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A Grammar of Nuosu



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For Ling 玲 (an exceptional woman)





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Preface

I started research on the Nuosu language at the *Chinese Academy of Social Sciences* in Beĭjīng in 1995, travelled to Liángshān several times and held many interactive sessions with native informants.

The Nuosu data in this grammar originate from folk stories (Chén & Wū 1998), natural dialogues (Lǐ & Mă 1981) and sentences elicited from native speakers. Part of the data was also obtained through questionnaires.

In the first phase, the Nuosu data were edited as separate research papers on syntax (Gerner 2004a) and TAM particles (Gerner 2002a, 2002b, 2004b, 2007, 2010, 2013a). These articles provide the basis of this grammar but were completely rewritten to fit the format of this monograph. Most of this grammar represents original research not published previously in any form.

The first draft was completed at the end of 2011. The manuscript was checked by Zhū Wén Xù 朱文旭 from the *University of Nationalities* in Bejjīng. I went with him page by page through the draft to discuss his comments. A complete revision of this draft was submitted to *Mouton de Gruyter* in 2012.

This monograph is informed by different linguistic theories but does not adhere to a particular model. The content is descriptive in nature but contains a few sections with theoretical implications of the data.

All example sentences are edited in the Nuosu script and Romanized script. The grammar is written for linguists and students of Nuosu, especially foreign missionaries.

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Abbreviations

* (before expression) ungrammatical # (before expression) unnatural, odd

<> infix

reduplication1P.DL First Person Dual

1P.DL.POSS First Person Dual Possessive
1P.NMT First Person Nominative
1P.PL First Person Plural

1P.PL.POSS First Person Plural Possessive

1P.SG First Person Singular

1P.SG.POSS First Person Singular Possessive

2P.DL Second Person Dual

2P.DL.POSS Second Person Dual Possessive

2P.PL Second Person Plural

2P.PL.POSS Second Person Plural Possessive

2P.SG Second Person Singular

2P.SG.POSS Second Person Singular Possessive

3P.ABS Third Person Absolutive
3P.DL Third Person Dual

3P.DL.POSS Third Person Dual Possessive

3P.PL Third Person Plural

3P.PL.POSS Third Person Plural Possessive

3P.SG Third Person Singular

3P.SG.POSS Third Person Singular Possessive
A Agent role of monotransitive predicate

ADJ Adjective ADVL Adverbializer

ALT Alternative question

ART Article

AUD Audio information source

CAUS Causative particle

CL Classifier

CL* Classifier with sandhi tone

CL' Classifier-bar CLF Cleft focus

COME Phasal auxiliary derived from 'come'

COMP Complementizer

CONJ Conjunction
CONJ.and Conjunction 'and'

COP Copular COV Coverb

COV.see Coverb derived from 'see'

D Dependent
DEFFUT Definite future
DEM Demonstrative

DEM.DD Discourse deictic demonstrative

DEM.DIST Distal demonstrative
DEM.PROX Proximal demonstrative
DEM.INDEF Indefinite demonstrative
DEM.here Demonstrative 'here'

DET Determiner
DIM Diminutive
DIR Directional
DP Dynamic perfect

EMP Emphatic

END Resultative derived from 'endure'

EXCL Exclamative

EXH Exhaustion particle

EXIT Phasal auxiliary derived from 'exit'

EXP Experiential
EXPR Expressive
EXT Extent
FOC Focus

FOC.even Focus particle 'even' FEAR Fear attitude particle

FUT Futur tense

GET Resultative derived from 'get'

H Head HAB Habitual

HIT Resultative derived from 'hit'

IDE Ideophone

IND Indefinite pronoun

IND.whatever Indefinite pronoun 'whatever'

IMFUT Immediate future IMP Imperative

INSERT Phasal auxiliary derived from 'insert'

INSTR Instrumental INT Interrogative

INT.what Interrogative 'what' INTENS Intensification

LINK Linker LOC Locative

LOC.under Locative 'under'
LOG.DL Dual logophor
LOG.PL Plural logophor
LOG.SG Singular logophor

LOG.SG.POSS Possessive singular logophor
LOOK Phasal auxiliary derived from 'look'

META Metapragmatic MOD Modal auxiliary

MOD.should Modal auxiliary 'should'

N Noun

NCL Noun classifier
NEG Negation

NEG.IMP Negative imperative
NOM Nominalization
NP Noun phrase
NUM Number
NUM.8 Number eight

O Patient role of monotransitive predicate

ObjectComp Object of comparison

ONO Onomatopoeic
OPT Optative

ORD Ordinal number

PASS Passive
PAT Patient
PER Periodical

POEP Possible epistemic modality

POSS Possessive
POST Postposition
PRO Pronoun

PRO.DIR Directional pronoun
PRO.LOC Locative pronoun
PRO.PAT Patient pronoun
PRO.REC Recipient pronoun

PROC.

PROG Progressive

PUT Resultative derived from 'put'

QUOT Quotative QUANT Quantifier QUANT.all Quantifier 'all'
RC Relative clause
RECL Reciprocal
REFL Reflexive
REGR Regret particle
RES Resultative

S Argument role of intransitive predicate

SEND Resultative derived from 'send'

SENT.TOP Sentence topic

SOL Solicitation, feedback StandardComp Standard of comparison

STP Stative perfect

SUFF Suffix
SUG Suggestion
SUP Superlative
SYL Syllable

TAM Tense, aspect, modality

TOP Topic TR Transitive

TS Time of situation
TT Time of topic
TU Time of utterance

V Verb

VIS Visual information source

VP Verb phrase VCL Verb classifier

VCL.pickaxe Verb classifier 'pickaxe' WISH Wish attitude particle

Chapter 1

The people and their environment

The Nuosu form the principal ethnic group of the Yi (♣) nationality in terms of language homogeneity and number of speakers. Anthropological accounts on the Nuosu exist in Chinese and English which I shall quote and summarize: on Nuosu history (section 1.1), Nuosu society (section 1.2), culture and religion (section 1.3). In this chapter, I use materials published in Gerner (2013b).

1.1 Nuosu history

Historical information on the Yi is available from indigenous written records (genealogies, myths and legends), from Chinese sources (ethnographic writers and annals at the county, prefecture and province level) and from Western accounts (travelers, missionaries and scholars). Westerners started to travel to and interact with the Yi at the end of the 19th century. Early professional travelers include the British diplomat Baber (1882) and the French physician Legendre (1913) who published travel accounts. French Catholic missionaries evangelized in several spots of Southwest China and recorded their cultural and linguistic observations (e.g. Swaine 1995, on Father Paul Vial).

There is great unanimity among ethnographic writers that the origins of the Yi trace back more than 2000 years to an ancient group called Ni people (Bradley 2001; Harrell 2001). Harrell (1995: 76) quoting the Chinese ethno-historiographer Mă Chángshoù 马长寿 (1985: 100) believes that the earliest mention of the Yi is in historical accounts of the Zhou dynasty (1048-250 B.C.). Early Chinese records referred to Southwestern peoples as Wūmán 乌蛮 (Black Barbarians) and Báimán 白蛮 (White Barbarians). These names may point to the basic color labels that apply to virtually every minority in Southwest China, not only the Yi but also other groups such as the Miao, Tai, Lahu, Lisu. Chinese sources of the late first millennium A.D. mention the Yi by referring to particular dynasties in Yúnnán, such as the Diān 滇 kingdom close to Kūnmíng, which was ruled by tribes thought to be the ancestors of the Yi. The last important involvement of Yi-type groups with a Southwestern dynasty was the Nánzhaò 南诏 kingdom near Dàlǐ 大理 (Yúnnán). This kingdom was defeated in the 13th century by Kublai Khan, the Mongol ruler of China. After the 12th century, Chinese sources gradually employed the name Lúo 猡 containing the pejorative animal radical (Bradley 2001: 201). The name evolved subsequently into its reduplicated form Lolo. This appellation was the designation used by Chinese and Westerners for many centuries until 1949 when, with the arrival of the People's Republic of China, it was substituted by the name Yí 彝. In the language classification literature, Lolo survived within the group designation Loloish languages. The name Yi arose during the Míng dynasty as an alternative designation for all non-Chinese groups in the Southwest. The character originally employed to write it was Yí 夷.

No grouping uses *Yi* as an autonym. Perhaps 15% of the Yi population call themselves by *Lolo* or *Lalo*. The remaining tribes employ heterogenous names such as *Nuosu*, *Nisu*, *Nasu*, *Ni*, *Azhe*, *Kopho*, *Mutsi*, *Phula*, *Hlehle* and so forth. These groups perceive *Lolo* as pejorative and prefer the collective name *Yi* instead. The classification of these groups within the Yi nationality did not take place through a process of group awareness, which is impossible for a cluster of rural communities spread out across hundreds of kilometers. The decision was made through an authoritative process initiated by the Chinese Nationalities Commission in the 1950s.¹ Harrell (1995: 66) (based on Chinese sources) describes this process as follows:

"So the problem presents itself clearly not as 'Who are the Yi?' which is easily answerable by 'Whoever the Nationalities Commission says they are,' but rather 'How did the Yi get an identity?' The quick answer to the question when phrased this way is 'Through the process of ethnic identification conducted in the 1950s, which employed Stalin's criteria of a nationality as having a common territory, language, economy, and psychological makeup expressed in a common culture.'"

The Nuosu in Liángshān prefecture constitute the largest homogenous Yi group with about 2.5 Million members. Different opinions on the historical origin of the Nuosu exist. Several Western writers suggest an old connection of the Nuosu to the Liángshān area. Dessaint (1980: 12) and Winnington (1959: 15), for example, believe that the Yi have inhabited the Liángshān area since the early years of our era or at least since the tenth century A.D. Harrell (2001: 85 and p.c.) also sees support in indigenous reports and Chinese historiographies for roots of the Nuosu in Liángshān since at least the Sòng dynasty (960–1279).

A different origin of the Nuosu is suggested in the annals of Wēiníng County (Western Guìzhōu). The Nuosu would originate from or be redefined by a migration wave in the 17th century from Guìzhōu province. This migration wave was triggered by warfare that the Míng dynasty general Wú Sānguì 吴三桂 brought upon local Yí lords (tǔsī) in Western Guìzhōu in the 1660s. A large portion of the Yi in Guìzhōu fled to Sìchuān where they populated the Liángshān area (Wēiníng Mínwēi 1997: 50–51).²

¹ In practice, the Chinese Nationalities Commission allowed any group to apply for the status of Minzú 民族, i.e. nationality. According to Harrell (1995: 82), there were 260 groups in Yúnnán alone who requested this status in the 1950s. After registration of their names, teams specialized in culture and language examined the validity of these claims and, based on Stalin's four criteria, they established the 56 nationalities.

² The official historiography of this event is as follows. Through false reporting of an imminent Yi rebellion against the imperial authority, Wú Sānguì received authorization to attack local Yí lords $(t \bar{u} s \bar{i})$ in Guìzhōu province. After two decisive battles, one of which took place at Yáncāng 盐仓 township in Wēiníng County, the resistance of the Yi was defeated. During the following years, an important portion of the Western Guìzhōu Yi emigrated to Liángshān 凉山 (Sìchuān province) and Hónghé 紅河 (Yúnnán province) (Wēiníng Mínwēi 1997: 50–51).

Harrell (p.c. in February 2011) does not accept a recent settlement of the Nuosu in Liángshān 350 years ago, as suggested in the Wēiníng annals, but would only consider the fringes of Liángshān (e.g. Pānzhīhuā area) as possible landing sites of Yi groups from Guìzhōu. He mentions two reasons for an ancient connection of the Nuosu with the Liángshān area.

Firstly, the Nuosu have ceremonial texts (*bimo teyy*) that differ from other Yi groupings suggesting that the Nuosu lived isolated from surrounding groups when the texts were recorded. Isolation from other Yi peoples is most credible to have occurred in Liángshān. The Nuosu religious manuscripts do not mention the social castes (section 1.2) whose existence Harrell traces back to the time after the 13th century. This absence in the texts suggests a presence of the Nuosu in Liángshān before the 13th century.

Secondly, comparison between different Yi scripts shows that at the earliest stage characters had a vertical orientation before they were rotated into a horizontal pattern. This 'rotation reform' happened gradually for the different Yi groupings. In Nuosu, genealogies of individual clans contain up to 30 generations and reach back to the earliest recorded ancestors at least 900 years in the past. These genealogical recordings use characters with a horizontal orientation which suggests that for the Nuosu the 'rotation reform' must have occurred more than 900 ago. On the other hand, it can be demonstrated that texts of other Yi groupings like the Nasu in Northern Yúnnán still used 'upright' characters at that time. Consequently, the Nuosu must have been isolated from other Yi groups at least until the 12th century. The only area in which the Nuosu could have lived isolated is Liángshān.

To illustrate this point, the standardized Nuosu script of 1978 uses the original upright characters. Handwritten manuscripts from Yúnnán and Guìzhōu demonstrate that many cognate characters have horizontal orientation.

Meaning	Nuosu script of 1978	Yi in Yúnnán ('Ashima' Poem³)	Yi in Guizhou
'mountain'		XII	₩ 'Six Patriarch Epic'4
'snow'	악	ठे ।	ਰਾ 'The origin of the Yi'5
'tree'	Y	>-	>- 'Six Patriarch Epic'

³ The characters for 'mountain', 'snow' and 'tree' are quoted from the 'Ashima' Poem (Huáng Jiànmíng 黄建明, Pǔ Weìhuá 普卫华 and Liáng Hóng 梁红 (1985). Āshīmǎ 阿诗玛. Beijing: College of Nationalities). The 'Ashima' Poem was written in the Yi language of Shílín 石林 County in 1813. It is about a girl whose name 'Ahima' literally means 'more precious than gold'.

⁴ The characters for 'mountain' and 'tree' are quoted from 'Six Patriach Epic', a narrative about the six founding patriarchs of the Yi people (Zhāng Délín 张德林, Liǔ Guāngfú 柳光福 and Wéi Dìngfù 韦定富 (1983). *Migration of the Six Patriarchs* 彝族六祖迁徒典籍选编. Beijing: College of Nationalities). The manuscript is from Dàfāng 大方 County, Guìzhōu Province.

⁵ The character for 'tree' is quoted from the Guìzhōu narrative 'The origin of the Yi' (Bìjié writing group (1991). *The origin of the Yi* 彝族源流. Guìyáng: Guìzhōu Nationalities Press).

The Nuosu caste society surfaced after the Mongols extended their subsidiary ruling system based on indigenous chieftains ($t\check{u}s\bar{\imath}$) all over China in the 13th century. The rise of the caste system is probably directly related to the installment of indigenous chieftains by the imperial administration. The $nzymo^6$ constituted a relatively small group of indigenous landowners chosen by the central government from several spots in Liángshān. The nuoho caste 7 constitutes a much larger class of ethnic aristocrats, but not acknowledged by the central government. Further, the quho caste 8 consists of ordinary people. The Chinese historiographer Mă Chángshoù 马长寿 (1985: 105–109) reports that conflicts between the nzymo and nuoho castes started during the Míng dynasty around the 15th century and escalated gradually into the ejection of the Lili Nzomo from Meigu county by sections of the nuohu caste. Until the dawn of the 20th century these conflicts persisted with the rise of new centrally appointed nzy mo and their displacement enforced by insubordinate nuoho and quhuo.

At the same time, internal fights among *nuoho* clans resulted in migration of defeated clans to the outskirts of the Liángshān area (Xīchāng 西昌, Yánbiān 盐边, Miǎnníng 冕宁 and Nínglàng 宁蒗 in Northern Yúnnán). In these counties, the Nuosu coexist with other groups, mainly Han, whereas the Nuosu almost exclusively populate the core counties of Liángshān (Meǐgū 美姑, Zhaōjué 昭觉, Xǐdé 喜德, Pǔgē 普格) until the current time (Harrell 2001: 87).

The Red Army passed on its Long March through the Liángshān area in April 1935 and the relatively smooth traversal helped the Nuosu gain credit with the Central Government after the People's Republic was founded in 1949. In the aftermath, Liángshān was established as Yi autonomous prefecture and Xichang became its capital. The caste society was abolished. In 1957–59, at the time of the Great Leap Forward, a rebellion of disillusioned Yi leaders broke out and was defeated.

During the Cultural Revolution 1966–1976, ethnic culture was suppressed, like all over China, but experienced revival in the 1980s. In 1978, the Government standardized and issued an official Nuosu syllabary of 1119 characters in which bilingual Nuosu-Han education was sponsored. In the wake of Maó Zédōng's 毛泽东 great investigation into Chinese minority peoples in the 1950s, Nuosu was one of the few groups whose writing system was officially recognized. The modern syllabary consists of characters with vertical orientation which links this script to ancient times when the characters stood upright (section 3.3).

1.2 Nuosu society

Nuosu society is organized along two coordinates, the clan and caste orders, which are the warp and the woof of the social fabric (Harrell 2001: 94).

⁶ Nuosu term for *tŭsī*, which can be translated by 'governor'.

⁷ The name *nuoho* means literally 'black group' in Nuosu.

⁸ Quho means 'white group'.

Nuosu society is a clan order of patrilineal lineage (Harrell 2001: 91). Every Nuosu belongs to one clan that is associated with one caste. Each caste consists of several clans. The number of clans that inhabit a given area is limited and known to the residents of that region. Solidarity among clan members is a social imperative. Nuosu clans are exogamous and marriage between clans serves the purpose of establishing kinship networks. Male membership to a clan is inherited from the father, whereas female membership is acquired through marriage.

The prototypical exogamous marriage arrangement is between cross-cousins. Marriage is arranged between a man and his female cross-cousin, the daughter of his father's sister or his mother's brother, or between a woman and her male cross-cousin, the son of her mother's brother or her father's sister.

Nuosu prioritize clan membership over attachment to homeland compared to the Han emphasis on attachment to place. For the Nuosu, clan bondage is always stronger than affinity to a physical place. Evidence for this difference can be found in the rites for the soul of the deceased. The Nuosu priest (*bimo*) assists the soul of the deceased to migrate back to the ancestor's departure point so that people with a common genealogy are concentrated at the same place in the afterworld. In the Han metaphysics, the soul of the deceased can be found by a bureaucratic address in the afterworld matching the physical place in this world (Harrell 2001: 93).9

Nuosu clans are associated with one of three castes, *nzymo*, *nuoho* or *quho*. The *nzymo* caste consists of less than one percent of the Liángshān population. They are the descendants of former aristocrats recognized by the imperial government. The *nuoho* caste consists of the descendants of former aristocrats that were not recognized by the imperial government. The *quho* caste comprises independent farmers. The clans within a caste are exogamous but each caste is strictly endogamous. A *nzymo* marries a *nzymo* (with some recent relaxation), a *nuoho* marries a *nuoho* and a *quho* marries a *quho*. In the wake of the takeover in 1949, the economic aspects of the caste system were abolished but conscience of the castes survived until today.

In addition to these three strata, there is a fourth caste, the *ga xy* houseslaves, which are not associated with any clan. They are the decendants of people that were captured as slaves from the Han area or of aliens that ventured into Nuosu territory without adequate local protection. This four-way caste system have given the Nuosu a prominent place among ethnic groups in China. Communist writers before and after the Cultural Revolution used Nuosu society as an illustration for the Marxist theory of social evolution in which societies pass from the primitive to the feudal stage. During my initial research semester at the Chinese Academy of Social Sciences in Beijing, I was shown an educational movie on the traditional slave system in Liángshān.

⁹ For Han metaphysics, Harrell quotes Martin & Ahern (1972: 232), see Martin E. and Ahern, E. (1972). *The cult of the Dead in a Chinese village*. Stanford: Stanford University Press.

1.3 Nuosu culture and religion

In addition to clans and casts, Nuosu society acknowledges several social offices not tied to the descent of the holder: surgga 'wealthy person', ndeggu 'mediator', ssakuo 'warrior', gemo 'craftman', bimo 'priest', sunvi 'shaman'. I summarize decriptions provided by Harrell (2001: 96–98).

The surgga is a person whose material possessions in land, livestock and slaves provide him a recognized status as entrepreneur. The ngeddu is a person with a special track record in mediating social conflicts. In traditional society, the ssakuo is a warrior who has proven himself to be hero on the battlefield. The gemo is a craftsman, either a blacksmith, a gold or silversmith.

The bimo 'priest' and sunyi 'shaman' are ministers of the Nuosu folk religion which incorporates elements of spiritism and animism. The bimo performs all kind rituals, especially death rituals, through chanting of texts. Bimo are male, are almost always quho and are considered to be the guardians of the Nuosu traditional script. The office of bimo is acquired through a long process of apprenticeship. The most prominent ritual that bimo are called for is the ritual that guides the soul of a deceased person to the place of his ancestors.

The *sunyi* is a shaman whose experience is not acquired through ritual texts but through interaction with the spiritual world. The office of *sunyi* is not tied to caste, clan or gender. The sunyi enters trance and becomes possessed by spirits when called upon to perform rituals such as exorcising or curing diseases.

The Nuosu calendar uses elements of the Chinese zodiac (shēngxiào 生肖) which has wide circulation in East Asia. It uses the twelve zodiac animals to divide days, months and years but the order differs from the Han calendar. The Nuosu monthcycle starts in August with the month of the Rat and is ordered by Rat (≈ August), Ox (≈ September), Tiger (≈ October), Rabbit (≈ November), Dragon (≈ December), Snake (≈ January), Horse (≈ February), Sheep (≈ March), Monkey (≈ April), Chicken (≈ May), Dog (\approx June) and Pig (\approx July). The Nuosu zodiac terms are listed in section 4.4.1.

Across the Liángshān area, the Nuosu celebrate the Torch Festival in July. A mythical legend has the Yi ancestors fighting pests sent by the god Entiguzi to destroy their crops. By holding up torches they defeated the pests and the god who sent them. Every year in the month of the Dog, on the day chosen by the bimo torches are lit to commenmorate the victory.

Chapter 2

Language background

In this chapter, I situate Nuosu in the family of Tibeto-Burman languages (section 2.1), describe its dialectal spread (section 2.2), survey previous linguistic accounts (section 2.3), and present a preview of its typological features (section 2.4). I incorporate again materials published in Gerner (2013b).

2.1 Genetic affiliation of Nuosu

Nuosu belongs to the Tibeto-Burman language family. According to scholars who have classified Tibeto-Burman languages such as Benedict (1972), Bradley (1997), Sūn 孙 (1998), van Driem (2001) and Matisoff (2003), the Loloish languages (Sūn 孙 uses the term 'Yi group') constitute the principal component of the Burmese-Lolo language group. The Burmese-Lolo languages have seven or eight sister groups and Tibeto-Burman is the higher-level language family on top of these nodes. Bradley (1997), van Driem (2001) and Matisoff (2003) differ from Benedict (1972) in excluding Qiang, the extinct Tangut (西夏) language and Nung from Burmese-Lolo. Sūn 孙 (1998) includes the Bai, Bisu and Tujia languages within the Yi (Loloish) group; these languages are classified by Western scholars in other groups of Tibeto-Burman.

Another difference pertains to the internal subdivisions of the Loloish languages. Sūn 孙 (1998) does not propose any internal structure. Benedict (1972) and van Driem (2001) envisage a bipartite structure for Loloish, Northern and Southern, whereas Bradley (1997) and Matisoff (2003) identify a tripartite subdivision, Northern, Central and Southern. The Yi languages are present in each of these subdivisions. The exact position of individual Loloish languages is not agreed upon, but Nuosu is classified within the Northern Loloish languages. See table 2.1.

One of several open questions is whether all groups whose autonym sounds like Nosu, Nasu, Nesu, Nisu, Nyisu or Ngopho should be included in the Northern Loloish branch. In virtually every county of Southwest China we can find small, medium and large groupings with this selfname. The internal classification of the Loloish languages must be re-established in the future by considering more data sets and also grammatical features.

2.2 Nuosu and its dialects

Liángshān Nuosu has five dialects: Shynra, Suondi, Adur, Yynuo, and Lindimu (Han-Chinese: Tianba). In this grammar, I shall describe the principal dialect, Shynra as spoken in Xide County, the place chosen by the Government for language standardization. Little is known about the relationship of the five Nuosu dialects. Shynra,

Table 2.1: The Loloish languages

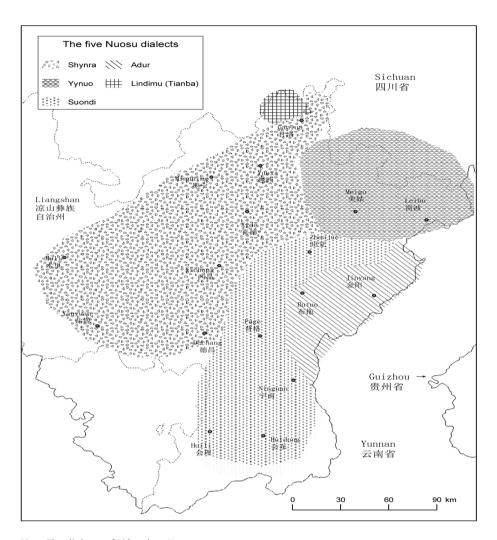
Loloish	Loloish	Yi	Loloish	Loloish
Benedict (1972)	Bradley (1997)	Sūn 孙 (1998)	van Driem (2001)	Matisoff (2003)
Northern Independent Lolo, Lisu, Ahi, Nyi, Ulu	Northern Nosu, Nasu Sami, Kepo Phula, Laka () Central Sani (Nyi), Axi Azhe, Lipho, Lisu Lalo, Lahu ()	Yi , Lisu, Hani, Lahu Naxi, Jinuo Nusu, Bai Tujia, Bisu Azhe ()	Northern Nuosu (?), Nasu Lisu, Axi Lolo, Nyi ()	Northern Nosu, Nasu, Nesu Lipho, Lalo () Central Lisu, Lahu, Lolo Axi, Nyi, Putao Shehleh ()
Southern	Southern		Southern	Southern
Hani (Akha),	Hani (Akha), Akeu		Lahu, Akha	Hani (Akha)
Phunoi, Lahu,	Phunoi, Mpi		Phunoi, Mpi	Phunoi, Mpi
Black Lolo ()	Bisu, Sila ()		mBisu, Sila ()	Bisu ()

Table 2.2: Population statistics for the Nuosu dialects

County/ municipality	Population	Shynra	Suondi	Adur	Yynuo	Lindimu (Tianba)
Xīchāng 西昌	818,033	71,400	10,200	-	-	_
Mùlǐ 木里藏族自治县	195,938	51,000	-	-	-	-
Yányuán 盐源县	469,674	212,500	-	-	-	-
Déchāng 德昌县	286,574	13,600	51,000	-	-	_
Huìlǐ 会理县	676,360	-	105,400	-	-	_
Huìdōng 会东县	566,111	-	79,900	-	-	_
Níngnán 宁南县	260,844	-	54,400	-	-	-
Pǔgé 普格县	221,630	-	68,000	93,500	-	_
Bùtuō 布拖县	220,991	-	-	205,700	-	_
Jīnyáng 金阳县	214,332	-	83,300	71,400	11,900	_
Zhāojué 昭觉县	349,996	117,300	96,900	30,600	86,700	_
Xǐdé 喜德县	207,478	173,400	-	-	-	_
Miǎnníng 冕宁县	474,624	142,800	-	-	-	_
Yuèxī 越西县	363,674	239,700	-	-	5,100	_
Gānluò 甘洛县	266,847	15,300	-	-	86,700	69,700
Měigū 美姑县	261,215	-	-	-	251,600	_
Léibō 雷波县	361,953	_	_	40,800	119,000	_
Total for Liángshān:	6,216,281	1,037,000	549,100	442,000	561,000	69,700

Suondi and Adur appear to be mutually intelligible, whereas Yynuo and Lindimu may constitute separate languages.

The information in table 2.2 on the geographical distribution of these dialects is based on fieldwork carried out during 2000–2001 and on extrapolated population figures from the 1980s (*Survey of Liángshān Yi Autonomous Prefecture*, Liángshān writing committee 1985).



Map: The dialects of Liángshān Nuosu

Shynra has the highest number of speakers with more than one Million speakers. It is the Government-sponsored standard dialect of Nuosu. From the numbers in table 2.2, we can draw the geographical distribution of the five dialects on the map above. (The Nuosu living in Xiaŏ Liángshān, Yúnnán, and Pānzhīhuā, Sìchuān, are not represented on this map.)

2.3 Literature survey on Nuosu

Linguistic data collection undertaken by native Chinese started before Western travelers, missionaries and linguists reached the groups known today as the Yi.

According to Fù Màojì 傳懋勣 (1997: 37–38), the earliest written record from a Yi-type language was a poem from an ancient language called *Bailang* language which was transcribed in Chinese characters. The manuscript dates from 58–75 A.D. Fù believes that Bailang may be an ancestor of Loloish-Naxi languages. Later in the 7th century, the Mán Shū 蛮书 ('Book of the Southern Barbarians') included eight words of the Wūmán language. Fù views these words as partially cognate to items in the modern vocabulary of Liángshān Nuosu. In the 18th century, several wordlists, one containing 800 words, were recorded in imperial collections using the Lolo script (Fù 1997: 39).

In the first part of the 20th century, Chinese scholars became interested in Yi languages, but examined only the Yi script and did not study the structure of the language (except for Fù's grammar). The language was first studied by missionaries and travelers, mainly of French nationality. At the end of the 19th century, diverse writers published vocabularies from Yi languages in Yúnnán and Sìchuān such as Boell (1899), Bonifacy (1904), Clarke (1911) and Liétard (1911, 1912). Two studies provided sketches of grammatical structures in two Yi languages, Ngi of Lùnán county and Axi of Mílè county of Yúnnán province. Vial (1909) appended a grammatical sketch to his French-Ngi dictionary. Liétard (1909, 1911) published a more detailed grammar on Axi. These were the sole Yi languages described by Western writers until 1990 when the linguist Bradley (1990) wrote a paper on the grammatical tone in Liángshān Nuosu. Björverud published a grammar of Lalo (Dàlǐ 大理) as her Ph. D. dissertation at Lund University in 1998.

Fù Màojì's *Descriptive grammar of Lolo* represents the sole available Nuosu grammar in English. This work was submitted in August 1950 as doctoral thesis at Cambridge University and reprinted in an issue of *Linguistics of the Tibeto-Burman Area* in 1997. Fù collected the Nuosu data of his thesis during 1938–1949. Fù provided large amounts of comparative data from other Nuosu dialects and Yi languages spoken in Yúnnán province. He also traced back the origins of the Yi writing systems. The grammar proper is organized in five chapters: (II) Phonetics, (IV) Parts of Speech, (V) Word formation, (VI) Syntax: General, (VII) Syntax: Special.

Chén Shìlín 陈士林 et al. (1985)'s Sketch of the Yi language introduces basic sentence patterns in Nuosu and other Yi 'dialects'. Chén 陈 & Wū 巫 (1998)'s Yi grammar is a more detailed description of Nuosu in Chinese. The co-author Wū Dá 巫达 is native Nuosu speaker from Ganluo county. Like many grammars published in China during the 1970–90s, grammatical properties are mainly discussed in a lexicon-oriented chapter titled 'parts of speech'. Chén & Wū append a collection of twelve lengthy folk stories to their book.

Furthermore, at least 25–30 linguistic journal articles on Nuosu have been published since 1979, mainly in *Mínzú Yŭwén* ('Ethnic language & literature'), a journal published by the Chinese Academy of Social Sciences in Beijing six times a year. Most of these papers represent lexical and morphological studies.

Table 2.3: Chine	ese research	papers on	Nuosu
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Category	Topic and papers	
1) phonology:	– complex consonants (Zhū Wénxù 朱文旭 1989)	
2) morphology:	– affixation (Zhū Jiànxīn 朱建新 1984, 1986)	
	– proverb quadruplets (Lǐ Xiùqīng 李秀清 1985; Wū Dá 巫达 1995)	
3) lexicon:	– proper names (Zhū Wénxù 朱文旭 1987)	
	- kinship terms (Sū Liánkē 苏连科 1988; Bāqiě Rìhuŏ 巴且日火 2000)	
	– adjectives (Xiaŏmén Diǎnfú 小门典夫 2002)	
	– determiners (Chén Shìlín 陈士林 1989)	
	- sound-symbolic words (Mǎ Xìnguó 马兴国 1991)	
	- Chinese loanwords (Zhū Wénxù 朱文旭 1997)	
4) syntax:	– syntactic roles (Hú Sùhúa 胡素华 2005; Wū Dá 巫达 2009)	
5) semantics:	- TAM (Chén Kāng陈康 1996; Liú 刘 & Gù 顾 2008; Dài 戴 & Hú 胡 1998)	
6) pragmatics:	– topic construction (Hú Sùhúa 胡素华 2004)	
7) diachrony:	- grammaticalization (Shāmă Dǎgè 沙马打各 2005)	

The native Nuosu linguist Hú Sùhúa 胡素华 (2002) published a book in Chinese on the structural particles in Yi in which she catalogues and explains the function of grammatical particles in Nuosu. Her work is more detailed on grammatical properties than Chén & Wū's grammar. There are also scores of papers on Yi languages published in regional journals of Southwest China.

2.4 Typological profile of Nuosu

I shall classify Nuosu for an array of morphosyntactic types and catalogue rare properties of Nuosu some of which I previously published in journals.

2.4.1 Phonology

Firstly, Nuosu has in its sound inventory a rare bilabial voiced trill, represented as [B]. It occurs always before the vowel [u] in either noncreaky [B] or creaky syllables [B], and sometimes with alveolar consonant onset as in [tB] or [tB]. The trill is more pronounced in creaky syllables and with alveolar consonant onset. (More information is provided in section 3.1.1.A.)

[B]:	yi bb ux	'roof'	[в]:	bb ut shy	'meadow'
[B]:	shax bb u r	'bread'	[B]:	bb ur	'write'
[t _B]:	dd ut	'poison'	[tв]:	she dd u	'steel'
[tB]:	bbux dd ur	'East'	[t _B]:	ta dd ur	'paralyzed'

Secondly, the syllable structure in Nuosu is simple. Syllables exhibit an open structure: C(C)V. Thirdly, Nuosu has a four-way contrast "prenasalized-voiced-voiceless-aspirated" for all major points of articulation (section 3.1.1.A).

```
[mb]: nbo 'roll' [b]: bbo 'go' [p]: bo 'rent' [ph]: po 'escape' [nd]: ndat 'enough' [d]: ddat 'bear' [t]: da 'put' [th]: ta 'earthen jar' [k]: mge 'buckwheat' [g]: gge 'hear' [k]: ge 'tell' [kh]: ke 'dog'
```

Finally, Nuosu exhibits three tones plus a fourth sandhi tone which contrasts weakly with the other three tones. Compared with other isolating languages in East-Asia, Nuosu has a relatively small number of tones.

2.4.2 Morphology

Nuosu displays an isolating morphology. In the basic vocabulary, most nouns are disyllabic, whereas verbs tend to be monosyllabic. Nuosu is a predominantly suffixing language.

Nuosu exhibits a strong synesthetic sound symbolism (for this semiotic notion, see Waugh 1992, 1994). For a closed set of gradual antonym pairs, prefixing i- to an adjectival root produces the diminutive member, whereas prefixing a- to the same root yields the augmentative member of that pair.

[i] dimin	utive		[a] augm	entative	
	ix sho	'short'	11 %	a sho	'long'
₽£	ix du	'thin'	1 1.€	a du	'thick'
D B	ix ly	'light'	11 T	ax ly	'heavy'
ᡚ ¥	ix jjy	'narrow'	11 A	a jjy	'wide'
₽	ix nyi	'few'	म्री≢	ax nyi	'much, many'
₽J₩	ix fu	'fine'	41 A.	a fu	'coarse'
₽ } ≋I	ix nu	'soft'	₹£	ax guo	'hard'
₿%	iet zyr	'small'	∄ুব	ax yy	'big'

Table 2.4: Synesthetic sound symbolism

Nuosu exhibits an African-style logophor (with two suppletive forms). The two logophors track the source whose speech is reported (section 5.4.1.B).

(1) a. \mathbf{W} 图 \mathbf{H} \mathbf{H}

b. HC1¥至2Ŷ浏問到0*1/2/*3Ŷ8ŶŶ.

mu jy $_1$ **lu dda_2** ddix da gge go $\mathbf{op}_{^{\star_1/2/\star_3}}$ jjiex mguo male name male name at COV hear SENT.TOP LOG.PL clear ox ddix.

DP QUOT

'Mudje₁ heard from Ludda₂ that they $_{1/2/*3}$ understood it clearly.'

Definite articles are derived from classifiers with the nominalizer -su (section 5.4.5).

(2) a. ⋈ θ b. ⋈ ⊕ ⅓

co ma co max su man CL man ART=CL-DET 'the man'

c. ជខែង d. ជខ៌ម្

bbu shy ji bbu shy jix su

snake CL snake ART=CL-DET

'a snake' 'the snake'

The Nuosu predicate is marked for TAM by verb suffixes. Bare verbs are allowed and frequent. TAM suffixes are described in section 7. At least two types of TAM suffixes are cross-linguistically exceptional. The *exhaustion* particle targets three kinds of structure: the clause-initial NP on which it acts as universal quantifier ('all'), the VP which it modifies as completive marker ('completely') and the AP on which it contributes the meaning of superlative ('most'). This marker with form *sat* is described in Gerner (2007a) respectively in section 7.5.1.

(3) a. 奶口管比Y Î 未 口口 **是**。

co hxit yuop su jjy gex tep yy hxep **sat.** people NUM.8 ART=CL-DET together book see, read EXH 'The eight people are all reading books.'

b. 创第丰米卡母皇追阅。

cop wox syp hmi ci ma zze **sat** ox. 3P.PL nut NUM.10 CL eat EXH DP

- (i) 'They all ate ten nuts.' (ii) 'They completely ate up ten nuts.'
- (iii) 'They all ate up ten nuts.'
- c. 划步引递资效⊕**生**。

i dix a zzyx ggux dax nrat **sat**. garment DEM.DIST CL COV beautiful EXH 'That garment is the most beautiful.'

Nuosu uses two modal particles that express the wishes and fears of the speaker through a socialized agent. The wish particle is reminiscent of the optative mood conjugation in Ancient Greek, while the fear particle is cross-linguistically unmatched. Both particles are studied in Gerner (2010) or in section 15.3.

(4) a. X非季※哲争。

cy jjo ssy sho **ddep lox**. 3P.SG life span long WISH 'It is desirable (= I hope) that he has a long life'.

b. 🐒 អ្នកស្នងប្រាស 🕻

zzyt mu cyx ma ssut lup ba la **mat.**world DEM.PROX CL throw into disorder FEAR
'It is to be feared (= I fear) that the world is being thrown into disorder'.

All major Nuosu word categories allow reduplication with a variety of meanings (section 4.3): nouns (diminutive), numeral classifiers (ordinal numbers), personal pronouns (emphatic meaning), verbs and adjectives (alternative question), adverbs of manner (intensification).

(5) Diminutive nouns

> zza go **uo nyie uo nyie** ji gox qo. dish LOC hair ~DIM CL LOC have 'In the dish, there are some hairs.'

b. 望望業量習点。

vox vox bbo nyi jjip ndit. snow ~DIM CL also fall PER 'There is also a small snow shower.'

(6) Ordinal Numbers

a. ជាឬក្រុមិអូអូវិក្រុ

bbu dde nyip **ma max** su dax hna sa. story NUM.2 CL ~ORD-DET rather hear SUFF 'The second story is quite amusing.'

b. 泉丰口さきよ。

si hni hxit **yuop yuop** su woman NUM.8 CL ~ORD-DET 'the eighth woman'

- (7) Emphatic pronouns
 - a. ៥៥ ៨៧ ៨ .

ngat ngat yiet hxop yiet.1P.SG~EMP song sing'I am singing myself (not with the help of others).'

- (8) Alternative question for verbs and adjectives
 - ብ**ֈ**ፄֈ**ֈ**β a. cop wox ne hxop ci ix **fu** fu? gu? gux 3P.PL 2P.SG call ~ALT cord fine ~ALT 'Did they call you?' 'Is the cord fine (enough)?'
- (9) Intensification of manner adverbs
 - a. 0411414130°

ma hxa **a hnat a hnat** mu jjip ox. rain intensive ~INTENS ADVL fall DP 'It is raining intensively.'

b. 1247411世里门。

ne **hxit jjo hxit jjo** mu ngat ddip la. 2P.SG quick ~INTENS ADVL 1P.SG at come 'Please come here very quickly!'

2.4.3 Syntax

Nuosu exhibits an aspect-conditioned word order split for simple clauses (Gerner 2004a; section 10.2): SOV order in 'on-going' (\approx imperfective) clauses and OSV in 'resultative' (\approx perfective) clauses.

- (10) SOV order in 'Ongoing clauses'
 - a. 40H#IJ\##.

at nyop mu rryr la hxex njuo. female name male name love PROG 'Anyo is waiting for Mudge.'

OSV order in 'Resultative clauses'

b. ተወዘአቱ≴፴。

at nyop mu ga wep mo ox. female name male name GET see DP 'Anyo was seen by Muga.'

Level	Relation	First slot	Second slot
Phrase	Possessive	Possessor noun (D)	Possessee noun (H)
	Adjectival	Noun (H)	Adjective (D)
	Nominalization	Relative clause (D)	Noun (N)
		Noun (H)	Relative clause (D)
	Adpositional	Noun phrase (D)	Postposition (H)
Clause	Predicational	Argument/adjunct (D)	Predicate (H)
	Adverbial	Adverb (D)	Verb (H)
	Negation	Negative particle (H)	Verb (D)
	TAM	Verb (D)	Auxiliary (H)
Sentence	Subordination	Embedded clause (D)	Complementizer (H)

Table 2.5: Dependency orders

Several of Greenberg (1966)'s universals connect the relative order of O and V to other dependency orders. This fact led Lehmann (1973) to view the relative order of direct object and verb (VO or OV) as a deep property that impacts the relative order of other dependency relations. In Nuosu, which is verb-final, the dependent element generally precedes the head except for adjectival modification, negation and relative clauses (table 2.5). Nuosu thus complies with Lehmann's predictions to a certain degree.

Below, I illustrate the relative order of head and dependent element for various syntactic relations. In (11), possessors always precede possessees.

For adjectival modification, the dependent element follows the head, an order that contrasts with the other dependency orders (section 5.2.3).

(12)	a.	乗1741月4			b.	九八世色		
		bbox bu	ax hmu	ma		со	sur ggat	bbu
		mountain	high	CL		person	rich	CL
		Noun (H)	Adjective (D)			Noun (H)	Adjective (D)	
		'A high mountain'				'A rich hou	ısehold'	

Relative clauses represent an exception. They can be attached to the left and to the right of the head noun. Left-branching relative clauses restrict the reference of the head, while right-branching clauses are nonrestrictive (section 5.2.4).

(13)	Relative clause built on common nouns
	. ?

a. 创并和累升出

co nax jjo mgo jjo su (Right-branching) person illness have illness have NOM

Restrictive: 'the people who have an ailment.'

Relative clause built on proper nouns

b. 量量累重用并

nax jjo mgo jjo su mux ga (Left-branching) illness have illness have NOM male name

Nonrestrictive (appositive): 'ailing Muga.'

Postpositions always occur after the NPs they mark for case. Most postpositions are derived from verbs.

(14) a. 创新世界生产。

b. 业量非主风工口景①。

In the same vein, predicates always follow noun phrases which they modify as arguments or as adjuncts.

(15) a. ₩≚氧狀計量。

p. 萬刊片品割次は対示。

^{&#}x27;Their family gave me pig meat.'

^{&#}x27;We were delayed in Xichang for one day.'

^{&#}x27;Lupo praises Adge.'

^{&#}x27;You should cut with the knife-edge facing down'

Manner adverbs (D), especially when built on the phrasal suffix -mu, occur left to the predicate, the head.

'He ran with particular effort.'

The negative particle is infixed in the verb before the last syllable. In (17a), the verb is monosyllabic, in (17b) it is disyllabic.

'He has no friends in Puge County.'

Predicates are in the scope of auxiliary verbs which is reflected by the order of verbs-auxiliary.

^{&#}x27;He does not feel upset.'

^{&#}x27;You should study quickly!'

p. ⅓ባኊዝଶ≢በሪሪऽ

cyx li ap mu it nyi gu but but?
3P.SG TOP now
$$\underbrace{\text{sleep}}_{\text{Verb (D)}}$$
 $\underbrace{\text{MOD.dare}}_{\text{Auxiliary (H)}}$

Embedded constructions are headed by a complementizer. In Nuosu, the complementizer (H) is always placed after the dependent clause (D).

(19) a. 对厅村里厅出步留守才生的分。

ip nyip	it it		yur nyip	nge	su	lu ti	go
today	LOG.SG.P	OSS	birthday	COP	COMP	male name	PRO.PAT
ap-	shut	ox	ddix.				
NEG-	remember	DP	QUOT				

'(Muga complained that) Luti did not remember that today is his birthday.'

b. 当者主て重小て?

A syntactic property of a different kind is the order of TAM particles after the predicate. Bare verbs are common, but when they are suffixed by TAM particles, the order is fixed and iconic according to the following arrangement.

(20) **Layer 1** (situation-internal) < **Layer 2** (situation-external) < **Layer 3** (propositional attitudes) < **Layer 4** (illocutionary force)

In the following examples, the order of particles must reflect increasing layer level. A permutation of particles that does not respect the monotone increase of layer level is disallowed.

(21) a. 手主対, 凹引車間及事策**占**労者。

'It may have been here that he once found many mushrooms.'

^{&#}x27;Is he daring to sleep now?'

^{&#}x27;Was it slippery when it snowed?'

b. 创拿手口连**的**\$\frac{1}{2}\$.

cop wox tit la

3P.PL here come

sat	ox	ddix.
EXH	DP	QUOT
Layer 1	Layer 2	Layer 3

'(Someone) said that they all came up.'

c. 重张从四连沙锦守。

ne bbut cy ndo 2P.SG medicine drink

sat	go shex	hxax.
EXH	HAB	IMP
Layer 1	Layer 2	Layer 4

^{&#}x27;Drink always all the medicine, I suggest.'

2.4.4 Pragmatics

Nuosu exhibits two topic particles, *ne* communicates maintaining topic and *li* contrastive topic. Both particles are attached to the sentence-initial NP.

(22) a. 🗸 〇 \$ 日 片 片 子 手 手 戶 。

vut nyop **ne** mu jie ap- syp bur zzur. female name TOP male name NEG- know seem 'As for Vunyo, she appears not to know Mujie.'

b. 1**₫**12#H#₫.

a yit **li** rrop jji -mu ddop hxip. female name TOP natural -ADVL word say '(Differently from what you might think) Ayi spoke naturally.'

Chapter 3

Phonology

I present the Nuosu sounds in section 3.1, its phonological processes in section 3.2 and its logographic script in section 3.3.

3.1 Sounds and tones

3.1.1 Consonants

Nuosu exhibits 43 consonant phonemes, presented below in the Romanized script (Nuosu Pinyin) and in the International Phonetic Alphabet.

Phonation Types		Point of articulation					
		Labial	Alveolar	Retroflex	Alvelopalatal	Velar	Glottal
Stops	prenasalized voiced unvoiced aspirated	nb [mb/m _B] bb [b/ _B] b [p] p [p ^h]	nd $[nd/ndB]$ dd $[d/dB]$ d $[t]$ t $[t^h]$			mg [ŋg] gg [g] g [k] k [k ^h]	
Fricatives	voiced unvoiced	f [f] v [v]	ss [z] s [s]	r [z] sh [ş]	y [z] x [ç]	w [γ] h [x]	hx [h]
Affricates	prenasalized voiced unvoiced aspirated		nz [ndz] zz [dz] z [ts] c [ts ^h]	nr [ndz,] rr [dz,] zh [tş] ch [tş ^h]	nj [ndz] jj [dz] j [t¢] q [t¢ʰ]		
Nasals	voiced unvoiced	m [m] hm [m]	n [n] hn [n៉]		ny [n,]	ng [ŋ]	
Laterals	voiced unvoiced		l [l] hl [l̞]				

Remarkable features of the consonant system are the four fully contrastive phonation types: prenasalized, voiced, unvoiced and aspirated. A rare sound is the labial trill [B], which is an allophone of [b]. The words listed in this section are quoted from Mă & Walters & Walters (2008) and from my own database.

A. Stops

The labial stop [b] is in complementary distribution with the bilabial trill [B] before the back vowel [U]. The trill is more pronounced if the vowel is creaky: [U] (written as U). Both allophones are represented in Nuosu Pinyin by U). Furthermore, the prenasalized consonants [U] / [U] form another pair of allophones before the vowel [U], which are written as U0 in Nuosu Pinyin.

nb [mb/m _B]	bb [b/B]	b [p]	p [p ^h]
nbi 'distribute' (tr.) nbie 'shoot'	bbi 'spread' (intr.) bbie 'penis' (coll.)	bi 'read' bie 'kick'	pi 'cut open' pie 'malaria'
nba 'bundle' nbo 'roll'	bba 'carry on back' bbo 'go, leave'	ba 'exchange' bo 'rent'	pat 'hatch out' po 'escape'
nbu 'curse'	bbu 'exist'	bu 'porcupine'	pu 'price'
nbur 'full'	bbur 'write'	bur 'return; again'	pur 'turn over'
	bbyp 'give'	byp 'compensate'	pyp 'inhale'
nbyr 'peel, cut off'		byr 'child diarrhea'	pyr 'fold (clothes)'

The alveolar stops [nd] and [d] are pronounced as [ndB] and [dB] before the back vowel [u]. These allophones are trills onset by an alveolar stop. The trills are more marked if the back vowel is creaky: [\underline{u}].

nd [nd/ndB]	dd [d/dB]	d [t]	t [t ^h]
ndi 'contain'	ddi 'bad, rotten'	di 'single, alone'	ti 'mean, signify'
ndie 'skillful'	ddie 'make'	die 'layer'	tie 'nominalizer'
ndat 'enough'	ddat 'accept'	da 'put'	ta 'earthern jar'
	dduo 'climb'	duo 'hold in arms'	tuo 'sharp, keen'
ndo 'drink'	ddop 'word'	dop 'point at'	to 'cut swiftly'
	dde dde mu 'often'	dep 'rise up'	te 'time'
ndu 'dig'	ddu 'home'	dut 'step on'	tut 'family'
ndur 'shake grain'	ddur 'exit'	dur 'thousand'	tur 'chop up'

The four phonation types are also fully contrastive for the velar point of articulation.

mg [ŋg]	gg [g]	g [k]	k [k ^h]
	ggit 'die out'	gip 'care for'	ki 'have contact'
mgie 'tell lies'	ggie 'break' (intr.)	gie 'guess'	kie 'chop'
mga 'pass'	gga 'road'	ga 'drop, shake'	ka 'want'
mguo 'embroider'	gguo 'rake'	guo 'fierce'	kuo 'brave'
mgo 'cold'	ggo 'used up'	go (pronoun)	ko 'spread'
mge 'buckwheat'	gge 'hear'	ge 'foolish'	ke 'dog'
mgu 'love, like'	ggu 'nine'	gu 'call'	ku 'steal'
mgur 'pick up'	ggur 'frightened'	gur 'frighten'	kur 'year, age'

B. Fricatives

There are eleven fricative phonemes. They are contrastive for most vowels, as illustrated for different neighbouring consonants.

f [f]	v [v]	w [ɣ]	
jix fi 'separate'	vit 'time'		
fat 'set free'	va 'chicken'	wat 'saddle'	
pu fox 'mislead'	vo 'snow'	wo 'bear'	
fut 'six'	vu 'go crazy'		
fur 'pour'	vur 'enter'		
fy 'ugly'	vy 'buy'		
ss [z]	s [s]	r [z,]	sh [ş]
ssi 'use'	si 'choose'		
ssa kuo 'hero'	sat 'mark, sign'	ra 'make noise'	sha 'splash'
	suo 'three'	ruop 'pull trigger'	shuo 'scrape'
sso 'study'	sot 'breath'	ro 'frugal'	sho 'harvest'
sse 'son'		rep 'gather'	she 'meat'
ssut 'mix'	su (nominalizer)	rup 'unlucky'	shut 'remember'
	sur 'repay'	rur 'weed'	shur 'lake'
ssy 'lifetime'	sy 'blood'	ry 'early'	shy 'gold'
ssyr 'press down'	syr 'sweep'	ryr ggur ggur 'firm'	shyr 'yell'
y [z]	x [¢]	w [γ]	h [x]
yit 'needle'	xi 'arrive'		hit 'harm'
yie (classifier)	xie 'pick, pluck'		
		wa 'behind'	hat 'cover'
yuo (classifier)	xuo 'slip, slide'	wuo 'pull up'	huo 'pour'
yo 'sheep'	xop 'leak out'	wo 'group'	ho 'pen, fold'
		we 'strength'	he 'good'
yy 'water'	xy 'foot'		
x [¢]	h [x]	hx [h]	
xit 'bite'	hit 'harm'	hxit 'eight'	
xie 'catch fish'	1101111	hxie mat 'heart'	
	ha 'advise'	hxa 'hundred'	
xuo 'slip, slide'	huop lyt 'apricot'	hxuo 'mix, add'	
xop 'leak out'	hot 'bow'	hxo 'grow, raise'	
•	he vat 'very good'	hxe 'fish'	

C. Affricates

Affricates are consonants that begin as stops and are released as fricatives. Nuosu exhibits for the alveolar, retroflex and alvelopalatal points of articulation four fully contrastive affricates (altogether twelve affricates).

nz [ndz]	zz [dz]	z [ts]	c [ts ^h]
nzi 'hammer nails'	zzi 'bridge'	zi 'leave over' (tr.)	ci 'fall'
nzie 'chop'	zzie 'drench'	zie 'compensate'	cie 'deer'
nza 'sing (of bird)'	zza 'crops, food'	za pux 'earth wall'	ca 'hot'
nzuo 'leak'		zuo 'hire'	cuop luop 'a little'
nzop (exp asp)		zo 'entertain, bear'	co 'person'
nze 'pretty'	zze 'eat'	zep 'tighten'	ce 'salt'
nzup 'armful of'	zzu 'jab, poke'	zut 'stir up'	cu 'fat'
nzur 'hate'	zzur 'reside, live'	zur bop 'origin'	cur 'build'
nzy 'rule'	zzy 'ride (horse)'	zy 'plant'	cy 'wash'
nzyr 'hot'	zzyr muo 'peace'	zyr 'accumulate'	cyr 'pinch'
nr [ndz,]	rr [dz,]	zh [tş]	ch [tṣʰ]
nra 'measure, test'	rrax ggie 'aligned'	zha 'feed'	cha 'discuss'
	rruo 'thief'	zhuo 'bridle'	chuo 'rip off'
nro 'stuff in'	rro 'accomodate'	zhot 'despise'	chop 'breakfast'
nrep 'withdraw'	rre 'row'	zhep 'bowl'	che 'rice'
nrut 'rust'	rrup 'chopsticks'	zhu 'praise'	chu 'thorn'
nrur 'lock'	rrur 'lie about'	zhur 'whet'	mu chur 'autumn'
nry 'wine'	rry 'tooth'	zhy 'command'	chy 'bequeath'
nryr 'pierce'	rryr 'worn out'	zhyr 'pull up'	chyr 'tear'
nj [ndʑ]	 jj [dʑ]	j [tç]	q [tç ^h]
nji 'fast'	jji 'fly'	ji (classifier)	qi 'want'
njie 'vomit'	jjie 'burn' (intr.)	jie 'burn' (tr.)	qie 'jump'
njuo 'wander'	jjuo 'collapse'	juo 'press flat'	quo 'navel'
njo 'make level'	jjo 'have, exist'	jo 'turn'	qo 'contain'
nju 'crawl'	jjut 'waist'	ju 'manage'	qu 'silver'
njurx zuo 'expell'	jjur (classifier)	jur 'marrow'	qur 'shave'
njy 'skin'	jjy 'melt'	jy 'bladder, gall'	gy 'sweet'
njyr 'weed'	<i>"</i>	jyr 'slip off'	qyr dit 'cremate'
		<u> </u>	

D. Nasals and laterals

There are six nasal consonants, four voiced and two unvoiced, and two lateral consonants, one voiced and one unvoiced.

m [m]	n [n]	ny [n]	ng [ŋ]
mit 'hungry'	nit 'your'	nyi 'sit'	
mie 'nimble'	hxa nie 'tongue'	nyiet 'late'	ngie 'turn over'
mat (illocut. part.)	na 'ill; ache'	•	nga 'I'
muo (classifier)	nuo 'hide'	nyuo bby 'tears'	nguo 'chest'
mo 'see'	not 'flesh'	nyot 'paste, stick'	ngo 'cry'
	ne 'you'		nge 'be'
mup 'hemp'	nut 'sunken'	nyu 'crawl'	
murx nyie 'pamper'	nur ma 'soybean'		
m [m]	hm [m]	n [n]	hn [n]
mix 'even'	hmi 'name'	ni 'sprout'	ax hni 'red'
miep 'front'	hmie 'poke, flick'	niep sha 'Liángshān'	xyx hnie 'shoe'
ma (classifier)	hmat 'teach'	nax li 'chronic ill'	hna 'ask'
iet muop 'dream'		ax nuo 'hide'	
mot 'soldier'	hmo 'blow'	nop 'you' (pl.)	hnop 'drive'
		ne (topic particle)	hne (classifier)
mu 'do, make'	hmu 'mushroom'	ix nu 'soft'	a hnut 'deep'
mur hni 'siblings'	hmur 'explode'	nur ji 'soybean pod'	
myt 'strop'	hmyp 'end'		
n [n]	1 [1]	hn [n]	hl [l]
ni 'scent'	li 'go upwards'	hnip 'smell'	hlit 'dry in sun'
niep ga 'pumpkin'	lie 'scald'	hniet rra 'vegetable'	hlie 'spleen'
na shy 'typhus'	la 'come'	hna 'listen'	hla 'soul'
nuo su 'Nuosu'	luo 'instance'		hluo 'rinse'
no 'equal'	lo 'boat'	hnox 'until'	hlo 'entertain'
ne 'stop'	le 'ox'	nep ndit 'lack'	hlep 'month'
nu 'leprosy'	lu 'dragon'	hnut kip 'deep soil'	hlu 'stir fry'
nur ni 'sprout'	lur kur 'city'		hlur 'fester'
	ly 'four'		hly 'winnow'
	lyr 'bind, wind'		hlyr 'stir up'

3.1.2 Vowels

Nuosu exhibits eight vocalic phonemes: two front vowels, two central vowels and four back vowels. They are represented in Nuosu Pinyin and IPA below.

