, ŋ<sup>31</sup>ŋuŋ<sup>55</sup>  
 they (two), ʔũ<sup>31</sup>n.u<sup>55</sup>si<sup>31</sup>  
 they (two); both of them, ŋ<sup>31</sup>n.uŋ<sup>55</sup>si<sup>31</sup>; ʔŋ<sup>31</sup>n.uŋ<sup>55</sup>si<sup>31</sup>  
 thick (bamboo pole), ua<sup>55</sup>lom<sup>33</sup>  
 thick (book), (ua<sup>55</sup>)t<sup>h</sup>an<sup>55</sup>  
 thick (grove), a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 thick (soup), dense, ɕa<sup>55</sup>  
 thick (soup), k<sup>h</sup>an<sup>55</sup>  
 thick, ŋ<sup>31</sup>ka<sup>55</sup>ɕi<sup>55</sup>  
 thick, t<sup>h</sup>a<sup>35</sup> -v  
 thick, wide, a<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>  
 thief, petty, k<sup>h</sup>u<sup>53</sup>su<sup>55</sup>  
 thigh, p<sup>h</sup>an<sup>33</sup> cf. 'leg'  
 thigh bone, femur, p<sup>h</sup>an<sup>55</sup>duŋ<sup>55</sup>  
 thimble, nɪn<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>dim<sup>55</sup>dem<sup>55</sup>  
 thimble, to put on a, nɪn<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup>gr<sup>31</sup>ɕ<sup>h</sup>ɿ<sup>55</sup>  
 thin (book, child), ba<sup>35</sup>ba<sup>31</sup>tɕ<sup>h</sup>en<sup>31</sup>; ba<sup>35</sup>; very thin, ba<sup>35</sup>ba<sup>31</sup>  
 thin (in diameter), fine, tiny, ua<sup>35</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>  
 thin (in diameter), tɕi<sup>55</sup>sɿn<sup>33</sup>  
 thin (grove), watery, ga<sup>31</sup>ɛ<sup>55</sup>  
 thin (person), di<sup>31</sup>ɿu<sup>55</sup>ɛ<sup>31</sup>, du<sup>31</sup>zu<sup>55</sup>ɛ<sup>31</sup>  
 thin (soup), gu<sup>55</sup>liɛ<sup>55</sup>tɕ<sup>h</sup>a<sup>55</sup>dzi<sup>31</sup>ɛ<sup>31</sup>  
 thin (soup), bum<sup>55</sup>  
 thin person, du<sup>31</sup>zu<sup>55</sup>ɛ<sup>31</sup>  
 thin (pole), tɕi<sup>55</sup>sɿn<sup>33</sup>  
 thin and small, tɕ<sup>h</sup>en<sup>31</sup>gu<sup>35</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 thin and small, di<sup>31</sup>zu<sup>55</sup>gu<sup>31</sup>di<sup>31</sup>zu<sup>55</sup>  
 thin bamboo strip, a<sup>31</sup>lam<sup>31</sup>  
 thin vermicelli that has been hung to dry, ɕa<sup>31</sup>za<sup>31</sup>ua<sup>55</sup>tɕ<sup>h</sup>ɿ<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 thin; (body) get thinner, di<sup>31</sup>zu<sup>55</sup>; ɿu<sup>55</sup>  
 thing, nen<sup>33</sup>  
 thing, affair, matter, k<sup>h</sup>a<sup>55</sup>  
 think, remember, ts<sup>h</sup>om<sup>55</sup>nɪa<sup>53</sup>; ts<sup>h</sup>om<sup>53</sup>  
 think, think about, ts<sup>h</sup>om<sup>55</sup>, ɕɿ<sup>31</sup>  
 think aloud; talk to one's self, ŋ<sup>31</sup>luŋ<sup>55</sup>ŋ<sup>31</sup>bu<sup>31</sup>  
 third, ku<sup>31</sup>p<sup>h</sup>an<sup>55</sup>a<sup>31</sup>som<sup>53</sup>, ti<sup>35</sup>sɛ<sup>55</sup> (Ch.), sa<sup>55</sup>ma<sup>33</sup>t<sup>h</sup>i<sup>31</sup>ma<sup>33</sup> (Lisu)  
 third, dɕa<sup>53</sup>u<sup>31</sup>som<sup>31</sup>  
 third day of lunar month, ɕɿ<sup>31</sup>la<sup>55</sup>sum<sup>33</sup>nɪ<sup>55</sup>  
 third earthly branch (tiger), a<sup>31</sup>k<sup>h</sup>an<sup>31</sup>n.uŋ<sup>55</sup>  
 thirst, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>zã<sup>31</sup>ɛ<sup>55</sup>  
 thirsty, za<sup>31</sup>ʔã<sup>55</sup>  
 thirteen, t<sup>h</sup>i<sup>55</sup>ts<sup>h</sup>ai<sup>55</sup>som<sup>53</sup>, ts<sup>h</sup>ɿ<sup>31</sup>sa<sup>55</sup> (Lisu)  
 thirtieth day of lunar calendar, sum<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>nɪ<sup>33</sup>  
 thirty, a<sup>31</sup>som<sup>31</sup>ts<sup>h</sup>a<sup>55</sup>

- this condition, iɛ<sup>55</sup> iaŋ<sup>31</sup> ŋu<sup>31</sup>  
 this end, tɕ<sup>h</sup>ɑŋ<sup>33</sup> k<sup>h</sup>a<sup>55</sup>  
 this end, na<sup>55</sup> t<sup>h</sup>ɑn<sup>55</sup>  
 this end, iɛ<sup>31</sup> t<sup>h</sup>ɑn<sup>55</sup>  
 this item, thing, iɛ<sup>55</sup> iaŋ<sup>31</sup> ŋu<sup>31</sup>  
 this kind of, iɛ<sup>55</sup> tɕ<sup>h</sup>o<sup>33</sup> mu<sup>53</sup>  
 this much, iɛ<sup>31</sup> io<sup>55</sup>  
 this period of time, iɛ<sup>55</sup> sɑ̃<sup>55</sup> ŋu<sup>31</sup>  
 this reason, tɕ<sup>h</sup>ɑŋ<sup>33</sup> k<sup>h</sup>a<sup>55</sup>, iɛ<sup>31</sup> t<sup>h</sup>ɑn<sup>55</sup>  
 this side, iɛ<sup>31</sup> k<sup>h</sup>a<sup>55</sup>  
 this way, iɛ<sup>55</sup> io<sup>55</sup>  
 this, iɛ<sup>55</sup>, iɛ<sup>31</sup>; ia<sup>55</sup>, ia<sup>55</sup>  
 thistles, thorns; brambles, ba<sup>55</sup> xu<sup>55</sup>  
 thorn of flesh, e.g. like the little piece of flesh that sometimes sticks out at the  
 side of one's fingers, xu<sup>55</sup> dzɿ<sup>ɔ̃</sup><sup>53</sup>  
 thorough cleaning, a<sup>31</sup> daŋ<sup>55</sup> di<sup>31</sup> k<sup>h</sup>in<sup>31</sup>  
 those, k<sup>h</sup>u<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup> mu<sup>53</sup> (far)  
 those, na<sup>33</sup> io<sup>55</sup>  
 those (far and near), na<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup> mu<sup>53</sup>  
 those (far and near), k<sup>h</sup>u<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup> mu<sup>53</sup>  
 thousand (1000), (t<sup>h</sup>i<sup>55</sup>)tu<sup>31</sup>, ja<sup>55</sup>, t<sup>h</sup>i<sup>31</sup> tu<sup>55</sup> (Lisu)  
 thousand, ŋ<sup>31</sup> k<sup>h</sup>uŋ<sup>55</sup>  
 thrashing ground, mu<sup>31</sup> dza<sup>31</sup> t<sup>h</sup>ɑm<sup>55</sup> za<sup>55</sup>  
 thread for spinning, ŋu<sup>55</sup> ŋu<sup>31</sup>  
 thread needle, to, ɕu<sup>55</sup>; ʂ<sup>53</sup> u<sup>31</sup>  
 thread, woolen, ɕa<sup>55</sup> min<sup>31</sup> buŋ<sup>55</sup>  
 thread, buŋ<sup>55</sup>, ʔuam<sup>55</sup> zu<sup>33</sup>; vam<sup>55</sup> zu<sup>33</sup>  
 threaten, p<sup>h</sup>u<sup>31</sup> za<sup>55</sup> u<sup>31</sup> ɛ<sup>33</sup>  
 three days ago, ua<sup>55</sup> ʂu<sup>31</sup> ni<sup>55</sup>  
 three days hence, i<sup>55</sup> zaŋ<sup>31</sup> ni<sup>55</sup>, ti<sup>55</sup> saŋ<sup>31</sup> ni<sup>55</sup>  
 three years ago, t<sup>h</sup>a<sup>31</sup> t<sup>h</sup>u<sup>55</sup> ŋu<sup>55</sup>  
 three years from now, ua<sup>55</sup> ʂu<sup>31</sup> ŋu<sup>55</sup>  
 three, a<sup>31</sup> som<sup>53</sup>, sa<sup>55</sup> (Lisu)  
 thresh (grain), ʔa<sup>31</sup> nɛ<sup>31</sup> (ɛ<sup>31</sup>)  
 thresh grain, t<sup>h</sup>ɑm<sup>55</sup> u<sup>31</sup>  
 threshold, la<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> k<sup>h</sup>um<sup>31</sup>, na<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> k<sup>h</sup>om<sup>33</sup>  
 thrifty, tɕɛ<sup>31</sup> io<sup>31</sup>  
 throat, la<sup>33</sup> k<sup>h</sup>u<sup>55</sup> k<sup>h</sup>uɑ̃<sup>31</sup>  
 through, open (road), t<sup>h</sup>uŋ<sup>55</sup>  
 throw (dice), di<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup>  
 throw, cast (dice), vam<sup>53</sup>  
 throw away, ɕi<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup>, tɕ<sup>h</sup>o<sup>31</sup>  
 through away thrash, ʂ<sup>55</sup> t<sup>h</sup>uŋ<sup>31</sup> ts<sup>h</sup>oŋ<sup>53</sup>  
 throw backward, ʔi<sup>55</sup> zaŋ<sup>31</sup> k<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup>  
 throw forward, ma<sup>55</sup> ʂu<sup>31</sup> k<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup>  
 throw one's chest out, haŋ<sup>55</sup> ʂ<sup>31</sup>  
 throw out (from), iɛ<sup>31</sup> k<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup> io<sup>55</sup>

- throw out (to), tɕ<sup>h</sup>o<sup>31</sup> a<sup>31</sup>bo<sup>55</sup>  
 throw out (toward speaker), iɛ<sup>31</sup>k<sup>h</sup>a<sup>55</sup>tɕ<sup>h</sup>o<sup>31</sup> io<sup>55</sup>  
 throw (rock), a<sup>31</sup>p<sup>h</sup>u<sup>53</sup>u<sup>31</sup>  
 throw (rock), ɕi<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup>  
 throw upon, na<sup>31</sup> k<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup>  
 throw upward, na<sup>31</sup> k<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>o<sup>31</sup>  
 throw, to, tɕ<sup>h</sup>o<sup>31</sup>; tɕ<sup>h</sup>o<sup>31</sup>; tɕ<sup>h</sup>o<sup>31</sup>  
 throw, to, vam<sup>53</sup>  
 thumb, ɲ<sup>31</sup>p<sup>h</sup>a<sup>31</sup> mu<sup>33</sup>  
 thumb, to, (t<sup>h</sup>i<sup>55</sup>)bu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
 thumb, to, mu<sup>31</sup>k<sup>h</sup>ɲ<sup>33</sup>  
 trumpet, bu<sup>31</sup>lu<sup>55</sup> (Lisu)  
 thunder, mu<sup>55</sup> daɻ<sup>55</sup>; mo<sup>55</sup>daɻ<sup>55</sup>  
 Tibetan language, ka<sup>35</sup> dzu<sup>55</sup> ʂɿ<sup>55</sup> va<sup>31</sup>  
 Tibetan language, ka<sup>35</sup> dzu<sup>55</sup> k<sup>h</sup>a<sup>55</sup>  
 Tibetans, ka<sup>35</sup> dzu<sup>55</sup> (Lisu)  
 tick, ɕuŋ<sup>55</sup>ba<sup>33</sup>  
 ticket, p<sup>h</sup>iau<sup>35</sup> (Ch.)  
 tide ebbs, tɕ<sup>h</sup>u<sup>31</sup>mu<sup>31</sup>ben<sup>53</sup>  
 tide rises, tɕ<sup>h</sup>u<sup>31</sup>mu<sup>31</sup>buŋ<sup>31</sup>  
 tidy, neat, tɕ<sup>h</sup>a<sup>55</sup> tɕ<sup>h</sup>a<sup>55</sup>  
 tie, to, fau<sup>31</sup>  
 tie up cow, fa<sup>31</sup>u<sup>31</sup> > fau<sup>31</sup>, k<sup>h</sup>a<sup>55</sup>va<sup>31</sup>u<sup>31</sup>  
 tie (shoe laces), nɛm<sup>31</sup>  
 tie up, bind, t<sup>h</sup>u<sup>55</sup>u  
 tie up, bind, ba<sup>31</sup>ŋu<sup>31</sup>  
 tie waistband, ma<sup>55</sup>(dɛm<sup>55</sup>nɛm<sup>31</sup>)  
 tiger, a<sup>31</sup>k<sup>h</sup>aŋ<sup>31</sup>  
 tight (bind tightly), (di<sup>31</sup>)tɕ<sup>h</sup>uŋ<sup>55</sup>  
 tighten, lɛn<sup>33</sup>li<sup>33</sup>  
 tightly woven, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>ɛ<sup>55</sup>  
 tile, brick, ua<sup>31</sup> la<sup>31</sup> bu<sup>31</sup> (Lisu)  
 tiled, slanting, la<sup>55</sup>dzɿ<sup>31</sup>ni<sup>33</sup>tɕ<sup>h</sup>a<sup>31</sup>ɻdzɛ<sup>35</sup>  
 timber; lumber, ɕuŋ<sup>55</sup> guŋ<sup>31</sup>  
 time (duration), ɻo<sup>55</sup>t<sup>h</sup>a<sup>31</sup>  
 time, duration, (ŋ<sup>31</sup>)ʂɿ<sup>31</sup> t<sup>h</sup>a<sup>31</sup>, tɕ<sup>h</sup>a<sup>33</sup>bu<sup>33</sup>  
 times (repetitions), number + -k<sup>h</sup>a<sup>55</sup>  
 times (repetitions), number + -fu<sup>55</sup> (Lisu)  
 times (repetitions), t<sup>h</sup>i<sup>55</sup>dzan<sup>31</sup>  
 timid, cowardly, ɲim<sup>31</sup> tɕ<sup>h</sup>i<sup>55</sup> la<sup>55</sup>  
 timid, cowardly, ɲ<sup>31</sup>de<sup>31</sup>k<sup>h</sup>ʂɿ<sup>55</sup>tɕ<sup>h</sup>ɛn<sup>31</sup>  
 tin, ts<sup>h</sup>u<sup>31</sup> (Lisu)  
 tinder, xo<sup>31</sup> bi<sup>31</sup> suŋ<sup>55</sup>  
 tinker, mend, di<sup>31</sup>tɕ<sup>h</sup>i<sup>55</sup>ɻi<sup>55</sup>  
 tip of a file, ba<sup>31</sup>ts<sup>h</sup>u<sup>53</sup>  
 tired, fatigued, a<sup>31</sup>xuŋ<sup>55</sup>  
 titmouse tɕɿu<sup>55</sup>ɻgɛŋ<sup>55</sup>

- tobacco ashes, a<sup>31</sup>iā<sup>31</sup> yom<sup>55</sup>  
 tobacco leaves, cured, a<sup>31</sup>iā<sup>31</sup> ɕam<sup>55</sup>  
 tobacco pipe, bowl, bag, la<sup>31</sup>k<sup>h</sup>ɕɛŋ<sup>55</sup>  
 tobacco seeds, a<sup>31</sup>iā<sup>31</sup> iu<sup>55</sup>  
 today, this day, de<sup>55</sup> ni<sup>33</sup>  
 toe nail, ʔa<sup>31</sup>xa<sup>35</sup> nin<sup>33</sup>  
 toe, tip of, ɲ<sup>31</sup>tɕ<sup>h</sup>im<sup>55</sup> la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 toe, ʔa<sup>31</sup>xa<sup>35</sup> ni<sup>31</sup> tɕ<sup>h</sup>im<sup>55</sup>, ɲ<sup>31</sup>tɕ<sup>h</sup>in<sup>55</sup>  
 toes, a<sup>31</sup>xa<sup>53</sup> ni<sup>31</sup> tɕ<sup>h</sup>im<sup>55</sup>  
 together, in the same place, da<sup>31</sup>si<sup>55</sup>, da<sup>33</sup>si<sup>55</sup>, ta<sup>31</sup>si<sup>55</sup>  
 toilet paper, ni<sup>31</sup>si<sup>55</sup>ɕin<sup>31</sup>dem<sup>55</sup>  
 toilet, ni<sup>55</sup> ni<sup>55</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 tomato, ba<sup>31</sup>k<sup>h</sup>i<sup>55</sup>luŋ<sup>55</sup>  
 tomorrow evening, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup> ni<sup>31</sup> ʃ<sup>55</sup> k<sup>h</sup>a<sup>55</sup>  
 tomorrow morning, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>saŋ<sup>31</sup>  
 tomorrow, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup> ni<sup>31</sup>  
 tongue root, p<sup>h</sup>u<sup>31</sup> le<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>33</sup>  
 tongue tip, p<sup>h</sup>u<sup>31</sup> le<sup>31</sup> la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 tongue, p<sup>h</sup>u<sup>31</sup>le<sup>31</sup>, laŋ<sup>55</sup>, ʔaŋ<sup>55</sup>  
 tonight, de<sup>55</sup> ʃ<sup>55</sup> k<sup>h</sup>a<sup>55</sup>  
 too late, ma<sup>31</sup>l<sup>h</sup>a<sup>35</sup> dzɿ<sup>31</sup>  
 too, excessively, -bum<sup>31</sup>  
 too, excessively, ua<sup>55</sup>duŋ<sup>31</sup>  
 tool; instrument, la<sup>31</sup> ma<sup>55</sup> ua<sup>33</sup> nen<sup>33</sup>  
 tooth joint, a<sup>31</sup>sa<sup>31</sup> mu<sup>31</sup> dzuŋ<sup>31</sup>  
 tooth paste, ia<sup>31</sup> kau<sup>55</sup> (Ch.)  
 tooth root, a<sup>31</sup>sa<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>33</sup>  
 tooth, canine, de<sup>31</sup> gɲ<sup>55</sup> a<sup>31</sup>sa<sup>31</sup>  
 tooth, front; incisor, ma<sup>55</sup> su<sup>31</sup> k<sup>h</sup>a<sup>55</sup> a<sup>31</sup>sa<sup>31</sup>  
 tooth, lower, ka<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> a<sup>31</sup>sa<sup>31</sup>  
 tooth, shua<sup>55</sup> > a<sup>31</sup>sa<sup>31</sup>  
 tooth, upper, ka<sup>31</sup> t<sup>h</sup>uŋ<sup>55</sup> a<sup>31</sup>sa<sup>31</sup>  
 toothbrush, a<sup>31</sup>sa<sup>31</sup> dzɛn<sup>55</sup> (dem<sup>55</sup>)  
 toothpick, a<sup>31</sup>sa<sup>31</sup> ni<sup>55</sup> k<sup>h</sup>o<sup>31</sup> lo<sup>31</sup> dem<sup>55</sup>  
 top of head, la<sup>31</sup> p<sup>h</sup>uŋ<sup>55</sup> k<sup>h</sup>o<sup>31</sup> ɲ<sup>55</sup>/ɲuŋ<sup>55</sup>  
 top, t<sup>h</sup>uŋ<sup>55</sup>  
 topple, tear down (e.g., a wall), p<sup>h</sup>u<sup>31</sup>t<sup>h</sup>an<sup>33</sup>do<sup>31</sup>  
 torch, tɕ<sup>h</sup>ɛ<sup>31</sup> mi<sup>55</sup> dom<sup>31</sup>/dum<sup>31</sup>  
 torn (clothes), gaŋ<sup>55</sup> ʔdze<sup>35</sup>  
 tortoise, vu<sup>55</sup>kui<sup>55</sup> (Ch.)  
 total = together, ʔa<sup>31</sup>dan<sup>55</sup>  
 touch, ɲen<sup>55</sup>  
 toward, facing, ba<sup>31</sup>  
 toward, facing, k<sup>h</sup>a<sup>31</sup>  
 towel, in<sup>55</sup>ɕim<sup>33</sup>dem<sup>55</sup>  
 town people, dzɿ<sup>55</sup>duŋ<sup>55</sup> a<sup>31</sup>ts<sup>h</sup>uŋ<sup>31</sup>  
 town; city, dzɿ<sup>55</sup>

- township, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup>dzu<sup>33</sup>lien<sup>31</sup>u<sup>31</sup>  
 township, cã<sup>55</sup>  
 toy, a, a<sup>31</sup>hi<sup>55</sup>dẽm<sup>55</sup>  
 tracks, p<sup>h</sup>u<sup>31</sup>za<sup>55</sup>  
 tracks, to follow, di<sup>31</sup>tẽ<sup>h</sup>en<sup>35</sup>  
 trachoma, ni<sup>55</sup>luŋ<sup>55</sup>bũ<sup>31</sup>si<sup>31</sup>  
 trade; barter, a<sup>31</sup>tẽ<sup>h</sup>in<sup>31</sup>  
 train, mẽ<sup>33</sup>t<sup>h</sup>a<sup>33</sup> (Burmese)  
 train, to, tẽ<sup>h</sup>en<sup>31</sup>ʃl<sup>31</sup>dʒl<sup>55</sup>u<sup>31</sup>  
 transfer; move, tiau<sup>35</sup>  
 transient reviving of dying, mu<sup>55</sup>dʒl<sup>31</sup>du<sup>55</sup>  
 translator, k<sup>h</sup>a<sup>55</sup>çi<sup>31</sup>t<sup>h</sup>im<sup>55</sup>su<sup>55</sup>  
 transport, to, a<sup>31</sup>tẽ<sup>h</sup>i<sup>55</sup>ũ<sup>31</sup>  
 transport; donate, m<sup>31</sup>dʒo<sup>31</sup>  
 trash, ʃl<sup>55</sup>t<sup>h</sup>un<sup>31</sup>(sa<sup>55</sup>dẽm<sup>55</sup>)  
 travel, to, a<sup>55</sup>k<sup>h</sup>in<sup>31</sup>do<sup>55</sup>  
 traveller, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>dʒl<sup>55</sup>su<sup>55</sup>  
 travelling expenses, t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>dʒl<sup>55</sup>ti<sup>31</sup>p<sup>h</sup>u<sup>55</sup>  
 tray; plate, beŋ<sup>55</sup>; k<sup>h</sup>en<sup>55</sup>bẽ<sup>55</sup>  
 tread, stamp feet, k<sup>h</sup>a<sup>55</sup>ʃun<sup>55</sup>/çun<sup>55</sup>  
 tree fork, çun<sup>55</sup>di<sup>31</sup>k<sup>h</sup>u<sup>55</sup>  
 tree name, k<sup>h</sup>o<sup>33</sup>bũ<sup>55</sup>, dʒi<sup>31</sup>za<sup>55</sup>,  
 tree name, lim<sup>31</sup>, ba<sup>33</sup>ia<sup>55</sup>gun<sup>31</sup>, bã<sup>33</sup>iã<sup>55</sup>gun<sup>31</sup>  
 tree root, çun<sup>55</sup>t<sup>h</sup>im<sup>33</sup>, ŋ<sup>31</sup>ven<sup>55</sup>ld<sup>55</sup>  
 tree seedlings, çun<sup>55</sup>iũ<sup>31</sup>  
 tree shade, çun<sup>55</sup>di<sup>31</sup>ga<sup>55</sup>u<sup>31</sup>  
 tree trunk, çun<sup>55</sup>gun<sup>31</sup>  
 tree, flower, çun<sup>55</sup>ven<sup>55</sup>  
 tree, ʃl<sup>55</sup>dʒun<sup>55</sup>  
 tree, winter melon, su<sup>31</sup>mu<sup>33</sup>  
 triangular, som<sup>31</sup>tẽ<sup>h</sup>ũ<sup>31</sup>dʒu<sup>55</sup>  
 tripe = pig stomach, p<sup>h</sup>a<sup>33</sup>  
 tripod, da<sup>31</sup>tẽ<sup>h</sup>a<sup>55</sup> (of metal), ni<sup>33</sup>gu<sup>55</sup> (of stone)  
 troublesome, inconvenient, di<sup>31</sup>çã<sup>35</sup>  
 trough (pig feeding), ʔo<sup>55</sup>dʒi<sup>31</sup>k<sup>h</sup>un<sup>31</sup>  
 trough, groove, ma<sup>31</sup>du<sup>31</sup>dʒl<sup>31</sup>, tsau<sup>55</sup>kau<sup>55</sup> (Ch.)  
 trough, round wooden, çun<sup>55</sup>dʒi<sup>31</sup>k<sup>h</sup>un<sup>31</sup>  
 trouser legs, çã<sup>33</sup>mã<sup>55</sup>dun<sup>55</sup>  
 trouser seat, ç<sup>3</sup>a<sup>33</sup>dun<sup>55</sup>  
 trousers belt, ma<sup>33</sup>dẽm<sup>55</sup>  
 trousers, pants, çã<sup>33</sup>mã<sup>55</sup>  
 truant, be, ʃl<sup>55</sup>va<sup>31</sup>ma<sup>31</sup>tẽ<sup>h</sup>en<sup>35</sup>ien<sup>55</sup>ʔdʒe<sup>35</sup>  
 truce, k<sup>h</sup>a<sup>55</sup>u<sup>31</sup>du<sup>31</sup>  
 true (speak truthfully), tẽ<sup>h</sup>un<sup>55</sup>si<sup>31</sup>di<sup>55</sup>  
 true, iẽ<sup>53</sup>  
 true; really, si<sup>31</sup>di<sup>55</sup>  
 trumpet, a, k<sup>h</sup>a<sup>55</sup>u<sup>31</sup>du<sup>31</sup>

- trumpet, a, sa<sup>55</sup>la<sup>55</sup>  
 Trung language, du<sup>31</sup> lu<sup>31</sup> k<sup>h</sup>a<sup>55</sup>  
 trunk (elephant), mo<sup>33</sup> gu<sup>33</sup> s<sup>l</sup><sup>31</sup> na<sup>55</sup>  
 trunk of body, t<sup>h</sup>i<sup>55</sup> z<sup>l</sup><sup>55</sup> gu<sup>31</sup>  
 try hard, ba<sup>31</sup> s<sup>l</sup><sup>31</sup> ma<sup>55</sup> s<sup>l</sup><sup>31</sup>  
 try hard, s<sup>l</sup><sup>31</sup> sa<sup>55</sup> da<sup>31</sup> s<sup>l</sup><sup>55</sup>, nu<sup>55</sup>li<sup>33</sup> (Ch.)  
 try, attempt, di<sup>31</sup> dza<sup>31</sup> u<sup>31</sup>  
 try, a<sup>31</sup> s<sup>l</sup><sup>31</sup>  
 tube for blowing on a fire, t<sup>h</sup>e<sup>31</sup> mi<sup>55</sup> a<sup>31</sup> p<sup>h</sup>u<sup>55</sup> dem<sup>55</sup>  
 tube, η<sup>31</sup> dā<sup>31</sup>  
 tuber (root), ia<sup>31</sup> t<sup>h</sup>u<sup>55</sup>  
 tuber, k. of, bi<sup>31</sup> cū<sup>35</sup> di<sup>31</sup>  
 tuber, k. of, bi<sup>31</sup> p<sup>h</sup>a<sup>31</sup>  
 tuber, k. of, bu<sup>31</sup> lē<sup>33</sup> gō<sup>53</sup>  
 tuber, k. of, k<sup>h</sup>u<sup>31</sup> dzu<sup>55</sup>  
 tuber, k. of, k<sup>h</sup>u<sup>31</sup> dzu<sup>55</sup> t<sup>h</sup>e<sup>31</sup> n<sup>31</sup>  
 tuber, k. of, mi<sup>31</sup> la<sup>55</sup> da<sup>55</sup>  
 tuber, k. of, mu<sup>31</sup> nem<sup>31</sup>  
 tubers, ni<sup>31</sup> ua<sup>31</sup> g<sup>31</sup>  
 tuck under arm, gu<sup>31</sup> lu<sup>55</sup> p<sup>h</sup>a<sup>31</sup> a<sup>31</sup> t<sup>h</sup>u<sup>31</sup>  
 tuition, t<sup>h</sup>e<sup>31</sup> n<sup>55</sup> di<sup>31</sup> p<sup>h</sup>u<sup>55</sup>  
 tumor, small, dza<sup>31</sup> ma<sup>55</sup> t<sup>h</sup>e<sup>31</sup> n<sup>31</sup>, ba<sup>31</sup> sum<sup>55</sup> du<sup>31</sup>  
 tumor, swelling, de<sup>31</sup> dzu<sup>55</sup>  
 turban; scarf, la<sup>31</sup> p<sup>h</sup>u<sup>55</sup> xua<sup>55</sup> dem<sup>55</sup>; la<sup>31</sup> p<sup>h</sup>u<sup>55</sup> xua<sup>55</sup>  
 turn (body), (dz<sup>l</sup><sup>31</sup> gu<sup>31</sup>) p<sup>h</sup>o<sup>31</sup> s<sup>l</sup><sup>55</sup>  
 turn (cause to), ʔa<sup>31</sup> xua<sup>55</sup> ε<sup>31</sup>  
 turn (head), p<sup>h</sup>o<sup>31</sup> s<sup>l</sup><sup>33</sup>  
 turn (round and round), ʔa<sup>31</sup> xua<sup>55</sup> ni<sup>33</sup>  
 turn a corner, go<sup>31</sup> la<sup>31</sup>  
 turn a door handle, xua<sup>53</sup> η<sup>31</sup>  
 turn a screw, xua<sup>31</sup> o<sup>55</sup>  
 turn around (the head), la<sup>31</sup> p<sup>h</sup>u<sup>55</sup> xua<sup>31</sup> s<sup>l</sup><sup>55</sup>  
 turn bad, spoil, η<sup>31</sup> mā<sup>55</sup> a<sup>31</sup> p<sup>h</sup>o<sup>55</sup>  
 turn head, p<sup>h</sup>o<sup>31</sup> s<sup>l</sup><sup>33</sup>  
 turn inside out; reverse, pu<sup>55</sup> tan<sup>33</sup> p<sup>h</sup>o<sup>31</sup> s<sup>l</sup><sup>55</sup>  
 turn off (light) = 'kill', sa<sup>53</sup>  
 turn off (water), t<sup>h</sup>a<sup>31</sup> u<sup>31</sup>  
 turn on (water), lim<sup>33</sup>  
 turn on (water), s<sup>l</sup><sup>31</sup> la<sup>31</sup> u<sup>31</sup>  
 turn on light, to light, fē<sup>31</sup> u<sup>31</sup> > fē<sup>31</sup> u<sup>31</sup>  
 turn one's head, la<sup>31</sup> p<sup>h</sup>u<sup>55</sup> p<sup>h</sup>o<sup>31</sup> s<sup>l</sup><sup>55</sup>  
 turn or lift (to open), p<sup>h</sup>o<sup>33</sup> o<sup>55</sup>  
 turn over (body), p<sup>h</sup>o<sup>31</sup> iu<sup>55</sup>  
 turn over (food), a<sup>31</sup> zu<sup>31</sup> ε<sup>55</sup>  
 turn over (on bed), zu<sup>31</sup> gu<sup>31</sup> p<sup>h</sup>o<sup>33</sup> s<sup>l</sup><sup>55</sup>  
 turn red, tsa<sup>35</sup> si<sup>55</sup> a<sup>31</sup> p<sup>h</sup>o<sup>55</sup>  
 turn the page, s<sup>l</sup><sup>55</sup> va<sup>31</sup> t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>u<sup>55</sup> t<sup>h</sup>i<sup>55</sup> p<sup>h</sup>u<sup>55</sup> a<sup>31</sup> u<sup>31</sup>

turnip; radish tuber, la/ie<sup>31</sup> ts<sup>h</sup>u<sup>31</sup> di<sup>31</sup> p<sup>h</sup>u<sup>31</sup>  
 turtle, tortoise, (vu<sup>55</sup>)kui<sup>55</sup>  
 turtledove, da<sup>31</sup>fa<sup>55</sup>; da<sup>31</sup>fa<sup>55</sup>  
 tusk, mo<sup>33</sup>gu<sup>33</sup> a<sup>31</sup>sa<sup>31</sup>  
 tweezers = baby pinchers, ma<sup>55</sup>ɲem<sup>55</sup>tɕ<sup>h</sup>en<sup>31</sup>  
 twelfth lunar month, ɲ<sup>31</sup>t<sup>h</sup>an<sup>55</sup>sɿ<sup>31</sup>la<sup>55</sup>  
 twelve, t<sup>h</sup>i<sup>31</sup>ts<sup>h</sup>ai<sup>55</sup>ɲi<sup>55</sup>; ts<sup>h</sup>ɿ<sup>55</sup>ɲi<sup>31</sup> (Lisu)  
 twentieth day of lunar month, a<sup>31</sup>ɲi<sup>33</sup>ts<sup>h</sup>a<sup>55</sup>ɲi<sup>33</sup>  
 twenty-one, a<sup>31</sup>ɲi<sup>55</sup>ts<sup>h</sup>ai<sup>55</sup>t<sup>h</sup>i<sup>31</sup>  
 twenty, a<sup>31</sup>ɲi<sup>55</sup>ts<sup>h</sup>a<sup>55</sup>, ɲi<sup>31</sup>ts<sup>h</sup>ɿ<sup>55</sup> (Lisu)  
 twice as much; many, t<sup>h</sup>i<sup>31</sup>tu<sup>55</sup>  
 twin, ɲi<sup>55</sup>dzi<sup>55</sup>  
 twinkle, to, tɕ<sup>h</sup>i<sup>31</sup>lɛm<sup>31</sup>  
 twist (leg), xua<sup>55</sup>ɲu<sup>31</sup>  
 twist (rope), ɲu<sup>55</sup>ɲu<sup>31</sup>ɲu<sup>55</sup>ɲu<sup>31</sup>, ɲuɲ<sup>55</sup>  
 twist (towel), di<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 twist in (screw), t<sup>h</sup>in<sup>53</sup>  
 twist with fingers, so<sup>31</sup>mu<sup>31</sup> (feel, stroke), ɲu<sup>55</sup>ɲu<sup>31</sup>  
 twist, sprain, tɕ<sup>h</sup>i<sup>31</sup>o<sup>55</sup>  
 twist, wring (towel), du<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 two hands (of rice), mo<sup>33</sup>guan<sup>53</sup> > m<sup>31</sup>guan<sup>53</sup>  
 two- to four-stringed instrument, hĩ<sup>55</sup>hã<sup>31</sup>  
 two-string bow instrument, hĩ<sup>55</sup>hã<sup>31</sup>  
 two-times (roughly); about twice, t<sup>h</sup>i<sup>31</sup>fu<sup>55</sup>t<sup>h</sup>an<sup>53</sup>  
 two, a<sup>31</sup>ɲi<sup>55</sup>, sa<sup>55</sup> (Lisu)

udder (of cow, goat), a<sup>31</sup>tɕ<sup>h</sup>u<sup>55</sup>la<sup>31</sup>p<sup>h</sup>uɲ<sup>55</sup>  
 ugly, ma<sup>31</sup>nem<sup>55</sup>  
 understand a language (can), to<sup>33</sup>so<sup>53</sup>  
 understand a language (cannot), to<sup>33</sup>m<sup>31</sup>so<sup>53</sup>  
 umbilical cord, ben<sup>33</sup>t<sup>h</sup>u<sup>55</sup>t<sup>h</sup>i<sup>33</sup>  
 umbrella, k<sup>h</sup>o<sup>35</sup>dzi<sup>31</sup> (Lisu), mo<sup>55</sup>p<sup>h</sup>en<sup>55</sup>  
 umbrella frame, mo<sup>55</sup>p<sup>h</sup>en<sup>55</sup>la<sup>55</sup>  
 unceasingly; continuously, ma<sup>31</sup>t<sup>h</sup>an<sup>ɲ</sup><sup>55</sup>ua<sup>33</sup>  
 uncle; father's younger brother, a<sup>31</sup>uan<sup>31</sup>  
 uncle; husband of father's sister, a<sup>31</sup>vu<sup>31</sup>  
 uncle; mother's brother, a<sup>31</sup>ben<sup>33</sup>  
 uncle, o<sup>55</sup>p<sup>h</sup>a<sup>31</sup>  
 underarm hair, gu<sup>31</sup>lu<sup>55</sup>min<sup>33</sup>  
 undershirt, in<sup>55</sup>ga<sup>31</sup>mu<sup>31</sup>  
 understand, ʔa<sup>31</sup>ɲuɲ<sup>31</sup>dʒuɲ<sup>55</sup>a<sup>31</sup>  
 undertand, take in aurally, so<sup>53</sup> (a<sup>31</sup>ba<sup>35</sup>)  
 underwear, in<sup>55</sup>ga<sup>31</sup>mu<sup>31</sup>  
 undress, to, (dʒu<sup>55</sup>)tɕ<sup>h</sup>in<sup>31</sup>ɲuɲ<sup>55</sup>  
 unfamiliar, m<sup>31</sup>so<sup>53</sup>mu<sup>53</sup>  
 unfortunate, m<sup>31</sup>p<sup>h</sup>a<sup>55</sup>  
 uniform, military, iu<sup>31</sup>ga<sup>31</sup>mu<sup>31</sup>; hẽ<sup>31</sup>ga<sup>31</sup>mu<sup>31</sup>