	Front		Central		Back	
	Unrounded	Rounded	Unrounded	Rounded	Unrounded	Rounded
Close Close-mid Open-mid	i [i] ie [ε]		y [ɨ]		e [tt]	u [u] o [o] uo [ɔ]
Open				a [a]		

These vowels have the status of phonemes as the following lists of contrastive words demonstrate.

i [i]	ie [ε]	y [i]	e [ttt]
i (logophor)	ie 'duck'		e 'yes' (agreement)
bi 'scatter'	bie 'have diarrhea'	by 'cry (eagle)'	
ddip 'be called'	ddie 'serve as'		dde (nominalizer)
gi 'official'	gie 'strange'		get 'groom hair'
vi mop 'ax'	vie hlur 'worried'	vy 'millet'	
sit 'kill'	sie 'touch, pat'	syp 'know'	
		shyp 'seven'	shep 'search'
zzip 'compete'	zzie 'engrave'	zzyt mu 'world'	zze 'wear out'
		zhyp 'urge'	zhet 'correct'
jji 'bee'	jjie 'leave'	jjyt 'short person'	
mix (Future Tense)	mie lie 'steep'	myt 'purse lips'	
nit 'shift blame'	niep nie 'breast milk'		nep 'germs'
lip 'elephant'	lie 'pop up'	ly 'request'	lep 'swing'
u [u]	o [o]	uo [ɔ]	a [a]
	op 'goose'	uox ba 'frog'	ap (negator)
bu (classifier)	bop 'show'	buo 'colour-match'	bat zhu 'small cup'
ddu (nominalizer)	ddox mu 'knife'	dduo zip 'ladder'	ddap 'or'
gut 'support'	go (classifier)	guo 'too much'	gat 'dress'
vu 'intestines'	vot 'pig'		vat 'dollar'
sup 'resemble'	sot 'calculate'	suo 'quietly'	sat 'all; finish'
shu 'make'	shot 'shameful'	shuo 'brush by'	shax tur 'bullet'
zzup zzup 'icicle'			zzat 'stare at'
zhut nyot 'curl up'	zhop 'coax'	zhuop zy 'table'	zhat 'embroider'
jjut 'medium'	jjop 'cut'	jjuo 'chop'	
mup 'hemp'	mo 'plow'	muo (classifier)	ma 'bamboo'
	not 'flesh'	nuo 'peep'	na ddi 'epidemic'
nu 'leprosy'	HOU HESH	nuo peep	na aar cpiacinic

3.1.3 Tones

There are three tonemes, [55], [33], [21], and a fourth tone sandhi [44] whose phonological status is weak (section 3.2.2). The sandhi tone is mainly attested in disyllabic words. Very few monosyllabic words carry this tone.

-t [⁵⁵]	-(no letter) [33]	-p [²¹]	-x [⁴⁴]
xit 'bite'	xi 'thread'	xip 'such a'	xix 'what'
lot 'hand'	lo 'ravine'	lop 'surround'	lox 'after'
jjut 'waist'	jju 'oats'	jjup 'mark, track'	jjux (nominalizer)
bbot 'group'	bbo (classifier)	bbop 'possess'	bbox zze 'man'
vut 'press, mash'	vu 'corn stalk'	vup 'intestinal gas'	vux nuo 'intestine'
dit 'cloth layer'	di 'lacquer'	dip 'grind'	dix lo 'concave'
hlit 'flash'	hli 'heap things up'	hlip 'unbent'	hlix ndo 'lose'
not 'rich soil'	no 'equal'	nop 'faint'	nox nzy 'family status'
shyt 'put to bed'	shy 'twist'	shyp 'lead'	shyx ba 'golden'
chet 'distribute'	che 'be kidnapped'	chep 'spread legs'	chex zi 'rice silk'
nyit 'make room'	nyi 'exist'	nyip 'dax'	nyix dde 'seat'
hxot 'apply'	hxo 'steam'	hxop 'dye'	hxox ssu 'sparse'
yot 'incorrect'	yo 'sheep'	yop 'rock, shake'	yox mu 'fly, insect'

3.2 Phonological processes

3.2.1 Creaky voice

Syllables with medium vowel y [i] and back vowel u [u] can be larryngealized resulting in two set of vowels: one with, the other without creaky voice. Creaky voice is written in Nuosu Pinyin by -r after the vowel.

u [u]	ur [uৣ]	y [i]	yr [į]
nbu 'bore a hole'	nbur 'full'	nbyt 'overflowing'	nbyr 'peel'
bu (classifier)	bur 'return'	by 'cry (goat)'	byr 'diarrhea'
pu 'gush'	pur 'blow (wind)'	py 'mouth painful'	pyr 'plot'
hmu 'boil in water'	hmur 'inflate'	hmy 'tail'	hmyr 'close, shut'
vu 'flock'	vur 'turn over'	vy 'millet'	vyr 'scratch'
tu 'tung tree'	tur 'chisel'		
hlu 'leather'	hlur 'burnt up'	hlyp 'shed, molt'	hlyr 'escape'
lup 'take by force'	lur 'stuffy, stifling'	ly 'moan, groan'	lyr 'wrap up'
zu 'set upright'	zur bop 'origin'	zy 'accept, receive'	zyr 'accumulate'
sut 'other people'	sur ggat 'rich'	sy 'still, yet'	syr 'wipe clean'
zhup 'soak'	zhur 'cheat'	zhyp 'throw'	zhyr 'pull up'
shut 'China fir'	shur 'lake, sea'	shy 'liter'	shyr 'yell'
rrut 'bin'	rrur 'lie down'	rry 'corner'	rryr 'worn out'
ju 'bell'	jur 'blame'	jy 'provoke'	jyr 'slip away'
		xy 'foot'	xyr xyr 'continuous'
yu 'pick up'	yur 'wind into roll'	yy 'laugh'	yyr 'image'

3.2.2 Tone sandhi

The sandhi tone x [44] has a weak phonological status. It is the result of a dissimilatory process in which a monosyllabic word with neutral tone [33] is adjacent to another syllable with [33]-tone. One of the tones is raised to differentiate it from the other. Most sandhi tones occur within compound words. A few cases are syntactically motivated and happen when two independent words stand next to each other. Eight such contexts are identified below.

(1) a. Sandhi Rule 1 (meaningful tone):

Singular personal pronouns take the sandhi tone [44] if they are patient noun phrases of a monotransitive verb in the [33]-tone (see section 10.2.3.A).

ታህ θH b. \rightarrow c. nga gu ngax gu 1P.SG call 1P.SG call 'I called (someone).' '(Someone) called me.' ₹Ê d. 1€ е. ne nex mgu mgu 2P.SG 2P.SG love love 'You love (someone).' '(Someone) loves you.' f. 沘汉 黑灾 g. cy jie CVXiie 3P.SG fear 3P.SG fear

(2) a. Sandhi Rule 2 (not carrying meaning):

A monosyllabic noun with [33]-tone takes the sandhi tone [44] if it stands next to a classifier with [33]-tone.

'a bridge'

'(Someone) fears him.'

*101 O θĤ b. \rightarrow c. *co ma coxma person CL person CL 'a person' 'a person' 以15* ЦB d. e. *zzi zzixgur gur bridge CL bridge CL

'He fears (someone).'

'a bridge'

(3) a. Sandhi Rule 3 (not carrying meaning):

A monosyllabic (pro)noun with [33]-tone takes the sandhi tone [44] before one of the topic markers li or ne.

b. * $\mbox{$^{\lambda}$}$ $\mbox{$^{\lambda}$}$

*cy ne cy**x** ne
3P.SG TOP 3P.SG TOP

'as for him' 'as for him'

d. ★ŊIJ → e. ŴIJ

*co li co**x** li person TOP person TOP 'as for the man' 'as for the man'

(4) a. Sandhi Rule 4 (not carrying meaning):

A monosyllabic (pro)noun with [33]-tone takes the sandhi tone [44] before the noun conjunction *si nip* 'and'.

b. *1₹₫₽ → c. Î\$₫₽

*ne si nip nga ne**x** si nip nga 2P.SG and 1P.SG 2P.SG and 1P.SG

'You and I' 'You and I'

(5) a. Sandhi Rule 5 (not carrying meaning):

A monosyllabic reduplicated verb/adjective with [33]-tone takes the sandhi tone [44] before its reduplicant.

b. *번번? → c. 현번?

*ku ku? ku**x** ku? steal ~ALT steal ~ALT

'steal?' 'steal?'

d. * $\not\models$ F? \rightarrow e. $\not\models$ F?

*ssi ssi? ssi**x** ssi?

bright ~ALT bright ~ALT

'bright?' 'bright?'

(6) a. Sandhi Rule 6 (not carrying meaning):

A monosyllabic verb with $[^{33}]$ -tone takes the sandhi tone $[^{44}]$ before the postverbal adverb sy 'still'.

b. *11Y → c. 11Y

*la sy la**x** sy come still come still come' 'still come'

- d. $* \emptyset Y$ \rightarrow e. $\hat{\emptyset} Y$ *zze sy
 eat still

 'still eat'

 *still eat'
- (7) a. Sandhi Rule 7 (not carrying meaning):

 A monosyllabic verb/adjective with [33]-tone takes the sandhi tone [44] before the nominalizers *su* or *dde*.
 - b. * \oplus \(\psi\$ \tag{\text{\$\frac{1}{3}\$}\$ \rightarrow su rrox su straight NOM straight NOM 'the one that is straight' 'the one that is straight'
 - e. ¥\$X̂Ø d. *ሦ\\ ፲ *vit gga dde dde су vit gga cyx clothes wash NOM clothes wash NOM 'the place to wash clothes' 'the place to wash clothes'

The last sandhi rule is the result of a dissimilatory process in which the low [21]-tone, not the neutral [33]-tone, switches to the sandhi [44]-tone.

- (8) a. Sandhi Rule 8 (meaningful tone):

 Monosyllabic verbs with underlying [21]-tone and word order OAV take
 the sandhi [44]-tone and impose the word order AOV (see section 10.2.3.B).

3.2.3 Syllable structure

The Nuosu syllable structure is regular and simple. Every syllable is open, has a vowel and a tone.

(9)Nuosu syllable structure:

```
S = Stop; F = Fricative; V = Vowel; T = Tone
a.
   (S)(F)VT
```

b. NVT N = Nasal; V = Vowel; T = Tone

c. LVT L = Lateral; V = Vowel; T = Tone

When nasals and laterals co-occur with the central vowel v [i], they are in free variation with syllabic consonants:1

Syllable (without tone)	Basic pronounciation	Free variation
my	mɨ	m
hmy	mį	μ̈́
ny	(not attested)	(not attested)
hny	(not attested)	(not attested)
ly	1 i	1
hly	ļi	1
ngy	(not attested)	(not attested)

The attested Nuosu syllables are shown in section 3.3.2.

3.3 The logographic script

3.3.1 Introduction

The different Yi groupings share a long history of religious and secretive texts using a syllabic script. The priests, the experts of the Yi writing, employed largely similar character sets throughout the Yi residence area. The oldest traces of the Yi script go back to stone and pottery inscriptions dating from the 8th century B.C. (Wu Gu 2001: 24).2

Each grapheme of the Yi system corresponds to one syllable. After 1000 A.D., the priests conducted a writing reform by rotating the vertical orientation of characters into a horizontal one. For the most populous branch of Yi, the Nuosu of Liángshān prefecture (Sìchuān), the Chinese Government standardized in 1978 a set of 1119 characters. For this set, the orientation of graphemes was reverted to a vertical pattern similar to the one used in ancient times. The systems of other Yi groups were not standardized and differ from the Nuosu system through the 'reclining' appearance of graphemes. The Nuosu system is used as a teaching medium in

¹ Two sounds or syllables are in free variation, if they are not in complementary distribution and if the substitution of one by the other does not alter the meaning.

² In this subsection, I am using again material published in Gerner (2013b).

primary schools and some secondary schools of Liángshān prefecture. Official documents are drafted in both languages, Chinese and Nuosu. The International Standardisation Organisation (ISO) reserved space for the Nuosu character set in Unicode in 1995. With the Unicode support of Windows 2000, typewriting is possible by using special input software.

3.3.2 Nuosu syllabary

Unlike the Chinese logographic script, Nuosu syllables stand in one-to-one correspondence with graphemes of the script. Nuosu has 44 *initial* segments (43 consonants plus empty initial segment), ten *final* segments (eight plain vowels and two creaky vowels) and four *suprasegments* (three tonemes and one tone sandhi). The theoretical number of logical syllables the script should provide graphemes for is 1,760. Since certain combinations of initials and finals are not attested in any dialect of Nuosu, the designers of the Government-sponsored Nuosu script only standardized 1,119 graphemes in 1978. In the standard Shynra dialect an even smaller number of graphemes is in actual use, about 1,005.

Logical Syllables:	1,760 (= 44 Initials × 10 Finals × 4 Suprasegments)
Graphemes in Nuosu Script:	1,119
Graphemes in actual use:	1,005

Graphemes that represent syllables in the sandhi tone have a bonnet compared to the grapheme symbolizing the syllable with [33]-tone.

<u>‡</u>	mi	ĈZ,	mix
00 00	jjuo	DG M	jjuo x
W	lu	Ŵ	lu x

In two cases, the sandhi-tone grapheme contrasts with the grapheme for the syllable with [21]-tone.

લ	ve p	ઉ	ve x
8	nzo p	$\hat{\mathcal{S}}$	nzox

In the attached syllabary, I have marked those graphemes of the script that are not in actual use with gray shade. Three folk stories with interlinear Nuosu script, romanization, IPA transcription, English glosses and translation are appended to this grammar.

Chapter 4

Word structure

Nuosu has isolating morphology. Grammatical categories can be expressed on the noun or verb but do not need to. This chapter is divided into four sections, a preview on the basic word categories in Nuosu (section 4.1), a section on affixation (section 4.2), on reduplication (section 4.3), and on word compounding (section 4.4).

4.1 Word categories

4.1.1 Open categories

Nuosu nouns, verbs and adjectives are open word classes. They are defined syntactically not morphologically. Verbs and adjectives always occur in the rightmost slot of a minimal simple clause. Nouns always occur in nonfinal position of a minimal simple clause. Nuosu adjectives differ from verbs (section 6.1.3). They are always intransitive and cannot take the progressive marker *-njuo*. Those verbs that do not co-occur with *-njuo* are gradable and monotransitive.

Widespread homophony and polysemy result in overlap of the category of nouns, verbs and adjectives.

Table 4.1: Open word categories

Nouns	Verbs	Adjectives
lyp 'seed'	lyp 'sow'	
jjie 'fork'	jjie 'separate'	
njot 'ice'	njot 'freeze'	
gguo 'harrow'	gguo 'drag a harrow'	
	dop 'adapt'	dop 'well-suited'
	jjip 'become'	jjip 'full'

4.1.2 Closed and semi-closed categories

In Nuosu, there are five closed and three semi-closed word categories. Closed categories have a small and definite number, semi-closed categories a medial and vague number of members.

Table 4.2: Closed and semi-closed word categories

Category	Subcategory	Section
Determiners (semi-closed)	Classifier (semi-closed)	section 5.2.1
	Quantifier (closed)	section 5.3.2
	Demonstrative (closed)	section 5.4.3
	Article (semi-closed)	section 5.4.5
Pronouns (closed)	Personal (closed)	section 5.4.1
	Anaphor (closed)	section 5.4.2
	Interrogative/indefinite (closed)	section 5.4.6
Coverbs (closed)		section 6.2
Auxiliaries (closed)	Phasal (closed)	section 7.2
	Resultative (closed)	section 7.3
	Modal (closed)	section 8.2
Particles (closed)	Nominalizer (closed)	section 5.2.4
	Progressive aspect (closed)	section 7.4
	Perfective aspect (closed)	section 7.5
	Quantitative aspect (closed)	section 7.6
	Perfect (closed)	section 7.7
	Tense (closed)	section 7.8
	Quotative (closed)	section 8.3.1
	Negation (closed)	section 9.2
	Topic (closed)	section 14.1
	Focus (closed)	section 14.2
	Illocutionary (closed)	section 15
Adverbs (semi-closed)	Movable (semi-closed)	section 9.1.2
	Immovable (semi-closed)	section 9.1.3
	Postverbal (semi-closed)	section 9.1.4
Conjunctions (semi-closed)	Noun (closed)	section 5.3.3
	Forward-linking (semi-closed)	section 13.1.2
	Backward-linking (semi-closed)	section 13.1.3
Complementizers (closed)		section 13.2

The exact definition of these categories relies on morphosyntactic and semantic features and is decribed in the relevant sections.

4.2 Affixation

Bybee, Pagliuca & Perkins (1990) found that suffixation is more common than prefixation at the ratio of 3:1. For verb-final languages the ratio is 5:1, for verb-initial languages it is still 2:1. The preference for suffixing was explained in terms of grammaticalization and cognitive processing of the human mind (Whaley 1997). This preference for suffixation also exists in Nuosu.

4.2.1 Inventory of prefixes

I present nine derivative prefixes in this section. However, only the size and fruit prefixes are true prefixes (section A–B). The other seven morphemes are prefixes in the making (section C–I). They are bound morphemes that were used as independent nouns at a previous point in time.

A. Size prefixes

Nuosu exhibits two sound-symbolic prefixes. The diminutive prefixes i- and the augmentative prefix a- can be prefixed to a set of adjectival roots generating pairs of antonyms.

Table 4.3:	Synesthetic	sound	symbolism
-------------------	-------------	-------	-----------

[i] diminutive			[a] augm	[a] augmentative			
1 9 ₩	ix sho	'short'	11 %	a sho	'long'		
₽€	ix du	'thin'	11 %	a du	'thick'		
ÐU	ix ly	'light'	11 T	ax ly	'heavy'		
∄ ¥	ix jjy	'narrow'	11 A	a jjy	'wide'		
£)≢	ix nyi	'few'	£1.	ax nyi	'much, many'		
ÐW	ix fu	'fine'	11 A.	a fu	'coarse'		
₽ ¶	ix nu	'soft'	∄ ,1€	ax guo	'hard'		
₽16	iet zyr	'small'	∄ ₫	ax yy	'big'		

B. Fruit prefix syp-

```
也书
     syp
            vo
                  'peach'
                                  背貨
                                        syp
                                              ndat
                                                     'pear'
     fruit
                                        fruit
半曳
     syp
                  'walnut'
                                  事切
                                        syp
                                                     'apricot'
           hmi
                                              yi
     fruit
                                        fruit
≢X
     syp
                  'plum'
                                  ‡$
                                        syp
                                              hni
                                                     'apple'
           ga
     fruit
                                        fruit
≢€
     syp
           nju
                  'citrus orange'
     fruit
```

C. gga- 'road'

≨Ê	gga	shyx	'lead way'	氢业	ggax	shu	'walk'
	road	lead			road	make	
\$\$I	gga	re dde	'crossing'	₽̂≇	ggax	nyi	'neighbour'
	raod	crossing			road	sit	
拿쌧	gga	jo	'stroll around'	≨∜	gga	yot	'go astray'
	road	hand to			road	wrong	

D. co- 'person' (also as free morpheme)

161 ₩	co	cux	'nationality'	1911/91	co	cyt	'genealogy'
	person	-			person	family line	
1911米	co	shet	'eunuch'	A 101	co	mo	'body, corpse'
	person	-			person	_	
化的	cox	go	'prisoner'				
	nerson	LOC					

E. ddop- 'word'

#.l€	ddop	bur	'answer'	電影	ddop	shep	'accuse'
	word	return			word	search	
#1	ddop	bbyp	'command'	₹ ₩	ddop	ddur	'fulfill'
	word	give			word	exit	
輩H	ddop	mu	'obey'	\$ %	ddop	zy	'testify'
	word	do			word	attest	
## ##	ddop	sat	'rumor'				
	word	point to					

F. hxie- 'heart'

K (I)	hxie heart	ca hot	'eager'	16 %	hxie heart	jjuo move	'heart moving'
16 10	hxie	kat	'happy'	1 €⊴l	hxie	vur	'like, love'
	heart	happy			heart	enter	
1€ H[hxie	sha	'sorrowful'	1 € X€	hxie	guo	'hardened heart'
	heart	sorrow			heart	hard	
特乳	hxie	na	'jealous'	1€ 0#	hxie	pur	'evil-minded'
	heart	ill			heart	turn	
K E	hxie	nbut	'bother'	净	hxie	ndot	'disgust'
	heart	bother			heart	disgust	

G. ke- 'mouth'

₽≚	ke	bbo	'agree'	Ϋ́	ke	bot	'argue, discuss'
	mouth	go			mouth	argue	
44	ke	ci	'tired'	₽N	ke	cyt	'open mouth'
	mouth	fall			mouth	-	
44	ke	hxa	'eloquence'	۲¹۵	ke	уу	'boast'
	mouth	tongue			mouth	big	
X_1^{11}	ke	zy	'cross-examine'	남者	ke	jjip	'promise'
	mouth	attest			mouth	become	

H. mu- 'place, sky, steam'

НЖ	mu - place,sky	njy –	'sky'	ЯМ	mu - place,sky	vut	'(blue) sky'
ЯЗ	mu- place,sky	ggu –	'sky, air'	HS	mu- place,sky	sot breath	'air'
Н®	mu- place,sky	ngo weep	'overcast'	HO	mu- place,sky	ca warm	'clear sky'
H#	mu-	di	'cloud'	Н₩	mu-	hxuot	'mist, fog'
	place,sky	_			place,sky	_	
11.1	mu-	hxo	'water vapour'	ዝъ	mu-	kup	'earth steam'
	place,sky	_			place,sky	_	
НĶ	mu-	hlit	'lightning'	₩.	mu-	zyr	'thunder'
	place,sky	_			place,sky	_	
HH	mup-	hly	'wind'	ĦЯ	mu-	dut	'fire'
	place,sky	_			place,sky	_	
Я₩	mu-	hxi	'flame'	\mathfrak{H}	mu-	bbop	'fire light'
	place,sky	_			place,sky	light	
Ħ₹ĵ	mu-	ddix	'place'	ΉC	mu-	jy	'star'
	place,sky	there	•		place,sky	_	
ĦФ	mu-	уу	'dark of moon'	Яδ	mu-	dduo	'waxing moon'
	place,sky	big			place,sky		9
H +	mu-	kut	'year'	Ήθ	mu-	hlep	'month'
	place,sky	_	,		place,sky	_	
1111	mu-	cyt	'era'	Ħ⊒	mu-	tat	'hour, time'
	place,sky	family line			place,sky	_	,
Н≢	mu-	nyi	'spring'	41	mu-	she	'summer'
	place,sky	_	opinis		place,sky	_	
HЖ	mu-	chur	'autumn'	НЖ	mu-	cu	'winter'
	place,sky	_			place,sky	_	
ĦГī	mu-	nyip	'day, daylight'	ĦЯ	mu-	si	'night'
***	place,sky	day	aay, aayngn	*****	place,sky	_	
Ħф	mu-	ti	'morning'	11 %	mu-	ket	'evening'
414	place,sky	_	monning	410	place,sky	_	Cvenning
H1(mu-	vi	'dusk'		prace, sky		
411/	place,sky	AI	uusk				
	prace,sky	_					

I. *o*- 'head'

10米	0-	nyit	'honour'	103	0-	go	'life'
	head	face			head	LOC	
100 21	0-	hnot	'brain'	10 At	0-	fu	'horn'
	head	_			head	horn	

10 T	0-	kup	ʻpillow'	10引	0-	go	'headband'
	head	_			head	LOC	
10 th	0-	ji	'pointed'	10 ¥	0-	zzy	'pointless'
	head	CL			head	_	
10 11	0-	bu	'bald'	10 ni	0-	bbu	'intelligent'
	head	_			head	_	
101	0-	mop	'dizzy; giddy'	10€	0-	vu	'dizzy'
	head	_			head	dry	
10 出	0-	hmy	'start & end'	10 ()	0-	qu	'old person'
	head	tail			head	white	
10 ⊕	0-	ngep	'nod head, agree'	10 %	0-	qyp	'lift head'
	head	lean			head	lift	

4.2.2 Inventory of suffixes

In this section, I present three nominalizer suffixes (section A), four gender/age suffixes (section B), and two adjectivizer suffixes (section C).

A. Nominalizer suffixes

There are three nominalizers that derive lexical nouns from verbs: The action nominalizer -lu, which is unproductive, the quality/extent nominalizer -jjux and the manner nominalizer -tie, which are both productive.

Verb	-lu (action)	- jjux (quality or extent)	-tie (manner)
mgu 'love'	mgu-lu 'love' (n.)	mgu- jjux 'extent of love'	mgu- tie 'way of loving'
zze 'eat'	zze- lu 'diet'	zze- jjux 'quality of diet'	zze-tie 'way of eating'
syp 'know'	syp- lu 'knowledge'	syp- jjux 'extent of knowledge'	syp-tie 'way of knowing'
ju 'govern'	ju-lu 'act of governing'	ju- jjux 'extent of government'	ju-tie 'way of governing'
hmat 'teach'	hmat-lu 'teaching'	hmat- jjux 'quality of teaching'	hmat-tie 'way of teaching'
hxip 'speak'	hxip-lu 'speech'	hxip- jjux 'quality of speech'	hxip-tie 'way of speaking'
chyp 'weave'	chyp-lu 'act of weaving'	chyp- jjux 'weaving quality'	chyp-tie 'way of weaving'
mu 'do'	mu-lu 'acts'	mu-jjux 'extent of deeds'	mu-tie 'way of doing'
ggat 'wear'	ggat- lu 'wardrobe'	ggat- jjux 'quality of clothing'	ggat-tie 'way of wearing'
hxep 'see'	hxep-lu 'view'	hxep- jjux 'vision'	hxep-tie 'way of seeing'
ndo 'drink'	ndo-lu 'act of drinking'	ndo- jjux 'extent of drinking'	ndo-tie 'way of drinking'
bbur 'write'	bbur-lu 'writing'	bbur- jjux 'quality of writing'	bbur-tie 'way of writing'
nra 'measure'	nra-lu 'act of measuring'	nra- jjux 'measure' (abstract)	nra-tie 'way of measuring'
get 'comb'	get-lu 'act of combing'	get- jjux 'quality of combing'	get-tie 'way of combing'
yy 'laugh'	yy-lu 'act of laughing'	yy- jjux 'extent of laughing'	yy-tie 'way of laughing'
ggut 'sew'	ggut-lu 'act of sewing'	ggut- jjux 'quality of sewing'	ggut-tie 'way of sewing'
bi 'read'	bi-lu 'act of reading'	bi- jjux 'extent of reading'	read-tie 'way of reading'

The verbs listed above can take all three nominalizers. The verbs listed below only take *-ijux* and *-tie*, not *-lu*. The suffix classes of *-ijux* and *-tie* are largely identical.

Verb	-jjux (quality or extent)	-tie (manner)
zhe 'cut, fell'	zhe- jjux 'extent of cutting'	zhe- tie 'manner of cutting'
shut 'remember'	shut- jjux 'extent of memories'	shut-tie 'manner of memorizing'
hxe 'lend'	hxe- jjux 'extent of lending'	hxe- tie 'manner of lending'
gu 'call, crow'	gu- jjux 'extent of crowing'	gu- tie 'manner of crowing'
kie 'fell'	kie- jjux 'extent of felling'	kie-tie 'manner of felling'
ngo 'weep'	ngo- jjux 'extent of weeping'	ngo-tie 'manner of weeping'
vy 'buy'	vy- jjux 'extent of buying'	vy- tie 'manner of buying'
la 'come'	la- jjux 'quality of coming'	la- tie 'manner of coming'
syr 'sweep'	syr- jjux 'extent of sweeping'	syr-tie 'manner of sweeping'
sot 'count'	sot- jjux 'extent of counting'	sot- tie 'manner of counting'
ku 'steal'	ku- jjux 'extent of stealing'	ku- tie 'manner of stealing'
nzyt 'bite'	nzyt- jjux 'extent of biting'	nzyt-tie 'manner of biting'
zyt 'dig'	zyt- jjux 'extent of digging'	zyt- tie 'manner of digging'
lo 'scald, burn'	lo- jjux 'extent of scalding'	lo- tie 'manner of scalding'
hlu 'cook'	hlu- jjux 'quality of cooking'	hlu- tie 'way of cooking'
hxip ryt 'admit'	hxip ryt- jjux 'admission'	hxip ryt-tie 'way of admission'
la hxex 'wait'	la hxex- jjux 'extent of waiting'	la hxex-tie 'manner of waiting'
hxo lo 'depend'	hxo lo- jjux 'dependance'	hxo lo-tie 'kind of dependance'
nyie 'shear'	nyie- jjux 'extent of shearing'	nyie-tie 'way of shearing'
mgot 'chase'	mgot- jjux 'extent of chasing'	mgot-tie 'manner of chasing'

The three suffixes -lu, -jjux and -tie scope over the verb alone, not over the verb phrase (the verb, its complements and adjuncts). No complement noun phrase may be added. The agent of the verb can be expressed as the possessor of the nominalized verb.

- (1) a. * 커익 W
 - *nry ndo -**lu** wine drink NOM 'act of drinking wine'
 - c. *系句长争
 *tep yy bi -**tie**book read NOM
 'the manner of reading books'
 - e. *兴学刊版
 *vy lot mu -lu
 business do NOM
 'the act of doing business'

- b. *却於上賽
 - *i qi get -jjux head comb NOM 'act of combing one's hair'
- d. * 水のき策 *hxie mgat syp -**jjux** Chinese know NOM 'the extent of knowing Chinese'
- f. * # \$ 月 *****
 - *vit gga ggat -**tie**clothes wear NOM
 'the manner of wearing clothes'

(2)	a.	₩ D\$	b.	ዙ ⊲ ₩		
		*nga yy - lu		ngat yy - lu		
		1P.SG laugh NOM		1P.SG.POSS laugh NOM		
		'*My laughing'		'my laughing'		
	c.	*13 子	d.	华国协		
		*ne hxip - tie		nit hxip - tie		
		2P.SG speak NOM		2P.SG.POSS speak NOM		
		'*your way of speaking'		'your way of speaking'		
	e.	* \'\'\'\'\'\'	f.	1 ti €		
		*cy hxep - jjux		cyp hxep - jjux		
		3P.SG see NOM		3P.SG.POSS see NOM		
		'*his vision'		'his vision'		

B. Gender/age suffixes

There are three gender and one age suffixes attached to animal names: -bat (male), -bu (male), -mop (female) and -sse (young). The two male suffixes occur after different nouns. Several nouns can use both suffixes. For inanimate nouns, the female suffix -mop and the age suffix -sse have developed secondary functions as augmentative and diminutive suffixes (see Jurafsky 1996; Matisoff 1991).

Noun	-bat (male)	-bu (male)	-mop (female)	-sse (young)
le 'ox'	le- bat 'bull'	le- bu 'ox'	le- mop 'cow'	le- sse 'calf'
mu 'horse'	mu-bat 'stallion'	mu- bu 'stallion'	mu-mop 'mare'	mu-sse 'colt, foal'
yo 'sheep'	yo-bat 'ram'	yo- bu 'wether'	yo-mop 'ewe'	yo- sse 'lamb'
vot 'pig'	vot-bat 'boar'	_	vot-mop 'sow'	vot-sse 'piglet'
ke 'dog'	ke- bat 'dog'	_	ke-mop 'bitch'	ke-sse 'puppy'
ax nyie 'cat'	-	ax nyie- bu 'tomcat'	ax nyie-mop 'queen'	ax nyie-sse 'kitten'
va 'chicken'	-	va- bu 'rooster'	va-mat 'hen'	va- sse 'chick'
ie 'duck'	_	ie- bu 'drake'	ie-mat 'female duck'	ie-sse 'duckling'
op 'goose'	_	op- bu 'gander'	op- mop 'female goose'	op- sse 'gosling'
lat- 'wolf'	-	lat- bu 'male wolf'	lat-mop 'wolf'	lat- sse 'pup'
wo- 'bear'	-	wo- bu 'he-bear'	wo-mop 'she-bear'	wo-sse 'cub'
lot jy 'finger'	-	_	lot-mop 'thumb'	lot jy-sse 'little finger'
bbo 'mountain'	-	bbo-bu 'moutain'	-	bbo-sse 'hill'
vat 'rock'	-	vat- bu 'rock'	vat-mop 'big rock'	vat-sse 'small rock'
lur (mat) 'stone'	-	_	lur-mop 'big stone'	lur-sse 'little pebble'
yyp- 'water'	-	_	yyp- mop 'river'	yyp- sse 'creek'
ggap- 'path'	_	_	ggap- mop 'road'	ggap- sse 'lane'

In addition, *-mop* and *-sse* can also co-occur with several verbs to derive lexical nouns.

Verb	- mop (female)	-sse (son)
bi 'read' get 'able'	bi- mop 'priest' get- mop 'master'	bi- sse 'apprentice of priest' get- sse 'apprentice'
hlut 'pasture'	hlut- mop 'shepherd'	hlut- sse 'shepherd boy'
hmat 'teach'	hmat- mop 'teacher'	_
sso 'study'	_	ssox- sse 'pupil'
surx sha 'poor'	_	sha- sse 'poor guy'

C. Adjectivizer suffixes

Two suffixes derive adjectives from verbs. The suffix -sa encodes the easiness or pleasure of doing an activity. The suffix -we expresses the opposite state of difficulty. The suffix -we is less productive than -sa, as illustrated below. The derived adjectives are gradable and can be intensified with -jjy-.

争诽	zze	sa	'easy to eat'	₽#	zze	we	'difficult to eat'
	eat	easy			eat	difficult	
世間	ndo	sa	'easy to drink'	常	ndo	we	'difficult to drink'
	drink	easy			drink	difficult	
常事	yu	sa	'easy to grasp'	##	yu	we	'difficult to grasp'
	grasp	easy			grasp	difficult	
批出	mga	sa	'easy to go'	出来	mga	we	'difficult to go'
	go, pass	easy			go, pass	difficult	
ከ ዋ	jot	sa	'easy to cook'	¥ %	ot	we	'difficult to cook'
	cook	easy			cook	difficult	
刊電	mu	sa	'easy to do'	11张	mu	we	'difficult to do'
	do	easy			do	difficult	
果県	mgot	sa	'easy to pursue'	##	mgot	we	'difficult to pursue'
	pursue	easy			pursue	difficult	
出事	hxep	sa	'look good'	*日果	*hxep	we	'look bad'
	see, look	pleasant			look	difficult	
北北	hna	sa	'pleasant to hear'	米北默	*hna	we	'difficult to hear'
	hear	pleasant			hear	difficult	
事事	nyi	sa	'pleasant to sit'	*丰駅	*nyi	we	'difficult to sit'
	sit	pleasant			sit	difficult	

4.3 Reduplication

In Nuosu, all major word categories allow reduplication with an array of meanings: nouns (section 4.3.1), numeral classifiers (section 4.3.2), personal pronouns (section 4.3.3), verbs (section 4.3.4), adjectives (section 4.3.5), and ideophones (section 4.3.6). In addition, Nuosu idioms are composed of four partially reduplicated syllables (section 4.3.7).

4.3.1 Nouns

Nouns are wholly reduplicated in three constructions.

(3) Structure Input nouns Gloss
a. N N + CL N common nouns 'some', 'a few'
b. N N (+ ART/DEM+CL) N body part term 'only', 'always'
c. N-jiy-N few common nouns 'real', 'authentic'

In all three constructions, monosyllabic nouns are reduplicated as AA and dissyllabic nouns as ABAB. In the first construction, most common nouns can be reduplicated and followed by a classifier to encode a diminutive meaning.

- (4) a. 日受到字子,日常日常民主学出口多量。 mu ket te go ne, **mu di mu di** nzy nyi go ndit la yip luop evening when TOP cloud~DIM CL also LOC attached come META REGR 'Oh a few clouds appear in the evening.'
 - b. 用母型学家,用肾用肾口管口管。 mu ti te go ne, **mu hly mu hly** tu pur la ndit. morning when TOP wind~DIM CL blow come PER 'A slight wind is blowing sometimes in the morning.'
- (5) a. 引致效果%無分爭句。
 mux dde cy jot **lur mat lur mat** ma gox rrur.
 soil DEM CL stone~DIM CL LOC lie about
 'Some stones lie about this piece of land.'
- (6) a. 麥刀泉於印琴琴, 유민奇學 新妙詩。 ket mop si qix suo ko ko, **kex ke** ma go jjo vot ndit. night calm~DIM dog~DIM CL LOC have bark PER 'At night a few dogs are barking sometimes.'
 - b. 蒸州学臺建臺山港。
 bbut jjuop go **viex vie viex vie** bu vie.
 grass LOC flower~DIM CL blossom
 'A few flowers blossom in the grassland.'

Terms for unique or double body parts can be reduplicated with the sense of exclusive predicational relation glossable as *only* or as *always*.

- (7) a. 闭世山新星,伊切然切然分步引出译字章。
 ax pa li he sat, ngat **i qi i qi** max su ax di na go shex.
 other TOP good EXH 1P.SG.POSS head~only ART only ill HAB
 'Otherwise everything's ok, only my head always aches.'
 - b. 机环伊利里利里米剂对利门米尔。
 bbu sse ngat **ka nyuo ka nyuo** go ax di cyt la go shex.
 mosquito 1P.SG.POSS face~only LOC only sting come HAB
 'The mosquitoes only sting my face.'
 - c. 网络分前均學學学例海斯目主節。
 va cyx ma ax yi **lot lot** go da zza tur la go shex.
 hen DEM CL child hand~only LOC COV crops peck come HAB
 'The hen is always pecking food from the child's hand.'
 - d. 引带了N 划划 划 ≇ 目 3 章。 ax rryr cyp **bbur lie bbur lie** go nyi la go shex. female name 3P.SG.POSS thigh~only LOC sit come HAB 'Adge always comes to sit on his thighs.'

The third reduplication pattern is not productive. Several common nouns can undergo epenthetic reduplication by using the intensifier infix -jjy- 'very'. This process emphasizes the definitional properties of the noun and can be glossed as *real* or *authentic*.

- (8) a. 對貝及以內置另內置內也。
 nop it dde li **la dda** -jjy- **la dda** ji nge.
 2P.PL hometown TOP valley very valley CL COP
 'Your hometown is in a real valley.'
 - b. 创新详述引录中,以写句中也。
 cop jiet lap bbu a zzyx ji, **le** -jjy- **lex** ji nge.
 3P.PL.POSS home ox DEM CL ox (general) very ox CL COP
 'Their family's ox is a real ox.'

4.3.2 Classifiers

In combination with numerals, classifiers can be wholly reduplicated in three constructions.

(9) Structure

 a. NUM+CL CL*+su
 b. NUM CL NUM CL+mu
 c. cyp CL cyp CL+ne/ax di classifiers

 Input category meaning/gloss ordinals numbers ordinals numbers unit processing
 c. individual'

Ordinal numbers are encoded in Nuosu by the nominal construction in (9a). The reduplicant together with the nominalizer -su function as definite article.

- (10) a. 例下分分上以伊思州分址。
 co nyip **ma max** su li ngat jip xi ma nge.
 person NUM.2 CL ART TOP 1P.SG.POSS relative CL COP
 "The second person is my relative."
 - b. 了中級学師豪中语出口來子生節。

 cyp xy pot go chu sox **ji jix** su li bit ap-dop ox.

 3P.SG.POSS foot LOC thorn NUM.3 CL ART TOP pull out NEG- can DP

 'I cannot get out the third thorn from his foot.'
 - c. 河北重出于印域说出的问题。 kax ddi nyi nge ci fut **qi qix** su go pur da. who also NUM.16 CL ART LOC go STP 'Everybody go now to page sixteen.'

The phrasal reduplication pattern (9b) produces an adverbial. The numeral and classifier are reduplicated together and attached to the predicate with -*mu*. This construction expresses the idea that an entity is processed in increments.

- (11) a. 卓州『『『『 ie qyt **cyp tot cyp tot** mu ci la. water NUM.1 CL~one after other ADVL fall come 'The water leaks one drop after another.'
 - b. 中型坐型坐升里丁拿罗河。 xy **nge bbo nge bbo** mu ddie cyp gga qyp da. manure NUM.5 CL~one after other ADVL COV NUM.1 place put STP 'Put the manure in one place according to piles of five.'
 - c. 세章切영학장장당용비영。
 cop wox yi bo go **ly bbop ly bbop** mu bo.
 3P.PL house rent SENT.TOP NUM.4 CL~one after other ADVL rent
 'When they rent houses, they rent in groups of four.'

The nominal reduplication construction (9c) is phrasal. The numeral *one* and the classifier are reduplicated within the noun phrase. This pattern encodes the sense of *a few, some isolated*.

(12) a. 紫母了對了對自豪爭求切。

ddop ma **cyp go cyp go** ne hxip six jjie-ap-mgur. word NUM.1 CL~isolated TOP speak RES clear<NEG> 'Some isolated words were pronounced unclearly.'

b. 月页14141海头世来入。

mux dde **cyp jot cyp jot** ne zza gox zzur yip sy. soil NUM.1 CL~isolated TOP crops LOC stick up still 'Some isolated pieces of land still grow crops.'

c. 18.ស1៧1៧1/ឯងដង្គង

cyp nyuo yi **cyp zzip cyp zzip** ax di hxep-ap-sa. 3P.SG.POSS glass NUM.1 CL~isolated only see clear<NEG> 'He does not see well with some (of these) glasses.'

4.3.3 Personal pronouns

Personal pronouns may be reduplicated as emphatic pronouns. Tone changes are co-associated with the process of reduplication. Reduplicated pronouns only occur in the role of subject not of object (section 5.4.1.A).

	Singular	Dual	Plural
1P	ngat ngat	ngap nyit ngap nyit	ngop ngox
2P	nit nit	nep nyit nep nyit	nop nox
3P	nit nit	cyp nyit cyp nyit	cop cox

ne lot buop ddie-ap-ddur, **ngat ngat** sip mo. 2P.SG help need<NEG> 1P.SG~EMP take IMP 'You do not need to help me, I will take it myself.'

b. 图纸出事出非**多米多米**的问题。

pu jiet kep nyix nge su **nep nyit nep nyit** jjy- hxix yy. price how much COP COMP 1P.DL~EMP RECL- discuss 'You both may discuss the price yourselves.' c. 当的争举可象不同, 创创门的丰。 cop wox zzv vvx si-ap-ssop, cop cox la vix svp. accompany not need 3P.PL~EMP come still 2P.SG 3P.PL 'You do not need to accompany them, they are coming on their own.'

4.3.4 Verbs

All verbs can be reduplicated to encode alternative questions. Gradable verbs can further undergo epenthetic reduplication with the intensifier infix -jjy-.

(14)		Structure	Input verbs	Meaning
	a.	V V	V verb	Alternative question
	b.	V-jjy-V	V gradable verb	Intensification

For alternative questions, monosyllabic verbs with mid- or low tone have their base raised to sandhi tone -x and the reduplicant preserving the original tone. Dissyllabic verbs AB reduplicate in an unpredictable way for both constructions, partially as ABB (AB-jjy-B) or wholly as ABAB (AB-jjy-AB).

Alternative questions are formed through whole or partial reduplication of the verb. Some dissyllabic verbs are reduplicated as ABAB/ABB, some only as ABB.

Table 4.4:	REGIIN	lication	ın	a r	nresentati	IVA SAMT	പല വ	verns
IUDIC TITE	Neuup	ticution		uı	picaciitati	ive Juilip	ic oi	VCIDS

Verb	Alternative question	Intensification
mgu 'love'	mgux mgu	mgu-jjy-mgu
qyt 'bind'	qyt qyt	_
ndup 'beat'	ndux ndup	ndup-jjy-ndup
lot buop 'help'	lot buop buop	_
uo mur tit 'worship'	uo mur tit tit	_
bu dex 'praise'	bu dex bu dex / bu dex dex	bu dex-jjy-bu dex
hxie vur 'like'	hxie vur vur	hxie vur-jjy-hxie vur / hxie vur-jjy-vur
ggat qip 'delay'	ggat qip ggat qip / ggat qip qip	_
la hxex 'wait'	la hxex hxep	_
lyrx nyie 'move'	lyrx nyie nyie	lyrx nyie-jjy-lyrx nyie
jy jie 'fear'	jy jiex jie	jy jie-jjy-jy jie / jy jie-jjy-jie
hxie nep ndit 'regret'	hxie nep ndit ndit	hxie nep ndit-jjy-ndit
		hxie nep ndit-jjy-hxie nep ndit
ggup cyr 'rescue'	ggup cyrx cyr	_
lyr ggex 'tremble'	lyr ggex gge	lyr ggex-jjy-lyr ggex / lyr ggex-jjy-ggex
hxie jjuo 'move (sb)'	hxie jjuo jjuo	hxie jjuo-jjy-hxie jjuo
syp mgep 'chat'	syp mgep mgep	_
yyx zyr 'drench'	yyx zyr zyr	-

cox ku max su cop sip **qyt qyt**? people steal ART 3P.PL take bind~ALT 'Did they get hold of the thief?'

hmat mop ssox sse max su **bu dex bu dex**? teacher student ART praise~ALT 'Did the teacher praise the student?'

b. ፮३६८४ .d

hmat mop ssox sse max su **bu dex dex**? teacher student ART praise~ALT 'Did the teacher praise the student?'

(17) 国对常工以承门赛赛?

ne ip si cyp vit ngop **la hxex hxex**? 2P.SG just now NUM.1 time 1P.PL wait~ALT 'Have you been waiting for us just now?'

Gradable verbs can be intensified through reduplication and epenthesis of the infix -*jjy*-. For dissyllabic verbs the pattern is AB-*jjy*-AB or AB-*jjy*-B.

(18) a. 學前承養爭養

nga ax mo **mgu** -jjy- **mgu**. 1P.SG mother love very love 'I love mother very much.'

nga ngat mu ddix **ngop** -jjy- **ngop**. 1P.SG 1P.SG.POSS hometown think, miss very think, miss 'I am missing my hometown very much'

bbu dde cyx ma cox **hxie jjuo** -jjy- **hxie jjuo**. story DEM CL people heart-move very heart-move 'This story is very moving.'

4.3.5 Adjectives

Adjectives can also be reduplicated to express alternative question. Gradable adjectives can further be reduplicated with the epenthetic intensifier infix -jjy-.

(20)		Structure	Input adjectives	<u>Meaning</u>
	a.	A A	A adjective	Alternative question
	b.	A-jjy-A	V gradable adjective	Intensification

Adjectives and verbs are reduplicated in the same way. For pattern (20a), the base of monosyllabic adjectives with mid- or low tones rises to the sandhi tone -*x* while the reduplicant preserves the original tone. Dissyllabic verbs AB reduplicate partially as ABB (AB-*jjy*-B), or wholly as ABAB (AB-*jjy*-AB). The availability of partial or whole reduplication is unpredictable.

Table 4.5: Reduplication in a representative sample of adjectives

Adjective	Alternative question	Intensification
ge 'stupid'	gex ge	ge-jjy-ge
o bbu 'intelligent'	o bbux bbu	o bbu-jjy-o bbu
ax yy 'big'	ax yy ax yy / ax yy yy	ax yy-jjy-ax yy / ax yy-jjy-yy
ix fu 'thin'	ix fu ix fu / ix fu fu	ix fu-jjy-ix fu / ix fu-jjy-fu
a hmu 'high'	a hmu a hmu / a hmu hmu	a hmu -jjy-a hmu / a hmu-jjy-hmu
ix sho 'short'	ix sho ix sho / ix sho sho	ix sho -jjy-ix sho / ix sho-jjy-sho
gga sho 'far'	gga shox sho	gga shox-jjy-gga sho
ix jjy 'narrow'	ix jjy jjy	ix jjy-jjy-ix jjy
ix bbo 'thin'	ix bbo bbo	ix bbo-jjy-ix bbo
wox bu 'fat'	wox bu wox bu / wox bu bu	wox bu-jjy-wox bu / wox bu-jjy-bbu
ax nyi 'many'	ax nyi nyi	ax nyi-jjy-ax nyi
mip ji 'pointed'	mip jix ji	mip ji-jjy-mip ji / mip ji-jjy-ji
lap rryt 'skew'	lap rryt rryt	lap rryt-jjy-lap rryt
ax nuo 'black'	ax nuo nuo	ax nuo-jjy-ax nuo / ax nuo-jjy-nuo
chyp hni 'stinky'	chyp hnix hni	chyp hn -jjy-chyp hni / chyp hni-jjy-hni
ce qy 'salty'	ce qyx qy	ce qyx -jjy-ce qyx / ce qyx-jjy-qyx
sha qip 'exhausting'	sha qip qip	sha qip -jjy-sha qip / sha qip-jjy-qip

For alternative questions, monosyllabic adjectives are reduplicated as AA, disyllabic adjectives as ABB or occasionally as ABAB.

- (21) 母节藻母异? ma gop cyx ji **ssix ssi**? lamp DEM CL bright~ALT 'Does this lamp shine brightly?'
- (22) a. 반원각절보이야?
 ngat ix di ggux su **zhut zhut**?
 1P.SG.POSS clothes ART crinkly~ALT
 'Are my clothes crinkly?'

- b. 全球角の後(の)後? xyx hnie cyx zzip **iet zyr (iet) zyr**? shoe DEM CL small~ALT 'Is this pair of shoes small?'
- c. ขอสวงโด้ด?
 op rro shur mop **a hxuox hxuo?**Xichang lake deep~ALT
 'Is the lake of Xichang deep?'

For intensification, the epenthetic infix -jjy- is inserted between the base and its reduplicant: A-jjy-A, AB-jjy-AB or AB-jjy-B.

- (23) a. 对下承日系子系。
 ip nyip mo mu **mgo** -jjy- **mgo**.
 today sky, weather cold very cold
 'Today the weather is very cold.'
 - b. 伊伊州智子智。
 ngat pax shu jjip -jjy- jjip.
 1P.SG.POSS bag full very full
 'My bag is very full.'
- (24) 世里素和章章?
 ngat nyuo zzy **a hnix hnix**?
 1P.SG eye red~ALT
 'Are my eyes red?'

4.3.6 Colour ideophones

Colour adjectives take reduplicated ideophones to express colour nuances. They evoke images in the mind of the addressee. The ideophone is meaningless in isolation. The following list is nonexhaustive.

Adjective root Ideopho	onic expression	Gloss
a shyx 'yellow' shyx no shyx bu shyx ju shyx lo shyx ss shyx jie	ır bur o juo lo y ssy	yellow full of fruits yellow and pale yellow full of poults or blooms yellow in sky before thunderstorm a lot of yellow entities together yellow colour of stars in the sky

	shyx ly ly	yellow colour of body hair
	shyx mo mo	very pale yellow
	shyx ggo ggo	yellow colour of roasted fish
	shyx ba ba	yellow colour of buckwheat cake
	shyx mge mge	yellow colour in face of ill person
ax hni 'red'	hnix sy sy	red colour of glowing fire
ux iiii Teu	hnix lo lo	very red
	hnix zhyr zhyr	redish colour of human face
	hnix jjo jjo	area-wide red
	hnix mo mo	red and pale
	hnix xyr xyr	red and healthy colour of face
	hnix njie njie	a lot of red entities together
	hnix ssyr ssyr	full of red dots
	hnix zzyr zzyr	ordered red blocks
	(hni mox vu)	('pink')
a vut 'green'	vut mo mo	green and pale
a vat green	vut lo lo	azure, sapgreen
	vut nyie nyie	green and foggy
	vut zhu zhu	lively green
	vut zhyr zhyr	green colour of moss
	vut hlip hlip	green colour of crops in field
	vut jjo jjo	glossy and green
sox 'silver, grey'	sox bo bo	silver-grey
, , ,	sox mo mo	light grey
a qu 'white'	qux zyr zyr	snow-white
•	qux juo juo	white dots area-wide
	qux shy shy	snow-white area-wide
	qux sha sha	foamy-white
	qux zi zi	white thread on dark background
	qux mo mo	dirty-white
	qux jie jie	ashen, pale as a sheet
	qux bbie bbie	beaming white
	qux sy sy	little white on dark background
	qux ndo ndo	white colour of earthworm
ax nuo 'black'	nuo jjur jjur	shiny black colour of hair
	nuo chuo chuo	black colour of face
	nuo zzyt zzyt	deep black
	nuo bbip bbip	roughly black
	nuo sot sot	dark-grey
	nuo ddie ddie	layered black
	nuo ddep ddep	black-green colour of forest
		

- (25) a. 对厅景州*(季季
 - ip nyip mo mu **vut lo lo.** today sky green-IDE~EXPR
 - 'Today, the sky is azure.'
 - b. ₫¾Չ₽̂ŒŒ

nit ka nyuo **hnix zhyr zhyr.**2P.SG.POSS face red-IDE~EXPR
'Your face is reddish'

c. YSGXBOEE

vit gga yyx cy six **qu zhyr zhyr**. clothes wash RES white-IDE~EXPR 'wash the clothes snow-white.'

4.3.7 Idioms

Nuosu makes extensive use of four-syllable idioms to capture certain states of affairs. A varied use of these idioms in every day situations shows a high command of the stylistic register. Based on their form, idioms can be classified into five categories: AABB, ABAB, ABAC (frequent), ABCB (frequent), ABCD. Examples are drawn from Chén & Lǐ (1996)'s *dictionary of idioms*.

AABB

Very few Nuosu idioms exhibit the internal structure AABB.

```
**1
                                               'not so good'
        dop
                dop
                         ZZV
                                    ZZV
        can
                can
                                               (dop dop 'insufficient')
                                               'tireless'
$$$$$$
                        chyr
                                    chyr
        ggur
                ggur
        sturdy sturdy tear open
                                    tear open
```

ABAB

The structure ABAB is also rarely attested for idioms. Below, one example is provided in which the second A has the tone sandhi -x.

```
乗車策車 kuop luo kuox luo 'thornbush; patchwork'
```

ABCB

The pattern ABCB is frequent. The repeated syllable B is often a predicate, either adjective or verb. The syllables A and C are arguments of the predicate.

DHD净	lit	уу	dat	уу	'arrogant'
	pharynx	big	pawn	big	
#2#	pat	shut	mop	shut	'remember one's parents'
	father	remember	mother	remember	
ኯቘዄኯ	xy	ggot	lot	ggot	'muscle ache'
	foot	ache	hand	ache	
集单用单	ssup	hlit	sha	hlit	'dry barley and wheat in the sun'
	barley	dry in sun	wheat	dry in sun	
H0H#	dur	mu	vat	mu	'become a great multitude'
	1000	do	10000	do	

For the following idioms, A and C form disyllabic words or two independent words with similar meanings.

$!_{1}\oplus \P \oplus$	ke	nrat	hxa	nrat	'eloquent'
	mouth	nice	tongue	nice	(ke hxa 'eloquence')
} 8 \$ 8	wox	ggur	sat	ggur	'family members are scared'
	group	scared	_	scared	(wox sat 'family')
ካ _ተ አቀα	yi	shyt	ga	shyt	'new farmhouse'
	house	new	steel	new	(yi ga 'farmhouse')
k €k0	qop	zzy	wo	zzy	'entertain friends'
	friend	receive	group	receive	
\$C\$C	zha	hxuo	dop	hxuo	'willing to share food and drinks'
	feed	capable	give drink	capable	
≢ < <u>\$</u> <	syp	hxuo	pox	hxuo	'talkative'
	talk	capable	show	capable	(syp pox 'talk freely')
₽¥ ₽ ∅	ro	zzi	mo	zzi	'pretend to be angry'
	taut face	leave over	see	leave over	
张以 张	vo	guo	hxi	guo	'snowy and frosty weather'
	snow	much	frost	much	

Sometimes, A and C form two independent antonymic words.