- unimportant, m<sup>31</sup>dzo<sup>55</sup>  
 unit of length, t<sup>h</sup>i<sup>31</sup>dza<sup>55</sup>  
 unitary, i<sup>35</sup>iē<sup>31</sup>  
 unite; rally, a<sup>31</sup>du<sup>31</sup>dzi<sup>55</sup>  
 unlined garment, t<sup>h</sup>i<sup>55</sup>ci<sup>31</sup>lim<sup>33</sup>  
 unlucky, ma<sup>31</sup>qu<sup>31</sup>dzi<sup>31</sup>  
 unlucky, yur<sup>31</sup>ma<sup>31</sup>tē<sup>h</sup>o<sup>55</sup>  
 unmarried woman, s<sup>1</sup>lan<sup>55</sup>za<sup>55</sup>  
 unmovingly, ma<sup>31</sup>nen<sup>55</sup>ua<sup>33</sup>  
 unoccupied house, tē<sup>h</sup>im<sup>31</sup>de<sup>31</sup>gan<sup>55</sup>  
 unpack luggage, nen<sup>55</sup>p<sup>h</sup>un<sup>55</sup>  
 unseam (clothing), p<sup>h</sup>un<sup>53</sup>  
 untidy (person), s<sup>1</sup>la<sup>31</sup>nem<sup>55</sup>mm<sup>31</sup>tē<sup>h</sup>a<sup>55</sup>  
 untie (person), guē<sup>53</sup>  
 untie (rope), p<sup>h</sup>un<sup>55</sup>u<sup>31</sup>  
 untie, loosen SEE come loose  
 untie; undo, p<sup>h</sup>un<sup>55</sup>no<sup>31</sup>  
 until (time) (e.g., ‘Until I came...’), t<sup>h</sup>u<sup>31</sup>...  
 upbraid, to, p<sup>h</sup>u<sup>31</sup>za<sup>55</sup>u<sup>31</sup>  
 upper arm, (a<sup>31</sup>vu<sup>35</sup>)tē<sup>h</sup>i<sup>31</sup>ni<sup>55</sup>  
 upper back, da<sup>55</sup>gun<sup>31</sup>t<sup>h</sup>an<sup>55</sup>  
 upper course of a river, na<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 upper garment, na<sup>55</sup>t<sup>h</sup>an<sup>55</sup>gud<sup>31</sup>dēm<sup>55</sup>  
 upper lip, ka<sup>31</sup>t<sup>h</sup>an<sup>55</sup>ni<sup>55</sup>bu<sup>31</sup>  
 upper part of body, na<sup>55</sup>k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>an<sup>55</sup>nur<sup>31</sup>t<sup>h</sup>a<sup>55</sup>t<sup>h</sup>a<sup>55</sup>  
 upper reaches of river, tē<sup>h</sup>o<sup>31</sup>nu<sup>31</sup>na<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 upper storey, la<sup>31</sup>bu<sup>55</sup>t<sup>h</sup>an<sup>55</sup>  
 upper tooth, ka<sup>31</sup>t<sup>h</sup>an<sup>55</sup>a<sup>31</sup>sa<sup>31</sup>  
 upside down, dim<sup>31</sup>dzi<sup>31</sup>ē<sup>31</sup>  
 upside down, reverse, p<sup>h</sup>o<sup>31</sup>ʔo<sup>55</sup>  
 upstairs, la<sup>31</sup>bur<sup>55</sup>t<sup>h</sup>an<sup>55</sup>  
 urge, hurry, speed, dzi<sup>31</sup>dza<sup>55</sup>gen<sup>31</sup>  
 urgent, dzo<sup>55</sup>  
 urinary bladder, η<sup>31</sup>ba<sup>55</sup>p<sup>h</sup>u<sup>31</sup>  
 urinate, ca<sup>53</sup>ʔdz<sup>h</sup>n<sup>55</sup>ē<sup>31</sup>  
 urine, sa<sup>55</sup>ʂ<sup>31</sup>  
 use, to,  
 use; cause to use, dzom<sup>31</sup>ʂ<sup>1</sup>55, dzom<sup>31</sup>dēm<sup>55</sup>  
 use, to, dzom<sup>31</sup>dēm<sup>55</sup>  
 use or lean on (a walking stick), di<sup>31</sup>zan<sup>31</sup>; di<sup>31</sup>zan<sup>31</sup>se<sup>53</sup>  
 used to, iā<sup>31</sup>  
 useless, dzom<sup>53</sup>m<sup>31</sup>ta<sup>35</sup>  
 uterus; womb, η<sup>31</sup>tē<sup>h</sup>en<sup>31</sup>dan<sup>31</sup>  
 uvula, p<sup>h</sup>u<sup>31</sup>le<sup>31</sup>tē<sup>h</sup>en<sup>31</sup>  
 vaccinate against smallpox, na<sup>55</sup>do<sup>55</sup>t<sup>h</sup>a<sup>31</sup>u<sup>31</sup>  
 valley, ravine, k<sup>h</sup>a<sup>33</sup>la<sup>33</sup>k<sup>h</sup>un<sup>31</sup>

- valley (mountain), a<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup>  
 varnish tree, da<sup>31</sup>k<sup>h</sup>.ŋ<sup>55</sup>  
 vase, ɕuŋ<sup>55</sup>vɛn<sup>55</sup>dun<sup>55</sup>  
 vegetable bed, k<sup>h</sup>ɛn<sup>31</sup>t<sup>h</sup>i<sup>55</sup>tɕ<sup>h</sup>a<sup>31</sup>; ŋ<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>  
 vegetable soup, k<sup>h</sup>ɛn<sup>55</sup>tɕ<sup>h</sup>ŋ<sup>31</sup>  
 vegetable tray, k<sup>h</sup>ɛn<sup>33</sup>bɛŋ<sup>55</sup>  
 vegetables, greens, k<sup>h</sup>ɛn<sup>55</sup>  
 village, dzu<sup>53</sup>  
 village name, ŋua<sup>55</sup>sɿ<sup>55</sup>nɛ<sup>35</sup>  
 vegetable, k<sup>h</sup>ɛn<sup>55</sup>  
 vegetable soup, k<sup>h</sup>ɛn<sup>55</sup>tɕ<sup>h</sup>ŋ<sup>31</sup>  
 vegetables (dish), k<sup>h</sup>ɛn<sup>33</sup>  
 vegetable dish, k<sup>h</sup>ɛn<sup>55</sup>bɛ<sup>55</sup> (1/2 Ch.)  
 vehicle, small, t<sup>h</sup>an<sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 vehicle, small, la<sup>31</sup>tɕ<sup>h</sup>aŋ<sup>31</sup>  
 vehicle, small (car), mo<sup>55</sup>do<sup>55</sup>t<sup>h</sup>i<sup>31</sup>za<sup>31</sup>  
 verdigris, dzɿ<sup>31</sup>k<sup>h</sup>iu<sup>53</sup>, dzɿ<sup>31</sup>laŋ<sup>53</sup>  
 vertical, upright, (dɔ<sup>53</sup>)daŋ<sup>55</sup>  
 very (small), ba<sup>31</sup>ŋ<sup>31</sup>, ŋa<sup>31</sup>  
 very; most, a<sup>31</sup>k<sup>h</sup>u<sup>55</sup>a<sup>31</sup>k<sup>h</sup>u<sup>55</sup>; a<sup>31</sup>k<sup>h</sup>u<sup>55</sup> (Lisu)  
 vest; sleeveless garment, gua<sup>31</sup>dim<sup>55</sup>dɛm<sup>55</sup>  
 victorious, dzɔ<sup>33</sup>ɔdzɛ<sup>35</sup>  
 victory; triumph, dzɔ<sup>31</sup>  
 village, stockaded, dzu<sup>53</sup>  
 village, ɕã<sup>55</sup>  
 vine, t<sup>h</sup>i<sup>31</sup>lɿ<sup>31</sup>bun<sup>55</sup>  
 vinegar, suan<sup>55</sup>ts<sup>h</sup>u<sup>35</sup> (Ch.)  
 violate, breach, e<sup>31</sup>fɛn<sup>53</sup>  
 violate the law, fɛn<sup>35</sup>fa<sup>31</sup>  
 viper; poisonous snake, bu<sup>31</sup>tɕ<sup>h</sup>ã<sup>55</sup>  
 virgin land, tɕ<sup>h</sup>u<sup>31</sup>ɣa<sup>31</sup>  
 visit; tour, ts<sup>h</sup>a<sup>55</sup>kuɛ<sup>55</sup> (Ch.)  
 visit doctor, i<sup>55</sup>suŋ<sup>55</sup>dza<sup>55</sup>u<sup>31</sup>  
 visitor; guest, mu<sup>31</sup>nɛm<sup>35</sup>  
 voice, sound, saŋ<sup>55</sup>  
 voluntarily, ŋ<sup>31</sup>loŋ<sup>55</sup>ŋ<sup>31</sup>naŋ<sup>55</sup>  
 vomit (noun), dun<sup>55</sup>a<sup>31</sup>na<sup>33</sup>  
 vomit, to, ɔdun<sup>55</sup>ɛ<sup>31</sup>  
 vow, swear vow, m<sup>31</sup>dza<sup>31</sup>u<sup>31</sup>  
 voluntarily, ŋ<sup>31</sup>loŋ<sup>55</sup>ŋ<sup>31</sup>ŋaŋ<sup>55</sup>  
 vulture, t<sup>h</sup>i<sup>31</sup>mu<sup>31</sup>dun<sup>31</sup>  
 vulva, lɛ<sup>31</sup>bi<sup>55</sup>
- wade, to, tɕ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>ɕuŋ<sup>33</sup>  
 wag tail, ŋi<sup>33</sup>tɕ<sup>h</sup>uŋ<sup>55</sup>xua<sup>31</sup>sɛ<sup>55</sup>  
 wage war, a<sup>31</sup>vam<sup>55</sup>ɛ<sup>31</sup>  
 wages, pay, ɣu<sup>55</sup>di<sup>31</sup>p<sup>h</sup>u<sup>35</sup>

- waist, sɿɛ<sup>53</sup> dam<sup>55</sup>  
 waist of trousers, p<sup>h</sup>a<sup>33</sup> du<sup>55</sup>  
 waist, dɑ<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>31</sup>, p<sup>h</sup>a<sup>31</sup> dzim<sup>55</sup>  
 waist, sɿɛ<sup>53</sup> dam<sup>55</sup>  
 waist belt, ɕa<sup>55</sup> ma<sup>55</sup> dɛm<sup>55</sup>  
 wait a second, hang on, a<sup>31</sup> de<sup>33</sup>  
 wait, expect, tɕ<sup>h</sup>a<sup>31</sup> u<sup>31</sup>  
 wake up; become sober, a<sup>31</sup> se<sup>55</sup>  
 walk (on foot), dzɿ<sup>53</sup>  
 walk tiptoe, a<sup>31</sup> iaŋ<sup>355</sup> a<sup>31</sup> dzɿ<sup>55</sup>  
 walking stick, du<sup>31</sup> iaŋ<sup>31</sup> (ɕɿ<sup>55</sup>)  
 wall, enclosing, ɕo<sup>55</sup>  
 wall enclosing house, dza<sup>31</sup> xam<sup>35</sup>  
 wall seam, dzɛ<sup>35</sup> tɕu<sup>55</sup>  
 wall, dzɛ<sup>35</sup> tɕ<sup>h</sup>uŋ<sup>31</sup>  
 walnut, bu<sup>31</sup> iu<sup>55</sup>  
 walnut, ba<sup>31</sup> k<sup>h</sup>o<sup>33</sup>  
 wane, recede, a<sup>31</sup> ɕim<sup>55</sup>  
 want, need, ɕoŋ<sup>31</sup>, vɛ<sup>53</sup>  
 want, like, ŋa<sup>55</sup>, ŋu<sup>31</sup>  
 want (to go), dzɿ<sup>55</sup> mm<sup>31</sup> ŋa<sup>31</sup> ɕuŋ<sup>35</sup>  
 war, fight, scuffle, a<sup>31</sup> sun<sup>55</sup>  
 ward off, tɕ<sup>h</sup>a<sup>55</sup> ɕɿ<sup>31</sup>  
 warehouse, storehouse, mu<sup>31</sup> dza<sup>31</sup> tɕ<sup>h</sup>im<sup>31</sup>  
 warm (weather), lim<sup>31</sup> ɛ<sup>55</sup>  
 warm, ɕim<sup>55</sup> ɕɿ<sup>31</sup>; sum<sup>55</sup> bu<sup>31</sup>  
 warm, roast, bake, di<sup>31</sup> gaŋ<sup>53</sup> u  
 warm by fire, tɕ<sup>h</sup>ɛ<sup>31</sup> mi<sup>55</sup> ɕim<sup>55</sup> ɕɿ<sup>31</sup>; lim<sup>55</sup>  
 warm up left-overs, a<sup>31</sup> k<sup>h</sup>ien<sup>31</sup> u<sup>55</sup>  
 warn, se<sup>31</sup> ɣuŋ<sup>55</sup>  
 warp, ia<sup>31</sup> ɕu<sup>55</sup> (Lisu)  
 warp raising stick, mu<sup>55</sup> dan<sup>31</sup>  
 wart, de<sup>31</sup> dzɛn<sup>55</sup>  
 wash (water), ma<sup>55</sup> zɿ<sup>55</sup> a<sup>31</sup> ba<sup>55</sup>  
 wash, di<sup>31</sup> k<sup>h</sup>in<sup>31</sup> dzɛn<sup>53</sup> ts<sup>h</sup>ɿ<sup>31</sup>  
 wash; bathe, zɿ<sup>31</sup> gu<sup>31</sup> dzɛn<sup>53</sup> ɕɿ<sup>31</sup>  
 wash (clothes), dzɛn<sup>55</sup> (u<sup>31</sup>)  
 wash (clothes), ga<sup>31</sup> mu<sup>31</sup> dzɛn<sup>53</sup>  
 wash clothes once, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> k<sup>h</sup>a<sup>31</sup> ma<sup>55</sup> ɕu<sup>31</sup> dzuŋ<sup>53</sup>  
 wash face, ma<sup>55</sup> dzɛn<sup>31</sup> ɕɿ<sup>31</sup>  
 wash feet, a<sup>31</sup> xa<sup>55</sup> dzɛn<sup>55</sup>  
 wash floor, la<sup>55</sup> dza<sup>55</sup> dzɛn<sup>53</sup>  
 wash rice, dzi<sup>31</sup> za<sup>55</sup> ts<sup>h</sup>a<sup>55</sup> dzɛn<sup>53</sup>  
 washbasin, mā<sup>55</sup> dzɛn<sup>31</sup> dem<sup>55</sup>  
 washcloth, ma<sup>55</sup> ɕin<sup>31</sup> dem<sup>55</sup>  
 wasp, mu<sup>31</sup> k<sup>h</sup>ua<sup>31</sup> mu<sup>55</sup> vi<sup>33</sup>  
 wasp, p<sup>h</sup>u<sup>31</sup> ia<sup>55</sup> k<sup>h</sup>ua<sup>55</sup>

- wasp, black, ma<sup>35</sup> dzɿ<sup>31</sup>  
 waste, to, lan<sup>35</sup> fei<sup>35</sup> (Ch.)  
 waste (grain), ɕuŋu<sup>53</sup>  
 waste money, dzɑ<sup>31</sup> xa<sup>31</sup> a<sup>31</sup> ts<sup>h</sup>uŋ<sup>55</sup> ts<sup>h</sup>uŋ<sup>55</sup> sɿ<sup>31</sup> ma<sup>53</sup> u<sup>31</sup>  
 waste time, loaf, t<sup>h</sup>a<sup>55</sup> ma<sup>55</sup> di<sup>31</sup> p<sup>h</sup>u<sup>55</sup> dzɿ<sup>53</sup> u<sup>31</sup>  
 watch, a, na<sup>31</sup> li<sup>31</sup>  
 watch, a, gɿ<sup>31</sup> dzɑŋ<sup>31</sup>  
 watch (children), dzɑ<sup>53</sup> u<sup>31</sup>  
 watch a movie, tien<sup>35;55</sup> i<sup>31</sup> dzɑ<sup>53</sup> u<sup>31</sup>  
 watch a play, ɕi<sup>35</sup> dzɑŋ<sup>53</sup> u<sup>3</sup>  
 watch dog, tɕ<sup>h</sup>im<sup>31</sup> tɕ<sup>h</sup>u<sup>55</sup> dɛ<sup>31</sup> gɿ<sup>55</sup>  
 watch fire, a<sup>31</sup> gua<sup>53</sup> a<sup>31</sup> ni<sup>33</sup>  
 watch; guard, na<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup> t<sup>h</sup>iɛŋ<sup>31</sup> u<sup>31</sup>  
 watch the coffin, a<sup>31</sup> ts<sup>h</sup>ɑŋ<sup>31</sup> maŋ<sup>31</sup> tɕ<sup>h</sup>u<sup>31</sup> u<sup>31</sup>  
 water (clear), tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> xuŋ<sup>31</sup>  
 water (flowing), tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup>  
 water (green), mi<sup>31</sup> la<sup>55</sup> da<sup>55</sup>  
 water (rice), dzi<sup>31</sup> na<sup>55</sup> dzen<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>31</sup>  
 water (sediment), tɕ<sup>h</sup>o<sup>55</sup> muŋ<sup>55</sup>  
 water boiling, tɕ<sup>h</sup>i<sup>31</sup> lim<sup>33</sup>; tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> xuŋ<sup>31</sup>  
 water buffalo, a<sup>31</sup> li<sup>31</sup>  
 water drawing, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> bɛ<sup>31</sup> t<sup>h</sup>u<sup>31</sup>  
 water pot, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> ɕuŋ<sup>55</sup> dem<sup>55</sup>  
 water spirit, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>55</sup> p<sup>h</sup>u<sup>31</sup> iã<sup>33</sup>  
 water tap, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> ɕuŋ<sup>55</sup> dem<sup>55</sup>  
 water vat, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> ɕuŋ<sup>55</sup> dem<sup>55</sup>  
 water, boiling, a<sup>31</sup> su<sup>31</sup>  
 water, cloudy, tɕ<sup>h</sup>o<sup>31</sup> muŋ<sup>55</sup>; tɕ<sup>h</sup>o<sup>55</sup> muŋ<sup>55</sup>  
 water, muddy, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> k<sup>h</sup>am<sup>31</sup> ɛ<sup>31</sup>  
 water, spring, tɕ<sup>h</sup>a<sup>31</sup> ŋa<sup>35</sup> bo<sup>55</sup> tɕ<sup>h</sup>ɿ<sup>31</sup>  
 water, sprinkle, ʔa<sup>31</sup> nen<sup>53</sup>  
 water, to, ʔa<sup>31</sup> tɕ<sup>h</sup>em<sup>53</sup>  
 waterfall, tɕ<sup>h</sup>ɿ<sup>31</sup> da<sup>55</sup>  
 watermelon, gua<sup>31</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 waterstone, la<sup>31</sup> t<sup>h</sup>a<sup>55</sup>  
 wave, beckon, a<sup>31</sup> tɕ<sup>h</sup>i<sup>31</sup> vɛ<sup>55</sup>  
 wave (hand), xua<sup>31</sup> ɕɿ<sup>33</sup>  
 wave (water), dzi<sup>31</sup> k<sup>h</sup>u<sup>55</sup>  
 way, means, pan<sup>55</sup> fa<sup>31</sup> (Ch.)  
 we (inclusive), a<sup>31</sup> ni<sup>35</sup>  
 we (plural), a<sup>31</sup> iuŋ<sup>55</sup>  
 we two, the two of us, nɛ<sup>31</sup> so<sup>31</sup> (a<sup>31</sup> iuŋ<sup>55</sup> si<sup>31</sup>) a<sup>31</sup> so<sup>31</sup>  
 we all, all of us, a<sup>31</sup> ɕɑŋ<sup>55</sup>  
 weak, debilitated, in poor health, saŋ<sup>55</sup> mɛ<sup>31</sup> ɛ<sup>33</sup>  
 weak, saŋ<sup>55</sup> ba<sup>33</sup>, ŋuŋ<sup>55</sup>  
 weaknesses, m<sup>31</sup> ta<sup>33</sup> za<sup>55</sup>  
 wean, a<sup>31</sup> tɕ<sup>h</sup>u<sup>55</sup> k<sup>h</sup>uŋ<sup>53</sup> u<sup>31</sup>

- weapon; arms, a<sup>31</sup>san<sup>55</sup> nen<sup>33</sup>  
 wear (clothes), gua<sup>31</sup>, a<sup>55</sup>gua<sup>31</sup>  
 wear (clothes), gua<sup>31</sup>ʃɿ<sup>55</sup> li<sup>31</sup>  
 wear (hat), mō<sup>31</sup>ʃɿ<sup>55</sup>  
 wear (hat), da<sup>31</sup>mo<sup>55</sup>mo<sup>35</sup>o<sup>55</sup>  
 wear jewelry, a<sup>31</sup>b.ɿ<sup>55</sup>ʃɿ<sup>31</sup>  
 wear (shoes), g.ɿ<sup>31</sup>  
 wear, ɕu<sup>35</sup>(u<sup>31</sup>), iu<sup>35</sup>  
 wear horizontally, len<sup>53</sup>  
 weasel, dʒi<sup>31</sup>sun<sup>55</sup>, tʃ<sup>h</sup>ɿ<sup>31</sup>v.ɿ<sup>31</sup>  
 weather, mu<sup>55</sup>  
 weave (cloth), zan<sup>ʔ33</sup> u<sup>31</sup>, .ɿan<sup>33</sup>, zan<sup>53</sup>  
 weave (rice winnowing basket), ʔban<sup>55</sup>  
 weaver's shuttle, mi<sup>55</sup>gin<sup>31</sup>  
 wedding, ni<sup>35</sup>p<sup>h</sup>u<sup>31</sup>pe<sup>31</sup>  
 wedding day, a<sup>31</sup>ɕi<sup>31</sup>t<sup>h</sup>in<sup>55</sup>  
 wedding dance, a<sup>31</sup>ts<sup>h</sup>an<sup>31</sup> (fast dance)  
 wedding feast, vi<sup>55</sup>ɕo<sup>55</sup>nu<sup>31</sup>  
 wedge, peg, ga<sup>31</sup>san<sup>55</sup>  
 weed, to, k<sup>h</sup>an<sup>31</sup>  
 weed (grass), k<sup>h</sup>ɛ<sup>31</sup>u<sup>31</sup>  
 weed, to, bin<sup>53</sup>  
 weft, ia<sup>31</sup>po<sup>55</sup>  
 weigh, to, ts<sup>h</sup>ɿ<sup>31</sup>  
 weigh (food), to, ɿi<sup>31</sup>u<sup>31</sup>  
 weigh less than, tʃ<sup>h</sup>ɿ<sup>55</sup>ni<sup>m</sup><sup>31</sup>ni<sup>31</sup>u<sup>31</sup>  
 weigh less than, a<sup>31</sup>ɿi<sup>55</sup>m<sup>31</sup>lu<sup>ɿ</sup><sup>55</sup>  
 weigh more than, ua<sup>55</sup>man<sup>31</sup>ni<sup>31</sup>u<sup>31</sup>  
 weight (1/2 gram), clf., ɕu<sup>ɿ</sup><sup>55</sup>  
 weight (100 grams), clf., gam<sup>55</sup>  
 weight (for grain; 1 decaliter), clf., du<sup>ɿ</sup><sup>55</sup>  
 Weixi, yu<sup>31</sup>dzu<sup>55</sup>  
 welcome, greet, so<sup>33</sup> ma<sup>31</sup> go<sup>33</sup>, xua<sup>55</sup>ɿ<sup>31</sup> (Ch.)  
 welcomed, be, k<sup>h</sup>o<sup>55</sup>zu<sup>55</sup>  
 weld, solder, xɛ<sup>ɿ</sup><sup>35</sup>  
 welding; soldering, ɿi<sup>31</sup>mu<sup>33</sup>, li<sup>31</sup>mu<sup>33</sup>  
 well (n.), tɕ<sup>h</sup>a<sup>31</sup>ɿa<sup>35</sup>tʃ<sup>h</sup>ɿ<sup>31</sup>ɕom<sup>55</sup>  
 well trap, a<sup>31</sup>dʒim<sup>33</sup> dem<sup>55</sup>  
 well water, tɕ<sup>h</sup>a<sup>31</sup>ɿan<sup>35</sup>bu<sup>55</sup>ɿa<sup>55</sup>; tɕ<sup>h</sup>ɿ<sup>31</sup>ɿa<sup>53</sup> bo<sup>55</sup> za<sup>55</sup>  
 well, a, tɕ<sup>h</sup>a<sup>31</sup>ɿa<sup>53</sup>tʃ<sup>h</sup>ɿ<sup>31</sup>  
 well; comfortable, sã<sup>55</sup> ɛ<sup>31</sup>  
 well; healthy, ɕe<sup>31</sup>ɿem<sup>55</sup>  
 well; healthy, sɿ<sup>31</sup>la<sup>55</sup>ɿem<sup>55</sup>ua<sup>31</sup>li<sup>31</sup>  
 west, nem<sup>31</sup> dʒim<sup>55</sup> k<sup>h</sup>ua<sup>31</sup>  
 west, ie<sup>31</sup>tɕ<sup>h</sup>ɿ<sup>55</sup>  
 west wind, nem<sup>31</sup> dʒim<sup>55</sup> na<sup>31</sup>bu<sup>31</sup>  
 western-style house, na<sup>33</sup>t<sup>h</sup>u<sup>ɿ</sup><sup>55</sup>tɕ<sup>h</sup>im<sup>31</sup>

- wet (clothes), ʔdzam<sup>55</sup>  
 wet nurse, a<sup>31</sup>tʂ<sup>h</sup>u<sup>55</sup>o<sup>31</sup>mu<sup>31</sup>  
 what? what kind? k<sup>h</sup>a<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
 What day is it? (date), sɿ<sup>31</sup>la<sup>55</sup>k<sup>h</sup>a<sup>55</sup>dan<sup>55</sup>ni<sup>33</sup>  
 what kind? what? k<sup>h</sup>a<sup>55</sup>ŋu<sup>31</sup>  
 what time? k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>a<sup>33</sup>, ha<sup>55</sup>saŋ<sup>55</sup>nu<sup>31</sup>  
 What time is it? k<sup>h</sup>a<sup>55</sup>dan<sup>55</sup>dam<sup>55</sup>  
 what, k<sup>h</sup>a<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
 What's to be done? k<sup>h</sup>a<sup>31</sup>dʒi<sup>55</sup>ua<sup>31</sup>dʒem<sup>55</sup>  
 wheat (regular), ʂa<sup>31</sup>zɑ<sup>31</sup>lɑ<sup>55</sup>zu<sup>55</sup>, ʧɑ<sup>31</sup>.ɑ<sup>31</sup>  
 wheat, zuŋ<sup>53</sup>  
 wheat, ʂa<sup>31</sup>zɑ<sup>31</sup>  
 wheat (buck), bitter, gua<sup>31</sup>k<sup>h</sup>a<sup>55</sup>  
 wheat (buck), ua<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 wheat (buck), p<sup>h</sup>o<sup>31</sup>ua<sup>55</sup>  
 wheat bran, he<sup>55</sup>tʂ<sup>h</sup>ɿn<sup>31</sup>; tʂ<sup>h</sup>i<sup>55</sup>  
 wheat flour, ʧɑ<sup>31</sup>.ɑ<sup>31</sup>ua<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>, ʂɑ<sup>55</sup>.ɑ<sup>55</sup>ua<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>31</sup>  
 wheat husk, tʂ<sup>h</sup>i<sup>55</sup>  
 wheat root, ʂa<sup>31</sup>zɑ<sup>31</sup>t<sup>h</sup>am<sup>55</sup>  
 wheat straw, ʂa<sup>31</sup>zɑ<sup>31</sup>la<sup>55</sup>zu<sup>55</sup>  
 wheel, ʧi<sup>55</sup>li<sup>31</sup>li<sup>31</sup>, la<sup>33</sup>tʂ<sup>h</sup>aŋ<sup>31</sup>  
 when? k<sup>h</sup>a<sup>55</sup>t<sup>h</sup>a<sup>33</sup>  
 when? k<sup>h</sup>a<sup>55</sup>saŋ<sup>55</sup>  
 when? ha<sup>55</sup>saŋ<sup>55</sup>nu<sup>31</sup>  
 when (time), saŋ<sup>55</sup>nu<sup>31</sup>  
 when, at the time, ʔo<sup>55</sup>t<sup>h</sup>a<sup>31</sup>  
 where, k<sup>h</sup>a<sup>55</sup>lu<sup>ʔ31</sup>  
 where? which side? k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>31</sup>, k<sup>h</sup>a<sup>55</sup>ba<sup>31</sup>; na<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 where?, k<sup>h</sup>a<sup>55</sup>.ɑ<sup>31</sup>; k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>31</sup>; k<sup>h</sup>a<sup>55</sup>ba<sup>31</sup>  
 whet (knife), hẽŋu<sup>31</sup>  
 which (plural), k<sup>h</sup>a<sup>55</sup>tʂ<sup>h</sup>o<sup>31</sup>mu<sup>53</sup>  
 which (one), k<sup>h</sup>a<sup>31</sup>lu<sup>ʔ55</sup>; k<sup>h</sup>a<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 while away time, ŋ<sup>31</sup>ni<sup>55</sup>lie<sup>53</sup>bo<sup>31</sup>o<sup>31</sup>du<sup>35</sup>  
 whip, mǎ<sup>31</sup>k<sup>h</sup>ǎ<sup>33</sup>dẽm<sup>55</sup>  
 whip, to, di<sup>31</sup>xuŋ<sup>53</sup>  
 whip mark, ʔi<sup>55</sup>bu<sup>31</sup>dʒɿ<sup>31</sup>  
 whip, thrash, di<sup>31</sup>xuŋ<sup>53</sup>  
 whirl (of wind), na<sup>31</sup>bu<sup>31</sup>mi<sup>55</sup>zɿ<sup>55</sup>u<sup>31</sup>ba<sup>33</sup>  
 whirlpool, eddy, ʔi<sup>55</sup>tʂeu<sup>33</sup> (Lisu)  
 whirlpool, eddy, tʂ<sup>h</sup>a<sup>31</sup>ŋa<sup>55</sup>a<sup>31</sup>xua<sup>55</sup>  
 whirlwind, na<sup>31</sup>bu<sup>31</sup>xuaŋ<sup>53</sup>u<sup>55</sup>  
 whiskers, hair, ŋ<sup>31</sup>ni<sup>55</sup>tʂ<sup>h</sup>oŋ<sup>55</sup>  
 whisper in someone's ear, ba<sup>31</sup>tʂ<sup>h</sup>a<sup>55</sup>ba<sup>31</sup>tʂ<sup>h</sup>a<sup>55</sup>  
 whistle, sa<sup>55</sup>la<sup>55</sup>  
 whistle, sau<sup>35</sup>tsɿ<sup>33</sup> (Ch.)  
 whistle, brass wind instrument, ba<sup>31</sup>la<sup>55</sup> (Lisu)  
 whistle, to, a<sup>31</sup>fŋ<sup>55</sup>u<sup>31</sup>

- white crane, mo<sup>55</sup> xa<sup>33</sup>, ɲi<sup>31</sup> tʂɿ<sup>55</sup> (Lisu)  
 white fish, ɲua<sup>55</sup> tɕ<sup>h</sup>uŋ<sup>55</sup>  
 white oak tree, tʂɿ<sup>55</sup> ko<sup>55</sup>  
 white; silver, p<sup>h</sup>u<sup>55</sup> dza<sup>31</sup> (xa<sup>31</sup>lan<sup>55</sup>)  
 whitewash, to, dʒe<sup>35</sup> a<sup>31</sup>man<sup>55</sup> u<sup>55</sup>  
 whitewash, to, a<sup>31</sup>t<sup>h</sup>a<sup>31</sup>  
 white, be<sup>55</sup>, ba<sup>33</sup>, ba<sup>33</sup>ba<sup>33</sup>  
 white, p<sup>h</sup>o<sup>55</sup> mo<sup>31</sup>  
 white (of eye), ɲi<sup>55</sup>luŋ<sup>55</sup> ba<sup>33</sup>  
 who, k<sup>h</sup>a<sup>31</sup> io<sup>55</sup>  
 who? k<sup>h</sup>a<sup>31</sup>lu<sup>55</sup>  
 whoever = each one, k<sup>h</sup>a<sup>31</sup>io<sup>55</sup> gu<sup>55</sup>  
 whole, dzo<sup>55</sup> dzo<sup>33</sup>, a<sup>31</sup>dan<sup>33</sup>  
 whole; entire, a<sup>55</sup> dan<sup>55</sup>  
 whole floor or ground, t<sup>h</sup>i<sup>55</sup> mu<sup>31</sup> a<sup>31</sup> dan<sup>55</sup>  
 whole life; generation, t<sup>h</sup>i<sup>55</sup> t<sup>h</sup>i<sup>31</sup> ts<sup>h</sup>uŋ<sup>55</sup>  
 why, k<sup>h</sup>a<sup>55</sup> tʂ<sup>h</sup>ɿ<sup>31</sup> lan<sup>55</sup>  
 wick, tuŋ<sup>55</sup> ɕin<sup>55</sup>  
 wide (diameter), coarse (flour), ɲ<sup>31</sup> ga<sup>55</sup> ɕi<sup>55</sup>  
 wide (road), ua<sup>55</sup> gan<sup>31</sup> > ua<sup>55</sup> ga<sup>31</sup>  
 wide, thick, coarse, ua<sup>55</sup> lom<sup>33</sup>  
 width, p<sup>h</sup>a<sup>31</sup> za<sup>33</sup>  
 width of finger, ɲi<sup>31</sup> tɕ<sup>h</sup>im<sup>55</sup>  
 widow, widower, mi<sup>55</sup> ma<sup>31</sup>  
 wife, second, mu<sup>31</sup> li<sup>33</sup> mu<sup>31</sup>  
 wife, tɕ<sup>h</sup>a<sup>31</sup> ma<sup>33</sup>  
 wife (of brother), ts<sup>h</sup>a<sup>55</sup> ba<sup>55</sup>  
 wife of father's elder brother; uncle, au<sup>53</sup> ma<sup>31</sup>  
 wife of mother's brother; aunt, a<sup>31</sup> ɲi<sup>53</sup>  
 wife's brother's son, sa<sup>55</sup> dza<sup>31</sup>  
 wife's elder brother, p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 wife's elder sister, p<sup>h</sup>a<sup>55</sup> dza<sup>55</sup> ma<sup>31</sup>  
 wife's father; father-in-law, a<sup>31</sup> ben<sup>53</sup>  
 wife's father; father-in-law, a<sup>31</sup> ben<sup>53</sup> sɿ<sup>44</sup> p<sup>h</sup>a<sup>31</sup>  
 wife's mother; mother-in-law, a<sup>31</sup> luŋ<sup>35</sup>  
 wife's younger brother, t<sup>h</sup>a<sup>31</sup> nan<sup>55</sup>  
 wife's younger sister, t<sup>h</sup>a<sup>31</sup> nan<sup>55</sup>  
 wild animal, ʂa<sup>55</sup>, a<sup>31</sup> dam<sup>31</sup> ʂa<sup>55</sup>  
 wild boar, p<sup>h</sup>u<sup>31</sup> nem<sup>33</sup>  
 wild goose, tɕ<sup>h</sup>a<sup>31</sup> go<sup>55</sup>  
 wild ox, ɕa<sup>55</sup> p<sup>h</sup>u<sup>31</sup>  
 wild sheep, a<sup>31</sup> se<sup>31</sup>  
 wild, ungovernable, ma<sup>31</sup> k<sup>h</sup>am<sup>55</sup>  
 wildcat, da<sup>31</sup> ga<sup>31</sup>  
 will do, da<sup>55</sup> ɛ<sup>31</sup>  
 will, consent, ua<sup>55</sup>  
 willing, nan<sup>55</sup> ʂɿ<sup>3</sup>

- willing, prefer, nə<sup>55</sup> ɕuŋ<sup>55</sup>  
 will-o'-the-wisp; jack-o'-lantern, p<sup>h</sup>u<sup>31</sup> iã<sup>33</sup> tɕ<sup>h</sup>ɛ<sup>31</sup> mi<sup>55</sup>  
 wilt, to, ʔa<sup>31</sup> dza<sup>35</sup>  
 win, to, dzo<sup>31</sup>  
 win a war, dzo<sup>31</sup> ʔdʒɿ<sup>35</sup>  
 wind thread, xua<sup>55</sup> ŋu<sup>31</sup>  
 wind thread (onto a keel), gin<sup>31</sup>  
 wind blows, na<sup>31</sup> bu<sup>31</sup> fiŋ<sup>55</sup>  
 wind, coil, rotate, vu<sup>55</sup> tɕ<sup>h</sup>i<sup>55</sup>, xuaŋ<sup>55</sup>, xua<sup>55/53</sup>  
 wind, the, ŋɛ<sup>31</sup> bu<sup>31</sup>; na<sup>31</sup> bu<sup>31</sup>; ŋa<sup>31</sup> bu<sup>31</sup>  
 winding, crooked, bu<sup>31</sup> t<sup>h</sup>a<sup>55</sup>  
 window, ts<sup>h</sup>uaŋ<sup>55</sup> tsɿ<sup>31</sup> (Ch.)  
 windpipe, trachea, san<sup>55</sup> a<sup>31</sup> xa<sup>31</sup> dem<sup>55</sup>  
 wine drinking song, bu<sup>31</sup> zu<sup>55</sup>  
 wine pot, dʒi<sup>31</sup> dʒɛ<sup>55</sup> (Lisu)  
 wine yeast, la<sup>31</sup> sam<sup>55</sup>  
 wine, kind of, ma<sup>55</sup> guŋ<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>31</sup>  
 wine; liquor; rice beer, ŋu<sup>31</sup>; nu<sup>31</sup>  
 wine pot, dʒi<sup>31</sup> dʒɛ<sup>55</sup>  
 wine shop, nu<sup>31</sup> ven<sup>55</sup> za<sup>55</sup>  
 wine shop; restaurant, nu<sup>31</sup> ʔaŋ<sup>55</sup> za<sup>55</sup>  
 wine, Chinese, dʒi<sup>31</sup> za<sup>55</sup> nu<sup>31</sup>  
 wing, da<sup>31</sup> tɕ<sup>h</sup>iŋ<sup>55</sup> > da<sup>31</sup> tɕ<sup>h</sup>ɿ<sup>55</sup>  
 wink, blink, ŋ<sup>55</sup> tɕ<sup>h</sup>im<sup>55</sup> ua<sup>31</sup>  
 wink, hint, ni<sup>55</sup> luŋ<sup>55</sup> a<sup>31</sup> dʒaŋ<sup>31</sup> ɛ<sup>55</sup>  
 winnow (rice), to, ɕi<sup>31</sup> lem<sup>33</sup>  
 winnow, dʒi<sup>31</sup> ʂɿ<sup>55</sup> u<sup>31</sup>  
 winnow, to, di<sup>31</sup> fŋ<sup>55</sup>  
 winnowing basket, ʂɿ<sup>55</sup> ba<sup>31</sup> luŋ<sup>31</sup>  
 winnowing fan, la<sup>55</sup> ba<sup>55</sup>  
 winter, mu<sup>31</sup> dʒaŋ<sup>55</sup> du<sup>31</sup> gam<sup>53</sup>  
 winter (cold weather), iɛ<sup>31</sup> t<sup>h</sup>uŋ<sup>55</sup>  
 winter melon tree, su<sup>31</sup> mu<sup>33</sup>  
 wipe (table), ɕin<sup>55</sup> (u<sup>31</sup>), ɕi<sup>55</sup> ŋuŋ<sup>31</sup>  
 wipe, wipe off, ba<sup>31</sup> tɕ<sup>h</sup>em<sup>55</sup> u<sup>31</sup> (dust), p<sup>h</sup>am<sup>31</sup> a<sup>55</sup> ŋu<sup>55</sup> (desk)  
 wipe one's bottom, ni<sup>31</sup> si<sup>55</sup> si<sup>35</sup>  
 wipe, to, ɕi<sup>55</sup>  
 wire, ɕa<sup>31</sup> k<sup>h</sup>a<sup>55</sup> buŋ<sup>55</sup>  
 wire, rubber-coated, ɕa<sup>55</sup> sam<sup>31</sup> buŋ<sup>55</sup>  
 wisdom teeth, a<sup>31</sup> ko<sup>55</sup>  
 wish, want, be willing, ŋaŋ<sup>55</sup> ʂɿ<sup>31</sup>  
 wither, a<sup>31</sup> ŋoŋ<sup>55</sup> ʔdʒɛ<sup>35</sup>  
 wither, ɕuŋ<sup>35</sup> ven<sup>55</sup> ʔa<sup>31</sup> dʒa<sup>53</sup>  
 withered, a<sup>31</sup> dʒi<sup>31</sup> ʔguŋ<sup>55</sup> (shrunken)  
 witness, di<sup>31</sup> du<sup>31</sup> a<sup>31</sup> ts<sup>h</sup>aŋ<sup>31</sup> su<sup>55</sup>  
 wizard; sorcerer, da<sup>31</sup> ʂɿ<sup>55</sup> p<sup>h</sup>u<sup>31</sup>  
 wolf, iu<sup>31</sup> dzuŋ<sup>55</sup>



- woman, female, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>za<sup>55</sup>  
 wood, ɕuŋ<sup>55</sup>tan<sup>55</sup>  
 wood borer, ɕuŋ<sup>55</sup>ioŋ<sup>33</sup>  
 wood cabinet, ɕuŋ<sup>55</sup>ka<sup>33</sup>tsu<sup>33</sup>  
 wood carbon, xɿuŋ<sup>31</sup>; xɛŋ<sup>31</sup>(xɿuŋ<sup>31</sup>)  
 wood; log; timber, ɕuŋ<sup>55</sup>tan<sup>55</sup>  
 wood, k. of, li<sup>55</sup>ko<sup>55</sup>dzuŋ<sup>55</sup>  
 wood pile, t<sup>h</sup>i<sup>31</sup>zuŋ<sup>55</sup>, xam<sup>55</sup>guã<sup>31</sup>  
 woodcutter, ɕuŋ<sup>55</sup>ua<sup>31</sup>su<sup>55</sup>  
 wooden partition, sɿ<sup>55</sup>lan<sup>33</sup>da<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>  
 woodpecker, k<sup>h</sup>o<sup>55</sup>na<sup>55</sup>  
 wool (goat), a<sup>31</sup>bɛ<sup>55</sup>min<sup>55</sup>  
 wool, fleece, a<sup>31</sup>iaŋ<sup>31</sup>min<sup>55</sup>  
 wool, knitting, ɕa<sup>55</sup>min<sup>31</sup>buŋ<sup>55</sup>  
 word; speech; character, k<sup>h</sup>a<sup>55</sup>  
 word; speech; character, sɿ<sup>55</sup>va<sup>31</sup>  
 work, to, sɿ<sup>35</sup>tɕ<sup>h</sup>in<sup>31</sup>ua<sup>55</sup>u<sup>31</sup>  
 work, do work, ua<sup>31</sup>u<sup>31</sup>, dɕa<sup>53</sup>  
 work; labor, la<sup>31</sup>ma<sup>35</sup>ue<sup>33</sup>  
 work; labor, a<sup>31</sup>p<sup>h</sup>aŋ<sup>35</sup>  
 worker; laborer, sɿ<sup>31</sup>lam<sup>55</sup>su<sup>55</sup>  
 world, mu<sup>31</sup>p<sup>h</sup>u<sup>31</sup>lan<sup>31</sup>  
 worm, kind of, bu<sup>31</sup>luŋ<sup>55</sup>bu<sup>31</sup>t<sup>h</sup>a<sup>55</sup>  
 worm; insect, bu<sup>31</sup>luŋ<sup>33</sup>  
 worm-eaten, moth-eaten, ʔa<sup>55</sup>do<sup>33</sup>do<sup>33</sup>  
 worm, earth, bu<sup>31</sup>ioŋ<sup>31</sup>  
 worn (clothing), ga<sup>31</sup>geŋ<sup>55</sup>  
 worry, take to heart, mo<sup>31</sup>dzuŋ<sup>53</sup>ɛ<sup>31</sup>  
 worship Buddha, sɿ<sup>55</sup>gu<sup>31</sup>  
 worth, be, ʔa<sup>31</sup>p<sup>h</sup>u<sup>31</sup>ɛ<sup>33</sup>  
 wound; cut, dza<sup>33</sup>ma<sup>55</sup>sa<sup>31</sup>  
 wound, sore, da<sup>33</sup>dzu<sup>55</sup>  
 wounded, injured, di<sup>31</sup>ts<sup>h</sup>o<sup>31</sup>dzɛ<sup>31</sup>, dʒi<sup>31</sup>la<sup>55</sup>  
 wrap around, la<sup>31</sup>tɕ<sup>h</sup>a<sup>55</sup>di<sup>31</sup>tɕ<sup>h</sup>uŋ<sup>53</sup>  
 wrap, to, gi<sup>31</sup>nu<sup>31</sup>  
 wrap, to, xuaŋ<sup>55</sup>, k<sup>h</sup>o<sup>33</sup>dzɿ<sup>55</sup>,  
 wrap, dumplings, di<sup>31</sup>p<sup>h</sup>u<sup>35</sup>  
 wrap a wound, dza<sup>33</sup>ma<sup>55</sup>p<sup>h</sup>an<sup>31</sup>sɿ<sup>35</sup>  
 wriggler, tɕ<sup>h</sup>ɿ<sup>35</sup>p<sup>h</sup>u<sup>31</sup>  
 wring, xua<sup>53</sup>guu<sup>31</sup>; xua<sup>55</sup>ŋu<sup>31</sup>  
 wring, twist, du<sup>31</sup>tɕ<sup>h</sup>im<sup>31</sup>  
 wrinkle, a<sup>31</sup>dʒu<sup>55</sup>guŋ<sup>55</sup>  
 wrinkle, ruffle, ga<sup>31</sup>mu<sup>31</sup>ŋ<sup>31</sup>p<sup>h</sup>ŋn<sup>55</sup>  
 wrinkled, creased, ŋ<sup>31</sup>k<sup>h</sup>u<sup>31</sup>lim<sup>55</sup>  
 wrinkled, creased, a<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup>  
 wrinkles; lines, a<sup>31</sup>du<sup>31</sup>guŋ<sup>55</sup>  
 wrist watch, na<sup>31</sup>li<sup>31</sup> (Burmese), nɛm<sup>31</sup>dʒaŋ<sup>31</sup>dɛm<sup>55</sup>

write, a<sup>31</sup>zu<sup>55</sup> (u<sup>31</sup>)  
 write a letter, le<sup>31</sup>ʂu<sup>55</sup>a<sup>31</sup>zu<sup>53</sup>  
 write from memory, ʂɿ<sup>55</sup>va<sup>31</sup>k<sup>h</sup>o<sup>55</sup>mo<sup>55</sup>ʎo<sup>31</sup>li<sup>31</sup>u<sup>31</sup>  
 write, make spots, p<sup>h</sup>a<sup>31</sup>zu<sup>55</sup>  
 writing (= book, by extension), ʂɿ<sup>55</sup>va<sup>31</sup>  
 writing brush, pi<sup>31</sup> (Ch.)  
 writing pad, ʂɿ<sup>55</sup>va<sup>31</sup>pu<sup>53</sup>  
 wrong, a<sup>31</sup>ba<sup>53</sup>ba<sup>31</sup>  
 wrong, a<sup>31</sup>ʕen<sup>31</sup> (ŋa<sup>31</sup>ba<sup>55</sup> a<sup>31</sup>ba<sup>31</sup>)  
 wrong, be; be in a mess, ma<sup>31</sup>du<sup>31</sup>dʒɿ<sup>31</sup>  
 wrought iron, ʕa<sup>31</sup>k<sup>h</sup>ʕ<sup>55</sup>ni<sup>55</sup>, xu<sup>55</sup>mi<sup>55</sup> (Lisu)

xero, de<sup>33</sup>gan<sup>55</sup>  
 Xianwei (place name), ɣu<sup>31</sup> dzu<sup>55</sup>

yak, non<sup>31</sup> (vowel unclear); uaŋ<sup>31</sup>  
 yam, ŋem<sup>31</sup> t<sup>h</sup>aŋ<sup>55</sup>  
 yam, sweet potato, a<sup>55</sup>mu<sup>33</sup>  
 yam, sweet potato, a<sup>31</sup>p<sup>h</sup>u<sup>55</sup>tʂ<sup>h</sup>ɿ<sup>33</sup>  
 yawn, to, di<sup>31</sup>gu<sup>31</sup>ɿ<sup>31</sup>dʒu<sup>53</sup>  
 yawn, to, a<sup>31</sup>sa<sup>31</sup>xam<sup>55</sup>e<sup>31</sup>  
 year after next, me<sup>55</sup>ŋaŋ<sup>31</sup>ua<sup>55</sup>  
 year before last, da<sup>33</sup>t<sup>h</sup>u<sup>55</sup>ŋaŋ<sup>33</sup>  
 year, last, tʕ<sup>h</sup>a<sup>33</sup>ua<sup>55</sup>  
 year, next, ne<sup>31</sup>so<sup>33</sup>ua<sup>55</sup>  
 year, this, de<sup>31</sup>ni<sup>55</sup>ua<sup>55</sup>  
 year; age, ŋ<sup>31</sup>ŋaŋ<sup>55</sup>; ŋaŋ<sup>55</sup>  
 year of the chicken (rooster), k<sup>h</sup>a<sup>55</sup>ŋaŋ<sup>33</sup>  
 year of the cow, nō<sup>31</sup>uā<sup>31</sup>ŋaŋ<sup>55</sup>  
 year of the dog, de<sup>31</sup>gŋ<sup>53</sup>ŋaŋ<sup>55</sup>  
 year of the dragon, lu<sup>31</sup>ŋaŋ<sup>55</sup>  
 year of the goat, a<sup>31</sup>be<sup>55</sup>ŋaŋ<sup>33</sup>  
 year of the horse, mā<sup>31</sup>ŋaŋ<sup>55</sup>  
 year of the monkey, ni<sup>31</sup>sa<sup>31</sup>ŋaŋ<sup>55</sup>  
 year of the pig, ʎo<sup>55</sup>ŋaŋ<sup>33</sup>  
 year of the rabbit, t<sup>h</sup>o<sup>31</sup>la<sup>55</sup>ŋaŋ<sup>33</sup>  
 year of the rat, a<sup>31</sup>din<sup>55</sup>ŋaŋ<sup>33</sup>  
 year of the snake, bu<sup>31</sup>ŋaŋ<sup>55</sup>  
 year of the tiger, a<sup>31</sup>k<sup>h</sup>aŋ<sup>31</sup>ŋaŋ<sup>55</sup>  
 yell, to, iaŋ<sup>55</sup>  
 yellow, gā<sup>55</sup> (dried up, withered)  
 yellow, p<sup>h</sup>u<sup>55</sup>  
 yellow, ʂɿ<sup>55</sup>ʂɿ<sup>55</sup>mm<sup>55</sup>  
 yesterday, tʂ<sup>h</sup>ɿ<sup>55</sup>ni<sup>31</sup>, tʕ<sup>h</sup>i<sup>55</sup>ni<sup>31</sup>  
 yesterday evening, tʕ<sup>h</sup>a<sup>55</sup>ma<sup>55</sup>ʂɿ<sup>55</sup>k<sup>h</sup>a<sup>55</sup>  
 Yi person, la<sup>35</sup>lo<sup>33</sup>p<sup>h</sup>u<sup>31</sup> (Lisu)  
 Yi nationality, la<sup>31</sup>bui<sup>31</sup>tʂ<sup>h</sup>ɿ<sup>55</sup>

- yield the road, ʃɿ<sup>31</sup>zɿn<sup>31</sup> ʃɿ<sup>55</sup>  
 yoke for crossing a cable bridge, a<sup>31</sup>v.ɿ<sup>55</sup>  
 yoke, cow, a<sup>55</sup>la<sup>55</sup>gun<sup>31</sup>  
 yoke, connecting, nɛ<sup>31</sup>k<sup>h</sup>ua<sup>31</sup>p<sup>h</sup>.ɿ<sup>55</sup>  
 yokes, frames, tsi<sup>55</sup>  
 yokes, frames, ʃu<sup>33</sup>  
 you plural, nɛ<sup>31</sup>ɿɿ<sup>55</sup>  
 you (possessive), nɛ<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 you two, nɛ<sup>31</sup>ɿɿ<sup>55</sup>si<sup>31</sup>  
 you, nɛ<sup>31</sup>  
 young (age), o<sup>31</sup>n.ɿɿ<sup>55</sup>tɕ<sup>h</sup>ɛ<sup>31</sup>mɛ<sup>55</sup>  
 young man, dza<sup>31</sup>gu<sup>31</sup>lɛ<sup>55</sup> (Lisu)  
 young man, gu<sup>31</sup>tɕ<sup>h</sup>aŋ<sup>55</sup>za<sup>55</sup>  
 young man, youngster, lad, di<sup>31</sup>ts<sup>h</sup>aŋ<sup>31</sup>za<sup>31</sup>  
 young married woman, female, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>55</sup>za<sup>55</sup>  
 young = not old, m<sup>31</sup>t<sup>h</sup>i<sup>31</sup>maŋ<sup>31</sup>  
 young woman; girl; daughter, ʃɿ<sup>31</sup>laŋ<sup>55</sup>za<sup>55</sup>  
 yours, nɛ<sup>31</sup>k<sup>h</sup>a<sup>31</sup>  
 yours (pl.), nɛ<sup>31</sup>n.ɿɿ<sup>55</sup>k<sup>h</sup>a<sup>31</sup>  
 yourself, nɛ<sup>31</sup>luŋ<sup>55</sup>  
 yuan (Chinese dollar), t<sup>h</sup>i<sup>55</sup>laŋ<sup>55</sup>

APPENDIX B

TEXTS<sup>1</sup>

TEXT ONE: CROSSBOWS

t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>  
Crossbows.

a<sup>31</sup>nuŋ<sup>31</sup> mu<sup>31</sup> a<sup>31</sup> na<sup>55</sup> mu<sup>31</sup> gu<sup>31</sup> da<sup>31</sup>tɕ<sup>h</sup>ɛ̃n<sup>31</sup> iɛ<sup>33</sup> luŋ<sup>55</sup>  
Anong place DEF MOOD place also steep be stone

gu<sup>31</sup> a<sup>31</sup>p<sup>h</sup>aŋ<sup>55</sup> mu<sup>31</sup> iɛ<sup>55</sup>,  
also cliff place be,

k<sup>h</sup>a<sup>31</sup>la<sup>31</sup>k<sup>h</sup>uŋ<sup>31</sup> iɛ<sup>33</sup>, ɕuŋ<sup>55</sup>dzuŋ<sup>55</sup> t<sup>h</sup>i<sup>31</sup>-dzuŋ<sup>55</sup> gu<sup>31</sup> tɕ<sup>h</sup>im<sup>31</sup>  
bamboo.gulley.deep be, tree one-CLF also house

dəŋ<sup>55</sup> 5tə<sup>53</sup> ɛ<sup>31</sup>.  
like.that big IND.

ɕuŋ<sup>55</sup>xəŋ<sup>35</sup> ba<sup>31</sup> na<sup>55</sup> ɕa<sup>55</sup> gu<sup>31</sup> ba<sup>31</sup>ʂ<sup>31</sup> ɲo<sup>33</sup> ɛ<sup>31</sup>,  
forest LOC MOOD wild.animal also very have IND,

ɕa<sup>55</sup>san<sup>55</sup>-dəm<sup>55</sup> ɲu<sup>31</sup>a<sup>31</sup> t<sup>h</sup>a<sup>31</sup>na<sup>55</sup> iɛ<sup>33</sup>. t<sup>h</sup>a<sup>31</sup>na<sup>55</sup> p<sup>h</sup>aŋ<sup>55</sup>  
hunt-AGT DEF crossbow be. crossbow spring

ɲu<sup>31</sup>a<sup>31</sup> a<sup>31</sup>ts<sup>h</sup>a<sup>55</sup> iɛ<sup>33</sup>.  
DEF mulberry.tree be.

t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>-k<sup>h</sup>uŋ<sup>55</sup> ɲu<sup>31</sup>a<sup>31</sup> k<sup>h</sup>o<sup>33</sup>bu<sup>55</sup> iɛ<sup>33</sup>, lim<sup>31</sup> gu<sup>33</sup> iɛ<sup>33</sup>,  
crossbow-stock DEF tree.name be, tree.name also be,

dzi<sup>31</sup>zə<sup>55</sup> gu<sup>33</sup> iɛ<sup>33</sup>,  
tree.name also be,

t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>-dzaŋ<sup>35</sup> a<sup>31</sup>dzo<sup>55</sup> ɲa<sup>33</sup> ɲ<sup>31</sup>tɕ<sup>h</sup>a<sup>31</sup>-a<sup>31</sup>zu<sup>35</sup>-li<sup>33</sup> t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>  
bow-install become CONJ bow-groove-system bow

va<sup>55</sup> mi<sup>55</sup>buŋ<sup>55</sup> mi<sup>53</sup> len<sup>35</sup>li<sup>33</sup> t<sup>h</sup>a<sup>31</sup>na<sup>55</sup>  
string linen.thread INSTR tighten bow

<sup>1</sup> See the notes at the end of the three texts.

k <sup>h</sup> o <sup>33</sup> tɕ <sup>h</sup> im <sup>55</sup>	dzaŋ <sup>55</sup> li <sup>33</sup>	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup>	go <sup>31</sup> lo <sup>55</sup>	dzaŋ <sup>55</sup> u <sup>31</sup>	li <sup>31</sup> ua <sup>53</sup> o <sup>33</sup> ,	
mechanism	spring	load	bow	mechanism	load,	
t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup>	ua <sup>55</sup> dɛm <sup>55</sup>	na <sup>33</sup>				
arrow	become	MOOD				
t <sup>h</sup> a <sup>31</sup> ua <sup>55</sup>	a <sup>31</sup> lu <sup>31</sup>	gu <sup>33</sup>	m <sup>31</sup> ɬa <sup>33</sup> ,	a <sup>31</sup> ɣban <sup>55</sup> xaŋ <sup>35</sup>	duŋ <sup>31</sup>	
dragon.bamboo	(type)	also	NEG-good,	(bamboo type)	LOC	
io <sup>55</sup>	ŋu <sup>31</sup>	a <sup>31</sup> lu <sup>31</sup>	si <sup>55</sup>	ɬa <sup>33</sup>	ɛ <sup>31</sup>	
have	DEF	bamboo	only	good	IND	
ɣo <sup>55</sup>	ŋu <sup>31</sup>	gu <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -ŋuŋ <sup>55</sup> -a <sup>31</sup> t <sup>h</sup> i <sup>31</sup>	tcha <sup>35</sup> iun <sup>31</sup>	mu <sup>53</sup>	
that	CLF	also	one-year	only	PL	
a <sup>31</sup>	m <sup>31</sup> ɬa <sup>55</sup>	ɛ <sup>31</sup> .	t <sup>h</sup> i <sup>31</sup> maŋ <sup>33</sup>			
DEF	NEG-good	IND.	old			
a <sup>31</sup> di <sup>55</sup> mu <sup>53</sup> ,	ŋ <sup>31</sup> dzuŋ <sup>55</sup>	gu <sup>31</sup>	tsa <sup>55</sup> si <sup>31</sup> mu <sup>53</sup> si <sup>55</sup> ɬa <sup>33</sup>	ɛ <sup>33</sup>		
PL,	bamboo	also	red.PRT.very.good	IND		
t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup>	la <sup>35</sup> na <sup>33</sup>	tɕ <sup>h</sup> uŋ <sup>55</sup> -tɕ <sup>h</sup> uŋ <sup>31</sup>				
arrow	seek.PRT	straight-REDUP				
mu <sup>53</sup>	m <sup>31</sup> go <sup>31</sup> laŋ <sup>53</sup>	mu <sup>53</sup>	si <sup>55</sup>	la <sup>35</sup>	ɛ <sup>55</sup> ,	t <sup>h</sup> a <sup>31</sup> ma <sup>55</sup>
PL	NEG-curve	PL	only	good	IND,	arrow
t <sup>h</sup> i <sup>31</sup>	mi <sup>53</sup>	na <sup>33</sup>	ɕa <sup>35</sup>	ɕɿ <sup>55</sup>	m <sup>31</sup> da <sup>55</sup> ,	
smooth	INSTR	CONJ	animal	die	NEG-able,	
ɕa <sup>55</sup> -ɕɿ <sup>55</sup> -dɛm <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>	p <sup>h</sup> u <sup>31</sup> la <sup>55</sup>		t <sup>h</sup> i <sup>55</sup> -tɕ <sup>h</sup> ɿ <sup>31</sup>	a <sup>31</sup> ne <sup>33</sup> ,	
animal-die-NOM	DEF	poisoned.arrow		one-kind	have,	
p <sup>h</sup> u <sup>31</sup> la <sup>55</sup>	iɛ <sup>55</sup>	ŋu <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup>			
poisoned.arrow	this	CLF	DEF			
a <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>55</sup> -tɕ <sup>h</sup> uŋ <sup>55</sup>	m <sup>31</sup> io <sup>55</sup> ,	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>31</sup>	io <sup>55</sup>	
casual-REDUP	NEG-have,	one-place	one-place	only	have	
ɛ <sup>31</sup> .	ŋ <sup>31</sup> io <sup>55</sup>	za <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>			
IND.	have	place	DEF			
zɿ <sup>31</sup> ɣuŋ <sup>55</sup>	ba <sup>31</sup>	si <sup>55</sup>	a <sup>31</sup> ne <sup>33</sup> .	ɕa <sup>33</sup> k <sup>h</sup> ɛ <sup>33</sup> -su <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>	
mountain	LOC	only	have.	hunter-AGT	DEF	
zɿ <sup>31</sup> ɣuŋ <sup>55</sup>	ba <sup>31</sup>	dzɿ <sup>55</sup>	li <sup>33</sup>			
mountain	LOC	go	DIR			
p <sup>h</sup> u <sup>31</sup> la <sup>55</sup>	k <sup>h</sup> ɛ <sup>31</sup>	ɛ <sup>31</sup>	bu <sup>33</sup>	ɛ <sup>33</sup> .	p <sup>h</sup> u <sup>31</sup> la <sup>55</sup>	
poisoned.arrow	pull	IND	go	IND.	poisoned.arrow	
dzuŋ <sup>55</sup>	za <sup>35</sup>	a <sup>31</sup> dzo <sup>33</sup>	na <sup>33</sup>	go <sup>55</sup> no <sup>33</sup> li <sup>33</sup>		
root	see	ASP	MOOD	squat		

tɕ<sup>h</sup>uŋ<sup>31</sup> ɛ<sup>35</sup> a<sup>31</sup>k<sup>h</sup>ɛ̃<sup>31</sup> ηu<sup>55</sup>ηa<sup>33</sup> ʔa<sup>31</sup>iun<sup>55</sup> xan<sup>35</sup> ba<sup>31</sup>  
 dig IND pull DEF grass.name piece LOC

ʔo<sup>35</sup>ʔo<sup>35</sup>ʔo<sup>35</sup>! nã<sup>55</sup>li<sup>33</sup> t<sup>h</sup>an<sup>33</sup>sɛ<sup>33</sup>,  
 cock-a-doodle-do cry roll,

t<sup>h</sup>i<sup>33</sup>-k<sup>h</sup>ɿ<sup>55</sup> k<sup>h</sup>ɛ̃<sup>33</sup>u<sup>33</sup> t<sup>h</sup>i<sup>31</sup>-k<sup>h</sup>ɿ<sup>55</sup> xo<sup>33</sup>-io<sup>55</sup> p<sup>h</sup>o<sup>35</sup>lo<sup>33</sup>-p<sup>h</sup>o<sup>35</sup>lo<sup>33</sup>  
 one-CLF pull one-CLF like.that roll.about-REDUP

ua<sup>33</sup> t<sup>h</sup>an<sup>33</sup>sɛ<sup>31</sup>,  
 do roll,

ʔo<sup>55</sup> ηu<sup>33</sup>a<sup>31</sup> ɕa<sup>55</sup> vam<sup>35</sup> a<sup>31</sup>dzo<sup>33</sup> t<sup>h</sup>a<sup>35</sup> nã<sup>55</sup>  
 like.that DEF wild.animal hit ASP TEMP cry

ηu<sup>31</sup> o<sup>33</sup>di<sup>33</sup> ʔo<sup>35</sup> tɕ<sup>h</sup>uŋ<sup>35</sup> a<sup>31</sup>dzo<sup>33</sup> na<sup>33</sup>  
 DEF like.that “Oh!” dig ASP MOOD

p<sup>h</sup>ɛn<sup>33</sup>dʒi<sup>33</sup> k<sup>h</sup>a<sup>31</sup> di<sup>31</sup>p<sup>h</sup>u<sup>35</sup> u<sup>31</sup>i<sup>33</sup>, tɕ<sup>h</sup>a<sup>31</sup>ma<sup>31</sup> dun<sup>53</sup>  
 moss LOC wrap CONJ, house LOC

ʒi<sup>35</sup>ɛ<sup>31</sup>ηo<sup>33</sup> tɕ<sup>h</sup>im<sup>31</sup> ba<sup>31</sup> t<sup>h</sup>u<sup>31</sup> na<sup>33</sup>,  
 back house LOC arrive MOOD,

p<sup>h</sup>om<sup>31</sup> ɕɛm<sup>55</sup> la<sup>53</sup> li<sup>31</sup>, p<sup>h</sup>om<sup>31</sup> ɕɛm<sup>55</sup> mi<sup>53</sup>  
 palm leaf seek CONJ, palm leaf INSTR

di<sup>31</sup>p<sup>h</sup>u<sup>35</sup>-u<sup>31</sup>, di<sup>31</sup>p<sup>h</sup>u<sup>35</sup> a<sup>31</sup>dzo<sup>33</sup> na<sup>33</sup>  
 wrap-ASP, wrap ASP MOOD

xam<sup>31</sup>dʒan<sup>55</sup> t<sup>h</sup>an<sup>53</sup> lam<sup>35</sup> t<sup>h</sup>i<sup>55</sup>-n<sup>h</sup>uŋ<sup>33</sup> tɕ<sup>h</sup>a<sup>33</sup>bu<sup>33</sup> t<sup>h</sup>a<sup>35</sup>  
 pit.fire.frame above roast.in.sun one-year duration TEMP

si<sup>55</sup> zã<sup>31</sup> bu<sup>33</sup>ɛ<sup>31</sup>.  
 only ability ASP.

zã<sup>31</sup> bu<sup>33</sup> t<sup>h</sup>a<sup>35</sup> p<sup>h</sup>u<sup>31</sup>la<sup>55</sup> k<sup>h</sup>ɿ<sup>55</sup> ηu<sup>31</sup> ηi<sup>31</sup>k<sup>h</sup>u<sup>55</sup>  
 ability ASP TEMP poisoned.arrow root DEF fire.ashes

dun<sup>55</sup> a<sup>31</sup>luŋ<sup>35</sup>u<sup>31</sup> li<sup>33</sup> ηuŋ<sup>55</sup> bu<sup>33</sup>t<sup>h</sup>a<sup>35</sup>,  
 LOC cover CONJ weak ASP,

k<sup>h</sup>o<sup>35</sup>u<sup>31</sup> li<sup>33</sup> t<sup>h</sup>a<sup>31</sup>ma<sup>55</sup> ba<sup>31</sup> a<sup>31</sup>ne<sup>35</sup> ɛ<sup>31</sup>  
 pound CONJ poisoned.arrow LOC rub IND

t<sup>h</sup>a<sup>31</sup>ma<sup>55</sup> ηu<sup>31</sup>a<sup>31</sup> la<sup>31</sup>p<sup>h</sup>uŋ<sup>55</sup> a<sup>31</sup>ts<sup>h</sup>u<sup>35</sup>u<sup>31</sup> li<sup>33</sup>.  
 arrow DEF head whittle CONJ.

a<sup>31</sup>ts<sup>h</sup>u<sup>55</sup> so<sup>33</sup> ʔi<sup>33</sup>li<sup>55</sup> ba<sup>31</sup> ʔgam<sup>35</sup> u<sup>31</sup>li<sup>33</sup> ʔgam<sup>35</sup>  
 whittle CONJ below CONJ blow CONJ blow

a<sup>31</sup>dzo<sup>33</sup> t<sup>h</sup>a<sup>35</sup> ɕi<sup>35</sup>tɕ<sup>h</sup>ɿ<sup>31</sup> mi<sup>53</sup> gu<sup>31</sup>lu<sup>31</sup>  
 ASP TEMP knife INSTR line.path

xuanj <sup>35</sup> rotate	u <sup>31</sup> li <sup>33</sup> CONJ	p <sup>h</sup> w <sup>31</sup> la <sup>55</sup> poisoned.arrow	a <sup>31</sup> dzam <sup>55</sup> glue	buw <sup>55</sup> u <sup>31</sup> ASP	ʔo <sup>55</sup> di <sup>35</sup> like.that		
ua <sup>55</sup> u <sup>31</sup> . ASP.	p <sup>h</sup> w <sup>31</sup> la <sup>55</sup> poisoned.arrow	lɛ̃ <sup>35</sup> ɛ <sup>33</sup> make	dzo <sup>33</sup> ŋa <sup>33</sup> ASP				
da <sup>31</sup> k <sup>h</sup> uã <sup>33</sup> dunj <sup>55</sup> quiver	dunj <sup>33</sup> a <sup>31</sup> . LOC	sa <sup>35</sup> u <sup>31</sup> load	li <sup>33</sup> CONJ	ŋ <sup>31</sup> da <sup>31</sup> tube			
k <sup>h</sup> am <sup>55</sup> -k <sup>h</sup> am <sup>35</sup> cover-REDUP	li <sup>33</sup> , CONJ	k <sup>h</sup> o <sup>33</sup> dzi <sup>55</sup> wrap	dunj <sup>33</sup> LOC	a <sup>31</sup> DEF			
sa <sup>35</sup> load	u <sup>31</sup> . ASP.	ɕa <sup>35</sup> k <sup>h</sup> ɛ̃ <sup>35</sup> hunt	buw <sup>55</sup> go	t <sup>h</sup> a <sup>35</sup> TEMP	zi <sup>35</sup> a <sup>31</sup> bo <sup>55</sup> back	li <sup>33</sup> CONJ	k <sup>h</sup> ɛ̃ <sup>33</sup> hit
buw <sup>55</sup> go	ɛ <sup>31</sup> . IND.						
ma <sup>55</sup> t <sup>h</sup> am <sup>53</sup> enclosed.area	t <sup>h</sup> auw <sup>31</sup> arrive	buw <sup>55</sup> go	t <sup>h</sup> a <sup>35</sup> TEMP	ɕa <sup>55</sup> animal	p <sup>h</sup> w <sup>31</sup> za <sup>55</sup> tracks	la <sup>55</sup> seek	
li <sup>33</sup> , CONJ	p <sup>h</sup> w <sup>31</sup> za <sup>55</sup> tracks	za <sup>35</sup> see	a <sup>31</sup> dzo <sup>33</sup> ASP	na <sup>33</sup> , CONJ,			
di <sup>31</sup> tɕ <sup>h</sup> enʔ <sup>35</sup> follow.tracks	li <sup>31</sup> , CONJ,	a <sup>31</sup> p <sup>h</sup> u <sup>55</sup> meet	a <sup>31</sup> dzo <sup>33</sup> ASP	t <sup>h</sup> a <sup>35</sup> CONJ	p <sup>h</sup> w <sup>31</sup> la <sup>55</sup> poisoned.arrow		
mi <sup>53</sup> INSTR	van <sup>35</sup> hit	u <sup>31</sup> , ASP	ɕa <sup>55</sup> p <sup>h</sup> w <sup>31</sup> wild.ox				
k <sup>h</sup> a <sup>31</sup> LOC	ŋa <sup>33</sup> p <sup>h</sup> w <sup>31</sup> la <sup>55</sup> poisoned.arrow	vam <sup>35</sup> shoot	a <sup>31</sup> dzo <sup>33</sup> ASP	t <sup>h</sup> a <sup>35</sup> , CONJ,	ɕa <sup>55</sup> luŋ <sup>55</sup> iron.arrow		
t <sup>h</sup> i <sup>31</sup> -dam <sup>55</sup> one-CLF	vam <sup>35</sup> hit	u <sup>31</sup> , ASP,	guw <sup>55</sup> t <sup>h</sup> a <sup>35</sup> TEMP				
a <sup>31</sup> iaŋ <sup>35</sup> si <sup>31</sup> slowly	za <sup>ʔ</sup> <sup>53</sup> pursue	a <sup>55</sup> buw <sup>55</sup> DIR	li <sup>33</sup> vi <sup>55</sup> poisoned	m <sup>31</sup> vi <sup>55</sup> ɛ <sup>31</sup> NEG-poisoned	ŋo <sup>33</sup> have		
ba <sup>31</sup> LOC	dzanj <sup>31</sup> see	ɛ <sup>33</sup> , IND	vi <sup>55</sup> ɛ <sup>31</sup> poisoned	ŋo <sup>33</sup> have	t <sup>h</sup> a <sup>35</sup> , TEMP,		
p <sup>h</sup> w <sup>31</sup> la <sup>55</sup> poisoned.arrow	k <sup>h</sup> ɛ̃ <sup>35</sup> pull	u <sup>55</sup> ASP	t <sup>h</sup> a <sup>31</sup> TEMP	o <sup>33</sup> di <sup>33</sup> equal	ua <sup>35</sup> ua <sup>35</sup> ua <sup>35</sup> Wa!Wa!Wa!	ŋã <sup>55</sup> cry	
ɛ <sup>31</sup> IND	xo <sup>35</sup> ŋw <sup>33</sup> sanj <sup>55</sup> sound	ba <sup>31</sup> LOC	to <sup>33</sup> listen	u <sup>31</sup> li <sup>33</sup> , CONJ			
la <sup>55</sup> seek	buw <sup>33</sup> go	ɛ <sup>31</sup> IND	za <sup>55</sup> see	a <sup>31</sup> dzo <sup>33</sup> ASP	ŋw <sup>31</sup> a <sup>31</sup> DEF	ŋ <sup>31</sup> sam <sup>31</sup> -sam <sup>35</sup> skin-REDUP	
li <sup>33</sup> , CONJ,	sam <sup>35</sup> peel	a <sup>31</sup> dzo <sup>33</sup> ASP	ŋw <sup>31</sup> a <sup>31</sup> DEF				

a <sup>31</sup> cut	p <sup>h</sup> uŋ <sup>35</sup> u <sup>31</sup> open	li <sup>33</sup> , CONJ,	t <sup>h</sup> i <sup>31</sup> vɛn <sup>31</sup> -m <sup>31</sup> -gʷuŋ <sup>55</sup> -su <sup>31</sup> God-NEG-discuss-AGT	mu <sup>53</sup> PL			
a <sup>31</sup> ŋ <sup>31</sup> DEF	bu <sup>31</sup> ɕin <sup>33</sup> lung	le <sup>55</sup> , a.bit	ŋ <sup>31</sup> i <sup>31</sup> su <sup>33</sup> lung	le <sup>55</sup> , a.bit			
ŋ <sup>31</sup> ni <sup>31</sup> .lom <sup>31</sup> heart	le <sup>55</sup> , a.bit,	ŋ <sup>31</sup> t <sup>h</sup> i <sup>31</sup> za <sup>55</sup> intestine	le <sup>55</sup> , a.bit,	ŋ <sup>31</sup> la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> head	ɕa <sup>33</sup> meat		
le <sup>55</sup> , a.bit,	t <sup>h</sup> i <sup>55</sup> t <sup>ʂ</sup> h <sup>31</sup> equal	le <sup>55</sup> a.bit	t <sup>h</sup> i <sup>55</sup> t <sup>ʂ</sup> h <sup>31</sup> equal	le <sup>55</sup> a.bit			
ʂ <sup>55</sup> p <sup>h</sup> a <sup>31</sup> bamboo.strip	k <sup>h</sup> a <sup>31</sup> LOC	ɕu <sup>35</sup> u <sup>31</sup> wear	li <sup>33</sup> , CONJ,	ʂŋ <sup>35</sup> -p <sup>h</sup> in <sup>33</sup> seven-slices	ɕu <sup>35</sup> u <sup>31</sup> wear		
li <sup>33</sup> , CONJ,	p <sup>h</sup> u <sup>31</sup> iä <sup>55</sup> ghost	m <sup>31</sup> gu <sup>31</sup> sacrifice	ɛ <sup>33</sup> , IND,				
t <sup>h</sup> i <sup>31</sup> vɛn <sup>31</sup> -gʷuŋ <sup>55</sup> -su <sup>33</sup> God-discuss-AGT	mu <sup>55</sup> PL	a <sup>31</sup> , DEF,	t <sup>h</sup> i <sup>31</sup> vɛn <sup>31</sup> ma <sup>55</sup> God	ʂu <sup>31</sup> gʷuŋ <sup>55</sup> pray			
ʂ <sup>31</sup> li <sup>31</sup> CONJ	ŋ <sup>35</sup> p <sup>h</sup> aŋ <sup>33</sup> after	si <sup>33</sup> only					
ɕa <sup>55</sup> meat	k <sup>h</sup> i <sup>33</sup> eat	ɛ <sup>31</sup> IND	le <sup>55</sup> a.bit	k <sup>h</sup> i <sup>33</sup> eat	dzu <sup>33</sup> ASP	na <sup>33</sup> CONJ	tɕ <sup>h</sup> im <sup>31</sup> house
ba <sup>31</sup> LOC	z <sup>55</sup> back	a <sup>31</sup> bo <sup>33</sup> li <sup>33</sup> DIR	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> head				
ŋu <sup>31</sup> a <sup>31</sup> DEF	ɕa <sup>55</sup> san <sup>55</sup> p <sup>h</sup> u <sup>31</sup> hunter	u <sup>31</sup> li <sup>33</sup> CONJ	tɕ <sup>h</sup> a <sup>33</sup> ma <sup>31</sup> house	duŋ <sup>55</sup> LOC	t <sup>h</sup> u <sup>31</sup> return		
bu <sup>31</sup> DIR	ŋu <sup>31</sup> a <sup>31</sup> , DEF	ɕa <sup>55</sup> beast.spirit	zu <sup>55</sup> Zu <sup>55</sup>				
di <sup>31</sup> k <sup>h</sup> u <sup>35</sup> sacrifice	u <sup>31</sup> li <sup>33</sup> , CONJ	ŋu <sup>31</sup> wine	ɕuŋ <sup>35</sup> put	u <sup>31</sup> li <sup>33</sup> , CONJ	a <sup>31</sup> ɕim <sup>55</sup> bamboo.slices		
tɕ <sup>h</sup> a <sup>35</sup> insert	u <sup>31</sup> li <sup>33</sup> , CONJ,	a <sup>31</sup> t <sup>ʂ</sup> h <sup>31</sup> aŋ <sup>31</sup> household	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> crossbow	na <sup>31</sup> CONJ			
ni <sup>31</sup> ABL	a <sup>31</sup> lin <sup>33</sup> run	bu <sup>33</sup> u <sup>31</sup> DIR	ŋu <sup>31</sup> DEF	a <sup>31</sup> io <sup>31</sup> I	t <sup>h</sup> a <sup>31</sup> na <sup>55</sup> crossbow	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> head	
k <sup>h</sup> a <sup>31</sup> le <sup>33</sup> LOC	a <sup>31</sup> p <sup>h</sup> u <sup>55</sup> meet						
iuŋ <sup>55</sup> , DIR	ua <sup>55</sup> li <sup>31</sup> like.that	m <sup>31</sup> dza <sup>35</sup> u <sup>31</sup> . opening.	ŋ <sup>31</sup> he	ɕa <sup>33</sup> meat	ŋu <sup>31</sup> a <sup>31</sup> DEF	t <sup>h</sup> i <sup>55</sup> -dzu <sup>31</sup> one-village	
ba <sup>31</sup> LOC	mu <sup>31</sup> gam <sup>31</sup> rich						



di <sup>31</sup> ca <sup>31</sup>	mi <sup>55</sup> ma <sup>33</sup>	di <sup>31</sup> te <sup>h</sup> u <sup>55</sup>	ba <sup>31</sup>	a <sup>31</sup> ʔdaŋ <sup>55</sup>	t <sup>h</sup> i <sup>31</sup> -zam <sup>55</sup>	
dome	widow	orphan	IO	whole	one-house	
le <sup>55</sup>	dzan <sup>55</sup> p <sup>h</sup> o <sup>33</sup>	li <sup>33</sup>				
a.bit	cut	CONJ				
dzɿ <sup>55</sup>	u <sup>31</sup> .	ŋ <sup>31</sup> a <sup>31</sup> xa <sup>35</sup>	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>	a <sup>31</sup> ʔdaŋ <sup>55</sup>	ya <sup>35</sup> u <sup>31</sup>
give	ASP	foot	head	DEF	all	boil
li <sup>33</sup>	ca <sup>55</sup> san <sup>55</sup> p <sup>h</sup> u <sup>31</sup>	zɿ <sup>31</sup>				
CONJ	hunter	PL				
ŋu <sup>31</sup>	ŋ <sup>31</sup> ts <sup>h</sup> ɿ <sup>31</sup>	ta <sup>55</sup> ti <sup>55</sup>	t <sup>h</sup> i <sup>33</sup> -zam <sup>55</sup>	le <sup>53</sup>	a <sup>31</sup>	a <sup>31</sup> ven <sup>55</sup>
DEF	soup	CONJ	one-house	a.bit	DEF	divide
li <sup>33</sup>	em <sup>53</sup>	ε <sup>55</sup> .				
DEF	eat	IND				