管 君 管 智	ot	jjip	tot	jjip	'easy come easy go'
	downside	become	upside	become	
山流文法	ku	ddop	hxi	ddop	'insider talk and outsider talk'
	inside	word	outside	word	

One common subtype uses the coverb <i>ddie</i>	'prepare'	(section 6.2.2.A): AB-ddie-B.
--	-----------	------------------	---------------

计定生定	ke	sat	ddie	sat	'all the money is distributed'
	mouth	EXH	prepare	EXH	
斜州里州	jjox	sha	ddie	sha	'hard life'
	live	poor, tired	prepare	poor, tired	
≇± ≢⊛	shot	nyi	ddie	nyi	'awareness about one's shame'
	shame	sit	prepare	sit	
B 型 B위	ssix	pu	ddie	pu	'rental price (for ox)'
	use	price	prepare	price	
ጓ ቷ ላፁ	SSO	get	ddie	get	'be good at studying'
	study	can	prepare	can	
Sq 车 q	hmop	yot	ddie	yot	'play the wrong notes'
	blow	wrong	prepare	wrong	
利出革出	vut	sa	ddie	sa	'easy to turn the grindstone'
	grind	easy	prepare	easy	
⋞ ₽ ⋣ ₽	lup	zze	ddie	zze	'take food by force'
	rob	eat	prepare	eat	

ABAC

Another frequent idiom pattern is ABAC. In some cases, B and C form together a word or are independent words with similar meanings.

ፈ ል ቁዝ	mot	vit	mot	ggat	'armor'
	soldier	_	soldier	wear	(vit ggat 'clothes')
Ŷ₹Ŷ Ø	jjyx-	mgu	jjyx-	dde	'mutual love and friendship'
	RECL-	love	RECL-	_	(mgux dde 'love')
#\$#@	na	mup	na	mit	'individual cases of disease'
	ill	_	ill	_	(mup mit 'case, circumstance')
HK≰K	ka	bbo	ka	pat	'Creator; origin'
	CLF	father	CLF	father	
1¢&1¢€	ар-	bbop	ap-	zze	'no possessions, no consumables'
	NEG-	possess	NEG-	eat	

Some ABAC-idioms are composed of two antonyms B and C.

해석하다 mga
$$yy$$
 mga la 'coming and going' pass go down pass come

In the following idiom, AB and AC form two words that are antonymic.

```
방비량성vopmuvopngo'rich harvest and famine'-do-weep(vop mu 'harvest'; vop ngo 'famine')
```

In the next idiom, AB forms a word that is partially repeated. The third and fourth syllables have no relevant meaning.

```
쌍륭형하 lu byx lux ji 'folk story idioms' dragon − dragon CL (lu byx 'idiom')
```

ABCD

A group of idioms are composed of four different syllables, ABCD. When this happens, the four syllables entertain a semantic relation: A and C have similar meaning...

∃ઘંશે∈	rre	quo	zzax	bi	'waste resources'
	money	tear down	food	scatter	
ĵŧ%ች	xyp	xi	hni	jyx	'wedding'
	bride	reach	female	_	xyp xi 'wedding'

...or B and D have similar meanings as do A and C...

身常問民	nry	ndo	she	zze	'feast, regale oneself'
	wine	drink	meat	eat	
用鼠齿虾	na	ndit	mgox	zzur	'chronically ill'
	ill	attached	ache	stick up	
10 数字式	0	hxi	hmy	ga	'refuse any advice or task'
	head	shake	tail	drop	
╎№る隊	ke	ssyt	nyuo	hxi	'naughty'
	mouth	bite	eye	wave	

...or A and C are antonyms, B and D have similar meanings.

顶引吊鹿	0	go	hmy	sat	'from beginning to end'
	head	LOC	tail	EXH	(o go 'life'; hmy sat 'end')
10人4Å	0	syr	xy	shox	'dressed up and decorated'
	head	wipe	foot	clean	(syr shox 'sweep')
U119	ot	bur	tot	lie	'turn something upside down'
	downside	turn	upside	turn	(bur lie 'turn')

There are also idioms in which A, B, C, D have no semantic relation with each other (which would not qualify as reduplicative pattern).

```
於州口器 hxie bba la jjuo 'heart broken' heart carry come broken
```

4.4 Compounding

We illustrate several groups of compound words: nominal compounds (section 4.4.1), verbal compounds (section 4.4.2) and mixed compounds (section 4.4.3).

4.4.1 Nominal compounds

The meaning of nominal compounds may be related to the meaning of its components in different ways. I have distinguished 15 cases in this subsection.

A and B are unrelated in meaning

以比其度	ax jji	bbu zza	'mulberry tree'
	crow	worm as food	
∄⊯ሐሦ	ax jju	sha bbur	'wild cotton'
	fox	sheep wool	
图系制度	ax nyie	hnap bo	'edible tree fungus'
	cat	ear	
IJ≣€≢ോ	ax pu	yo hlut mop	'the praying mantis'
	grandfather	sheperd	
北 第	bbut	sse	'reed-pipe wind instrument'
	grass	son	
* የተ	mga jot	hna bbi	'cactus'
	buckwheat cake	without nose	
11億年末	a zhat	bbup ddi	'earthen silkworm'
	magpie	worm	
有性	it	ry	'corn stove'
	maize	reed, grass	

A and B are figuratively related

1筆	bbox	sse	'small hill'
	mountain	son	
3¥	bbo	jjut	'halfway up a mountain'
	mountain	waist, loins	
本 中	bbo	xy	'foot of mountain'
	mountain	foot	
ДЖ	yyx	hmy	'south'
	water	tail	
<u></u> ፈለ∄መ	ap vy	ax yi	'careless'
	left	right	

A and B are parallel

<u> 1</u> 1기11하	ax bu	a vo	'ancestors'
	grandfather	grand-grandfather	
HD	pat	mop	'parents'
	father	mother	
16	ap bbo	ax sse	'male members in a family'
	father	son	
1	ap bbo	ap my	'father and his daughters'
	father	daughter	
424H	ap mop	ap my	'female members in a family'
	mother	daughter	
14,∈	bbu	shy	'snake'
	worm	snake	
Ħ₹	mu	wo	'brown bear'
	horse	bear	
HE':	lat	ke	'wolfdog'
	wolf	dog	
119	ke	hxa	'eloquence'
	mouth	tongue	
₹9	ka	nyuo	'face'
	mouth	eye	
₹S	we	sot	'diligent, using strength'
	strength	breath	

A is the material of which B is made

χıη	pıp	yı	'wooden barrack, wooden house'
	board	house	
X W	lur	zhep	'earthen bowl'
	stone	bowl	
まば奪む	chyt nyie	yiep but	'wool cloth'
	goat hair	cloth	
章?第	shy	nrur pop	ʻgolden key'
	gold	key	

B denotes a part of A

黑式陆	i dix	lot	'sleeve'
	clothes	hand	
Υ¥	syr	lot	'branch'
	tree	hand	
\$#	ie	she	'duck meat'
	duck	meat	

JıΨ	bu	ddur	'sting of hedgehog'
	hedgehog	wing, sting	
₩ ₽	bbut	njip	'grass root'
	grass	root	

A is the producer of B

\$ (i)	16	qıp	auck egg
	duck	egg	
JJ 71 UL∑	ax bu	bbu dde	'legend, fairy tale'
	grandfather	story	

A is processed into B

氣等	nda	mox	'bracken powder'
	bracken	powder	
系以	zza	mox	'flour'
	crops	flour	
#Â	sha	mox	'wheat flour'
	wheat	flour	
HЫ	lat	уу	'tea water'
	tea	water	
ÞX≰	vap ga	уу	'rapeseed oil'
	rapeseed plant	water	
Χχι	lur	су	'oil'
	stone	oil	
张汉	bbut	су	'medicine'
	grass	oil	
XЯ	lur	si	'stone coal'
	stone	coal	
€ 魚	za	si	'coal'
	earth	coal	
业业	bbut	xy	'green manure'
	grass	fertilizer	

A describes the kind or nature of B

11X 1引	mga	zza	'buckwheat crops'
	buckwheat	crops	
ΦH	lo	mu	'brumby, wild horse'
	wild environment	horse	
≇Ď⊉	lo	yyx nyi	'wild buffalo'
	wild environment	buffalo	

B is a unit of A

4¢ it ji 'corncob' maize CL 出加 'grain of maize' it jur maize core Ħθ it ma 'grain of maize' maize CL አθ bbur 'letter' ma writing CLΒÂ 'twins' ssex zzi son CL.pair

A denotes the body part on which B is worn

¥8 lot ggur 'bracelet' hand bracelet ΨК lot bi 'ring' hand ring

B is a piece of equipment used in a means of transport, A

人名阿米曼 lo hly tat hmy sy 'sail' ship sail, big cloth HФ mu wat 'saddle' horse saddle 升非 mu zhuo 'bridle' horse bridle

B denotes the dwelling or storing place of A

¥Ϋ lot vi 'glove' hand house **១**២ nyuo yi 'eyeglasses' house eve <mark>ለ</mark> ከ bbur yi 'shrine' idol house ďη mot yi 'army camp, barracks' soldier house Ы'n va ke 'henhouse' hen nest ₩0 vot ho 'pigsty' pig pen 'maize storehouse' ₩ it jjur maize depot

A denotes the body part of disease B

ήγ	hnax	bbur	'sore at the nose'
	nose	sore, ulcer	
μŅ	ke	bbur	'sore at mouth'
	mouth	sore, ulcer	
\$ \$	nyuo	na	'illness at eyes'
	eye	ill	

B is a representative symbol for A

4 #	mot	sa	'(military) flag
	soldier	seal, mark	
金出●は日の	vo mu	di nzyp uo tie	'king's crown'
	king	crown	

A denotes the sign in Chinese zodiac for time unit B

% 木 \	hxie	hlep / kut	'month / year of rat'
	mouse; rat	month / year	month of rat ≈ August
≇Ψ/θ	nyi	hlep / kut	'month / year of ox'
	livestock; ox	month / year	month of ox ≈ September
Н¥/Ө	lat	hlep / kut	'month / year of tiger'
	tiger	month / year	month of tiger ≈ October
β / Ψθ λ	tep hlep	hlep / kut	'month / year of rabbit'
	rabbit	month / year	month of rabbit ≈ November
$\forall \Psi / \Theta$	lu	hlep / kut	'month / year of dragon'
	dragon	month / year	month of dragon ≈ December
ΕΨ/Θ	shy	hlep / kut	'month / year of snake'
	snake	month / year	month of snake ≈ January
НΨ/Θ	mu	hlep / kut	'month / year of horse'
	horse	month / year	month of horse ≈ February
$\Theta + \Theta$	yo	hlep / kut	'month / year of sheep'
	sheep	month / year	month of sheep ≈ March
$\Theta\Psi$ / Θ	nyut	hlep / kut	'month / year of monkey'
	monkey	month / year	month of monkey ≈ April
β Ψ/θ	va	hlep / kut	'month / year of rooster'
	rooster	month / year	month of rooster ≈ May
ΫΨ/θ	ke	hlep / kut	'month / year of dog'
	dog	month / year	month of dog ≈ June
₩¥/Ө	vot	hlep / kut	'month / year of pig'
	pig	month / year	month of pig ≈ July

4.4.2 Verbal compounds

Verbal compounds relate to the meaning of their components in four major ways, as listed below. Directional verb compounds are presented in section 6.4.1.

A and B are unrelated

頂	la	hxex	'wait'
	come	see	
沿生	ddie	mga	'please'
	prepare	pass	
유슈	but	ndit	'courageous'
	dare	stick out	
SĦ	lyr	mga	'disturb'
	wrap	pass	

A and B are antonymic

₩Ж	it	dep	'rise'
	lie	rise	
\$8点煮用	vup-jjup	vy-lot-mu	'do business'
	sell-SUFF	buy-hand-do	
11 X/I	li	xi	'come around to someone's turn'
	go	arrive	
색 ├ (JH	ggep	qy pur	'angered because of excessive joke'
	make fun	break off	

A and B are parallel

出作	hxep	hna	'take care'
	see	listen	
1 <u>%</u>	hxo	hxex	'sustain, nourish'
	nourish	see	
큅비	jjip	qot	'change'
	become	change	
位状	nbot	hat	'hide'
	hide	cover	
€₩	ju	hmox	'rule'
	manage	govern	
4.16	dop	sat	'direct'
	point at	point toward	
集第	du	dex	'emit, produce'
	raise	rise	
T q	ly	hmot	'request, ask for'
	want, request	beg	
况(K	gut	gep	'give heartfelt support, approve of'
	support	add	

B denotes resultative state of A

ιţΟ,	hna	cie	'hear clearly'
	hear	clear	
Цd	hxep	уу	'greatly respect'
	regard	big	
臣引	gep	jjip	'become full, complete'
	add	full	
₩9	zze	nbur	'eat one's fill'
	eat	full up	
110	hmip	mga	'overripe'
	ripe	pass	

4.4.3 Mixed compounds

Nouns can form lexical compouns with verbs and with classifiers. Occasionally, verbs also combine with classifiers, as illustrated below.

A is noun and B is verb

罗君	lot	jjip	'spring into action'
	hand	become	
∯∄	xyx	ne	'rest'
	foot	rest	
16€	hxie	vur	'like, love'
	heart	enter	
3E	rre	sot	'account' (v.)
	money	count	
ያ掌	nrur	pop	'key'
	lock (n.)	open	
ЮΉ	nyop	mu	'do farming work'
	profession	do	
目目	pu	jjo	'expensive'
	price	have	
ΨîW	bbux	ddur	'East'
	sun	come out	

A is noun and B is classifier

中华	nur	ji	'soybean pod'
	soybean	CL	
弾	chu	bbo	'thornbush'
	thorn	CL	
∳≚	dip	bbo	'tomb, grave'
	bury	CL	

戊苯	vix	bbo	'load'
	load, bundle	CL	
Y¥	syr	bbo	'tree'
	wood, tree	CL	
$\Theta \Theta$	gup	ma	'bead of sweat'
	sweat	CL	
θ 4	lyp	ma	'grain of seed'
	seed	CL	
ΥŅ	syr	qi	'leaf'
	wood, tree	CL	
뙨쌇	dut	zi	'torch, flambeau'
	fire	CL	
Д¥	уу	jjur	'spring'
	water	CL	
ЮĦ	hxix	gur	'appearance, profile'
	outside	CL	

A is verb and B is classifier

门锋	yur	nyip	'birthday'
	be born	CL.day	
录点	ngop	jix	'thought'
	think	CL	
\$€	sat	ma	'mark, symbol'
	point at	CL	
Ϋθ	bbur	ma	'letter'
	write	CL	
₹₽	ko	lo	'mattress'
	spread (a mat)	CL	

Chapter 5

The noun phrase

The Nuosu noun phrase represents rare features such as the existence of semi-open classes of in/definite articles and of an African-style logophor. This chapter is divided into four sections, an overview section (section 5.1), a section on classifiers, possession, adjectival modification, and relativization (section 5.2), a section on quantification (section 5.3), and a section on deixis and definiteness (section 5.4).

5.1 Introduction

5.1.1 Constructions of the noun phrase

The *noun phrase* (NP) was replaced in recent versions of Generative Grammar by *determiner phrase* (DP) whose head is a determiner like the definite article *the* (Carnie 2007). For Chinese, there is a controversy on the structural unit that would correspond to the English article *the* as the head of DP (Tang 1990; Cheng & Sybesma 1999; Wu & Bodomo 2009). Since classifiers in Cantonese can have definite reference, Cheng & Sybesma (1999) argue for the classifier to be the head of DP, which they call the head of the *classifier phrase*. Wu & Bodomo (2009), citing empirical constraints, disagree with this position.

This discussion has relevance for Nuosu in which the classifier contributes to the formation of indefinite and definite determiners (section 5.4.5). As this grammar is not committed to one particular syntactical framework, we will continue to employ the notion of noun phrase instead of determiner phrase, but adopt one structural unit that is reminiscent of labels used in Generative Grammar: the unit CL' (classifier-bar) which is a unit greater than a bare classifier but smaller than the whole noun phrase.

Table 5.1: The unit CL' in three types of determiners

Demonstratives	N	DEM	CL		
Indefinite articles	N		CL		
Definite articles	N		CL	su	CL'

Demonstratives, indefinite articles and definite articles require classifiers. Definite articles are derived from indefinite articles by appending the nominalizer -su (see section 5.2.4.C). The particle -su cannot be directly suffixed to the noun but must be complemented by other elements. It is thus not the element which encodes the determiner function, but it contributes to establishing definite determiners. The element that encodes the determiner function is the classifier.

Bare noun				N							
Numeral				N			NUM		CL'		
Quantifier	(most)			N			QUANT		CL'		
	(special)			N					CL'		mu
	(special)			N			сур		CL		zzix ap zzi
Adjective	(left)	ADJ-su		N							
	(left)	ADJ-su		N					CL'		
	(right)			N	ADJ				CL'		
	(right)			N	ADJ-su						
Relativisation	(left)	RC-su		N							
	(left)	RC-su		N					CL'		
	(right)			N		RC			CL'		
	(right)			N		RC-su					
Demonstrative				N				DEM	CL		
Definite				N					CL*	su	
Indefinite				N					CL		
Possessive			N_{PR}	\mathbf{N}_{PE}							

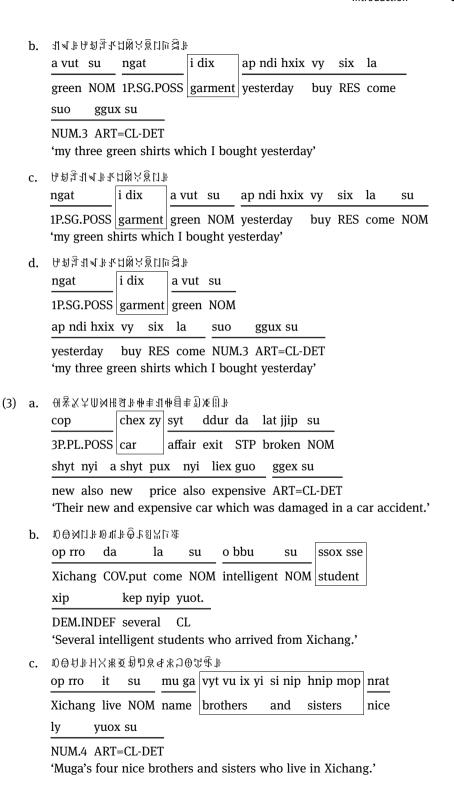
Table 5.2: Noun phrase constructions

Table 5.2 provides an overview of the constructions of the noun phrase. Different columns of the table show the relative order of multiple components.

5.1.2 The order of components in the noun phrase

Noun phrases in Nuosu consist at least of a bare noun and at most of four different components (classifier, adjective, possessor and relative clause). If several of these elements appear, their order is fixed according to the following schema:

The relative clause can occur on both sides of the head noun with a difference in meaning. The following examples illustrate this pattern:



5.2 Qualifying nouns

5.2.1 Noun classifiers

Classifiers in Asian languages assume an individualizing function. Individualization is the assignment of shape boundaries to a nominal concept (Burling 1965: 259–260; Greenberg 1972: 10; Croft 1994: 162-163; Bisang 1999: 115; Gerner 2006: 241). Bisang (1999: 121) distinguishes between actualizing and creative individualization. If a noun referent has inherent shape boundaries, a classifier actualizes them (actualizing individualization). Otherwise, a classifier imposes shape boundaries (creative individualization).

In theory, sortal classifiers actualize and mensural classifiers create shape boundaries. This division is sometimes blurred in Nuosu. Sortal classifiers might also create shape boundaries. For example, the sortal classifier for one-dimensional entities can co-occur with mass nouns such as gold to convey the sense of gold bar. Classifiers are therefore predominantly sortal or predominantly mensural.

As a general rule, sortal classifiers are clitics with bleached nominal meanings, while mensural classifiers are independent words that contribute stronger meanings to the noun. Almost all Nuosu classifiers are monosyllabic and have the neutral midtone [33]. This situation is expected, as classifiers are grammaticalized nouns which have undergone tone lenition (high and low tones weakened to midtones).

We distinguish eight groups of classifiers: animate sortal classifiers (section A), inanimate sortal classifiers (section B), small-range sortal classifiers (section C), double nominal and verbal classifiers (section D), collectivizers (section E), partitioners and subclassifiers (section F), measure words (section G), and auto-classifiers (section H).

A. Animate sortal classifiers

There is one human classifier, one classifier for body parts and one for plants. The human classifier ma is the same as the general classifier (section B). The human classifier is number-sensitive. For the numbers one or two modulo ten,1 the form is ma, for the numbers three to five, nine and ten modulo ten, the form switches to yuo (midtone). For six and eight modulo ten, the classifier form is yuop (low tone) and for seven modulo ten the form is *yuot* (high tone).

¹ The modulo operation finds the remainder of division of one number by another (for example: 11 mod 3 = 2, since $11 = 3 \times 3 + 2$). Several Yi languages have classifiers which are sensitive for the modulo operation (Gerner 2003: 993).

Classifier: ma (1–2); yuo (3–5, 9, 10); yuop (6,8); yuot (7)

Classifieds: people

co 'person' ax yi 'child' bbox zze 'man' si hni 'woman' bi mox 'priest' qop bop 'friend'

The general classifier *ma* (section B) can be involved for all numbers. Several examples of the human classifier *ma* are provided in (4).

(4) a. 切 f θ b. 切 in \$\psi\$ co cyp ma co suo yuo person NUM.1 CL person NUM.3 CL 'one person' 'three persons'

c. 魚羊尺色 d. 医兼足板 si hni hxit **yuop** bi mox shyp **yuot** woman NUM.8 CL priest NUM.7 CL 'eight women' 'seven priests'

The classifier *pot* categorizes body parts of dual number (hand, arm, foot, eye and so forth) as well as pieces of clothing (shoe, gloves, sleeves and so forth). It is the counterpart of the classifier *zzi* 'pair' (section E) which subcategorizes the same nouns.

Classifier: pot

Classifieds: dual body parts and certain pieces of clothing

hnap bo 'ear' lot 'hand' hlop bbop 'arm' ka nyuo 'face' mip bup 'lip' bbur lie 'thigh' jy xy 'foot' ddur 'wing' xyx hnie 'shoes'

i dix lot ke 'sleeve'

b. 划分学片像 lot cyp pot i dix lot ke nyip pot hand NUM.1 CL sleeve NUM.2 CL 'one hand' 'two sleeves'

The plant classifier *bbo* is predominantly sortal with several mensural uses. It co-occurs with fruit nouns and several nouns not related to plants. For example, *bbo* categorizes the noun *snow* as *show shower*, the noun *stone* as *pile of stones* and *medicine* as *bag of medicine*. The relation of these mensural uses to the plant classifier meaning is uncertain.

Classifier: bbo 'shower', 'pile', 'bag'

Classifieds: plants, trees and a few other nouns

syr bbo 'tree'	te bbo 'pine'	ma 'bamboo'
syp vo 'peach'	hly vo 'cherry'	syp ndat 'pear'
syp hmi 'nut'	nyi mop syp vo 'grape'	che 'paddy rice'
sha 'millet'	it mup 'maize'	hxa bit 'vegetable'
yiep yot 'potato'	niep ga 'pumpkin'	mup ly 'sesame'
sha zzit 'chili'	bbut 'grass'	chu 'thorn'
ce 'salt'	vo 'snow'	lur mat 'stone, rock'
bbut cy 'medicine'		

- (6) a. **楽**1 世 h. **半**140 P bbo hxa bit bbo syp vo cyp nyip peach NUM.1 CL vegetable NUM.2 CL 'one peach tree' 'two vegetable plants'
 - c. 31¥ d. 浆次向类 bbo bbut cv bbo ce cyp suo salt NUM.1 CL medicine NUM.3 CL 'three bags of medicine' 'one bag of salt'
 - ※ゴ田※ f. 举미안 e. lur mat nyip bbo vo suo bbo snow NUM.3 CL stone NUM.2 CL 'two piles of stones' 'three snow showers'

B. Inanimate sortal classifiers

Nuosu exhibits several one-dimensional classifiers (subsection i), several twodimensional classifiers (subsection ii), and a large number of three-dimensional classifiers (subsection iii).

(i) One-dimensional shape classifiers

There are one wide-range and five small-range classifiers in this group. The widerange classifier ji categorizes nouns that have lengthy one-dimensional shape, though several items are not directly related to shape.

Classifier: ji 'bar'

Classifieds: one-dimensional entities, tools and several other nouns

le 'ox'	hxe 'fish'	bbup ddi 'worm'
bbu shy 'snake'	uo nyie 'hair of head'	nyie 'hair of body'
vup ddu 'bone'	lot jy 'finger'	hxa nie 'tongue'
pup shu 'tail'	rry 'tooth'	syr dda 'stem'
syr lot 'branch'	njip 'root'	ma 'bamboo'
hni bbu 'sprout'	chu 'thorn'	tep ke 'cucumber'
jie dda 'stick, club'	sha zzit 'chili'	jie shat 'street'
ggap mop 'road'	yyp hmop 'river'	la dda 'valley'
shy 'gold'	jjy 'copper'	she ddu 'steel'
xi 'thread'	yiex syr 'broom'	syr dda 'wood'
o gat 'comb'	hxi 'arrow'	she ki 'nail'
nyie da 'scissors'	yit 'needle'	nrur pop 'key'
jjup hlup 'flute'	hxiet ggur 'sickle'	ssi mgu ssi mge 'tool'
ciep yiet 'thing'	ddax dda 'pole'	zhep sse 'bowl'
pip nzy 'plate'	mu zyr 'thunder'	syt 'event'
ngop jjux 'thought'	jix po 'method'	li yot jjux 'mistake'
lie ba jjux 'danger'	jjy ap sup jjux 'difference'	mgat jip 'advantage'

- (7) a. 北色小 b. 電行物 bbu shy cyp **ji** yit nyip **ji** snake NUM.1 CL needle NUM.2 CL 'one snake' 'two needles'
- (8) a. 의당하 b. 돈 하 b. 는 하 하 suo ji shy suo ji ox NUM.4 CL gold NUM.3 CL 'four oxen' 'three gold bars'
- 9) a. 用紙「中 b. 以印第作中 mu zyr cyp ji li yot jjux nyip ji thunder NUM.1 CL mistake NUM.2 CL 'four thunderclaps' 'two mistakes'

The classifier *hmo* is restricted to the noun 'river' which has the shape of a one-dimensional axis in the landscape.

Classifier: hmo

Classifieds: river

yy 'river'

Four classifiers categorize tools with a one-dimensional shape. The classifiers *qit* and *pit* contribute similar meanings to the noun phrase. All of these classifiers modify small ranges of nouns.

Classifier: qit

Classifieds: tool

ddox mu 'knife' nyie da 'scissors' yyrt shup 'saw' vi mop 'ax' luot guop 'harrow' zyt mop 'hoe'

hxiet ggur 'sickle'

Classifier: pit

Classifieds: tool ddox mu 'knife'

Classifier: zi

Classifieds: certain tools

yiex syr 'broom' dut zi 'torch'

Classifier: zzvr

Classifieds: tool

syr ggut 'plough' hnap chot 'gun' hot 'bow'

(ii) Two-dimensional shape classifiers

There are six two-dimensional classifiers in Nuosu, three relate to the natural land-scape, three others categorize flat objects such as paper, mats and so forth. The classifier *ggat* co-occurs with the generic noun for places.

Classifier: ggat

Classifieds: place

mu ddix 'place'

The classifier *jot* categorizes nouns of land surface and crops. For crops, it contributes the meaning of piece of land on which the crops grow. The classifier *gu* expresses the meaning of a large piece of land.

Classifier: jot 'small piece'

Classifieds: cultivated land

mux dde 'land' che 'paddy rice' sha 'millet' hxa bit 'vegetable' yiep yot 'potato' jju 'oat' zza bbo 'crops'

(10) a. 引変な単 b. 単位型 mux dde ly **iot** sha

mux dde ly **jot** sha suo **jot** land NUM.4 CL millet NUM.3 CL 'four pieces of land' 'three fields of millet'

Classifier: gu 'big piece'

Classifieds: land mux dde 'land'

The classifier *bbut* categorizes flat objects shown in the chart below. The classifier qi is an auto-classifier and co-occurs with nouns of leaves and paper. The classifier zzit is reserved for books, manuscripts and related documents.

Classifier: bbut

Classifieds: mainly two-dimensional entities

njyx gur 'skin' max juo 'bamboo mat' ip ko 'door' vap hat 'gate' tep yy 'letter' yip bbur 'picture' a ji 'sieve'

Classifier: qi 'leaf'

Classifieds: two-dimensional entities

syr qi 'leaf' tep yy 'paper'

Classifier: zzit

Classifieds: books

tep yy 'book'

(iii) Three-dimensional shape classifiers

There are one general and three small-range classifiers in this group. The general classifier ma individualizes a wide range of nouns, many denoting entities with a three-dimensional shape. Some classifieds of ma, however, do not extend physically in three dimensions (e.g. street); some denote mental states or events (e.g. street);

thought). Unlike the human classifier ma, the general classifier ma involves the same form for all numerals it co-occurs with. This classifier has cognates in most Yi languages. For example, ma^{55} is the general classifier in Weishan Lalo (Björverud 1998: 69).

Classifier: ma (general)

Classifieds: wide range of nouns

mux dde 'land' bbox sse 'mountain' shur 'lake, sea' mu jjur 'hole' lur mat 'stone, rock' hmyx shy 'sand' bap nip 'clay' svr iuo 'forest' shv 'gold' she ddu 'steel' qu 'silver' jjy 'copper' bbap ga 'village' ce 'salt' iie shat 'street' gop bo 'body' jie yi 'prison' hnap bbi 'nose' i ai 'head' ip mo 'belly' co mo 'corpse' hxie mat 'heart' mu 'horse' vo 'sheep' chyt 'goat' ke 'dog' vot 'pig' ax nvie 'cat' va 'hen' ap help 'hare' ie 'duck' ssyt 'tiger' op 'goose' lat hni 'lion' wo 'bear' tap hly 'dove' ax hxie 'mouse' ke rra 'sparrow' lat mop 'wolf' ax iiu 'fox' hxie zyr 'bird' bbu sse 'gnat' uox ba 'frog' bbut vup 'ant' jji 'bee' svr zza 'fruit' syp vo 'peach' hly vo 'cherry' che 'rice' svp ndat 'pear' svp hmi 'nut' chex nyo 'glutinous rice' lyp ma 'seedling' sha 'millet' sax le 'cotton' jju 'oats' yiep yot 'potato' huo se 'peanut' niep ga 'pumpkin' mup ly 'sesame' nur ma 'bean' hmu 'mushroom' che ma 'rice' she 'meat' va qip 'egg' uo tie 'turban' fup jip 'button' uop lur 'hat' o kup 'pillow' yi 'house' lix ti 'storied building' hox ho sse 'box' ciep viet 'thing' zhuop zyr 'table' it ggo 'bed' hlut bbup 'umbrella' bbur ma 'character' yiet hxop 'song' zv lv 'bell' yyr hla 'spirit' hmi 'name' te kop 'time'

(11) a. 並与でも b. bbox sse lv ma mountain NUM.4 CL 'four mountains'

biex gie 'dance' nvit cv 'demon' iet muop 'dream' **⊕ 1 1 1 1 1 1 1** hmyx shy suo ma NUM.3 CL sand 'three grains of sand'

c. 头巾も d. 無刈りも jjy nyip **ma** jie shat cyp **ma** copper NUM.2 CL street NUM.1 CL 'two pieces of copper' 'one street'

e. $\widehat{\mathcal{O}}$ 以 也 f. 求 以 句 hxit **ma** dance NUM.5 CL demon NUM.8 CL 'five dances' f. 读 以 日本 demon NUM.8 CL 'eight demons'

The classifier *nzy* is the sortal classifier for clouds. It actualizes the inherent boundaries of the classified.

Classifier: nzy

Classifieds: clouds

mu di 'cloud'

The sortal classifier *zha* categorizes entities of tiny size such as granulated materials. It also functions as mensural classifier for certain mass nouns contributing the sense of *a little*, as illustrated in (12).

Classifier: zha

Classifieds: entities with tiny shape

ciep yiet 'thing' hmyx shy 'sand' ce 'salt' mup ly 'sesame' sha 'millet' zza 'food'

b. 海下帶
hmyx shy ly **zha** zza nyip **zha**sand NUM.4 CL food NUM.2 CL
'four grains of sand' 'two tiny bits of food'

The classifier *tot* categorizes small amounts of liquid that appear in the shape of drops, typically body liquids.

Classifier: tot 'drop'

Classifieds: liquids

yy 'water' sy 'blood' nyo bby 'tear' gup ma 'sweat'

The sortal classifier ggu categorizes garments except those that co-occur with the classifier pot (see above). In addition, ggu is a classifier for looms which is related to the production of clothing.

Classifier: ggu

Classifieds: garment

vit gga 'garment' hlat 'trousers' nbo jjuo 'skirt' vap la chyp ddu 'loom'

C. Diverse small-range sortal classifiers

There are six sortal classifiers that categorize small ranges of noun referents. The classified nouns do not always exhibit a three-dimensional shape. The classifier *jjur* categorizes openings in a building such as doors or windows.

Classifier: jjur

Classifieds: narrow openings

ip ko 'door' siex nyuo 'window'

The classifier *lo* is restricted to valleys and reflects the omnipresence of the mountains on which the Nuosu people live.

Classifier: lo

Classifieds: valley

la dda 'valley'

The sortal classifier *gur* co-occurs with a couple of unrelated countable classifieds for which it actualizes shape boundaries.

Classifier: gur

Classifieds: diverse

zzi 'bridge' hmyp 'snare, trap' njit 'net'

Moreover, there are three sortal classifiers of mental states and events. Most classifieds have conceptual boundaries that are actualized by the classifiers. The classifier ijit categorizes abstract states and events. The form ka classifies dreams. The classifier go, which is homophonous to the pronoun go (section 5.4.1.G), categorizes speech such as words, jokes, riddles.

Classifier: jjit

Classifieds: certain mental states and events

syt 'event' li yot jjux 'mistake' lie ba jjux 'danger' jjy ap sup jjux 'difference' mgat jip 'advantage' ssi chot jjo 'usefulness'

Classifier: ka

Classifieds: dream iet muop 'dream'

Classifier: go

Classifieds: speech

ddop ma 'word' lu byx 'proverb' yyp ddu 'joke' gie ddop 'riddle' hne gge ddop 'news'

(13) a. 紫サは b. W 能です ddop ma hxit **go** lu byx nyip **go** word NUM.8 CL proverb NUM.2 CL

'eight words' 'two proverbs'

D. Mixed nominal and verbal classifiers

Verb classifiers categorize verbs by applying temporal boundaries to the referring event. In Nuosu, the classifier *vit* 'time' is a double noun classifier and verb classifier (section 7.6.4.D). With nouns like *rain*, which allow material and process interpretations, the classifier *vit* can occur in different argument slots of the predicate and is a double noun and verb classifier.

- (14) 母母了學習節。
 ma hxa cyp **vit** jjip ox.
 rain NUM.1 VCL.time become DP
 'There was a rain shower.'
- (15) 學母子學(對身)開節。

 nga ma hxa cyp **vit** (jjip su) gge ox.

 1P.SG rain NUM.1 VCL.time become NOM hear DP

 'I heard a rain shower.'

Similarly, the classifier tu 'shower' is a double noun and verb classifier.

Classifier: tu 'shower', 'drench'

Classifieds: weather phenomena

ma hxa 'rain' mu hly 'wind' hlyx shy 'dust'

E. Collectivizers

Collectivizers are classifiers that group several tokens of a noun together in a collection. In Nuosu, there are several collectivizers. The most common is gge that can co-occur with most count and mass nouns.

Classifier: gge

Classifieds: wide range of count and mass nouns

co 'person' le 'ox' svr bbo 'tree' ie gyt 'water' nry 'wine' ce 'salt' (...)

The classifier gge may not co-occur with numerals except cyp 'one' with which it developed into a quantifier. However, gge is compatible with demonstrative pronouns and the definite article, see (16c-d).

h.

**上間

tree

*syr bbo **nyip**

gge

NUM.2 CL

Intended meaning: 'two trees'

(16) a. Y¥7∭ syr bbo cyp gge tree **OUANT.some** 'some trees'

> c. Y*\(\hat{\chi}\) / 11\(\hat{\chi}\)|| d. Y**≛**∭# syr bbo cyx / a zzyx gge syr bbo ggex su tree DEM CL tree ART=CL+NOM 'these/those trees' 'the trees'

The collectivizer *wo* is the same form as the plural suffix for personal pronouns. The classifier wo categorizes people, animals and also she 'meat' for which it contributes the meaning of *piece*. It switches to the tone sandhi wox for the two nouns ke 'dog' and vot 'pig'.

Classifier: wo 'group, flock, herd'

Classifieds: animate nouns and meat

co 'person' ax yi 'child' bbox zze 'man' si hni 'woman' bi mox 'priest' gop bop 'friend' le 'ox' yo 'sheep' chyt 'goat' ke 'dog' va 'hen' ie 'duck' jji 'bee' she 'meat'

- (17) a. ② ∄ ↓ \$\ qop bop cyp **wo** friend NUM.1 CL.group 'one group of friends'
- b. 本行争 she nyip **wo** meat NUM.2 CL.piece 'two pieces of meat'
- c. ''□\$

 ke suo wox

 dog NUM.3 CL.group

 'three packs of dogs'
- d. ♥੮ੈੈਂ vot ly wox pig NUM.4 CL.group 'four herds of pigs'

Classifier: bbot 'group'

Classifieds: mainly people

co 'person' ax yi 'child' bbox zze 'man' si hni 'woman' bi mox 'priest' qop bop 'friend'

The collective classifiers *rre* and *pip* both contribute the meaning of *row* and co-occur with entities that can be piled up in a line.

Classifier: rre 'row'

Classifieds: a few nouns whose referents can be arranged in a row syr bbo 'tree' bbur ma 'written character' che 'rice'

Classifier: pip 'row'

Classifieds: tiles

mguox lur 'tile' sa pip 'board, plank'

The classifier *zzi* categorizes nouns denoting dual body parts (e.g. *ear*, *hand*, *eye*) and their associated articles of clothing (e.g. *gloves*, *sleeves*). Its classifieds cover the same range of nouns as the classifier *pot* (section A).

Classifier: zzi 'pair'

Classifieds: dual body parts and certain items of clothing

hnap bo 'ear' lot 'hand' hlop bbop 'arm' ddur 'wing' xyx hnie 'shoes' i dix lot ke 'sleeve'

(18) a. 学り者 b. 争ませる lot cyp zzi xyx hnie ly zzi hand NUM.1 CL.pair shoe NUM.4 CL.pair 'four pairs of shoes'

The classifiers *bbur* 'breed' and *ke* 'nest' collectivize small groups of livestock, insects and birds. The morpheme *ke* also functions as existential verb in the sense of *live in a nest* (section 12.1.2.K).

Classifier: bbur 'breed'

Classifieds: animals

kep sse 'puppy' va zyt sse 'chick'

Classifier: ke 'nest'

Classifieds: certain animal nouns

jji 'bee' hxie zyr 'bird' jyx zo 'ant'

puppy NUM.1 CL.breed 'one breed of puppy'

bird NUM.4 CL.nest 'four nests of birds'

ke

The classifier *kie* categorizes nouns for villages of an area and contributes the meaning of *range* or *area*.

Classifier: kie 'range', 'area'

Classifieds:

bbap ga 'village'

The dissyllabic collective classifier *zzyr ggup* 'set' categorizes clothes that are worn during social events. It appears to be the sole dissyllabic classifier besides a few *ad-hoc* dissyllabic classifiers (which can be derived from container nouns of materials or liquids).

Classifier: zzyr ggup 'set'

Classifieds: garment

vit gga 'garment'

F. Partitioners and subclassifiers

Collective classifiers, partitive classifiers and subclassifiers act upon entities with shape boundaries and individualize these boundaries. They create new conceptual boundaries by grouping several tockens into a collection (collective classifiers, see section E), or by cutting a part off a whole (partitive classifiers). The following two charts present partitive classifiers, *zip* categorizes storeys of buildings, *bbop* refers to rooms of houses.

Classifier: zip 'layer'

Classifieds: layered entities

lix ti 'storied building' dduo zip 'stairs'

Classifier: bbop 'room'

Classifieds: houses

yi 'house' lix ti 'building' le ho 'cow barn' da yi 'storehouse'

(20) a. Ĵ∮∫€

lix ti cyp **zip** le ho ly **bbop** building NUM.1 CL.storey 'three storeys in the building' b. 의용당황 le ho ly **bbop** cow barn NUM.4 CL.room 'four rooms in the cow barn'

A subclassifier divides a class of entities into subclasses, each associated with a different bundle of features. The morpheme *yiet* 'kind' is a subclassifier which can co-occur with most common nouns. For certain mental states and events, *yiet* is the sole available form of individualization. The subclassifier *yiet* is not naturally used with nouns of unique reference, e.g. *nose*, *heart*.

Classifier: yiet 'kind'

lur mat 'stone, rock'

Classifieds: most common nouns

mu 'horse' she ddu 'steel' ax nyie 'cat' hxie zvr 'bird' yo 'sheep' jji 'bee' bbut vup 'ant' ka bba 'gift' (...)(...) (\dots) hmi 'name' hxop 'language' hne gge ddop 'news' ngop jjux 'thought' jix po 'method' jjip jjup 'appearance' we vi 'power' ijo ijux 'life' ijy ap sup jjux 'difference' mgat jip 'advantage' ssi chot 'usefulness' shax ndur jjux 'suffering' ssi mgu ssi mge 'tool' ddut 'poison' li vot jjux 'mistake'

shy 'gold'

(21) a. 州州以北 ka bba hxit **yiet** gift NUM.8 CL.kind 'eight kinds of gift' b. 臺当口域 jix po nyip **yiet** method NUM.2 CL.kind 'two methods'

qu 'silver'

c.	#圣米厄斌			d.	# 11 X To 14	į.	
	#hnap bbi	suo	yiet		#ip mo	nyip	yiet
	nose	NUM.3	CL.kind		belly	NUM.2	CL.kind
	'three nos	ses'			'two b	ellies'	

G. Measure Words

Standard measures are socially recognized with a precise value. They measure the length, weight, volume, time, and other aspects of entities. In Nuosu, several more or less standard measures exists. These measures are not borrowed from Chinese, except for *jip* 'pound' (Chinese jīn 斤).

Standard Measure Words	Classifieds
shy 'liter' (container measure)	e.g. sha mox 'flour'
muo 'measure of ca. 13 liter' (container measure)	e.g. jju 'oats'
yi 'measure of ca. 350 liter' (container measure)	e.g. nry 'wine'
bu 'measure of one barrel' (container measure)	e.g. sha mox 'flour'
jip 'measure of one pound' (weight measure)	e.g. ce 'salt'
ne kop 'measure of ca. 500m' (length measure)	e.g. ggap mop 'road'
lot wap nuo 'measure of one cubit' (length measure)	e.g. xi 'thread'
dur 'penny' (currency measure)	e.g. rre mop 'money'
vat 'dollar' (currency measure)	e.g. rre mop 'money'
yop 'ounce' (measure of precious metals)	e.g. qu 'silver'

Among these standard measure words, the classifier bu is predominantly mensural but also has sortal uses. As sortal classifier, it categorizes plants such as flowers. As collective classifier, it co-occurs with nouns of cotton (with the sense of ball) and grape (contributing vine). For liquids and finely granulated materials, bu is a measure word (barrel).

Classifier: bu 'barrel'

Classifieds: flower, cotton and grape; certain mass nouns vie bbup 'bud' viex vie 'flower' nyi mop syp vo 'grape' sax le 'cotton' ie qyt 'water' nry 'wine' sha mox 'flour' lyp ma 'seedling'

(22) a. 張承17 b. ≢្ខា≢្រា viex vie cyp bu nyi mop syp vo nyip flower NUM.1 CL NUM.2 CL grape 'one flower' 'two grape vines'

The time measure word *kur*/*kut* 'year' is socially recognized as the period of one year. It categorizes the noun *kut ti* 'age' and is number-sensitive. With numbers seven modulo ten, it is pronounced *kur* with creaky voice and pronounced *kut* with a non-creaky sound for all other numbers.

Classifier: kur (with numeral *seven*); kut (with other numerals) 'year'

Classifieds: age

kut ti 'age'

The set of non-standard measures is open, since many entities can be transformed into containers or limiters of other objects. Non-standard measures share the property of being vague and not socially recognized. Below, several non-standard measures are provided. Illustrations of their use follow in (23a–f).

Classifier: gep 'handful'

Classifieds: hair

uo nyie 'hair' nyie 'animal hair' zza lyx 'seed'

Classifier: luo zzi 'double-hand measure'

Classifieds: certain mass nouns

hmyx shy 'sand' syx jo 'earth, mud'

Classifier: ta 'jar' (loaned from the Chinese tán 坛)

Classifieds: certain mass nouns

au 'silver' nrv 'wine'

Classifier: zhep 'bowl' (loaned from the Chinese zhǎn 盏)

Classifieds: mass nouns

ie qyt 'water' yy 'soup' sha mox 'flour'

nry 'wine' lat yy 'tea'

Classifier: pip 'bottle' (loaned from the Chinese ping 瓶)

Classifieds: liquids

ie gyt 'water' nry 'wine'

Classifier: pax shu 'bag'

Classifieds:

hmyx shy 'sand' svx jo 'earth, mud' lyp ma 'seedling' sha 'millet' sha mox 'flour' iiu 'oats'

- (23) a. 以刊几 nvie nge gep animal hair NUM.5 CL 'five handfuls of animal hair'
 - c. Qin # qu suo ta silver NUM.3 CL.jar 'three jars of silver'
 - e. 爿፲፡ፀ nry nyip pi wine NUM.2 CL.bottle 'two bottles of wine'

- 181€13組 h. hmyx shy cyp luo zzi sand NUM.1 CL 'one double-hand of sand'
- d. ዘվրա lat vy nyip zhep NUM.2 CL.bowl 'two bowls of tea'
- f. ŶŸ'nĤ₩ syx jo nyip pax shu mud NUM.2 CL.bag 'two bags of mud'

Finally, there are other frequently used measure words. The container measure word ga 'stem' individualizes tobacco as cigarettes. The measure word bo 'ball' individualizes material as clustered balls. The measure word cup collectivizes nouns denoting hair as coil or buckle.

Classifier: ga 'stem'

Classifieds: tobacco

yi 'tobacco'

Classifier: bo 'ball', 'clew' (Chinese loanword 包)

Classifieds: certain mass nouns

ce 'salt' xi 'thread'

Classifier: cup 'coil', 'buckle'

Classifieds: hair uo nvie 'hair'

H. Auto-classifiers

Auto-classifiers are nouns that serve as their own classifier. The term was coined by Matisoff (1973: 89) for Lahu, a Tibeto-Burman language spoken in Thailand. Many Lahu nouns function as their own classifier.

(24) Thailand Lahu (Matisoff 1973: 89)
a. $z\epsilon^{21}$ te⁵⁴ $z\epsilon^{21}$ b. q^ha^{745} ni⁴⁵ q^ha^{745} house NUM.1 CL.house village NUM.2 village 'one house' 'two villages'

Auto-classifiers are broadly attested in Lahu and other Yi languages, but in Northern Yi to which Nuosu belongs few examples exist. For some dissyllabic nouns, the second syllable is an auto-classifier.

| Syr bbo cyp bbo | Syr qi nyip qi | tree NUM.1 CL | leaf NUM.2 CL | 'one tree' | 'two leaves'

c. 图域问题 dut **zi** suo **zi** torch NUM.3 CL 'three torches'

5.2.2 Possession

Although the concept of in/alienability² has no significance for the grammar of Nuosu, the concept is helpful for the organization of the amorphous possessor-possessee pairs. Scholars (Gerner 2005: 310; Langacker 1991a: 169; Riegel 1984; Taylor 1989) sketch the notion of in/alienation as a prototypical category with two feature axes: conceptual distance (small \leftrightarrow great) and durability (permanent \leftrightarrow temporary), see figure 5.1.

Possessive noun phrases exhibit several so-called possessive roles. These roles may be associated with the two macro-roles of *possessor* and *possessee*. Nuosu does not use morphological marking but word order to encode possessor and possessee roles.

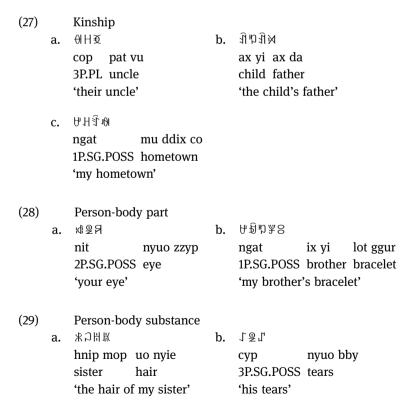
(26) Possessive constructions: N_{POSSESSOR} + N_{POSSESSEE}

² A possessor-possessee relationship is *alienable* if the possessee can be easily separated or "alienated" from the possessor (John's hair), whereas it is *inalienable*, if it cannot be easily separated (John's heart).

Link	permanent	durability	temporary
small	person-body part animal-body part plant-plant part object-part mass-constituent	owner-belongings	person-body substance animal-body substance plant-fruit/plant-leaves
conceptual distance	person-kin family-member set of objects-objection-collection-collection (e.g. people-their legs)		person-social contact social group-member container-contents
great	entity-attribute	entity-state	agent-/patient-action thinker-idea

Figure 5.1: A cognitive map of possessor-possessee pairs

The possessor noun always precedes the possessee. The following examples illustrate most possessive relations.



c. はい d. 1分 nit sot ddur cyp sy 2P.SG.POSS breath 3P.SG.POSS blood 'your breath' 'his blood'

(30) Owner-belongings

a. 料日湖 b. 世界章 nop rre zza ngat vit gga 2P.PL.POSS assets 1P.SG.POSS clothes 'your (pl.) assets' 'my clothes'

(31) Animal-body part

a. 引版作息 b. 料利兼內可提 le a zzyx ji pup shu small cat head ox DEM.DIST CL tail 'the head of the small cat' 'the tail of that ox'

c. 損≢利母 d. 簡單利 lat hni rry ma uox ba xy li lion tooth frog leg 'the teeth of the lion' 'the legs of that frog'

(32) Plant-part

syr bbo bbox su go syr qi tree ART=CL-DET LOC leaf 'the leaves of the tree'

(34) Plant-fruit

Y 進 引 兼 塗 対 奇 句 syr bbo a zzyx bbo go max ma tree DEM.DIST CL LOC fruit 'the fruit of that tree'

(35) Substance-constituent

北川の七脚1米な

ie qyt cyp zhep go ce ggex su water NUM.1 CL.bowl LOC salt ART=CL-DET 'the salt content of that bowl of water'

(36) Container-contents

- a. 馬氏学節周 jie vi go jiex jie law LOC prescription 'the prescriptions of the law'
- b. 手目学業所 hxo pu go lur mat mountain LOC stone 'the stones of the mountain'

(37) Entity-attribute

- a. 闭目半中 ax pu kut ti grandfather age 'the age of (my) grandfather'
- b. ↓₹8
 cyp jjip jjup
 3P.SG.POSS character
 'his character'
- c. 筝句章 mup dut ca jjux fire heat 'the heat of the fire'
- d. ១៛៨៙៝៩៧ nuo su mu pix nzop ndit Nuosu traditions 'the traditions of the Nuosu people'
- e. 智智制
 zhu zhu pu jiet
 pearl price
 'the pearl's price'
- (38) Person-social contact サの手向st

ngat qop bop suo yuo 1P.SG.POSS friend NUM.3 CL 'my three friends' (39) Agent/patient-action

a. 1H€

b. ৮৯2

cyp mu jjux 3P.SG.POSS deed 'his deeds' ngat hmat mop 1P.SG.POSS teacher

'my teacher'

c. 1_国争

cyp hxip tie 3P.SG.POSS tone

'his tone, way of talking'

(40) Thinker-idea

出事

ngat ngop jjux 1P.SG.POSS idea

'my ideas'

5.2.3 Adjectival modification

Adjectives that modify nouns require the nominalizer *su* and/or a classifier. Adjectives that restrict reference of the head noun are attached right to it; appositive adjectives with non restricting reference occur left to the head noun.

(41) Adjectival modification:

(i) ADJ+*su*+N; (Appositive)

(ii) ADJ+su+N+ CL'; (Appositive)

(iii) N+ADJ+su;

(Restrictive)

(iv) N+ADJ+ CL'. (Restrictive)

Examples (42a) and (43a) represent appositive adjectives, whereas (42b) and (43b) restrictive adjectives.

(42) a. ៩២៦৮៧**៩៩**១៧

mi yi yi su **hmiep chur yit mop** qit

sharp NOM sword CL

'a sharp sword (appositive: a sword which is sharp)'

b. ՔՔԵՆԵՐԻ

hmiep chur yit mop mi yi yi qit

sword sharp CI

'a sharp sword (restrictive: a sword that is sharp)'

- (43) a. 夕晚景第1 syx nie su zzax hxo sticky NOM porridge 'porridge which is sticky (app.)'
- b. 凝\$字以上 zzax hxo syx nyie su porridge sticky NOM 'porridge that is sticky (res.)'

In (44), appositive and restrictive adjectives are illustrated for three types of determiners: indefinite articles, definite articles and demonstratives.

- (44) a. 乳乳片片 ax nuo su **ke** ma black NOM dog CL 'a black dog (app.)'
 - c. #米용되요 **syp hmi** bbit ggop ma walnut empty CL 'an empty walnut (res.)'
 - e. 料料預算 le she ax vu su beef dry NOM 'beef that is dry (res.)'
 - g. 全家事的 bbox sho su **yi** ma clean NOM house CL 'a clean house (app.)'
 - i. ¥录象类 **syt** we zze jjit issue difficult CL 'a difficult issue (res.)'

- b. 肾氧氧化分离
 vit gga ax du cyx ggu
 clothes thick DEM.PROX CL
 'this thick garment (res.)'
- d.

 ② よい無利 第 中

 ssox sse la ry a zzyx ma

 pupil early DEM.DIST CL

 'that early pupil (res.)'
- f. 闭以比O垂前比 ax li su **qop bop** max su old NOM friend ART 'the long-time friend (app.)'
- h. 韓垂前隊兒 **ji bop** ix sho cyx ji cord short DEM.PROX CL 'this short cord (res.)'
- j. 爭集集份學
 jjiex mguo su **ddop ma** go
 clear NOM speech CL
 'a clear utterance (app.)'
- l. 飛母非兒事 hxie sa su **si hni** happy NOM woman 'happy women (app.)'

Monosyllabic adjectives with the midtone [33] take the sandhi tone [44] before the nominalizer su or before a classifier (sandhi rule 7, section 3.2.2). All other adjectives do not change their tone when preceding su.

It is possible to omit the head noun if it is salient from the discourse context.

Examples (47a+b) consist of headless nominalized adjectives that have been lexicalized as nouns.

5.2.4 Nominalization

Nuosu relative clauses are marked by invariable particles, notably the morpheme su (section A). The two morphemes ddu and dde have restricted usage as nominalizer (section B). The multiple functions of su are historically derived from the indefinite pronoun sut (section C).

A. The nominalizer su

Some of the material presented in this subsection has been published in Gerner (2004a: 139–142).

The nominalizer su encodes restrictive, appositive (nonrestrictive), and free (headless) relative clauses. Free relative clauses built on bare verbs are ambiguous. They refer to the activity or to a participant of the activity. Free relative clauses with bare verbs are employed only when the context provides clear cues about the identity of the referents.

Chén & Wū (1998: 116)

(48) a. 目計刊計算6000 a.

hxip **-su** mu **-su** jjyx- qo ssox. say NOM do NOM RECL- follow MOD.should

- (i) '(A person's) speech should agree with (his) deeds.'
- (ii) 'Walk your talk (lit. the speaker should agree with the doer).'
- . 从 乳果果原 .d

hxip six mo \mathbf{su} gex xi.

talk RES see NOM tell arrive

- (i) '(Let's) talk about the view.' (ii) '(Let's) talk about the watchers.'
- c. 入事私制则。

sy **su** ap- jjo ox.

die NOM NEG- exist DP

(i) 'Death is no more.' (ii) 'The dead (person) is no more.'

In (49a+b), we have a headless relative clause referring to the A- and O-arguments of the relative clause in which they are gapped.

sut co mox da ngax wa zyt bit **su** jjo. someone else COV.see 1P.SG after criticize NOM have 'There are those who speak badly about me in front of others.'

b. 化早盘复口用是

at gop yu six la zzit **su**name grasp RES come ART=CL-DET
'The one (=book) that Ago grasped yesterday'

The one (-book) that Ago grasped yesterday

Relative clauses can be attached to the left and right of a head noun. The left-branching nominalized phrase should not be reduced to a bare verb. It can be a bare verb, if it is right-branching.

(50) a. * 专身的 b. 奶豆身 co co

zze **su** co co zze **su** eat NOM person person eat NOM

'the eating person' the person who is eating'

c. **0 h d. 480 h

*gat qip su co co gat qip su delay NOM person person delay NOM the delaying person' co gat qip su NOM

Left-branching relative clauses are *appositive* and do not restrict possible referents. Right-branching relative clauses are *restrictive relative clauses*. If the head noun is a common noun, left- and right-branching relative clauses are both grammatical, as in (51a+b). For proper nouns or nouns with unique reference, only left-branching relative clauses are grammatical, see (52a+b).

- (51) RC built on common nouns
 - a. 的单年累升上

co nax jjo mgo jjo **su** (Right-branching) person illness have illness have NOM *Restrictive*: 'the people who have an illness.'

b. 单非常非是的

nax jjo mgo jjo **su** co (Left-branching) illness have illness have NOM person

Nonrestrictive (appositive): 'the ill people.'

- (52) RC built on proper nouns
 - a. *州兴静和泉和身

*mu ga nax jjo mgo jjo **su** (Right-branching) name illness have illness have NOM *Restrictive*: 'Muga who has an illness.'

b. 章 和 累 和 上 出 片 出 片

nax jjo mgo jjo **su** mu ga (Left-branching) illness have illness have NOM name

Nonrestrictive (appositive): 'ill Muga.'