## ANONG TEXT ONE: CROSSBOWS

The Nu people live in a region with big and steeply sloped mountains and valleys that are filled with huge trees and thick forests. There are a lot of animals in those forests. The Nu used to hunt those animals with bow and arrow. The tongue of the bow is usually made of mulberry wood. The bow is made of wood from k<sup>h</sup>o<sup>33</sup>, lim<sup>31</sup>, or dzi<sup>31</sup>zɑ<sup>55</sup> trees. When making the bow, a groove for the arrow has to be carved. The bowstring is usually tightened with hemp string. A trigger mechanism has to be installed in the shooting component. Arrows are usually made of bamboo named a<sup>31</sup>lu<sup>31</sup>. Arrows made of the tha<sup>31</sup>ua<sup>55</sup> ‘dragon bamboo’ are usually of poor quality. Also, arrows must be made of old bamboo. One year old bamboo can not be used to make arrows. Some of the red color old bamboos are the best. Arrows made of such bamboo would not warp. The plain arrows cannot kill wild animals. Poisonous arrows must be made for such purposes. It is not easy to make poisonous arrows. The poison used to make poisonous arrows can only be found in the snow-capped mountains. When a hunter found the poisonous weed in a snow mountain, he would dig around it to pull out the root of the plant. Then the hunter would give out cries of happiness as he rolls on the ground. Each time he found one, he would cry out with joy while rolling on the ground, just as happy as when he catches an animal in hunting. After digging out the poisonous weed, the hunter would wrap it up in moss and bring it home. Then he would wrap it up well with palm skin to bake it over fire. A year

later, when the weed is thoroughly dry, the hunter would bury it in hot ash for a while to soften it before pounding it into powder using a mortar and pestle. The hunter would shave a thin layer off the surface of the part of the arrow head which he would smear with the poisonous powder. The poisonous arrows are then stored in a securely covered arrow holder. On a hunting trip, the hunter would keep the poisonous arrows in an arrow bag.

When the hunter reaches the area frequented by animals, he would follow the animals' tracks. When he comes across a big animal, he would shoot it with the poisonous arrow. When hunting wild oxen, he uses arrows with metal shell heads. When he hits the target, he takes his time to see the effect of the poison. When he sees the poison taking its effect in killing the animal, he would cry out with joy and roll on the ground, just as when he found the poisonous weed. Then he would skin the animal and cut it open. Those hunters who are not religious would cut a small piece of the animal's liver, lungs, heart, kidney and head and put them on a bamboo skewer to offer as a sacrifice to the ghost. Religious hunters would pray to God before roasting some meat over fire to eat. After the game is carried home, a sacrifice table will be set up with wine and bamboo strips to pray that on the next hunting trip, he will find animals frequently, and that even if other hunters come across animals, the animals will escape from them. After that, the meat would be divided equally among villagers regardless of whether they are rich or poor or single or orphaned. The head and feet of the game are used to make soup to be shared by the members of the hunter's family.

## TEXT TWO: OVERHEAD CABLES AND BOATS

	a <sup>31</sup> laŋ <sup>55</sup>		si <sup>55</sup>		a <sup>31</sup> su <sup>31</sup>	
	overhead cables		and		boats	
a <sup>31</sup> nun <sup>31</sup>	tɕ <sup>h</sup> u <sup>31</sup> mu <sup>31</sup>	t <sup>h</sup> aŋ <sup>33</sup>	k <sup>h</sup> u <sup>33</sup> tɕ <sup>h</sup> ɛ <sup>55</sup>	ie <sup>33</sup> tɕ <sup>h</sup> ɛ <sup>55</sup>	dzɿ <sup>55</sup>	
Anong	Nu.river	LOC	this.side	that.side	walk	
gu <sup>31</sup>	ba <sup>31</sup> ɣi <sup>31</sup>	di <sup>31</sup> ɕa <sup>31</sup>	ɛ <sup>33</sup> .			
also	very	difficulty	IND.			
a <sup>31</sup> ɕa <sup>35</sup> di <sup>31</sup> ts <sup>h</sup> uŋ <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>	<sup>31</sup> lam <sup>31</sup>	mi <sup>53</sup>	ŋu <sup>55</sup>	li <sup>33</sup>	
elders	DEF	bamboo.strip	INSTR	twist	CONJ	
a <sup>31</sup> laŋ <sup>55</sup>	len <sup>53</sup>	ɛ <sup>31</sup>	<sup>31</sup> laŋ <sup>55</sup>			
cable	horizontal.wear	IND	cable			
a <sup>31</sup> lam <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup>	k <sup>h</sup> a <sup>55</sup> ts <sup>h</sup> ɿ <sup>55</sup>	k <sup>h</sup> am <sup>55</sup>	gu <sup>31</sup>	m <sup>31</sup> la <sup>55</sup>	
bamboo.strip	DEF	what	bamboo	also	NEG- good	
ɛ <sup>33</sup> .	m <sup>55</sup> t <sup>h</sup> am <sup>55</sup>	ba <sup>31</sup>	io <sup>53</sup>	ŋu <sup>31</sup> a <sup>31</sup>		
IND.	mountain.top	LOC	have	DEF		
a <sup>31</sup> ban <sup>55</sup>	a <sup>31</sup> lam <sup>31</sup>	si <sup>55</sup>	ɬa <sup>55</sup>	ɛ <sup>33</sup> ,	mu <sup>33</sup> zu <sup>31</sup>	t <sup>h</sup> u <sup>31</sup>
bamboo.strip	CLF	only	good	IND,	summer	arrive
ŋu <sup>33</sup>	t <sup>h</sup> a <sup>35</sup>	a <sup>31</sup> guŋ <sup>55</sup>	li <sup>33</sup>	t <sup>h</sup> i <sup>55</sup> -zam <sup>55</sup>		
DEF	CONJ	discuss	CONJ	one-house		
a <sup>31</sup> ban <sup>35</sup>	t <sup>h</sup> i <sup>55</sup> -ts <sup>h</sup> a <sup>55</sup>	tɕ <sup>h</sup> em <sup>53</sup>	li <sup>33</sup>	a <sup>31</sup> di <sup>31</sup>	k <sup>h</sup> om <sup>31</sup>	
bamboo.strip	one-ten	split.open	CONJ	REC	put.together	
ɛ <sup>31</sup> ,	a <sup>31</sup> ban <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> -ts <sup>h</sup> a <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>			
IND,	bamboo.strip	one-ten	DEF			
ɕɛ <sup>55</sup> -ts <sup>h</sup> a <sup>55</sup>	tɕ <sup>h</sup> em <sup>53</sup>	a <sup>31</sup> nɛ <sup>33</sup> ,	tɕ <sup>h</sup> em <sup>33</sup> a <sup>31</sup>	dzo <sup>33</sup>	na <sup>33</sup>	
eight-ten	slices	have	split.open	ASP	CONJ	
a <sup>31</sup> laŋ <sup>55</sup>	t <sup>h</sup> aŋ <sup>31</sup> ba <sup>31</sup> ,	ɕa <sup>31</sup> na <sup>31</sup>	bo <sup>33</sup>	li <sup>33</sup> ,		
overhead.cable	LOC	pull	go	CONJ		
a <sup>31</sup> laŋ <sup>55</sup>	ŋu <sup>55</sup>	bu <sup>31</sup> ɛ <sup>33</sup>	ŋi <sup>55</sup> k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> u <sup>31</sup>	bu <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup> ,
cable	twist	DIR	next	arrive	DIR	DEF
t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup>	ba <sup>33</sup> ia <sup>55</sup> gun <sup>31</sup>	la <sup>55</sup>	u <sup>31</sup> li <sup>33</sup> ,			
some	tree.name	seek	CONJ,			

a <sup>31</sup> sa <sup>33</sup> earth	k <sup>h</sup> uã <sup>31</sup> hole	tɕ <sup>h</sup> uŋ <sup>31</sup> , dig	a <sup>31</sup> sa <sup>33</sup> earth	k <sup>h</sup> uã <sup>31</sup> hole	ŋu <sup>31</sup> a <sup>31</sup> ASP	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person
t <sup>h</sup> i <sup>55</sup> one	sɿ <sup>31</sup> CAUS	zom <sup>55</sup> stand	tɕ <sup>h</sup> uŋ <sup>31</sup> . dig			
tɕ <sup>h</sup> uŋ <sup>31</sup> dig	a <sup>31</sup> dzo <sup>33</sup> ASP	ŋu <sup>31</sup> a <sup>31</sup> DEF	bã <sup>33</sup> iã <sup>55</sup> gun <sup>31</sup> tree.name	som <sup>31</sup> three	gun <sup>31</sup> root	sa <sup>31</sup> u <sup>31</sup> load
li <sup>33</sup> , CONJ,	di <sup>31</sup> tɕ <sup>h</sup> i <sup>55</sup> surroundings	k <sup>h</sup> a <sup>31</sup> LOC	ŋu <sup>31</sup> a <sup>31</sup> DEF			
luŋ <sup>55</sup> stone	dzo <sup>55</sup> dzo <sup>33</sup> whole	a <sup>31</sup> dan <sup>31</sup> cork	bã <sup>33</sup> iã <sup>33</sup> gun <sup>31</sup> tree.name	tɕ <sup>h</sup> ã <sup>25</sup> hit	a <sup>31</sup> dzo <sup>33</sup> ASP	
ŋu <sup>31</sup> a <sup>31</sup> , DEF	a <sup>31</sup> ŋɛn <sup>55</sup> shake	m <sup>31</sup> da <sup>55</sup> NEG-able	bu <sup>31</sup> DIR			
t <sup>h</sup> a <sup>35</sup> CONJ	a <sup>31</sup> lan <sup>55</sup> cable	ŋuŋ <sup>55</sup> twist	ɛ <sup>33</sup> , IND,	a <sup>31</sup> lan <sup>55</sup> cable	ŋu <sup>31</sup> a <sup>31</sup> DEF	ba <sup>55</sup> su <sup>31</sup> k <sup>h</sup> a <sup>55</sup> first
ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> i <sup>u</sup> <sup>55</sup> intestines	u <sup>31</sup> li <sup>31</sup> , CONJ	a <sup>31</sup> lam <sup>31</sup> bamboo.strip				
t <sup>h</sup> i <sup>55</sup> -ts <sup>h</sup> a <sup>55</sup> one-ten	tɕ <sup>h</sup> ɛm <sup>53</sup> CLF	m <sup>31</sup> t <sup>h</sup> am <sup>35</sup> hold	u <sup>31</sup> li <sup>33</sup> CONJ	a <sup>31</sup> k <sup>h</sup> i <sup>31</sup> others	mu <sup>53</sup> PL	a <sup>31</sup> DEF
na <sup>55</sup> t <sup>h</sup> aŋ <sup>53</sup> above	xuaŋ <sup>53</sup> u <sup>33</sup> , coil.ASP	na <sup>55</sup> t <sup>h</sup> aŋ <sup>53</sup> above				
xuaŋ <sup>53</sup> coil	ŋu <sup>31</sup> a <sup>31</sup> DEF	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> i <sup>u</sup> <sup>55</sup> intestines	ŋu <sup>31</sup> DEF	m <sup>31</sup> zan <sup>55</sup> NEG-see	bu <sup>33</sup> u <sup>31</sup> ASP	
o <sup>55</sup> di <sup>33</sup> like.that	xuaŋ <sup>53</sup> coil	u <sup>31</sup> , ASP,	t <sup>h</sup> i <sup>55</sup> -tɕ <sup>h</sup> ɛm <sup>55</sup> one-CLF			
xuaŋ <sup>55</sup> coil	da <sup>53</sup> succeed	a <sup>31</sup> dzo <sup>33</sup> ASP	ŋu <sup>31</sup> a <sup>31</sup> , DEF	ŋ <sup>31</sup> pu <sup>55</sup> connect	ŋu <sup>31</sup> , DEF	
ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> i <sup>u</sup> <sup>55</sup> intestines	ɕuŋ <sup>55</sup> DEF	ka <sup>31</sup> tɕ <sup>h</sup> ɿ <sup>31</sup> mo <sup>33</sup> insert	a <sup>31</sup> p <sup>h</sup> i <sup>55</sup> again			
t <sup>h</sup> i <sup>35</sup> -tɕ <sup>h</sup> ɛm <sup>55</sup> one-slices	sɿ <sup>31</sup> t <sup>h</sup> i <sup>31</sup> o <sup>33</sup> connect	gu <sup>33</sup> also	ŋ <sup>31</sup> pu <sup>55</sup> connect.head	ŋu <sup>31</sup> DEF		
ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> i <sup>u</sup> <sup>55</sup> intestines	k <sup>h</sup> a <sup>31</sup> DEF	di <sup>33</sup> iaŋ <sup>35</sup> insert	li <sup>33</sup> , CONJ,			

xuan <sup>53</sup> coil	a <sup>31</sup> bo <sup>33</sup> , DIR	ʕɛn <sup>55</sup> -ts <sup>h</sup> a <sup>55</sup> eight-ten	lam <sup>33</sup> armspan	ɕan <sup>33</sup> many	t <sup>h</sup> a <sup>35</sup> , TEMP,	k <sup>h</sup> a <sup>55</sup> gen <sup>35</sup> put.place	
li <sup>33</sup> CONJ	a <sup>31</sup> k <sup>h</sup> i <sup>31</sup> in.addition	t <sup>h</sup> i <sup>55</sup> -buŋ <sup>55</sup> one-root					
ɳuŋ <sup>55</sup> twist	ɛ <sup>31</sup> , IND.	xo <sup>31</sup> io <sup>55</sup> like.that	som <sup>31</sup> three	buŋ <sup>55</sup> root	ɳuŋ <sup>55</sup> twist	a <sup>31</sup> dzo <sup>33</sup> ASP	t <sup>h</sup> a <sup>35</sup> , TEMP
som <sup>31</sup> three	buŋ <sup>55</sup> root	da <sup>33</sup> si <sup>55</sup> together	ɳuŋ <sup>55</sup> twist	li <sup>33</sup> . CONJ.			
ɕan <sup>35</sup> compete	a <sup>31</sup> dzo <sup>33</sup> ASP	ɳu <sup>31</sup> a <sup>31</sup> , DEF	gua <sup>31</sup> ts <sup>h</sup> a <sup>35</sup> man	mu <sup>53</sup> PL	ɳu <sup>31</sup> DEF		
k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup> opposite	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> part.of	dzɿ <sup>55</sup> walk	bu <sup>31</sup> li <sup>33</sup> , DIR,				
lo <sup>33</sup> dza <sup>35</sup> cable.rope.connection		mi <sup>53</sup> INSTR	ʂan <sup>31</sup> a <sup>33</sup> pull	bo <sup>55</sup> , DIR	k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup> opposite	ʂan <sup>55</sup> pull	
t <sup>h</sup> u <sup>31</sup> arrive	bu <sup>33</sup> DIR	t <sup>h</sup> a <sup>35</sup> , TEMP	k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup> opposite	k <sup>h</sup> a <sup>31</sup> LOC			
va <sup>31</sup> system	u <sup>31</sup> li <sup>33</sup> CONJ	a <sup>31</sup> REC	p <sup>h</sup> ɿuŋ <sup>55</sup> , untie	m <sup>31</sup> ɕa <sup>53</sup> NEG- work	o <sup>55</sup> di <sup>55</sup> like.that	ua <sup>55</sup> do	
u <sup>31</sup> ASP	k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup> opposite	va <sup>35</sup> system	a <sup>31</sup> dzo <sup>33</sup> ASP	t <sup>h</sup> a <sup>35</sup> CONJ			
ie <sup>31</sup> -tɕ <sup>h</sup> ɛ <sup>53</sup> this-side	ni <sup>53</sup> ABL	ʂan <sup>31</sup> pull	li <sup>33</sup> CONJ	a <sup>31</sup> du <sup>33</sup> suitable	bu <sup>33</sup> ASP	t <sup>h</sup> a <sup>35</sup> TEMP	si <sup>55</sup> only
t <sup>h</sup> a <sup>33</sup> o <sup>33</sup> , stop,	a <sup>31</sup> lan <sup>55</sup> cable	di <sup>31</sup> gu <sup>33</sup> -dɛm <sup>55</sup> slippery-NOM					
ɳu <sup>31</sup> a <sup>31</sup> DEF	a <sup>31</sup> vzɿ <sup>55</sup> slide.help	ie <sup>33</sup> , be	a <sup>31</sup> vzɿ <sup>55</sup> slide.help	ɳu <sup>31</sup> a <sup>31</sup> DEF	tɕ <sup>h</sup> i <sup>31</sup> ni <sup>55</sup> southside	mu <sup>31</sup> earth	
k <sup>h</sup> a <sup>31</sup> LOC	li <sup>55</sup> ko <sup>55</sup> dzuŋ <sup>55</sup> wood.kind	tɕ <sup>h</sup> uŋ <sup>35</sup> dig					
bu <sup>31</sup> go	ɛ <sup>31</sup> IND	iã <sup>33</sup> za <sup>55</sup> length	ɳu <sup>31</sup> a <sup>31</sup> DEF	som <sup>31</sup> three	bu <sup>31</sup> t <sup>h</sup> a <sup>55</sup> handspan	t <sup>h</sup> i <sup>55</sup> ba <sup>33</sup> , some,	
a <sup>31</sup> ni <sup>55</sup> two	bu <sup>31</sup> t <sup>h</sup> a <sup>55</sup> handspan	t <sup>h</sup> i <sup>55</sup> ba <sup>33</sup> some	o <sup>31</sup> io <sup>55</sup> like.that				
gã <sup>35</sup> o <sup>33</sup> chop	a <sup>31</sup> vzɿ <sup>35</sup> slide.help	t <sup>h</sup> an <sup>55</sup> above	ɳu <sup>31</sup> a <sup>31</sup> DEF	ɳ <sup>31</sup> ga <sup>35</sup> lu <sup>31</sup> slide.help.rear	ua <sup>55</sup> do		
u <sup>33</sup> di <sup>31</sup> ASP	ɕu <sup>31</sup> center	duŋ <sup>53</sup> ɳa <sup>33</sup> LOC	ɳ <sup>31</sup> k <sup>h</sup> uã <sup>31</sup> hole	iũ <sup>35</sup> wear	u <sup>31</sup> . ASP		

k <sup>h</sup> a <sup>55</sup> p <sup>h</sup> aŋ <sup>35</sup>	k <sup>h</sup> a <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup>	dzi <sup>55</sup> k <sup>h</sup> uŋ <sup>55</sup>	o <sup>55</sup> di <sup>31</sup>	tɕ <sup>h</sup> uŋ <sup>31</sup>
next	LOC	DEF	slide.groove	like.that	dig
p <sup>h</sup> a <sup>31</sup> za <sup>33</sup>	k <sup>h</sup> a <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup> ,	a <sup>31</sup> laŋ <sup>55</sup>		
width	LOC	DEF	cable		
dzɿ <sup>33</sup>	o <sup>33</sup> di <sup>33</sup>	ua <sup>55</sup> u <sup>31</sup> ,	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup>	k <sup>h</sup> a <sup>31</sup> dzɿ <sup>33</sup>
go	like.that	do ASP,	person	that.side	LOC walk
bu <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup>	ma <sup>33</sup> -dɛm <sup>55</sup>	mi <sup>53</sup>		
DIR	DEF	slide.ropo-NOM	INSTR		
a <sup>31</sup> vzɿ <sup>55</sup>	k <sup>h</sup> uɑ̃ <sup>31</sup>	ba <sup>31</sup>	ɕu <sup>35</sup> u <sup>31</sup>	li <sup>33</sup>	a <sup>31</sup> laŋ <sup>55</sup> k <sup>h</sup> a <sup>31</sup> va <sup>35</sup>
slide.help	hole	LOC	wear	CONJ	cable LOC fasten
u <sup>31</sup> .	t <sup>h</sup> i <sup>55</sup> -tɕ <sup>h</sup> ɑ̃ <sup>33</sup>	ŋu <sup>31</sup> a <sup>31</sup>	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>		
ASP.	one-side	DEF	person		
zɿ <sup>31</sup> gu <sup>31</sup>	ba <sup>31</sup>	k <sup>h</sup> a <sup>55</sup> va <sup>31</sup>	sɛ <sup>31</sup> ,	go <sup>31</sup> lo <sup>55</sup>	ba <sup>31</sup> t <sup>h</sup> i <sup>35</sup> -buŋ <sup>55</sup> ,
body	LOC	fasten	ASP,	neck	LOC one-root,
p <sup>h</sup> a <sup>31</sup> dzim <sup>55</sup>	ba <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -buŋ <sup>55</sup>			
waist	LOC	one-root			
dɑ <sup>31</sup> buŋ <sup>31</sup>	ba <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -buŋ <sup>55</sup>	va <sup>31</sup>	sɛ <sup>33</sup> ,	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> a <sup>31</sup> vu <sup>35</sup>
crotch	LOC	one-root	fasten	ASP	then hand
a <sup>31</sup> ni <sup>35</sup> -bu <sup>55</sup>	ŋu <sup>33</sup>	a <sup>31</sup> vzɿ <sup>55</sup>			
two-CLF	DEF	slide.help			
ga <sup>55</sup> lu <sup>31</sup>	ba <sup>31</sup>	dzom <sup>31</sup>	ʂɿ <sup>55</sup> li <sup>33</sup>	ʂɿ <sup>31</sup> -luŋ <sup>55</sup>	bu <sup>55</sup> ɛ <sup>33</sup> ,
back	LOC	seize	CONJ	CAUS-slippery	go,
gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup>	k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup>	t <sup>h</sup> u <sup>31</sup>	bu <sup>31</sup> ɛ <sup>31</sup> .		
then	that.side	arrive	DIR.		
a <sup>31</sup> laŋ <sup>55</sup>	iɛ <sup>33</sup>	ŋu <sup>33</sup>	ŋu <sup>31</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -ŋuŋ <sup>55</sup>	dɕuŋ <sup>55</sup> a <sup>31</sup> ni <sup>55</sup>
cable	this	kind	DEF	one-year	LOC two
dzaŋ <sup>31</sup>	som <sup>31</sup>	dzaŋ <sup>31</sup>	a <sup>31</sup>	tɕ <sup>h</sup> ɿ <sup>33</sup>	
times	three	times	REC	change	
dzo <sup>31</sup>	ɛ <sup>31</sup>	m <sup>31</sup> tɕ <sup>h</sup> ɿ <sup>33</sup>	lɛ <sup>33</sup> zɿ <sup>33</sup> a <sup>33</sup> ,	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	ʂɿ <sup>31</sup> -luŋ <sup>55</sup>
look	IND	NEG-change	CONJ	person	CAUS-slippery
ʂɿ <sup>31</sup> t <sup>h</sup> a <sup>35</sup>	p <sup>h</sup> a <sup>55</sup> -dɛm <sup>55</sup>	bu <sup>31</sup> ɛ <sup>31</sup> .			
CONJ	cut.off-NOM	IND.			
ua <sup>33</sup> ʂu <sup>55</sup>	t <sup>h</sup> a <sup>35</sup>	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup>	t <sup>h</sup> i <sup>31</sup> -io <sup>55</sup>	ŋu <sup>31</sup>	k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup>
before	TEMP	person	one-CLF	DEF	opposite
a <sup>31</sup> ni <sup>53</sup>	nõ <sup>31</sup> uɑ̃ <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -dɕu <sup>31</sup>	vɛn <sup>35</sup>	ɛ <sup>31</sup>	
ABL	OX	one-CLF	buy	IND	

a <sup>31</sup> lan <sup>55</sup> cable	k <sup>h</sup> a <sup>31</sup> LOC	ni <sup>53</sup> ABL	ɣ <sup>31</sup> -luŋ <sup>35</sup> CAUS-slippery	a <sup>31</sup> ia <sup>55</sup> come.over	li <sup>33</sup> , CONJ,		
di <sup>31</sup> qu <sup>33</sup> center	ba <sup>31</sup> DEF	ga <sup>55</sup> na <sup>33</sup> stop	dzɿ <sup>33</sup> remain	t <sup>h</sup> a <sup>35</sup> CONJ			
ie <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>53</sup> this.side	a <sup>31</sup> ni <sup>53</sup> ABL	lu <sup>35</sup> dzɿ <sup>33</sup> connect	li <sup>33</sup> CONJ	ŋ <sup>31</sup> he	dza <sup>35</sup> side	t <sup>h</sup> u <sup>31</sup> arrive	
dzɿ <sup>33</sup> t <sup>h</sup> a <sup>35</sup> TEMP	ʃan <sup>33</sup> -dem <sup>55</sup> bundle-NOM	a <sup>31</sup> lam <sup>31</sup> bamboo.strip	ŋu <sup>31</sup> DEF				
nō <sup>31</sup> uā <sup>31</sup> ox	a <sup>31</sup> vzɿ <sup>55</sup> slide.help	ba <sup>31</sup> k <sup>h</sup> a <sup>31</sup> LOC	va <sup>33</sup> fasten	ma <sup>31</sup> -t <sup>h</sup> a <sup>33</sup> NEG-strong	t <sup>h</sup> a <sup>35</sup> , CONJ,		
io <sup>33</sup> pun <sup>55</sup> shake	a <sup>31</sup> ni <sup>35</sup> INCH	li <sup>33</sup> CONJ	a <sup>31</sup> lan <sup>55</sup> cable	ŋu <sup>31</sup> a <sup>31</sup> DEF			
ŋɛ <sup>55</sup> mɛ <sup>31</sup> ŋɛ <sup>55</sup> swing-to-and-fro	t <sup>h</sup> a <sup>35</sup> TEMP	p <sup>h</sup> a <sup>55</sup> den <sup>ʔ55</sup> cut.off	dzi <sup>35</sup> ASP	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> life			
a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person	ta <sup>55</sup> ti <sup>55</sup> CONJ	nō <sup>31</sup> uā <sup>31</sup> OX	ta <sup>55</sup> ti <sup>55</sup> CONJ				
tɕ <sup>h</sup> u <sup>31</sup> mu <sup>31</sup> river	quŋ <sup>53</sup> LOC	a <sup>31</sup> dza <sup>55</sup> fall	dze <sup>35</sup> , ASP,	ŋ <sup>31</sup> man <sup>31</sup> corpse	li <sup>31</sup> also	m <sup>31</sup> zan <sup>35</sup> NEG-look	iun <sup>53</sup> . DIR.
ie <sup>31</sup> t <sup>h</sup> uŋ <sup>53</sup> winter	t <sup>h</sup> u <sup>31</sup> arrive	ŋu <sup>31</sup> DEF	t <sup>h</sup> a <sup>35</sup> TEMP	a <sup>31</sup> su <sup>31</sup> boat	zam <sup>55</sup> row	ba <sup>31</sup> LOC	
a <sup>31</sup> suŋ <sup>31</sup> prepare	sɛ <sup>55</sup> , ASP	a <sup>31</sup> su <sup>31</sup> boat	ŋu <sup>31</sup> a <sup>31</sup> DEF				
a <sup>31</sup> ban <sup>55</sup> bamboo.strip	xaŋ <sup>35</sup> mu <sup>31</sup> place	k <sup>h</sup> a <sup>31</sup> LOC	ʃ <sup>55</sup> dzuŋ <sup>55</sup> tree	la <sup>55</sup> seek	a <sup>55</sup> bu <sup>31</sup> DIR		
li <sup>33</sup> , CONJ	ʃ <sup>55</sup> dzuŋ <sup>55</sup> tree	ŋu <sup>31</sup> a <sup>31</sup> DEF	t <sup>h</sup> i <sup>31</sup> -dzuŋ <sup>55</sup> one-CLF				
gu <sup>31</sup> also	tɕ <sup>h</sup> im <sup>31</sup> house	ɕaŋ <sup>55</sup> like.that	ta <sup>53</sup> u <sup>31</sup> big	mu <sup>53</sup> PL	la <sup>55</sup> seek	bu <sup>31</sup> ɛ <sup>31</sup> , DIR,	
tɕ <sup>h</sup> a <sup>31</sup> ŋa <sup>35</sup> water	t <sup>h</sup> aŋ <sup>53</sup> over	m <sup>55</sup> zɿ <sup>53</sup> float	mu <sup>53</sup> PL	ɕuŋ <sup>55</sup> tree			
la <sup>55</sup> seek	li <sup>33</sup> , CONJ,	za <sup>55</sup> a <sup>31</sup> see	dzo <sup>33</sup> ASP	ŋu <sup>31</sup> a <sup>31</sup> DEF	p <sup>h</sup> u <sup>31</sup> zom <sup>35</sup> chop.down	a <sup>31</sup> io <sup>33</sup> DIR	
ʔi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> after	ŋu <sup>31</sup> a <sup>31</sup> DEF	t <sup>h</sup> i <sup>35</sup> -dzu <sup>33</sup> one-village	gua <sup>31</sup> tɕ <sup>h</sup> a <sup>55</sup> man				

a <sup>31</sup> dan <sup>33</sup> whole	a <sup>31</sup> vzɿ <sup>55</sup> show.up.for	bu <sup>55</sup> li <sup>33</sup> DIR	ʃɿ <sup>55</sup> dzuŋ <sup>55</sup> tree	dza <sup>53</sup> side	t <sup>h</sup> u <sup>31</sup> arrive	bu <sup>31</sup> go
ŋu <sup>31</sup> a <sup>31</sup> , DEF	ŋã <sup>33</sup> za <sup>55</sup> length	k <sup>h</sup> a <sup>31</sup> LOC	a <sup>31</sup> lin <sup>35</sup> CLF	li <sup>33</sup> CONJ		
t <sup>h</sup> u <sup>31</sup> chop	ɛ <sup>33</sup> , IND	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> some	t <sup>h</sup> u <sup>31</sup> chop	ŋu <sup>33</sup> a <sup>31</sup> , DEF,	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> some	a <sup>31</sup> p <sup>h</sup> aŋ <sup>35</sup> -su <sup>55</sup> labor-AGT
u <sup>a</sup> <sup>33</sup> do	sɛ <sup>33</sup> , ASP,	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> some	ŋu <sup>31</sup> a <sup>31</sup> DEF			
tɕ <sup>h</sup> uŋ <sup>55</sup> -su <sup>55</sup> dig-AGT	u <sup>a</sup> <sup>33</sup> do	pɛ <sup>33</sup> , MOOD,	a <sup>31</sup> ŋi <sup>55</sup> -k <sup>h</sup> a <sup>33</sup> two-CLF	tɕ <sup>h</sup> uŋ <sup>31</sup> dig	a <sup>31</sup> dzo <sup>33</sup> ASP	
ŋu <sup>31</sup> a <sup>31</sup> DEF	nɛm <sup>31</sup> sun	la <sup>35</sup> ma <sup>31</sup> io <sup>55</sup> roast.in.sun	li <sup>33</sup> , CONJ,			
ŋ <sup>31</sup> ts <sup>h</sup> a <sup>55</sup> dozens	ŋi <sup>33</sup> day	t <sup>h</sup> a <sup>35</sup> TEMP	si <sup>55</sup> only	ʃan <sup>31</sup> pull	bu <sup>31</sup> ɛ <sup>31</sup> . DIR,	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> a <sup>31</sup> one-CLF
m <sup>55</sup> ʃu <sup>31</sup> infront,	tʃ <sup>h</sup> ɿ <sup>31</sup> first	ʃan <sup>31</sup> block.way	a <sup>31</sup> io <sup>55</sup> , DIR			
a <sup>31</sup> su <sup>31</sup> boat	ŋu <sup>31</sup> DEF	u <sup>a</sup> <sup>55</sup> duŋ <sup>31</sup> big	zɿ <sup>33</sup> li <sup>33</sup> CONJ	t <sup>h</sup> i <sup>31</sup> -ts <sup>h</sup> a <sup>55</sup> one-ten	mi <sup>35</sup> INSTR	a <sup>31</sup> REC
ʃan <sup>31</sup> pull	m <sup>31</sup> dzo <sup>31</sup> NEG-work	t <sup>h</sup> i <sup>55</sup> -dzu <sup>31</sup> one-village	tɕ <sup>h</sup> ɛn <sup>31</sup> person			
a <sup>31</sup> dan <sup>33</sup> all	a <sup>31</sup> vzɿ <sup>55</sup> show.up.for	bu <sup>55</sup> li <sup>33</sup> , DIR,	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> some	m <sup>55</sup> ʃu <sup>31</sup> k <sup>h</sup> a <sup>55</sup> infront	ʃan <sup>31</sup> pull	
u <sup>31</sup> ASP	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> some	ʔi <sup>55</sup> zan <sup>31</sup> k <sup>h</sup> a <sup>53</sup> behind				
ʃan <sup>31</sup> pull	u <sup>31</sup> , ASP,	t <sup>h</sup> i <sup>55</sup> ba <sup>31</sup> some	ʃɿ <sup>55</sup> k <sup>h</sup> o <sup>55</sup> rod	lan <sup>35</sup> hold	u <sup>31</sup> li <sup>33</sup> CONJ	go <sup>55</sup> t <sup>h</sup> in <sup>35</sup> pry.open
m <sup>31</sup> bo <sup>55</sup> DIR	t <sup>h</sup> a <sup>35</sup> TEMP	ŋa <sup>31</sup> -su <sup>55</sup> pry.open-AGT				
u <sup>a</sup> <sup>33</sup> do	sɛ <sup>31</sup> ASP	ʃan <sup>31</sup> pull	ŋu <sup>31</sup> DEF	a <sup>31</sup> ŋi <sup>55</sup> -ŋi <sup>33</sup> two-day	t <sup>h</sup> a <sup>31</sup> TEMP	si <sup>55</sup> only
tɕ <sup>h</sup> u <sup>31</sup> mu <sup>31</sup> sa <sup>31</sup> riverside		t <sup>h</sup> u <sup>31</sup> arrive	bu <sup>31</sup> ɛ <sup>31</sup> . DIR.			



a <sup>31</sup> ni <sup>55</sup> -k <sup>h</sup> a <sup>31</sup>	di <sup>33</sup>	tɕ <sup>h</sup> u <sup>31</sup> mu <sup>31</sup> sa <sup>31</sup>	ʃan <sup>55</sup>	t <sup>h</sup> u <sup>35</sup>	a <sup>31</sup> dzo <sup>33</sup>
two-CLF	all	riverside	pull	arrive	ASP
t <sup>h</sup> a <sup>35</sup>	da <sup>33</sup> si <sup>55</sup>	k <sup>h</sup> ɛ <sup>55</sup> gen <sup>35</sup>	li <sup>33</sup>		
TEMP	together	put	CONJ		
la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	ba <sup>31</sup>	ʃ <sup>1</sup> 55k <sup>h</sup> o <sup>35</sup>	xam <sup>33</sup> da <sup>33</sup>	t <sup>h</sup> i <sup>31</sup> -k <sup>h</sup> o <sup>35</sup>	p <sup>h</sup> a <sup>35</sup> ŋo <sup>33</sup>
head	LOC	rod	horizontal.log	one-root	fasten
di <sup>31</sup> ɕu <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>31</sup> -k <sup>h</sup> o <sup>55</sup>			
center	LOC	one-root			
p <sup>h</sup> a <sup>35</sup> ŋo <sup>33</sup> ,	ŋ <sup>31</sup> ni <sup>55</sup> tɕ <sup>h</sup> uŋ <sup>55</sup>	k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> o <sup>55</sup>	p <sup>h</sup> a <sup>35</sup> ŋo <sup>33</sup> ,	
fasten	tail	LOC	one-root	fasten	
ŋ <sup>31</sup> ni <sup>33</sup> tɕ <sup>h</sup> uŋ <sup>53</sup>	k <sup>h</sup> a <sup>53</sup>	ŋu <sup>31</sup> a <sup>31</sup>			
tail	LOC	DEF			
la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	xua <sup>53</sup> -dem <sup>55</sup>	k <sup>h</sup> am <sup>33</sup>	t <sup>h</sup> i <sup>31</sup> -k <sup>h</sup> o <sup>55</sup>	ba <sup>31</sup>	ʃ <sup>1</sup> 55lan <sup>31</sup>
head	rotate-NOM	bamboo	one-root	LOC	rudder
t <sup>h</sup> i <sup>35</sup> -p <sup>h</sup> uŋ <sup>55</sup>	dzan <sup>35</sup>	a <sup>31</sup> li <sup>33</sup> ,			
one-slices	load	CONJ			
a <sup>31</sup> su <sup>31</sup>	ni <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>55</sup>	ba <sup>31</sup>	ŋ <sup>31</sup> k <sup>h</sup> uã <sup>31</sup>	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> uã <sup>31</sup>	iu <sup>35</sup>
boat	tail	LOC	hole	one-hole	chisel
ʔo <sup>31</sup> li <sup>33</sup> ,	ɕuŋ <sup>55</sup> -k <sup>h</sup> o <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> o <sup>55</sup>			
CONJ	tree-root	one-root			
tɕ <sup>h</sup> uŋ <sup>35</sup>	u <sup>31</sup> li <sup>33</sup>	a <sup>31</sup> su <sup>31</sup>	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	xua <sup>55</sup> -dem <sup>55</sup>	ŋu <sup>31</sup>
insert	CONJ	boat	head	rotate-NOM	DEF
ʔo <sup>55</sup> k <sup>h</sup> e <sup>31</sup>	p <sup>h</sup> a <sup>35</sup> ŋo <sup>31</sup> ,				
that.place	fasten				
t <sup>h</sup> i <sup>55</sup> -tɕ <sup>h</sup> ɛ <sup>31</sup>	ba <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup> ,	a <sup>31</sup> su <sup>31</sup>	a <sup>31</sup> vzi <sup>55</sup>	p <sup>h</sup> a <sup>35</sup> ŋo <sup>31</sup>
one-side	LOC	DEF	boat	starch	fasten
					li <sup>33</sup> ,
					CONJ,
t <sup>h</sup> i <sup>55</sup> -io <sup>ʔ</sup> <sup>55</sup>	a <sup>31</sup> t <sup>h</sup> i <sup>31</sup>	mi <sup>53</sup>			
one-CLF	have	INSTR			
k <sup>h</sup> u <sup>31</sup> -tɕ <sup>h</sup> ɛ <sup>55</sup>	iɛ <sup>31</sup> -tɕ <sup>h</sup> ɛ <sup>55</sup>	zam <sup>31</sup>	ɛ <sup>31</sup> .	iɛ <sup>31</sup>	ŋu <sup>55</sup> a <sup>31</sup>
that-side	this-side	row	IND.	this.way	DEF
					a <sup>31</sup> su <sup>31</sup>
					boat
dzi <sup>33</sup> k <sup>h</sup> uŋ <sup>33</sup>	iɛ <sup>33</sup> .				
punt.pole	be.				
a <sup>31</sup> k <sup>h</sup> i <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup>	t <sup>h</sup> a <sup>31</sup> ua <sup>33</sup>	mi <sup>53</sup>	gu <sup>31</sup>	zam <sup>31</sup>
others	DEF	dragon.bamboo	INSTR	also	row
					ɛ <sup>55</sup>
					IND
t <sup>h</sup> a <sup>31</sup> ua <sup>33</sup>	iɛ <sup>33</sup> -ŋu <sup>33</sup>	a <sup>31</sup>	ŋ <sup>31</sup> m <sup>55</sup> ni <sup>33</sup>		
bamboo	this-CLF	DEF	delicate		

dɛ <sup>31</sup> ni <sup>55</sup> ua <sup>55</sup>	si <sup>55</sup>	io <sup>55</sup>	ɲu <sup>31</sup>	mu <sup>53</sup>	t <sup>h</sup> i <sup>55</sup> -ts <sup>h</sup> a <sup>55</sup>	k <sup>h</sup> o <sup>55</sup>
this.year	only	have	DEF	PL	one-ten	root
t <sup>h</sup> aŋ <sup>53</sup> ,	ua <sup>55</sup> u <sup>31</sup>	li <sup>33</sup>	a <sup>31</sup> tɕ <sup>h</sup> ɿ <sup>55</sup>	dzaŋ <sup>31</sup>		
above,	do	CONJ	sand	beach		
ba <sup>31</sup>	t <sup>h</sup> u <sup>31</sup>	bu <sup>31</sup>	ɲu <sup>31</sup> a <sup>31</sup>	di <sup>31</sup> ɬu <sup>31</sup>	k <sup>h</sup> o <sup>35</sup>	ɲu <sup>31</sup> a <sup>31</sup> ,
LOC	arrive	go	DEF	center	root	DEF,
m <sup>55</sup> ʂu <sup>31</sup> k <sup>h</sup> a <sup>53</sup>	lɛ <sup>55</sup>	ɲã <sup>31</sup>	ua <sup>55</sup>	u <sup>31</sup> .		
infront	a.bit	long	do	ASP.		
k <sup>h</sup> u <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>55</sup>	iɛ <sup>31</sup> tɕ <sup>h</sup> ɛ <sup>55</sup>	ɲu <sup>31</sup> a <sup>31</sup>	ŋi <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	t <sup>h</sup> i <sup>31</sup> -k <sup>h</sup> o <sup>55</sup>	t <sup>h</sup> uŋ <sup>55</sup>	
that.side	this.side	DEF	next	one-root	short	
bo <sup>33</sup>	ŋo <sup>33</sup> di <sup>33</sup>	ua <sup>55</sup>	u <sup>31</sup> li <sup>33</sup> ,			
DIR	like.that	do	CONJ,			
a <sup>31</sup> su <sup>31</sup>	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	k <sup>h</sup> a <sup>31</sup>	xam <sup>33</sup> da <sup>33</sup>	ua <sup>33</sup>	ɕuŋ <sup>55</sup> -k <sup>h</sup> o <sup>55</sup>	
boat	head	LOC	rod	do	tree-root	
t <sup>h</sup> i <sup>31</sup> -k <sup>h</sup> o <sup>35</sup>	mi <sup>53</sup>	p <sup>h</sup> a <sup>35</sup> ŋo <sup>33</sup>	di <sup>31</sup> ɬu <sup>33</sup>	ɛ <sup>31</sup>		
one-root	INSTR	fasten	center	IND		
a <sup>31</sup> ni <sup>55</sup> -k <sup>h</sup> o <sup>55</sup>	p <sup>h</sup> a <sup>35</sup> ŋo <sup>33</sup> ,	ŋ <sup>31</sup> ni <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>55</sup>	k <sup>h</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>31</sup> -k <sup>h</sup> o <sup>55</sup>		
two-root	fasten	tail	LOC	one-root		
p <sup>h</sup> a <sup>35</sup> ŋo <sup>33</sup>	a <sup>31</sup> su <sup>31</sup>	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	ba <sup>31</sup>			
fasten	boat	head	LOC			
a <sup>31</sup> lam <sup>31</sup>	lɛn <sup>35</sup>	u <sup>31</sup> li <sup>33</sup>	di <sup>31</sup> tɕ <sup>h</sup> ɿ <sup>55</sup>	ba <sup>31</sup> k <sup>h</sup> a <sup>55</sup>	va <sup>33</sup> -dɛm <sup>35</sup>	
bamboo.strip	fix	CONJ	side	LOC	fasten-NOM	
ua <sup>55</sup>	u <sup>31</sup>	a <sup>31</sup> su <sup>31</sup>	a <sup>31</sup> vzi <sup>55</sup>	ɲu <sup>31</sup> a <sup>31</sup>		
do	ASP	boat	starch	DEF		
t <sup>h</sup> i <sup>55</sup> -lam <sup>33</sup>	ɲã <sup>31</sup>	ua <sup>55</sup>	o <sup>33</sup> li <sup>33</sup> ,	k <sup>h</sup> am <sup>33</sup>	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>	ba <sup>33</sup>
one-armspan	long	do	CONJ	bamboo	head	LOC
ɲu <sup>31</sup> a <sup>31</sup>	sɿ <sup>55</sup> laŋ <sup>31</sup>	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup>				
DEF	starch	head				
dzaŋ <sup>35</sup>	u <sup>31</sup> li <sup>33</sup>	zam <sup>55</sup>	ɛ <sup>31</sup>	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup>	k <sup>h</sup> u <sup>31</sup> -tɕ <sup>h</sup> ɛ <sup>55</sup>	
load	CONJ	row	IND	then	that-side	
iɛ <sup>31</sup> -tɕ <sup>h</sup> ɛ <sup>55</sup>	dzi <sup>33</sup>	ɬa <sup>33</sup>	bu <sup>31</sup>	ɛ <sup>31</sup> .		
this-side	walk	good	DIR	IND.		

## ANONG TEXT TWO: SLIDING CABLES AND BOATS

In the past, transportation between the two sides of the Nujiang was very difficult. The ancestors used to make ropes out of bamboo strips, which they called sliding cables, to use as a means of crossing the river. What kind of bamboo strips are the best for making sliding cables? Usually, a special variety of bamboo used specifically for producing bamboo strips is preferable. When the summer comes, people begin to discuss plans for making the cables. Each household is responsible for cutting ten bamboo from the mountains and producing 80 bamboo strips. Then all of the bamboo strips will be gathered together to be transported to the spot where the sliding cable across the Nujiang will be installed. To install the sliding cable, first three poles of a kind of tree called *ba<sup>33</sup>ia<sup>33</sup>gun<sup>31</sup>* have to be found. Then a hole is dug in the ground. The three poles are inserted into the hole which is then filled with stones to make sure that the poles are solidly secured. Then one person will put 10 bamboo strips together as the center of a cable (like intestines) which are held together tightly while others wrap bamboo strips around the bundle. Where two bamboo strips meet, the ends are inserted into the center bundle so that no rough ends will stick out. When the cable reaches 80 chi (= 87.28 feet) in length, it is put aside. When three such cables are made, they are combined to make the big cable to be used as the sliding cable. When the big cable is completed, some men will find a way to get to the other side of the river while pulling one end of the big cable with them. Once they reach the other side of the river, they securely fasten the big cable to a wooden pole. Then the big cable is pulled taut. To use the sliding cable to cross the river, it needs a sliding harness, which is made of a hollowed-out section of a type of hard wood from southern China. It is about the length of three handspans between the tip of the middle finger and the tip of the thumb (= two feet). Sometimes it is two spans (= about one and a half feet) in length. The back of the harness has a hole below which there is a ladder. To slide across the river, a rope is threaded through the harness hole with the lower part being fastened to the person's pelvis, abdomen, and neck areas. The person grabs onto the back of the harness while sliding to the other side of the river.

Each year, the cable has to be replaced twice or three times. If it is not replaced in a timely manner, the cable may snap when being used. One time, there was this person who bought a cow from a place on

the other side of the river. He tried to slide the cow across the river. When the cow reached the middle, another person slid to the middle to reach the cow to secure the cow to the sliding harness with bamboo strips. At that point, the cow started to sway making the sliding cable sway with it. All of a sudden, the cable snapped, and that person fell into the river with the cow. Both were drowned and they never found that person's body.

In winter, when the river tide is low, wooden boats are used. The material used for making the boat comes from the mountain where bamboo for making bamboo strips can be found. They look for trees that are as big as a house. Once they find one, they cut it down. All of the young men from the village would go to cut out the inside based on the length they need for making the boat. Some dig out the inside of the middle while others dig out the inside of the ends. Then it is placed in the sun to air dry. Dozens of days later, it is brought back down to the riverside. If the tree is too big to be transported by a few dozen people, then everybody from the village take part in the effort. Some pull in the front, some push from the back, and some use wooden poles to pry it along. Sometimes it takes two days to drag it to the riverside. Usually, this kind of boat is made up of two hollowed-out logs both ends of which and the middle are fastened together using wooden poles to make them into the shape of a boat. At the head of the boat, there is an oar made of golden bamboo, and at the end of the boat, a hole is made for the rudder that is made of golden bamboo and wood. This enables the boat to turn so that it can be rowed back and forth between the two sides of the river.

Another kind of boat is made of dragon bamboo. One-year-old dragon bamboo is no good for making the boat. Usually ten or more bamboo poles are needed and the boat is usually made on the beach of the river. The bamboo pole in the center is a bit longer and each of the subsequent ones is slightly shorter on both sides of the center pole producing an arrow head shape of the head of the boat. The head, middle and end of the boat are also secured using wooden poles fastened with bamboo strips. An arms' length (= 5 to 6 feet) oar made of bamboo is used to row the boat back and forth between the two sides of the river.

## TEXT THREE: PYTHONS

lan <sup>55</sup> pythons						
a <sup>31</sup> k <sup>h</sup> u <sup>31</sup> zam <sup>55</sup> formerly	t <sup>h</sup> a <sup>35</sup> TEMP	ŋ <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person	t <sup>h</sup> i <sup>55</sup> -bu <sup>31</sup> zom <sup>35</sup> one-house	ŋo <sup>55</sup> have	ε <sup>31</sup> , IND,	
ŋ <sup>31</sup> tɕ <sup>h</sup> a <sup>31</sup> mu <sup>31</sup> girl	kun <sup>55</sup> -io <sup>55</sup> SIX-CLF					
ŋo <sup>55</sup> have	ε <sup>31</sup> . IND.	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> father	a <sup>55</sup> DEF	o <sup>31</sup> mo <sup>35</sup> long.ago	u <sup>33</sup> li <sup>33</sup> CONJ	ʃŋ <sup>55</sup> dʒɛ <sup>35</sup> ua <sup>33</sup> , ASP,
t <sup>h</sup> i <sup>55</sup> -ŋi <sup>33</sup> one-day	ŋu <sup>31</sup> a <sup>31</sup> DEF	ŋ <sup>31</sup> mu <sup>31</sup> 3P-mother				
a <sup>33</sup> dʒŋ <sup>31</sup> cogon.grass	ʃan <sup>53</sup> cut	dʒɛ <sup>35</sup> ε <sup>31</sup> ua <sup>33</sup> , ASP,	a <sup>31</sup> ʃŋ <sup>55</sup> k <sup>h</sup> a <sup>55</sup> nightfall	a <sup>33</sup> dʒŋ <sup>31</sup> cogon.grass		
t <sup>h</sup> i <sup>55</sup> -yo <sup>33</sup> one-back	zŋ <sup>55</sup> back	o <sup>31</sup> li <sup>33</sup> , DIR,				
lo <sup>33</sup> return	t <sup>h</sup> u <sup>31</sup> arrive	a <sup>31</sup> i <sup>33</sup> ua <sup>33</sup> DIR	a <sup>33</sup> dʒŋ <sup>31</sup> cogon.grass	yo <sup>33</sup> back	ŋu <sup>31</sup> a <sup>31</sup> , DEF,	
tɕ <sup>h</sup> im <sup>31</sup> house	t <sup>h</sup> aŋ <sup>53</sup> above	na <sup>33</sup> CONJ	a <sup>31</sup> dʒa <sup>33</sup> , put,			
a <sup>31</sup> dɛ <sup>33</sup> a <sup>31</sup> a.little.while	a <sup>33</sup> dʒŋ <sup>31</sup> cogon.grass	lam <sup>55</sup> roast.in.sun	ba <sup>31</sup> u <sup>33</sup> LOC	ʃŋ <sup>31</sup> think	li <sup>33</sup> , CONJ	
a <sup>33</sup> dʒŋ <sup>31</sup> cogon.grass	ʔo <sup>55</sup> -ŋu <sup>31</sup> that-CLF	p <sup>h</sup> .uun <sup>55</sup> untie	ua <sup>33</sup> , ASP			
a <sup>33</sup> dʒŋ <sup>31</sup> cogon.grass	yo <sup>33</sup> back	ɕun <sup>31</sup> LOC	ne <sup>55</sup> ABL	ŋu <sup>31</sup> a <sup>31</sup> DEF	lan <sup>55</sup> python	
t <sup>h</sup> i <sup>55</sup> -ɕu <sup>31</sup> one-CLF	ŋo <sup>55</sup> have	a <sup>31</sup> dʒi <sup>33</sup> u <sup>33</sup> , ASP	lan <sup>55</sup> python	mi <sup>53</sup> CAUS		
a <sup>31</sup> ʃa <sup>55</sup> mu <sup>31</sup> old granny	ba <sup>31</sup> IO	k <sup>h</sup> i <sup>55</sup> bite	ba <sup>31</sup> LOC	yo <sup>33</sup> want	li <sup>33</sup> , CONJ,	ŋa <sup>31</sup> you
tɕ <sup>h</sup> a <sup>31</sup> mu <sup>31</sup> girl	ŋu <sup>31</sup> DEF	t <sup>h</sup> i <sup>55</sup> -io <sup>55</sup> one-CLF	dʒŋ <sup>55</sup> give	a <sup>31</sup> i <sup>33</sup> , DIR		

m <sup>31</sup> dʒ <sup>55</sup>	i <sup>31</sup> le <sup>33</sup> ,	ŋa <sup>31</sup>	ba <sup>31</sup>	k <sup>h</sup> iŋ <sup>55</sup>	ɕuŋ <sup>33</sup> ε <sup>31</sup>	ve <sup>33</sup>	
NEG-give	CONJ,	you	PASS	bite	be.going.to	speak	
ua <sup>33</sup> ,	le <sup>33</sup>	dʒ <sup>55</sup>	ɕu <sup>33</sup>		a <sup>31</sup> li <sup>33</sup> ,		
ASP,	like.that	give	be.going.to		DIR		
t <sup>h</sup> a <sup>31</sup>	k <sup>h</sup> i <sup>55</sup>	ε <sup>31</sup> i <sup>55</sup> ,	ŋ <sup>31</sup> mu <sup>31</sup>	mi <sup>53</sup> ,	ŋ <sup>31</sup> tɕ <sup>h</sup> a <sup>31</sup> mu <sup>31</sup>		
don't	bite	DIR,	mother	CAUS	girl		
ʈa <sup>53</sup> ʎo <sup>31</sup> -io <sup>55</sup>		ŋu <sup>31</sup> a <sup>31</sup>	ŋa <sup>31</sup>				
eldest-CLF		DEF	you				
ʈo <sup>55</sup>	bu <sup>33</sup>	la <sup>35</sup> ,	a <sup>31</sup> mu <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	k <sup>h</sup> i <sup>55</sup>	ba <sup>31</sup> ua <sup>33</sup> se <sup>31</sup> ,	ŋa <sup>31</sup>
go	DIR	MOOD,	mother	IO	bite	ASP,	you
le <sup>53</sup>	ʈo <sup>35</sup>	bu <sup>33</sup> a <sup>31</sup>					
if	return	DIR					
a <sup>31</sup> mu <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	m <sup>31</sup> k <sup>h</sup> i <sup>35</sup>	ua <sup>33</sup> ,	ʈo <sup>55</sup>	bu <sup>33</sup>	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup>	
mother	IO	NEG- bite	ASP	go	DIR	then	
ŋ <sup>31</sup> tɕ <sup>h</sup> mu <sup>33</sup>		ŋu <sup>31</sup> ,					
girl		DEF					
lan <sup>55</sup>	ba <sup>31</sup>	ŋa <sup>31</sup>	m <sup>31</sup> lon <sup>55</sup>	buŋ <sup>55</sup>	ie <sup>33</sup>	a <sup>31</sup> ŋi <sup>33</sup>	
python	IO	you	NEG-go	DIR	this	second.oldest	
ba <sup>31</sup>	ʈo <sup>55</sup> bu <sup>31</sup>	la <sup>35</sup>	gen <sup>33</sup> no <sup>33</sup>	ua <sup>33</sup> ,			
IO	go	DIR	speak	ASP,			
a <sup>55</sup> ŋi <sup>31</sup>	gu <sup>33</sup>	lan <sup>55</sup>	ba <sup>31</sup>	ŋa <sup>31</sup>	m <sup>31</sup> ŋon <sup>33</sup>	ve <sup>33</sup>	
second	also	python	IO	you	NEG-willing	speak	
ua <sup>33</sup> .	a <sup>55</sup> tɕ <sup>h</sup> an <sup>33</sup>	ba <sup>31</sup>					
ASP.	3rd.person ?	IO					
ʈo <sup>35</sup>	bu <sup>31</sup>	la <sup>35</sup>	ve <sup>33</sup>	ua <sup>33</sup> ,	a <sup>55</sup> tɕ <sup>h</sup> an <sup>33</sup>	gu <sup>31</sup>	
go	DIR	SUP	speak	ASP	3rd.person	also	
bu <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>	ŋa <sup>31</sup>	m <sup>31</sup> luŋ <sup>55</sup>	ve <sup>33</sup>	ua <sup>33</sup> ,		
snake	IO	I	NEG-go	speak	ASP,		
k <sup>h</sup> a <sup>55</sup> p <sup>h</sup> an <sup>33</sup>	t <sup>h</sup> i <sup>31</sup> -io <sup>55</sup>	ʒŋ <sup>55</sup>	o <sup>33</sup> ua <sup>33</sup> ,	m <sup>31</sup> luŋ <sup>55</sup>	di <sup>33</sup>	ve <sup>33</sup>	
next	one-CLF	ask	ASP,	NEG-go	all	speak	
ua <sup>33</sup> ,	ŋ <sup>31</sup>	t <sup>h</sup> a <sup>55</sup> t <sup>h</sup> an <sup>31</sup>					
ASP	he	finally					

zɿn <sup>55</sup> ask	t <sup>h</sup> u <sup>31</sup> arrive	dʒɛ <sup>35</sup> ua <sup>33</sup> . ASP.	lɛ <sup>55</sup> like.that	a <sup>55</sup> gin <sup>55</sup> six(th)	ŋa <sup>31</sup> you	fo <sup>55</sup> go	bu <sup>33</sup> DIR
la <sup>35</sup> SUP	vɛ <sup>33</sup> speak	ua <sup>33</sup> , ASP,	a <sup>31</sup> ? Q				
a <sup>31</sup> mu <sup>31</sup> mother	k <sup>h</sup> a <sup>31</sup> IO	k <sup>h</sup> i <sup>55</sup> bite	ba <sup>31</sup> ua <sup>33</sup> se <sup>33</sup> , ASP,	a <sup>55</sup> gin <sup>55</sup> six(th)	ua <sup>33</sup> MOOD	ŋa <sup>31</sup> you	
a <sup>31</sup> mu <sup>31</sup> mother	ʂɿ <sup>33</sup> die	bo <sup>33</sup> DIR	t <sup>h</sup> aŋ <sup>55</sup> a <sup>31</sup> , fix,				
loŋ <sup>35</sup> return	buŋ <sup>31</sup> go	ɛ <sup>31</sup> DIR	ua <sup>33</sup> li <sup>33</sup> CONJ	la <sup>55</sup> return	dʒɛ <sup>35</sup> go	ua <sup>33</sup> , ASP	
t <sup>h</sup> i <sup>31</sup> za <sup>31</sup> path	ɬuŋ <sup>55</sup> MOOD	dʒɿ <sup>33</sup> walk	ɛ <sup>33</sup> ua <sup>33</sup> , IND	t <sup>h</sup> i <sup>55</sup> so <sup>33</sup> a.little.while		t <sup>h</sup> a <sup>35</sup> , TEMP	
lan <sup>55</sup> python	ŋu <sup>31</sup> DEF	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> a <sup>31</sup> one-place	gu <sup>31</sup> also	m <sup>31</sup> za <sup>31</sup> ba <sup>33</sup> NEG- see	ua <sup>33</sup> , MOOD,		
gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	io <sup>55</sup> di <sup>33</sup> this.way	dʒɿ <sup>33</sup> walk	io <sup>55</sup> di <sup>33</sup> this.way	dʒɿ <sup>33</sup> walk			
di <sup>33</sup> gã <sup>55</sup> rest	za <sup>55</sup> place	t <sup>h</sup> i <sup>55</sup> -ŋu <sup>31</sup> ba <sup>31</sup> one-piece	k <sup>h</sup> a <sup>31</sup> LOC	t <sup>h</sup> u <sup>31</sup> dʒɿ <sup>31</sup> arrive		t <sup>h</sup> a <sup>35</sup> , TEMP,	
ʔo <sup>55</sup> k <sup>h</sup> ua <sup>31</sup> that.place	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person	t <sup>h</sup> i <sup>31</sup> -io <sup>ʔ55</sup> one-CLF					
ŋo <sup>55</sup> stay	a <sup>33</sup> ua <sup>33</sup> , ASP,	tɕ <sup>h</sup> i <sup>55</sup> first	di <sup>31</sup> gã <sup>55</sup> rest	iuŋ <sup>35</sup> DIR	ua <sup>55</sup> li <sup>33</sup> , CONJ	di <sup>31</sup> gã <sup>55</sup> rest	t <sup>h</sup> a <sup>35</sup> , TEMP,
a <sup>31</sup> io <sup>31</sup> I	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> head	a <sup>31</sup> DEF					
ɕuŋɿ <sup>ʔ55</sup> louse	ʈa <sup>55</sup> seek	i <sup>33</sup> DIR	vɛ <sup>33</sup> speak	ua <sup>33</sup> , ASP,	la <sup>31</sup> p <sup>h</sup> uŋ <sup>55</sup> head	ɕuŋɿ <sup>ʔ55</sup> louse	
la <sup>53</sup> u <sup>31</sup> seek	ua <sup>33</sup> ASP	ŋu <sup>31</sup> a <sup>31</sup> DEF	bu <sup>31</sup> snake	tɕ <sup>h</sup> in <sup>55</sup> slough	t <sup>h</sup> i <sup>55</sup> -bu <sup>m31</sup> one-CLF		
a <sup>31</sup> ne <sup>55</sup> have	ua <sup>33</sup> , ASP,	ɕuŋɿ <sup>ʔ55</sup> louse	a <sup>31</sup> DEF	m <sup>31</sup> ŋo <sup>33</sup> NEG-have	i <sup>33</sup> , ASP,	bu <sup>31</sup> snake	tɕ <sup>h</sup> in <sup>55</sup> slough
si <sup>55</sup> only	a <sup>31</sup> ne <sup>55</sup> have	i <sup>33</sup> ASP	geŋ <sup>31</sup> speak	t <sup>h</sup> a <sup>35</sup> TEMP			
t <sup>h</sup> u <sup>55</sup> gather	a <sup>31</sup> out	ŋo <sup>33</sup> le <sup>33</sup> DIR	ua <sup>33</sup> t <sup>h</sup> a <sup>35</sup> , TEMP	bu <sup>31</sup> snake	tɕ <sup>h</sup> in <sup>55</sup> slough	ŋu <sup>31</sup> DEF	a <sup>31</sup> ɬaŋ <sup>55</sup> all
t <sup>h</sup> u <sup>53</sup> gather	ɛ <sup>31</sup> dʒɛ <sup>33</sup> ua <sup>33</sup> , DIR		gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then				

lo <sup>55</sup> return	dze <sup>35</sup> u <sup>33</sup> . ASP.	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> house	ɖuŋ <sup>35</sup> LOC	t <sup>h</sup> u <sup>31</sup> dzɿ <sup>31</sup> arrive	t <sup>h</sup> a <sup>35</sup> , TEMP	
a <sup>31</sup> p <sup>h</sup> aŋ <sup>55</sup> mountain.valley		k <sup>h</sup> uã <sup>31</sup> hole	ɖuŋ <sup>31</sup> big	k <sup>h</sup> a <sup>31</sup> PRT		
ie <sup>33</sup> be	ua <sup>33</sup> , ASP,	ba <sup>31</sup> ʂɿ <sup>31</sup> very	ŋuŋ <sup>55</sup> year	tɕ <sup>h</sup> a <sup>55</sup> , separate,	dzɿ <sup>33</sup> pass	t <sup>h</sup> a <sup>35</sup> , TEMP
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> woman	ŋu <sup>31</sup> DEF	tɕ <sup>h</sup> ɛn <sup>31</sup> child	t <sup>h</sup> i <sup>31</sup> -ioŋ <sup>55</sup> one-CLF			
ŋo <sup>55</sup> have	a <sup>31</sup> ni <sup>55</sup> INCH	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	ŋ <sup>31</sup> mu <sup>31</sup> dza <sup>53</sup> w's.parents.home	dzɿ <sup>55</sup> walk	dze <sup>35</sup> ua <sup>33</sup> , ASP	
ŋ <sup>31</sup> mu <sup>31</sup> dza <sup>53</sup> w's.parents.home		t <sup>h</sup> i <sup>55</sup> k <sup>h</sup> uẽ <sup>33</sup> one-section				
tɕ <sup>h</sup> a <sup>55</sup> separate	dzɿ <sup>31</sup> t <sup>h</sup> a <sup>35</sup> TEMP	dze <sup>35</sup> a <sup>31</sup> ua <sup>33</sup> , ASP,	ŋ <sup>31</sup> he	lo <sup>55</sup> return	t <sup>h</sup> a <sup>35</sup> TEMP	ŋ <sup>31</sup> he
p <sup>h</sup> a <sup>55</sup> dza <sup>55</sup> ma <sup>33</sup> elder.sis	a <sup>31</sup> ŋi <sup>33</sup> two	mi <sup>53</sup> CAUS				
ɕin <sup>31</sup> carry	ɛ <sup>31</sup> ba <sup>33</sup> ua <sup>33</sup> , IND,	t <sup>h</sup> i <sup>31</sup> za <sup>31</sup> path	ɖuŋ <sup>53</sup> LOC	ɕo <sup>33</sup> lo <sup>55</sup> coral	t <sup>h</sup> i <sup>31</sup> -dzuŋ <sup>55</sup> one-CLF	
a <sup>31</sup> nɛ <sup>55</sup> , have,	ŋ <sup>31</sup> ŋuŋ <sup>31</sup> they.two	m <sup>31</sup> nɛm <sup>35</sup> sisters				
zom <sup>35</sup> pick	ʂɿ <sup>31</sup> IMP	ua <sup>33</sup> li <sup>33</sup> CONJ	a <sup>31</sup> REC	guŋ <sup>55</sup> discuss	ɛ <sup>33</sup> ua <sup>33</sup> ASP	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> girl	ŋ <sup>31</sup> mu <sup>31</sup> mama	ba <sup>31</sup> IO				
ɖaŋ <sup>55</sup> climb	ʂɿ <sup>31</sup> cry	dzɿ <sup>55</sup> u <sup>33</sup> ua <sup>33</sup> , ASP,	ŋ <sup>31</sup> he	ma <sup>31</sup> ŋa <sup>53</sup> highest.point	ɖaŋ <sup>55</sup> climb	t <sup>h</sup> u <sup>31</sup> arrive
dzɿ <sup>33</sup> t <sup>h</sup> a <sup>35</sup> TEMP	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> girl	ŋu <sup>33</sup> DEF	ba <sup>31</sup> IO			
a <sup>31</sup> vu <sup>35</sup> hand	mi <sup>53</sup> INSTR	tɕ <sup>h</sup> iŋ <sup>33</sup> pinch	ua <sup>31</sup> li <sup>33</sup> , CONJ,	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> girl	a <sup>31</sup> ŋu <sup>55</sup> cry	a <sup>31</sup> ni <sup>55</sup> INCH
t <sup>h</sup> a <sup>35</sup> , TEMP,	ka <sup>55</sup> tɕ <sup>h</sup> ɿ <sup>31</sup> lan <sup>53</sup> why					
a <sup>31</sup> ŋu <sup>55</sup> cry	a <sup>31</sup> le <sup>33</sup> ? MOOD	ŋa <sup>31</sup> you	ŋo <sup>55</sup> lu <sup>35</sup> top.of.head	k <sup>h</sup> a <sup>31</sup> IO	vɛ <sup>53</sup> want	ua <sup>33</sup> li <sup>33</sup> , CONJ,
ŋo <sup>55</sup> lu <sup>35</sup> top.of.head	ŋu <sup>31</sup> DEF	tɕ <sup>h</sup> o <sup>31</sup> ua <sup>31</sup> lay.aside	ɖa <sup>33</sup> ua <sup>33</sup> , ASP			



t <sup>h</sup> i <sup>55</sup> so <sup>31</sup> a.little.while	t <sup>h</sup> a <sup>35</sup> TEMP	a <sup>31</sup> p <sup>h</sup> i <sup>55</sup> again	t <sup>h</sup> i <sup>55</sup> -dzaŋ <sup>31</sup> one-times	tɕ <sup>h</sup> i <sup>933</sup> pinch	ua <sup>31</sup> li <sup>33</sup> CONJ	
sɿ <sup>31</sup> -ŋu <sup>35</sup> CAUS-cry	u <sup>31</sup> ASP	ka <sup>55</sup> tɕ <sup>h</sup> ɿ <sup>31</sup> lan <sup>53</sup> why				
a <sup>31</sup> ŋu <sup>55</sup> cry	a <sup>31</sup> le <sup>33?</sup> MOOD	ŋa <sup>31</sup> you	i <sup>31</sup> luŋ <sup>35</sup> necklace	k <sup>h</sup> a <sup>31</sup> IO	ve <sup>53</sup> want	ua <sup>33</sup> li <sup>33</sup> , CONJ
i <sup>31</sup> luŋ <sup>35</sup> necklace	tɕ <sup>h</sup> in <sup>55</sup> take.off	li <sup>33</sup> , CONJ,	tɕ <sup>h</sup> o <sup>31</sup> ua <sup>33</sup> ɕa <sup>33</sup> , lay.aside,			
a <sup>31</sup> dɛ <sup>31</sup> separate	t <sup>h</sup> i <sup>55</sup> so <sup>31</sup> a.little.while	t <sup>h</sup> a <sup>35</sup> TEMP	t <sup>h</sup> i <sup>55</sup> -dzaŋ <sup>31</sup> one-times	tɕ <sup>h</sup> i <sup>933</sup> ua <sup>31</sup> pinch	li <sup>33</sup> CONJ	
sɿ <sup>31</sup> -ŋu <sup>35</sup> CAUS-cry	u <sup>31</sup> , ASP	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then				
ŋa <sup>31</sup> you	ka <sup>55</sup> tɕ <sup>h</sup> ɿ <sup>31</sup> lan <sup>53</sup> why	a <sup>31</sup> ŋu <sup>55</sup> cry	a <sup>31</sup> le <sup>33?</sup> MOOD	ŋa <sup>31</sup> you	ga <sup>31</sup> mu <sup>31</sup> clothes	k <sup>h</sup> a <sup>31</sup> IO
ve <sup>53</sup> want	ua <sup>33</sup> li <sup>33</sup> , CONJ,	ga <sup>31</sup> mu <sup>31</sup> clothes				
tɕ <sup>h</sup> in <sup>55</sup> take.off	li <sup>33</sup> CONJ	tɕ <sup>h</sup> o <sup>31</sup> ua <sup>31</sup> lay	ɕa <sup>33</sup> , aside	tɕ <sup>h</sup> a <sup>55</sup> separate	t <sup>h</sup> i <sup>55</sup> -dzaŋ <sup>31</sup> a.little.while	t <sup>h</sup> a <sup>35</sup> , TEMP,
a <sup>31</sup> p <sup>h</sup> i <sup>55</sup> again	t <sup>h</sup> i <sup>55</sup> -dzaŋ <sup>31</sup> one-times	su <sup>31</sup> -ŋu <sup>55</sup> CAUS-cry	u <sup>31</sup> , ASP,			
ka <sup>55</sup> tɕ <sup>h</sup> ɿ <sup>31</sup> lan <sup>53</sup> why	a <sup>31</sup> ŋu <sup>55</sup> cry	a <sup>31</sup> le <sup>33?</sup> MOOD	ŋa <sup>31</sup> you	ni <sup>31</sup> go <sup>33</sup> earring	k <sup>h</sup> a <sup>31</sup> IO	ve <sup>53</sup> want
u <sup>33</sup> li <sup>33</sup> , CONJ	ni <sup>31</sup> go <sup>33</sup> earring	gu <sup>31</sup> li <sup>33</sup> also				
tɕ <sup>h</sup> in <sup>35</sup> take.off	li <sup>31</sup> CONJ	tɕ <sup>h</sup> o <sup>33</sup> ua <sup>33</sup> ɕa <sup>33</sup> , lay.aside	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> girl	ŋu <sup>31</sup> DEF	ŋ <sup>31</sup> mu <sup>31</sup> mother	
k <sup>h</sup> a <sup>31</sup> LOC	t <sup>h</sup> i <sup>55</sup> tɕ <sup>h</sup> ɿ <sup>31</sup> equal	gu <sup>31</sup> also	ma <sup>31</sup> not	ɕa <sup>55</sup> e <sup>31</sup> IND		
dzaŋ <sup>31</sup> , MOOD,	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	s <sup>55</sup> dzuŋ <sup>55</sup> tree	ŋu <sup>31</sup> DEF	p <sup>h</sup> u <sup>31</sup> CAUS	zom <sup>35</sup> down	ba <sup>33</sup> ua <sup>33</sup> , CONJ,
ŋ <sup>31</sup> he	a <sup>33</sup> DEF	ŋ <sup>31</sup> t <sup>h</sup> a <sup>31</sup> ŋaŋ <sup>55</sup> 3P-younger.sister				
gua <sup>31</sup> -dem <sup>55</sup> wear-NOM	mu <sup>53</sup> PL	gua <sup>31</sup> wear	ɕi <sup>55</sup> li <sup>33</sup> ASP	lo <sup>55</sup> return	dze <sup>35</sup> ua <sup>33</sup> , ASP	
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> house	ɕuŋ <sup>53</sup> LOC	t <sup>h</sup> u <sup>31</sup> dzaŋ <sup>33</sup> arrive	t <sup>h</sup> a <sup>35</sup> , TEMP,			