We can distinguish five basic relative constructions, a headless, two left- and two right-attached constructions.

- (53) *Relative constructions*: (i) RC+su; (Free)
 - (ii) RC+su+N; (Appositive)
 - (iii) RC+su+N+CL'; (Appositive)
 - (iv) N+RC+su; (Restrictive)
 - (v) N+RC+CL'. (Restrictive)

The head of the relative construction is co-referential with a gapped or resumed argument in RC. The following arguments can be gapped or resumed.

(i) Argument role S

The gapped argument of a relative clause can have the S role (intransitive subject), as in (54a). The S-role cannot be resumed as in (54b).

- (54) a. **分**5年**11**第**4** 划 主 ⑩。
 - ssox sse Ø na a zzyx ma ix go bbo ox. pupil [empty] ill DEM.DIST CL home go DP 'The student who was ill went back home.'
 - - *ssox sse cy na a zzyx ma ix go bbo ox.

 pupil 3P.SG ill DEM.DIST CL home go DP

 Intended meaning: 'The student who was ill went back home.'

(ii) Argument role A

In (55), the head noun *co* 'person' has the A-role of the relative clause.³ (55a) illustrates left-branching and (55b) right-branching relative clauses.

- (55) a. 🎗 비위 또 위 및 바 명 플 유 번 a.
 - cyx li Ø nry ap- ndo **su** ngat **qop bop** ma nge. 3P.SG TOP [empty] wine NEG- drink NOM 1P.SG.POSS friend CL COP 'He is a friend of mine who doesn't drink.'
 - b. 例「冰点了景平年。
 co Ø cyp nyit ddop njyp su ap- jjo.
 person [empty] 3P.DL speech believe NOM NEG- have
 'There was nobody who believed what they said.'

The basic word order in Nuosu is aspectually conditioned. Clauses with progressive aspect have the order AOV; resultative clauses have the order OAV (section 10.2). In resultative relative clauses with word order OAV, the A-argument is gapped with a resumptive pronoun in the relative clause.

nyop mu co zza yy cop vup gox sha ggex su ix go bbo ox. peasant cereals 3P.PL sell SEND ART home go DP

'The peasants who sold cereals at the market have gone home.'

^{3 (55}b) is quoted from Chén & Wū (1998: 224).

(iii) Argument role O

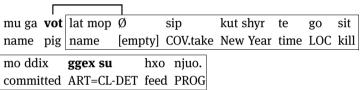
In resultative relative clauses with word order OAV, the O-argument is gapped without a resumptive pronoun in the relative clause. The relative clause in example (57) is resultative because of the particle *gox sha* 'away' (section 7.3.2.B).

	\neg					
tep yy	Ø	mu ga	gup	gox sha	ggex su	a shyt-jjy-a shyt.
book	[empty]	name	throw	SEND	ART=CL-DET	new-very-new

'The books which were thrown away by Muga were (all) brand-new.'

In clauses with indeterminate word order which are neither progressive nor resultative, the O-argument is gapped without resumptive pronoun.

(58) 月光砂州口川平长割少州东至间上土岳。



^{&#}x27;Muga fed the pigs that Lamo intended to slaughter for the New Year.'

In progressive relative clauses with word order AOV, the O-argument must be gapped by a resumptive pronoun.

(59) 學拿角系第次思聞身前拿字角章。

vit gga	ax mo	gox	cy	njuo	ggex su	ax nyi	-jjy-	ax nyi.
clothes	mother	PRO	wash	PROG	ART=CL-DET	much	very	much

^{&#}x27;The clothes that Mum washes are many.'

(iv) Argument role of Recipient

Recipient arguments (indirect objects) can be relativized not by co-referential deletion but by substituting a resumptive pronoun for the recipient noun phrase.

(60) 日米1分本用の日の単分子削上第ま。
mu ga cyp ssox sse lat mop rre mop ddie cop mame 3P.SG.POSS pupil male name money COV.set up 3P.PL
bbyx ggex su jox zyt. give ART=CL-DET blame

^{&#}x27;Muga blamed the pupils to whom Lamo had given money.'

(61) វិមាមជិច្ចាមាប្រឹងលេជមូល។。

ax yi	nga	bbux dde	sip	cop	ge	ggex su	o bbu-jjy-o bbu.
child	1P.SG	story	COV.take	3P.PL	tell	ART = CL - DET	very intelligent

'The children to whom I told the story are very intelligent.'

In Nuosu, it is not possible to relativize other semantic roles than A, O and recipient. There is no direct strategy to express constructions like *the man by/through/for whom*.

B. The nominalizers ddu and dde

For instruments and locations, Nuosu uses two nominalizers distinct from *su*: *ddu* (instrumental) and *dde* (locative). These particles have limited productivity. They can only scope over untensed verb phrases and nominalize unspecific events.

(62) a. 샤ፃ\\라[라운

zza zze **ddu** ssi bux ssi ot food eat NOM utensil 'the utensils of food consumption'

b. *ՀԵՐԱՐԱՐԵՐԵՐ

*zza zze ox **ddu** ssi bux ssi ot food eat DP NOM utensil Intended meaning: '*the utensils that were used for food consumption'

(63) a. HX切びり

mu ga it **dde** yi name live NOM house 'the house where Muga lives'

b. *ዘሂቭላ**፩**ኮ

*mu ga it da **dde** yi name live STP NOM house Intended meaning: '*the house where Muga is living (now)'

In (62) and (63), the second example is ungrammatical because the nominalization particles *ddu* and *dde* nominalize verb phrases marked by the perfect particles *ox* and *da* whose function is to refer to specific events.

These nominalizers might be historically derived from one proto-form before splitting into ddu and dde. In Wēiníng Neasu, a close genetic relative of Nuosu, there is a cognate nominalizer, dr^{33} , for both instrumental and locative.

(64) Wēining Neasu (author's fieldnotes 29-June-1999)

a. si^{33} th^{33} dr^{33} b. na^{33} dr^{21} lr^{21} dr^{33} tree fell NOM bird fly go NOM 'the instruments for felling a tree' 'the place to which birds fly'

(i) The nominalizer ddu

The particle *ddu* nominalizes transitive verbs phrases as headless relative clauses. *Ddu* nominalizes bare verbs as patient nominals and object-verb phrases as instrumental nominals. It was productive at some earlier stage of history and was lexicalized afterwards.

| cod | co

c. 역부 d. 서역부 ndo **ddu** nry ndo **ddu** drink NOM wine drink NOM 'drinks' 'utensils for drinking wine'

The particle *ddu* nominalizes the verb *ggat* 'wear' as *clothes*, the verb *ndit* 'wear' as *hat*, *gloves*, *shoes* and so forth.

e. HY f. HY
ggat ddu ndit ddu
wear NOM wear NOM
'clothes' 'what is worn at extremeties of body'

Some verbs to which *ddu* is attached have lexicalized meanings.

(66) a. 月野 b. 幸里野 mu **ddu** kop ddie **ddu** do NOM need NOM 'activity' 'needs'

Verbs nominalized by *ddu* can be modified by certain nominal modifiers, for example by the classifier *yiet* 'kind', see (67a). The possibility of using numerals hinges on the degree these nominalized expressions are lexicalized, see (67b).

- (67) a. 肾爭級以後或爭單?
 nop wox nra **ddu** xix yiet jjox jjo?
 2P.PL measure NOM INT.what CL have~ALT
 'What kind of measure do you have?'
 - b. 季口世平1日 vap la chyp **ddu** cyp gu coat weave NOM NUM.1 CL 'one loom'

The agent of the verb nominalized by *ddu* is expressed as a possessor, in example (67c) by the possessive pronoun *ngat* 'my'.

c. ሆኔሃህፋው ngat ly **ddu** li wep ox. 1P.SG.POSS request NOM TOP get DP 'My request was granted.'

The morpheme *ddu* can also nominalize stative verbs. In one case, *ddu* can even be attached to the predicate *ap cy* 'more' with the sense *advantage*.

- (68) a. 《京田田田田刊刊》 ne xix mu jy jie **ddu** jjo? 2P.SG INT.what do fear NOM have 'Why are you afraid?'

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 < c. cv ddie co box ddu apiio. 3P.SG COV.prepare people show NOM NEGhave 'He has no accomplishments' (*lit.* 'he has nothing to show to others.')

(ii) The nominalizer dde

The particle *dde* can nominalize any verb/adjective whose referring event/state is tied to a fixed place. It may be attached to subject-verb, object-verb or verb-verb phrases. In each case the verb/adjective must refer to generic nonspecific events/ states. In particular, the verb or adjective cannot be suffixed by an aspect particle as shown in (69b).

(69) a. หิปษป≇ป**ฐ**ป.

cyx li ngat it nyi gu **dde** nge. DEM.PROX TOP 1P.SG.POSS sleep NOM COP 'This is my sleeping place.'

b. *χ៌១៨៛៛៨៙៝**ថ**្ង.

*cyx li ngat it nyi gu ox **dde** nge. DEM.PROX TOP 1P.SG.POSS sleep DP NOM COP Intended meaning: 'This is the place where I slept.'

The particle *dde* is attached to a subject-verb phrase in (70a) and to an object-verb phrase in (70b–d).

(70) a. 母女児童の圭奇比前**愛**津景的。

cop cy shyp six qop bop max su jjox **dde** go xi ox. 3P.PL 3P.SG lead RES friend ART=CL-DET live NOM LOC arrive DP 'He led them to the place where his friend lived.'

b. ∃മജ്മ

rre mop dax **dde** money put NOM 'place to put money'

c. 粉氣量又計量用土,此戶日母。

co zzax zze **dde** go nyi ggex su li, hxie mgat nyip person food eat NOM LOC sit ART=CL-DET TOP Han NUM.2 ma qo.

CL contain

'Among the people who sit at the table, there are two Han Chinese.'

d. X 号 宁 生 号 宁 郑 文 字 郑 凶 。

cy ma gop ddie ma gop dit **dde** go dit da. 3P.SG lamp COV.prepare lamp hang NOM LOC hang STP 'He had the lamp placed on the lamp pedestal.'

In (70e) *dde* nominalizes a directional verb phrase which then is individualized by a classifer.

e. 月童母童董賀月片

mu ddix cop gox bbo **dde** ggat su place 3P.PL PRO.LOC go NOM ART=CL-DET 'the place they are going to'

The particle *dde* can also nominalize stative verbs and adjectives as long as they encode generic states that can be associated with fixed places.4

(71) 早期日果買用望まして
(72)

gep mgot hnop hxi ke co jox nuo jy jyx dde bbo ox. dog person PASS drive out outside towards black-IDE~EXPR NOM go DP 'The dog was driven out by someone into the darkness.'

The particle dde was lexicalized after a few verbs. In (72a), ssox dde does not denote an *ad-hoc* place of study, but is the noun for *school*.

(72) a. **Q Q** 9 H D b. dde SSOX mot it dde study NOM soldier live NOM 'school' 'barracks' c. ට@ 🎗 d. ₩¥ dde mop mge **dde** nyix meet NOM sit NOM 'assembly, meeting place' 'seat'

The particle dde can be used in expressions V_1 -dde- V_2 -dde to denote abstract concepts. These expressions are partly lexicalized.

的发生的发生或不能用。 (73)

> **dde** jjip jjo CVX ma li xix **dde** apnge. person DEM.PROX CL TOP arrive NOM become NOM NEG- have NOM COP 'This man does not have any credibility (i.e. is exaggerating).'

C. Appendix: The particle su

The particle su exhibits six grammatical functions which are analyzed in different parts of this grammar and summarized in this subsection.

Mear	nings	Section of grammar
(i)	Indefinite pronoun <i>sut</i> 'someone else'	section 5.4.1.E
(ii)	Determiner particle su	section 5.4.5
(iii)	Nominalizer su	section 5.2.4.A
(iv)	Focus particle su	section 14.2.2
(v)	Topic particle su	section 14.1.2
(vi)	Complementizer su	section 13.2.3

⁴ For instance, the verb ngop 'think' cannot be nominalized by dde as *ngop dde. The activity of thinking cannot be easily associated with a place.

(i) As indefinite pronoun sut 'someone else'

An indefinite pronoun is a pronoun that refers to one or more beings, objects, or places unfamiliar to the addressee. *Sut* 'someone else' is an indefinite pronoun.

- (74) a. 开XX 呈標的的可能。
 - mu ga **sut** wa ddop ddi hxa ddi hxip ox. name someone else behind evil words speak DP 'Muga has slandered other people.'
 - p. HX※砂田H⋈。

mu ga **sut co** sha mu hxi. name someone else have compassion 'Muga cares for others.'

The indefinite pronoun sut is derived from the common noun *su 'person' in an ancestor language of Nuosu. There are several residual words using this form in the modern language.

h. Ĵŧd

d. ⊃#

(75) a. ₽辩

suhlitsuxyypersonyoungpersongreat'adolescent''(tribal) elder'

c. \#\\

sunyitmopsupersonmagic artsold, greatperson'priest''old person'

(ii) As determiner particle su

The morpheme *su* is not an independent determiner but contributes to the formation of a definite article together with a classifier (see section 5.4.5).

(76) a. \\ \Link\hat{\hat{h}}\hat{h}

以下預集 b. ੲ饱剂集 iet muop kax su puppy ART=CL-DET dream ART=CL-DET 'the breed of puppy' 'the dream'

(iii) As nominalizer su

The morpheme su is a marker of relative clauses. The semantic roles which su can relativize are S, A, O and Recipient. In (77), the head noun is coreferential with the gapped O-argument of the relative clause.

(77) 华口从时上回来为案。

ggap mop cy mga **su** gup lur gut lur. way 3P.SG pass NOM stable-not-stable 'He is unstable in his paths (= ways which he is passing through).'

(iv) As focus particle su

The morpheme su co-occurs optionally with the copular nge to form a special focus construction, called association with focus pattern (Jackendoff 1972; Rooth 1985; Paul & Whitman 2008). The Nuosu construction has similar focus properties as the Chinese bare shì-construction (see section 6.1.2.B). In Nuosu, every constituent marked by su / su nge can be focused by assigning it intonational prominence. In (78), the distant subject is in focus.

(78) 有到用少山,X的有用硫學業解以提出,P的有用硫學業解以提出也。
ne xip mu go li,
2P.SG DEM.DD do COMP TOP

cv a hnat mu nit iox zyt ry la su nge, 3P.SG especially 2P.SG toward FOC COP enrage become a hnat mu nit jox zyt ry la su nga apnge. 1P.SG especially 2P.SG toward enrage become FOC NEG-COP 'If you proceed in this way, **he** will be particularly enraged against you, but I won't.'

(v) As topic particle su

Another function of su is to mark sentence topics which do not participate in the argument structure of the main predicate (section 14.1.2). Sentence topics occur in initial position and can be further marked by one of the topic markers ne (maintaining topic) or li (contrasting topic).

- (79) a. 笋足片以指生的穿型足派了。
 - ssux mi **su** li lat ti cop jox ku gep we gex. riot SENT.TOP TOP male name 3P.PL toward encourage 'Regarding the riots, Lati encouraged them to take heart.'
 - Y 另 其 没 間 H 意 U # U , 母 影 依 佢 Y 佢 。 b. bbit ddur su kax jjo li, CVX gge mu matter CLF have DEM.PROX CL QUANT.all happen SENT.TOP TOP hxie kat cop wox -iivkat. 3P.PL happy very happy

'All these things happened for the purpose of making them happy.'

(vi) As complementizer su

The particle *su* functions as complementizer for matrix verbs such as *sso* 'learn', *hxep ddur la* 'recognize', *dde jji* 'know', *shut* 'remember' and so forth (see section 13.2.3).

。论创举化生产别是比可电性可依 (08)

ip nyip it yur nyip su nge LOG.SG.POSS birthday **COMP** today COP lat hxa go ap-shut ddix. male name PRO.PAT NEG-remember DP OUOT

'(Muga complained about) Laha forgetting that today is his birthday.'

5.3 Quantifying nouns

In this section, we analyze the Nuosu numeral system (section 5.3.1), nominal quantifiers (section 5.3.2) and the additive noun conjunction *si nip* 'and' (section 5.3.3).

5.3.1 Numerals

Number can be encoded in a language as a grammatical category (Corbett 2000) or as a lexical category (Comrie 1999, 2005; Hammarström 2010). As grammatical category, number can have obligatory or facultative expression in the nominal / verbal system. In English, we are forced to choose between singular and plural when we use a noun. Languages in which nouns are indeterminate for number have "general number" (Corbett 2000: 10). Nouns in Nuosu only have *general number* in this sense.

A. Cardinal numbers

Cardinal number systems differ for the arithmetical base that is used in constructing numeral expressions. The base of a system of cardinal numbers is the number n such that numeral expressions are constructed according to the formula an + b, that is a number a multiplied by the base n plus some other number b. Comrie (2005: 530) mentions five kinds of arithmetical bases.⁵

Nuosu exhibits a purely decimal system and is similar to Mandarin Chinese and other isolating languages of Southwest China.

⁵ Hammarström (2010) catalogues the existing arithmetical bases found in about 4,000 languages of the world. Besides the widespread arithmetical bases of 10 and 20, he reports other bases such as 3, 4, 5, 6, 8, 12, 15 and identifies the language families in which they are attested.

Table 5.3: The major arithmetical bases for number systems in the world

Base	Name of system	Language examples
10	Decimal (+hybrid)	English, Chinese, Nuosu
20	Vigesimal (+hybrid)	Diola-Fogny (Niger-Congo: Senegal;
		Sapir 1965: 84-85)
Other (e.g. 60)	Other (e.g. sexagesimal)	Sexagesimal: Ekari (Trans-New Guinea: Indonesia; Drabbe 1952: 30)
Body parts	Extended body-part system (fingers, arm etc.)	Kobon (Trans-New Guinea: Papua; Comrie 2005: 530)
No	Restricted (using only ≈ 20 numbers)	Pirahã (Mura in Brazil; cited in Comrie 2005: 530)

(i) 1–20						
1	cyp	11	cix zy			
2	nyip	12	ci nyix			
3	suo	13	ci suo			
4	ly	14	ci ly			
5	nge	15	ci nge			
6	fut	16	ci fut			
7	shyp	17	ci shy			
8	hxit	18	ci hxit			
9	ggu	19	cix ggu			
10	ci	20	nyip zi			
(ii) 20–100						
20	nyip zi		61	fut ci cyx		
21	nyip ci d	сух	62	fut ci nyix		
22	nyip ci 1	nyix	70	shyp ci		
30	suo ci		71	shyp ci cyx		
31	suo ci c	yx	72	shyp ci nyix		
32	suo ci n	yix	80	hxit ci		
40	ly ci		81	hxit ci cyx		
41	ly ci cyx		82	hxit ci nyix		
42	ly ci nyix		90	ggu ci		
50	nge ci		91	ggu ci cyx		
51	nge ci cyx		92	ggu ci nyix		
52	nge ci n	yix	100	cyp hxa		
60	fut ci					

(iii) 100-1,000

100	cyp hxa	555	nge hxa nge ci nge
101	cyp hxa nip cyp	600	fut hxa
111	cyp hxa cix zy	606	fut hxa nip fut
200	nyip hxa	666	fut hxa fut ci fut
202	nyip hxa nip nyip	700	shyp hxa
222	nyip hxa nyip ci nyip	707	shyp hxa nip shyp
300	suo hxa	777	shyp hxa shyp ci shyp
303	suo hxa nip suo	800	hxit hxa
333	suo hxa suo ci suo	808	hxit hxa nip hxit
400	ly hxa	888	hxit hxa hxit ci hxit
404	ly hxa nip ly	900	ggu hxa
444	ly hxa ly ci ly	909	ggu hxa nip ggu
500	nge hxa	999	ggu hxa ggu ci ggu
505	nge hxa nip nge	1,000	cyp dur

(iv) 1,000-1,000,000,000

1,000	cyp dur	11,000	cyp vat cyp dur
1,001	cyp dur nip cyp	20,000	nyip vat
1,010	cyp dur nip ci	100,000	ci vat
1,100	cyp dur cyp hxa	1,000,000	cyp hxa vat
2,000	nyip dur	10,000,000	cyp dur vat
3,000	suo dur	100,000,000	cyp sur
10,000	cyp vat	200,000,000	nyip sur
10,001	cyp vat nip cyp	1,000,000,000	ci sur

For large numbers, languages differ in the use of exponentiation of the numeral base. English, for example, has a decimal system and uses a special term for 10², which is *hundred*, one for 10³, *thousand*, as well as one for 10⁶, *million*. Nuosu uses exponential bases that partially differ from English, see table 5.4 below.

B. Ordinal numbers

Ordinal numbers identify the position of an element in a set relative to other members of the same set (Hurford 1975, 1987; Stolz & Veselinova 2005). In Nuosu, ordinal numbers employ cardinal numbers, a classifier and the nominalization particle su as in the following construction:

(81) *Ordinal number construction*: NUM+CL+CL*+su.

If the classifier has the midtone [33] in isolation, then the second copy takes the sandhi tone [44]. If the classifier is in the low tone [21], the tone of the second copy is

Exponentiation	Number	English base	Nuosu base
10 ¹	10	ten	ci
10 ²	100	hundred	hxa
10 ³	1,000	thousand	dur
104	10,000	_	vat
105	100,000	_	-
106	1,000,000	million	-
107	10,000,000	_	-
108	100,000,000	_	sur

Table 5.4: Exponential bases of 10 in English and Nuosu

low too. If the classifier has the high tone [55], then the second copy occurs in the same tone [55]. The string CL^*+su is a definite article.

(82) a. 均10分片

CO cyp ma max su person NUM.1 CL ART=CL-DET 'the first person'

b. **₹₽₽₽**₽

si hni hxit yuop yuop su woman NUM.8 CL ART=CL-DET 'the eighth woman'

c. 长豪兴珠珠珠

bi mox shyp yuot yuot su NUM.7 CL priest ART=CL-DET 'the seventh priest'

#किंक्वां≈40 .b

o get suo ji jix su comb NUM.3 CL ART=CL-DET 'the third comb'

The above construction is available for sortal as well as for mensural classifiers, as illustrated by the following example.

北田田山林 (E8)

ie qyt nyip zhep zhep su water NUM.2 CL.bowl ART=CL-DET 'the second bowl of water'

5.3.2 Noun quantifiers

In this section I describe the scope and function of more than ten noun quantifiers (section A–section I). One of them, the quantifier mu 'all' has a wide range of grammatical functions overviewed in section J.

A. The quantifier mu 'whole/all'

The particle mu occurs at the right edge of the noun phrase and assumes the function of collective universal quantifier. It acts upon definite noun phrases marked by demonstratives or definite articles. Bare nouns that have a definite interpretation also co-occur with mu.

- (84) The mu-constructions: (i) N+mu
 - (ii) N+CL'+mu

If the noun phrase is a singular count noun or a mass noun, then mu conveys the sense of whole. If the noun phrase denotes several countable entities, the morpheme mu has the sense of all.

- (85) a. 日本 京田田 最新 ggat mu hnix lo lo. cloud DEM.PROX CL QUANT.whole red IDE~EXPR 'This whole cloud is very red.'
 - b. 対プ分よりかはい。
 ip mop max su **mu** ma wa ddur.
 stomach ART=CL-DET QUANT.whole ulcer exit
 'The whole stomach is full of ulcers.'
 - c. 月光系の刊刊聖光司。
 mu hly cyx tu **mu** la bbap ga vur.
 wind DEM.PROX CL QUANT.whole come village enter
 'This whole wind blew into the village.'
 - d. 덕朱현 바셔주체험현。
 yy jjur max su **mu** ie qyt jjip ox.
 spring ART=CL-DET QUANT.whole water become DP
 'The whole spring is full of water.'
 - e. 引於於日刊引以公包。
 ax hxie cyx ma **mu** ax nyie gax zze.
 mouse DEM.PROX CL QUANT.whole cat COV.drop eat
 'The cat ate the whole mouse.'

The quantifier *mu* can be used with a bare noun, if the context provides a definite quantity.

(86) ⑩ 위 처 작 약 박 。 gup ma **mu** cy syr gox sha. sweat QUANT.all 3P.SG wipe SEND 'He wiped away all the sweat.'

The quantifier *mu* must refer to definite quantities of the noun referent. With indefinite numeral expressions, it is ungrammatical.

(87) a. **H** ⊕ 1 怪 水* b. *១៤៤។ *le *pip go cyp ma mu suo ji mu ox NUM.3 CL NUM.1 CLwhole whole apple 'a whole apple' 'all three oxen'

The noun phrase must consist of a common noun. Plural pronouns cannot co-occur with the quantifier *mu*. Plural pronouns can be instead universally quantified with the verb particle *sat* (section 7.5.1).

- (88) a. ★母爭用口節 *cop wox **mu** la ox. 3P.PL QUANT.all come DP Intended meaning: 'They all came.'
 - b. 创新过程的 cop wox la sat ox 3P.PL come EXH DP 'They all came.'

Nouns for punctual events such as *thunderclap* are ungrammatical with the quantifier mu even if modified by a classifier. In (89a+b), a unique thunderclap is not compatible with mu, whereas a definite set of thunderclaps is.

- (89) a. *州終紀井州承孚永。
 *mu zyr jix su **mu** mo -jjy- mo.
 thunder ART=CL-DET QUANT.whole loud very loud
 'The whole thunderclap was very loud.'
 - b. 用於前身用來子來。
 mu zyr ggex su **mu** mo -jjy- mo.
 thunder ART=CL-DET QUANT.all loud very loud
 'All the thunderclaps were very loud.'

The exhaustion particle sat quantifies the sentence-initial NP (all) and also functions as event quantifier (completely). It may occur independently or in combination with the nominal quantifier mu.

(90) 引引着举用牙底的。

vo a zzyx bbo **mu** jjy sat ox. snow DEM.DIST CL QUANT.whole melt EXH DP 'All the snow from that shower has completely melted away.'

The quantifier *mu* can act upon count nouns whose cardinality is two in contrast to English which would involve *both* rather than *all*.

(91) §ЯH#®。

nyuo zzyp **mu** na ox. eye QUANT.all sick DP 'be sick in both eyes'

The quantifier *mu* modifies sentence-initial NPs. It is ungrammatical after the second noun phrase in the sentence.

(92) * 9 + 0 日 的 同 片 月 午 多 中 。

*gup ma nyop mu co ggex su **mu** syr gox sha. sweat peasant ART=CL-DET QUANT.all wipe SEND Intended meaning: 'All the peasants wiped their sweat away.'

The abstract noun $ngop\ jjux$ 'idea' can be individualized by the classifier ji but then cannot be quantified by mu 'whole'. If it is categorized by the collective classifier gge, it can be quantified by mu.

> *ngop jjux cyx ji **mu** he-jjy-he. idea DEM.PROX CL QUANT.all good-very-good Intended meaning: 'That whole idea is good.'

b. 承養炎問刊机去机。

ngop jjux cyx gge **mu** he-jjy-he. idea DEM.PROX CL QUANT.all good-very-good 'All the ideas are good.'

B. The quantifier zzix ap zzi 'every'

The quantifier $zzix \ ap \ zzi$ is a distributive universal quantifier. Similar to mu, the quantifier $zzix \ ap \ zzi$ acts upon a definite set of referents. Its distributive meaning is enforced by the numeral cvp 'one' and the quantifier mu.

(94) The zzix ap zzi-construction: N+cyp+CL+zzix ap zzi+mu

Count and mass nouns alike can occur in this construction provided that a suitable sortal or mensural classifier individualizes them.

(95) a. Ĥ፬፲Ψ**협**ϒ업ዝ였ል».

mux dde cyp jot **zzix ap zzi mu** zzax zy da. land NUM.1 CL QUANT.every QUANT.all crops plant STP 'Crops are planted on every plot of land.'

ie qyt cyp zhep **zzix ap zzi mu** ndo sat. water NUM.1 CL.bowl QUANT.every QUANT.all drink EXH 'Every bowl of water has been finished.'

la dda cyp lo **zzix ap zzi mu** ry jjo. valley NUM.1 CL QUANT.every QUANT.all grass have 'Every valley has grass.'

uo nyie cyp ji **zzix ap zzi mu** ax nuo. hair NUM.1 CL QUANT.every all black 'Every hair is black.'

hxe cyp ji **zzix ap zzi mu** nge vat ly. fish NUM.1 CL QUANT.every all NUM.5 CL.dollar require 'Every fish costs five dollars.'

Although it is natural to have NPs quantified by *zzix ap zzi* occurring in sentence-initial position, they may also be found after NPs in second position.

lur mat co cyp zzix ap zzi six bbo. ma nrep mu stone person NUM.1 CLQUANT.every RES all move go 'Every man moved the stones away.'

Dual noun phrases can be used in the *zzix ap zzi*-construction with the meaning of *both*.

(97) 孝母工母**看來**當問本人的。

hnap bo zzix ap zzi cvp pot aphxit ox. gge NUM.1 QUANT.every ear CL hear NEGcan DP 'Both ears cannot hear.'

Similar to *mu*, the *zzix ap zzi*-construction is compatible with the exhaustion particle *sat*, as shown in (98).

> co cyp ma **zzix ap zzi** xip mu hxip sat. person NUM.1 CL QUANT.every DEM.DD talk EXH 'Everyone is talking in this way.'

C. The quantifier kep nyix 'several'

The quantifier *kep nyix* 'several' is a non-proportional quantifier with vague numeral value. It requires the presence of a classifier interpreted with indefinite reference.

(99) a. The kep nyix-construction: N+kep nyix+CL

This quantifier can modify almost every count, mass and event noun. Unique body parts for which counting is pragmatically odd should not involve the quantifier *kep nyix*, as in (100g).

- (100) a. 율배H화더라照다하컵。
 - niep sha mu ddix yy hmo **kep nyip** ji jjip. Liángshān area river QUANT.several CL become 'In the Liángshān area there are several rivers.'
 - b. 机图图集件口器位标 .d

op rrop bbo su ggap mop **kep nyip** ji jjip. Xichang go NOM road QUANT.several CL become 'There are several roads that lead to Xichang.'

c. ៕ជាភ្នំក្នុងៗ**ក្រុម**្សា

a ddit go syr juo ax yy **kep nyip** ma jjip. there LOC forest big QUANT.several CL become 'There are several forests in that area.'

. 出生图长13量出升图 . b

gup ma **kep nyix** tot cyp ka nyuo go ndit. sweat QUANT.several CL.drop NUM.1 face LOC have 'There are several sweat drops on his face.' e. 里球以拿川口的。

ddip vip **kep nyix** gge la ox. guest QUANT.several CL come DP 'Several guests have come.'

f. ⋈₩₩**‡**Ш⊕ŵ。

va mat **kep nyix** gge qip ox. hen QUANT.several CL lay egg 'Several hens have laid eggs.'

g. #¥≗¼≇̂+0°.

#ka nyuo **kep nyix** ma face QUANT.several CL 'several faces'

D. The quantifier ax pa 'other'

The quantifier *ax pa* 'other' can but need not use classifiers for individualizing the noun. It is attached right to the head noun and before the classifier complex.

(101) The ax pa-construction: N+ax pa (+CL')

The quantifier *ax pa* 'other' has the same binding properties as pronouns which are captured by Chomsky's binding principle B: "A pronoun must be free in its binding domain" (Chomsky 1981: 188). A noun phrase with *ax pa* refers to an entity not mentioned in the same sentence but salient from the discourse context. This property is called by some authors the *discourse anaphoric* property (Beck 2000: 103).

- - cy syt **ax pa** mu ap- dop ox. 3P.SG strength QUANT.other do NEG- can DP Discourse anaphoric: 'He cannot do other things' (different from some contextually salient things).

nga ddop ma **ax pa** ap- hxip ox. 1P.SG word QUANT.other NEG- say DP Discourse anaphoric: 'I do not say anything else' (in addition to some contextually salient utterances).

bbur ddu **ax pa** kop yip sy. pen QUANT.other need yet Discourse anaphoric: 'He still needs other pens' (more than those he has been using already).

- d. X 🗟 Y 引 出 水 軒 顶 。
 - cy zze ddu **ax pa** ap- jjo ox. 3P.SG food QUANT.other NEG- have DP Discourse anaphoric: 'He doesn't have any other food' (than that contextually salient food).
- e. ፌዝ**∄**₩θዙዛ⊀ውሃ。

mge fu ax pa max su li ap- hmip sy. buckwheat loaf QUANT.other ART=CL-DET TOP NEG- done still Discourse anaphoric: 'The other buckwheat loaf is not done yet' (implying that one buckwheat loaf is done).

- - cy i dix **ax pa** ggu vy ox. 3P.SG shirt QUANT.other CL buy DP Discourse anaphoric: 'He bought other clothes' (than those at hand).

E. The quantifiers ax nyi 'much' / ix nyi 'few'

The quantifiers *ax nyi* 'much' and *ix nyi* 'few' act upon noun phrases and verb phrases. When they modify noun phrases, they co-occur with the collective classifier *gge*. The diminutive noun quantifier must be used as the reduplicated form *ix nyi nyi gex*. When the quantifiers target verb phrases, they are marked by the adverbializer *mu*.

- (103) The ax nyi/ix nyi-constructions: (i) N+ax nyi +gge (nominal)
 - (ii) N+ix nyi nyi gex (nominal)
 - (iii) ax nyi / ix nyi +mu+V (verbal)

No other classifier except *gge* can be used in (103i). *Ax nyi* and *ix nyi* are proportional quantifiers and incompatible with the universal quantifier *mu*.

- (104) a. 戶州並引≢間間。
 - niep sha bbo **ax nyi gge** jjip. Liángshān mountain QUANT.many CL have 'Liángshān has a lot of mountains.'
 - b. ※サ切※引達間(* H)※⑥。
 cy vot i qi **ax nyi gge** (*mu) vup ox.
 3P.SG pig head QUANT.many CL QUANT.all sell DP
 'He has sold a lot of pig heads.'

The collective classifier *gge* attaches the quantifiers *ax nyi / ix nyi* to the head noun, while the adverbializer *mu* connects them to the verbal complex.

- (105) a. ℙฐเ⊕+乳≢間U®。
 - nga ip nyip gup ma **ax nyi gge** ddur ox. 1P.SG today sweat QUANT.much CL exit DP 'I have sweated a lot today.'
 - b. դՎև⊕Գ**યુ**≢ዠ∩છુ∘

nga ip nyip gup ma **ax nyi mu** ddur ox. 1P.SG today sweat QUANT.much ADVL exit DP 'I have sweated a lot today'.

The adverbializer *mu* requires the subject of the sentence to control the situation which is not the case in (106b), but in (107).

(106) a. 均匀均量量分分页少点。

bbup ddi **ix nyi nyi gex** mux dde go njuo. worm QUANT.few ground LOC move 'Few worms move in the ground.'

b. *#\$**\$**\$#**#**\$\$#\$\$\$.

*bbup ddi **ix nyi mu** mux dde go njuo. worm QUANT.few ADVL ground LOC move Intended meaning: 'Worms move sparsely in the ground.'

> nga shax jji **ix nyi mu** mu ga bbyx. 1P.SG sweet QUANT.few ADVL name give 'I gave Muga a few sweets.'

Noun phrases with quantifiers *ax nyi* or *ix nyi* may occur in both argument slots. In (108), they occur in patient NPs.

(108) a. 州瓜**須**≢間及瓜爭咁節。

uo nyie **ax nyi gge** cy nyie gox sha ox. hair QUANT.many CL 3P.SG cut SEND DP 'He cut off a lot of hair.'

b. 中世子图引拿用电顶。

nga vot hnap bo **ax nyi gge** zze ox. 1P.SG pig ear QUANT.many CL eat DP 'I ate a lot of pig ears.' c. 月夏×平中**旬丰丰**几印。

mux dde cy jot xy **ix nyi nyi gex** gep ox. ground DEM.PROX CL fertilizer QUANT.few add DP '[He] applied little fertilizer to this field.'

F. The quantifier cyp gge 'some'

The quantifier *cyp gge* 'some' is composed of *cyp* 'one' and the collective classifier *gge* (section 5.2.1.E). This quantifier is attached right to the head noun and no other modifying material can occur in the noun phrase.

(109) The cyp gge-construction: N+cyp gge

It is a partial quantifier which focuses on a portion of a contextually salient referent. Count and mass nouns can both be quantified by *cyp gge*.

(110) a. ዘສ**ነ**ዘህፀዛላል.

mu jjur **cyp gge** li ma gop ap- ndit. hole QUANT.some TOP lamp NEG- put, exist 'Some holes do not have lamps sticked into.'

b. 专利【II】从对到时间。

ie qyt **cyp gge** cy fur gox sha ox. water QUANT.some 3P.SG pour SEND DP 'He poured out some water.'

c. 211142 00°

le **cyp gge** hlix ndo ox. ox QUANT.some lose DP 'Some oxen got lost.'

d. Y#X#1||14X@Y。

syr zza lur ma **cyp gge** go ap- hmip sy. fruit QUANT.some PRO.LOC NEG- ripe still 'Some fruit is not ripe yet.'

G. The quantifier ax di 'only'

The quantifier $ax\ di$ 'only' can occur within the NP, before or after the head noun, or outside the NP as adverb. The quantifier $ax\ di$ must be reduplicated as $ax\ di\ di$ within the noun phrase. It can be reduplicated outside the noun phrase if adverbialized by -mu.

(111) The ax di-constructions:

```
ax di di+su+N
                              NP-internal:
(i)
                              left-branching, appositive
     ax di di+su+N+CL'
(ii)
(iii) N+ax di di+su
                              NP-internal:
                              right-branching, restrictive
(iv) N+ax di di+CL'
(v)
     NP+ax di
                              NP-external
(vi) NP+ax di di+mu
                              adverbial constructions
```

When the quantifier ax di di is right-branching, it marks the noun referent as unique for the property encoded in the noun, as in (112a). If it is left-branching, the noun referent is unique for the property of the noun or for some other property, as in (112b)

- (112)NP-internal (right-branching)
 - a.

SSE ax di di su bbur ma SSO bbo. son only NOM character learn go 'The unique son is attending school (he is unique in the family).'

NP-internal (left-branching)

φ. ∄ኳኳችኒኞች⊕Φ薬°

ax di di su sse bbur ma SSO bbo. only NOM son character learn go 'The unique son is attending school (he is unique for a property).'

The quantifier can only be attached to the left side of a proper noun but not to its right side. This is also true for nouns with unique referents.

- (113)NP-internal (left-branching)
 - a. <u>1</u>12211110100000

ax di di su mu jie max su da. op rro it only NOM name ART=NOM+DET Xichang live STP 'Mujie who is a lonely person lives in Xichang.'

NP-internal (right-branching)

*mu jie ax di di su da. op rro it NOM Xichang live **STP** name only Intended meaning: 'The Mujie who is alone lives in Xichang.' (114) NP-internal (left-branching)

a. រាំងឯក1 ឃុ

ax di disuhxo bbuonlyNOMsun

'the sun that is alone (in the sky)'

NP-internal (right-branching)

p. *។ ជាសិខាម

*hxo bbu **ax di di** su sun NOM NOM 'the unique sun'

If *ax di* is attached after a bare noun, it can be interpreted as noun or verb quantifier. The uniqueness may refer to the property of the noun or of the verb.

(115) NP-internal / NP-external

a. Γ¶ημθθξ.

sse **ax di** bbur ma sso bbo. son only character learn go

NP-internal: (i) 'The unique son attends school (only son).'

NP-external: (ii) 'The son is attending school alone (only attender).'

NP-external

b. ኔፅዝዝዝልፀፀች.

sse max su **ax di** bbur ma sso bbo. son ART=CL-DET only character learn go 'The son alone is attending school (without any company).'

NP-external

c. អង្សឹងលេខ្សាស់

mu jie **ax di** op rro it da. name only Xichang live STP 'Mujie lives alone in Xichang.'

As external quantifier, it may take the forms $ax\ di$ and $ax\ di\ di\ mu$. The form $ax\ di$ can target noun phrases in any argument role. $Ax\ di\ di\ mu$ only aims at agents.

(116) a. አብታሁቱ .

cy **ax di** vot she zze. 3P.SG alone pork eat 'He alone eats pork.'

cy **ax di di mu** vot she zze. 3P.SG alone ADVL pork eat 'He alone eats pork.'

- (117) a. 本中本分字。 cy vot she **ax di** zze. 3P.SG pork alone eat 'He only eats pork.'
 - o. *メサ本剤お計H号。 *cy vot she **ax di di mu** zze. 3P.SG pork alone eat Intended meaning: 'He eats pork alone.'

The property of agent-orientation is imposed by the adverbializer -mu which requires the preceding noun phrase to be the controlling entity of the situation. This constraint is violated in (117b) and (118c).

- (118) a. 坪ᆌ常罕了英州。
 nga **ax di** syt cyp jjit mu.
 1P.SG alone matter NUM.1 CL do
 'I alone did one thing.'
 - b. 野早了英氰實用。
 nga syt cyp jjit **ax di** mu.
 1P.SG matter NUM.1 CL only do
 'I only did one thing.'
 - c. *坪丫「英聞智計用。

 *nga syt cyp jjit **ax di di mu** mu.

 1P.SG matter NUM.1 CL alone do
 Intended meaning: 'I did one thing alone.'

The quantifier *ax di* after a temporal NP has the function to emphasize the short duration of the time stretch.

H. The quantifiers ax nyi yix nyi 'at most' / ix nyi yix nyi 'at least'

The two quantifiers are *ax nyi yix nyi* 'at most' and *ix nyi yix nyi* 'at least' are embedded in noun phrases with numerals. They contain the quantifiers *ax nyi* 'many' and *ix nyi* 'few' (section E). The second component *yix nyi* 'even if' is a clausal conjunction (section 13.1.2.C). Both quantifiers imply numeral ranges below or above the value provided in the NP.

- (120) *The* ax nyi yix nyi / ix nyi yix nyi-constructions:
 - (i) N+ax nyi yix nyi+NUM+CL 'at most'
 - (ii) N+ix nyi yix nyi+NUM+CL 'at least'

English approximations for these quantifiers are *if much then only 60 years* and *if few then only 60 years*.

- (121) a. 全身液分半球乳量的量压卡半重。
 bbox zze cyx ma kut ti **ax nyi yix nyi** fut ci kut jjo.
 man DEM.PROX CL age QUANT.less NUM.60 year have
 'This man is at most 60 years old.'

I. Other quantifying expressions

Several quantifiers in English are nominal, while their counterparts in Nuosu are encoded as adverbial expressions.

(i) 'more than five'

The adverb *ap cy* 'more' is used in comparative constructions after the predicate or before the predicate using the adverbializer -*mu*.

- - b. 脚步注意出分野及出世。
 zhep sse go she nge ma **ap cy** mu it.
 bowl LOC meat NUM.5 CL more ADVL lie
 'More than five pieces of meat are in the bowl.'

(ii) 'different'

In order to convey the English meaning *different*, a periphrastic construction is used in Nuosu: *not resemble each other*.

(123) 「米妥氏の。 cyp nyit **jjy- ap- sup.** 3P.DL RECL- NEG- resemble 'Both are different.'

(iii) 'special'

The adjective special is expressed in Nuosu as the complex predicate gop ap sup 'follow-not-resemble'.

(124) HXOVF. mu ga qop apsux. follow NEG- resemble name 'Muga is special.'

J. Appendix: The particle mu

The particle mu exhibits five functions that are analyzed in different parts of this grammar.

Meanings Section of grammar

Main verb mu 'do' (i)

Ouantifier mu 'whole/all' (ii) section 5.3.2.A

(iii) Adverbializer mu and mu da section 7.7.1.B, section 9.1.3.A

(iv) Circumstantial conjunction mu da section 7.7.1.B

Circumstantial conjunction mu (v) (in negated clauses)

In this section, we summarize the different functions of -mu.

(i) As main verb

The morpheme mu has a limited use of main verb with the sense do, function as. It predicates nouns denoting professions, offices or other functions. With the noun syt 'affair', it refers to specific activities of someone.

(125) a. .HGÆĶ b. XIT≚H. сy hmat mop сy sip po mu. mu. 3P.SG teacher 3P.SG landlord do do 'He is a landlord.' 'He is a teacher.'

d. **4** 数 为 H 3 c. 单片割用。 nga vy lot mu. ne xix syt mu? 1P.SG business 2P.SG INT.what affair do do 'I am doing business.' 'What are you doing?'

With the event noun nyop 'labor', mu means 'do'; the noun for peasant was lexicalized as work-do-person.

(126) a. 母争のH。 b. のH物。 cop wox nyop **mu**. nyop **mu** co 3P.PL labor do work do person 'They work.' 'Peasant'

(ii) As quantifier mu 'whole/all'

The meaning of collective universal quantifier is analyzed in detail in section 5.3.2.A. Here again an example.

(127) 粉兒問記。

co cyx gge **mu** la.

person DEM.PROX CL QUANT.all come
'All the people came.'

(iii) As adverbializer mu and mu da

The string mu links adverbial expressions to the verb (section 9.1.3.A). Moreover, mu combines with the perfect particle ta (section 7.7.1.B) to form mu da that can substitute mu without difference in meaning.

- (128) a. Ψ**Η/ΗΨ**! mu / mu da nji zze! fu zzi ax yy **mu / mu da** hxip! quick ADVL voice big **ADVL** speak eat 'Eat quickly!' 'Speak louder!'
 - c. 从景泉州/州浏览。 cy we zze **mu / mu da** bot. 3P.SG spending strength ADVL run 'He ran with particular effort.'

Some adjectives are lexicalized as fixed adverbials like the following:

- (129) a. 复知 b. 水馬用 dde dde **mu** ap nryr **mu** no meaning honest 'really'
 - c. ⑥ 切水光 出 別 景。
 box gu ap cy nge **mu** xie sat.
 maize roughly harvest EXH
 'We have roughly finished harvesting the maize.'

(iv) As circumstantial conjunction mu da

Moreover, the compound mu da (though not mu alone) can be used as circumstantial conjunction to attach clauses to a main clause. In (130), mu da cannot be replaced by a unique occurrence of mu.6

- (130) (…) 从上受到另具用例目录。
 - (...) cy sip tuo -iivtuo mu da mu zyt. 3P.SG take sharpen pointed very pointed CONI soil dig 'Having sharpened [the bamboo rod] very much, he ploughed the earth to earn a living.'

(v) As circumstantial conjunction *mu* (in negated clauses)

The particle mu can link a negated clause to a main clause with a circumstantial meaning, as in (131a-c). Positive circumstantial sentences lacking the negator cannot be attached to a main clause with mu, as shown in (131d).

- (131) a. 。身串的任身不串以及 le she she Сy apzze mu vot zze. 3P.SG ox meat NEGeat CONI pig meat eat 'He is not eating beef, only pork.'
 - bbo. cop wox ap ndi hxix on rro apbbo mu chep du 3P.PL yesterday Xichang NEG-CONI Chengdu go go 'They did not go to Xichang vesterday but to Chengdu.'
 - c. 创拿Q资水类H机×鸡类。 cop wox nyop bbop mu jie shat bbo. apbbo ggep 3P.PL work NEGgo CONI street entertain go 'They did not go to work but looked for entertainment in the street.'
 - *从印度包括外报号。 d. le she *cv zze mu vot she zze. 3P.SG ox meat eat CONJ pig meat

Intended meaning: 'He is eating pork while eating beef.'

5.3.3 The additive noun conjunction si nip 'and'

The noun conjunction si nip 'and' serves two functions. First, it juxtaposes two NPs in different syntactic positions of the sentence. Si nip combines two agents in (132a), two patients in (132b) and two recipients in (132c).

⁶ Adapted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 218).

(132) a. ≼< \$ & ተ\ਜੇ¥ \$ Î\h\θθ.

vut ga **si nip** at gop nyix jjy gex bbur ma sso. name and name NUM.2 together writing system study 'Vuga and Ago both study the writing system.'

> nga yiet yot **si nip** mge fu hxie vur. 1P.SG potato and buckwheat cake like 'I like potatoes and buckwheat.'

C. りよる単出主象を対とり。

nga tep yy ddie mu gox **si nip** vut ga bbyx 1P.SG book COV.prepare name and name give 'I gave books to Mugo and Vuga.'

Unlike English *and*, the conjunction *si nip* should not be used before the last item of a list. In the Nuosu writing system, the convention was adopted from Chinese to separate items in the list not by commas but by so called pause marks (顿号). Pause marks have no counterpart in the English writing system.

- √以、4水、川川、(***身食**) 川以子戊出口。 (133) a. (*si nip) vut ga. at go. mu jie. mu ga jjy gex dep la. name name name and name together rise come 'Vuga, Ago, Mujie and Muga stood up together.'
 - . 身化却尽(**多泉***)、却护、即以从 h. cv le she、 vot she (*si nip) va she apzze. 3P.SG beef pork and chicken NEGeat 'He does not eat beef, pork or chicken.'

Moreover, *si nip* may combine two nouns in a noun phrase that can be modified together by a determiner. Yet, it is not possible to combine two determiners within a noun phrase.

(134) a. ፀି⊦ጰቆ⊩ጋፒቴ

ssox sse **si nip** hmat mop ly yuo pupil and teacher NUM.4 CL 'four pupils and teachers' (= group of four with at least one pupil and one teacher)

b. *ሐጲዬፋብቆፁ

*co cyx **si nip** a zzyx ma person DEM.PROX and DEM.DIST CL Intended meaning: 'this and that person'

In order to juxtapose two adjectives or verbs, the conjunction si nip cannot be used, but another type of construction, illustrated in (135b), is employed.

(135) a.

> si nip pux liex guo *vit gga CVX a shyt ggu clothes DEM.PROX CLnew CONJ.and expensive Intended meaning: 'new and expensive clothes'

b. ሦኔጲጃ₩≢ብ₩, ĝŧij፠。

vit gga cvx ggu shyt **nyi** a shyt, pux **nyi** liex guo. clothes DEM.PROX CL new also new price also expensive 'new and expensive clothes'

Secondly, si nip can be used as a postposition for the oblique semantic role of companion, a kind of secondary agent. When si nip acts as noun conjunction, it is inserted in between two NPs; when it functions as postposition for the role of companion, it occurs after the second NP.

。思生系引卫圣王Q1**多泉**X (136) a.

> CVX si nip cyp jjy gex gop bop ggap mox go njuo. 3P.SG CONJ 3P.SG.POSS friend together road LOC walk 'He and his friends are walking on the road.'

。思生氧化宜生**科展**至〇1次 b.

> CVX cvp qop bop **si nip** jjy gex ggap mox go njuo. 3P.SG 3P.SG.POSS friend **POST** together road LOC walk 'He is walking with his friends on the road.'

With the reciprocal verb prefix *jjy*-, the postposition *si nip* marks the NP with which the primary S- or A-argument has a relationship of reciprocity.

中中旬的**泉**食穿田穿羊。 (137)

> jjyx-nzur-jjyx-yie. nga ngat ix yi si nip 1P.SG 1P.SG.POSS brother POST RECL-angry-RECL-angry 'I am angry with my younger brother.'

h.

> ne су si nip jjy-sux mu sso jjix ddep lox. 3P.SG POST RECL-resemble WISH 2P.SG ADVL perfect 'It is desirable that you are as perfect as he.'

5.4 Localizing nouns

In this section, we describe the set of personal pronouns (section 5.4.1), the reflexive pronoun zyt jie 'self' (section 5.4.2), the set of demonstratives (section 5.4.3), the function of bare nouns (section 5.4.4), the set of in/definite articles (section 5.4.5) and the set of interrogative/indefinite pronouns (section 5.4.6).

5.4.1 Personal pronouns

An overview of the set of personal pronouns is provided in Table 5.5.

Table	5.5:	Personal	pronouns

Person	S/A	0	Emphatic (S/A)	Possessive adnominal	Possessive pronominal
1P.SG	nga	ngax	ngat ngat	ngat	ngat vi
LOG.SG	i	ix	it it	it	it vi
2P.SG	ne	nex	nit nit	nit	nit vi
3P.SG	су	сух	сур сух	сур	cyp vi
1P.DL	ngap nyit	ngap nyit	_	ngap nyit	ngap nyit vi
LOG.DL	ip nyit	ip nyit	_	ip nyit	ip nyit vi
2P.DL	nep nyit	nep nyit	_	nep nyit	nep nyit vi
3P.DL	cyp nyit	cyp nyit	_	cyp nyit	cyp nyit vi
1P.PL	ngop wox	ngop wox	_	ngop	ngop vi
LOG.PL	ор	ор	_	ор	op vi
2P.PL	nop wox	nop wox	_	nop	nop vi
3P.PL	cop wox	cop wox	_	сор	cop vi
Versatile	•	go		-	-

In this set, the logophor with two suppletive forms as well as the reduplicated emphatic pronouns represent rare pronouns.

For a short discussion of some of the Nuosu pronouns in a pan-Burmese-Lolo perspective, see Bradley (1993: 185). I analyze the set of basic pronouns (section A), the set of logophoric pronouns (section B), the set of dual pronouns (section C), the set of possessive pronouns (section D), the indefinite personal pronoun sut 'someone else' (section E), and the versatile pronoun go 'him/her/them' (section F). In the appendix (section G), I summarize the grammatical functions of go.

A. The basic pronouns

Nuosu has three basic personal pronouns for speaker, addressee and third person. Plural pronouns are derived from the singular pronouns with the plural suffix wox. The singular pronouns have further undergone anticipatory assimilation of their vowel (Trask 1996: 54).⁷ The plural suffix *wox* can also be used after a few human nouns (section 4.2.2) and is related to the collectivizing classifier *wo* (section 5.2.1.E).

Table 5	5.6:	Basic	pronouns
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Person	S/A	0	Emphatic (S/A)
1P.SG	nga	ngax	ngat ngat
2P.SG	ne	nex	nit nit
3P.SG	су	сух	сур сух
1P.PL	ngop wox / ngop	ngop wox / ngop	-
2P.PL	nop wox / nop	nop wox / nop	-
3P.PL	cop wox / cop	cop wox / cop	_

The three plural pronouns can be reduced as ngop / nop / cop without change in meaning, but native speakers characterize the short forms as sloppy. These forms are homophonous to the possessive plural pronouns. Although there is no risk of confusing both uses, native speaker disprefer the shorter version if their attention is focused on this issue, see (138a+b). The longer versions cannot be employed as possessive pronouns, see (138c).

- (138) a. 多/多爭可下層 A 基。

 ngop / ngop wox ip nyip jie shat bbo.

 1P.PL 1P.PL today street go

 'We'll go into the street.'

 - c. \$ (/*\$爭) 以氧化性心。
 ngop (/*ngop wox) vit gga kat go rrur?
 1P.PL.POSS 1P.PL clothes where rest
 'Where are our clothes?'

Singular personal pronouns take the sandhi tone [44] if they are patient noun phrases of a monotransitive verb in the [33]-tone (Sandhi Rule 1, section 3.2.2).

⁷ Bradley (1993: 185) proposes that the suffix *wox* might have been doubly suffixed and fused once with the singular pronouns. This complex scenario is less probable than the relatively straightforward explanation of anticipatory assimilation.

- (139) a. 引录图字及英列。 a zzyx te go **cy** mgu da. DEM.DIST time 3P.SG love STP 'At that time, she was in love.'
 - b. X氧美。 cy **nex** mgu. 3P.SG 2P.SG love 'She loves you.'
- XH.00. b. H爭**於**世節。 (140) a. mu gox сy gu ox. cyx gu ox. 3P.SG 3P.SG crow DP name call DP 'It (=the rooster) crowed.' 'Mugo called him.'
- (141) a. 引承對於於學節。 a zzyx te go **cy** yur ox. DEM.DIST time 3P.SG be born DP 'At that time, he was born.'
 - b. 乳果用母性乳乳等。 ax mo mu ti te go **nex** yur. mother morning time 2P.SG bear 'Mom gave birth to you in the morning.'
- XPXD. . ÑX**4**¥1 (142) a. b. ngax lot сy ox. cyp nga ox. ga ga 3P.SG.POSS hand 3P.SG 1P.SG beat DP 1P.SG beat DP 'He beat me.' 'I beat his hand.'

One exception from this sandhi rule is the ambi-transitive verb yy 'laugh'. Not the pronoun takes the sandhi tone [44] but the verb itself, see (143b).

143) a. ゆうで b. 母争かる。
nga yy ox. cop wox nga yyx.
1P.SG laugh DP 3P.PL 1P.SG laugh
'I laughed.' 'They laughed at me.'

Moreover, singular pronouns can be reduplicated with some additional sound changes: *ngat ngat*, *nit nit*, *cyp cyx*. The reduplicated forms are emphatic pronouns, must be agents and must create a contrast with other referents. First and second

person pronouns are pronominal, while the third person pronoun can be pronominal, as in (144c), or adnominal, as in (144d).

未**付付**量比赛利量**的**的。 (144) a.

> tep yy **nit nit** ddiex bur six a hnat mu vat ox. book 2P.SG~EMP change RES especially good DP 'You have improved the book very much yourself (as opposed to others who might have improved the book).'

b. **ኯ**፞፞፞፞ቚፙፙኇ

> ngat ngat yiet hxop viet. 1P.SG~EMP song sing 'I am singing myself (not with the help of others).'

c. អុក្សដូច្នេះ**រង្**ជ្ជារៈ

mu ga lie ba ox su cyp cyx hxep ddur la. be in danger DP NOM 3P.SG~EMP exit name see come 'Muga recognized himself that he was in danger (as opposed to others who saw him in danger).'

mu jie cyp cyx ssox sse hmat. name 3P.SG~EMP student teach 'Mujie taught the student himself (without outside help).'