gu <sup>31</sup> tɕ <sup>h</sup> a <sup>55</sup> man	ŋu <sup>31</sup> a <sup>31</sup> DEF	a <sup>31</sup> io <sup>31</sup> I	t <sup>h</sup> i <sup>55</sup> -bu <sup>31</sup> zom <sup>55</sup> one-house	a <sup>31</sup> DEF	iɛ <sup>55</sup> this
ŋu <sup>31</sup> a <sup>31</sup> DEF	m <sup>31</sup> zɿ <sup>33</sup> NEG-be	ts <sup>h</sup> om <sup>55</sup> think	ua <sup>33</sup> , ASP,		
ʔi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> after	a <sup>31</sup> DEF	mu <sup>31</sup> dza <sup>31</sup> food	do <sup>55</sup> ladle.out	ɕɿ <sup>31</sup> dzɿ <sup>55</sup> shout	u <sup>31</sup> li <sup>33</sup> , CONJ
di <sup>33</sup> dzaŋ <sup>55</sup> probe	ua <sup>33</sup> , ASP	mu <sup>31</sup> dza <sup>31</sup> grain	gu <sup>35</sup> also		
do <sup>55</sup> ladle.out	m <sup>31</sup> so <sup>55</sup> NEG-know	ua <sup>33</sup> . ASP.	tɕ <sup>h</sup> a <sup>31</sup> p <sup>h</sup> aŋ <sup>31</sup> rice.pounder	du <sup>55</sup> pound	ɕɿ <sup>31</sup> dzɿ <sup>55</sup> u <sup>31</sup> cry
ua <sup>33</sup> , ASP	tɕ <sup>h</sup> a <sup>31</sup> p <sup>h</sup> aŋ <sup>31</sup> rice.pounder	gu <sup>33</sup> also	du <sup>55</sup> pound		
m <sup>31</sup> so <sup>53</sup> NEG-know	u <sup>31</sup> ua <sup>33</sup> , ASP	a <sup>31</sup> io <sup>31</sup> I	t <sup>h</sup> i <sup>55</sup> bu <sup>31</sup> zom <sup>55</sup> one-house	a <sup>31</sup> DEF	m <sup>31</sup> tɕ <sup>h</sup> a <sup>55</sup> , NEG-like
a <sup>31</sup> xɛ <sup>33</sup> foot	ŋ <sup>31</sup> tɕ <sup>h</sup> in <sup>55</sup> toe	ŋu <sup>31</sup> DEF			
p <sup>h</sup> a <sup>55</sup> p <sup>h</sup> a <sup>55</sup> flat-REDUP	lan <sup>31</sup> piece	m <sup>31</sup> tɕ <sup>h</sup> a <sup>55</sup> , NEG-like,	gen <sup>35</sup> speak	u <sup>31</sup> ua <sup>33</sup> , ASP	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> woman
iɛ <sup>55</sup> this	ŋu <sup>31</sup> a <sup>31</sup> DEF	ua <sup>55</sup> t <sup>h</sup> a <sup>35</sup> , TEMP,			
a <sup>31</sup> mu <sup>31</sup> mama	dza <sup>53</sup> infront.of	tɕ <sup>h</sup> a <sup>31</sup> p <sup>h</sup> aŋ <sup>31</sup> rice.pounder	du <sup>55</sup> pound	t <sup>h</sup> a <sup>35</sup> temp	ŋu <sup>31</sup> a <sup>31</sup> DEF
dzim <sup>33</sup> press	ɛ <sup>31</sup> IND	iuŋ <sup>55</sup> a <sup>31</sup> , DIR,			
ʔe <sup>33</sup> li <sup>33</sup> so	p <sup>h</sup> a <sup>55</sup> p <sup>h</sup> a <sup>55</sup> flat-REDUP	lan <sup>31</sup> piece	tɕ <sup>h</sup> a <sup>55</sup> like	dzɛ <sup>35</sup> ASP	vɛ <sup>33</sup> speak
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> z̤a <sup>33</sup> woman	mã <sup>55</sup> face	k <sup>h</sup> a <sup>31</sup> LOC			
dza <sup>55</sup> look	u <sup>31</sup> ASP	ŋu <sup>31</sup> a <sup>31</sup> DEF	tsa <sup>55</sup> si <sup>33</sup> red	ɛ <sup>31</sup> ua <sup>33</sup> , IND	a <sup>31</sup> io <sup>31</sup> I
t <sup>h</sup> i <sup>55</sup> -bu <sup>31</sup> zom <sup>55</sup> one-house	a <sup>31</sup> DEF	ioŋ <sup>55</sup> CLF	m <sup>31</sup> -bu <sup>31</sup> si <sup>31</sup> , NEG-red,		
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> za <sup>55</sup> woman	ŋu <sup>31</sup> DEF	ua <sup>33</sup> t <sup>h</sup> a <sup>35</sup> , TEMP	a <sup>31</sup> mu <sup>31</sup> mother	dza <sup>53</sup> infront	la <sup>31</sup> ma <sup>55</sup> field
uaŋ <sup>35</sup> do	li <sup>33</sup> , CONJ,	nɛm <sup>31</sup> sun	mi <sup>53</sup> CAUS	bu <sup>31</sup> si <sup>31</sup> red	dzɛ <sup>35</sup> . ASP.

ʔi <sup>55</sup> p <sup>h</sup> an <sup>33</sup> after	a <sup>31</sup> DEF	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> child	gu <sup>31</sup> also	ʔa <sup>53</sup> big	ni <sup>33</sup> , INCH,	nō <sup>31</sup> uā <sup>31</sup> OX	
a <sup>31</sup> tɕ <sup>h</sup> un <sup>31</sup> put	dzo <sup>31</sup> a <sup>31</sup> can	ni <sup>33</sup> INCH					
ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P father	mi <sup>53</sup> CAUS	nō <sup>31</sup> uā <sup>31</sup> OX	a <sup>31</sup> tɕ <sup>h</sup> un <sup>31</sup> put	ʃ <sup>31</sup> dʒ <sup>55</sup> cry	u <sup>31</sup> ua <sup>33</sup> , ASP,		
t <sup>h</sup> i <sup>55</sup> -ni <sup>33</sup> one-day	ŋu <sup>31</sup> a <sup>31</sup> , DEF	tʂ <sup>h</sup> ʅ <sup>31</sup> qom <sup>55</sup> lake					
qun <sup>55</sup> LOC	mi <sup>53</sup> CAUS	tɕ <sup>h</sup> a <sup>55</sup> bird	ɕe <sup>31</sup> nem <sup>53</sup> beautiful	ŋu <sup>31</sup> DEF	lan <sup>55</sup> a <sup>31</sup> come.out	ŋa <sup>33</sup> li <sup>33</sup> , DIR,	
si <sup>55</sup> li <sup>55</sup> ;si <sup>55</sup> li <sup>55</sup> yo <sup>31</sup> , (bird cry)							
dɛ <sup>31</sup> gz <sup>55</sup> ʔo <sup>55</sup> ŋu <sup>31</sup> ! messy dog!		di <sup>31</sup> tɕ <sup>h</sup> u <sup>55</sup> orphan	k <sup>h</sup> a <sup>33</sup> ɕa <sup>33</sup> IO	m <sup>31</sup> yo <sup>31</sup> NEG-abuse	dɛ <sup>53</sup> ? MOOD?		
li <sup>33</sup> ŋā <sup>33</sup> cry	a <sup>33</sup> ua <sup>33</sup> , ASP,	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>55</sup> child					
(abusive language!)							
ŋu <sup>31</sup> DEF	bun <sup>31</sup> name	gun <sup>53</sup> shout	u <sup>33</sup> , CONJ,	nō <sup>31</sup> uā <sup>31</sup> OX	a <sup>31</sup> tɕ <sup>h</sup> un <sup>31</sup> -su <sup>55</sup> put-AGT	ŋu <sup>31</sup> a <sup>31</sup> , DEF,	
ʔo <sup>55</sup> ŋu <sup>31</sup> that-CLF	san <sup>55</sup> sound	ba <sup>31</sup> LOC					
t <sup>h</sup> o <sup>53</sup> listen	o <sup>31</sup> li <sup>33</sup> , CONJ,	nō <sup>31</sup> uā <sup>31</sup> OX	dʒan <sup>53</sup> look	m <sup>31</sup> t <sup>h</sup> am <sup>53</sup> NEG-have	t <sup>h</sup> a <sup>35</sup> , TEMP,	nō <sup>31</sup> uā <sup>31</sup> OX	
ŋu <sup>31</sup> DEF	a <sup>31</sup> ts <sup>h</sup> an <sup>31</sup> person	mu <sup>31</sup> dza <sup>31</sup> crops					
em <sup>55</sup> eat	ba <sup>31</sup> DIR	ʔi <sup>55</sup> p <sup>h</sup> an <sup>33</sup> after	ni <sup>55</sup> day	ŋu <sup>31</sup> DEF	a <sup>31</sup> tɕ <sup>h</sup> un <sup>31</sup> put	dʒ <sup>33</sup> ASP	gu <sup>33</sup> also
ŋ <sup>31</sup> he	bun <sup>31</sup> name	ŋu <sup>31</sup> a <sup>31</sup> DEF					
sē <sup>55</sup> ū <sup>31</sup> (bird.cry)	li <sup>33</sup> , CONJ,	ʔo <sup>35</sup> di <sup>33</sup> like.that	si <sup>55</sup> li <sup>55</sup> si <sup>33</sup> li <sup>33</sup> (bird.cry)	ŋā <sup>53</sup> cry	a <sup>31</sup> u <sup>33</sup> , CONJ,		
ʔo <sup>55</sup> ŋu <sup>31</sup> like.that	t <sup>h</sup> o <sup>53</sup> listen	t <sup>h</sup> a <sup>35</sup> , TEMP	nō <sup>31</sup> uā <sup>31</sup> OX	ŋu <sup>31</sup> DEF			

a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> household	mu <sup>31</sup> dza <sup>31</sup> crops	εm <sup>53</sup> eat	ba <sup>31</sup> DIR	ua <sup>33</sup> . CONJ	a <sup>31</sup> ʃi <sup>55</sup> k <sup>h</sup> a <sup>55</sup> evening
ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	mi <sup>53</sup> CAUS	xo <sup>33</sup> curse	ua <sup>33</sup> CONJ		
t <sup>h</sup> i <sup>55</sup> -ŋi <sup>33</sup> one-day	t <sup>h</sup> i <sup>55</sup> -ŋi <sup>33</sup> one-day	k <sup>h</sup> a <sup>55</sup> tʂ <sup>h</sup> ŋ <sup>31</sup> laŋ <sup>53</sup> why	εm <sup>53</sup> eat	ʃi <sup>31</sup> dʒi <sup>55</sup> let	u <sup>31</sup> ASP
lε <sup>33</sup> ? MOOD?	a <sup>31</sup> p <sup>h</sup> u <sup>31</sup> dad	u <sup>31</sup> , VOC,	ga <sup>31</sup> mu <sup>31</sup> clothes		
ma <sup>31</sup> NEG	ɖaŋ <sup>55</sup> have	li <sup>33</sup> CONJ	nō <sup>31</sup> uā <sup>31</sup> OX	a <sup>31</sup> t <sup>h</sup> iε <sup>31</sup> chase.away	u <sup>31</sup> t <sup>h</sup> a <sup>35</sup> , ASP TEMP
ba <sup>31</sup> xu <sup>55</sup> thorn	tɕ <sup>h</sup> i <sup>33</sup> stab	ε <sup>31</sup> , IND,	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then		
ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	mi <sup>53</sup> CAUS	ga <sup>31</sup> mu <sup>31</sup> clothes	t <sup>h</sup> i <sup>31</sup> -t <sup>h</sup> am <sup>55</sup> one-CLF	di <sup>31</sup> k <sup>h</sup> ua <sup>53</sup> wear	u <sup>31</sup> dʒε <sup>35</sup> ASP
ua <sup>33</sup> , CONJ,	ʔi <sup>55</sup> p <sup>h</sup> aŋ <sup>55</sup> after	ŋi <sup>33</sup> day	gu <sup>33</sup> also		
ʔo <sup>35</sup> di <sup>33</sup> like.that	tʂ <sup>h</sup> ŋ <sup>31</sup> ɖom <sup>55</sup> lake	ɖuŋ <sup>33</sup> LOC	ni <sup>53</sup> ABL	si <sup>55</sup> li <sup>55</sup> si <sup>33</sup> li <sup>33</sup> u <sup>31</sup> (bird.cry)	ua <sup>55</sup> li <sup>33</sup> ASP
ŋā <sup>33</sup> cry	a <sup>31</sup> u <sup>33</sup> , CONJ,	ʔo <sup>55</sup> ŋu <sup>31</sup> over.there			
k <sup>h</sup> a <sup>31</sup> LOC	to <sup>53</sup> listen	li <sup>33</sup> CONJ	nō <sup>31</sup> uā <sup>31</sup> OX	gu <sup>31</sup> also	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> mu <sup>31</sup> dza <sup>33</sup> person crops
εm <sup>53</sup> eat	ba <sup>31</sup> DIR	ua <sup>33</sup> CONJ			
a <sup>31</sup> ʃi <sup>55</sup> k <sup>h</sup> a <sup>55</sup> evening	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	mi <sup>53</sup> CAUS	ʒŋ <sup>33</sup> u <sup>31</sup> ask	ua <sup>33</sup> ASP	ʔo <sup>55</sup> dʒaŋ <sup>31</sup> that times
ŋu <sup>31</sup> a <sup>31</sup> DEF	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	k <sup>h</sup> a <sup>31</sup> IO			
ʃi <sup>31</sup> la <sup>55</sup> nem <sup>55</sup> good	ɕi <sup>31</sup> -ŋin <sup>55</sup> CAUS-know	a <sup>31</sup> p <sup>h</sup> u <sup>55</sup> dad	u <sup>33</sup> , VOC,	t <sup>h</sup> i <sup>55</sup> -ŋi <sup>33</sup> one-day	t <sup>h</sup> i <sup>55</sup> -ŋi <sup>33</sup> one-day
a <sup>31</sup> io <sup>31</sup> I	nō <sup>31</sup> uā <sup>31</sup> OX	a <sup>31</sup> DEF			

tɕ <sup>h</sup> uŋ <sup>35</sup> put	t <sup>h</sup> a <sup>35</sup> , TEMP	tʂ <sup>h</sup> ɿ <sup>31</sup> ɕom <sup>55</sup> lake	ɕuŋ <sup>55</sup> LOC	ni <sup>53</sup> ABL	tɕ <sup>h</sup> a <sup>33</sup> bird	ɕɛ <sup>33</sup> nɛm <sup>55</sup> beautiful
ŋu <sup>31</sup> DEF	lan <sup>55</sup> come.out	a <sup>31</sup> ASP	ŋo <sup>55</sup> have	li <sup>33</sup> CONJ		
a <sup>31</sup> io <sup>31</sup> I	buŋ <sup>31</sup> name	a <sup>31</sup> sɛ <sup>35</sup> ũ <sup>31</sup> call	li <sup>33</sup> CONJ	ŋã <sup>33</sup> cry	ŋu <sup>31</sup> ɛ <sup>31</sup> , ASP,	ʔo <sup>55</sup> ŋu <sup>31</sup> like.that
san <sup>55</sup> sound	ba <sup>31</sup> LOC	toŋ <sup>53</sup> listen	li <sup>33</sup> , CONJ,	nõ <sup>31</sup> uã <sup>31</sup> ox		
ŋu <sup>31</sup> DEF	a <sup>31</sup> ts <sup>h</sup> an <sup>31</sup> household	mu <sup>31</sup> dza <sup>31</sup> crops	ɛm <sup>53</sup> eat	bo <sup>31</sup> , DIR,	ua <sup>55</sup> li <sup>33</sup> CONJ	ɕi <sup>33</sup> -ŋin <sup>55</sup> CAUS-know
dʒɛ <sup>33</sup> ASP	t <sup>h</sup> a <sup>35</sup> , TEMP,					
t <sup>h</sup> i <sup>35</sup> -ŋi <sup>33</sup> one-day	ŋu <sup>31</sup> a <sup>31</sup> DEF	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	ta <sup>55</sup> ti <sup>55</sup> CONJ	a <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>35</sup> put	dʒɛ <sup>35</sup> , ASP,	
ʔo <sup>55</sup> -ŋi <sup>33</sup> that-day	gu <sup>31</sup> also	tʂ <sup>h</sup> ɿ <sup>31</sup> ɕom <sup>55</sup> lake	ɕuŋ <sup>53</sup> LOC			
ni <sup>53</sup> ABL	tɕ <sup>h</sup> a <sup>55</sup> bird	ni <sup>53</sup> ABL	t <sup>h</sup> i <sup>55</sup> -ɕu <sup>31</sup> one-CLF	xo <sup>35</sup> xi <sup>31</sup> like.that	lan <sup>55</sup> come.out	a <sup>31</sup> ASP
ŋu <sup>31</sup> a <sup>31</sup> DEF	li <sup>33</sup> . CONJ.	si <sup>55</sup> li <sup>55</sup> si <sup>33</sup> li <sup>33</sup> u <sup>31</sup> , (bird.cry),				
di <sup>31</sup> tɕ <sup>h</sup> u <sup>55</sup> orphan	k <sup>h</sup> a <sup>31</sup> ɕa <sup>35</sup> IO	m <sup>31</sup> ʔo <sup>31</sup> NEG-abuse	dɛ <sup>53</sup> ? MOOD?	ua <sup>33</sup> li <sup>33</sup> like.that	ŋã <sup>33</sup> cry	
a <sup>31</sup> ua <sup>31</sup> , ASP,	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	mi <sup>53</sup> CAUS			
a <sup>31</sup> vu <sup>35</sup> hand	dʒu <sup>33</sup> stretch	ʂɿ <sup>31</sup> ASP	li <sup>33</sup> , CONJ,	a <sup>31</sup> io <sup>31</sup> I	t <sup>h</sup> i <sup>55</sup> -bu <sup>31</sup> zom <sup>55</sup> one-house	le <sup>33</sup> CONJ
ŋ <sup>31</sup> zɿ <sup>33</sup> be	na <sup>33</sup> , MOOD,	a <sup>31</sup> io <sup>31</sup> I				
a <sup>31</sup> vu <sup>35</sup> hand	p <sup>h</sup> am <sup>53</sup> palm	ŋa <sup>31</sup> fall	ŋu <sup>33</sup> DIR	ua <sup>33</sup> li <sup>33</sup> like.that	m <sup>31</sup> dʒa <sup>33</sup> then	u <sup>31</sup> ua <sup>33</sup> , ASP CONJ,
gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	tɕ <sup>h</sup> a <sup>55</sup> bird	ŋu <sup>31</sup> DEF				
a <sup>31</sup> vu <sup>35</sup> p <sup>h</sup> am <sup>55</sup> hand palm	a <sup>31</sup> ASP	ŋa <sup>31</sup> fall	i <sup>35</sup> ua <sup>33</sup> , DIR,	ʔo <sup>55</sup> -ŋi <sup>33</sup> that-day	ŋu <sup>31</sup> a <sup>31</sup> DEF	tɕ <sup>h</sup> a <sup>55</sup> bird
ŋu <sup>33</sup> DEF	lan <sup>55</sup> hold	u <sup>31</sup> li <sup>33</sup> ASP	a <sup>31</sup> so <sup>33</sup> that			

p <sup>h</sup> a <sup>55</sup> -dza <sup>55</sup> -di <sup>33</sup>	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup>	ɕun <sup>55</sup>	lo <sup>35</sup>	dʒɛ <sup>35</sup> ,	tɕ <sup>h</sup> a <sup>55</sup>		
father-son-both	house	LOC	return	ASP,	bird		
gu <sup>31</sup>	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup>	ɕun <sup>53</sup>					
also	house	LOC					
sɿ <sup>31</sup> -lan <sup>35</sup>	u <sup>33</sup> ,	bu <sup>55</sup> dʒa <sup>31</sup>	ɛm <sup>53</sup>	ŋu <sup>31</sup>	t <sup>h</sup> a <sup>35</sup> ,	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup>	
CAUS-put	CONJ,	food	eat	ASP	TEMP,	3P dad	
a <sup>31</sup> si <sup>55</sup>	ŋ <sup>31</sup> tɕ <sup>h</sup> ɛn <sup>31</sup>	k <sup>h</sup> a <sup>31</sup>					
and	3P child	IO					
ŋu <sup>31</sup> a <sup>31</sup>	a <sup>31</sup> gʒɿ <sup>33</sup> hin <sup>35</sup>	ɕun <sup>31</sup>	ɕa <sup>55</sup>	a <sup>31</sup> dʒa <sup>33</sup>	io <sup>55</sup>	ua <sup>33</sup> ,	
DEF	rice-bowl	LOC	meat	DEF	fall	DIR	
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> za <sup>55</sup>	ŋu <sup>31</sup>	a <sup>31</sup> gʒɿ <sup>55</sup> -hin <sup>35</sup>					
woman	DEF	rice-bowl					
ɕun <sup>31</sup>	ua <sup>33</sup> ,	ŋ <sup>31</sup> ŋi <sup>33</sup>	ŋu <sup>31</sup> a <sup>31</sup>	t <sup>h</sup> i <sup>31</sup>	ŋi <sup>33</sup> -io <sup>55</sup>	ua <sup>33</sup> ,	
LOC	CONJ,	shit	DEF	only	shit- CLF	CONJ	
t <sup>h</sup> i <sup>35</sup> -ian <sup>55</sup>	t <sup>h</sup> i <sup>55</sup> -ian <sup>55</sup>	xo <sup>33</sup> io <sup>35</sup>					
one-evening	one-evening	like.that					
dzo <sup>35</sup> dzo <sup>33</sup>	ua <sup>31</sup>	io <sup>55</sup> t <sup>h</sup> a <sup>35</sup>	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> za <sup>55</sup>	ŋu <sup>31</sup>	mi <sup>53</sup>	p <sup>h</sup> e <sup>53</sup> !	
repeat	do	TEMP	woman	DEF	CAUS	bah!	
ie <sup>33</sup>	tɕ <sup>h</sup> o <sup>33</sup>	tɕ <sup>h</sup> a <sup>55</sup>					
this	ghost	bird					
ka <sup>55</sup> tɕ <sup>h</sup> ɿ <sup>31</sup>	mo <sup>33</sup>	ua <sup>31</sup> li <sup>33</sup>	k <sup>h</sup> a <sup>55</sup> ŋi <sup>33</sup>	ua <sup>31</sup>	li <sup>33</sup>	dzo <sup>31</sup> san <sup>53</sup>	
what	use	CONJ	seize	ASP	CONJ	kill	
dʒɛ <sup>33</sup>	t <sup>h</sup> a <sup>35</sup> ,						
ASP	TEMP						
na <sup>31</sup>	tɕ <sup>h</sup> uŋ <sup>55</sup> zai <sup>31</sup>	k <sup>h</sup> a <sup>53</sup>	ŋi <sup>55</sup> p <sup>h</sup> aŋ <sup>31</sup>	ŋi <sup>33</sup>	ŋu <sup>31</sup>	dʒu <sup>53</sup>	t <sup>h</sup> a <sup>35</sup>
door	in.rear	LOC	after	day	DEF	look	TEMP
tɕ <sup>h</sup> a <sup>33</sup>	maŋ <sup>31</sup>	ŋu <sup>31</sup> a <sup>31</sup>					
bird	corpse	DEF					
me <sup>33</sup>	ɛ <sup>33</sup>	li <sup>33</sup>	ts <sup>h</sup> u <sup>31</sup> te <sup>35</sup>	t <sup>h</sup> i <sup>55</sup> -k <sup>h</sup> a <sup>31</sup>	a <sup>31</sup> ne <sup>55</sup>	ua <sup>33</sup> ,	
NEG	have	CONJ	scissors	one-grasp	have	ASP,	
ŋo <sup>55</sup>	ts <sup>h</sup> u <sup>31</sup> te <sup>55</sup>	ŋu <sup>31</sup> a <sup>31</sup>					
that	scissors	DEF					
ma <sup>31</sup> xuŋ <sup>55</sup>	ts <sup>h</sup> u <sup>31</sup>	ni <sup>33</sup>	ua <sup>33</sup> -dem <sup>55</sup> ,	ŋ <sup>31</sup> ma <sup>31</sup> xuŋ <sup>55</sup>	ɕun <sup>31</sup>		
sackcloth	scissors	INSTR	do-NOM,	sackcloth	LOC		
a <sup>31</sup>	a <sup>31</sup> k <sup>h</sup> om <sup>35</sup>	ba <sup>31</sup>	ua <sup>33</sup> ,				
DEF	assemble	go	ASP				

ʔi <sup>55</sup> p <sup>h</sup> aŋ <sup>31</sup> after	ni <sup>33</sup> day	ŋu <sup>31</sup> a <sup>31</sup> , DEF,	ma <sup>31</sup> xuŋ <sup>55</sup> sackcloth	ni <sup>33</sup> INSTR	ŋu <sup>31</sup> DEF	lu <sup>35</sup> bring
ua <sup>55</sup> li <sup>33</sup> , CONJ,	dza <sup>53</sup> look	a <sup>31</sup> na <sup>55</sup> DIR	t <sup>h</sup> a <sup>35</sup> , TEMP,			
ts <sup>h</sup> u <sup>31</sup> te <sup>55</sup> scissors	mi <sup>53</sup> INSTR	ŋ <sup>31</sup> ʂ <sup>1</sup> <sup>55</sup> smash	ua <sup>33</sup> ADV	ts <sup>h</sup> u <sup>31</sup> scissors	ni <sup>55</sup> ASP	ua <sup>33</sup> ma <sup>31</sup> do
ua <sup>33</sup> , CONJ,	gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> , then,	p <sup>h</sup> e <sup>53</sup> , bah!	iɛ <sup>55</sup> this			
tɛ <sup>h</sup> o <sup>33</sup> ghost	ts <sup>h</sup> u <sup>31</sup> te <sup>53</sup> scissors	ka <sup>55</sup> tɕ <sup>h</sup> l <sup>31</sup> what	mo <sup>33</sup> use	ua <sup>31</sup> li <sup>33</sup> , CONJ,	tɕ <sup>h</sup> im <sup>31</sup> house	p <sup>h</sup> aŋ <sup>55</sup> ʂ <sup>1</sup> <sup>31</sup> next
tɛ <sup>h</sup> o <sup>33</sup> misplace	a <sup>31</sup> ba <sup>55</sup> DIR	ua <sup>33</sup> , CONJ				
gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	ts <sup>h</sup> u <sup>31</sup> te <sup>55</sup> scissors	ŋu <sup>31</sup> a <sup>31</sup> DEF	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person	t <sup>h</sup> i <sup>55</sup> -ioŋ <sup>55</sup> one-CLF	a <sup>31</sup> p <sup>h</sup> o <sup>55</sup> change	
dze <sup>35</sup> a <sup>31</sup> ASP	ua <sup>33</sup> , CONJ,					
a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person	ioŋ <sup>55</sup> CLF	ŋu <sup>31</sup> a <sup>31</sup> DEF	ʂ <sup>1</sup> laŋ <sup>55</sup> za <sup>55</sup> young.woman	ɕi <sup>31</sup> nem <sup>53</sup> beautiful	t <sup>h</sup> i <sup>31</sup> -ioŋ <sup>55</sup> one-CLF	
tɕ <sup>h</sup> a <sup>33</sup> become	dze <sup>35</sup> a <sup>31</sup> ASP	ua <sup>33</sup> , CONJ,				
gu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> child	ŋ <sup>31</sup> p <sup>h</sup> u <sup>31</sup> 3P dad	mi <sup>53</sup> CAUS	ɕem <sup>31</sup> knife	t <sup>h</sup> i <sup>55</sup> -tɕ <sup>h</sup> em <sup>31</sup> one-grasp	
si <sup>55</sup> si <sup>55</sup> sharp	ua <sup>33</sup> ADV					
hɛ <sup>35</sup> ũ <sup>31</sup> grind	ua <sup>31</sup> ASP	li <sup>33</sup> , CONJ,	na <sup>31</sup> tɕ <sup>h</sup> uŋ <sup>55</sup> k <sup>h</sup> om <sup>33</sup> threshold	ba <sup>31</sup> LOC	tɕ <sup>h</sup> u <sup>35</sup> frame	u <sup>31</sup> ASP
li <sup>33</sup> CONJ	m <sup>31</sup> dza <sup>33</sup> u <sup>31</sup> then	u <sup>33</sup> , ASP,				
a <sup>31</sup> io <sup>31</sup> I	t <sup>h</sup> i <sup>55</sup> -bu <sup>31</sup> zom <sup>55</sup> one-house	ŋu <sup>31</sup> a <sup>31</sup> DEF	ɕem <sup>31</sup> sa <sup>31</sup> knife.opening	k <sup>h</sup> a <sup>33</sup> LOC	iɛ <sup>55</sup> this	
ʔbuŋ <sup>35</sup> step	ne <sup>55</sup> io <sup>55</sup> DIR	li <sup>33</sup> , CONJ,				
a <sup>31</sup> io <sup>31</sup> I	t <sup>h</sup> i <sup>55</sup> -bu <sup>31</sup> zom <sup>55</sup> one-house	m <sup>31</sup> zɿ <sup>33</sup> NEG-be	u <sup>33</sup> ASP	ŋu <sup>31</sup> a <sup>31</sup> , DEF,	iɛ <sup>33</sup> k <sup>h</sup> a <sup>31</sup> this-LOC	
a <sup>31</sup> io <sup>31</sup> I	ɕem <sup>31</sup> sa <sup>31</sup> knife.opening	k <sup>h</sup> a <sup>31</sup> LOC	le <sup>55</sup> MOOD			

k <sup>h</sup> o <sup>31</sup> k <sup>h</sup> om <sup>55</sup> jump.descend	buu <sup>33</sup> DIR	li <sup>33</sup> , CONJ,	xo <sup>33</sup> io <sup>55</sup> like.that	m <sup>31</sup> dza <sup>35</sup> then	a <sup>31</sup> dze <sup>35</sup> ASP	t <sup>h</sup> a <sup>35</sup> , TEMP,	
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> za <sup>55</sup> woman							
a <sup>31</sup> ni <sup>55</sup> -io <sup>ɔ</sup> <sup>55</sup> two-CLF	ŋu <sup>31</sup> DEF	ba <sup>31</sup> IO	ɡuŋ <sup>53</sup> shout	ua <sup>33</sup> , ASP	dzi <sup>31</sup> walk	a <sup>31</sup> ʃi <sup>31</sup> try	ua <sup>33</sup> li <sup>33</sup> CONJ
ɡuŋ <sup>53</sup> shout	ua <sup>33</sup> . ASP.	ɡu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then					
tɕ <sup>h</sup> a <sup>31</sup> ma <sup>31</sup> za <sup>55</sup> woman	ŋu <sup>31</sup> DEF	dzi <sup>33</sup> walk	ɛ <sup>31</sup> ni <sup>55</sup> IND	li <sup>33</sup> , CONJ	ts <sup>h</sup> u <sup>31</sup> te <sup>55</sup> scissors		
k <sup>h</sup> uŋ <sup>31</sup> ne <sup>53</sup> ABL	a <sup>31</sup> ts <sup>h</sup> aŋ <sup>31</sup> person	a <sup>31</sup> p <sup>h</sup> o <sup>33</sup> change					
a <sup>31</sup> ni <sup>33</sup> INCH	io <sup>ɔ</sup> <sup>55</sup> CLF	ŋu <sup>31</sup> a <sup>31</sup> DEF	ie <sup>31</sup> -ua <sup>33</sup> this-way	ɕa <sup>55</sup> ɔb.uŋ <sup>35</sup> step	ɛ <sup>31</sup> ia <sup>33</sup> ua <sup>33</sup> , (stepping),		
a <sup>31</sup> k <sup>h</sup> i <sup>31</sup> in.addition	io <sup>ɔ</sup> <sup>55</sup> CLF	ŋu <sup>31</sup> a <sup>31</sup> , DEF,					
ɔ <sup>55</sup> k <sup>h</sup> a <sup>31</sup> di <sup>33</sup> that.place	k <sup>h</sup> o <sup>31</sup> k <sup>h</sup> om <sup>55</sup> jump.descend	dze <sup>35</sup> ASP	u <sup>33</sup> , CONJ,	ɡu <sup>33</sup> t <sup>h</sup> a <sup>35</sup> then	ɔ <sup>31</sup> ŋu <sup>55</sup> that-CLF		
som <sup>31</sup> p <sup>h</sup> a <sup>33</sup> dza <sup>55</sup> three-person-family	ŋo <sup>55</sup> stay	la <sup>55</sup> good	dze <sup>35</sup> ua <sup>33</sup> . ASP.				

## ANONG TEXT THREE: THE PYTHON

Once upon a time, there was a couple with six daughters. The father passed away a long time before. One day, the mother went to the mountains to gather cogon grass. Dusk came and she carried a big backload of grass home. After she got home, she started to spread the grass to dry in the sun. Suddenly a python came out of the pile of grass. It wanted to bite the old lady. It said, "Give me one of your daughters. Otherwise, I will bite you to death." The mother replied, "Don't bite me yet. Let me go and ask my daughters." She then went to ask her oldest daughter whether she would be willing to go (with the python). She also told her daughter that if she did not go, her mother would be bitten to death. And if she was willing to go, then the python would not bite her mother. Her daughter said, "I am not going if it means marrying the python." Then the old lady went to ask her second oldest daughter (to see) whether she would be willing to marry the python. Her second daughter did not want to marry the python either. Then she asked the



third daughter who also said no. She asked her daughters one by one who all said no until she asked the last one, her sixth daughter. The sixth daughter said, "If I don't go, mother will definitely be bitten to death. Therefore, I will go."

On their way back with the python, suddenly the python disappeared when they reached a particular spot. A person was sitting by the river who said, "Let's rest here for a little while." While they are resting, that person spoke again, "Please see if there are lice in my hair." However, she did not find any lice in his hair. Instead she found some snake skin. She said to that man, "There are no lice. I only found some snake skin." Then they returned home. It happened that their home was in a big cave.

Several years later, they had a child. Therefore, they wanted to go and visit the wife's mother. After staying at the wife's mother's home for a few days, they returned (to their) home. Upon departure, the wife's second sister said, "Please take me along." When they reached a place where there was a coral tree, the two sisters discussed plans to pick coral. The older sister asked the younger sister to climb up the tree to pick coral. At that moment, the child was pinched and started crying. The mother in the tree asked, "Why is my child crying?" Her second older sister said, "The child wants the ornaments in your hairdo." She then took out the ornaments and threw them down (to her sister). A moment later, the child was pinched again and started crying again. The mother again asked, "Why is my child crying again?" Her sister said, "He wants your necklace." The mother took off her necklace and threw it down (to her sister). A little while later, the child was pinched yet again and started crying yet again. The mother again asked why and was told that her child wanted her clothes. So she took them off and threw them down. Another moment later, the child was once again pinched and once again started to cry. The mother once again asked why and was told that her child wanted her earrings. She took them off and threw them down (to her sister). In the end, the mother had nothing left on her. After that, the older sister cut the tree down and put on the younger sister's clothes and everything (that goes with them) and returned home (i.e. to the younger sister's home). When she got home, the husband thought (to himself), 'This woman does not look like my wife.' So he asked her to go and fetch grain to test her. Just as expected, she did not even know where the grain was stored. Later she was asked to go and pound (rice) with mortar and pestle. She did not know about that either. Then he saw that this woman's feet were flat so

he asked her why she did not look like his wife. The woman replied, "My feet were squeezed flat when I pounded (rice) with mortar and pestle at my mother's house." At that moment, the woman's face turned red. The man thought (to himself), 'My woman's face was not red like this.' So he asked the woman why. The woman said, "My face was burned red by the sun when I worked alongside my mother."

In time, the child grew up and could take care of the cows. One day, his father asked him to go and let the cows graze. Suddenly, a beautiful little bird flew out of the lake. The bird was chirping, and called the lonely child's name, and asked the boy to ask his mother whether his mother was mistreating him. The boy was listening to the bird and was not paying attention when the cows ate the neighbors' crops. The next day, the boy again heard the bird calling his name and after that he again forgot to keep an eye on the cows, and the cows again ate the neighbors' crops. In the evening, his father scolded him and asked him why the cows had eaten the neighbors' crops every day. The son said, "Dad, because I don't have clothes (to wear), so when I tried to chase the cows away, thorns hurt me. And I failed to keep cows away (from the neighbors' crops)." Then his father gave him an article of clothing to put on. The next day, again a bird flew out of the lake, chirping. The lonely child heard it and again forgot to keep an eye on the cows. The cows again ate the neighbors' crops. When his father asked him in the evening, this time he told him the truth. He said, "Dad, every day when I go and graze the cows, a beautiful bird flies out of the lake and calls me by my name. Because I was listening to the bird, the cows ate the other people's crops." The following day, his father went to feed the cows with him. On that day, as expected, a bird flew out of the lake and started chirping just like before and called out his son's name and asked his son whether he was abused. At that moment, the father reached out his hand and said, "If you are my wife, please come to the palm of my hand." Then the bird indeed came up and landed on his palm. That day, father and son brought the bird home and the bird flew back and forth in the house. At mealtime, meat would fall into the father's and son's bowls (from no where) while crap would fall into the woman's bowl. This happened again and again every day, which annoyed the woman who spit at the bird saying, "You useless damned bird!" She seized the bird and killed it. She threw the dead bird behind the door. The next day, the dead bird disappeared and a pair of scissors showed up in the same spot. When using the scissors to cut cloth, the next day the cloth would be in many tiny pieces. Angered,

the woman threw the scissors beneath the house. At that moment, the scissors changed into a beautiful young lady. The father then whetted a sharp knife and placed it over the threshold of the house with its sharp edge pointing upward. He said to the sisters, "Let it be that she who is my wife can cross the threshold easily and that she who is not my wife fall over onto the edge of the knife." Having said that, he summoned the two women and asked them to cross the threshold. The woman that used to be the scissors crossed the threshold. However, the other woman fell onto the knife. After that, the father, mother, and son lived happily ever after.