The emphatic pronoun cannot have the role of patient, as in (145a), or be the complement of a postposition, as in (145b).

*月**公中的**岛里。 (145) a.

*mu ga **ngap ngax** ngox ddie. 1P.SG~EMP distrust Intended meaning: 'Muga distrusts only me (as opposed to others).'

b. *⊕爭**७%**%₭.

*cop wox cyp cyx jop shyr. 3P.PL 3P.SG~EMP to shout Intended meaning: 'They shout only at him (as opposed to others).'

Bradley (1993: 185) identified the emphatic pronouns as reflexives which they are not since they cannot co-refer with arguments in other syntactic slots.

- (146) a. *州 X X X Y * *。
 - *mu ga **cy cyx** jop zyt. name 3P.SG~EMP to blame Intended meaning: 'Muga blames himself.'
 - b. * ታ ቋ ቱ **ታ ቻ** ቷ 。

*nga hxe ddie **ngap ngax** bbyp.

1P.SG fish COV.prepare 1P.SG~EMP give, allocate Intended meaning: 'I am allocating the fish to myself.'

The emphatic pronoun *cyp cyx* in an embedded clause can refer to the subject of the matrix clause, as in (147a). The emphatic logophoric pronoun *it it* tracks the person whose speech is reported, as illustrated in (147b).

- - mu gox₁ ngop go **cyp cyx**_{1/2} lat hxa₃ jop hxip tat xi shu kax. name think SENT.TOP 3P.SG~EMP male name to say should think 'Mugo₁ thought that $he_{1/2}$ should tell Laha₃ alone (not by others).'
 - b. $\mathbb{H}\mathfrak{T}_1 \mathbb{H}\mathfrak{T}\mathfrak{D}_1 \mathbb{H}\mathfrak{T}\mathfrak{Q}_2 \mathbb{M}\mathfrak{T}$.

 lat hxa_1 hxip go **it it**₁ mgie at $nyop_2$ zi ddix. male name say SENT.TOP LOG.SG~EMP cheat female name cheat QUOT 'Laha₁ said that he_1 cheated $Anyo_2$ himself (not by using others).'

B. The logophors

A *logophor*⁸ is a form that is required to mark dependency on a noun phrase which has a discourse role in the sense of Sells (1987).

- (148) Three discourse roles (Sells 1987: 457)
 - a. Source: one who is the intentional agent of the communication;
 - b. Self: one whose mental state or attitude the proposition describes;
 - c. PIVOT: one with respect to whose (space-time) location the content of the proposition is evaluated.

Nuosu has one SOURCE-logophor, used in reported speech constructions, and a reflexive anaphor with extensions as SELF-logophor (section 5.4.2.B). The SOURCE-

⁸ The term *logophor* was originally coined by Hagège (1974) and adopted in Clements (1975)'s study of Ewe. The label is etymologically derived from the Greek *logos* 'word' and *pherein* 'carry', a verb inherited from an old Proto-Indo-European source with cognates in many ancient European languages (e.g. Latin). Hagège employed this term for dependent marking in indirect speech clauses attested in West-African languages including Mundang, Dogon, Ewe, Tupuri (Niger-Congo) and Mupun (Afro-Asiatic).

logophor has two suppletive forms, a singular i and plural form op. The singular form underwent tone changes for the patient and possessive roles.

Table 5.7: Logophors

Person	S/A	0	Emphatic (S/A)	Possessive adnominal	Possessive pronominal
Logophor-Singular	i	ix	it it	it	it vi
Logophor-Dual	ip nyit	ip nyit	-	ip nyit	ip nyit vi
Logophor-Plural	ор	op	_	ор	op vi

The reported speech constructions in Nuosu employ verbs of saying of hearing, the complementizer *go*, and a sentence final particle, either the quotative particle *ddix* or the adverbializer *mu*.

(149) Reported speech constructions:

Secondary speaker+V_{sav}+go+reported speech+ddix / mu

Examples in (150) illustrate this pattern for the two suppletive logophors i and op, which must be bound by a secondary speaker (SOURCE) whose speech is reported.

(150) Chén & Wū (1998: 267)

- - si sse max su₁ hxip go cyp mu ox go ne2 god ART=CL-DET say SENT.TOP do so DP COMP 2P.SG shyp nyip giji tip six \mathbf{i}_1 go ne уу ca week awake COMP TOP RES LOG.SG water hot scoop bbyx ddix. la. \mathbf{i}_1 sip gox pu mo come LOG.SG take PRO.PAT give spread want QUOT 'The god₁ said that when you₂ wake up after a week, you₂ should scoop some hot water and give it to him₁ so that he₁ may spread it.'

 ${f mu~jie_1}~~$ hxip bur go ${f op_{1+2}}~$ kat zza zze apla ox mu. male name emphasize SENT.TOP LOG.PL dinner eat NEG-come DP ADVL 'Mujie₁ emphasized that they₁ would not attend the dinner.'

The logophors interact with the personal pronouns and the reflexive anaphors which we explore in the following subsections.

(i) Bound in reported speech clauses

In binding theory (Chomsky 1981: 188), the English reflexive anaphor *himself* is required to be dependent on a c-commanding NP which occurs in the same simple clause. The Nuosu logophors have different binding conditions.

(151) Binding conditions on logophors:

The interpretation of the logophors i and op must depend on a secondary speaker (SOURCE).

The logophors i and op have no antecedent in the same simple clause and need not be c-commanded by their antecedent. The logophors and antecedents are at different clausal levels, as in (152). The logophors need not be c-commanded by their antecedent, as in (152b+c).

- - **lat ti**₁ mu nyox₂ jox hxip go $\mathbf{i}_{1/*2/*3}$ bbo ox ddix. male name male name to say SENT.TOP LOG.SG go DP QUOT 'Lati₁ told Munyo₂ that $he_{1/*2/*3}$ had already left.'
 - b. $\mathbb{H}_{\mathfrak{F}_1}$ $\mathbb{H}_{\mathfrak{F}_2}$ $\mathbb{H}_{\mathfrak{F}_1/2/*3}$ $\mathbb{H}_{\mathfrak{F}_1/2/*3}$ $\mathbb{H}_{\mathfrak{F}_1/2/*3}$ $\mathbb{H}_{\mathfrak{F}_1/2/*3}$ bbo ox ddix. male name male name from STP hear SENT.TOP LOG.SG go DP QUOT 'Lati₁ heard from Munyo₂ that $he_{*1/2/*3}$ had already left.'
 - c. $\mathbb{H}\oplus_1\mathbb{H}\oplus_2\mathbb{H}_2\mathbb{H}\oplus\mathbb{H}\oplus\mathbb{H}_{1/2/*3}\mathbb{H}\oplus\mathbb{H}_3$ lat \mathfrak{ti}_1 **mu nyox**₂ ddix da gge go $\mathfrak{op}_{*1/2/*3}$ bbo ox ddix. male name male name from STP hear SENT.TOP LOG.PL go DP QUOT 'Lati₁ heard from Munyo₂ that they* $_{1/2/*3}$ had already left.'

The logophor can occur in any syntactic position of the reported speech clause: as subjects as in (152), as direct objects as in (153a), or as adjunct noun phrases as in (153b).

- (153) a. អXា្ਬេះ៧៤₂មិ្ប្រមិ្ឌលិវិ。
 - \mathbf{mu} \mathbf{ga}_1 hxip go la hxa₂ \mathbf{ix}_1 nzur jox jjip ox ddix. male name say SENT.TOP male name LOG.SG hate POEP DP QUOT 'Muga₁ said that Laha₂ might hate him₁.'
 - b. $\mathbf{W} \mathbf{H}_1 \mathbf{B} \mathbf{H} \mathbf{\hat{F}}_2 \mathbf{\hat{H}}_1 \mathbf{d} \mathbf{I} \mathbf{H} \mathbf{M} \mathbf{I} \mathbf{H} \mathbf{I} \mathbf{\hat{I}} \mathbf{\hat{I}}$.

'Lupo₁ said that they₂ would come because of him₁.'

The other pronouns and the reflexive anaphor zyt jie (section 5.4.2) are illicit in reported speech constructions if they are taken to depend on a SOURCE. (154a) and (154b) show that third person pronouns cannot track secondary speakers.

- (154) a. 惟中, 州章, 爭目主义**1/2/3 崔 ⑩ 肈。 lat ti₁ mu nyox₂ jox hxip go $\mathbf{cy}_{1/2/3}$ bbo ox ddix. male name male name to say SENT.TOP 3P.SG go DP QUOT 'Lati₁ told Munyo₂ that he*_{1/2/3} had already left.'
 - b. 用序1月第2至列目》到第1/*2/3 查阅至。 lat ti₁ mu nyox₂ ddix da gge go **cop wox**_{$1/^{\star}2/3$} bbo ox ddix. name male name from STP hear SENT.TOP 3P.PL go DP QUOT 'Lati₁ heard from Munyo₂ that they_{1/*2/3} had already left.'

In the same vein, examples in (155) illustrate that the reflexive anaphor cannot depend on the secondary speaker.

- (155) a. *惟•,州••。 望图•**淮**州_{*1/*2/*3} 崔⑥••。 mu nyox₂ jox hxip go **zyt jie** $_{1/*2/*3}$ bbo ox ddix. male name male name to say SENT.TOP REFL DP QUOT 'Lati₁ told Munyo₂ that he himself_{*1/*2/*3} had already left.'
 - mu nyox2 ddix da gge go zyt jie_{1/*2/*3} bbo male name male name from STP hear SENT.TOP LOG.SG go OX ddix. DP QUOT 'Lati₁ heard from Munyo₂ that he himself_{1/*2/*3} had already left.'

If the speaker reports his own utterance, the logophor is illicit. In this case, the reflexive anaphor or the first person pronoun should track the speaker.

(156) Constraint of primary speaker:

The logophor cannot depend on a secondary speaker (SOURCE) who is also the primary speaker.

Examples in (157) illustrate this constraint.

*nga_{*1} hxip go i∗₁ ko wex OX mu. 1P.SG say SENT.TOP LOG.SG DP ADVL pass exam 'I₁ said that I_{*1} had passed the exam.'

- b. **岁**1图头**类以**1系统的H。
 - $egin{array}{lll} \textbf{nga}_1 & \text{hxip} & \text{go} & \textbf{zyt jie}_1 & \text{ko wex} & \text{ox} & \text{mu.} \\ 1P.SG & \text{say} & \text{SENT.TOP} & \text{REFL} & \text{pass exam} & \text{DP} & \text{ADVL} \\ \text{`I_1 said that I_1 had passed the exam.'} & & & & & \\ \end{array}$
- c. $rak{P_1}$ 目 $rak{P_1}$ 未 $rak{R}$ $rak{D}$ ho . **nga**₁ hxip go **nga**₁ ko wex ox mu.

 1P.SG say SENT.TOP 1P.SG pass exam DP ADVL ' I_1 said that I_1 had passed the exam.'

When the secondary speaker is the addressee or a third person, then the logophor should be used, as in (158) and (159).

- 11图字对1字系的字。 (158)a. ne₁ hxip \mathbf{i}_1 ko wex ox ddix. 2P.SG SENT.TOP LOG.SG sav pass exam **QUOT** 'You₁ said that you₁ had passed the exam.'
 - b. $\$_1 \exists \$ \$_{1/2} \$ \$ \widehat{\mathbb{N}} \widehat{\mathbb{N}} \$$ or \mathbf{ne}_1 hxip go $\mathbf{ne}_{*1/2}$ ko wex ox ddix. 2P.SG say SENT.TOP 2P.SG pass exam DP QUOT 'You₁ said "You_{*1/2} passed the exam" (= that I_2 passed the exam).'
- (159) a. $\mbox{$\chi_1$} \mbox{$\exists\, \pm\, \mbox{b}\mbox{\downarrow}} \mbox{\downarrow} \mbox{$$
 - b. $\lambda_1 \exists \forall \lambda_{*1/2} \Longrightarrow \widehat{\mathbb{R}} \widehat{\mathbb{Q}} \widehat{\mathbb{T}}$ cy hxip go cy*_{1/2} ko wex ox ddix. 3P.SG say SENT.TOP 3P.SG pass exam DP QUOT 'He₁ said he*_{1/2} had passed the exam.'

In very specific contexts, logophors may take referents outside the sentence, but only if it is understood that the immediately preceding sentence has an identifiable secondary speaker. The logophors cannot refer to someone in the physical world not mentioned in the discourse.

(160) a. $\begin{align*}{ll} $\mathbb{P}_2 \widehat{\mathbb{D}}_{1/*2/*3} & \mathbb{P}_3 \\ & nga_2 & ix_{1/*2/*3} & hxep yy. \\ & 1P.SG & LOG.SG & respect \\ & `(Lupo_1 said that) I_2 respect him_{1/*2/*3}.' \end{align*}$

b.
$$\lambda_2$$
 λ_2 $\lambda_{1/*2/*3}$ $\lambda_{1/*2/*3}$ hxep yy. $\lambda_{1/*2/*3}$ hxep yy. $\lambda_{1/*2/*3}$ hxep yy. $\lambda_{1/*2/*3}$ (Adje₁ said that) he₂ respects her_{1/*2/*3}.

(ii) Free in simple clauses

Similar to personal pronouns, the logophor cannot take its antecedent in the simple clause.

(161) Simple clause constraint.

The logophor must be free in simple clauses.

(162a) illustrates that two singular logophors in the same simple clause are illicit, (162b) shows the same point for the plural logophor, and (162c) for mixed singularplural logophor pairs. The reflexive anaphor zyt jie should track the logophor in simple clauses, as in (162d).

- *₩母1图》划18mm114位至。 (162) a.
 - *lu ti₁ hxip \mathbf{i}_1 ix_{∗1} hxep yy ddix. SENT.TOP LOG.SG LOG.SG male name say respect **QUOT** "*Ludi₁ said that he₁ respects himself_{*1}."
 - ***增**身1010*1月日第。 b.
 - *lu ti₁ hxip hxep yy ddix. go op_1 op_{*1} male name say SENT.TOP LOG.PL LOG.PL respect **QUOT** "*Ludi₁ said that they₁ respect themselves_{*1}."
 - - *lu ti₁ hxip ddix. go \mathbf{i}_1 op_{*1} hxep yy male name say SENT.TOP LOG.SG LOG.PL respect QUOT "*Ludi₁ said that he₁ respects them_{*1}."
 - - lu ti₁ hxip go ddix. \mathbf{i}_1 zyt jie₁ hxep yy SENT.TOP LOG.SG male name say **REFL** respect **QUOT** 'Ludi₁ said that he₁ respects himself₁.'

(iii) Bound by nearest secondary speaker

An ambiguity arises when two speech reports are embedded in each other with two secondary speakers. This ambiguity is resolved in Nuosu in the following way.

Nearest secondary speaker constraint. (163)

The logophor is dependent on the nearest secondary speaker (SOURCE) in case that there is more than one.

Example (164) shows two secondary speakers, *Laze* and *Ludda*. *Laze* is reported to inform on *Ludda*'s utterance. The logophor is contained in *Ludda*'s utterance and thus dependent on *Ludda*. *Laze* is blocked as potential antecedent of the logophor.

(164) $\mathbf{H}\mathbf{5}_{1}$ 집 $\mathbf{5}_{2}$ 기가, $\mathbf{W}\mathbf{2}_{3}$ 집가, $\mathbf{5}_{*1/3}$ 화온 $\hat{\mathbf{5}}$ 이유디크 $\mathbf{W}\hat{\mathbf{1}}$.

lat sse₁ hxip $ngop_2$ ge go, lu dda3 hxip go, male name 1P.PL SENT.TOP male name SENT.TOP sav tell sav **i**∗1/3 mup shy dex op rro la tat xi ddix. LOG.SG tomorrow should QUOT Xichang come

'Laze₁ told us₂ that Ludda₃ said that he_{*1/3} should come to Xichang tomorrow.'

In (165), two logophors occur at different clausal levels. The higher logophor occurs with *Ludda* in the same clause and can only be dependent on *Laze*. In line with (163), the lower logophor is dependent on the proximal *Ludda*, and hence cannot be dependent on the distant *Laze*.

 ${f lat\ sse}_1$ hxip go, ${f lu\ dda}_2$ hxip ${f ix}_{1/^{\star}2}$ ge go, male name say SENT.TOP male name say LOG.SG tell SENT.TOP

 $\mathbf{i}_{^{\star}1/2}$ mup shy dex op rro la tat xi ddix. LOG.SG tomorrow Xichang come should QUOT

'Laze $_1$ said that Ludda $_2$ told $\lim_{1/*2}$ that $he_{*1/2}$ should come to Xichang tomorrow.'

As logophors are bound by the nearest SOURCE, reference to the distant SOURCE can be made by means of the reflexive anaphor or pronouns.

 ${f lat\ sse}_1$ hxip go, ${f lu\ dda}_2$ hxip ${f ix}_{1/^{\star}2}$ ge go, male name say SENT.TOP male name say LOG.SG tell SENT.TOP

zyt jie_{1/*2/*3} mup shy dex op rro la tat xi ddix. REFL tomorrow Xichang come should QUOT

'Laze₁ said that Ludda₂ told $him_{1/\star 2}$ that he $himself_{1/\star 2/\star 3}$ should come to Xichang tomorrow.'

 $\textbf{b.} \quad \textbf{H$\$$}_1 \\ \textbf{A} \\ \textbf$

 ${f lat\ sse}_1$ hxip go ${f lu\ dda}_2$ hxip ${f ix}_{1/^{\star}2}$ ge go male name say SENT.TOP male name say LOG.SG tell SENT.TOP

 $\mathbf{cy}_{1/^{\star}2/3}$ mup shy dex op rro la tat xi ddix. 3P.SG tomorrow Xichang come should QUOT

'Laze₁ said that Ludda₂ told \lim_{1/\star_2} that $\lim_{1/\star_2/3}$ should come to Xichang tomorrow.'

When attitudes are reported, then two internal logophoric roles are assigned to constituents in the complex clause: SOURCE and SELF. The reflexive anaphor tracks the SELF and the logophor the SOURCE, as illustrated in (167a+b). The pronoun can also depend on the SELF (in addition to exophoric reference possibilities) but not on the SOURCE, see (167c).

(167) a. HC $_1$ 日钞, $\widehat{\mathfrak{I}} \times_2 \, \mathfrak{b}_{1/^*2} \, \mathbb{A}$ d $\in \mathbb{W}$ $\in \widehat{\mathfrak{I}}$ 。 **mu jy** $_1$ hxip go, ax ga $_2$ **i** $_{1/^*2}$ tep yy bi male name say SENT.TOP female name LOG.SG book read xi mgu ddix. hope QUOT

'Mudje₁ said that Aga_2 hoped that $he_{1/^*2}$ would attend school.'

HC₁图抄**引X₂≵闖**1/*2床d∈級受兌。 mu jv₁ hxip go ax ga2 zyt jie_{1/*2} tep yy bi male name sav SENT.TOP female name REFL book read xi mgu ddix. hope **QUOT** 'Mudje₁ said that Aga₂ hoped that she_{*1/2} would attend school.'

c. HC1 图 3 引 X 2 X * 1/2/3 未 d E 从 美 \hfta . mu jv₁ hxip go $ax ga_2$ tep yy bi **cy***_{1/2/3} male name say SENT.TOP female name 3P.SG book read xi mgu ddix. hope **QUOT**

'Mudje₁ said that Aga₂ hoped that she_{*1/2/3} would attend school.'

C. The dual pronouns

Nuosu exhibits semi-grammaticalized dual pronouns. The dual forms are made up of the singular pronouns and the number *nyip* 'two'. They have undergone the following tone changes.

Table 5.8: Dual pr	onouns
--------------------	--------

Person	Basic pronouns		'two'		Basic dual pronouns
1P	nga	+	nyip	\rightarrow	ngap nyit
LOG.SG	i	+	nyip	\rightarrow	ip nyit
2P	ne	+	nyip	\rightarrow	nep nyit
3P	су	+	nyip	\rightarrow	cyp nyit

In isolation, the plural pronouns refer to quantities equal to or greater than two. In the presence of a dual, however, the plural always denotes at least three participants. This effect on the interpretation of the plural pronouns is a cross-linguistic

trait of languages with dual pronouns (Siewierska 2004: 88). (168c) contrasts a dual with a plural pronoun that refers to at least three people.

ngap nyit jjyhxix da rre mop cyp dur nge go 1P.DL RECLsav STP SENT.TOP money NUM.1000 COP iivxapda ddap? RECL- NEGput INT

'Didn't we both agree on 1,000 dollars?'

. 论确实用操作论用**米体**生压量电器体象层进一,d

lat mop si nip lu ti nyix hxip go **ip nyit** mu ddix male name and male name both say SENT.TOP LOG.DL area a zzy ggat jjie ox ddix.

DEM.DIST place leave DP QUOT

'Lamo and Luti₁ both said that they₁ have left the area.'

nep nyit ngop rrox mu zza yy zyt dop bbo da.
2P.DL 1P.PL COV.replace food prepare go STP
'(Toward two people): Prepare some food for us (= speaker plus two other people).'

d. 1本意用证。

cyp nyit ggax shu njuo. 3P.DL path walk PROG 'They were both on the way.'

D. The possessive pronouns

Adnominal possessives are derived from basic pronouns forms through rhyme and tone changes. (Possessive noun phrases are characterized in section 5.2.2.)

Table 5.9: Rhyme and tone changes for possessive pronouns

Person	Basic pronouns		Basic possessive pronouns
1P	nga	\rightarrow	ngat
LOG.SG	i	\rightarrow	it
2P	ne	\rightarrow	nit
3P	су	\rightarrow	сур

The dual possessives are identical with the basic dual pronouns. The plural possessives are derived from the plural forms by omitting the suffix wox. Moreover, all the

pronominal possessives are invariably derived from adnominal possessives by suffixing the morpheme -vi.

Table 5.10: Possessive Pronouns

	Singular		Dual		Plural	
Person	adnom.	pronom.	adnom.	pronom.	adnom.	pronom.
1P	ngat	ngat vi	ngap nyit	ngap nyit vi	ngop	ngop vi
1P LOG	it	it vi	ip nyit	ip nyit vi	ор	op vi
2P	nit	nit vi	nep nyit	nep nyit vi	nop	nop vi
3P	сур	cyp vi	cyp nyit	cyp nyit vi	сор	cop vi

Several possessive forms are exemplified below. Examples (169e+f) illustrate that the plural possessive forms cannot append the suffix -wox; examples in (170) exhibit pronominal possessives pronouns.

- (169) a. 13年 jjip tie cyp 3P.SG.POSS character 'his character'
 - 1¥∃2 cyp nyit rre mop 3P.DL.POSS money 'The money of them both'
 - 以(表)以口 nop (*wox) ip mop 2P.PL.POSS belly 'your(pl.) bellies'

- b. 44 升手 nit mu tie 2P.SG.POSS handling 'your handling'
- d. 少岁点半点季 ndit fu ndit hne ngap nyit 1P.DL.POSS jewelry 'the jewelry of us both'
- f. 少(*爭) 小舟 ngop (*wox) rry ma 1P.PL.POSS teeth 'our teeth'
- (170) a. cyp nyit hxip go hlat gge ip nyit-vi CVX nge ddix. say SENT.TOP trousers DEM.PROX CL LOG.DL-POSS COP QUOT 'Both said that these trousers are theirs.'
 - h. ዘአዟችቸለዎችፋቸች ብ mu ga hxip go tep yy cy zzit **it-vi** nge ddix. name say COMP book DEM.PROX CL LOG.SG-POSS COP QUOT 'Muga said that this book is his.'

E. The personal pronoun sut 'someone else'

The morpheme *sut* (high tone) is an indefinite personal pronoun with the meaning *someone else*. Sometimes, it can be used adnominally with other human common nouns such as *co* 'person'.

- - cy jjie bbo yix ne hxi yip **sut** ddip jjip hxit. 3P.SG leave go provided that again someone at become can 'If she leaves, she can go to another (= marry someone else).'
 - b. 指申於前世母母素母目出。

lat ti **sut** ax pa guop jiet ddop ma hxip hxit. male name someone other country language speak can 'Lati can speak the language of other countries.'

- c. XX的订别为模划填。
 - cy **sut co** miep lie da yiet hxop yiet. 3P.SG someone in front of COV.put song sing 'He is singing in front of others.'

Similar to the quantifier *ax pa* 'other' (section 5.3.2.D), the pronoun *sut* exhibits binding properties captured by Chomsky's binding principle B: "A pronoun must be free in its binding domain" (1981: 188). The pronoun *sut* refers to an entity not mentioned in the same sentence but salient from the discourse context. We refer to this property as the *discourse anaphoric* property (Beck 2000: 103).

> li nzv ke lap vut jjo da CVX svt mu. TOP STP 3P.SG someone power under have business ob Discourse anaphoric: 'He does business under the authority of others' (different from himself).

- - cy **sut** ix go it. 3P.SG someone home LOC live Discourse anaphoric: 'He lives in the home of others' (not his own).
- c. 英明[1]日本单。

sut co bbyx cyp rre mop vup shux.
 others give 3P.SG.POSS money count CAUS
 Discourse anaphoric: 'Let others count his money' (different from him).

F. The versatile pronoun go

As a pronoun, the morpheme go refers to individual people or objects, collections of entities, places or destinations. Syntactically, it may not function as the subject (agent) of the clause and may not occur at the beginning of the sentence. With a few yerbs. the morpheme go developed into fixed lexicalized and grammaticalized expressions.

(i) For O-argument

The pronoun go can track a person or thing that occupies the role of patient (O). If the verb is monosyllabic and has a basic midtone [33], then the pronoun go switches to the sandhi tone gox (see Sandhi Rule 1, section 3.2.2).

```
(173) a.
        40≱∄。
         at nyop
                                ndux.
                       go
         female name PRO.PAT
                                beat
         'Anyo beats him/her/it/them.'
        48∮€՞
```

at zop gox mgu. female name PRO.PAT miss 'Adzo misses him/her/them.'

Many monotransitive verbs in Nuosu encode the semantic roles of A and O ambiguously if both arguments have human or animate referents (for details, see section 10.2.3). In a sentence like (174), the distributions of roles is uncertain.

```
(174) a.
        8. 玉宝宝化玉品
         lu po
                     mu gox
                                 lot buop.
         male name male name help
         'Lupo helps Mugo / Mugo helps Lupo.'
```

One technique of disambiguation is to use the morpheme go as resumptive pronoun for the O-role (section 10.2.3.C).

```
₩≌Ħ୬३≌표。
h.
    lu po₁
                    mu gox
                                                lot buop.
                                   \mathbf{go}_1
    male name male name
                                   PRO.PAT
                                                help
    'Lupo<sub>1</sub>, Mugo helps him<sub>1</sub>.'
```

(ii) For recipient

The pronoun go can also represent recipient noun phrases (indirect objects). As recipients tend to be animate, go refers to animate beings in this function.

(175) 알 버 传 남 맛 孝 🖁 🕅 .

vo mu nze ke jo **go** bbyx da. king power hand over PRO.REC give STP 'The king handed over his power to him/her/them.'

(iii) For location

Positional verbs such as *stand*, *sit*, *lie* require the specification of locative phrases, while most activity verbs allow locative phrases. The locative phrase may consist of just *go* which refers then to a place that is salient in the discourse situation.

(176) 🔻 🔾 對 ≢ 。

vut nyop **go** nyi. female name PRO.LOC sit 'Vunyo is sitting here/there.'

(iv) For direction

In the same vein, directional verbs (*go*, *come*, *enter*) require the presence of a directional phrase. The pronoun *go* can track destinations of directional verbs.

ox.

DP

(177) ฟิ⊖Ұ∢เป๋เ๋. co ma **go** vur la person CL PRO.DIR enter come

'Someone came in.'

(v) Lexicalized / grammaticalized meanings

The pronoun *go* has been lexicalized and grammaticalized in the neighborhood of a few verbs. With the directional verb *ddur* 'exit', it was lexicalized into an abstract predicate, *happen*. With two other verbs, *go* formed two resultative auxiliaries. With the verb *shep* 'search', it was grammaticalized as habitual aspect marker.

Tahla 5 11.	Levicalized	grammaticalized	expressions with an

Form	Lexicalized / grammaticalized meaning	Meaning of verb	Section
gox ddur	'happen', 'occur'	ddur 'exit'	
go zix	Phase auxiliary (INSERT)	zip 'insert'	section 7.2.2.C
gox sha	Resultative auxiliary (SEND)	sha 'send'	section 7.3.2.B
gox ssop	Resultative auxiliary (HIT)	ssop 'endure'	section 7.3.2.C
go shex	Habitual aspect particle (HAB)	shep 'search'	section 7.6.3

These meanings are analyzed in different parts of the grammar. Below are illustrations for each of these expressions.

(178) a. ¥XX爭U計出。

syt cy jjit **gox** ddur su nge. thing DEM.PROX CL happen FOC COP 'This thing will happen.'

b. ※¥¾¼₽√。

cy **go** zix zzax zze ge. 3P.SG INSERT food eat PROG 'He is in the process of eating.'

lat sse cyp xyp mop zip **gox** sha ji ngox. male name 3P.SG.POSS wife divorce SEND intend 'Laze intends to divorce his wife.'

d. 从紫目對何。

cy ddop hxip **go** ssop. 3P.SG word speak HIT 'He will say it right.'

Gerner (2004b: 1357)

e. ¦ጰθሮቋቌቘ፞。

ke cyx ma yo mgot **go** shex. dog DEM.PROX CL sheep chase HAB 'This dog used to chase sheep.'

G. Appendix: The particle go

Besides its pronominal use, the morpheme *go* exhibits one lexical and three grammatical meanings that are analyzed in different parts of this grammar.

Meanings Section of grammar section 5.2.1.C (i) Classifier for speech (ii) Pronoun for O- and oblique arguments section 5.4.1.F (iii) Locative case particle section 10.2.3.C section 13.2.2 Complementizer (iv) Topic particle section 14.1.3 (v)

(i) As classifier for speech

The morpheme *go* functions as classifier for speech and categorizes a small range of speech-related nouns (see section 5.2.1.C).

(ii) As pronoun for O- and oblique arguments

As a pronoun, *go* can represent people, things and places that are patients, recipients, locations or destinations of some activity. The pronoun *go* cannot function as subject or occur in clause-initial position. Examples were supplied in the previous subsection and are not repeated here (see also Gerner 2004a).

(iii) As locative case particle

The morpheme *go* also acts as locative case marker (Gerner 2004a). The specification of a locative phrase is obligatory for positional verbs (*nyi* 'sit', *hxit* 'stand', *it* 'lie' and so forth) and *go* is the default marker, unless the speaker wants to express a more specific position.

For verbs of motions, *go* functions as case marker of directional noun phrase to indicate the destination of a motion.

(iv) As complementizer

The particle *go* also is complementizer of certain matrix predicates. The verb phrase or clause marked by *go* is part of the argument structure of the main predicate. Complement clauses typically occur in initial position (see section 13.2.2).

```
(182) a. 引引之重求(?)
vo jjip go hxuo ddap ap- hxuo?
snow become COMP strong or NEG- strong
'Was the snowfall dangerous?'
```

。世北海水巨化岛早田沿岸

le she sip gup ke zha **go** li apzhet su nge. beef take throw dog feed COMP TOP NEG- good NOM COP 'It is not good to throw the beef to the dogs.'

c. $\% \% \hat{\lambda} \theta \Pi Y \Pi \pi d \Phi \pi \Lambda d$?

diep yyr cyx ma hxep go ijur hla ddap ijur-ap-hla? ne film DEM.PROX CL watch COMP 2P.SG fear fear<NEG> or 'Were you afraid watching the film?'

(v) As topic particle

The particle go can mark sentence topics that are not part of the argument structure of a predicate. Sentence topics occur in initial position and can optionally be marked by one of the topic markers *ne* (maintaining topic) or *li* (contrasting topic). For further information, see section 14.1.3.

(183) a. **市工事**大为效义本部。

> hxep jjit ga ap nzie. nga go syt cy SENT.TOP 1P.SG see matter DEM.PROX CL strange<NEG> 'In my view, this thing isn't strange.'

Lǐ & Mă (1981: 89)

"佢本母贷?" - "玉母本里出刊辛口?"

ap-SSO mix?" "ap sso kep mu go INT.where NEG- study SOL NEG study SENT.TOP TOP INT.how syp la?"

know come

"Why shouldn't we study?"

"If we do not study, how can we become knowledgable?"'

shvrx rruo la go ne ku ax di ku. come SENT.TOP TOP robber steal only steal 'If the robber comes, all he does is steal.'

d. 开某的母类学可以为对性实验类型。

op rro bbo go mu rryr li ggap mop go da male name Xichang go SENT.TOP TOP road LOC COV.put ndox bbo iii go su nge. LOC RES FOC fall COP go

'If Mudge goes to Xichang, he will collapse on the way.'

5.4.2 Reflexive anaphors

Nuosu is in process of substituting an older reflexive anaphor, *yip dde* 'self', by *zyt jie* 'self', a form which is borrowed from the Chinese reflexive anaphor *zìji* (e.g. Li & Thompson 1981; Huang & Liu 1993).

A. zvt jie 'self' as short-distance anaphor

In binding theory (Chomsky 1981: 188), a short-distance anaphor must depend on a c-commanding NP which occurs in the same simple clause ("Binding Condition A"). In Nuosu, two basic expressions serve as reflexive anaphor.

Table 5.12: Reflexive anaphors

Short form:	zyt jie	'oneself'
Long form:	zyt jie yip dde zyt jie	'oneself'

The short form is preferred by young speakers, the longer form is used by elder speakers. Both include *zyt jie* which is borrowed from Chinese *ziji*. The form *yip dde* is in process of being lost in Modern Nuosu. It preserved an independent use as emphatic pronoun (section D).

Oblique argument

Only the short form, not the long form is used in the possessor role of possessive noun phrases.

(185) Anaphor is possessor in possessive phrase

a.
$$\mathfrak{A}$$
 \mathfrak{A} $\mathfrak{A$

'Ayi₁ combed her own₁ hair (lit. Ayi₁ combed the [head of self₁]₂).'

b.
$$\mathfrak{S}_1$$
 其 \mathfrak{M}_1 划 \mathfrak{T}_2 (\mathfrak{X}_1) \mathfrak{H}_3 ngop wox₁ **zyt jie**₁ i dix₂ (zyt jie₁) ggat. 1P.PL REFL clothes REFL wear Possessor

'We₁ wear our own₁ clothes₂ (lit. we₁ wear the [clothes of self₁]₂).'

The anaphor *zyt jie* is subject-oriented; it cannot refer to the direct object (0) but must refer to the subject (A).

(186)
$$H imes_1$$
 引 \bullet_2 $\hat{\Theta}$ H $\left\{ \begin{tabular}{ll} \be$

B. zyt jie 'self' as long-distance anaphor

Like Chinese *zìji*, the reflexive anaphor *zyt jie* also tracks antecedents which are (i) possessors in a possessive noun phrases, or (ii) at a higher syntactic level of the matrix clause.

(i) Antecedent is possessor of possessive phrase

When the anaphor is the direct object, as in (187a), or the possessor of the direct object, as in (187b), then the subject antecedent "sub-commands" the antecedent (Huang & Liu 1993: 142).

b.
$$\[\exists \Re_1 \# \Theta_2 \# \#_1 \# \Psi_3 \# \]$$
 mu hlie₁ ddop ma₂ **zyt jie**₁ ngop ddux₃ zie. male name words REFL thought match '[Muhlie₁'s words]₂ match [his₁ thoughts]₃.'

The possessor antecedent is blocked if the possessee is a human referent. The only antecedent in (187c) is the possessee.

C.
$$\int_1$$
 $\bigcirc \Xi_2$ $\left\{ \begin{tabular}{ll} \be$

(ii) Antecedent is at higher syntactic level of matrix clause

The anaphor tracks the SELF in a matrix clause, "the one whose mental state or attitude the proposition describes" (Sells 1987). Example (188) illustrates the anaphor *zyt jie* for a verb of thinking, (189) for a verb of fearing. Only *zyt jie* (not the long form) occurs as the subject of the embedded clause. Alternatively, the SELF can also be tracked by the pronoun *cy*, see (188b) and (189b).

⁹ "Sub-command" is a weaker version of "c-command". A constituent A *sub-commands* a constituent B if and only if a constituent C which is mother or grandmother of A dominates B.

(189) a. ヤの1号2付き日本間1/*2/*3日冬手出。
at nyop1 ngat2 yy ddi mu **zyt jie**1/*2/*3 la ap- dop su jie
name 1P.SG.POSS because of REFL come NEG- can COMP fear
Main clause Embedded clause Main clause

'Because of me_2 , $Anyo_1$ is afraid that $she_{1/\star 2/\star 3}$ is unable to come.'

b. $\P^0_1 \Psi_2 d \P H R H_{1/*2/*3} \Pi F F F H_0$ at nyop₁ ngat₂ yy ddi mu $\mathbf{cy}_{1/*2/3}$ la ap dop su jie. female name 1P.SG.POSS because of 3P.SG come NEG can COMP fear Main clause Embedded clause Main clause

Examples in (190) represent reported speech. In (190a), both reflexive anaphors are bound by a third person pronoun which in turn can depend on Muga in the matrix clause or on some external referent.

'Lamo₁ told Muga₂ that he_{2/3} should better know himself_{2/3}.'

When we replace the third person singular pronoun by a second person, then reference to antecedents in the matrix clause is blocked, as in (190b). When we replace it by a logophoric pronoun, reference is routed to the speaker whose speech is reported, Lamo, as in (190c).

^{&#}x27;Because of me₂, Anyo₁ is afraid that she_{$1/^{*}2/3$} is unable to come.'

REFL know should QUOT

'Lamo₁ told Muga₂ that you₃ should better know yourself₃.'

$$\mathbf{c}$$
. 据 \mathbf{h} 1 州 \mathbf{h} 2 学习 \mathbf{h} 3 和 和 \mathbf{h} 4 **次**8 \mathbf{h} 5 。

'Lamo₁ told Muga₂ that he₁ should better know himself₁.'

C. zyt jie 'self' as emphatic pronoun

The short anaphor *zyt jie* (not of the long form) acts as emphatic pronoun when posed after a subject noun phrase.

(191) a. 多5#開州 对 no.

mup sse **zyt jie** bbur jjip ox.

'The colt obeyed by itself (without others forcing it to obey).'

b. ՄΗ죛**ՀՄ**ՉՕՒ

ngat pat vu **zyt jie** yix cur get. 1P.SG uncle REFL house build MOD.able 'My uncle can build a house alone (without outside help).'

c. 哲事**建**#季可以系第。

nop wox **zyt jiet** yiep yot zy mo ddix. 2P.PL REFL potato plant MOD.committed

'Prepare the planting of potatoes vourselves (without outside help).'

The short anaphor *zyt jie* can be used in a statement of general truth, when no specific and definite referent is intended. The anaphor assumes the function of indefinite pronoun similar to the English *one*.

(192) #1000, #11 代证。

zyt jiet nyop bbop, **zyt jiet** mgat.

REFL work REFL advantageous 'If one is working, then one is happy.'

D. yip dde 'original-self' as emphatic pronoun

The expression *yip dde* (which is a component of the reflexive anaphor *zyt jie yip dde zyt jie*) has limited use as emphatic pronoun after a subject noun phrase.

(193) a. HF**米ダ**リトコせ。

lat sse **yip dde** li hmat mop nge. male name original-self TOP teacher COP 'Originally, Laze is a teacher.'

b. 1¥**∑**੫ÂKUX££X∑‡.

cyp **yip dde** li ax ga la ap- dop su cy dde jji. 3P.SG original-self TOP female name come NEG- can COMP 3P.SG know 'He originally knew that Aga cannot come.'

c. ካከ୬ሁ***፬ ‡** ¼ **¾** ሀ ¼ ዓ。

nga hxep go ngat **yip dde** nyi cyx mo li ap-but. 1P.SG see SENT.TOP 1P.SG original-self also 3P.SG see go up NEG-dare 'In my view, I originally do not dare to go to see him.'

Derived from the function of emphatic pronoun is the adverb *yip dde go* 'originally' whose position is immovable after the subject of the clause.

> cyx gge li **yip dde go** nop gox mu tat xi. DEM.PROX CL TOP originally 2P.PL PRO.PAT do should 'Originally, you should do these things.'

5.4.3 Demonstratives

Nuosu employs two basic demonstratives with exophoric, anaphoric, cataphoric, and recognitional uses (Diessel 1999). Furthermore, there is an *indefinite demonstrative* that can be glossed by 'such as this/that'. Indefinite demonstratives are attested in several languages worldwide. They are often morphologically derived from definite

demonstratives (Lyons 1999: 151). 10 Rarely, they are single morphemes as in Nuosu. The indefinite demonstrative may be compounded with definite demonstratives to express discourse deictic meanings. There are also three adverbial demonstratives, two encode relative distance to the speaker, one expresses discourse deixis.

Table 5.13: Demonstratives

Distance value	Definite determiner	Indefinite determiner	Pronoun	Adverb
indefinite proximal / recent distal / remote	cyx a zzyx	xip	xip cyp xip a zzyx xip	xip mu tit a ddit

The demonstratives in Table 5.13 have overlapping discourse functions. The following table shows the different discourse function of each demonstrative.

Table 5.14: Pragmatic uses of demonstratives

Pragmatic uses	Form	Pragmatic uses	Form
Exophoric: indefinite	xip	Anaphoric	cyx, a zzyx
Exophoric: proximal	cyx, tit	Cataphoric	cyx, xip, xip mu
Exophoric: distal	a zzyx, a ddit	Recognitional	a zzyx
Discourse deixis: indefinite	xip, xip mu		
Discourse deixis: recent	cyp xip		
Discourse deixis: remote	a zzyx xip		

The demonstratives cyx, a zzyx and xip are adnominal determiners attached to the right of a common noun. They require a classifier in order to individuate the nominal concept.

The demonstrative determiner construction: N+DEM+CL

The analysis of demonstratives proceeds in the following order: cvx and a zzvx (section A), xip (section B), cyp xip, a zzyx xip and xip mu (section C), tit and a ddit (section D).

10 Turkish and Japanese have two contrastive sets of definite and indefinite demonstratives:

	DEF.PROX	DEF.MED	DEF.DIST	INDEF.PROX	INDEF.MED	INDEF.DIST
Turkish	bu	şu	0	böyle	şöyle	öyle
Japanese	kono	sono	ano	konna	sonna	anna

A. The demonstratives cyx and a zzyx

The demonstrative cvx tracks noun referents that are located close to the deictic center, either physically to the speaker or temporally to the time of utterance. The demonstrative a zzvx is the counterpart of cvx. It indicates relative distance from the deictic center. The morphemes cyx and a zyyx have four pragmatic uses: exophoric, anaphoric, cataphoric and recognitional.

(i) Exophoric uses

Demonstratives refer exophorically when their referents are located in the physical speech situation. Exophoric reference is the core function of the demonstratives cyx and *a zzyx*. Examples (196a–c) illustrate the proximal *cyx* which refers to real world entities that are obvious and at hand.

- 1.8.0 £ 4.1**%** 3.1ℓ (196) a.
 - bbu shy **CVX** ji ne tatijip! snake DEM.PROX CL 2P.SG NEG.IMPtouch 'Don't touch this snake!'
 - ኯኯ፞፞፟፟፟፟፠ጜ₭ቇ፞፞፞፞፞፞፞፞ኯ፟ b.

vit gga jjie shyr gox sha. nga cyx ggu clothes DEM.PROX CL tear SEND 'I will tear these clothes into pieces.'

、KENHKDAK。

cv tep vv zzit bi tat xi. 3P.SG book DEM.PROX CL MOD.should read 'He should read this book.'

The distal demontrative in (197a) can be uttered by a speaker who looks over a village from the top of a mountain. The context of (197b) suggests visibility of the village. It is naturally uttered in a context in which the speaker uses fingers to point at the referent in the speech situation.

。用季化丰**菜**比的毫份。 (197) a. cop wox co a zzyx yie ijie bbo mat. go 3P.PL person DEM.DIST CLLOC leave go **FEAR**

'It is a worry that they leave that family.'

ኯ፠ቨ**ረካ**፟ቜፁኯዸ፠ብ° ngap nyit bbap ga a zzvx ma go hxep da li. 1P.DL village DEM.DIST CL LOC COV.watch go up 'Let's go up to that village (on top of the mountain).'

(ii) Anaphoric uses

English typically uses an indefinite article for the introduction of new referents in discourse (Himmelmann 1996). For the second mention, it uses an anaphoric demonstrative (*this, that* or *these* but not *those*) which aims to establish previously new referents as major discourse topics. Any third or subsequent mention maintains or reactivates previously established referents. Third and higher mentions are represented by third person pronouns and definite articles but not by anaphoric demonstratives.

Nuosu resembles English. Indefinite articles introduce new discourse participants. Both *cyx* and *a zzyx* are used as anaphoric demonstratives to establish new referents as major discourse topics or to reactivate them if they have phased out from discourse attention.

(198) $\hat{0}$ $\hat{0}$ sho mo cyp nyip **cox ma** diep huop ndup nga bbvx. co three days ago man CL telephone hit 1P.SG give man ma hxip go a zzvx ngat qop bop DEM.DIST CL say SENT.TOP LOG.SG 1P.SG.POSS friend ma nge ddix, tit **cv** kax ddi nge su nga CL COP QUOT but 3P.SG who COP NOM 1P.SG PRO.PAT ddur ap- la, nga **cyp** jox hna lox, wax know exit NEG- come afterwards 1P.SG 3P.SG to ask CONJ man a zzyx ma li qop bop apnge ddep lox, ngat DEM.DIST CL TOP 1P.SG.POSS friend NEG- COP originally cv diep huop ndup yot ox. 3P.SG telephone hit

'Three days ago, a man phoned me. That man said that he was a good friend of mine, but I did not know who he was. So after I insisted, the man acknowledged that he was not my friend and that he had dialed the wrong number.'

The first mention is marked by an indefinite article, the second mention by the distal anaphoric demonstrative a zzyx, the third and fourth mention by a third person pronoun. The fifth mention is marked again by the anaphoric demonstrative a zzyx and the sixth by a third person pronoun. The use of a zzyx for the fifth mention of the referent has the function of reinforcing the referent as discourse topic.

In (199), cyx has an anaphoric use and tracks the referent Muga who was introduced previously in discourse.

(199). 公然米母康**父母说的**, 生界中美, 企家自己的重多者**使**生臣**又此**。

op rro **mu ga** hxip go i mup shy dex la name COMP LOG.SG tomorrow Xichang say come yip ddix, tit nga hxep go, co cvx ma DEM.PROX EXCL QUOT but 1P.SG see COMP man CLcv mgie ngap nyit zi hxit. 3P.SG cheat 1P.DL cheat say

'Muga said that he would come to Xichang tomorrow. In my opinion, this man is cheating us both.'

The following dialogue exhibits two sentences of semi-direct speech (in which some but not all of the deicitic centers are converted). The first utterance introduces a dog which is not in visible reach of the speech site. The second utterance refers to that dog by means of the proximal demonstrative *cyx*.

(200)Chén & Wū (1998: 217) "话只说中国来自了"了。 hna lax "ne vvt vu gox xix sip sy, elder brother PRO.PAT ask come still 2P.SG INT.what COV.take mux mo zze" ddix "i kex ma sip go ne, soil plough eat QUOT COMP TOP LOG.SG dog CL COV.take mux mo zze" ddix. ix vi jox hxip "nit soil plough eat QUOT younger brother to say 2P.SG.POSS sv" ddix. ke cyx ma sip ix hxe lax dog DEM.PROX CL COV.take LOG.SG borrow come still, again QUOT

'The elder brother asked him again: "With what do you plough the earth to make a living?" (His brother replied:) "I am using a dog." (He said) again to the younger brother: "Let me borrow (this) your dog."'

(iii) Cataphoric uses

Only the proximal demonstrative cyx, but not the distal azzyx, can have cataphoric reference. Nuosu resembles English in this regard which only uses this not that for cataphoric reference. Example (201a) with cyx has a natural cataphoric reading although it may also be interpreted anaphorically, especially if we omit the locative demonstrative tit. By contrast, (201b) is only understood anaphorically since a zzyx must refer back to a referent mentioned previously.

- - ne (tit) **ddop ma cyx go** cuop luo hna. 2P.SG DEM.here word DEM.PROX CL little bit listen 'Please listen to this word (that will follow).'

ne **ddop ma a zzyx go** cuop luo hna. 2P.SG word DEM.DIST CL little bit hear 'Please listen to that word (that you heard previously).'

(iv) Recognitional uses

Recognition is a type of reference to entities whose knowledge is shared by the speaker and the addressee (Himmelmann 1996: 230–239; Diessel 1999: 106). The shared knowledge is usually new, not mentioned in previous discourse, unactivated and consisting of *private* information not readily available to outsiders. It is part of the specific history of the speaker and addressee.

In Nuosu, only a zzyx not cyx can have recognitional uses. In (202), a zzyx reactivates the experience shared by the speaker and addressee about a heavy storm. The proximal demonstrative cyx cannot be employed here, at least not with a recognitional meaning.

(202) 水下水分生剂水用含油菜 (/ #菜) 生粉末半 水料用最多米的 (/ #cyx) ap nyip miep ma hxa ax guo mu jjip a zzyx (/ #cyx) recently before rain violent ADVL fall DEM.DIST DEM.PROX ddip hxix ne syt ap- jjo mu ix go xi ox bat? day 2P.SG incident NEG- have ADVL house arrive DP SUG 'Did you arrive home safe with that awful storm last week?'

B. The demonstrative xip

The term *indefinite demonstrative* is used in two ways. In languages of Middle and South America (Tupí, Cariban and Amazonian families), this term describes indefinite pronouns like *someone*, *something*, *somewhere*, which can be turned into interrogative pronouns in the presence of an additional interrogative particle (see Hoff 1968: 271; Bhat 2004: 236–237).

The name of indefinite demonstrative is also used for forms that convey a 'variety interpretation' and can be paraphrased by *such as* or *of this/that kind* (Lyons 1999: 40–41).

- (203) a. I wish I could afford to buy that car.
 - b. I wish I could afford to buy *such a* car.

- (204)I'd love to have those colleagues.
 - I'd love to have *such* colleagues.

The demonstratives that and those in (203a) and (204a) are indefinite, at least on a certain reading. They refer to a class of entities not to specific members of that class. We adopt for this use the term of indefinite demonstratives.

The Nuosu indefinite demonstrative xip is not marked for distance. It co-occurs with classifiers like the other demonstratives in construction (195). The variety interpretation of *xip* is illustrated in the following example.

(205)

> syt xip zha mix ne cyx mu apdop. affair DEM.INDEF CL even 2P.SG 3P.SG do NEG- MOD.can 'You are not even capable of doing a small thing like this.'

The demonstrative xip is often used after nominalized clauses to make up a variety of situations that match the description of the nominalization.

(206)。门里尼沙州全路分类北部入设与专州。

> vot vi shep ddop ma xip go male name behind mistake look for NOM word DEM.INDEF CL lat hxa hxip shu la. male name say cause come 'Lati spoke such an accusation against Laha.'

씨교리ᄎ박병회첫귀ឫ병. (207)

> iiit mu nzox ox. lu po svt he vat xip male name TOP affair good good DEM.INDEF CL do EXP DP 'Lupo did such a good thing.'

Nuosu speakers also employ xip when the identity of a referent is known to them but unknown to the addressee. It is glossed then as 'a certain'.

(208)

> nga la six lur kur bi ji hmi **xip** ma go xi ox. 1P.SG come RES city place name name DEM.INDEF CL LOC arrive DP 'They arrived in a certain city called Beijing.'

The indefinite demonstrative is also used for cataphora, the reference to an entity whose identity is established in subsequent discourse. In texts, the indefinite demonstrative *xip* is employed cataphorically more often than the demonstrative *cyx* (section A).

(209) 型用家用銀幣計: (…)
vo mu ne vup zzyp **xip** ji jjo: (…)
king TOP custom DEM.INDEF CL have
'The king had a custom like this...'

In (210), *xip* co-occurs with the collective classifier *gge*. The referent is established through comparison with a contextually salient participant.

(210) 冬片以拿到川子宁のӨ內山口。

hot put kep nyix **xip** gge jjy gex op rro da ddur la. people QUANT.several DEM CL together Xichang COV.put exit come 'A group of several people like this moved out of Xichang.'

C. The demonstratives cyp xip, a zzyx xip and xip mu

Two pronominal demonstratives express the concept of discourse deixis: *cyp xip* and *a zzyx xip* which are complex demonstratives consisting of *cyp* 'this' or *a zzyx* 'that' and the indefinite demonstrative *xip* 'such as'.

A form has discourse deictic reference if it is coreferential not with a noun phrase but with an abstract entity evolving from discourse: a thought, an event, a proposition or an illocution. The English pronominal demonstratives *this* and *that* (not *these* and *those*) can express discourse deixis. Discourse deictic elements aim to stratify the flow of information. They draw the addressee's attention to speech-related entities which do not have any existence in the outside world or even in subsequent discourse. The following example illustrates a discourse deictic use of *that* (Himmelmann 1996: 224–229):

(211) Teams have been working together since August to get here and we want them to have a good time. *That*'s why Pop Warner moved to the Disney complex three years ago. (USA Today, 12th December 1997)

The demonstratives *cyp xip* and *a zzyx xip* exclusively serve the function of discourse deixis: *cyp xip* represents the abstract entity as something close to the deictic center, *a zzyx xip* as something remote from the deictic center.

```
(212) 月\hat{\mathbf{H}}: "母宝头不当宝里女\hat{\mathbf{C}} \hat{\mathbf{H}} 专业总案" \hat{\mathbf{T}} 。
      情句: "「劉/北京日子子子子" 章。
      mu nyox:
                   "co
                          ddip go
                                        ap hxiet ddip kut sut
      male name people say COMP last year
                                                          other people
                   vox
                          ma ne
                                    ku
                                          six bbo" ddix.
                   sheep CL 2P.SG steal RES go
                                                      QUOT
      lat hxa:
                   "cyp xip / a zzyx xip mux ke dop su
                                                              ap map!" ddix.
      male name DEM.DD
                               DEM.DD
                                           nonsense
                                                        NOM EXCL
                                                                         OUOT
      'Munyo: "Some people say that you stole a sheep last year."
      Laha: "This (= proposition) / that (= past situation) is nonsense!"
```

In (213), cyp xip and a zzyx xip refer to a past event not the proposition previously uttered. They indicate different degrees of remoteness of the event.

(213)於明紅夷柱貨目太日。 13/1岁3 中世生的。 nop wox six sut co ssot vat iiv vat. other people 2P.PL entertain RES good verv good cvp xip a zzvx xip nga wep mo ox. DEM.DD DEM.DD 1P.SG DP get see

'You treat other people very well. I saw this (recent) / that (remote).'

Sometimes *cyp xip* and *a zzyx xip* are reduced to *xip*, especially when occurring in sentence-initial topic position. The demonstrative *xip* may co-occur with the topic marker li.

的次间通出;到14是任任美格下的16次。 (214)

> turx io! CVX gge xip li cop wox mu DEM.PROX TOP people CLbeware DEM.DD 3P.PL do qob xoi zzip ngop bbop. su intend NOM pay attention

'Beware of these people! This is what they do, pay attention.'

The demonstrative adverb xip mu 'in this/that way' consists of xip and the adverbializer mu (section 5.3.2.J). It is used for discourse deixis, oriented toward past discourse, as in (215)–(216), or future discourse, as in (217).

- "B点10的某个资。 X**旬H**承剩31的的10的目光。 (215)lu ti ap si si mu op rro bbo ji ngox. cy xip mu DEM.DD male name secretely ADVL Xichang intend 3P.SG go ngop te ne cox ma jox hxip... go cyp think time LOC TOP person CL3P.SG to sav 'Luti intended to go to Xichang on his own. While he was thinking over this (lit. in this way), someone told him...'
- (216)ssox sse nop mox gex nep gox iio ox DP student 2P.PL before only then PRO.LOC have nyi xip mu hxop hmat. ggex su, lat mop cop wox ART=CL-DET DEM.DD male name also 3P.PL teach 'Lamo also taught the students who were here before you in that way.'

(217) Chén & Wū (1998: 230)

cyp ggup jjux ne bbap ga co ggex su 3P.SG afterwards TOP village people ART=CL-DET

"jjix mu vyt hop xip mu hxip: lot ji ijuo su li (\ldots) CLTOP DEM.DD say name hand cut off NOM

'Afterwards, the village people spoke like this: "Jjimu Vuho's hand was cut off because...'

The expression *xip mu da* 'therefore' is composed of *xip mu* and *da* and is a metasequential marker indicating a conclusion of some preceding reasoning.

(218) 对第分打工事例针升上出? 图开网, 开兴时息自至自己说。

nop wox kax ddi hxo lo da svt mu su nge? -2P.PL INT.who depend STP affair COP do NOM xip mu da, mu ga ssot six vat-jjy-vat tat xi. therefore name treat RES good-very-good should 'On whom do you depend to solve difficult situations? – For this reason,

You whom do you depend to solve difficult situations? – For this reason you should treat Muga very well.'

D. The demonstratives tit and a ddit

The term demonstrative adverb is reserved for the locative deictic pronouns *here* and *there*. They indicate the location of an event in respect to the deictic center.