#### NOTES ON THE THREE TEXTS

1. The three texts were elicited from two separate informants. The first two texts were from Hán Wénjùn while the third was from Fàn Guópǔ. There are stylistic differences between the two informants' speech. In the process of transcribing the texts, no modifications whatsoever were made.
2. During elicitation of the texts, we noticed that the tones and the pronunciation of the initials and finals of some of the words showed variation in specific contexts particularly when compared to pronunciation of words in isolation. The variation was preserved in our transcription for the benefit of those who are interested in studying variation resulted from blending.
3. Although most of the grammatical phenomena found in the texts had been covered in our grammatical description of Anong before collecting the texts, we did encounter some new grammatical features. We tried our best to incorporate them into our grammatical analysis. However, for several of those points, even when we used the same kind of contexts to elicit examples of them, we failed to obtain satisfactory examples. These include certain functions of the numeral one, the functions of certain measure words, the functions of some structural particles, the functions of certain aspect suffixes, the functions of certain conjunctions, etc. Their uses are all preserved in our transcription of the texts for further investigation in the future.

## APPENDIX C

### AN ACOUSTIC LOOK AT ANONG

Ela Thurgood

#### 1. INTRODUCTION

In this appendix, an acoustic analysis of some of the phonetic structures of Anong is presented. Data are discussed in terms of both variability and comparison to the traditional articulatory descriptions given by Sun. The vowel system is examined from three angles: First, the vowels are located in acoustic space. Second, the acoustic patterns of raised and nasalized vowels are examined in detail. And, third, possible influence of Lisu on the Anong vowel system is discussed. A particular interest of this study is in the phonetic reality behind two phonemic contrasts: a three-way laryngeal contrast of voiceless aspirated, voiceless unaspirated, voiced stops and a three-way coronal contrast of alveolar, retroflex and alveolo-palatal fricatives and affricates. An acoustic analysis of Anong tones looks at the tonal space characteristics and a correlation between tones and the tense-modal register. Although not in the forefront, the question of how the language death affects the range, distribution, and degree of variability is also considered.

##### 1.1. *Anong Data*

Sun (2005) collected the Anong data during his six field trips, in the '60s, '80s and '90s. The data used in this study have been selected from recordings made by Sun in 1999.<sup>1</sup> His consultant was a fluent speaker of Anong and Lisu, who used Anong when speaking to his mother and elders, but Lisu when speaking to his wife and to his four children. He was quite possibly one of the last fluent speakers of Anong.

Sun's recordings made on a camcorder are of words produced in isolation, and thus they represent qualities in clear citation forms. Sun

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<sup>1</sup> I would like to thank Professor Sun Hongkai for sharing his recordings with me and making this acoustic study possible.

asked his consultant to repeat each word twice in a row. Both tokens were measured. Using SoundEdit 16 version 2, the recordings were downsampled at 11,025 Hz for vowel analysis and at 22,050 Hz for consonant analysis. The data were analyzed using Scicon's Macquiner software system.

## 2. VOWELS<sup>2</sup>

Sun (this volume) distinguishes eight main vowels, with [y] a ninth one restricted to a handful of obviously Chinese borrowings. The notational system used by Sun in this study and in 2000 differs slightly from the one used in 1988, with the difference in the symbols for the low back vowels (see Table 1).

Table 1: Anong vowels

1988 (Sun 1988:30)			2000 (Sun 2000:69; Sun (this volume))		
i (y)	ɯ	u	i (y)	ɯ	u
e		o	e		o
ɛ		ɔ	ɛ	a	ɑ
	ɑ				

To characterize the qualities of the vowels more precisely the frequencies for the first three formants (F1, F2, F3) were calculated at about the mid-point for each vowel over a 23 ms window. The mean formant frequencies and the number of tokens measured for each vowel are shown in Table 2. The vowel /y/ is not included in the analysis, because no examples were available in the recorded data. The positions of the Anong vowels in a two-formant space are plotted in Figure 1, with ellipses drawn around each cluster of points representing a single vowel type.

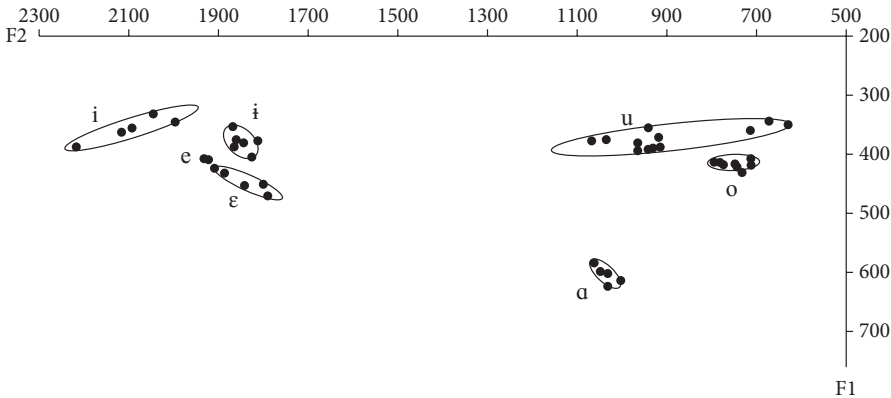
Figure 1 shows that the two vowels /e/ and /ɛ/ are not well separated in the F1/F2 space, even though /e/ is slightly higher and more peripheral than /ɛ/. The vowel /ɛ/, as produced by Sun's consultant, is a relatively high vowel. It is possible that /ɛ/ and /e/ constitute allophones of the same phoneme.

<sup>2</sup> This section is based on an earlier analysis of vowels in Thurgood (2007) with some new data on vowels, particularly on the vowel [e], included in this analysis.

Table 2: Mean frequencies of Anong vowels

	n	F1	F2	F3
i	5	356	2096	3500
e	3	416	1924	2979
ɛ	4	477	1886	3426
a	6	600	1044	2739
o	7	416	753	2743
u	8	379	967	2854
uu = i	6	380	1849	2912

Figure 1: Anong F1/F2 vowel space



The back vowel /u/ shows a centralizing tendency ( $F2 = 967\text{Hz}$ ). It becomes more peripheral only when it follows a bilabial stop, as in, for example,  $[\text{ka}^{55}\text{pu}^{31}]$  ‘cuckoo’ or  $[\text{p}^{\text{h}}\text{u}^{31}]$  ‘blow air on fire’. When after a bilabial, the  $F2$  lowers by ca 200 Hz (mean  $F2 = 675\text{ Hz}$ ); these tokens of /u/ are included in Figure 1 resulting in a large scatter for the vowel.

Of special interest is the vowel described by Sun as the back unrounded vowel /uu/; in his work, Sun observes that /uu/ is more central than the symbol u would lead one to expect, and, as the acoustic analysis shows below, a more appropriate IPA symbol for /uu/ would, in fact, be /i/. Accordingly, in Figure 1 /i/ is used instead of /uu/.

The low vowel /a/ becomes the most open and central vowel when it functions as the prefix  $[\text{a}^{31}]$ , as in, for example,  $[\text{a}^{31}\text{sa}^{53}]$  ‘earth, dirt, soil’ or in  $[\text{a}^{31}\text{t}\text{sa}^{55}]$  ‘to stride forward’. Based on 8 tokens, the  $F2$  of [a] increases by ca. 200 Hz. In Table 3 mean values of the formant frequencies for both allophones of /a/ are given for comparison.

In Table 4, Sun's vowel configuration is compared with E. Thurgood's vowel configuration based on her acoustic study. The difference is in the representation of the vowel /u/, now marked as /i/, and in the lack of [a], now analyzed as an allophonic variant of /a/.

Table 3: Mean values of F1, F2, F3 for the two allophones of /a/

	F1	F2	F3
[ɑ]	600	1044	2739
[a]	582	1217	3141

Table 4: Anong vowels

Sun (this volume)			E. Thurgood (2007)		
i (y)	u	u	i	i	u
e		o	e		o
ɛ	a	ɑ	ɛ		ɑ

### 2.1. Vowel Raising

Vowel raising occurs when /ɛ ɑ o/ follow an alveolo-palatal. Formant frequencies of /ɛ ɑ o/ were measured when they followed /ç/, /tç<sup>h</sup>/, /tç/ and /dz/. Additionally, the affricate retroflex /tʂ<sup>h</sup>/ also causes vowel raising.<sup>3</sup> Measured in the middle, the three non-high vowels are raised to what in IPA would be [i ɤ u], respectively. Formant values of the main vowels /ɛ ɑ o/ and their raised counterparts are given in Table 5; their formant frequencies are plotted in Figure 2.

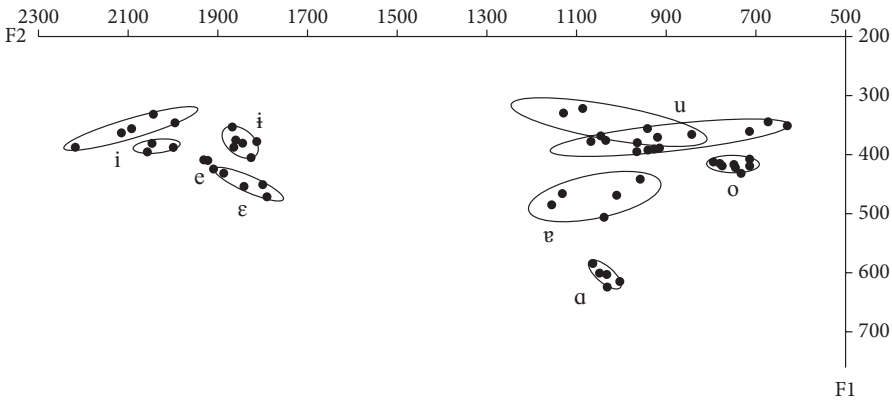
The influence of the alveolo-palatal consonants is greater for the low vowel /a/ (the F1 is lowered by ca. 130 Hz) than for the mid vowels /ɛ/ and /o/ (their F1 is lowered by ca. 70 Hz). However, the two mid vowels also show an increase in F2 vis-à-vis their neutral counterparts. In the case of /ɛ/, the F2 is increased by ca. 200 Hz, in the case of /o/ it is increased by ca. 220 Hz. As a result, when raised, /ɛ/ almost overlaps with /i/ and /o/ partially overlaps with /u/. The vowel /a/, on the other hand, occupies a new vowel space.

<sup>3</sup> This points to [tʂ<sup>h</sup>] being more [tç<sup>h</sup>]. The retroflex affricate is analyzed later in the section devoted to coronal contrasts.

Table 5: Mean formant frequencies for /ε a o/ and their raised counterparts

	F1	F2	F3
/ε/	477	1886	2996
	390	2032	2885
/a/	600	1044	2739
	472	1062	2681
/o/	416	753	2743
	345	979	2293

Figure 2: Allophonic variation in Anong



## 2.2. Apical Vowel /ɿ/

Sun reports that Anong has the apical vowel /ɿ/. In E. Thurgood's (2007) study, the vowel described by Sun as /ɿ/ is measured in two contexts: (1) When it follows either an alveolar or a retroflex; and, (2) When it follows a consonant cluster /bɿ/, /fɿ/, /k<sup>h</sup>ɿ/ or /gɿ/. Altogether 26 tokens of /ɿ/ were measured.

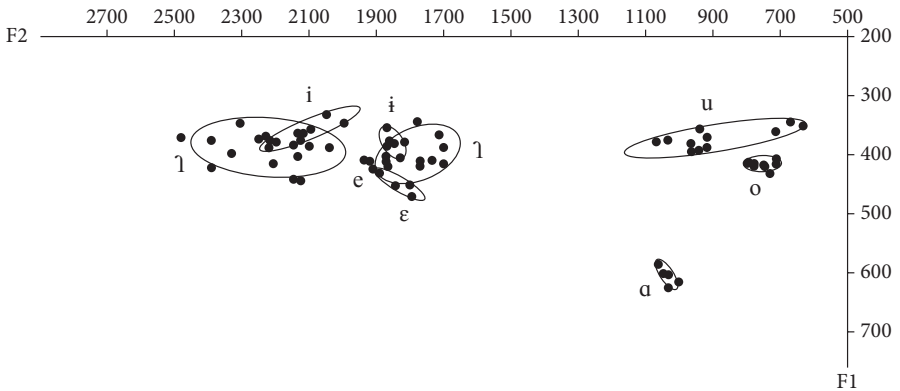
As the earlier study shows, depending on the preceding consonant, /ɿ/ is either a very peripheral high front vowel partially overlapping with /i/ or a very central high vowel partially overlapping with /i/. It overlaps partially with /i/ when after /bɿ/, /fɿ/, /k<sup>h</sup>ɿ/, or /gɿ/; It overlaps partially with /i/ when after an alveolar or retroflex consonant. Table 6 gives the mean formant frequency values of the two variants. Figure 3 presents Sun's apical vowel in the F1/F2 vowel space. The two scatters of the vowel are marked with the symbol ɿ.



Table 6: Allophonic variants of Sun's apical vowel /ɿ/

	F1	F2	F3	
ɿ = i	393	1756	2963	when after /tʂ /, / dz/, or /dz/
ɿ = i	388	2231	3816	when after /b.ɿ/, /f.ɿ/, /k <sup>h</sup> .ɿ/, or /g.ɿ/

Figure 3: Sun's apical vowel in the F1/F2 vowel space



### 2.3. Nasal and Nasalized Vowels

According to Sun, in Anong there are nasal vowels. The examples given in Table 7 were available in the data. The values of the first three formants of the nasal and oral /a/ were measured using the procedure outlined in the introduction to the oral vowels.

Table 7: Examples of oral and nasal /a/

la <sup>33</sup>	'to look, seek'	lã <sup>31</sup>	'to swim'
k <sup>h</sup> ua <sup>33</sup>	'bee'	k <sup>h</sup> uã <sup>31</sup>	'hole'

It is clear that in Anong, nasal /a/ is now retained somewhat randomly. On the one hand, the nasalization observed by Sun in [lã<sup>31</sup>] 'to swim' has disappeared, making the difference between [la<sup>31</sup>] 'to swim' and [la<sup>33</sup>] 'to look, seek' just tonal. On the other hand, however, in a different word, /p<sup>h</sup>ãŋ<sup>31</sup>/ 'five', the final nasal [ŋ] is no longer pronounced, but nasalization on the vowel is preserved. The word is pronounced as [p<sup>h</sup>ã<sup>31</sup>]. Figure 4 presents a spectrogram of [p<sup>h</sup>ã<sup>31</sup>] 'five'.

An acoustic analysis was also conducted to see how /a/ followed by a nasal fits into the patterns of the oral and nasal /a/. The examples

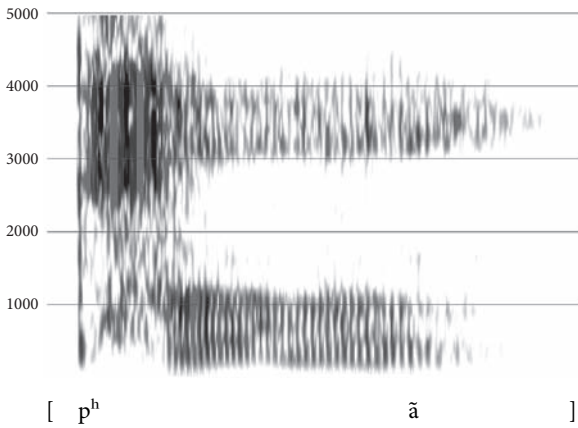
Figure 4: Spectrogram of [p<sup>h</sup>ã<sup>31</sup>] ‘five’.

Table 8: Examples of /a/ followed by a nasal

- /am/ in [sãm<sup>53</sup>] ‘to pour’  
 /an/ in [bãn<sup>55</sup>] ‘to weave (baskets)’  
 /aŋ/ in [dãŋ<sup>55</sup>] ‘to climb a tree’, [lãn<sup>55</sup>] ‘piece (of stone)’, [ts<sup>h</sup>ãŋ<sup>31</sup>] ‘person’

Table 9: Mean formant frequency values for oral and nasalized allophones of /a/

	F1	F2	F3
[ɑ]	600	1044	2739
[a]	582	1217	3141
[ɐ]	472	1062	2681
[ã]	405	1015	3237

analyzed are given in Table 8. The results are given in Table 9. For comparison, the formant frequencies for the oral allophones of /a/ are also given.

As Table 9 shows, nasalization triggers raising in the low vowel, an observation also made for other languages (see, for example, Gordon and Maddieson 2004). The values for the nasalized [ã] and the raised [ɐ] are very similar. The only consistent and robust difference between [ã] and [ɐ] is in F3. For [ã], F3 is by ca. 550 Hz bigger than for [ɐ].

### 2.4. Influence of Lisu on the Anong Vowel System

Despite the richer vowel inventory of Lisu, with one minor exception, Anong has not shown any expansion of its vowel inventory. The exception is Anong /y/, which now occurs in a handful of Chinese borrowings into Anong, undoubtedly in part because the /y/ already occurs in Lisu. Table 10 presents the vowel inventory of the northern Lisu dialect, with which the Anong speakers are primarily in contact with (Bradley 1994).

Table 10: Northern Lisu vowels (Bradley 1994)

i	y	ɯ	u
e	ø	ɤ	ɔ
á		a	

As in Anong, the two processes, vowel raising and nasalization, are also found in Lisu, however, the directionality of change and end results are different. Lisu does not appear to have affected Anong. Specifically, although fronting has been reported in Black Lisu, it only involves /a/ to /ɛ/ after alveolo-palatals. Raising has been reported to occur but only in Southern Lisu and even then the results are different: the mid vowels /e ø ɤ o/ are variably raised to /i y ɯ u/ (Bradley 2003). Nasalization has also been found in Lisu, but unlike the variable nasalization in Anong, Lisu nasalization is not just predictable but is subject to distinctly different environmental constraints: It occurs in syllables beginning with a vowel or with h- (Bradley 2003).

### 2.5. Summary

In Table 11, Sun's vowel configuration is compared and contrasted with the one based on this acoustics study. The difference is in the representation of the vowel /ɯ/, now marked as /i/, and in the lack of /a/, now analyzed as an allophonic variant of /a/. The vowel /y/ is put in parenthesis to mark the fact that its acoustic values have not been checked due to the lack of tokens.

Table 11: Anong vowels

2005 (Sun, this volume)			2007 (E. Thurgood 2007)		
i y	ɯ	u	i (y)	ɨ	u
e		o	e		o
ɛ	a	ɑ	ɛ		ɑ

The data reveal that in Anong vowels following alveolo-palatals are systematically altered in height. The allophonic variation of /ε a o/ is manifested as shifts predominantly along the high/low dimension, but the front/back dimension is also altered. The data also reveal that the vowel /ɣ/ shifts along the front/back dimension.

Nasalization has been shown to trigger /a/ raising. A tendency to denasalize a vowel that is not followed by a nasal has been observed. A tendency to drop the final nasal but to keep the vowel nasalized has also been observed. These two tendencies could be presented as the following chain: [aŋ > ã > a].

### 3. CONSONANTS

Sun (this volume) distinguishes 47 consonants (see also Table 12 below). As observed by Sun, a number of consonants presented in Table 12 no longer exists in Anong. Of particular interest are nasals and retroflexes. Of the five nasals /m n ŋ ŋ̣ ɲ/, Anong now has three /m n ɲ/. /ŋ̣/ is an allophone of /n/ occurring only in front of a high front vowel, as in [dɛ<sup>55</sup>ŋ̣i<sup>33</sup>] ‘today’. There is no distinction between the voiceless and voiced nasals: Voiceless nasals are pronounced as voiced. Nasals in codas begin to disappear leaving their traces on the preceding vowel (see the section on nasalized vowels). The retroflex /ŋ/ is pronounced as [ŋ]. For example, [t<sup>h</sup>a<sup>31</sup>ŋaŋ<sup>55</sup>] ‘younger sibling’ is pronounced as [t<sup>h</sup>a<sup>31</sup>naŋ<sup>55</sup>]. The retroflex series of stops /t<sup>h</sup> ṭ ḍ/ and the lateral /l/ have shared the fate of the nasal retroflex. They have also disappeared. /t<sup>h</sup> ṭ ḍ/ are now pronounced as [t<sup>h</sup> t d]; /l/ is pronounced as [l]. The fate of the fricative and affricate retroflexes is discussed in the section on coronal contrasts.

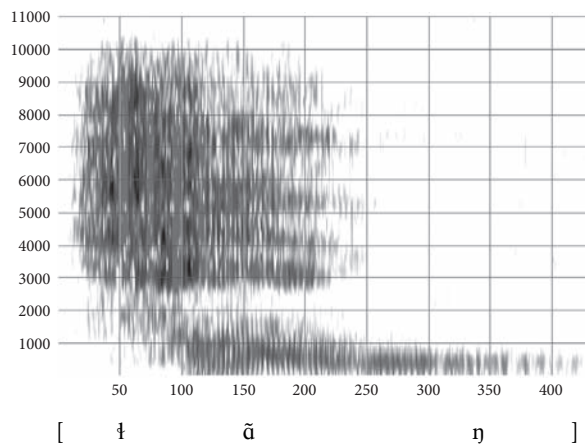
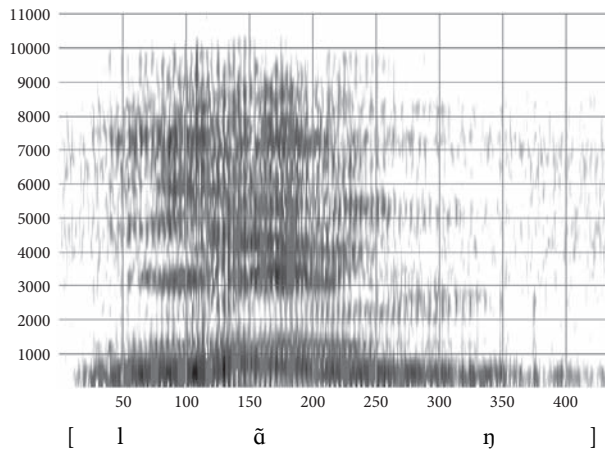
Table 12: Anong consonant inventory (after Sun this volume)

	bilabial	alveolar	retroflex	alveolo-palatal	velar	glottal
stops	p <sup>h</sup> p b	t <sup>h</sup> t d	ṭ <sup>h</sup> ṭ ḍ		k <sup>h</sup> k g	ʔ
fricatives	f v	s z	ʂ ʐ	ç ʒ	x ɣ	h
affricates		ts <sup>h</sup> ts dz	ṭʂ <sup>h</sup> ṭʐ dẓ	ṭç <sup>h</sup> ṭç dẓ		
nasals	m̚ m	ŋ n	ŋ̣ ŋ	ŋ̣ ɲ	ŋ ɲ	
lateral						
fricatives		ɬ				
approximants		l	ɭ			
approximant		ɹ				

### 3.1. Variation in Consonant Production

Variation in pronunciation is observed in the production of cross-linguistically less common segments such as the lateral fricative /ɬ/. When asked to produce words with the fricative /ɬ/, the consultant always produced the approximant [l] at first and only later, having been prompted to change his pronunciation by Sun, he produced the voiceless fricative [ɬ]. Figure 5 illustrates this variation in the word [ɬaŋ<sup>53</sup>] (from ɬa<sup>55</sup>ŋu<sup>31</sup>) ‘to lick’.

Figure 5: Variation of /ɬ/ in the word [ɬaŋ<sup>53</sup>] ‘to lick’



Variation in the production of the fricatives /x ɣ/ can also be observed. The velar /x/ is palatalized when followed by /i/ and pronounced as the alveolo-palatal [ç]. For example, /xi<sup>55</sup>/ ‘to laugh’ is pronounced as [çi<sup>55</sup>] (Figure 6). However, with the prefix a<sup>31</sup>, only part of the velar fricative is palatalized. As a result, /a<sup>31</sup>xi<sup>55</sup>/ ‘to laugh’ is pronounced as [ʔa<sup>31</sup>xçi<sup>55</sup>] (Figure 7).

Figure 6: Spectrogram of /xi<sup>55</sup>/ ‘to laugh’ [çi<sup>55</sup>]

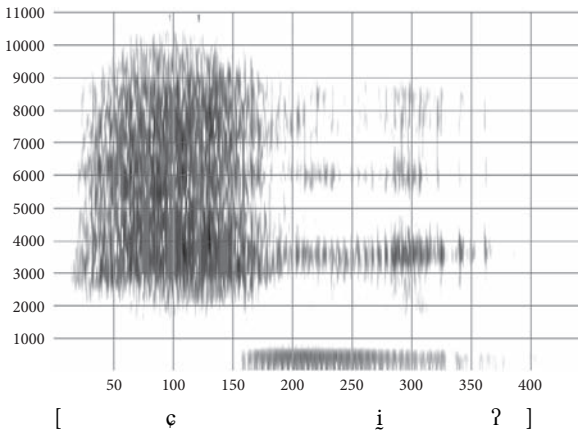
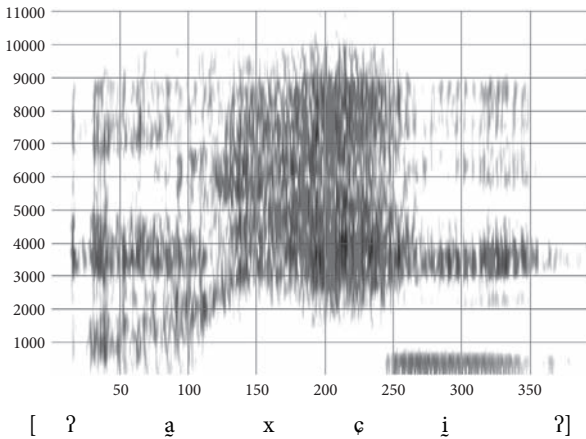


Figure 7: Spectrogram of /a<sup>31</sup>xi<sup>55</sup>/ ‘to laugh’ [ʔa<sup>31</sup>xçi<sup>55</sup>]



The voiced fricative /ɣ/ is often only produced when the consultant is prompted by Sun to say it. Figure 8 gives the first pronunciation of /ɣi<sup>31</sup>/ ‘a saw’ (Sun’s ɣu<sup>31</sup>) without the velar fricative; Figure 9 gives the second pronunciation of /ɣi<sup>31</sup>/ with the fricative /ɣ/.

Figure 8: Spectrogram of /ɣi<sup>31</sup>/ ‘a saw’ [iə<sup>31</sup>]

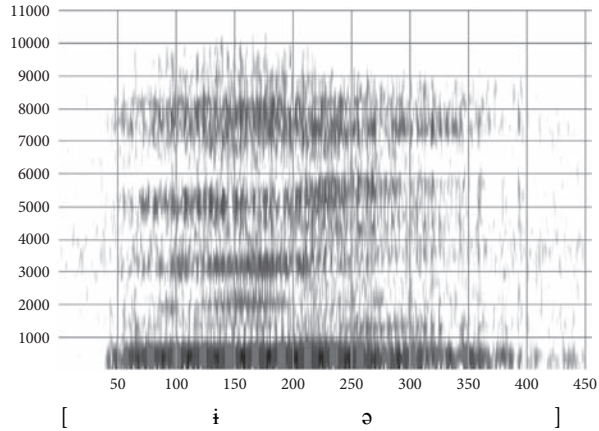
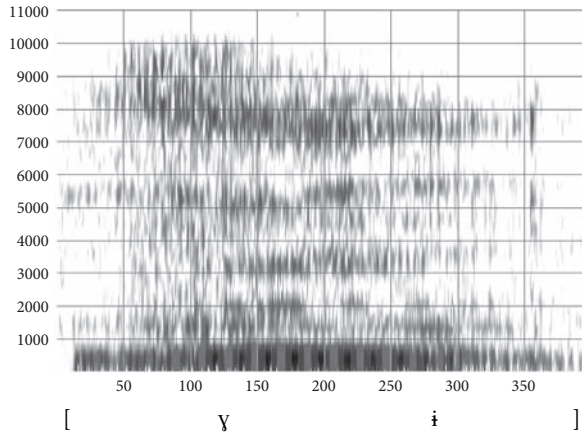


Figure 9: Spectrogram of /ɣi<sup>31</sup>/ ‘a saw’ [ɣi<sup>31</sup>]



3.2. *Voice Onset Time*

Anong has a three-way laryngeal contrast of voiceless aspirated/voiceless unaspirated/voiced stops. The phonetic nature of the laryngeal contrast, illustrated in Figures 10–11, is determined by measuring the voice onset time, i.e., the period from the release burst to the onset of voicing of the following vowel (i.e. the first glottal pulse). The number of tokens measured in this study ranged from 2 for the unaspirated series to 4 for the voiced series and 5 for the aspirated series. Figure 12 shows the mean VOT durations.

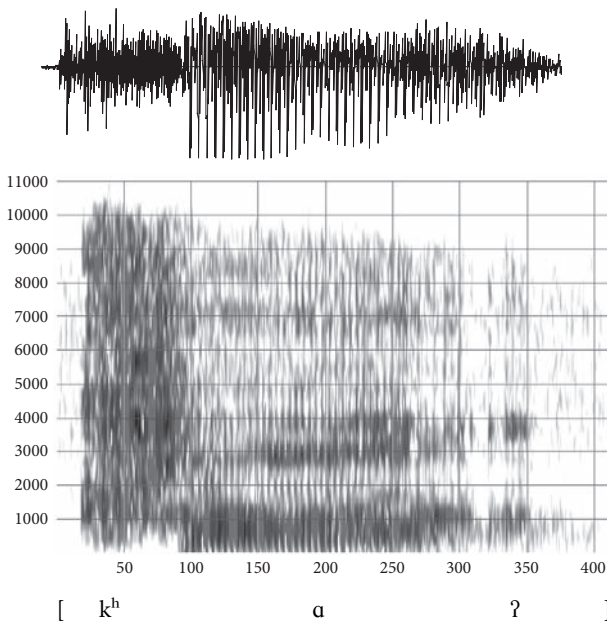
Figure 10: /k<sup>h</sup>/ in /k<sup>h</sup>ɑ<sup>55</sup>/ ‘bamboo box’



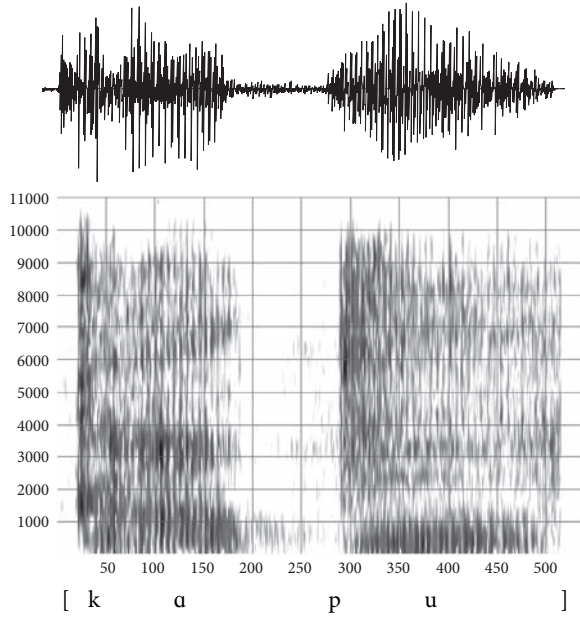
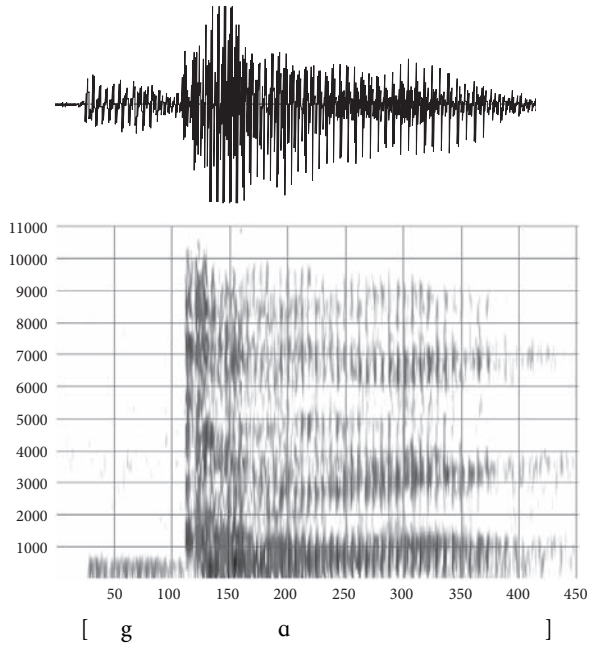
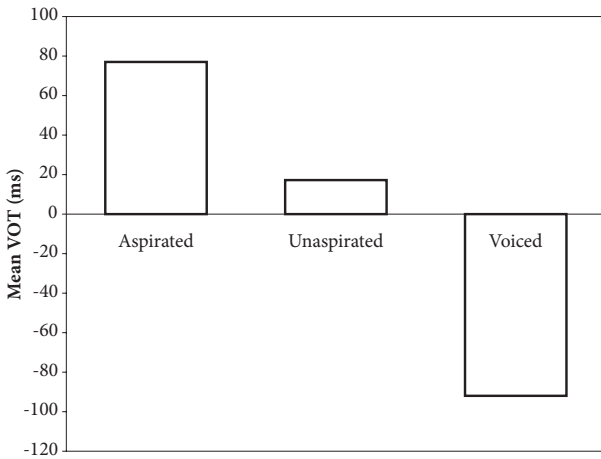
Figure 11: /k/ in /ka<sup>55</sup>pu<sup>31</sup>/ ‘cuckoo’Figure 12: /g/ in /ga<sup>55</sup>/ ‘bright’

Figure 13 shows that VOT clearly distinguishes between the three series. Voiceless aspirated stops are well distinguished from voiceless unaspirated stops by a considerably longer voicing lag (positive VOT) than the one characterizing the unaspirated series. The voice distinction is realized through the presence of prevoicing. The voicing lead (negative VOT) of voiced stops separates them clearly from unaspirated voiceless stops. Scheffe's post hoc tests show all of the pairwise comparisons to be highly significant: voiced vs. unaspirated voiceless,  $p < .0001$ ; unaspirated vs aspirated,  $p < .0001$ .

Figure 13: Mean VOT values for the three series of stops



Cho and Ladefoged (1999) have shown that cross-linguistically there are often statistically significant durational differences in VOT associated with different places of articulation. In Anong, however, the differences in VOT among the aspirated bilabial, alveolar and velar stops are not statistically significant. Figure 14, in which the aspirated stops are separated for their places of articulation, shows the VOT of /p<sup>h</sup>/ to be the longest. The VOT of /p<sup>h</sup>/ is ca. 7 ms longer than that of /k<sup>h</sup>/ and ca. 16 ms longer than that of /t<sup>h</sup>/, but pairwise comparison by Scheffe's post hoc tests does not indicate any statistically reliable VOT difference between any pair of aspirated stops.

Figure 14: Mean VOTs and standard deviations for the aspirated stops

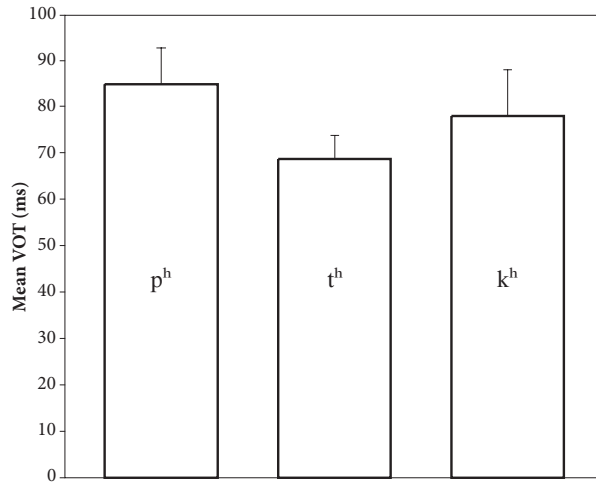
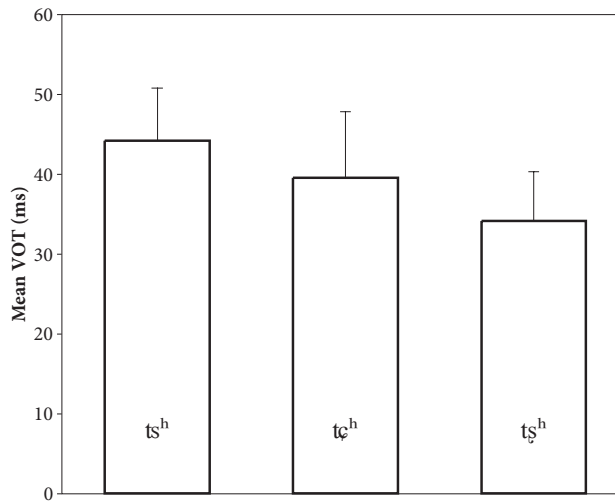


Figure 15: Mean VOTs and SDs for the aspirated affricates



An analysis of variance of VOT has also been performed for aspirated affricates  $/ts^h tʃ^h tʂ^h/$ . Results are shown graphically in Figure 15. The differences in VOT values between  $/ts^h/$  and  $/tʂ^h/$  are statistically significant at the  $p < .05$  level according to Scheffe's post hoc tests. The differences in VOT values are not statistically significant when  $/tʃ^h/$  and  $/tʂ^h/$  are compared ( $p = .132$ ), nor when  $/tʃ^h/$  and  $/ts^h/$  are compared ( $p = .612$ ).