In Nuosu, *tit* 'here' and *a ddit* 'there' are demonstrative adverbs. They occur before the verb phrase. Both demonstratives must take the locative particle *go* or coverb *da*. The bare demonstratives can be used with locative verbs (*sit*, *stand*, *lie*) and basic directional verbs (*go*, *come*).

(219) a. 手觉用手觉手世堂门?

ne xix mu bur six **tit** ngat ddip la? 2P.SG INT.why return RES here 1P.SG LOC.at come 'Why are you coming back here (where I am)?'

ne xix mu bur six **a ddit** ngat ddip la? 2P.SG INT.why return RES there 1P.SG LOC.at come 'Why will you be coming back there (where I will be)?'

c. 月**天**季刻升紫炎素目。

mu ga **tit** da mu rryr jop ddop hxip. male name here COV.put male name to word speak 'Muga is talking here with Mudge.' . ኮሜዚዪቴክቴል .b

cy **a ddit** go da qie ot yy. 3P.SG there LOC COV.put spring low go down 'He can jump down from there.'

e. 月月月日日日</l

mu ga **a ddit** nyi ggup jjux ne, tep yy bi. male name there sit afterwards book read 'After Muga sat there, he read a book.'

Sentences in (219a–e) have SV or AOV order in which the demonstratives *tit* and *a ddit* occur after the S/A- and before the O-argument (if there is any). When the clause has an obligatory OAV order, the adverbs occur after the O- and A-arguments, as in (220a+b).

(220) a. 肾氧闭承手网XQOHQEE。

vit gga ax mo **tit** da cy six tu mu tux zyr zyr. clothes mother here COV wash RES snow-white 'Mom washed here the clothes as white as snow.'

co dur co hxa cyx gge mu ga **a ddit** go people thousand people hundred DEM CL name there LOC wep mo ox. see DP

'Muga saw thousands of people there.'

The demonstrative adverb *tit* has been grammaticalized into a contrastive conjunction with the sense *but* (section 13.1.3.A). This development is comparable to the English time deictic *now* which has non-deictic discourse-marking functions in sentences like *now that was a good objection*. When *tit* is employed as conjunction, it must occur in sentence-initial position.

(221) a. 开兴贺坐9第县,季贺坐生村拿日愈。

mu ga lu po jox ddop hxip, **tit** lu po ne it nyi gu ox. male name male name to word say but male name TOP sleep DP 'Muga said something to Lupo, but Lupo was sleeping.'

b. 岁享可表象作刊, 至天戊素条定作化刊。

vit gga li bbox sho tit bbox sho sat nge, jjy gex clothes TOP clean NOM COP all clean **EXH** but su apnge. NOM NEG-COP

'The clothes are clean, but not all of them.'

5.4.4 Bare common nouns

Nuosu allows bare common nouns to have generic, specific indefinite and specific definite reference. We understand *specificity* as the existence of the referent in the physical world (for discussion, see Farcas 2002). *Definiteness*, by contrast, refers to the guarantee of identifiability of the referent (section 5.4.5).

In Nuosu, bare common nouns in topical position are either generic or definite specific. Example (222) expresses a general truth and has the bare common noun $\it co$ 'person' in sentence-initial position. The bare common noun is marked by a topic morpheme.

(222) №111月74年90。

cox li nge get jjy- ap lop sup. man TOP QUANT.all RECL- roughly resemble 'All people are roughly the same.'

The bare noun *bi mop* 'priest' in (223) is more natural with a specific definite reading. (Usually, there is only one priest per village).

(223) 长刀山瓜川姆倭州黨皇。

bi mop li nyop mu co mgep da zzax zze. priest TOP peasant together food eat 'The priest is eating together with the peasants.'

The second mention of *nzy mop* 'governor' in (224) is a bare noun which is interpreted as specific and definite.

(224) 月ばた2分も労需国。 は2次単元 **11 年。

mu iie nzy mop CVX ma iox ddop hxip. male name governor DEM.PROX CL to word speak hxie qyt la sha. **nzy mop** cy shu 3P.SG CAUS greatly worried governor

'Mujie spoke to the governor and made the governor greatly worried.'

Nominal predicates that are bare nouns generally have a generic meaning.

(225) おりまり。

nga **mop su** ox. 1P.SG old man DP 'I am an old man now.'

Bare common nouns that are direct objects of monotransitive verbs can have generic, specific-definite and specific-indefinite reference. The bare noun vot bbu sse 'piglet' in (226a) has a generic and specific-indefinite reading; the bare noun ma gop 'lamp' in (226b) is specific-indefinite, and vo mu 'king' in (226c) is specific-definite.

```
(226) a.
         . ጵ ጊኬ ሇ አዚ
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mu ga vot bbu sse vup. name piglet sell

- (i) 'Muga sells piglets (now: specific-indefinite).'
- (ii) 'Muga sells piglets (it is his job: generic).'
- b. 业量菜菜面的每半生的饲效。

ngop wox jjyx rex dde go ma gop ddie go dut da. 1P.PL meeting point LOC lamp COV PRO.LOC lighten put 'At our meeting point there were lamps lit with fire.'

cvp svt iiit su cop wox hxip vo mu ge. 3P.SG.POSS matter ART=CL-DET 3P.PL say king tell 'They told the king about his problem.'

When bare common nouns are direct objects of monotransitive verbs that are negated or modified by modal verbs, they are typically interpreted as generic (unspecific and indefinite).

```
. @ B 7 K 4
(227) a.
```

nga nrv apndo ox. 1P.SG wine NEG- drink DP

- (i) 'I did not drink the wine (specific and definite).'
- (ii) 'I did not drink wine (generic).'
- b. አዝଘሄደ.

mo ddix. сy nry ndo 3P.SG wine drink MOD.committed

- (i) 'He wants to drink the wine (specific and definite).'
- (ii) 'He wants to drink wine (generic).'

5.4.5 Indefinite and definite articles

Cheng & Sybesma (1999) argue for Chinese that classifiers are the counterpart of the definite article the in English, while Wu & Bodomo (2009) disagree. In Nuosu, definiteness and indefiniteness are marked in the noun phrase. The classifier contributes to the formation of indefinite and definite articles. There are two semi-open classes of articles indexed by the set of classifiers.

(228) *In/definite article constructions*: (i) N+CL; (indefinite) (ii) N+CL*+su. (definite)

The asterisk indicates tone sandhi changes of the classifiers (section 3.2.2). If the classifier in isolation has the midtone $[^{33}]$ as most classifiers do, then it switches to the tone sandhi $[^{44}]$. If the classifier is in the low tone $[^{21}]$ or has the high tone $[^{55}]$, then the tone does not change. The particle su contributes to the formation of the definite article (Chén 1989). The view that su functions as determiner (Hú 2002: 140; 2004) is not correct as it does not directly modify bare nouns.

(229) a. ***** b. **以 ** tle su person DET ox DET Intended meanings: 'the man' 'the ox'

Sortal and mensural classifiers can both form indefinite and definite articles. Consider the following examples:

- (230) a. 乖E中 bbu shy **ji** snake CL 'a snake'
 - c. da hmo water CL 'a river'
 - e. 章 Y M yiex syr **zi** broom CL 'a broom'
 - g. 孝凡和 hnap chot zzyr gun CL 'a gun'
 - i. 组中兼 a ji **bbut** sieve CL 'a sieve'

- b. ជាខម៌ារៈ bbu shy **jix su** snake ART=CL-DET 'the snake'
- d. 日曜日 yy **hmox su** water ART=CL-DET 'the river'
- h. 孝承希集 hnap chot zzyrx su gun ART=CL-DET 'the gun'
- j. 引导张步 a ji **bbut su** sieve ART=CL-DET 'the sieve'

間帐章 k. ie avt gge water CL '(some) water'

БӨЖ m. bbur ma rre chracter CL 'a row of written characters'

ልከ**&** ο. da yi bbop storehouse CL 'a room in the storehouse' 1. 夕州間井 ie gyt ggex su water ART=CL-DET 'the water'

ո. հժՅե bbur ma rrex su ART=CL-DET chracter 'the row of written characters'

թ. ՋրՖ∦ bbop su da vi storehouse ART=CL-DET 'the room in the storehouse'

One view of definiteness is known as the familiarity hypothesis. On this view, definite noun phrases signal that the referent is familiar to both the speaker and hearer. Indefinite noun phrases do not indicate such shared familiarity. The familiarity hypothesis was originally formulated by Christophersen (1939). Hawkins (1978) is one modern work within this tradition.

Some scholars proposed to replace familiarity by identifiability as in certain sentences definite articles cannot be understood to indicate familiarity but rather a guarantee of identifiability. The identifiability hypothesis was put forward by Lyons (1999: 6-7) who provided the following English example in which Ann is trying to put up a picture on the wall. Without turning round, she says to Joe who just entered:

(231) Pass me **the** hammer, will you?

Joe looks around and sees a hammer on a chair. The definite article in (231) tells the addressee that he can identify the hammer Ann is talking about. Familiarity would not be an appropriate characterization for this use of the.

The Nuosu definite articles provide a guarantee of identifiability but exhibit differences with their English counterpart. Firstly, like Ancient Greek and Modern German but unlike English, Nuosu can use definite articles for proper names and clan names. Indefinite articles can specify clan names but not proper names.

Proper names b. H#6# ◆別川* (232) a. *mu jie mu jie ma max su male name CL male name ART=CL-DET 'a Mujie' 'the Mujie'

Clan names

(233) a. $H H \theta$ b. $H H \hat{\theta} H$ sha mat max su sha mat clan name CL clan name ART=CL-DET 'the member of the Shama clan'

For entities with a unique referent in the real world, identifiability is derived from general world knowledge. In (234), the sun or other unique celestial bodies have definite reference. The use of the definite article is grammatical, the indefinite article is ungrammatical.

Referents whose uniqueness is derived from world knowledge

(234) 日東子町(*仓 / 仓 身) 即日判決,及漁 阜 ⑩。
mu ti hxo bbu (*ma / max su) ddur la te go, cy zzax zze ox.
morning sun CL / ART=CL-DET exit come when 3P.SG food eat DP
'When the sun rose in the morning, he ate some food.'

The noun *zzyt mu* 'physical world' often co-occurs with the demonstrative determiner cyx 'this' but is compatible with the definite article as well, see (235a+b). The function of the demonstrative is to contrast this world with the afterworld. The indefinite article cannot be used, as in (235c).

- (235) a. 窓日発舟日本⑥。

 zzyt mu cyx ma mu cy ju.

 world DEM.PROX CL QUANT.whole 3P.SG rule

 'He rules this whole world.'
 - b. 終日竟計日※6。
 zzyt mu **max su** mu cy ju.
 world ART=CL-DET QUANT.whole 3P.SG rule
 'He rules the whole world.'
 - c. 窓刊(*も) 月x6。 zzyt mu (***ma**) mu cy ju. world CL QUANT.whole 3P.SG rule Intended meaning: 'He rules a whole world.'

The noun *vo mu* 'emperor, king' is taken to be the supreme ruler of a given area. It can be used as bare noun or with the definite article but not with the indefinite article as it would imply that there is more than one supreme leader.

- - cy ddop shep hnox vo mu ddix xi bbo. 3P.SG appeal EXT.until king LOC.at arrive go 'He is appealing to the king.'
 - b. *从最职置9月日全国的基外*。
 - *cv ddop shep hnox vo mu ma ddix хi bbo. appeal EXT.until LOC.at 3P.SG king CL arrive go 'He is appealing to a king.'
 - c. 从需期的引用引用实现率
 - cy ddop shep hnox vo mu **max su** ddix xi bbo. 3P.SG appeal EXT.until king ART=CL-DET LOC.at arrive go 'He is appealing to the king.'

Nuosu definite articles have exophoric and anaphoric uses which are also the functions of demonstratives. Articles express a guarantee of identifiability, whereas demonstratives incorporate deictic meaning.

- (237) Exophoric uses

ne vit gga **ggux su** ddie cyx gat. 2P.SG clothes ART=CL-DET COV.prepare 3P.SG put on 'Please dress him with the clothes (here).'

1 ¥ ¥ ¾ ¾ ± ¾ ※。

ne vit gga **cyx ggu** ddie cyx gat. 2P.SG clothes DEM.PROX CL COV.prepare 3P.SG put on 'Please dress him with these clothes (finger pointing).'

Demonstratives and definite articles differ in that definite articles can but demonstratives cannot express associated anaphora (Hawkins 1978: 150–151; Himmelmann 1996: 210–211). For associated anaphora, the referent is associated with an entity previously mentioned. In (238), the definite article is used for associated anaphora and cannot be substituted by a demonstrative.¹¹

(238) Associated anaphora

tit cyp xyp mop **max su** (/*cyx ma) ssa hxuo ggup jjux, but 3P.SG.POSS wife ART=CL-DET DEM CL capable afterwards ddop hxip get xip ma. word speak can DEM.INDEF CL

'But his wife was capable and wise in speech.'

¹¹ Quoted from the folk story "The earnest man" (Chén & Wū 1998: 221).

Definite articles also track anaphoric noun phrases, typically third and subsequent mentions of referents, as in (239)–(240).¹²

Anaphora

- - tit da vyt vu **max su** gox hna lax sy then elder brother ART=CL-DET PRO.PAT ask come still 'The elder brother still came and asked him.'

bbox zze nvop bbop apyuo xyp mop nvi iv. man work NEGwant NUM.4 CLwife also fear cvp qivn aom avx ggex su ga chap la. 3P.SG.POSS also TOP wife ART=CL-DET go to market come 'There were four lazy men who feared their wives. On one day the wives went to the street market.'

5.4.6 Interrogative / indefinite pronouns

Nuosu exhibits seven basic interrogative pronouns. Most of them are built on the stem ka/ke or modifications thereof.

Table 5.15: Interrogative pronouns

kax ddi (ma)	'who'	kep te go	'when'
xix (+CL)	'what/which'	kep mu	'how'
kep nyix (+CL)	'how much/many'	xix jjip hnex	'why'
kat (go)	'where'		

These interrogative pronouns, also called *wh*-elements, are formal marks of interrogative sentences. While English *moves* interrogative noun phrases into sentence-initial position, Nuosu is an *in-situ* language. Like Chinese or Japanese, it keeps *wh*-elements in the original syntactic slot without moving them (see Chomsky 1986; Cheng 1997).

In Nuosu, there are no existential indefinite pronouns. Existential meanings are conveyed by common nouns predicated in one of the existential constructions (section 12.1). The above interrogative pronouns can be transformed into universal indefinite pronouns by means of the adverb *nyi* 'also'. Only *kep nyix* 'how much' and *xix jjip hnex* 'why' cannot be used as indefinite pronoun.

¹² Example (239) is quoted from the folk story "The elder and younger brother" (Chén & Wū 1998: 218); (240) is cited from the folk story "Fearing the wives" (Chén & Wū 1998: 226).

Table 5.16: Indefinite pronouns

kax ddi (ma)nyi	'whoever'	kep te nyi	'whenever'
xix (+CL)nyi	'whatever'	kep mu nyi	'whatever way'
kat go nyi	'wherever'		

A. The pronoun kax ddi 'who'

The interrogative pronoun kax ddi 'who' refers to people. If a classifier is employed, it must be the human classifier ma. The classifier is understood as marker of specificity with some exceptions. Classifiers tend to be more frequent as subject of a sentence, as in (241a+b), because subjects are more often specific. The classifier is more likely omitted when it is direct object, as in (241c), or when it occurs in an equative copular clause, as in (241d+e).

- 对厅**另**中中第? (241)a.
 - ip nyip kax ddi ma nga shex? today INT.who CL1P.SG look for 'Who was looking for me today?'
 - b. 母亲爱图》第10 5 ff? cop wox ggu dut kax ddi iio? go ma sse 2P.PL among LOC INT.who CL have son 'Who among them has a son?'
 - . 世北太肇忠能**定保**, 風太肇宜**定保** E ne kax ddi bbyx gox zy shux, 2P.SG INT.who CAUS 3P.SG **CAUS** receive kax ddi ax di gox zv su nge. INT.who only 3P.SG receive NOM COP 'Whoever you are giving it will receive it.'
 - ?性**化除**水性增孔。 ssox sse ddip kax ddi nge? go cy student COMP 3P.SG INT.who COP sav 'Whom do the students say that he is?'
 - e. 뽀쁘റെഗെ 기 다 가 있다. ngop bbap ga da ax yy-jjy-ax yy max su kax ddi nge? 1P.SG village COV.put great-very-great INT.who COP ART 'Who is the most important in my village?'

The indefinite pronoun kax ddi can act as subject or object. No classifier should be used with the indefinite pronoun *kax ddi*.

(242) a. 矛掌≢爿貿效。

kax ddi nyi nry ndo qi. IND.everyone also, all wine drink want 'Everyone wants to drink wine.'

b. 对事用乳片以此类的。

ka ddi nyi mu gox gep gur shu bbo ox. IND.everyone also, all male name COV frighten CAUS leave, go DP 'Everyone is annoyed by Mugo and leaves.'

The indefinite pronoun *kax ddi* is similar to the quantifier *zzix ap zzi* 'every' (section 5.3.2.B), but does not quantify over definite referent sets as *zzix ap zzi* does.

B. The pronoun xix 'what/which'

The pronoun xix 'what/which' is oriented towards animate or inanimate entities. It co-occurs with or without classifiers; it depends on a head noun or stands alone. If used, the classifier emphasizes the specificity of the referent. Xix is more often incorporated in object than in subject noun phrases. In (243a+b), xix is associated with the S-role, in (244a-c) with the O-role, and in (245) with the locative role.

(243) a. 早门上泉&乎门上**况**或杀亚上出?

la su si nip la xix viet nga ap-S11 1P.SG come NOM and NEGcome NOM INT.what CL dax zhet su nge? COV.put good NOM COP

b. μ ኒርય ተመጀርጓ μ

'Which is better: that I come or not?'

ggap mop **xix** ji nge su nga dde-ap-jji. road INT.what CL COP NOM 1P.SG know<NEG> 'I do not know what the way is.'

(244) a. ĝų¼ਬ±₩҂У?

ngax li **xix** hxip ddie ddur yip sy? 1P.SG TOP INT.what say need still 'What else do I need to say?'

b. 對另似体景况体是?

nop ka bba wep jjux **xix** wep mix? 2P.PL present thing to get INT.what get SOL 'What reward will we get?' c. 1岁\$Â\\$X\?

ne vit gga **xix** ggu cy qi? 2P.SG clothes INT.what CL wash want 'What clothes do you want to wash?'

cyp sse li xix ggat da yur su? 3P.SG.POSS son TOP INT.what CL COV.put bear NOM 'Where was her son born?'

The pronoun xix is universal indefinite pronoun when the adverb nyi 'also' is added. Other elements may intervene in between xix (+CL)...nyi. The inde-finite pronoun can have the S/A-role, as in (246a), or the O-role, as in (246b+c).

(246) a. 划^ŷ **¾**≢虾砂。

ku jox **xix nyi** ap- rrur. LOC.inside to INT.what also, all NEG- lie 'There is nothing inside.'

b. 从从中丰兴电压的。

xix zha zza nyi cy zze sat ox. IND.whatever CL also, all 3P.SG EXH DP food eat 'He has consumed whatever small amount of food he could find.'

c. ¼Î¼¥££Ĥ£X î,X

су bbvx syt xix nyi go mox max su mu 3P.SG COV.give issue IND.whatever also first ART do shux. jjip become CAUS

'Let him be the first for whatever issue.'

C. The pronoun kep nyix 'how much/many'

The pronoun *kep nyix* 'how much/many' acts as interrogative pronoun and requires a classifier.

(247) Construction of kep nyix: (N)+kep nyix+CL.

The interrogative pronoun *kep nyix* is derived from the non-interrogative quantifier *kep nyix* 'several' (section 5.3.2.C). The pronoun *kep nyix* does not give rise to a universal indefinite pronoun.

It refers to quantities of noun phrases that occur in every syntactic position of the sentence. In (248a–c), *kep nyix* occupies the S-role, in (249a+b) the A-role, and in (250a+b) in the O-role. In (251a+b), *kep nyix* is part of the predicate.

yo **kep nyix ma** po bbo ox? sheep INT.how many CL run go DP 'How many sheep escaped?'

b. 重要 前本 計算 1 1 2 3 3 4 4 5 6 7 8 7 8 7 8 8 7 8<

bbu xot lot **kep nyix zha** qie bbo ox? grasshopper INT.how many CL bounce go DP 'How many grasshoppers went bouncing along?'

c. d⇒Y坐M章中重思?

yy go syr ddip **kep nyix** ji bbu njuo? water LOC piece of wood INT.how many CL float PROG 'How many pieces of wood are floating in the water?'

syt cy jjit co **kep nyix ma** wep mo ox? subject DEM.PROX CL people INT.how many CL get see DP 'How many people saw this event?'

b. 奶**以拿**母母亲蛋哥?

co **kep nyix ma** nit jop ddop hxip? people INT.how many CL 2P.SG to words speak 'How many people are talking to you?'

(250) a. 哲爭型<<p>(250) f

nop wox bbap ga go co **kep nyix yuop** jjo? 2P.PL village LOC people INT.how many CL have 'How many people do you have in the village?'

mge fu **kep nyix ma** mu jie zze gox sha ox? wheat cake INT.how many CL male name eat SEND DP 'How many wheat cakes did Mujie consume?'

(251) a. 用页为型M章承世?

mux dde cy jot **kep nyix** mo nge? field DEM.PROX CL INT.how many CL.acre COP 'How many acres does this piece of land have?' b. **∦**ጋ¼ል¼≩ዝ?

zyt mop cy qit **kep nyix** mu? hoe DEM.PROX CL INT.how much make 'What does this hoe cost?'

D. The pronoun kat go 'where'

The locative interrogative pronoun *kat go* is oriented toward places and co-occurs with motion and non-motion verbs. The locative coverb *da* is often attached to *kat go* to make up a locative phrase. The following three sentences exhibit non-motion verbs: an intransitive verb in (252a), a clause with obligatory AOV order in (252b), and a clause with obligatory OAV order in (252c).

- (252) a. 冒角比较型?
 - ke max su **kat go** it? dog ART=CL-DET INT.where lie 'Where is the dog lving?'
 - b. X框里刻的 f 的 F ?

cy **kat go** da co hxox co hmat? 3P.SG INT.where COV.put people teach people teach 'Where is he teaching others?'

c. 月母吃少刈り生的?

nry cop **kat go** da ndo sat ox? wine 3P.PL INT.where COV drink EXH DP 'Where did they finish drinking all the wine?'

With verbs of motion, the interrogative pronoun kat go represents either the destination of the motion or its origin. For verbs of motion, the coverb da marks the origin of movement, as in (253a–c).

(253) a. 刊拿山砌近坐刈门間出出出了至少年。

cop wox li kat go da lax gge nge su 3P.SG TOP person INT.where COV.put come CL COP NOM nga dde-ap-jji. gox 1P.SG PRO.PAT know<NEG> 'I do not know where they are from.'

vy cyx gge **kat go** ddur la su nge? weeds DEM.PROX CL INT.where exit come NOM COP 'Where do these weeds come from?' c. 别用壳步**框**事网号景门步士?

ddox mu jix su **kat go** da vy six la su nge? knife CL NOM INT.where COV.put buy RES come NOM COP 'Where did you buy the knife from?'

The locative particle *go* in *kat go* is generally required. With certain verbs like *bbo* 'go' and *rrur* 'lie', it can be omitted, especially in conventionalized expressions like greetings.

(254) a. 氢电类⑩?

ne **kat** bbo ox? 2P.SG INT.where go DP 'Where are you going?'

b. 日2近の計士?

rre mop **kat** rrur su nge? money INT.where lie NOM COP 'Where is the money?'

The universal indefinite pronoun *kat go nyi* 'everywhere' functions as independent locative phrase. No other element can intervene between *kat go* and *nyi* which is one lexicalized unit.

(255) a. 用序型兴**屯学**量从分析。

lat ti bbap ga **kat go nyi** cy jo mga. male name village IND.wherever 3P.SG pass through 'Lati passed through all the villages (*lit*. the village wherever).'

b. 佢對車帮品主見追。

kat go nyivop ngo ddi sisat.IND.whereverfamineEXP'There is a famine everywhere.'

c. 1 电子 单 例 片 作 朱 〇 主 路。

ne **kat go nyi** co gep sip zhot cur ddi dit. 2P.SG IND.wherever person COV COV.take offend 'Everywhere people have said something offensive about you.'

E. The pronoun kep te go 'when'

The interrogative pronoun *kep te go* consists of *kep te* and the locative particle *go*. It refers to the event time. The string *kep te go* is one unit and *go* should not be dropped. The pronoun *kep te go* occurs either in sentence-initial position, as in (256a), or after the S/A argument, as in (256b–d).

(256) a. **公園**對重量景景?

kep te go ne nax mgo nzox? INT.when 2P.SG ill EXP 'When have you been ill?'

b. \(\frac{1}{2}\hat{1}\hat{1}\hat{1}\hat{1}\hat{1}\hat{1}\hat{1}\hat{2}\hat{1}\hat{2}\hat{1}\hat{2}\hat{1}\hat{2}\hat{1}\hat{2}\hat{1}\hat{2

syt cyx gge **kep te go** ddur? affair DEM.PROX CL INT.when exit 'When will these things happen?'

c. ፤ **' 최 ୬** ቅ ጋ ቅ ?

ne **kep te go** xyp mop xyp? 2P.SG INT.when wife marry 'When will you have your wedding?'

shu kut ngop wox **kep te go** pup bbo hlo bbo? this year 1P.PL INT.when tomb pay visit go 'This year, when will we go to the cemetery?'

The pronoun *kep te* together with the sentence adverb *nyi* can be used as universal indefinite pronoun: *kep te nyi* 'whenever, always'. No element intervenes between *kep te* and *nyi* which functions as one lexical unit.

(257) a. 「對母」**以對車**說青沙節。

cyp te kop li **kep te nyi** zox nze go shex. 3P.SG time TOP IND.whenever available HAB 'He is always available (*lit*. his time is always available).'

kep te nyi syt cyx gge cop gox jjiex mguo ap-dop. IND.whenever affair DEM.PROX CL 3P.PL PRO.PAT understand NEG-can 'They are never able to understand these things.'

c. **出利車**場用⊕02.

kep te nyi nbop mu nrat qip tat xi. IND.whenever do good deeds should 'One should always do good.'

F. The pronoun kep mu 'how'

The interrogative pronoun of manner *kep mu* 'how' consists of *kep* and the adverbializer *mu*. It is an interrogative pronoun for manner. A derived meaning is interrogative for reason and motif. In some sentences both meanings appear, in others only one meaning is present.

(258) a. ዘጋ**\ អ**ፀ爭\$ ተዛሄ₭?

pat mop **kep mu** cop wox sse mu hnie mgu? (manner) parents INT.how 3P.PL children love 'How do parents love their children?'

hxa bit cy yiet **kep mu** hlu? (manner) vegetable DEM.PROX CL INT.how cook 'How should the vegetables be cooked?'

c. ፤ አዝሂ ተወቅ እ 莱 ነ

ne **kep mu** tep yy sso ap- bbo? (reason) 2P.SG INT.how book study NEG- go 'Why don't you take on your studies

d. 業間ほ業間望外上は600世出版中間集まりは?

zyt jie bur zyt jie jox da (manner) su nge ox, REFL. return REFL be against STP NOM COP DP guop jiet **kep mu** da at mgut la mix? INT.how STP SOL country prosper come 'If it is divided, how can the country prosper?'

ne **kep mu** co zyt? (reason)
2P.SG INT.how person blame
'Why do you blame people?'

f. 對單口量以升單?

nop wox hxep jjux **kep mu** jjix? (manner) 2P.PL view INT.how become 'What is your view on this?'

g. Y坐MH靠床中页井筋。

syr bbo **kep mu** jjix su nga dde jji ox. (manner) tree INT.how become NOM 1P.SG know DP 'I know what type of species the tree is.'

Together with the sentence adverb *nyi* 'also, all', *kep mu* forms an indefinite pronoun with the sense 'whatever way'. The string *kep mu nyi* forms a close unit and no other element may be intercalated.

(259) a. 当出升量少少分为第。

ne **kep mu nyi** go ap- njyp go shex. 2P.SG IND.however PRO.PAT NEG- believe HAB 'You never believe anything.'

b. 胃升事化蛋!

kep mu nyi zhet! ap-IND.however NEGgood 'You can never do it!'

The indefinite pronoun sometimes conveys the meaning of deontic or epistemic necessity ('whatsoever') for which Nuosu lacks special auxiliary verbs.

c. 母亲为月为31片, 出月丰0%片寸。

cop wox kax mu kax yot su, kep mu nyi bie jjuo su nge. CLF do CLF make NOM IND.however destroy NOM COP 3P.PL 'What they are doing must be destroyed.'

G. The pronoun xix jjip hnex 'why'

The interrogative pronoun xix jjip hnex 'why' is composed of xix 'what' and the conjunction *jiip hnex* 'because'. This interrogative pronoun is placed at the beginning of the sentence or after the subject of the sentence. The adverbializer mu links the interrogative pronoun to the verb phrase. In (260a), mu is omitted because the discourse deictic demonstrative *xip mu* already incorporates *mu*.

XXX**对**章81HXE重B? (260) a.

xix jjip hnex xip mu guo luo mut? cy 3P.SG INT.whv DEM.DD angry 'Why is he angry like this?'

€**Ŋ҈₹\$**H⊻≭1€? h.

> vo xix jjip hnex mu po bbo sat? sheep INT.why ADVL **EXP** run go 'Why have all the sheep run away?'

1 **以對桑**州的商計刊?

ne xix jjip hnex mu yi ngox nge? su 2P.SG INT.why ADVL cry NOM COP 'Why are you crying?'

4. 水型引用化水烧用量料的分点?

ap ndop hxot it kie xix jjip hnex mu go yix qy ndit? vesterday evening village LOC INT.why ADVL house catch fire 'Why did the village catch fire yesterday evening?'

Unlike for the other pronouns, we cannot derive an indefinite pronoun from the interrogative pronoun *xix jjip hnex* 'why' by means of the adverb *nyi*.

Chapter 6

The verb phrase

The Nuosu verb phrase exhibits several special features such as a large set of simplex/complex verb pairs (section 6.1.4.E), about 20 coverbs some of which are polysemous (section 6.2) and a set of compositional direction verbs (section 6.4.1). This chapter contains four sections: predicative constructions (section 6.1), coverbs (section 6.2), locational phrases (section 6.3) and directional phrases (section 6.4).

6.1 Predicative constructions

Four lexical categories may function as predicates: nouns (section 6.1.1), copular (section 6.1.2), adjectives (section 6.1.3) and verbs (section 6.1.4).

6.1.1 Nominal predicates

Bare nominal predicates consist of a common noun. The nominal predicate has unspecific reference. Nominal predicates are intransitive. Their sole argument is specific, definite and often presented with a topic particle (section 14.1.1.).

- (1) NP+TOP+ Nominal predicate
- (2) a. 発出につ。
 cyx li **nzy mop**.
 3P.SG TOP Tǔsī (上司)
 'He is Tǔsī (governor installed by the imperial government).'
 - b. 印以低級。 ngax li **hxie die co.** 1P.SG TOP foreigner 'I am a foreigner.'

Nominal predicates tend to have support from the copular verb, but in two contexts bare nominal predicates are used frequently: in contrastive pairs of nominal predicates, as in (3), and temporal nominal predicates, as in (4).

(3) a. អង្គមាធិល⊚ដ,៥មុម។ ₹០ដ mu hlie li **yix cur lut gur**, lu ti li **syr zyt lut gur.** male name TOP architect male name TOP carpenter 'Muhlie is an architect, Luti is a carpenter.' b. ½៧០៛, មិប្សាវិស. CVX li qu sse. ngax li nuo sse. 3P.SG TOP White Yi 1P.SG Black Yi TOP 'He is a White Yi, I am a Black Yi.'

(4) 对口目中3中間。

ip nyip li xyx ne ddip hxix. today TOP resting day 'Today is resting day.'

The nominal predicate must consist of a bare noun. When the predicate is modified by a classifier, it must be supported by the copular.

(5) a. H�����.

li mu gox hmat mop. TOP male name teacher 'Mugo is a teacher.'

b. អូមិ្ស្ស១ម្នា.

mu gox li hmat mop nge. ma male name TOP teacher COP CL 'Mugo is a teacher.'

6.1.2 Copular predicate

The Nuosu copular predicate is *nge*. As in other languages (Higgins 1979), it assumes three basic functions (equative, predicational, specificational) and a contextually derived meaning of focus element.

The copular verb is incompatible with most aspect, tense and modal markers. It can co-occur with modal elements that mark speaker attitudes such as the matrix adjective jox jjip 'possible', the adverb ap nryr mu 'really' or the modal auxiliary tat xi 'should', as in (6). It is incompatible with most other modal auxiliary verbs, as illustrated in (7), and rejects aspect and tense particles, as shown in (8).

(6) a. - β·UℲℍℲℙℲ。

> CVX li nuo su nge jox jjip. 3P.SG TOP Nuosu COP possible 'He might be a Nuosu.'

b. 从31410以。

tat xi. cy nuo su nge 3P.SG Nuosu COP should 'He should be a Nuosu.'

- c. ½ባዲዮዘለጷውጀትብ
 - cyx li ap nryr mu syr zyt lut gur ma **nge.** 3P.SG TOP really carpenter CL COP 'He must really be a carpenter.'
- - *mu rryr li nyop mu co **nge** but. male name TOP peasant COP dare Intended meaning: 'Mudge dares to be a peasant.'
 - b. *川心引しの至利於。
 - *mu jy li cyp qop bop **nge** qi. male name TOP 3P.SG.POSS friend COP want Intended meaning: 'Mudje is in the process of being his friend.'
- (8) a. * 🕅 山伊里市 🖽 🕆 。
 - *cyx li ngat ddip vip **nge** njuo.

 3P.SG TOP 1P.SG.POSS peasant COP PROG

 Intended meaning: 'He is in the process of being a peasant.'
 - b. *HXU\2016.
 - *mu ga li hmat mop **nge** nzox. male name TOP teacher COP EXP Intended meaning: 'He was once a teacher.'
 - c. *ቑ፞፞፞፞፞፞፞ቑ፟ዾኯኯቜ፞፞ዼ፟፨
 - *ngax li bi mop ma **nge** mix. 1P.SG TOP priest CL COP FUT Intended meaning: 'I will be a priest.'

Nuosu copular clauses tend to mark the first NP by a topic particle, either by ne (maintaining topic) or by li (contrastive topic). Both particles are not required though. We discuss the three basic functions of the copular verb nge in subsection A and its contextually derived focus meaning in subsection B.

A. Basic functions

Cross-linguistically, copular verbs assume three functions (Akmajian 1979; Higgins 1979; Mikkelsen 2005); they serve to equate two noun referents, to predicate a noun referent and to specify a noun referent.

(i) Equative function

The first function of the copular verb *nge* is to equate the referents of two expressions, either single individuals or groups of individuals.

- (9) a. भैं। พิษัยป. ngax li lu pox
 - 3P.SG TOP male name COP 'I am Lupo.'
 - b. 1 ¥ ባ ዘ አ ቋ ቆ ዘ **ដ ป** 。
 - cyp nyit li mu ga si nip mu rryr **nge**.

 3P.DL TOP male name and male name COP

 'These two are Muga and Mudge.'

nge.

mu ti te go mu jy max su li ket mop te go mu jy max su **nge.** morning at time of star ART TOP evening at time of star ART COP 'The morning star is the evening star.'

- - cyx li ngat ax da **nge.** 3P.SG TOP 1P.SG.POSS father COP 'He is my father.'

Sometimes, a copular construction is compatible with an equative and a predicational reading. The intended interpretation depends on background knowledge and speaker intention.

cyx li ngat pat vu **nge.** 3P.SG TOP 1P.SG.POSS uncle COP 'He is my uncle / He is one of my uncles.'

(ii) Predicational function

Predicational copular clauses tell us something about the referent of the sentence-initial subject (Mikkelsen 2005: 1). A predicational copular clause like *Susan is a doctor* is similar to a non-copular clause like *Susan runs the marathon* by virtue of the fact that both express a property of the subject referent.

- (11) a. X以完計日出。
 - cyx li shyrx rruo ma **nge**. 3P.SG TOP thief CL COP 'He is a thief.'

cyx li sse ge ma **nge.** 3P.SG TOP fool CL COP 'He is a fool.'

c. 10 自 1 X 到 8 举 9 封 。

op rro li lur kur nrat vie ma **nge.** Xichang TOP city beautiful CL COP 'Xichang is a beautiful city.'

There is thus no fundamental difference between copular clauses in which the second argument contains a nominal predicate, as in (11), and those in which the second argument is a nominalized verb phrase, as in (12).

(12) a. ¾៨៤៤៥៣៤៩២.

vut sa li ap ndi hxix la su **nge.** name TOP yesterday come NOM COP 'Vusa is the one who came yesterday.'

b. 单引口水效准水用。

ngax li la ap- qi su ap- **nge**. 1P.SG TOP come NEG- want NOM NEG- COP 'It is not the case that I do not want to come.'

Predicational copular clauses sometimes contain temporal or locative nouns as the first NP.

(13) a. ልቦታቄቦታ。

ip nyip ngat yur nyip **nge.** today 1P.SG.POSS birthday COP 'Today is my birthday.'

b. 象乞賽引於永邊太仆甚桑什萊計刊。

mup shy dex li cy go mox vit su gga sho mu bbo su **nge.** tomorrow TOP 3P.SG first ART journey go NOM COP 'Tomorrow is the first time he embarks on a journey.'

c. ជាជាឱ្យបាញ់ ១៩៩៧.

a ddit bbop jox li ssox dde ma **nge**. there CL at, to TOP school CL COP 'Ahead there is a school.'

(iii) Specificational function

Specificational predicate clauses differ from predicational copular clauses by the inversed order of the two arguments. Specificational predicate clauses introduce a referent into discourse defined through a property and tell us *who* or *what* the referent is (Akmajian 1979: 162–165). Predicational copular clauses, by contrast, state something *about* the referent of the first NP.

- (14) a. 서워ፕጵት ያተህአህ.
 - nry ndo ap- qi max su li cy **nge.** wine drink NEG- want ART TOP 3P.SG COP 'The one who does not want to drink is he.'
 - b. 융화하게 하다 나타한 다.
 ssox sse he-jjy-he max su li mu gox **nge.**student good-very-good ART TOP male name COP
 'The best student is Mugo.'
 - ብ ሆነ እ ላ ጂ ለ ጂ ይ ፑ ባ ቤ ፑ ብ a ddit viet hxop go yiet max su li nga nge. there LOC at song sing ART TOP 1P.SG COP 'The one who is singing songs is I.'
 - yyp ddu nit bit li jop su vut sa nge. 2P.SG toward ioke open NOM TOP COP name 'The one who is joking with you is Vusa.'

B. Derived functions

In Sino-Tibetan languages, nominalization particles like su often generate focus meaning (Bickel 1999; Paul & Whitman 2008). This focus meaning is contextually derived as opposed to encoded. The copular verb supports the nominalization particle in expressing focus meaning.

In Chinese, for example, the shi...de-construction (shi is the copular verb and de the nominalization particle) focuses on the constituent immediately following the copular shi (Paul & Whitman 2008: 415).

- (15) Mandarin Chinese
 - a. tā shì zài běi jīng xué yǔ yán xué de.
 3P.SG COP at Beijing learn linguistics NOM
 'It is in Beijing that he studied linguistics.'

There is a second focus construction in Chinese with the copular verb *shì* only, called the *bare shì*-construction. In contrast to the *shì...de*-construction, the *bare shì*-construction is an *association-with-focus* pattern (Jackendoff 1972; Rooth 1985) in which any constituent following the copular can be focused by assigning it intonational prominence.

tā shì zài běi jīng xué yǔ yán xué.
 3P.SG COP at Beijing learn linguistics
 'It is in Beijing that he studied linguistics.'

In Nuosu, the bare copular *nge* (without *su*) is ungrammatical after other verbs. The *su nge*-construction has developed focus meaning. The *su nge*-construction is an *association-with-focus* pattern in which every constituent can be focused by assigning it intonational prominence, as in (16).

ne syt xip mu da,... 2P.SG matter DEM.DD do STP 'If you proceed in this way,...'

cy nex mo go hxie mat ci su nge, 3P.SG 2P.SG toward PRO.PAT heart fall NOM COP 'he will be disappointed about you...'

,世北千飞阳外长录管中,

nga nex go hxie mat ap-ci su nge, 1P.SG 2P.SG PRO.PAT heart NEG-fall NOM COP toward 'but I won't.'

b. 从着星沙龙用手出出,

nex mo hxie mat ci cy go su nge, 3P.SG 2P.SG toward PRO.PAT heart fall NOM COP 'he will be disappointed about you...'

,世出午孔阳外生录94以

hxie mat сy ngax mo go ap-ci su nge, 3P.SG 1P.SG toward PRO.PAT heart NEG-fall NOM COP 'not about me.'

cy nex mo go **a hnat mu** hxie mat ci su nge, 3P.SG 2P.SG toward PRO.PAT especially heart fall NOM COP 'he will be especially disappointed about you...'

ሂቆ∄\$ት ት ላ ተነ

cuop luo ax di ci su ap- nge, a little bit only fall NOM NEG- COP 'not only slightly.'

d. X 第 末 升 用 外 生 未 单 土 ,

су nex mo hxie mat ci go su nge, 2P.SG PRO.PAT fall toward heart NOM COP 'he will be disappointed about you...'

建工业业工业, nex hxie we mo go nyi su apnge, 2P.SG toward PRO.PAT faith sit NOM NEG-COP 'not being confident about you.'

6.1.3 Adjectival predicates

As in other languages, Nuosu adjectives fall into two groups, gradable and ungradable adjectives. Both share morphosyntactic properties with verbs and also differ from verbs. For four features, ungradable adjectives contrast with gradable adjectives and align with activity verbs.

Table 6.1: Morphosyntactic properties of adjectives

	Gradable adjectives	Ungradable adjectives	Verbs
Sole predicate	yes	yes	yes
Negation	yes	yes	yes
Reduplication	yes	yes	yes
Progressive <i>njuo</i>	no	no	yes/no
Dynamic perfect ox	most	most	yes
Stative perfect da	yes	yes	yes
Experiential <i>nzox</i>	few	no	yes/no
Comparative construction	yes	no	yes/no
Intensifier - <i>jjy</i> -	yes	no	yes/no
Exhaustion particle sat	yes	no	yes/no
Superlative -lop-	yes	no	no

Most adjectives act as the sole predicate of an intransitive clause without support of other elements. The copular verb is never used to prop up adjectives.

- (17) a. 春日**6**。
 mo mu **ca**.
 weather hot
 'The weather is hot.'
- (18) a. 競乐開身第章。 ssox sse ggex su **ax nyi**. pupil ART many 'The pupils are many.'
 - c. 体学量的。
 nit vit gga **nrat**.
 2P.SG.POSS clothes beautiful
 'Your clothes are beautiful.'

- b. *於刊①士。
 *mo mu **ca** nge.
 weather hot COP
 Intended meaning: 'The weather is hot.'
- b. 肾分泌的量性。 ggap mop cyx ji **ix fi.** road DEM CL narrow 'This road is narrow.'

- e. ህብ ነት እ vot max su cu. pig ART fat 'The pig is fat.'
- f. ១ដ%្¥**វិ**្រ le she cvx wo ax vu. beef DEM.PROX CL drv 'This piece of beef is dry.'
- χη**υ**υφλ. cvx li o bbu hne nii. 3P.SG TOP intelligent 'He is intelligent.'
- 明相资舟船。 h. CO a zzyx ma nbop. DEM.DIST CL kind 'That man is kind.'

li

TOP

surx sha.

poor

i. 月最日**%**时。 41. 第1. 第**1** 1. i. mu nvox li bbox sha. cop wox male name TOP stupid 3P.PL 'Munyo is stupid.' 'They are poor.'

Gradable adjectives are often intensified. The infix -jjy- 'very' is inserted in between the adjective and a copy of it.

፠፞፞፞፞፞፞፠፠ (19) a. hxi jox mgo-jjv-mgo. ma hxep sa-jjv-hxep sa. CVX outside cold-very-cold DEM.PROX CL nice-very-cold 'It is very cold outside.' 'This one is very nice.'

Some ungradable adjectives are nominalized by su or complemented by the perfect particle ox as the predicate of the sentence. Examples (20a) and (20c) with bare predicates are dispreferred, but (20b) and (20d) are preferred.

- (20) a. 1400#。 ddop ma vu iji. ddop ma vu iji su. cvp cvp 3P.SG.POSS word 3P.SG.POSS word true NOM true 'His words are true.' 'His words are true.'
 - c. 💡 ሦህ 🖰 。 d. ፅዝብወው zze ddu li lut. zze ddu li lut ox. TOP enough TOP enough enough food food '(I've got) enough food.' '(I've got) enough food.'

Ungradable adjectives can be formed from gradable adjectives by suffixing ideophones to the root.

(21) a. chyp nix ni. zza CVX gge food DEM.PROX CL smelling IDE~EXPR 'The food smells bad.'

b. 空**负**對對。

vo **qux go go.** snow white IDE~EXPR 'The snow is very white.'

Adjectives can be negated like verbs by inserting the particle *ap*- before the last syllable of the adjective. Adjective-ideophone compounds are negated by nominalizing or adverbializing the compound and negating the predicate.

(22) a. 与郑玑录则至景。

ie qyt a zzyx zhep ap- **mgo.** water DEM.DIST cup NEG- cold 'The water in that cup is not cold.'

b. よ

よ

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tep yy a zzyx bbut **vu-ap-jji**. letter DEM.DIST CL true<NEG> 'That letter is not true.'

c. 阿口以XX上至也。

cit la **ggop ga ga** su ap- nge. basket empty IDE~EXPR NOM NEG- COP 'The basket is not (completely) empty.'

syr bbo a zzyx bbo **vut lox lo** mu ap- jjip. tree DEM.DIST CL green IDE~EXPR NOM NEG- become 'That tree is not sap-green.'

As for verbs, adjectives can be partially reduplicated (their last syllable) to express the concept of alternative question.

mux dde cy jot go zap bbyp **ax guo guo**? field DEM.PROX CL LOC earth hard~ALT 'Is the earth of this field hard?'

b. ∰H¼₫**⋛**貫?

ddox mu cy pit **tuox tuo**? knife DEM.PROX CL sharp~ALT 'Is this knife sharp?'

Even if they designate dynamic properties, adjectives cannot co-occur with the progressive marker *njuo*.

(24) a. *Y#X+前片**@**岳。

*syr zza lur ma ggex su **hmip** njuo. fruit ART ripe PROG Intended meaning: 'The fruits are becoming ripe.'

b. *አልጋ**@¥@**ជ。

*cy ip mop **mit -jjy- mit** njuo 3P.SG belly hungry very hungry PROG Intended meaning: 'He is becoming hungry.'

Gradable and ungradable adjectives are generally compatible with the perfect particles ox (dynamic) and da (stative). The particle ox conveys inchoative meaning, whereas da emphasizes stative meaning (it is the case that). Adjectives not compatible with inchoative meaning reject ox, as in (25b).

(25) a. 🕅 划 🕻 🖈 🗓 。

cyx li **vux mo** ox.
3P.SG TOP crazy DP
'He is crazy now (before he wasn't).'

b. *វ目🕀 🖁 វា២🖟 。

*hxo pu max su **a hmu** ox.
mountain ART high DP
Intended meaning: 'The mountain is high now (before it wasn't).'

(26) a. **登**見分り **3**d M。

bbox zze max su **ax yy** da. man ART tall STP 'It is the case that the man is tall.'

b. 肇坐鼠步划丰凶。

viex vie ggex su **a hni** da. flower ART red STP 'It is the case that the flowers are red.'

Adjectives can co-occur with the experiential aspect marker *nzox*, only if they denote states that can be repeated within a given timeframe. Generally, this is only possible for certain gradable stage-level adjectives.

(27) a. *塗坐浴山**利**夏 る。

*viex vie cyx bu **a vu** nzox. flower DEM.PROX CL dry EXP Intended meaning: 'This flower was once dry.' b. 日云月聲系含。 mu ga li **nax mgo** nzox. name TOP ill EXP 'Muga has been ill once.'

Superlative meaning can be formed in two ways in Nuosu: with the exhaustion particle *sat* (see section 7.5.1) and with the superlative infix *-lop-* inserted in between the adjective and a copy of itself (section 11.4.2.B). Ungradable adjectives are incompatible with the exhaustion particle and with the superlative infix, as in (28b) and (29b).

- (28) a. 肾氧剂强制循生。
 vit gga cyx ggu **a du** sat.
 clothes DEM.PROX CL thick EXH
 'This garment is the thickest.'
 - b. *學氧分類Q條條集。
 *vit gga cyx ggu **qux zyr zyr** sat.
 clothes DEM.PROX CL very white EXH
 Intended meaning: 'This garment is completely very white.'
 - c. 电银泡间增生。
 sha zzix cyx ggex **nzyr** sat.
 chilli DEM.PROX CL spicy EXH
 'The chili is extremely spicy.'
- (29) a. ។ ០ ៤២ ៤ ២ ៤ មិ ៤ at nyop li **iet zyr-lop-iet zyr** max su. female name TOP small-SUP-small ART 'Anyo is the smallest.'

In the same vein, gradable adjectives can be modified by the intensifying infix -jjy-, whereas ungradable adjectives cannot.¹

(30) a. 《京島本学島本》。
ne **ssax kuo-jjy-ssax kuo.**2P.SG bold-very-bold
'You are very bold.'

¹ Example (30) is quoted from the folk story "The forest meeting" (Chén & Wū 1998: 261).