Figure 16: Mean VOT values for the three series of affricatives in Anong

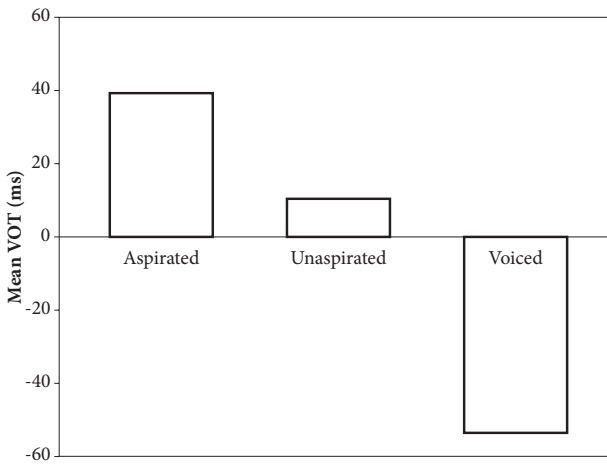


Figure 16 shows that VOT clearly distinguishes between the three series of affricates. Scheffe's post hoc tests show all of the pairwise comparisons to be highly significant: aspirated vs. unaspirated,  $p < .0001$ ; unaspirated voiceless vs. voiced,  $p < .0001$ .

Voiced affricates require special attention. In contrast to voiced stops, they may be realized phonetically as fully voiceless. In our data, of the three types of affricates, the alveolo-palatal affricate /dʒ/ is regularly produced as its voiceless counterpart [tʃ] during the first repetition of a word; for example, /dʒa<sup>53</sup>/ 'to read' is pronounced as [tʃo<sup>53</sup>]<sup>4</sup> and /dʒo<sup>31</sup>/ 'to win' as [tʃu<sup>31</sup>]. However, in other words /dʒ/ is always pronounced as [dʒ], as in [dʒi<sup>55</sup>dʒi<sup>55</sup>] 'to polish'. When /dʒ/ is fully voiced, it has a long voicing lead of ca. 53 ms (Figure 16). The discussed variation in the production of /dʒ/ is for one speaker only. It would be interesting to see how other Anong speakers pronounce the voiced affricates /dʒ/, /dʒ/ and /dʒ/.

### 3.3. Coronal Contrasts

Anong has a three-way coronal contrast of alveolar, retroflex and alveolo-palatal fricatives and affricates. In the light of the observation that retroflexes are disappearing in the language, the retroflex series /ʂ tʂ<sup>h</sup> tʂ/ is of great interest, particularly, how the retroflex series contrasts

<sup>4</sup> Vowel changes are discussed earlier.

with the alveolar series /s ts<sup>h</sup> ts/ and the alveolo-palatal series /ç tç<sup>h</sup> tç/. The discussion of the phonetic nature of the contrast presented here is based on an earlier acoustic study of coronal contrasts in E. Thurgood (2009). In this work, the three-way distinction among the voiceless fricatives /s ç/, among the aspirated voiceless affricates /ts<sup>h</sup> tç<sup>h</sup> tç<sup>h</sup>/ and among the unaspirated voiceless affricates /ts tç tç/ was analyzed on the basis of FFT spectra, gravity center frequencies<sup>5</sup> and the formant frequencies of the following vowel /a/ measured at the onset and in the middle of the vowel. The data consisted of 28 tokens of /s ç/ and 28 tokens of /ts<sup>h</sup> tç<sup>h</sup> tç<sup>h</sup>/. For the unaspirated affricates /ts tç tç/, and in particular for /tç/, the data were sparse, something that Sun observed as early as in 1988. However, 10 tokens of /ts tç tç/ were used to compare whenever possible the unaspirated series with the aspirated one.

### 3.3.1. *Spectral Properties*

The study on coronal contrasts has shown that there is considerable uniformity across the analyzed data in the spectral characteristics. Figure 17 (based on E. Thurgood (2009)), in which the averaged spectra are separated according to the following vowel, illustrates the spectral characteristics. Among the fricatives, the most prominent spectral peaks for /s/ occur at higher frequencies than for /ç/ and for /tç/, at approximately 7.2 kHz regardless of the following vowel. In contrast, /ç/ and /tç/ display their most prominent spectral peaks at lower frequencies, between 2.2 and 4 kHz depending on the following vowel. The spectra for the two fricatives differ in that /ç/ shows a less prominent, secondary peak cluster between 5.1 and 6.2 kHz, while /tç/ shows a relative flat spectrum following the most pronounced noise peak and then a steep decline. The spectral shapes of Anong coronal fricatives pattern well with spectral shapes of coronal fricatives in other languages with the three-way contrast.

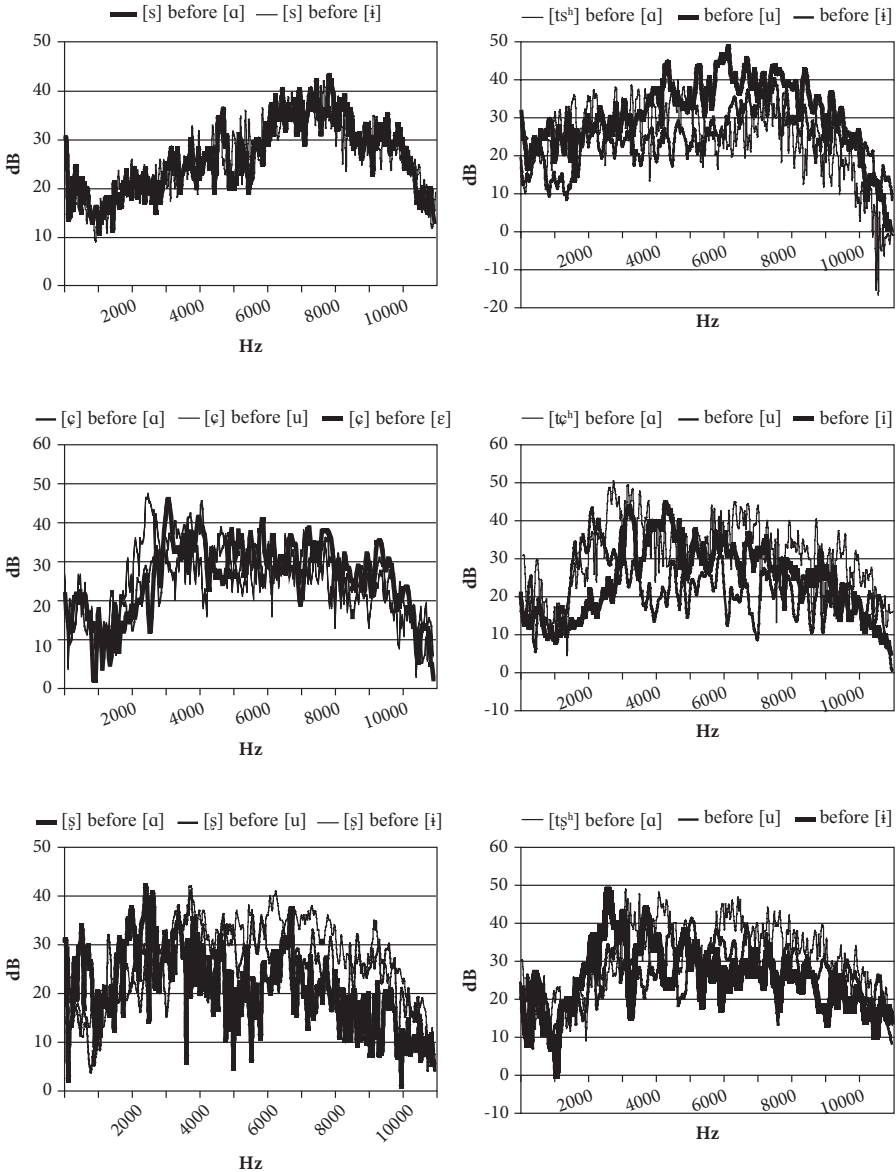
Among the coronal affricates, the highest spectral peaks of /ts<sup>h</sup>/ are centered at higher frequencies, between 5.6 kHz and 6.8 kHz. Spectra for /tç<sup>h</sup>/ and for /tç<sup>h</sup>/ show a very similar display of noise distribution with the most pronounced peaks between 2 and 4 kHz. For both affricate types before the non-back high vowel, the spectral peaks are followed by a relative flat spectrum and then a decline. However, before the low

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<sup>5</sup> The center of gravity was calculated following the method described in Gordon, Barthmaier, and Sands (2002) for each token and then averaged together for each coronal appearing in each context.

vowel, the spectra of /tɕ<sup>h</sup>/ and /tʂ<sup>h</sup>/ are characterized by secondary peaks between 5.7 kHz and 6.4 kHz. When before the non-back high vowel, the spectral shapes of /tɕ<sup>h</sup>/ and /tʂ<sup>h</sup>/ are similar to the spectral shape of /ç/; When before the low vowel, the spectral shapes of /tɕ<sup>h</sup>/ and for /tʂ<sup>h</sup>/ are similar to the spectral shape of /ʃ/.

Figure 17: Acoustic spectra for Anong coronal fricatives and affricates



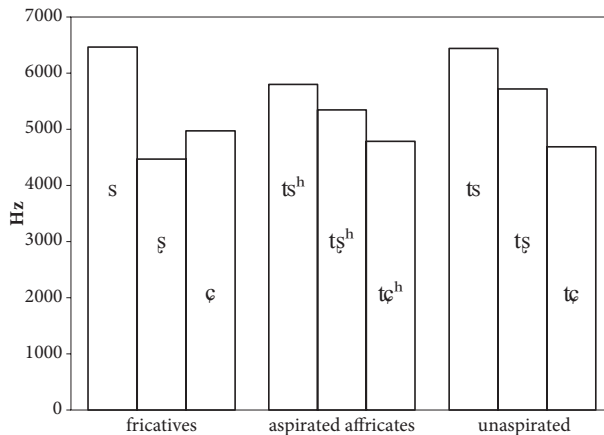
### 3.3.2. Gravity Centers

The center of gravity well differentiates only between /s/ on the one hand and /ʃ/ and /ç/, on the other. The center of gravity for /s/ is the highest; it is always greater than 6 kHz. The centers of gravity for /ʃ/ and /ç/ are always smaller than 5.5 kHz. Scheffe's post hoc tests reveal the difference between /s/ and /ç/ and between /s/ and /ʃ/ to be significant at minimally the  $p < .05$  level. However, pairwise comparison between /ʃ/ and /ç/ does not reach statistical significance.

The center of gravity well differentiates between the three types of coronal affricates. The alveolar /ts<sup>h</sup>/ has the highest gravity center values, while the alveolo-palatal /tç<sup>h</sup>/ has the lowest gravity center values. Pairwise post hoc comparisons involving /ts<sup>h</sup>/, /tʃ<sup>h</sup>/ and /tç<sup>h</sup>/ show a significant difference at minimally  $p < .05$ . For the unaspirated affricates, the comparison is more restricted. However, even though the data are limited in the number of tokens available, the gravity center frequencies of unaspirated /ts/, /tʃ/ and /tç/ pattern in the same way as the gravity center frequencies of aspirated /ts<sup>h</sup>/, /tʃ<sup>h</sup>/ and /tç<sup>h</sup>/.

The alveolar affricate /ts/ has the highest gravity center values, while the alveolo-palatal affricate /tç/ has the lowest, with the gravity center values of the retroflex affricate /tʃ/ placed in between.

Figure 18: Mean gravity center frequencies for coronal fricatives and affricates



### 3.3.3. Formant Frequencies of the Following Vowel

Table 13 presents formant frequencies of the vowel /a/ in different contexts. It shows that all three Anong coronal fricatives are well differentiated by the formant frequencies of the following vowel. The alveolo-palatal /ç/ triggers a significant lowering of F1 and a raising of F2 in the following /a/. The lowering effect of /ç/ on F1 and the raising effect of /ç/ on F2 persist into the middle of the vowel. The retroflex /ʂ/ triggers a significant lowering of F3 in the following /a/. The effect of /ʂ/ on /a/ persists well beyond the portion of the vowel immediately adjacent to the fricative. There is no difference in formant values between the beginning and the middle of the vowel when /a/ follows the alveolar /s/. The formant frequency values of /a/ following /s/ pattern with the formant frequency values of /a/ arrived at in the earlier study (E. Thurgood 2007).

Table 13: Averaged frequencies of /a/

	at the onset			in the middle		
	F1	F2	F3	F1	F2	F3
following /s/	580	1124	2939	581	1086	2969
following /ʂ/	424	1245	2373	567	922	2382
following /ç/	455	1201	2749	461	1150	2794
following /ts/ and /ts <sup>h</sup> /	541	1281	2825	573	1085	2847
following /tʂ <sup>h</sup> /	398	1216	2699	457	1071	2693
following /tç/ and /tç <sup>h</sup> /	388	1230	2788	443	1036	2721
following a non coronal	600	1044	2739			

The fricative components of coronal affricates pattern only partially with their fricative counterparts: F1 is lowered and F2 is raised when /a/ follows /tç<sup>h</sup>/ and /tç/; F1, F2, F3 are not changed when /a/ follows /ts<sup>h</sup>/ and /ts/. The difference between coronal fricatives and affricates lies with the retroflex affricate /tʂ<sup>h</sup>. The fricative component of /tʂ<sup>h</sup>/ does not trigger lowering of F3 in the following vowel. Instead, it patterns with the alveolo-palatals /tç<sup>h</sup>/, /tç/ and /ç/ in triggering a lower F1 in /a/. A lower F1 reflects a longer constriction not characteristic of a retroflex (Halle and Stevens 1997; Stevens 1998). It again points to /tʂ<sup>h</sup>/ being more like /tç<sup>h</sup>/.



### 3.3.4. *Retroflex Fricatives and Affricates*

As for retroflexes in Anong, the spectral shapes of /ʂ/ and the formant frequencies of the following vowel show that /ʂ/ is acoustically a retroflex. First, the spectral shape of /ʂ/ with its two spectral peaks not only differentiates it well from the remaining two coronals /s/ and /ç/, but it also patterns well with the spectral shapes of the retroflex fricatives in other languages (see E. Thurgood 2009). Second, Anong /ʂ/ triggers a significant lowering of F3 in the following /a/, a feature that has been associated with the presence of retroflexion. It is of interest that in Anong the effect of /ʂ/ on the following vowel is observed not only at the vowel onset but also into the middle of the vowel. In contrast, the /tʂʰ/, termed a retroflex by Sun, is not a typical retroflex acoustically. First, the fricative part of /tʂʰ/ does not consistently pattern with the fricative /ʂ/. Second, the spectral peaks of /tʂʰ/ are not different from those of /tçʰ/. Third, the vowel /a/, when it follows /tʂʰ/, does not show a lowered F3, but instead a lowered F1. Thus, in the speech of one of the last fluent speakers of Anong, the retroflex affricate /tʂʰ/ has been lost along with other retroflex series even though it did not become /tçʰ/. In contrast, the retroflex fricative /ʂ/ is still preserved.

## 4. TONES AND TENSE-MODAL REGISTER

### 4.1. *Tones*

Anong has five tones: two level tones (the high 55 tone and the mid 33 tone), and three contour tones (the rising 35 tone and two falling tones: 53 and 31). Tone 33 is a new tone, one that developed between 1988 (not noted by Sun (1988)) and 2000 (recorded by Sun (2000)). The words illustrating the five tones are given in Table 14. The pitches illustrating the tonal contrasts in these words are given in Figure 19. The pitch contour of each token is 170 ms long measured (in Hz) from the onset of the vowel. Pitch measurements are given at 10 ms intervals.

Table 14: Words illustrating Anong tonal contrasts

tç <sup>h</sup> uj <sup>55</sup>	'(earthen) jar'
tç <sup>h</sup> uj <sup>33</sup>	'to play'
tç <sup>h</sup> uj <sup>53</sup>	'straight; press'
tç <sup>h</sup> uj <sup>35</sup>	'to fish'
tç <sup>h</sup> uj <sup>31</sup>	'dig up'

Figure 19: Pitch traces of Anong tones

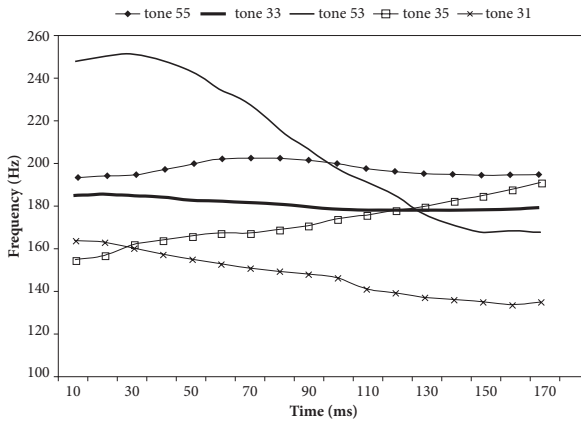


Figure 19 illustrates pitch contours for Anong tones elicited with the consultant's full attention on differentiating among the five words given in Table 14 by tonal distinctions. In this elicitation, tones 55 and 33 are relatively close to each other in their fundamental frequencies (F0). They are only ca. 10 Hz apart for the first 60 milliseconds of the vowel and then ca. 30 Hz apart. The rising tone 35 and the falling tone 31 begin at approximately 160 Hz. Tone 35 raises ca. 30 Hz; tone 31 falls ca. 30 Hz. A pitch contour of tone 53 displays first a quasi hat-like pattern with a small rise of 10 Hz and then a steep fall of ca. 60 Hz occupying over half of the duration of the vowel.

The mean F0 values of Anong tones are graphically presented in Figure 20. The duration of the vowels was normalized by measuring the fundamental frequency at 8 evenly divided points across the duration of the vowel: the onset and the endpoint of the vowel, and six intermediate points. For each tone from 12 to 6 tokens were measured. In contrast to the earlier elicitation, during the recording of these tokens, the consultant was focused more on a word meaning than on a tonal pitch. Pairwise post hoc comparisons indicate significant differences at minimally  $p < .05$  between tone 31, on the one hand, and the remaining four tones, on the other. Post hoc tests indicate that there are overlaps and crossings of the four remaining tones.

The possible correlation between consonant aspiration and a tonal contour has been under investigation (see, for example, Xu and Xu, 2003). In this study, an interaction of an aspirated consonant with F0 of the following vowel /a/ is tested in the high tone 55 and in the low-falling tone 31. The F0 of /a/ following an aspirated consonant /p<sup>h</sup> t<sup>h</sup> ts<sup>h</sup>

Figure 20: Mean F0 values for five Anong tones

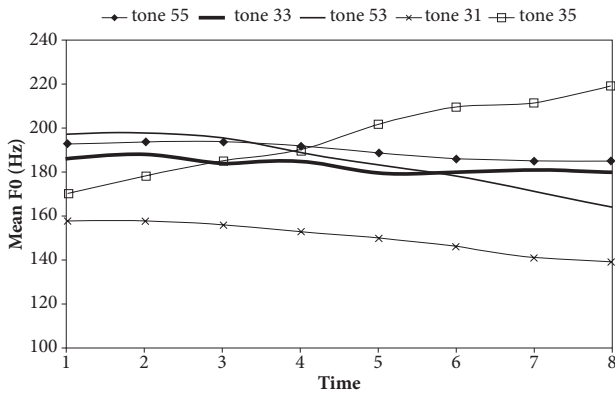
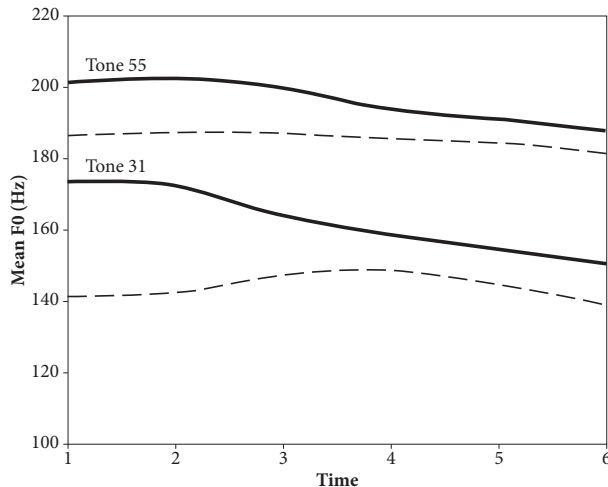


Figure 21: Average F0 contours (aspirated vs. voiced consonants)



$k^h$ / is compared with the F0 of /a/ following a voiced consonant /b d g l/. Figure 21 presents the average F0 contours separated for a consonant type. The solid lines represent F0 measured after an aspirated consonant. The dashed lines represent F0 measured after a voiced consonant. The curves are time normalized. Figure 21 shows that a consonant type correlates with the F0 of the following vowel. It is higher following an aspirated consonant than following a voiced consonant by ca. 20 Hz through the first half of /a/ in tone 55 and by ca. 35 Hz through the first quarter of /a/ in tone 31. Statistical analysis shows that the onset

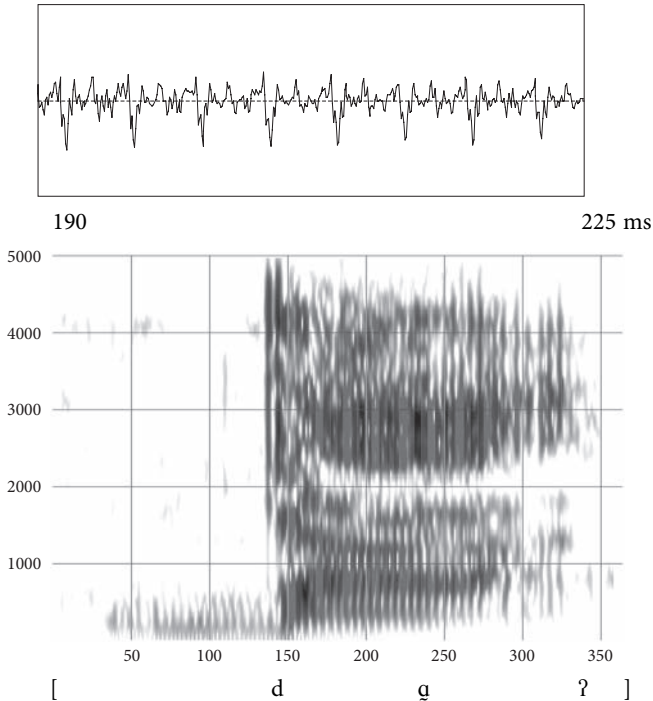
F0 values of the two curves for each of the tones are significantly different ( $p < .001$ ). The consonant effect decreases over time towards the syllable offset, but it never disappears completely.

#### 4.2. *Tense-Modal Register*

Anong vowels are described as tense, a new feature first recorded only in 1983 (Sun 2005:152). In descriptions of southeast Asian languages, the feature ‘tense’ is used to refer primarily to a laryngeal setting, in which the vocal folds are tense and vibration is partially inhibited when compared with the vocal folds of modal phonation (cf. Maddieson and Ladefoged 1985). Anticipating the discussion below, the terms ‘tense’ and ‘laryngealized’ are used interchangeably in referring to the non-modal phonation (or ‘register’) employed in Anong.

In this study, tense-modal register is analyzed on the basis of the low vowel /a/. Some of its acoustic characteristics can be seen in Figure 22. The waveform of /a/ measured in the middle of the vowel (between 190 and 225 ms) shows irregularly spaced pitch periods and reduced acoustic

Figure 22: Waveform and spectrogram of [dqʔ<sup>55</sup>] ‘thunder’



intensity. The spectrogram shows increased distance between the vertical striations. It is also characterized by a final glottal closure.

The final glottal closure could be analyzed in two ways. It could be analyzed as part of the tense register on the vowel that creates a full glottal closure at the vowel end. It could also be analyzed as a glottal stop in the coda. That, in turn, would imply that tense vowels arise as the result of the preceding [ʔ]. The evidence is inconclusive. Following Sun's analysis, the word given in Figure 22 is transcribed as [dqʔ<sup>55</sup>].

Figure 23 presents a waveform and a spectrogram of /a/ in the word [k<sup>h</sup>qʔ<sup>55</sup>] 'bamboo box' transcribed by Sun without [ʔ] in a coda. The waveform of /a/ measured in the middle of the vowel (between 200 and 245 ms) once again shows irregularly spaced pitch periods, and the spectrogram shows increased distance between the vertical striations in the second half of the vowel.

Figure 23: Waveform and spectrogram of [k<sup>h</sup>qʔ<sup>55</sup>] 'bamboo box'

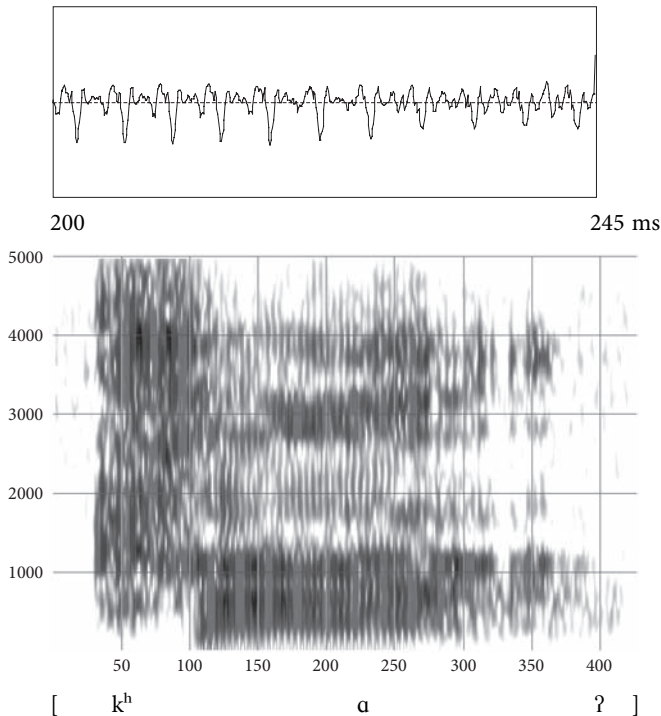
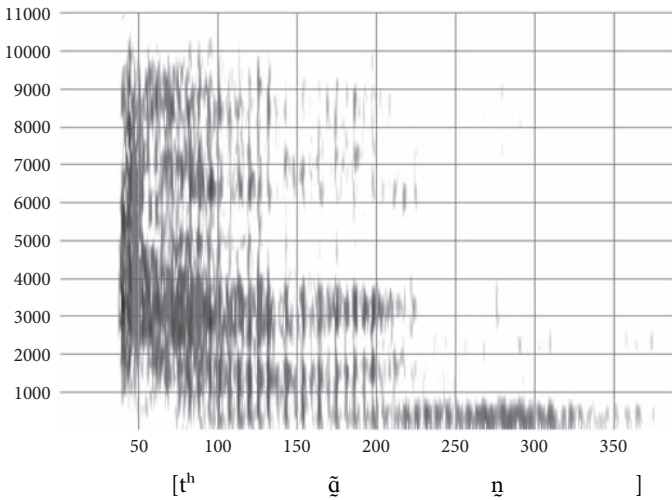


Figure 24: Spectrogram of [t<sup>h</sup>ãn<sup>55</sup>] (from [t<sup>h</sup>a<sup>31</sup> nãŋ<sup>55</sup>]) ‘younger sibling’

As noticed by Sun, vowel tenseness can be observed not only in open syllables. In Figure 24, /a/ is followed by a nasal, in which case not only the vowel but also the following nasal are laryngealized. From the spectrogram in Figure 24, it is clear that the vowel becomes progressively more laryngealized. The irregular pitch periods are particularly noticeable in the second half of [ã].

Tense vowels are distinguished from modal vowels in terms of their spectral properties. On the basis of their analysis of Jingpo, Hani, Nasu, and Wa, Maddieson and Ladefoged (1985) show that the most consistent acoustic feature of tense vowels is energy increase in higher formants and energy reduction in fundamental frequency (see also Gordon and Ladefoged 2001).

This study looks at the acoustic properties of tense vowels in Anong by analyzing the power spectra of /a/. Figures 25–26 present two Fast Fourier Transform (FFT) spectra calculated over a 23 ms window. The differences between them are in the amplitude of the second harmonic when compared to the amplitude of the fundamental. In Figure 25, the amplitude of the second harmonic is slightly less than that of the fundamental. In contrast, in Figure 26, the amplitude of the second harmonic is slightly greater than that of the fundamental. Another difference between the two spectra is that the spectrum of /a/ in /k<sup>h</sup>a<sup>55</sup>/ shows a slightly steeper increase in intensity as one moves from low

frequency components to higher frequency components. These differences imply that in /p<sup>h</sup>a<sup>33</sup>/ the vowel is not laryngealized as much as it is in /k<sup>h</sup>a<sup>55</sup>/.

Figure 25: FFT spectrum of /a/ in the word /p<sup>h</sup>a<sup>33</sup>/ ‘basket’

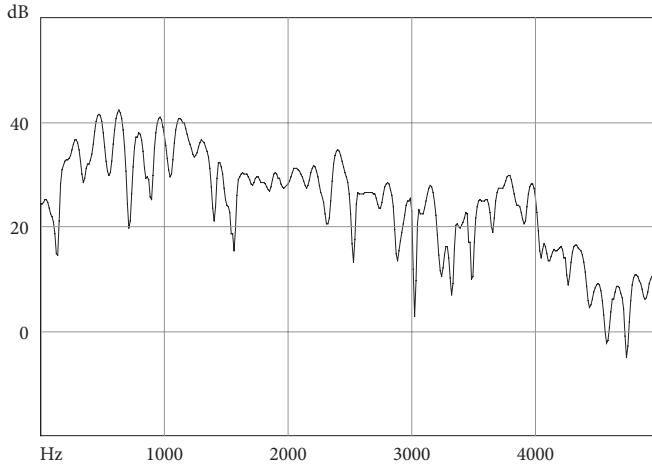
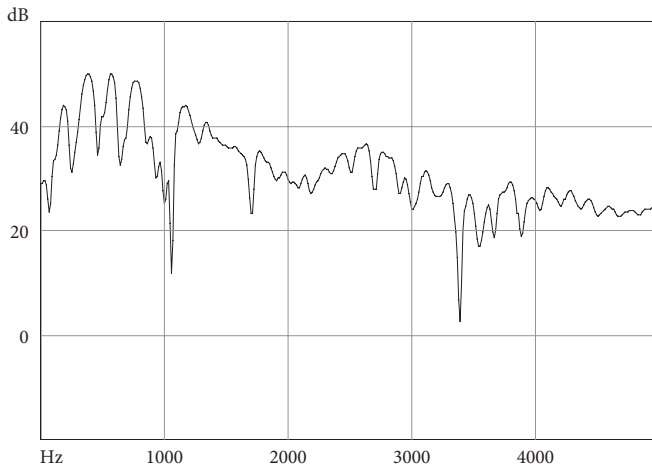


Figure 26: FFT spectrum of /a/ in /k<sup>h</sup>a<sup>55</sup>/ ‘bamboo box’



It has been shown that a non-modal register sometimes correlates with a particular tone only. For example, among the three Tibeto-Burman languages discussed by Maddieson and Ladefoged (1985), in Jingpo and Nasu, each of the tones correlates with a tense and non-tense (lax) register, but in Hani, only the mid and low falling tones co-occur with a tense register. One obvious explanation of the differences in the spectra of vowel /a/ in Anong would be that the high tone 55 co-occurs with a tense phonation and the mid tone 33 co-occurs with a modal phonation.

The acoustic parameters of the vowel /a/ were measured for every tone to see whether in Anong there is a correlation between a phonation and a pitch. The amplitude values measured in the middle of /a/ were those of the first harmonic (H1) of the fundamental, the second harmonic (H2), and the first formant (F1). The comparisons between the amplitude values were made by subtracting the intensity of the first harmonic from the intensity of the second harmonic (H1–H2), and by subtracting the intensity of the first harmonic from the intensity of the harmonic closest to the first formant (H1–F1).

The results of these comparisons were checked particularly carefully for /a/ tokens produced in tone 55, where among the four pairs of words, in one, /daʔ<sup>55</sup>/ ‘thunder’, /a/ was recorded by Sun as followed by /ʔ/. It was established that the amplitude values measured in the middle of /a/ were no different whether /a/ was marked as being followed by a glottal stop or not. As a result, all the tokens of /a/ produced in tone 55 were averaged together. Figures 27 and 28 present amplitude comparisons across the five Anong tones.

The mean H1–H2 amplitude differences show that H2 is about 5 dB above H1 for the high tone 55 and about 4 dB above H1 for the high-falling tone 53. It is about 2 dB above H1 for the mid-rising tone 35. The difference is much smaller for the mid-falling tone 31 and the mid tone 33. For these tones, the amplitude of H2 is only about 1 dB above the amplitude of H1. The mean H1–F1 amplitude differences show a similar pattern. Once again the difference is the biggest for tones 55 and 53. It is about 5 dB. For tone 33, the mean H1–F1 is 2.7 dB. The difference is the smallest for tones 31 and 35, for which the amplitude of F1 is only about 1dB above the amplitude of H1.



Figure 27: Differences in H1–H2 amplitude across the five Anong tones

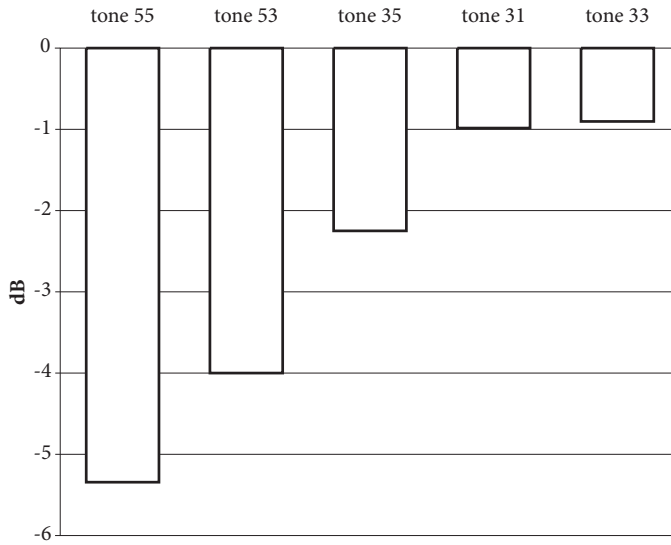


Figure 28: Differences in H1–F1 amplitude across the five Anong tones

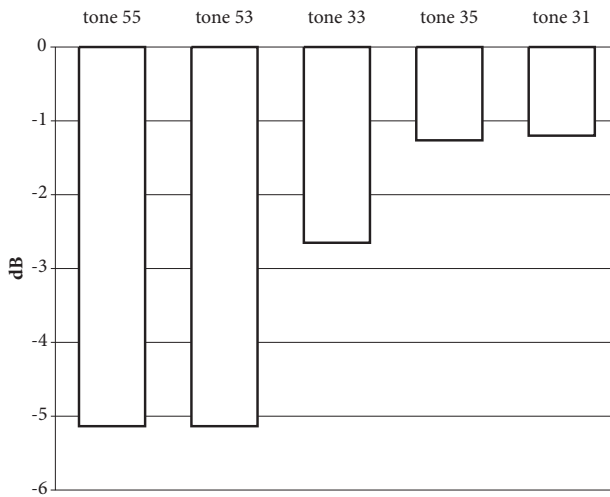
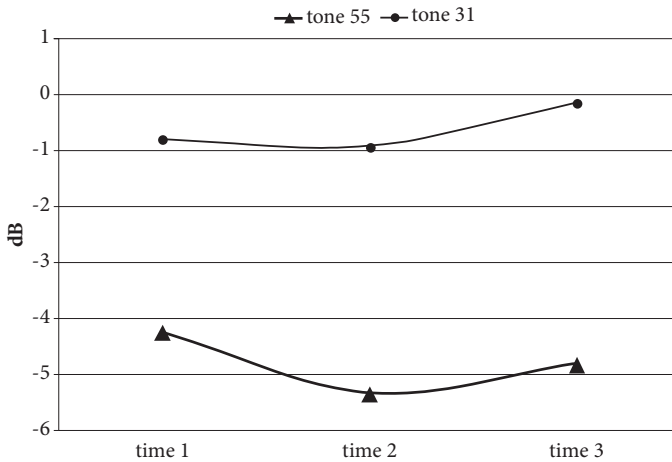


Figure 29 offers another look at the modal-tense register in Anong. It gives the averaged H1–H2 values at three percentage points (25%, 50%, and 75%) across the vowel duration for two tones for which the H1–H2 values are most different, tones 55 and 31. To avoid effects of the preceding consonants, the vowel onset was excluded. To avoid effects of the following glottal stop, the vowel offset was also excluded. By sampling the amplitudes at three points instead of one, it was hoped to learn more about a correlation between a register and a pitch in Anong.

Figure 29 makes it clear that in Anong laryngealization is a vowel feature. Figure 33 makes it also clear that laryngealization in Anong is a matter of degree. Tone 55 correlates with a tense register. The amplitude of the second harmonic is greater than that of the fundamental at the three points measured across the vowel duration. Tone 31 correlates with tense-modal register, as the amplitude of the second harmonic is only slightly above that of the fundamental.

Figure 29: Averaged H1–H2 comparisons across /a/ duration for tones 55 and 31



## 5. CONCLUSIONS

The study looked at different aspects of phonetic structures of Anong. It can be summarized as follows. The seven vowels of Anong are for the most part well differentiated on the basis of their F1 and F2 values, even though individual tokens of /e/ are not well separated from the tokens of /ɛ/. Possible influence of Lisu on Anong vowels was not observed despite the fact that both systems are characterized by vowel raising and vowel nasalization.

Variation in the production of those consonants that are cross-linguistically less common pointed to the effects of language attrition. The three-way laryngeal contrast of voiceless aspirated, unaspirated and voiced stops was established for stops. For affricates, the three-way contrast was at times simplified to a two-way contrast between voiceless aspirated and voiceless unaspirated affricates. The three-way coronal contrast was established for fricatives and affricates. The analysis showed that despite the disappearance of retroflex stops, nasals and liquids, the fricative /ʃ/ was acoustically a retroflex, while the affricate /tʃ<sup>h</sup>/ was not acoustically retroflex.

The analysis shows that in Anong tenseness is not an acoustic cue to any of the five tones in the same way that the pitch is. Neither is it a contrastive property of vowels. However, a degree to which a vowel is tense (laryngealized) correlates with a pitch level. Namely, there is a strong tendency for a high tone to co-occur with a fully laryngealized vowel, and for a mid and a mid-falling tone to co-occur with a slightly laryngealized vowel.

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