```
ddop ma vu jii-jiy-vu jji.
   *cvp
   3P.SG word
                 true-very-true
```

Intended meaning: 'His words are very true.'

Finally, gradable adjectives can be used in comparative constructions (section 11.4.1.A), whereas ungradable adjectives cannot.

ϔΫϼϼϗ (31) a. cy ne yyx ap cy. 3P.SG 2P.SG tall more 'He is taller than you.'

> b. *ተወልፋ_ስ ኢሃዝ**ኒ**ች° *at nvop jox ap cv mu gex zhv. female name male name toward more true 'Anyo is more real than Luti.'

6.1.4 Verbal predicates

Verbal predicates differ from adjectival predicates with respect to a number of tests (table 6.1). Four types of verbs are scrutinized below, intransitive verbs (section A), monotransitive verbs (section B), ambitransitive verbs (section C) and ditransitive verbs (section D). Furthermore, there are verb pairs, called simplex/complex verbs, which differ through a change of valency and devoicing of the initial consonant (section E).

A. Intransitive verbs

Except for pro-drop contexts,² intransitive verbs require exactly one NP argument. Intransitive verbs can take control and noncontrol arguments.

Table 6.2: Intransitive verbs

Control argument	Noncontrol argument	
bbo 'go'	jji 'fall down, collapse'	ddur 'exit, happen'
li 'go up'	jjip 'fall' (rain)	rryrx jjuo 'collapse'
jji 'fly'	hlix ndo 'go astray'	lat jjip 'bust'
vot 'bark'	jjip qot 'change'	wop 'swell'
qi 'jump'	ggit 'sink'	mop jjip 'pass away'
it 'lie'	sy 'die'	vi 'blossom'
nyi 'sit'	mop jjip 'pass away'	nyop 'sink'
()	yit jjuo 'in disharmony'	()

² Pro-drop or zero-anaphora contexts are contexts in which an argument that is required by a predicational frame can be omitted if it can be inferred by the context (Fillmore 1986; Rizzi 1986).

b.

Many intransitive verbs allow optional adjunct elements such as locational phrases.

(32) a. 飛送爭用利学## 5.

hxie zyr wo mu vut go **jji** njuo.

bird CL.group sky LOC fly PROG

'A flock of birds is flying in the sky.'

Positional intransitive verbs require a locational phrase or pronoun. These elements cannot be omitted. Positional verbs are therefore not intransitive verbs.

- (33) a. HX∯≢。 b. *HX≢。 mu ga gox **nyi**. *mu ga **nyi**. male name PRO.LOC sit male name sit 'Muga sits here.' Intended meaning: 'Muga sits.'
 - c. 崎子皇⑥の乐学母。
 nit nrur pop hox ho sse go it.
 2P.SG.POSS key small box LOC lie
 'Your keys are in the small box.'

Intransitive verbs of motion require noun phrases indicating the destination. The directional NP is inserted between the verb of motion and a directional verb.

。**⑥業▶**坐DQ北日車 (34) a. gux su lo bbo nyop уу go vur ox. ship ART=CL-DET sink water LOC DP enter go 'The ship was sinking in the water.'

Many intransitive verbs are unvolitional and take NP arguments that undergo the effects of some change.

€発貿№。 b. ៧៧និមន្តាំ。 (35) a. hlix ndo vo ox. co a zzyx ma ggit ox. sheep get lost person DEM.DIST sink DP DP CL 'The sheep went astray.' 'The man sank to the bottom.'

- c. 学 W loo d. 《 自 # loo do contain the system of the syst
- e. 1 引目の智 ⑩。

 cyp ax pu **mop jjip** ox.

 3P.SG.POSS grandfather pass away DP

 'His grandfather passed away.'
- f. 丁奎季秋節。 cyp bbo lo **wop** ox. 3P.SG face swell DP 'His face became swollen.'
- g. 例 永年 代 的。
 co cyx yie **yit jjuop** ox.
 person DEM.PROX family in disharmony DP
 'This family in not united.'

B. Monotransitive verbs

Monotransitive verbs require two arguments except for pro-drop contexts. They refer to events in which one participant is doing something to or directing some behavior at the other one. Table 6.3 provides a non-exhaustive list.

Table 6.3: Monotransitive verbs

mgu 'love'	bit 'take out'	hlut 'lead to pasture'
zyt 'plane off'	jyt 'beat (with stick)'	zie 'match'
yiet 'sing'	nrur 'lock'	zhe 'cut'
zze 'eat'	shut 'remember'	mge 'chew'
ndo 'drink, smoke'	bbur 'write'	sit 'kill'
ndup 'beat'	kie 'fell'	yot 'lick'
nyiet 'fish'	ku 'steal'	bie 'kick'
ssyr 'press'	nzyt 'bite'	tu 'perforate'
chyp 'weave'	jot 'cook'	hlu 'cook'
wep 'get, obtain'	la hxex 'wait'	bi 'read'
mgur 'pick up'	hxo lo 'depend'	ngo 'touch'
yu 'take'	zhyp 'throw'	yyt 'saw'
sso 'study'	mgot 'chase'	jyt 'breathe'
nyie 'cut'	yip bbur 'paint'	rrot 'weave'
hlit 'dry in the sun'	ga 'shake, make'	kie 'fell'
cur 'build'	nyot 'seal'	nbot 'hide'
ggit cyr 'cause to perish'	jip ndip 'protect'	qup 'keep watch'
syp 'know'	dit lyp 'force'	mgup ddie 'heal' ()

In pro-drop contexts, an omitted participant is inferred from the context but can always be specified if needed.

尹义辈愈. (36) a. Х**¥**Ю̂. b. shut shut ox. nga cy ox. cy 3P.SG remember DP 3P.SG remember DP 'She remembered.' 'She remembered me.'

All of the verbs in Table 6.3 license control agents, as illustrated in (37), and sometimes they also admit noncontrol agents, as shown in (38).

- (37) a. 。34中美体图内 h. 40£° nga ce te SOX ji hlu. at nvop nex mgu. NUM.3 CL 1P.SG dish cook female name 2P.SG love 'I cooked three dishes.' 'Anyo loves you.'

 - e. Xi Xi Xi Mr Ri Xi . f. 정보물정화원. ka bba in ai ip ko cv wep nzox. ne qup. tonight 2P.SG 3P.SG present get EXP door watch 'He got a prize.' 'You should watch the door tonight.'
- (38) 「点分け歩策(す)生。 cyp ddop ma ngat ngop jjux (go) **zie**. 3P.SG.POSS word 1P.SG.POSS idea PRO.PAT match 'His words match my ideas.'

Simple monotransitive clauses do not use case-marking coverbs except those described in section 6.2.1 and section 6.2.2. More examples are provided in (39).

- (39) a. J爾切利州仍承筆。
 cyp jiet yi a shyt ma **cur** mo ddix.
 3P.SG.POSS family house new CL build MOD.committed 'His family is committed to build a new house.'
 - b. W当りの主題の。 lu po cyp qop bop **jip ndip**. male name 3P.SG.POSS friend protect 'Lupo protected his friend.'

- c. 机井间步州岛苯乳州堡顶。
 - bbu jji ggex su cop **ggit cyr** gox sha sat ox. enemy ART 3P.PL annihilate SEND EXH DP 'They caused all the enemies to perish.'
- d. 引网多中光珠印丰。

ax da mup xyx hnie **rrot** yix syp. father flax shoe weave still 'My father still weaves flax shoes.'

e. 当岩利州次界坐。

ne hxit jjo mu cy **mgot bbo**. 2P.SG quick ADVL 3P.SG chase go 'Chase him quickly.'

- f. X毫未未成 ...
 - cy bbox sse **yip bbur** njuo. 3P.SG mountain paint PROG 'He is painting a mountain.'

ne xip mu nga **dit lyp** ap- hxit. 2P.SG DEM.DD 1P.SG force NEG- can 'You can't put me under pressure like this.'

ax yi cyx ma jip xi **hxo lo.** child DEM.PROX CL relatives depend 'The child depends on his relatives.'

- i. XYY##...
 - cy syr ggut **zyt** njuo. 3P.SG plough plough, dig PROG 'He is ploughing (the ground).'
- j. 前录分析计前即件。 ax mo ma jie sip ax yi **jyt**. mother little stick COV.take child beat 'Mother beat her child with a stick.'
- k. 乳目域下€≢(≚)。
 ax pu ip nyip yo **hlut** (bbo).
 grandfather today sheep lead to pasture go
 'My grandfather led the sheep to pasture today.'

Serial verb constructions of the form $NP_1 V_1 NP_2 V_2$ with NP_2 denoting a subpart (body parts and so forth) of NP₁ are reminiscent of possessor ascension in other languages although the possessor is not raised in Nuosu. This construction is contrasted with the monotransitive construction in (40)–(41).

- (40) a. **.В**₽¥₩₽₽ bbo lo ax yi ngat nzyt. face child 1P.SG.POSS bite 'The child bit my face.'
 - bbo lo dit. ax yi **nzyt** ngat child bite 1P.SG.POSS face put 'The child bit me on the face.'
- (41) a. Hㄨൃ刧⋈拏。 i qi ndup. mu ga cyp male name 3P.SG.POSS head hit 'Muga hit his head.'
 - b. 用以書1到效路。 mu ga ndup i qi dit. cyp male name hit 3P.SG.POSS head put 'Muga him him on the head.'

C. Ambitransitive verbs

Ambitransitive verbs are verbs which have intransitive and monotransitive uses. Their intransitive use cannot be interpreted as pro-drop. Most authors distinguish two types of ambitransitive verbs, unergative and unaccusative verbs.³ Unergative verbs align the intransitive S- and monotransitive A-argument, whereas unaccusative verbs group the intransitive S and the monotransitive O together.

Table 6.4: Ambitransitive verbs

Unergative	Unaccusative		
gu 'crow, call' ra 'scold'	gat qip 'hamper' lyrx nyie 'move'	sot 'count' jjiex mguo 'clear'	jjie shyr 'tear' pop 'open'
bot 'run'	ggot 'close'	lix qy 'break'	рор орен
dde jji 'know' yy 'laugh'	mge 'boil, broil' yyx zyr 'steep, soak'	lyt 'peel off' ' yyr 'be born, bear'	
ddiex bur 'change'	xyp 'marry'	njie 'broke, break'	

³ Dixon & Aikhenvald (2000: 20) disprefer to employ these terms thinking that they are used with many different senses in the literature, without clear cross-linguistic criteria being involved.

Unaccusative verbs are more numerous than unergative verbs. Both types are illustrated below, starting with unergative verbs.

- (42) a. ⋈ J U loo. va bu **gu** ox. rooster crow DP 'The rooster crowed.'
- b. 評H争り⑩。
 nga mu gox **gu** ox.
 1P.SG male name call DP
 'I called Mugo.'
- (43) a. 以(業生日) (床。 cy (zyt bbo mu) **ra**. 3P.SG by himself scold 'He is scolding by himself.'
- b. X中0x 0。 cy ngax **ra** ox. 3P.SG 1P.SG blame DP 'He blamed me.'
- (44) a. $\theta \in \mathfrak{S} \otimes 0$. cop wox **bot** ox. 3P.PL run DP 'They ran.'
- b. Xxxx的最繁。 cy ip nyip op rro **bot**. 3P.SG today Xichang run 'He he running the Xichang route.'
- (45) a. 引り於分質#。
 ax yi cyx ma **dde jji**.
 child DEM.PROX CL mature
 'This child is mature.'
 - b. 异类类系分变排觉。
 syt cy jjit hmat mop **dde jji** ox.
 matter DEM.PROX CL teacher know DP
 'The teacher got knowledge of this matter.'
- b. Н\Prd\overline{\text{d}} (46) a. HK€00. mu ga cop wox yyp ox. nga yyx ox. male name laugh 3P.PL 1P.SG laugh DP DP 'Muga laughed.' 'They laughed at me.'
- (47) a. X筆身節。
 cy **ddiex bur** ox.
 3P.SG change DP
 'He has changed (physically or mentally).'
 - b. 春母於筆展乳事用母節。
 tep yy cy **ddiex bur** six a hnat mu vat ox.
 book 3P.SG change RES especially ADVL good DP
 'He has very much improved the book.'

Unaccusative verbs are reminiscent of simplex/complex verb pairs scrutinized in (section E) below.

- - b. 及目录学 争 li 。

 cy hxip su nga **jjiex mguo** ox.

 3P.SG say NOM 1P.SG understand DP

 'I understand what he is saying.'
- (49) a. ຟະເອີ້າຄື. zhep sse **njie** ox. bowl broken DP 'The bowl is broken.'
- (50) a. ਖੋਪੈਂਮ 🖟 . zzi **lix qy** ox. bridge break DP 'The bridge is broken.'
- (51) a. 世標園影!
 ngat ddop hxip **sot**.
 1P.SG word speak count
 'My word counts.'
- (52) a. 引切動節。 ax yi **yur** ox. child be born DP 'The child was born.'
- (53) a. 以多年长⑥。
 vit gga **jjie shyr** ox.
 clothes tear DP
 'The garment tore.'
- (54) a. Y並\$疑⑩。
 syr bbo lyrx nyie ox.
 wood CL move DP
 'The tree moved.'

- b. 嬰乐文學爭用。 zhep sse cy **njie** gox sha. bowl 3P.SG break SEND 'The bowl was broken by him.'
- b. 尾刈乳光乳叶。 bip cy **lix qy** gox sha. pen 3P.SG break SEND 'The pen was broken by him.'
- b. 쉐홀ສ금지\$.
 cop wox jjy gex rre mop sot.
 3P.PL together money
 'They counted the money together.'
- b. 乳果用母性乳乳類。 ax mo mu ti te go nex **yur.** mother morning time 2P.SG bear 'Mother gave birth to you in the morning.'
- b. 承母於爭民爭用。 tep yy cy **jjie shyr** gox sha. book 3P.SG tear SEND 'He tore the book apart.'
- b. 新印第三級。
 ne ax yi lyrx-tat-nyie!
 2P.SG child move<NEG.IMP>
 'Don't move the child!'

- (55) a. まままがん。
 syp hmi njy lyt ox.
 walnut shell, skin peel off DP
 'The walnut peeled off its skin.'
 - b. 写单是回¥。
 ne xyx hnie tat- lyt.
 2P.SG shoe NEG.IMP- take off
 'Don't take your shoes off!'
- (56) a. 早來知引用器 (0 億)。
 syt cy jjit a hxox mu **gat qip** ox.
 matter DEM.PROX CL long time ADVL delay DP
 'This matter was delayed for a longer time.'
 - b. 對爭單級無當可。
 nop wox syt cy jjit **gat**-tat-**qip**!
 2P.PL matter DEM.PROX CL delay<NEG.IMP>
 'Don't delay this matter any further!'
- (57) a. 引电子用单单。
 a yit ap mu shu kut **xy**.
 female name this year marry
 'Ayi gets married this year (woman's perspective).'
- (58) a. **到新华对**⑩。 b. 对季×中×的。 ip ko ggot da ox. ip ko cy ggot da ox. door close DP door 3P.SG close DP 'The door closed.' 'He closed the door.'
- **到事業児童**⑩。 (59) a. b. 当对事\. ip ko zvt jie pop ox. ne ip ko pop! door REFL open DP 2P.SG door open 'The door opens by itself.' 'Open the door!'
- (60) a. 肾氧化铯。 vit gga yyx zyr ox. clothes soak DP 'The clothes soaked with water.'

- (61) a. d�®. h. χĜ**&**ΰ, уу mge ox. cy уух mge ox. water boil DP 3P.SG water boil DP 'The water is boiling.' 'He is boiling water.'

There are two pseudo-ambitransitive examples, verbs for which the intransitive and monotransitive verbs differ phonologically. In (62), the intransitive verb is dissyllabic and the monotransitive verb monosyllabic. In (63), the low tone [21] is associated with the intransitive verb, and the sandhi tone [44] with the monotransitive verb.

- (62) a. XC間節。 b. 氧甲母爭斯。 cy **jy jie** ox. ax yi cop wox **jie**. 3P.SG be afraid DP child 3P.PL frighten 'He was afraid.' 'The children frighten others.'
- b. አዛ 8 ነሪ። (63)a. Х**ЖК**Ю. ngox die. Сy ngop die OX. СУ nga 1P.SG 3P.SG doubt DP 3P.SG doubt 'He doubted me.' 'He doubted.'

D. Ditransitive verbs

Ditransitive verbs must specify three arguments. These arguments are semantically encoded as A, O and B (Dixon 1994). In Nuosu, there is a set of ditransitive verbs including several *simplex/complex verbs* which we analyze in section E. They are indicated in Table 6.5 in bold font.

Table 6.5: Ditransitive verbs

hmat 'teach'	bbyp 'give'	box 'show'
sur 'return' (borrowed item)	sha 'sprinkle'	dit 'dress' (hat)
hxe 'borrow, lend'	gup 'throw'	dox 'make drink'
vup 'sell'	nbi 'distribute'	zha 'feed'
rrep 'move'	bbur 'write'	gat 'dress' (shirt)
nyop 'bequeath'	gep 'add'	ge 'tell'
zi 'keep for'	hna 'ask'	

Nuosu ditransitive clauses always mark either O or B by a coverb (postpositition): O by the coverb *ddie* (section 6.2.2.A) or B by the coverb *bbyp* (section 6.2.4. A). Ditransitive clauses that do not mark semantic roles with coverbs are almost inexistent in Nuosu. In (64a), the verb *hna* 'ask' does not use syntactic marking on its arguments. In (64b), the O argument *yyx* 'water' is partly lexicalized with the verb *sha* 'sprinkle' with which it forms a monotransitive verb.

- 的**北**及美兴大品。 (64) a. hna nga syt kep nyix jjit cyx ox. 1P.SG several CL 3P.SG DP matter ask 'I asked him about several things.'

Ditransitive verbs close to the idea of physical transfer tend to use the preverbal coverb *ddie* on the O-argument as, for example, the verb *bbyp* 'give'.

- (65) a. 学業生が専ま。
 nga hxe ddie lu ti **bbyp**.
 1P.SG fish COV male name give
 'I gave Luti a fish.'
 - b. X日Q里單步。 cy rre mop ddie ngax **sur**. 3P.SG money COV 1P.SG return 'He returned me the money.'
- (66) a. 平⑨圭里兑兼。
 nga ce bop ddie cyx **hxe**.
 1P.SG salt CL COV.prepare 3P.SG lend
 'I lent him a packet of salt.'
 - b. 肾氧引性氯并生液⑥。
 vit gga a shyt ggux su ddie cyx **box**.
 clothes new ART COV.prepare 3P.SG show
 'I showed him the new clothes.'

Ditransitive verbs for which the idea of transfer is more indirect and abstract prefer the postverbal coverb bbyp on the B-argument (see section 6.2.4.A).

- (67) a. 利対とはほのよまゆ。
 ax da qy ly bip nyop sse **bbyp** ox.
 father heritage CL bequeath son COV.give DP
 'The father bequeathed his son.'
 - b. 學母家母母家子。
 nga zhuop zyx ma nrep cy **bbyx**.

 1P.SG table CL move 3P.SG COV.give
 'I moved a table for/to him.'
 - c. 日录句 文學 】。 mu gox hxa bit vup nga **bbyx**. male name vegetable sell 1P.SG COV.give 'Mugo sells vegetables to me.'

Speech-related verbs mark the addressee of a speech event with the preverbal coverb jox (section 6.2.4.B).

- - o. 从中學永兒阿哥。
 cy ngap jox hxie mgat hxop **hxip.**3P.SG 1P.SG toward Han spoken language speak
 'He is speaking to me in Chinese.'

Ditransitive verbs indicating physical transfer must specify all three arguments, as for example the verb *bbyp* 'give'.

- (69) a. 。**北**以代里昇1D永均。 ddie bbyp. nga tep yy cyp zzit mu ga 1P.SG book NUM.1 CL COV male name give 'I gave one book to Muga.'
 - b. *界系引行符。
 *nga tep yy cyp zzit **bbyp**.
 1P.SG book NUM.1 CL give
 'I gave one book.'

Ditransitive verbs with an abstract idea of transfer can omit arguments as pro-drop.

(70) a. H#分5分析。

lat hxa ssox sse jox **hmat.** male name pupil toward teach 'Laha teaches his pupils.'

b. H♯⊕҄ҍҍ。 mu rrvr sso

mu rryr ssox sse **hmat.** male name pupil teach 'Mudge teaches his pupils.'

c. 月常才是从母系。

mu rryr nuosu bbur ma **hmat.** male name Nuosu written language teach 'Mudge teaches the written Nuosu language.'

E. Simplex/complex verb pairs

A remarkable process of lexicalization occurred in Nuosu and other Yi languages (Gerner 2007b). For about 20 mainly monosyllabic verbs, it is possible to devoice the initial consonant and to derive verbs with causative meaning. For example, the verb *ggat* 'wear' in *Mary wears a red shirt* has a devoiced counterpart *gat* 'dress = cause to wear' which is used in clauses like *Mary dressed her daughter with a red shirt*. The voiced component is called the *simplex* and the devoiced member the *complex* of the pair.

(71) a. 以切り田以出。

cy i di nrat ggu **ggat.** 3P.SG clothes beautiful CL wear 'He wears a beautiful clothing.'

b. 引来却是某次**。

ax mo i di ddie cy **gat**. mother clothes COV.prepare 3P.SG dress 'Mom dressed him.'

Simplex/complex pairs are ordered in Table 6.6 by the point of articulation (bilabial, alveolar, velar).

Other phonological phenomena such as aspiration, as in (76), or vowel change, as in (80), might join the devoicing process.

(72) a. X沪原风处 10。

cy ngax mox da **bbit** bbo ox. 3P.SG 1P.SG in front of appear, exit go DP 'He appeared in front of me.'

Table 6.6: Simplex/complex verb pairs

Simplex intransitive verb	Complex monotransitive verb	Simplex monotransitive verb	Complex ditransitive verb
bbit 'appear'	bit 'take out'		
nbo 'roll' (intr.)	bop 'roll' (tr.)		
bbup 'loose'	pup 'loosen' (tr.)		
		ndit 'wear' (hat)	dit 'put on' (hat)
		ndo 'drink'	dop/x 'make drink'
zzi 'leave over'	zi 'leave over'	zze 'eat'	zha 'feed'
zzur 'be, stand'	cur 'erect, build'		
rry 'torn'	chy 'tear off'		
jjie 'burn'	jie 'burn'		
jjy 'melt'	jy 'melt'		
jjo 'pasture'	juo 'pasture'		
jjuo 'collapse'	quo 'make collapse'		
bie jjuo 'rotten'	bie quo 'corrupt'		
nyi 'sit'	hnip 'make sit'		
ggur 'fear'	gur 'frighten'	ggat 'wear' (shirt)	gat 'dress' (shirt)
lap ggut 'bend'	kut 'bend'	gge 'hear'	ge 'tell'

- b. ଶିክ ਜੋ # ው .
 ax yi shax jji **bit.**child candy take out
 'The child took out the candy.'
- (73) a. ⊖@ሄ≚⑥。
 hle bo **nbo** bbo ox.
 ball roll go DP
 'The ball is rolling.'
- (74) a. 单岁足声觉。
 xyx hnie sy jip **bbup** ox.
 shoe lace loosen DP
 'The shoelace is loosening.'
- (75) a. 샤비윤。 zza **zzi** ox. food leave over DP 'Food was left over.'

b. ドササ圭。 nga vo lip **bop.** 1P.SG snow ball roll

'I am rolling a snow ball.'

- b. 発光子程制分析。 xyx hnie sy jip **pu** gox sha. shoe lace loosen SEND 'Untie the shoelaces!'
- b. 肾海黃氧河。 nga zza **zi** nex da. 1P.SG food leave 2P.SG STP 'I leave the food for you.'
- (76) a. 『目サゾナダ庫。
 hxo pu go syr go ap- zzur.
 mountain LOC tree PRO.LOC NEG- be, stand
 'There are no trees on the mountain.'

- b. 歩筆車兼分切。
 ngop wox yie mox ma **cur**.
 1P.PL big house CL build
 'We built a large house.'
- (77) a. ሕ**⋷**≸ዝ**ገ**ሧ° h. vit gga vit gga zyt jie rry ox nga chy gox sha clothes REFL rip DP clothes 1P.SG tear **SEND** 'The garment tore by itself.' 'I tore the clothes.'
- \$4**¥**0. b. 1348 M M 🖟 . (78) a. mup dut iiie mup dut iie ox. ne da ox. burn fire burn STP fire DP 2P.SG DP 'The fire burnt.' 'You have to kindle the fire.'
- (80) a. 의主目学和主節。
 le bbox pu go **jjo** bbo ox.
 ox mountain LOC pasture go DP
 'The ox was pasturing on the mountain.'
 - b. 日本生のミサギ州。
 rre cy ddie ndip shy go **juo** da.
 cattle 3P.SG COV.prepare greenland LOC pasture STP
 'He led the cattle to pasture.'
- (81) a. 《 覺 照 ⑥ 。 b. 从 《 覺 日 。 cy za pux **quo**. wall collapse DP 3P.SG wall make collapse 'The wall has collapsed.' 'He made the wall collapse.'
- (82) a. ১৮ বি এ মি ও প্ল জি jjut zzur ax li cyx ma **bie jjuo**. society old DEM.PROX CL rotten 'The society is rotten.'
 - b. 阅说問名序例目標。

 co cyx gge jjut zzur **bie quo** njuo.

 person DEM.PROX CL society corrupt PROG

 'These people are corrupting society.'

- (83) a. 豸卓章。
 ne miep **nyi**.
 2P.SG in front sit
 'Sit in front!'
 - b. 乳肉乳素生母以乳素网。
 ax yi ax mo ddie it ggo go **hnip** da.
 child mother COV.prepare bed LOC make sit STP
 'The mother made her child sit on the bed.'
- μχη. · @84 (84) a. h. nga ggur ox. nga сух gur. 1P.SG fear 1P.SG 3P.SG DP frighten 'I am afraid.' 'I frighten him.'
- 。**@ 18 程** 以出 (85) a. b. 。华级市均 she xi lap ggut she xi kut. ox. nga iron thread bend DP 1P.SG iron thread bend 'The iron thread bent (by itself).' 'I bent the iron thread.'

All examples listed above have a valency increase from one-place to two-place predicates. For five pairs below, the simplex predicate is a two-place predicate and the complex member a ditransitive predicate.

- (86)a. ታየ X ያት ያ 中的X 中 星 路。 ddie dit. uop lur ndit. uop lur nga nga nex 1P.SG hat 1P.SG hat COV 2P.SG put on wear 'I wear a hat.' 'I put your hat on you.'
- (87) a. 董智奇集月季智。
 bbox zze max su nry ap- **ndo**.
 man ART wine NEG- drink
 'This person doesn't drink wine.'
 - b. 野身瀬里利託。 nga ie qyt ddie ne **dox**. 1P.SG water COV 2P.SG make drink 'I gave you water to drink.'
- ●母母企業 。身串以次 (88) a. b. le she ddie ax yi zha. Сy zze. ne zzax 3P.SG ox meat 2P.SG COV child feed eat food 'He is eating ox meat.' 'Feed the child!'

```
(89) a.
         nit
                      ddop
                                  nga
                                               ox.
                             ma
                                         gge
         2P.SG.POSS word
                             CL
                                  1P.SG
                                               DP
                                         hear
         'I heard your word.'
         · 12 K + 2 fi 4
     h.
         nga
                bbux dde
                           syp
                                      CVX
                                             ge.
         1P.SG
                story
                                     3P.SG
                           converse
                                             tell
```

There is one pair of verbs, one having a voiced, the other a voiceless consonant. However, both are montransitive verbs with similar meanings.

```
3份状状外。
(90) a.
                        xvx hnie
                                        da.
         ne
                 ngat
                                  ssip
         2P.SG 1P.SG shoe
                                  use
                                        STP
         'You use my shoes.'
         ተመከተል፤
         ijot bbip
                   nga
                           sip
                                 mo!
         bag
                   1P.SG
                          take
                                 IMP
         'I'll take the bag, ok?'
```

'I tell him a story.'

6.2 Coverbs

The term *coverb* has different meanings. For linguists of Australian and South American languages (McGregor 2002; Dickinson 2002), coverbs are uninflected verbs that form an open class and co-occur with a small set of inflected classificatory verbs. For linguists of Asian languages, coverbs are verbs which grammaticalized as pre- or postpositions.

It is not possible to reconstruct a verbal meaning for all postpositions in Nuosu. There are three verb-like properties of coverbs: the possibility of reduplication, the possibility of negation and the possibility of appending aspect, tense or modality particles. Moreover, some coverbs must be adjacent to the NPs they mark, while others can be variably attached to the subject or to another noun phrase. Some coverbs are polysemous serving multiple grammatical functions.

Coverbs in this section are arranged in the following order: agent coverbs (section 6.2.1), goal coverbs (section 6.2.2), recipient coverbs (section 6.2.3), locative coverbs (section 6.2.4), directional coverbs (section 6.2.5) and other oblique coverbs (section 6.2.6).

Coverbs	Sole Predicate	Alternative Question	Negation	Coverb-TAM compound	Adjacent to NP
gep 'add'	Yes	No	No	No	Yes
sip 'take'	Yes	No	No	sip-da	Yes
gep sip 'add-take'	Yes	No	No	No	Yes
ddie 'prepare'	Yes	No	No	No	Yes/No
bbyp/bbyx 'give'	Yes	Yes/No	Yes/No	Yes/No	Yes
ga 'drop'	Yes	No	No	No	Yes/No
shu 'make'	Yes	No	No	No	Yes/No
jox '-'	No	No	No	jox-da	Yes
da 'put'	Yes	No	No	No	Yes
ddip/ddix 'say'	Yes	No	No	ddip/ddix-da	Yes
zyp/zyx 'lean'	Yes	No	No	zyp/zyx-da	Yes
mo 'watch'	No	No	No	mox-da	Yes
xi 'arrive'	No	Yes	Yes	Yes	Yes
hxep/hxex 'see'	Yes	No	No	hxep/hxex-da	Yes
chop 'along'	Yes	No	No	chop-da	Yes
six 'take'	Yes	No	No	six-da	Yes
sat 'point to'	Yes	No	No	sat-da	Yes
mga 'pass'	Yes	No	No	mga-da	Yes
mgep/mgex 'mix'	No	No	No	mgep/mgex-da	Yes
rrox mu '-'	No	No	No	rrox mu-da	Yes
qo 'follow'	Yes	No	No	qo-da	Yes
wa mgot 'pursue'	Yes	No	No	wa mgot-da	Yes

Table 6.7: List of coverbs and their morphosyntactic properties

6.2.1 Agent coverbs

Three agentive coverbs with semantic nuances exist in Nuosu: gep 'add' (section A), sip 'take' (section B) and the compound gep sip (section C). They are the formal mark of passive constructions.

A. The coverb gep 'add'

The agentive postposition gep has a verbal origin ('add') and is still used with this meaning today.

(91) X深川里世間より節。

zzax ddie ngat zhep sse су gge ox. gep 3P.SG rice CL COV 1P.SG.POSS bowl add DP 'She added more rice to my bowl.'

The morpheme gep developed into an agentive postposition ('by') and can be viewed as a mark of passive (section 11.1). As postposition, gep always marks the second NP in the clause as the agent.

Table 6.8: Polysemous coverbs

Coverb	Grammatical functions	Sections	
sip/six 'take'	- Agent coverb,	section 6.2.1.B	
	 Instrumental coverb, 	section 6.2.7.A	
	 Resultative conjunction 	section 13.3	
bbyp 'give'	Causee coverb,	section 6.2.3.A	
	 Recipient coverb 	section 6.2.4.A	
ddie 'prepare'	Goal coverb,	section 6.2.2.A	
	 Causee coverb 	section 6.2.3.B	
shu 'make'	Causee coverb,	section 6.2.1.D	
	 Valence particle 	section 12.2	
da 'put'	 Locative coverb, 	section 6.2.5.A	
	 Stative perfect 	section 7.7.1	
ddix 'say'	 Locative coverb 	section 6.2.5.B	
	 Quotative particle 	section 8.3.1.A	
	Complementizer	section 8.3.1.B	
sat 'point out'	 Reference coverb 	section 6.2.7.B	
	 Exhaustion particle 	section 7.5.1	

(92) Y 坐 呈 片 以 片 本 井 前 。

syr bbo bbox su cy **gep** kie jji ox. tree ART 3P.SG COV.add fell fall DP 'The tree was felled by him.'

It must appear with monotransitive or ditransitive predicates for which *gep* expresses that the direct object is affected physically or in another intended way.

vap la suox ggu cy **gep** chyp da ox. cloak NUM.3 CL 3P.SG COV.add weave STP DP 'Three cloaks were weaved by her.'

syt сy jjit сy gep hxip ngax ge. matter DEM.PROX CL3P.SG COV.add 1P.SG tell say 'This matter was told me by him.'

c. ម៉ិ គឺ ម៉ង់ កំ ក ភាព ហ្វែ ំ

jix po ji nga **gep** ngop ddur la ox. method CL 1P.SG COV.add think exit come DP 'A method was conceived by me.'

- d. 本口张北汉北长印工。
 - tep yy bbut su cy **gep** bi ngax ge. book, letter ART 3P.SG COV.add read 1P.SG tell 'The letter was read to me by him.'
- 。比北门均里以从北海旅帐 ka bba viet su cy gep ddie nga bbyx su nge. gift ART 3P.SG COV.add COV 1P.SG give NOM COP 'The gift was given by him to me.'

The concept of affectedness is crucial. The same verb may be compatible or incompatible with *gep* depending on the expression of affectedness.

- (94) a. *评用引作声说。
 *nga lat hxo **gep** syp ox.
 1P.SG male name COV.add know DP
 Intended meaning: 'I am known by Laho.'
 - b. 評出工作意见。
 nga lat hxo **gep** syp ndox ox.
 1P.SG male name COV.add know PUT DP
 'I am recognized by Laho.'
- (95) a. *未付出出節。
 *tep yy nga **gep** hxep ox.
 book 1P.SG COV.add see (read) DP
 Intended meaning: 'The book was seen by me.'
 - b. 承母界時爭重節。
 tep yy nga **gep** hxep jjie mguo ox.
 book 1P.SG COV.add see (read) fall apart DP
 'The book was read by me (and as a result) fell apart.'

In (96a), the bare verb *wep* 'receive' does not convey affectedness. In (96b–c), the post-predicate elements imply a resultative reading.

(96) a. *ヨスドは本節。

*rre mop nga **gep** wep ox.

money 1P.SG COV.add get DP

Intended meaning: 'The money was received by me.'

- b. 异聚苯基甲酚酚。
 get lu yiet cy **gep** sso da ox.
 skill CL 3P.SG COV.add study STP DP
 'A skill was acquired by him.'

B. The coverb sip 'take'

The coverb *sip/six* is a plain verb and belongs to the category of monosyllabic verbs with grammatical tone (section 10.2.3.B). In simple clauses, only the low tone verb *sip* can be used. It is associated with both orders: AOV and OAV.

- (97) a. ∃ລິສົ≇IIIXIT。
 rre mop ax nyi gge cy **sip**.
 money much CL 3P.SG take
 'He took a lot of money.'
 - b. 刈∃刀削≢州仆。 cy rre mop ax nyi mu **sip.** 3P.SG money much take 'He took a lot of money.'

The two allomorphs *sip/six* give rise to two postpositions: the agentive coverb *sip* and the instrumental coverb *six* (section 6.2.7.A). The agentive coverb *sip* is appended to the agent, the second noun phrase in the sentence, and emphasizes that the agent manipulates the patient in a physical way. Its function is close to *gep* but it contributes more directly the meaning of handling.

- (98) a. 雌贸米光比量。 nit uop lur cy **sip** ndit. 2P.SG hat 3P.SG COV.take put on 'He put on your hat.'
 - b. 引印引来IT年。 ax yi ax mo **sip** jyt. child mother COV.take beat 'The child is beaten by her mother.'
 - c. 周至學的也。 jie bop nga **sip** zhe. rope 1P.SG COV.take cut 'The rope was cut by me.'

. *1CH1288 .b

mup njit sse lat mop **sip** zzy. colt male name COV.take ride 'Lamo is riding on a colt.'

Sometimes, the concept of disposal is more indirect or abstract as illustrated in the following examples.

(99) a. 並以分非以**に**述。

yiet hxop max su cy **sip** yiet. song ART 3P.SG COV.take sing 'He sings a song (by holding a song book).'

d. 1104₽ՊՀֈ

ssox sse suo yuo at nyop **sip** hmat. pupil NUM.3 CL name COV.take teach 'Anyo teaches three pupils.'

The agentive coverb *sip* is banned if the main predicate does not communicate the idea of (physical) disposal, as in (100).

(100) a. * 学以 作 ※ ①。

*nga cy **sip** gat qip.

1P.SG 3P.SG COV.take delay, hinder
Intended meaning: 'I was delayed by him.'

*zzi at nyop **sip** mga ox. bridge name COV.take cross DP Intended meaning: 'The bridge was crossed by Anyo.'

c. *世旬的中作少生的。

*ngat ix yi nga **sip** ngop ddie ox. 1P.SG.POSS brother 1P.SG COV.take doubt DP Intended meaning: 'I mistrust my younger brother.'

As coverb, sip cannot be negated or reduplicated, but can co-occur with the perfect particle da which illustrates that its verbal meaning is still alive.

(101) a. 크고���������

rre mop cyx gge **sip** da vit gga vy yy. money DEM.PROX CL COV.take STP clothes buy go 'Take this money and buy some clothes.'

C. The complex coverb gep sip

The complex coverb *gep sip* combines the agent coverbs *gep* 'add' and *sip* 'take'. Its meaning expresses the agentive concept of disposal, similar to *sip*.

(102) a. 切以比比的策。

yi cy **gep sip** ndo hxex. tobacco 3P.SG COV drink, inhale LOOK 'He is trying to smoke tobacco.'

syr pip cyx gge cy **gep sip** get zyt. wooden beam DEM.PROX CL 3P.SG COV cupboard polish, cut 'He is taking this wooden beam to make a cupboard.'

c. 岁室为北北前主网。

vit gga cy **gep sip** ix go da. clothes 3P.SG COV home put 'He put the clothes at home.'

D. Appendix: The particles sip/six

The morphemes *sip/six* cover several functions, one lexical and three grammatical functions.

Meanings Section of grammar

(i) Main verb sip 'take'

(ii) Agentive postposition *sip* section 6.2.1.B(iii) Instrumental postposition *six* section 6.2.7.A

(iv) Resultative conjunction *six* section 12.2

Below, I briefly illustrate these uses and reconstruct the historical origin and development of *sip/six*.

(i) As main verb sip 'take'

The verb *sip* 'take' in simple clauses has the low tone and allows both orders: AOV and OAV.

(103) a. 世年間日条1.

vot she gge mu hlie **sip.** pork CL male name take 'Muhlie took the pork.'

b. 用象サ串目1°。

mu hlie vot she gge **sip.** male name pork a little bit take 'Muhlie took the pork.'

(ii) As agentive postposition sip

As agentive postposition, *sip* marks the agent, which is the second NP in the clause, and conveys the meaning that the patient is handled in a certain way.

(104)nga ax da sip zvt. 1P.SG father take scold 'I am scolded by my father.'

(iii) As instrumental postposition six

As instrumental postposition, six marks the instrument by means of which the agent affects the patient. The instrumental NP occurs before the patient NP.

(105)**水影似的**对于 ngop wox zza six va hxo. 1P.PL take hen feed corn 'We fed the hens with corn.'

(iv) As resultative conjunction six

After main verbs, the morpheme *sip/six* developed into a resultative conjunction, reminiscent of so that, which encodes the state resulting from an activity.

(106) a. ddiex bur six iet zyr vit gga сy ox. clothes 3P.SG change small DP RES 'She downsized the clothes.'

> b. 1 L 中 以 手 **夏** × 前。 cyp tit six wop ox. jy xy cy 3P.SG.POSS foot swollen 3P.SG stamp RES DP 'She stamped with her foot so much that it got swollen.'

(v) Historical development

The different meanings of sip/six developed through syntactic reanalysis in serial verb constructions: the postpositional meanings (agentive, instrumental) from preverbal rebracketing and the resultative meaning from postverbal rebracketing.

Preverbal Reanalysis:

```
NP_1[NP_2 sip][NP_3 V] \rightarrow NP_1[NP_2 sip NP_3 V]
NP_1[NP_2 six][NP_3 V] \rightarrow NP_1[NP_2 six NP_3 V]
```

Postverbal Reanalysis:

```
NP_1 [NP_2 V] [NP_3 six] [NP_4 V] \rightarrow NP_1 [NP_2 V] [NP_3 six NP_4 V]
```

Both reanalyses occurred only when two of the arguments NP_1 , NP_2 or NP_3 were co-referential and the second co-referential arguments was deleted. The meanings of agentive coverb, instrumental coverb and resultative particle surfaced in three kinds of co-referential patterns.

- Agentive coverb (Preverbal Reanalysis, coreferential NP₂ and NP₃)

The meaning of agentive coverb developed through preverbal reanalysis in which NP₃ is deleted since it is coreferential to NP₂.

yi max su cy **sip** Ø syr. house ART 3P.SG COV.take sweep 'He swept the house.'

Instrumental coverb (Preverbal Reanalysis, different NP₂ and NP₃)

The instrumental coverb is the result of reanalysis of the meaning of *take* as an instrumental postposition. No coreferential deletion occurs.

(108) X 或 於 東 守 樹。
cy yiet hxie **six** yiep but chyp.
3P.SG loom COV.take cloth weave

'He is weaving cloth with a loom.'

Resultative marker (Postverbal Reanalysis, coreferential NP₁ and NP₃)

Postverbal reanalysis of six occurred when NP₃ was coreferential to NP₁. It was reinterpreted first as purposive and then as resultative marker.

(109) 以日 元 兼 氪 并 # 。
cy rre mop hxe Ø **six** nre sur.
3P.SG money borrow RES debt pay back
'He borrowed money so that he can pay back his debts.'

6.2.2 Patient coverbs

There is one patient coverb which is obligatory in most ditransitive constructions, *ddie* 'prepare'.

A. The coverb ddie 'prepare'

As main verb, *ddie* conveys a general meaning of *making* or *preparing*. Depending on the type of object, it can express a wide range of meanings.

- (110) a. HX系217生的。 mu ga hmat mop cvp vit ddie ox. name teacher NUM.1 time do, function as DP 'Muga was working as teacher for some time.'
 - አካθዙ**±**֎。 ddie cy vi max su ox. 3P.SG house ART make, repair DP 'He has fixed the (problems of the) house.'
 - c. 1/4 M P M Y S t . ax mo hxi jox ddie. da vit gga mother outside COV.put clothes clean, purge 'Mom is cleaning the clothes.'

Furthermore, ddie is the obligatory postposition of ditransitive verbs for the semantic role of patient. It marks the patient that is transferred to someone or placed into a specific position.

- (111)a. 吸水表本到口多效效。 ddie nit vit gga ix ggo da da. go 2P.SG.POSS clothes COV.prepare bed LOC put STP 'Put your clothes on your bed.'
 - h. りが事をい。 yi ddie tit cy cur. house 3P.SG COV.prepare here build 'He built the house here.'

With ditransitive verbs, *ddie* does not need to be adjacent to the goal NP but can occur after the agent NP as well. The non-adjacency property of ddie is a residual feature of its verbhood and of the basic word order instability (section 10.2.3).

。 3年累出事日17年 以 (112) a. rre mop cyp hxa **ddie** ngat vat lot zip. 3P.SG money NUM.100 Yuan COV 1P.SG.POSS hand LOC put 'He put 100 Yuan into my hand.'

b. ∃2146以**生**世學才区。

rre mop cyp hxa vat cy **ddie** ngat lot go zip. money NUM.100 Yuan 3P.SG COV 1P.SG.POSS hand LOC put '100 Yuan was put by him into my hand.'

The coverb *ddie* is also obligatory with ditransitive complex verbs (see section 6.1.4.E) or with verbs for which the idea of transfer in only indirect.

(113) a. 划矛从

对党

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D

D

D<br/

i dix cyx ggu nga **ddie** lu po gat. coat DEM.PROX CL 1P.SG COV.prepare male name dress 'I dressed Lupo with this coat.'

b. 重月即**生**星母手。

ne nry zhep **ddie** ddip vip dop. 2P.SG wine CL COV.prepare guest give to drink 'Give the guests a bowl of wine.'

c. 植术母生界觉。

nit tep yy **ddie** nga box. 2P.SG book COV.prepare 1P.SG reveal, let see 'Show me your book.'

As postposition, *ddie* has lost most other verbal properties. It cannot be negated, reduplicated or suffixed by a TAM particle.

6.2.3 Causee coverbs

Four coverbs mark the causee noun phrase with different semantic nuances: *bbyp/bbyx* 'give' (section A), *ddie* 'prepare' (section B), *ga* 'drop' (section C), *shu* 'make' (section D).

A. The coverb bbyp/bbyx 'give'

The verb bbyp/bbyx 'give' evolved before other predicates into a causee postposition, after other predicates into a recipient postposition (section 6.2.4.A). The tone alternation is driven by a process of tone dissimilation. If the immediately preceding tone is [44] or [55], then bbyp takes the low tone, whereas if the midtone [33] or low tone [21] precedes it, then bbyx takes the higher sandhi tone.

cy ap mut shu kut zza ma ax nyi gge ddie ngop **bbyx** ox. 3P.SG this year crops much CL COV 1P.PL give DP 'He provided us with abundant crops.'

b. 创组制中年承租工资。

cop jiet le ji ddie ngop jiet **bbyp** ox. 3P.PL.POSS family ox CL COV 1P.PL.POSS family give DP 'Their family gave our family an ox.'

The coverb *bbyp/bbyx* together with the causative particle *shux* (section 6.2.3.D) frame the causative verb phrase. The coverb *bbyp/bbyx* marks the causee.

(115) a. มีฟมิสประเ**ร**ิฐหิยุหิยุมิยุหพ.

ax da ax mo li ap my **bbyx** bbox zze cyx ma jjip father mother TOP daughter COV.give man DEM.PROX CL make shux ap- qi.

CAUS NEG- want

'The parents don't want to let their daughter marry this man.'

b. @ሦብ里ዞሽ የ 🖟 。

mge fu cop ddie nga **bbyx** zze shux. buckwheat bread 3P.PL COV 1P.SG COV eat CAUS 'They fed me with buckwheat bread.'

mop mgep te go, co **bbyx** ra ap-shup hxit. meeting when people COV make noise NEG- CAUS can 'It is forbidden to make noise during the meeting.'

d. አቁ<u>ጌ</u>ጘአቋጀ‡ፋሪ°

ngop **bbyx** shup. cv svt cviiit dde iii ap-3P.SG 1P.PL COV matter DEM.PROX CL know NEG-**CAUS** 'He doesn't let us know about this matter.'

e. ক্ষান্য্ৰীধ্ৰাল্ডি

ngop ip nyip ax mo **bbyx** hxie mat kat shux. 1P.PL today mother COV heart CAUS 'We made Mom happy today.'

With ditransitive verb phrases, the coverb *bbyp/bbyx* may be used twice, the first as causative coverb, the second as recipient coverb.

(116) **プトスプ**トロ (116) **プトスプト**ロ (116)

nga hmat mop bbyx bbut bbur ngat ix go tep yy 1P.SG CL1P.SG.POSS teacher COV.give book write home bbyp shux. COV.give CAUS

'I made the teacher write a letter to my family.'

As causative coverb, *bbyp/bbyx* must be adjacent to the causee NP, cannot be negated or reduplicated and cannot be directly followed by a TAM particle.

B. The coverb ddie 'prepare'

Besides ditransitive clauses (section 6.2.2.A), *ddie* functions as causative post-position. It must co-occur with the valence particle *shux* (section 11.3.2) in one of the following constructions.

(117) a. Causee+Causer+*ddie*+VP+*shux* in-/monotransitive VP b. Causer+O+*ddie*+Causee+*bbyx*+V+*shux* monotransitive VP

The next three examples illustrate the pattern (117a). The first two examples in (118) use an intransitive verb, (119) uses a monotransitive verb.

- (118) a. 引即主量录长单。 ax yi ne **ddie** gox shyr shux. cat 2P.SG COV.prepare LOC cry CAUS 'Let the child cry.'
 - b. 学刊生せまじ沪。
 nga cop **ddie** it nyi gu shux.
 1P.SG 3P.PL COV.prepare sleep CAUS
 'They let me sleep.'
- (119) 원보발시원.
 cop cy **ddie** le sit shux.
 3P.PL 3P.SG COV.prepare ox kill CAUS
 'He let them kill the ox.'

The use of the two causative postposition, *ddie* and *bbyx*, implies the sense that the causer hands the patient over to the causee for further processing.

- 。現象完好堂字政 (120)a. сy syr ddie nga bbyx mgo shux. 3P.SG wood COV.prepare 1P.SG COV.give pull, move **CAUS** 'He made me move the firewood.'
 - b. 母⑨生乳Sୈ啡单。
 cop ce **ddie** ax lyr bbyx yot shux.
 3P.PL salt COV.prepare goat COV.give lick CAUS
 'They let the goat lick the salt.'

C. The coverb ga 'drop'

The coverb ga is another causative postposition which conveys a permissive sense to the clause. As verb, it has the meaning 'drop' or 'shake off'.

(121) 单署到分别研入争用。

xyx hnie go syx jo cop **ga** gox sha. shoe LOC mud 3P.PL drop SEND 'They shook the mud off their shoes.'

As causee coverb, *ga* can occur in two causative constructions either alone, with *shux* or with *bbyx* and *shux*.

(122) a. Causee+Causer+*ga*+VP+(*shux*) in-/monotransitive VP b. Causer+O+*ga*+Causee+*bbyx*+V+*shux* monotransitive VP

The valency particle *shux* tends to be present if the causee is human or animate, as in (123), and absent if it is inanimate, as in (124).

(123) a. 埃袋XX#粪巢⑩。

hxie zyr cy **ga** jji bbo shux ox. bird 3P.SG COV.drop fly go CAUS DP 'He let the bird fly away.'

b. **豸**ÂX♥蝥巢。

ne cyx **ga** bur bbo shux. 2P.SG 3P.SG COV.drop return go CAUS 'He let you go back.'

c. រៀសXฏH₭ቯ&છ。

ax yi **ga** xip mu shyr tat-shup ox. child COV.drop DEM.DD scream NEG.IMP- CAUS DP 'Don't allow the child to scream like this.'

d. ⋈गX୬ౖдӈ҈。

va bu **ga** gox gu shux. rooster COV.drop LOC crow, call CAUS 'Let the rooster crow.'

(124) a. ∃ភ្ជាប់X発や用。

rre mop ax yi **ga** hlix ndo mat. money child COV.drop lose FEAR 'I am afraid of letting the child waste the money.' b. መናአቒፇል?

zhep sse **ga** kat qyp da? bowl COV.drop where put STP 'Where did you put the bowl?'

c. 均面以**以**中音。

yix bo cy **ga** nga dox. tobacco CL 3P.SG COV.drop 1P.SG smoke 'He let me smoke a packet of cigarettes.'

 \mathbf{d} . $\mathbf{d} \mathbf{w} \mathbf{x} \hat{\mathbf{x}} \mathbf{\theta} \mathbf{x} \mathbf{r}$ መታፈፍ?

nit uop lur cyx ma **ga** nga dit go zhet zhet? 2P.SG hat DEM.PROX CL COV.drop 1P.SG put on COMP good~ALT 'Would it be ok for me to put on your hat?'

Furthermore, ga also co-occurs with the causee postposition bbyx and the valence particle shux. The coverb ga marks the patient, bbyx marks the causee.

(125) a. みつXリば了忠沪。

xyp mop **ga** mu jie bbyx yu shux. wife, bride COV.drop male name COV.give marry CAUS 'Let Mujie choose his wife.'

р. ୩୬୪୬ (*4) ХНԵՂ릴»

bbu dde cyx ma **ga** mu hlie bbyx hxip shux. story DEM.PROX CL COV.drop male name COV say CAUS 'Let Muhlie tell the story.'

Finally, as a postposition, ga cannot be negated, reduplicated and compounded by TAM.

D. The coverb shu 'make'

The coverb *shu* is derived from a dummy verb that can be glossed by 'make' or 'get'. It belongs to a stylistically low register and is identified by native speakers as careless talk similar to English *I made three glasses of beer* in lieu of *I drank three glasses of beer*. As verb, *shu* subcategorizes a wide range of nouns.

(126) a. 雪州卯?

ne nry **shux shu?** 2P.SG wine make~ALT 'Did you drink wine?'

- b. 例等字字型。 cop wox syt ap- **shu**. 3P.PL thing NEG- do 'They did nothing.'
- c. 步爭漁地節。 ngop wox zzax **shu** ox. 1P.PL food make DP 'We have already eaten.'
- d. 飛線光炉間節。 hxie zyr cy **shu** ssop ox. bird 3P.SG make END DP 'He shot the bird down.'

Furthermore, *shu* functions as causative postposition. The word order of causer and causee is variable. It is regulated by the same principles as the order of subject and object in simple clauses (section 10.2).

- (127) a. Caus**ee**+Caus**er**+shu+VP b. Caus**er**+Caus**ee**+shu+VP
- In (128a), *shu* is attached to the causer (first person pronoun with midtone). In (128b) it is postposed to the causee (first person pronoun with sandhi tone).
- (128) a. 《日蘭州爭學用書業。 ap ndi hxix cop wox nga **shu** rre hlut bbo. yesterday 3P.PL 1P.SG COV.make pasture livestock go 'Yesterday I caused them to pasture the livestock.'
 - b. 《日啟创筆字》曰書業。
 ap ndi hxix cop wox nga**x shu** rre hlut bbo.
 yesterday 3P.PL 1P.SG COV.make pasture livestock go
 'Yesterday they caused me to pasture the livestock.'

If the third person pronoun *cy* (midtone) occurs directly before *shu*, it is often understood non-deictically as an impersonal causee, as in (129a–b). Depending on the context, *cy* may also be interpreted deictically, as in (129c–d).

a. 早光光学第1,步光伊华成的。
syt cy jjit ggup jjux ne, ngop cy **shu** ngop die ox.
matter DEM.PROX CL after TOP 1P.SG 3P.SG COV.make doubt DP
'After this matter, it left us in doubt.'

- b. 界为**护**尼州另刻效。
 - nga cy **shu** jy jie sy dax qi. 1P.SG 3P.SG COV.make fear die almost 'It scared me almost to death.'
- c. 歩刈炉Ψ≚。
 ngop cy **shu** ddur bbo.
 1P.SG 3P.SG COV.make exit go
 'He made us go out.'
- d. 步爭以即飛琶河域的。
 ngop wox cy **shu** hxie njuo da yiet ox.
 1P.PL 3P.SG COV.make move heart STP sing DP
 'We were moved by his song.'

As a postposition, *shu* cannot be negated, reduplicated or suffixed by TAM particles. It functions also as valence particle at the end of the clause to indicate an increase of valence of the clause. Most causative clauses require the presence of *shu* (section 11.3.2). The valence particle *shu* (with allotones *shup* and *shux*) has preserved the verb property of negation.

- 3**代**化 11.17. 以 生 15 (130) a. ddie ne сy bbyx shux. cyp nyip ngop 2P.SG COV 3P.SG COV NUM.1 day think CAUS 'Let him think (about it) for one day.'
 - b. 排資物預算分類以及。
 na mgup co co na bbyx lyrx nyie ap- **shup**.
 doctor ill person COV.give move NEG- CAUS
 'The doctor didn't allow the sick person to move.'

6.2.4 Recipient coverbs

Two coverbs are reseved for marking the recipient noun phrase of a ditransitive clause, *bbyp/bbyx* 'give' (section A) and *jox* (section B).

A. The coverb bbyp/bbyx 'give'

Besides the function of preverbal causative coverb (section 6.2.3.A), *bbyp/bbyx* also acts as postverbal coverb for recipient noun phrases in ditransitive clauses. The coverb *bbyp/bbyx* divides ditransitive verbs up into three groups, those that require marking by *bbyp/bbyx*, those that tolerate but do not require its marking and those that ban its presence.

Table 6.9: Verbs that	are	in/com	patible	with	bbvp/bbvx
-----------------------	-----	--------	---------	------	-----------

bbyp obligatory	<i>bbyp</i> optional	bbyp forbidden
sha 'send, sprinkle'	sur 'return'	bbyp 'give'
nbi 'distribute'	hxe 'borrow, lend'	hmat 'teach'
bbur 'write'		hna 'ask'
zi 'keep for'		lup 'rob'
sip 'take, bring'		ku 'steal'
jo 'hand in'		sso 'study'
gup 'throw'		zha 'feed'
vup 'sell'		gat 'dress'
nyop 'bequeath'		ge 'tell'
bur 'return'		dox 'make drink'
gup 'throw'		

Firstly, examples in (131) require the marking of the recipient by bbyp/bbyx at the end of the sentence.

- .**1**4¥14KCE (131) a.
 - rre mop cy bbyx. bur nga gep money 3P.SG COV.add return 1P.SG COV.give 'The money was returned by him to me.'
 - .**1.**K&%D&4 h. nga tep vv bbut bbur cv bbyx. 1P.SG letter CL write 3P.SG COV.give 'I write him a letter.'
 - .**1.**100 + 1.00 bbyx. nga she a zzyx ma gup ke 1P.SG meat DEM.DIST CL throw dog COV.give 'I tossed that piece of meat to the dog.'
 - **ኒ**ሴ ይደች ተ እ cy sha jji map tap nbi ax yi bbyx. 3P.SG sweets distribute child COV.give 'He distributed sweets to the children.'

Secondly, the main verbs in the following examples necessitate either marking by the preverbal coverb *ddie* or by the postverbal coverb *bbyp*.

。世色世色歌竹 (132) a. zza ma ddie nex nga sur. 1P.SG crops COV 2P.SG return 'I return to you the crops.'

- b. 评海分步到记。
 nga zza ma sur ne **bbyx**.
 1P.SG crops return 2P.SG lend
 'I return to you the crops.'
- (133) a. X日口里主義。 cy rre mop ddie nex hxe. 3P.SG money COV 2P.SG lend 'He lends you money.'
 - b. X日の業年分。 cy rre mop hxe ne **bbyx**. 3P.SG money lend 2P.SG lend 'He lends you money.'

Thirdly, several ditransitive verbs cannot take bbyx to mark recipient NPs. The verb bbyp 'give' itself cannot mark its recipient by bbyx. Ditransitive verbs that forbid the use of bbyp involve other coverbs.

- (134) a. *坪惠舟丁津州第本。

 *nga ddop ma cyp go hna nex **bbyp**.

 1P.SG word NUM.1 CL ask 2P.SG COV

 'I ask you one word.'
 - b. 肾患分子致衰缩术。
 nga ddop ma cyp go **six** nex hna.
 1P.SG word NUM.1 CL COV 2P.SG ask
 'I ask you one word.'
- - b. X月里界是。
 cy nry ddie nga dox.
 3P.SG wine COV 1P.SG make drink
 'He gave me wine to drink.'

> lu ti nga qo da hxie mgat sso qi. male name 1P.SG COV STP Chinese study want 'Luti wants to learn Chinese from me.'

The postverbal postposition bbyp/bbyx cannot be negated or reduplicated but can attach TAM particles. It must be adjacent to the NP it marks.

B. The coverb jox

The coverb cannot be used as verb and its original verbal meaning, if any, is uncertain. For motion verbs, it marks the direction towards which an entity moves. For a few non-motion verbs, *jox* codes the recipient of a directed activity.

(137) a. 少平兴**卯**山。

ngop juo jjop **jox** li. 1P.PL Zhaojue County toward go up 'Let us go up to Zhaojue.'

b. 承於# d 出 **9** 举。

hxie zyr jji yyx hmy **jox** bbo. bird fly south toward go 'The bird flies towards the south.'

c. $H \times H \mathcal{P} I \times X \times \Theta$.

mu ga ngat **jox** hxep da lur mat gup. name 1P.SG toward in direction of stone throw 'Muga throws a stone in my direction.'

(138) a. 以世野学園。

cy ngat **jox** lot hxi. 3P.SG 1P.SG toward hand wave 'He is waving his hand toward me.'

 \mathbf{b} . ይ $\mathbf{\hat{Q}}$ ጊዜጚ፞፠፠ \mathbf{k} .d

syt cy jjit nga shu cyp **jox** hxip. matter DEM.PROX CL 1P.SG COV.make 3P.SG toward speak 'He spoke to me about this matter.'

c. Ո̂ጸՈ՞ኮዎႆં.

- d. Hㄨ歩笋ጮ。 mu ga ngop **jox** ra. name 1P.SG toward scream 'He is screaming at me.'
- 10%**分**(以) 44片。 op bbop ne iox (da) hxep aphxit. 2P.SG front toward STP look NEG-MOD 'You can't look ahead.'

For gradable adjectives or verbs, the postposition *jox* encodes the NP that is understood as the standard of comparison against which another NP is evaluated. Comparative constructions are scrutinized in section 11.4.1.

- (139) a. 坪兴爭水吳相司。
 nga cy **jox** ap cy mu ax yy.
 1P.SG 3P.SG toward more big
 'I am bigger than he.'
 - b. X世界学年X日藻皇黨。
 cy ngat **jop** ap cy mu zzax zze nyiet.
 3P.SG 1P.SG toward more meal eat late
 'He is eating later than I am.'

The postposition jox cannot be negated or reduplicated, but can be suffixed by the perfect particle da as jox da, as in (138e).

6.2.5 Locative coverbs

Four coverbs mark the location at which an event happens: *da* 'put' (section A), *ddip/ddix* 'say' (section B), *zyp/zyx* 'lean' (section C) and *mo* (section D).

A. The coverb da 'put'

The morpheme da is a predicate (put), a locative coverb before and a perfect particle after other predicates (section 7.7.3). The following two examples illustrate da as predicate.

(140) a. 州眾生等例內。

nry zhep ddie hxat **da** da.

wine CL COV upside put STP

'Put the bowl of wine on top of it (= the ancestral altar).'

b. 例说分量行例?
co cyx ma kep nyix nyip **da**?
person DEM.PROX CL how many day put
'How many days will the body be put on display?'

As postposition, *da* is the principle marker of locative phrases. Locative phrases have the following structure.

(141) NP+locative particle+da

Locative phrases marked by *da* are illustrated below. With non-motion verbs, *da* marks a non-dynamic location. With motion-verbs, *da* indicates the origin of motion.

- OTHOKÉ EÉGTÉH (142) a. cop wox vi wax nuo jox da nyop mu ge. 3P.PL house behind LOC COV work **PROG** 'They are working behind the house.'

 - c. 晚後身果用学知堂歷。 hxie zyr ma mo mu go **da** vo njuo. bird CL sky LOC COV fly PROG 'A bird is flying in the sky.'
 - d. 代创型第M对新年。
 at nyop ku jox **da** ip ko ggot.
 female name inside LOC COV door close
 'Anyo closes the door from the inside.'
 - e. 用爺Y塗YM账目。 mu nyox syr bbo go **da** qie la. male name tree LOC COV jump come 'Munyo is jumping down from the tree.'

The contrast between the locative coverb da and the source coverb da is illustrated for the following minimal pair of examples.

(143) a. 尹肇乐学知年。 nga bbox sse tot jop **da** hxep. 1P.SG mountain upside LOC COV see 'I am watching something on top of the mountain.' b. 肾蚤よ牙質例片。
nga bbox sse go **da** hxep.
1P.SG mountain LOC COV see
'I am watching something from (i.e. standing on) the mountain.'

Place names are directly followed by the postposition *da* without an intervening locative particle.

(144) 歩筆の曲MJFで製の。
ngop wox op rro **da** cyp nyip gat qip.
1P.PL Xichang COV NUM.1 day delay
'We were delayed in Xichang for one day.'

As postposition, *da* cannot be negated, reduplicated or followed by a TAM particle. Example (145) shows the impossibility of negation.

(145) *创争序の状況ほ並。 *cop wox ggap mop ap- **da** bur bbo. 3P.PL road NEG- COV return go 'They did not return when they were on the road.'

B. The coverb ddip/ddix 'say'

The verb *ddip/ddix* 'say' acquired multiple grammatical functions (section 8.3.1). After other main predicates, it surfaced as quotative particle, complementizer and before the predicate as locative postposition of human nouns. This function is reminiscent of the French preposition *chez* 'at the place of'.

The morpheme ddip/ddix is the formerly productive verb for say now supplanted by hxip (section 8.3.1.A). It still functions marginally as the main predicate be named.

(146) 學用象筆。
nga mu hlie **ddix**.
1P.SG male name be named
'My name is Muhlie.'

As postposition, ddip/ddix must be adjacent to a human noun. It indicates the association of the subject referent with the location of someone. This sense is reanalyzed from the verbal meaning of ddip/ddix (someone is associated with a name). The postposition ddix marks the location of a human referent as the place of an activity or as the origin/destination of a motion.

(147) a. マスダ刊新 U H ⑩。
syt cy jjit cop **ddix** ddur su ox. Location
matter DEM.PROX CL 3P.PL COV happen DP
'This matter happened at their house.'

b. 当少**宁** 举门, 举页者。

ne ngop **ddix** bbo la, bbo dde jjip. Location 2P.SG 1P.PL COV run come run-SUFF become 'Come to our place for running a race, there is enough space.'

c. 量均果更量目。

ix yi vyt vu **ddix** la. Origin younger brother elder brother COV come 'The younger brother comes from his brother's home.'

d. 肾量从几本乳蛋质。

vit gga cy sip ngop **ddix** ddiex bur. Destination clothes 3P.SG COV.take 1P.PL COV alter 'He took the garment to have it altered at our house.'

The following use of the postposition *ddip/ddix* is metaphorical in that causees are viewed as sources.

(148) ₲∃₦₤₷.

nit rre cop **ddix** sot.

2P.SG.POSS money, account 3P.PL COV calculate

'Let them settle your account (= Your account is settled at their place).'

The tone of ddi^* switches to the low tone [21] if the preceding syllable has a high tone. It adopts the sandhi tone [44] if the preceding tone is a low or midtone.

(149) a. 减米世**望**刻以井片。

nit hmi ngat **ddip** da cy jji su. 2P.SG.POSS name 1P.SG.POSS COV STP 3P.SG know NOM 'He got to know your name from me.'

b. 用物本表明本门。

lat rep ngop **ddix** ku ap- la. thief 1P.PL COV steal NEG- come 'Thieves don't come to our house to steal.'

The postposition ddip/ddix cannot co-occur with TAM particles except for the perfect particle da. The string ddix da emphasizes the stative aspect of the locative relation.

> tep yy cy zzit cyp ddix da nga sip la. book DEM.PROX CL CL COV STP 1P.SG take come 'I took this book away from him.'

b. ២៩វិសបិក្ខេសិ

nga cop **ddix** da yix ga ndo ox. 1P.SG 3P.PL COV STP tobacco CL smoke DP 'I smoked a cigarette at their place.'

The postposition *ddip/ddix* rejects any other aspect particle. The morpheme *njuo* in (151b) is used as verb not in the function of progressive aspect (section 7.4.1).

(151) a. *뒤ょ환경목於目於第。

*nry cyp **ddix** nzox vy dax pu ggap jjyx. wine 3P.SG COV EXP buy price light 'The wine that can be bought at his place is rather cheap.'

b. ¼€≢∭∄¶∰.

cy yo hlut ggex su **ddix** njuo. 3P.SG sheep pasture ART COV move 'He is out with the shepherds.'

In section 5.4.3.D, we scrutinized the locative demonstrative *a ddit* 'there' which is lexicalized from the verb *ddip/ddix* 'say' by introducing a tone change for *ddi**.

(152) 米田川火旱業和財效。

lur mat gge cy gep bbo **a ddit** da. stone CL 3P.SG COV.add push there put 'Stones were moved by him here.'

Finally, the postposition *ddip/ddix* cannot be negated or reduplicated and must be adjacent to the NP it marks.

C. The coverb zyp/zyx 'lean'

The morpheme zyp/zyx functions as independent verb ('lean') and also as weakly grammaticalized postposition ('close to').

(153) 承生€ 自 € 內。

get ddie za pux **zyp** da. cupboard COV wall lean STP 'Let the cupboard stand close to the wall.'

As a postposition, zyp/zyx modifies the subject noun phrase before the main predicate, as in (154a). After the main predicate, zyp/zyx modifies the direct object which, as result of the activity, is moved to a certain place, as in (154b).

(154) a. 均行母签袋网子单。

co nyip ma bbop **zyx** da jjy- ndux. person NUM.2 CL ahead COV.lean STP RECL- hit "Two people leaned forward to beat each other."

b. Y外间身身子说网。
syr pip ggex su ssyr jjy- **zyx** da.
beam ART press RECL- COV.lean STP
'Press the beams closely together.'

The tone of zy^* is conditioned by a process of tonal dissimilation. If the preceding tone is a high tone or midtone, then zyp takes the low tone; if the preceding syllable has the low tone, then zyx has the elevated sandhi tone. If it has the midtone, then native speakers accept both tone variants zyp/zyx.

- (155) a. 用低電量經營基份素目的。
 mu jy zax pu **zyp** da tep yy hxep.
 male name wall COV.lean STP book read
 'Mudje leans on a wall reading a book.'
 - lat rep suo vuox su da ku. jjy-ZVX COX thief ART NUM.3 RECL-COV.lean STP person steal 'The three thieves rob others as a team.'

The postposition zyp/zyx is obligatorily followed by the stative perfect particle da. It cannot be negated or reduplicated and must be adjacent to the locative noun it marks.

D. The coverb mo 'see'

The postposition *mox* 'in front of' is probably derived from the verb *mo* 'see'. The verb mo is not productive anymore. It does not function as sole predicate anymore but is lexicalized with *wep* 'get' into the telic verb *wep mo* 'perceive'.

(156) 日光東平春節。 mu ga vut gop wep **mo** ox. male name female name GET see DP 'Muga has seen Vugo.'

As verb, *mo* 'see' assumes the midtone, whereas as locative postposition, *mox* 'in front of' exhibits the sandhi tone.

- (157) a. រាំន្ទសុន្តិស្លាំ២៧និម្មវិស.
 - ax mo ne cy **mox** da ax yi a zzyx ma ka ap- hna. mother TOP 3P.SG in front STP child DEM CL want NEG- willing 'The mother refused to acknowledge the child in his presence (his = someone given by context).'
 - b. ៨អឹដ្ឋាហ្សំ Mage.

nit shax jji sip ax yi **mox** da tat- zze. 2P.SG sweets COV child COV.see STP NEG.IMP- eat 'Don't eat sweets before the children.'

ne sut co **mox** da ngat hmi tat- gu. 2P.SG others person COV STP 1P.SG.POSS name NEG.IMP- call 'Don't pronounce my name in front of others.'

The postposition *mox* often co-occurs with the stative perfect particle *da* but cannot append any other aspect particle. It cannot be reduplicated or negated.

(158) a. 里塚麓図覧YYS。

ddip vip **mox** da yix syr ap- hxit. with *da* guest COV STP house sweep NEG- can 'One cannot sweep the house in the presence of guests.'

h. አታ**ቶ** ዘ일。

cy nga **mox** nry ndo. without *da* 3P.SG 1P.SG COV wine drink 'He drank wine in front of me.'

6.2.6 Directional coverbs

Three directional coverbs exists that mark the destination of a motion event: *xi* 'arrive' (section A), *hxep/hxex* 'see' (section B) and *chop* 'along' (section C).

A. The coverb xi 'arrive'

The coverb *xi* 'arrive' cannot be used as sole predicate of a clause but occurs after other predicates to mark a physical destination or temporal endpoint.

The concept of *arrive* is represented by a directional verb, la 'come' or bbo 'go', one of the two conjunctions six (section 6.2.1.D) or hnox (section 13.1.2.C), and xi 'arrive'. The expressions six...xi and hnox...xi function as circumpositions.

(159) a. 月泉口泉用口釘平以。

mu hlie la **six** lat mop jiet ddu **xi.**male name come DIR male name home COV.arrive 'Muhlie arrives at Lamo's home.'

b. 从举算专门介判从。

cy bbo **hnox** njit la bux te **xi.** 3P.SG go EXT.until Butuo County COV.arrive 'He is going straight to Butuo County.'

The circumposition *six...xi* should only mark the directional component not the temporal endpoint. The circumposition *hnox...xi* emphasizes the lack of interruption in the reaching of the physical or temporal endpoint.

(160) a. 水寒削井井寛の母以。

hxie zyr ggex su jji **six** op rro **xi**. bird ART fly DIR Xichang COV.arrive 'The birds flew to Xichang.'

b. *引以上长夏升中X1。

*ax nyie sse shyr **six** mu ti **xi**. little cat meow DIR morning COV.arrive 'The little cat meowed until in the morning.'

(161) 母爭周的內所寬/寶周虫級。

cop wox jie o da mga **six** / **hnox** jie hmy **xi**.

3P.PL start of street COV pass DIR EXT.until end of street COV.arrive 'They went straight from the beginning of the street to the end.'

With temporal nouns, *xi* marks the endpoint of event. The coverb *xi* cannot directly precede verb phrases but is nominalized by means of the noun *te* 'time'.

syt cy jjit nga shut **hnox** ap hxiet ddip ku **xi.** matter DEM CL 1P.SG remember EXT.until last year COV 'I remembered this matter right up to last year.'

b. 增呈及英少水质的重要以 。

nga syt cy jjit ngop die **hnox** cyx te go **xi.**1P.SG matter DEM.PROX CL doubt EXT.until 3P.SG time LOC COV
'I will doubt this matter until I see (proof of) it.'

c. ዙርብ፟፟፟ቑንዚ፟፞፞፠ዝሮ**ቪ**ሪችን እንዲ

sux yy a zzyx ma mu ddix cy ggat ju **hnox** syx te go **xi.** leader DEM CL place DEM CL rule EXT.until die time LOC COV 'That leader ruled over this place until his death.'

The postposition xix is placed at the end of the clause. It has preserved most verb properties such as reduplication, negation and suffixation of TAM particles (especially da and ox).

- (163) a. 肾爭型計量性對學規模?
 nop wox ndo hnox mu ti te go **xix xix**?
 2P.PL drink EXT morning time LOC COV~ALT
 'Have you been drinking until the dawn?'
 - «**አ**አቂቪፁጲባጆ aivn ai cy SSO hnox tit xi. aptoday 3P.SG study EXT NEG-COV here 'He hasn't studied up to this point today.'

B. The coverb hxep/hxex 'see'

The verb hxep/hxex 'see' developed into a directional and reference postposition (*according to*). It functions as sole predicate of a clause, as in (164), and may cooccur with the postposition hxep/hxex, as in (165).

- (164) \$世學家養之間。
 ne ngat vit gga cyx ggu **hxep**.
 2P.SG 1P.SG.POSS clothes DEM.PROX CL see
 'Look at my clothes.'
- (165) 學樂例集例制。
 nga sut co **hxex** da **hxep**.

 1P.SG other person COV.see STP see
 'I am looking towards others.'

The tone of hxe^* is not syntactically conditioned but depends on the tone of the preceding syllable. As a result of tonal dissimilation, it assumes the low tone [21] when preceded by a high tone. It has the sandhi tone [44] when preceded by a low tone. It takes either low [21] or high tone [44], when preceded by a midtone.

- (166) a. 手手吊分業例で業。 get sse get mop **hxep** da syr zyt. apprentice master joiner COV.see STP wood shape 'The apprentice is shaping wood according to the master joiner.'
 - 31Â₩¥₩₩₩B. ne a zzyx pot jop hxex da cyx gu. 2P.SG DEM.DIST side LOC see STP 3P.SG call 'Look into that direction when you call him.'

With motion verbs, *hxep/hxex* encodes the direction in which an entity moves, as in (167). With non-motion verbs, *hxep/hxex* functions as a reference coverb marking noun phrases as abstract reference points, as in (168).

(167) Є削井1目背対於。

yo ggex su hxo pu **hxep** da bot. sheep ART mountain COV.see STP run 'The sheep ran towards the mountain.'

> ne sut co **hxex** da vy. 2P.SG others person COV.see STP buy 'Purchase according to (what) others (purchase).'

b. ₹₹Â⊞**¥**⋈\$。

ne tit cyx gge **hxex** da sot. 2P.SG here DEM.PROX CL COV.see STP calculate 'Calculate according to this here.'

cy gga sho jox **hxep** da ngop. 3P.SG distant LOC COV.see STP think 'He has a broad perspective on things.'

As postposition, *hxep/hxex* cannot be negated or reduplicated. It is always followed by the stative perfect particle *da* with which it forms a close unit.

(169) 用初份第20份也。

lat rep co **hxex** da cox ku. thief person COV.see STP person steal 'The thief is selective in his targets.'

C. The coverb chop 'along'

The coverb *chop* 'go along' can be employed as monotransitive verb with the role of *path* as argument. The morpheme *chop* always occurs in low tone. As verb, it is compatible with the progress marker *njuo*.

(170) a. ጛቇኑጋብባትታታ.

nop wox ggap mop ax yy jix su **chop.**2P.PL road big ART go along 'Move forward along the big road.'

b. ១៩៩៦**ដ**េ

lex ji ggap mop **chop** njuo. ox CL road go along PROG 'An ox is moving along the road.'

As postposition, *chop* occurs with motion verbs or with those non-motion verbs that can show progression along a path. It must be followed by the stative perfect particle da.

(171) a. 重重 0 分 中 用 図 1 。

ne sat ma cyx ji **chop** da zyt. 2P.SG check mark DEM.PROX CL COV.along STP dig 'Dig along this check mark.'

b. 从适中机用对肝。

cy zzi ji bbu **chop** da mga. 3P.SG bridge beside COV STP cross 'He is crossing along the edges of the bridge.'

c. ⋈७७€ g # ⋈ ८º

va bu za pux **chop** da gu. rooster wall COV.along STP call 'The rooster crows while moving along the wall.'

The coverb *chop* is often used as reference coverb with metaphorical meaning. The marked noun phrase is viewed as model or standard to follow.

(172) a. 主工点用列岁拿生引出罗列。

ne cyp ddop **chop** da vit gga ddie a ddit qyp da. 2P.SG 3P.SG.POSS word COV STP clothes COV there put STP 'According to his advice, put the clothes there.'

b. ¾₹¥1目損稅⅓⅓b. ¾₹¥1b. ¾₹¥1b. ¾₹¥b. ¾₹¥b. ¾₹b. ¾₹</

kax ddi nyi cyp pu jiet jix su **chop** da sot. whoever also 3P.SG.POSS price ART COV STP calculate 'All want to adapt calculations according to his price (standard).'

Like many other postpositions, *chop* cannot be negated or reduplicated but it must be followed by the stative particle da.

6.2.7 Oblique coverbs

Seven oblique coverbs mark secondary semantic roles not required by the argument structure of the main predicate: six 'take' (section A), sat 'point to' (section B), mga

'pass' (section C), mgep/mgex 'mix' (section D), rrox mu (section E), qo 'follow' (section F) and wa mgot 'pursue' (section G).

A. The coverb six 'take'

Besides the agent coverb sip 'take' (section 6.2.1), *six* 'take' surfaced as instrumental postposition and is appended to the second NP of the sentence. It may or may not be followed by the stative perfect particle *da*, as in (173b).

- (173) a. 日光日電景世版章。
 mu ga yy mge **six** vot nyie lo.
 male name boiling water COV.take pig skin scald
 'Muga is scalding the pig's skin with boiling water.'
 - b. X⑥坐甲氯 M坐货。
 cy cax po ddu **six** da po njuo.
 3P.SG fan COV.take STP fan PROG
 'He is fanning with a fan.'
 - c. 即屬甲利氯內屬基因屬。
 nga bbur ddu a zzyx ji **six** tep yy bbur.
 1P.SG pencil DEM.DIST CL COV.take book write
 'I am writing a book with that pencil.'

The coverb six can also be used with NPs that express instrumentality in a more indirect and abstract way.

(174) X域网络原环原分并说器。
cy yiet hxop sho **six** xyp hlie max su hxie jjuo.
3P.SG song CL COV.take girl ART move
'He moved the girl's heart with a song.'

As postposition, *six* cannot be negated or reduplicated and must be adjacent to the NP it marks.

- (175) a. 크고치비타여분확보다。
 rre mop cyx gge **sip** da vit gga vy yy.
 money DEM.PROX CL COV.take STP clothes buy go
 'Take this money and buy some clothes.'
 - ne syr ggut cyx six da gur mux mo. 2P.SG plough DEM.PROX CL COV.take STP ground plough 'Plough the earth with this plough.'

B. The coverb sat 'point to'

The coverb *sat* 'point to' acquired the function of reference postposition ('*about*') and also of aspect particle (section 7.5.1). It can occur as sole predicate of a sentence and be preceded by the morpheme *dop*.

(176) a. 佢業片以**生**図。

kat bbo su cy **sat** da. where go NOM 3P.SG point out STP 'He pointed out where to go.'

b. ՈԾՋԱԿՎԵԳԹՈ.

mux dde xix da ggat nge su cop sat ox. INT.what CLCOP NOM 3P.PL point out STP DΡ area 'They have put up a sign that explains what place this is.'

In serial verb constructions, *sat* developed two functions. First, it surfaced as speech verb ('point out', 'emphasize'). In this role, *sat* is compatible with other verbs if it is amenable to an interpretation of contrastive focus. Examples in (177) consist of two events, the event of emphasizing and the event of the second VP.

(177) a. 母爭達內世串引計學。

cop wox **sat** da vot she ax di zze. 3P.PL point out, emphasize STP pig meat only eat 'They emphasized that they would only eat pig meat.'

co cy bbot **sat** da op rro bbo. people DEM.PROX CL emphasize STP Xichang go 'This group emphasized that they would (only) travel to Xichang.'

Second, verbs that can be understood as directed activities incorporate *sat* as directional postposition. These activities denote single events.

(178) a. 增冬髮∀平。

nit hot **sat** da nbie. 2P.SG.POSS target COV.point out STP shoot 'Shoot at the target.'

b. 为\人来引从衷事**能**刘中。

cy syr bbo a fu bbox su **sat** da kie. 3P.SG tree thick ART COV STP fell 'He is aiming at the tree (with an axe).' With speech and attitudinal verbs, *sat* functions as reference postposition ('about') and marks the topic of a speech or attitude. Speech events or attitude expressions can be understood as directed abstract activities.

- (179) a. 索母於少以惟乐爭**建**刘君非也。
 - ddop ma cyx go li lat sse jox **sat** da hxip su nge. word DEM.PROX CL TOP male name toward COV STP say NOM COP 'This word was said with respect to Laze.'
 - b. HXI爭集>NUHE (···)。
 mu jie cyp jox sat da xip mu hxip (...)
 male name 3P.SG toward COV.point out STP DEM.DD say
 'Mujie is saying the following about him.'
 - c. X例對黨對其簡身爭變利目。
 cy co nop zi nop hnat ggex su jox **sat** da hxip.
 3P.SG person 2P.PL cheat 2P.PL cheat ART toward COV STP say
 'He is talking about those that cheat you.'
 - d. 歩头①I爭集网卷乘集。
 ngop jjy gex cyp jox **sat** da ngox die sat.
 1P.PL together 3P.SG toward COV STP doubt EXH
 'We have doubts about him.'

As postposition, *sat* is always followed by the stative perfect particle *da*, cannot be negated and should not be reduplicated.

The morpheme *sat* evolved as aspect particle after other predicates. The functions of postposition and aspect particle (section 7.5.1) surfaced in preverbal and postverbal slots of serial verb constructions. The exact process of semantic reanalysis for the aspectual meaning is not known at this point.

C. The coverb mga 'pass'

The coverb *mga* 'pass' functions as sole predicate and as postposition with directional ('through') and abstract ('according to') meanings. The meaning of the verb is illustrated in (180), and of the postposition in (181) and (182).

- (180) a. 代の氧乙茂中間。 at nyop gga mop cyx ji **mga**. name road DEM.PROX CL pass 'Anyo is going through this path.'
 - b. 체율실하다。 nop wox zzi **mga** yy. 2P.PL bridge pass go down 'Go down over the bridge.'

(181) a. 母爭**司**兴析內爭坐。

cop wox yyx ga **mga** da bur bbo. 3P.PL river, water CL COV STP return go 'They went back along the riverside.'

b. ¾ਉਉ⊮ቍኺሦዅ⋈ቯንቋጚ.

bbox zze max su ji bbu jox **mga** da ix go vur li. man ART side LOC COV STP house enter go up 'The man entered from the side of the house.'

c. ជម្រឹងព្រៃស្**ពស្**មស្និន

nit syr cyx bbo lax yi jox **mga** da kie dax zhet. 2P.SG.POSS tree DEM CL left LOC COV STP fell more good 'It is better to fell the tree from the left side.'

(182) a. ΥЧĤ恳Φ豪析浏从€。

at gop ax mo ngop jjux **mga** da xi bup. female name mother idea COV STP weave 'Ago is weaving according to her mother's ideas.'

b. 引印来至目型时刻以。

ix yi vyt vu hxip ddop **mga** da nyiet. younger brother elder brother say word COV STP fish 'The younger brother is fishing according to his brother's advice.'

Like many other postpositions, *mga* must co-occur with the stative aspect particle *da*, cannot be negated or reduplicated.

A special multi-morpheme postposition contains the coverb *mga*, the postposition *lot tuo mga* 'with the help of'. In this expression, *lot* means 'hand' and *tuo* 'rely'. This expression functions as sole predicate, as in (183), or as postposition, as in (184). It marks human nouns. As postposition it is always followed by the perfect particle *da*. In contrast to bare *mga*, *lot tuo mga* can be negated. The particle *da* must be changed to *mu*, see (185).

(183) 军权英世军司附回从。

syt cy jjit ngat **lot tuo mga** tat xi. matter DEM.PROX CL 1P.SG.POSS pass through hand should 'This matter should be in my hands.'

(184) a. 华第第日母學灣所內萄沙凝學山。

ngop wox sux yy ma **lot tuo mga** da ix go zzax zze li. 1P.PL leader CL COV STP house food eat go 'We went in for lunch with the help of a village elder.' \mathbf{b} . 中工學目前內米出來的人工學工學 \mathbf{d}

nga cyp **lot tuo mga** da co hmi ndit a zzyx ma 1P.SG 3P.SG.POSS COV STP famous person DEM.DIST CL

syp ox. know DP

'I got to know that famous person through his help.'

(185) 「点母學司化計刊內, 公內內 生物 (185)。

cyp ddop ma **lot tuo-ap-mga** mu da, syt cy jjit nga 3P.SG.POSS word COV<NEG> ADVL STP matter DEM CL 1P.SG shut ox.
remember DP

'I remember this event (even) without his reminder.'

D. The coverb mgep/mgex 'mix'

The comitative coverb *mgep* functions as predicate with the meaning 'mix, join together'. It also lexicalized in the compound *mop mgep* 'hold meeting'.

(186) a. H系INK&。

mu hlie cyp cyt vi **mgep.** male name 3P.SG.POSS clan mix, join 'Muhlie associates with his clan.'

b. 本美口優水准子。

ngop wox mop **mgep** ap- sat sy. 1P.PL hold meeting NEG- EXH still 'We have not finished the meeting.'

As postposition, mge^* exhibits a dissimilative tone which depends on the pitch level of the preceding syllable. If the preceding noun is monosyllabic with high tone, then mge assumes a low tone [21]; if the preceding noun is monosyllabic with low tone [21] or midtone, then mge takes the sandhi tone [44].

(187) a. 引×引未中叠非。

ax da ax mo nga **mgex** jjo. father mother 1P.SG COV.mix be at, have 'The parents are together with me.'

> cyx li cop wox **mgep** da jie bop zhe. 3P.SG TOP 3P.PL COV STP rope cut 'He cut the rope together with them.'

The postposition mgep/mgex cannot be negated or reduplicated. It is often but not always followed by the stative perfect particle da.

- (188) a. 坪州礒州守康愈。
 nga cop **mgex** da jjiex mguo ox.
 1P.SG 3P.PL COV.mix STP understand DP
 'I have progressed in my understanding together with them.'
 - b. 闭床闭焊缝刻闸井缝。 ax mo ax yi **mgex** da shax jji mge. mother child COV.mix STP candy chew 'The mother is eating candies with her child.'
 - c. ଶିଅଶିଛିଷିଷ୍ଟର ax yi ax mo **mgex** da ngo. child mother COV.mix STP weep 'The child is weeping together with her mother.'
 - d. ቑቑቑቑቑቑፙፙ፨ ngax nyi nzip apdop mu cop mgex da yy. 1P.SG also bear NEGcan ADVL 3P.PL COV STP laugh 'I also can't bear that they are laughing together.'

The coverb does not necessarily require control verbs but many noncontrol verbs are incompatible with mgep/mgex as for the attitude verbs in (189).

- (189) a. #世刊爭發知心間。 #nga cop wox **mgep** da jy jie. 1P.SG 3P.PL COV.mix STP fear 'I am afraid of them.'
 - b. #단원물@제분。 #nga cop wox **mgep** da syp. 1P.SG 3P.PL COV.mix STP know 'I am knowing together with them.'

E. The coverb rrox mu

The postposition rrox mu is composed of the first syllable of the verb rrop zip 'replace' and the adverbializer mu (section 5.3.2.J). The verb rrop zip occurs as independent predicate, as in (190a), and in serial verb constructions, as in (190b).

(190) a. 尹水杨州、米川世紀で。
nga ap lit da, cy la ngat **rrop** zip.
1P.SG busy 3P.SG come 1P.SG replace
'I am busy, so he replaces me.'

b. ଖି୫୫୬୩୯୬% ୫୯% ଜଣ ଓ ୧୯୯୬ ଜଣ ଓ ୧୯୯୬ ଜଣ ଓ ୧୯୯୬ ଜଣ ୧୯୯୯ ଜୟ ୧୯୯୯୯ ଜୟ ୧୯୯୯ ଜୟ ୧୯

cop wox ngop wox **rrop** zip da lur ma lyrx nyie. 3P.PL 1P.PL replace STP stone move 'They replaced us to move the stones.'

The postposition rrox mu cannot function as predicate but marks the semantic role of beneficiary, substitute or cause. It is often but not always followed by the perfect particle da.

(191) a. 學域 **最** H 対 目。

nga nit **rrox mu** da hxip. 1P.SG 2P.SG.POSS COV STP speak 'I am speaking for (replacing / in favor of) you.'

p. រាំងរាំស**មូ**អឲ្

ax mo ax yi **rrox mu** zze.

mother child COV eat

'The mother helps the child to eat the meal.'

. **Მ**ዚ**Მ**೩೩ ൂ

ax mo sse **rrox mu** ngo.

mother son COV cry

'The mother cries for (= because of) her son.'

. ACAH@1CH .b

pat mop sse **rrox mu** xyp mop xyp. parents son COV bride, woman marry 'The parents help their son find a bride.'

e. №SHÔ1êu.

hmat mop ssox sse **rrox mu** bip mgur. teacher student COV pen pick up 'The teacher picks up the pen for (replacing / in favor of) the student.'

ROHHACLEH .

cop wox cyp **rrox mu** lat rep mgot.

3P.PL 3P.SG COV thief chase

'They were chasing the thief for (= replacing / in favor of) him.'

The use of the postposition is almost unrestricted, but for some mental verbs the concept of beneficiary, substitute or cause is incompatible.

*nga syt cy jjit nit **rrox mu** syp.

1P.SG matter 3P.SG CL 2P.SG COV know

'I know about this matter for you.'

The postposition *rrox mu* cannot append aspect particles other than *da*. Moreover, *rrox mu* may not be negated or reduplicated.

F. The coverb qo 'follow'

The coverb *qo* 'follow' functions as independent predicate and as comitative post-position ('with'). As postposition, *qo* marks a noun phrase as the secondary co-agent. It differs from the other comitative postposition mgep/mgex (section D) which marks a noun phrase as co-agent of equal rank. As main verb, *qo* means *follow* and *contain*, an existential meaning presented in section 12.1.2.E.

- (193) a. 月常负责长龄。
 mu rryr qop bop ap- **qo**.
 male name friend NEG- follow
 'Mudge follows no friend.'
 - b. 海狀黑色。 (Walters & Ndaxit 2006: 140)
 zza go lur mat **qo**.
 rice, food LOC stone contain
 'There are stones in the rice.'

As postposition, *qo* marks a noun phrase for being associated with a primary agent of an activity.

- (194) a. *电针6•对口紧的。 vut sa cop qo da la nviet ox. 3P.PL COV.follow STP come late DP name 'Vusa was delayed together with them.'
 - b. 醫學兼到開身的執門型。
 lu po vyt vu ggex su **qo** da yi ndo.
 name elder brother ART COV.follow STP tobacco smoke
 'Lupo is smoking together with his older brothers.'
 - c. 의章 반응 처음 작 .
 le nyi vot **qo** da lop tup yot.
 ox also pig COV.follow STP container lick
 'The ox together with the pig are licking the container.'
 - d. 豸兔屬印簾。
 ne cyx **qo** da la hxex.
 2P.SG 3P.SG COV.follow STP wait
 'Wait together with him.'

e. 以切引目 () 对 3 手 () 。

ly yi ax pu **qo** da rre hlut bbo. grandson grandfather COV.follow STP pasture go 'The grandson goes to pasture with his grandfather.'

nga qop bop **qo** cyp xyp mop yu bbo. 1P.SG friend COV.follow 3P.SG.POSS bride take go 'Together with my friend, I go to welcome his bride.'

(195) a. 中旬 (195) a.

nga nex **qo** da na ox. low-control event 1P.SG 2P.SG follow STP ill DP 'I am ill together with you.'

nga sut co **qo** hxa cie mu ox. low-control event 1P.SG others follow sneeze DP 'I am sneezing together with others.'

The postposition qo cannot be employed with noncontrol verbs as in (196).

(196) *请素母了素母砂生。

*nit ddop ma cyp ddop ma **qo** zie. 2P.SG.POSS word 3P.SG.POSS word COV.follow match 'Your words match with his words.'

The postposition qo cannot be negated or reduplicated. However, qo can be negated in a construction by using the adverbializer -mu (see section 5.3.2.J).

cy ngop ap- **qo** mu bbo. 3P.SG 1P.PL NEG- follow ADVL go 'He did not go together with us.'

As shown in the above examples, the postposition qo is typically followed by the stative aspect particle da. It cannot be followed by other TAM particles.

G. The coverb wa mgot 'pursue'

The expression *wa mgot* is composed of the locative particle *wa* 'behind' and the predicate *mgot* 'pursue'. It functions as independent predicate.

(198) \$₹\$2≌\$.

mup sse mup mop **wa mgot.**colt mare pursue
'The colt follows the mare.'

As postposition, *wa mgot* 'after' conveys temporal succession. It co-occurs with a large range of volitional verbs which are compatible with this concept.

cyx nyi ngat **wa mgot** da jy jie ox. 3P.SG also 1P.SG COV.after STP fear DP 'He was afraid after I was.'

b. 沒≢≢≌果刈亡出ô。

ngax nyi cyp **wa mgot** da ndup ssop ox. 1P.SG also 3P.SG COV.after STP beat END DP 'I also got a beating after he did.'

c. 岁母皇景刻集门前。

nga cop **wa mgot** da shut la ox. 1P.SG 3P.PL COV.after STP remember come DP 'I remembered it after they did.'

mu ga mu gox **wa mgot** da ka bba wep ox. male name male name COV.after STP prizet receive DP 'Muga received a prize after Mugo did.'

e. 1世世界刘长。

ne ngat **wa mgot** da bi. 2P.SG 1P.SG COV.after STP read 'Read after me.'

The coverb *wa mgot* is often followed by the stative perfect particle *da* but cannot be negated or reduplicated.

6.3 Locative phrases

Locative phrases have an elaborate internal structure (section 6.3.1); their position in the clause is always before the predicate (section 6.3.2).

6.3.1 The structure of locative phrases

Locative phrases indicate the immovable place at which an event happens or a position is held. Locative phrases use common nouns or place names, a locative particle and the coverb *da* (section 6.2.5.A).

(200) NP + Locative Particle + da

The following example illustrates a locative phrase marked by underlining.

(201) 俄爭角蔥角納膏素。
cop wox <u>mux dde **nzix da**</u> xyx ne.

3P.PL field edge of COV rest

'They rest at the edge of the field.'

The purpose of locative particles is to specify the activity at the mentioned location with greater precision. Omitting the locative particle would render the locative phrases too underspecified and thus ungrammatical.

- (202) a. *前印负录Υ查M&。
 *ax yi max su syr bbo da ngo.
 child ART tree COV cry
 Intended meaning: 'The child cries at the tree.'
 - b. *用以來到知學用語。

 *mu ga <u>lur kur</u> **da** syt mu njuo.

 name of man city COV business do PROG

 Intended meaning: 'Muga is doing business (in) the city.'

There are restrictions on the use of the locative particle. No locative particle, only the coverb da, can be used after place names.

(203) 州 X D ⊕ (*学) 対 氏 D ト。
mu ga op rro (*go) da hxie mgat hmat.
name Xichang LOC COV Chinese teach
Intended meaning: 'Muga is teaching Chinese in Xichang.'

The coverb da is ungrammatical if the main predicate is not a control verb as in (204), if it is a motion verb as in (205), or if it contains da as lexicalized component as in (206).

yi hxi jox (*da) ma hxa jjip.

house outside COV rain become
'It is raining outside the house.'

- b. 원물병원(기본원 (*원) 접。
 cop wox yi ssox dde lax vy jox (*da) jjip.

 3P.PL house school left of COV become 'Their house is on the left side of a school.'
- (205) a. 冰水日敞水坑(**M)恁。 cy ap ndi hxix ngop **ji bbu** (***da**) njuo. 3P.SG yesterday 1P.PL beside COV move, go 'Yesterday, he went along at our side.'
 - b. 发生增强多种的知识。
 cy ap ndi hxix ngop **ji bbu** da yi ngox.

 3P.SG yesterday 1P.PL beside COV cry

 'Yesterday, he wept at our side.'
- - b. 对新型型 (***) 中河。
 ip ko yi **ku jox** (***da**) ggot da.
 door house LOC.inside COV close
 'Close the door in the house.'

Locative particles exist in bare form, with da, with jop/jox, with jop/jox and da. The bound morpheme jop/jox also functions as recipient postposition jox 'to' (section 6.2.4.B).

The bare particles are locational pronouns, they can replace other nouns.

Table 6.10: Locative particles

Bare	with <i>da</i>	with <i>jop/jox</i>	with <i>jop/jox</i> and <i>da</i>	Gloss
tot	tot da	tot jop	tot jop da	'above'
ot	ot da	ot jop	ot jop da	'below'
lap vut	lap vut da	lap vut jop	lap vut jop da	'under'
ku	ku da	ku jox	ku jox da	'inside'
gat zyr	gat zyr da	gat zyr jox	gat zyr jox da	'middle of'
hxi	hxi da	hxi jox	hxi jox da	'outside'
miep	miep da	miep jox	miep jox da	'in front'
op bbop	op bbop da	op bbop jox	op bbop jox da	'in front'
ji bbu	ji bbu da	ji bbu jop	ji bbu jop da	'beside'
a ggux a lex	a ggux a lex da	a ggux a lex jop	a ggux a lex jop da	'around'
wa	wa da	wa jox	wa jox da	'behind'
wa nuo		wa nuo jox		'in back of'
		lax vy jox	lax vy jox da	'left of'
		lax yi jox	lax yi jox da	'right of'
bbux ddur		bbux ddur jox	bbux ddur jox da	'east of'
bbux jji		bbux jji jox	bbux jji jox da	'west of'
yyx hmy		yyx hmy jox	yyx hmy jox da	'south of'
уух о		уух о јох	yyx o jox da	'north of'
i qix	i qix da			'on top of'
nzix	nzix da			'at edge of'
go	go da			'in, at, on'

Bare particles must be used pronominally. Nonbare particles are used adnominally after nouns to specify a position at or on the noun referent.

- a. *学和家庭乐學U步。
 *syt a zzyx jjit bbox sse wax ddur su.
 matter DEM.DIST CL hill behind happen NOM
 'This story happened over the hill.'
 - b. 学利录风量多步。
 syt a zzyx jjit bbox sse wax jop ddur su.
 matter DEM.DIST CL hill behind happen NOM
 'This story happened over the hill.'
- a. **X 到附 日。
 *cy <u>lur kur</u> **hxi** it.

 3P.SG city outside live
 'He lives outside the city.'

- b. XX机场争时。
 cy <u>lur kur</u> **hxi jox** it.

 3P.SG city outside live
 'He lives outside the city.'
- (210) a. 创用领面U争M专门策。
 cop mu ddix **bbux ddur jox da** ne la hxex.

 3P.PL field, land east COV 2P.SG wait

 'They wait for you at the eastside of the field.'
 - b. 用兴创争紧张争对简目。
 mu ga cop wox gat zyr jox da ddop hxip
 name 3P.PL in middle of LOC STP word say
 'Muga is standing in their midst.'
 - c. មាទីបិតមេក្សានិងាសិទិស្តម a ggux a lex jox da vot sit.

 3P.PL village and township around LOC COV pig kill 'They killed pigs around the villages and townships.'

6.3.2 The position of locative phrases

The position of the locative phrase is always before the predicate. In dynamic events, the locative phrase is also placed after the subject NP.

- a. 寒受智等対係句句。
 vyt vu <u>ot jop da</u> tep yy sso.
 elder brother downstairs COV book study
 'The brother is studying downstairs.'

In presentative constructions (section 12.1), the locative phrase is found in sentence-initial position. The coverb da is omitted in this construction.

a. 译尔学 (*) 详集 引 章 用 思。

get sse go (*da) burx yyr ax nyi mu it.

little box LOC COV photo many ADVL lie
'In the little box, there are many photos.'

h. vi hxi jox (*da) cox ma ip ko ndup njuo. outside COV CLdoor knock PROG house person 'There is someone outside knocking at the door.'

6.4 Directional phrases

A special feature are the four cardinal directional verbs (see section 6.4.1). The directional coverbs introduced in the previous section help to distinguish three types of directional phrases (section 6.4.2).

6.4.1 Directional particles and verbs

Four directional particles are used with motion verbs to indicate the direction. These particles are used adnominally or pronominally. They differ from other locative particles (table 6.9) in that they are restricted to motion verbs.

Table 6.11: Directional particles

uo mgut 'upwards'	hxat 'upwards' (only pronominally)
ix cy 'downwards'	jjyp 'downwards' (only pronominally)

The particles are generally used with a physical interpretation as in the following examples.

- - cy hxo pu **uo mgut** li da mup zzy bbo. 3P.SG mountain upside go up STP horse ride go 'He is riding a horse up the mountain.'

SSO.

study

- b. 융乐器以外系过分。 ssox sse **uo mgut** li da tep yy student upside go up STP book
- c. 引导制制。
 ne ap nryr mu **hxat** li.
 2P.SG really, definitely LOC.up to go up
 'You must go up.'

'The student is going up reading a book.'

(214) a. 醫學手貫對類於口。
mu rryr hxo pu go da **ix cy** la.
male name mountain LOC COV.put down come
'Mudge is coming down from the top of the mountain.'

```
b. 非分數目例。
syp mop jjyp la da.
scholar down come STP
'The scholar comes down.'
```

Besides particles, there are four primary and five secondary directional verbs. They generate twenty compound verbs with compositional meanings.

Table 6.12: Directional verbs

Secondary ↓ / Primary →	la 'come'	bbo 'go'	li 'go up'	<i>yy</i> 'go down'
vur 'enter'	vur la	vur bbo	vur li	vur yy
ddur 'exit'	ddur la	ddur bbo	ddur li	ddur yy
bur 'return'	bur la	bur bbo	bur li	bur yy
dep 'rise'	dep la	dep bbo	dep li	dep yy
mga 'cross'	mga la	mga bbo	mga li	mga yy

The four primary verbs can function as independent predicates. One indicates movement towards the speaker (*la* 'come'), the other three encode movement away from the speaker (*bbo* 'go'; *li* 'go up'; *yy* 'go down').

- (215) a. 创第以集節。
 cop wox **la** sat ox.
 3P.PL come EXH DP
 'They have all come.'
 - b. ※⊕升系營業。 cy lip mu mo ggux **bbo**. 3P.SG Meigu County go 'He went to Meigu.'
 - c. 步爭士目抄知前以内。
 ngop wox hxo pu go da ix cy yy.
 1P.PL mountain LOC COV downwards go down
 'We went down the mountain.'
 - d. X出版以。
 cy uo mgut li.
 3P.SG upward go up
 'I am going up into the house.'

Among the secondary predicates, *bur* 'return', *dep* 'rise' and *mga* 'cross' can be used as sole predicates, but *vur* 'enter' and *ddur* 'exit' are not productive independent predicates anymore and must be used with other directional verbs. The verb *bur* 'return' posed after other verbs means 'again'.

- (216) a. *坪島学州世節。
 *nga ix go da **ddur** ox.
 1P.SG house COV exit DP
 'I return from here.'
 - c. 學爭例常節。 nga tit da **dep** ox. 1P.SG here COV rise DP 'I rise from here.'
- (217) a. 片手図目節。
 nga tit da **bur** ox.
 1P.SG here COV return DP
 'I return from here.'
 - b. 日光学书貸口⑩。
 mu ga rruo nuo **bur** la ox.
 male name Mianning County return come DP
 'Muga came back from Mianning County.'

b. *፟ቑቜ፞፞፞ቜቜ**፞ዻ**፟፟፞ፙ፟፟。

*nga ix go go vur ox.

1P.SG house LOC enter DP

'I rise from here.'

- c. $\widehat{\mathbb{A}}$ $\not\in$ d. \exists $\not\in$ bburx **bur** hxip **bur** write return say return 'write again' 'say again.'
- e. \$ 世禁回译。 ne ngat ddop tat- **bur**. 2P.SG 1P.SG word NEG.IMP- return 'Don't answer me.'

Examples in (218) illustrate the status of directional compounds as independent predicates.

- (218) a. 科學用語句。 hxit jo mu **dep la.** quick ADVL stand up come 'Stand up quickly.'
 - b. 肾豎項⊖賽釜。 nga wax bbu hlep **bur bbo**. 1P.SG next month return come 'I go back next month.'

- c. 飛終爭聞刊節。 hxie zyr gox **mga** li ox. bird DIR cross go DP
- 'The bird went across to the higher side.'
- \mathbf{d} . $\mathbf{D}\mathbf{U}\mathbf{M}$ $\mathbf{\hat{E}}\mathbf{G}\mathbf{\hat{k}}$ $\mathbf{H}\mathbf{X}$ $\mathbf{\mathcal{E}}\mathbf{\mathcal{H}}$ $\mathbf{\mathcal{E}}\mathbf{\mathcal{H}}$ cop bbap ga a zzyx ma gox da ddur yy. village **DEM.DIST** CL LOC COV exit go down 'They went out of the village to the lower side.'

All primary and compound directional verbs of Table 6.11 can be suffixed to other motion verbs.

(219)
$$NP + V_{MOTION} + NP + V_{DIR-1}V_{DIR-2}$$

If a source or destination is specified, it is placed between the motion verb and the direction verb complex, generally according to the structure in (219).

- **水口に車用型が10**0。 (220) a. sha he la ngop fi jy nyi хi ox. 1P.PL airplance sit Shanghai arrive come DP 'We flew to Shanghai.'
 - b. 机色色用朱芩氧d⑥。
 bbu shy nju mu jjur go **vur yy** ox.
 snake crawl earth hole LOC enter go down DP
 'The snake is crawling into the earth hole.'

 - d. 用爺母蔥子河常山爺。
 mu nyox it dde go da **dep li** ox.
 male name residence place LOC COV rise go up DP
 'Munyo rose up from where he was.'

6.4.2 Types of directional phrases

Directional phrases incorporate one of the three directional coverbs, *xi* (section 6.2.6. A), *hxep/hxex* (section 6.2.6.B) and *chop* (section 6.2.6.C). Directional phrases contain a motion verb and/or one of the directional coverbs.

- (221) a. 升爭划第1目 £ 學 凝。
 - mu nyox **li** six hxo pu tot jop **xi**.
 male name go up DIR mountain up COV.arrive
 'Munyo is climbing up to the peak.'

cy le **mgot** six lur kur hxi jox **xi**. 3P.SG ox drive DIR city outside COV 'He drives the oxen out of the city.'

(222) a. មាទិី%៣វាជម៌្រដាស់ទិំងេៈ

cop wox lur mat ax yy max su **hxep** da **lyrx nyie**. 3P.PL stone big ART COV.see STP move 'They moved in the direction of the big stone.'

b. 从门重单贯列长。

cy la dda jox **hxep** da **shyr**. 3P.SG valley COV COV STP shout, yell 'He yelled toward the valley.'

(223) a. រាំ២៩៤៧៥១៛%K.

ax yi tep yy sip ggap mop **chop** da **bi**. child book COV road COV STP read 'The child is reading a book along his path.'

b. **須**以**卯**效用效氏。

ax nyie yix qi **chop** da **shyr.**cat roof COV STP meow
'The cat meowed while walking on the roof.'

Chapter 7

Tense and aspect

The Nuosu aspectual apparatus is sophisticated with rare features. The chapter contains eight sections: an introduction (section 7.1), a section on phasal auxiliaries (section 7.2), resultative auxiliaries (section 7.3), progressive aspect (section 7.4), perfective aspect (section 7.5), quantitative aspect (section 7.6), perfect (section 7.7), and tense (section 7.8).

7.1 Introduction

In this section, we choose a theory of situation types (section 7.1.1), a theory of tense (section 7.1.2) and overview aspect and tense categories in Nuosu (section 7.1.3).

7.1.1 The theory of situation types

We briefly survey theories of event and argument structure: the classical Vendlerian Aktionsarten (section A), and mereological approaches (section B). This survey draws on a more extensive elaboration by Gerner (2007a).

A. The four Vendlerian situation types

Vendler (1967) classified situations as achievements, accomplishments, activities and states based on their compatibility with *in-*, *at-* and *for-*adverbials.

Table 7.1: The four Vendlerian situation types in I	Table 7.1: Th	four	Vendlerian	situation	types in	ı English
--	----------------------	------	------------	-----------	----------	-----------

	in	for	at	Verb+ing
Achievement	+	_	+	_
Accomplishment	+	-	-	+
Activity	_	+	-	+
Activity State	-	+	+	

Contrary to Vendler's characterization, scholars noted that the progressive can be used in achievements (Leech 1971: 1–27; Comrie 1976: 43):

- (1) He is dying slowly.
- (2) He is reaching the station.
- (3) He is winning the match.

Scholars also questioned the genuine punctual character of achievements and their modifiability of achievements by *at*-adverbials (Verkuyl 1993: 46–50):

- (4) He typed the letter *p* at noon sharp.
- (5) He typed a business letter *at noon sharp.

Because of these difficulties, achievements and accomplishments should be defined differently, that is as *quantized* and *bounded events* (see section 7.1.2).

B. Object, event and state structure

The mereological approach (Link 1983; Bach 1986; Krifka 1989, 1992, 1998) builds on the parallels that exist between the ontological structure of objects, temporal structure of events and degree stucture of states. We distinguish four types of objects, events and states: (i) Singular; (ii) Homogenous; (iii) Quantized; (iv) Bounded.

(i) Singular objects, events and states

Nominal count expressions of the following kind denote singular objects:

- singular count expressions (one potato)
- singular proper names (John, Mary)
- singular pronouns (I, you, he/she/it)
- singular definite expressions (this bed, the pen)
- singular possessive expressions (John's nose).

Clauses with punctual verbs of the following type denote *singular events*:

- (6) S/he typed the letter p in an instant/*in one hour.
- (7) S/he touched the dog in an instant/*in an hour.

Stative clauses with ungradable predicates of the following type denote *singular* states:

- positional states (sit on chair, pregnant, dead)
- other ungradable states (brandnew)

(ii) Homogenous objects, events and states

The homogenous reference type is the conjunction of two properties: Cumulativity (Quine 1960: 91, "any sum of parts which are water is water") and Divisibility (Cheng 1973, "any part of something that is water is water").

In Nuosu, every common noun (person, water) is cumulative; not every common noun is divisible. Items left to 'sand' in the following list use a sortal classifier, items right to it use a mensural classifier. In Nuosu, items with minimal parts are like 'sand', items without minimal parts are like 'powder'.1

¹ In English, most people would probably draw a line somewhere between 'raspberry' and 'rice', because their morpho-syntactic properties are different: three raspberries, *three rices.

(8) Apple-tangerine-raspberry-rice-sand-powder-air.

There are three types of verbs that refer to homogenous events:

- incremental verbs with homogenous patient noun phrase (eat cake, breathe air, walk distances, waste time);
- non-incremental verbs (laugh, cry, snore, push a cart).

For gradable predicates ('tall'), a *class of comparison* is a group of objecs against which a vague statement ('Bill is tall') is evaluated. A class of comparison is contextually conditioned. A state is homogenous if its comparison class is homogenous as an object.

(iii) Quantized objects, events and states

Objects or events of a given denotation are quantized if no proper part is again of the same denotation (Krifka 1992, 1998). Objects like *five people* or events like *drink four litres of water* do not admit any proper part that again matches the same denotation *five people* or *drink four litres of water*. The following nominal expressions denote quantized objects:

- count expressions (three apples, five liters of water, 2 kg of tomatoes)
- proper names (John, Peter and Mary)
- pronouns (*I*, *you*, *they*)
- definite expressions (the women, this/that blueberry, these houses)
- possessive expressions (John's books, his tea)

In quantized events, something must be gradually processed. Dowty (1991) used the term "Incremental Theme" which can be a physical patient, a spatial entity, or a temporal entity.

- incremental verb with quantized physical entity as patient (eat two sandwiches, waste 100 ¥, breathe three cubic meter of air, type 100 letters);
- incremental verb with quantized spatial entity as patient (*walk two kilometers*, *push a cart two kilometers*);
- incremental verb with quantized temporal entity as patient (serve two years, waste two hours).

A state is quantized if its comparison class is quantized as an object.

(iv) Bounded events

Bounded events are characterized by the property of closure under final segment (Naumann 2001: 30). For the bound event of *walking to the station* every final segment is again an event of the type *walking to the station*.

- Boundary through a resultative state (work to exhaustion, eat to fullness);
- Boundary as the destination of motion verb (*walk to station, swim to coast*);
- Boundary in the lexical structure of the verb (*die*, *close the door*, *win a match*, *reach the summit*).

States also exhibit a temporal structure. A state is individual-level if an entity is in that state for the entire lapse of its existence. The state is *stage-level* if the entity is in that state for a limited period of time (Carlson 1977; Kratzer 1995). For example, the predicate be father of is individual-level, the predicate be ill is stage-level. These two notions play an important role in the characterization of selectional restrictions of quantificational aspect particles (section 7.6).

7.1.2 The theory of tense

Tense is important for an account of the quantitative aspect particles (section 7.6), of the perfect particles (section 7.7) and of the future tense particle (section 7.8).

There is a linguistic tradition that distinguishes three time concepts in communication (Klein 1992, 1994; Reichenbach 1948). We use Klein's labels.

Definition

Time of situation TS time referred to by non-finite component of the clause Time of topic TT time for which, on some occasion, a claim is made

Time of utterance TU time of making an utterance

In the example that Klein provides,

- (9) a. What did you notice when you checked the cellar?
 - b. Chris left his house.
 - c. The door was open.
 - d. The door was wooden.

the discourse topic in (9) is the witness's checking of the cellar and TT the time of checking the cellar. The event of leaving the house in (9b) is short and TS is before TT or included in TT. In (9c), the TS likely includes TT. In (9d), the TS is permanent and includes TT. From this picture, Klein (1992: 536) defines tense as a relation between TT and TU not between TT and TS:

TT and TU

Past tense TT < TU (TT before TU) Present tense $TU \subseteq TT$ (TU included in TT)

Future tense TT > TU (TT after TU)

Klein (1992: 537) defines aspect as a relationship between TS and TT not as a relationship between TT and TU.

TT and TS

 $\begin{array}{lll} \mbox{Perfective} & \mbox{TS}_{\mbox{END}} \subseteq \mbox{TT} & (\mbox{TT including end of TS}) \\ \mbox{Imperfective} & \mbox{TT} \subsetneq \mbox{TS} & (\mbox{TT properly in TS}) \\ \mbox{Prospective} & \mbox{TT} < \mbox{TS} & (\mbox{TT in the pretime of TS}) \\ \end{array}$

The perfective is part of the exhaustion (section 7.5.1) and dynamic perfect particles (section 7.7.2); the imperfective is part of the progressive particles (section 7.4).

7.1.3 Aspect and tense categories in Nuosu

The following table provides an overview of the aspect and tense categories that are expressed in the grammatical systems of languages of the world and of Nuosu (Bybee 1994; Dahl 1985: chap 3 & 4; Dik 1997: 217–243).

Table 7.2: Aspect and tense categories in Nuosu

Aspect/tense subareas	Aspect/tense categories	Subsection in grammar of attested Nuosu category
phasal aspect	ingressive	section 7.2
	continuous	section 7.2
	egressive	section 7.2
	resultative	section 7.3
perfectivity/imperfectivity	progressive aspect	section 7.4
	perfective aspect	section 7.5
quantitative aspect	experiential	section 7.6.1
	periodical	section 7.6.2
	habitual	section 7.6.3
perspectival aspect	perfect	section 7.7
absolute tense	past	-
	future	section 7.8

7.2 Phasal auxiliaries

In Nuosu, two specialized expressions (section 7.2.1) and three grammaticalized verbs (section 7.2.2) mark the individual phases of events.

7.2.1 Specialized expressions

There are no phasal verbs corresponding to 'start' and 'finish', but there is one expression close to the idea of starting phase: *go mox* 'beginning' (section A). Furthermore, there is the verb *jjup zot da* 'continue' (section B).

A. qo mox 'beginning'

The expression go mox (section 9.1.3.B) is an adverb composed of the pronoun go (section 5.4.1.F) and the conjunction mox 'before' (section 13.1.2.C). Its syntactic position is before the verb. It means 'in the beginning' and has two interpretations. In one reading, go mox scopes over the situation referring to the beginning of the situation and being close to the idea of a inchoative auxiliary. In the second reading, go mox has scope over some larger set of situations in which the event described is the starting point.

- - svr ma max su go mox hmip ox. fruit ART=CL-DET beginning ripe DP
 - (i) 'The fruit started to ripen.'
 - (ii) 'The fruit was the first to be ripe.'
 - . Թፈርሞ የተመመመ
 - nga go mox ax vi hmat da. 1P.SG beginning child teach **STP**
 - (i) 'I started to teach children.'
 - (ii) 'In the beginning, I was teaching children.'

Furthermore, there are several lexicalized expressions which employ go mox to indicate the first in a series.

(11) 中心計算生前

go mox ddip hxix xy jy week beginning day 'The first day of the week'

B. jjup zot da 'continue'

The phasal verb *jjup zot* (often complemented by the stative perfect particle da) expresses continuative meaning. Its syntactic position is before the verb phrase.

(12) a. λ**8λ**Νβκ.

> jjup zot da mux mo. cy 3P.SG continue soil plough 'He continued to plough the earth.'

b. 月景8会刘氏息风母。

mu hlie **jjup zot da** hxie mgat hxop sso. male name continue Chinese language study 'Muhlie continued to study Chinese.'

c. ዝኞ器ኞ刈ኚህህӨ。

ngop wox **jjup zot da** diep yyr hxep. 1P.PL continue film watch 'Let's continue to watch the film.'

kep mu **jjup zot da** it nyi gu? INT.how continue sleep 'Why do you continue to sleep?'

After temporal noun phrases, *jjup zot da* conveys the meaning of an English *for*-adverbial. The morpheme *jjup* is then generally dropped and the phasal verb reduced to *zot da*.

(13) a. HQJ¥会>HQJ¥合>HQJ¥6>HQJ\$6+HQJ

mu qu cyp kut **zot da** ma hxa ap- jjip. period NUM.1 year continue rain NEG- become 'It did not rain for one year.'

b. ¼፟፟፟፟ቑቑቩ፞ቝ**ዿ፞፞፞፠**፞፠

cy te kop nyip ma **zot da** shyr. 3P.SG hour NUM.2 CL continue shout 'He shouted for two hours.'

7.2.2 Grammaticalized verbs

Four grammaticalized verbs emphasize different phasal aspects of an event: the delimitative auxiliary *hxep* 'look' (section 7.2.2.A), the inchoative auxiliary *la* 'come' (section 7.2.2.B), the continuative auxiliary *go zix* 'insert' (section 7.2.2.C) and the completive auxiliary *ddur* 'exit' (section 7.2.2.D). They all originate from verbs and still function as predicates (Gerner 2002a).

A. hxep 'look'

The verb *hxep* 'look' was grammaticalized as postverbal auxiliary *try* (Gerner 2002a: 57–60). The grammatical function surfaced through the metaphor that looking into an activity is the same as trying to perform it. Example (14) illustrates *hxep* as full verb, (15) shows *hxep* in a few lexicalized compound verbs, and (16) its postverbal auxiliary meaning of *try*.

(14) 学第! ※ 学用 # 片片 # 月 6 。

hxex! hxit go cy syt mu apsu mu ox. 3P.SG matter do NEG-NOM DP see can do 'Look here! He has done some forbidden things.'

- (15) a. 学記策。
 - nga nex la **hxex**. 1P.SG 2P.SG wait=come+look 'I wait for you.'
- b. 日の単す業。 pat mop ngax hxo **hxex**. parents 1P.SG look after=feed look

'My parents look after me.'

(16) a. 雲母泳⇒泳母繁?

ddop ma cyx go xix hxip **hxex**? word DEM.PROX CL INT.what say LOOK 'What does this word try to say?'

- b. 哲爭兼照而重步優景。
 nop wox zyt jie cuop luo ngop mge **hxex**.
 2P.PL REFL a little bit judge LOOK
 'Try to judge it on your own.'
- c. 用刀用面型兼命印序。
 lat mop nry cuop luo ndo **hxex** lox ndo hna.
 male name wine a little bit drink LOOK CONJ.and drink want
 'Lamo tried some of the wine and liked it.'
- d. 严闭下\xx\vi \nabla \nabla \nabla \nabla ?

 nga xix sip syt cy jjit sup **hxex** mix?

 1P.SG INT.what take matter DEM.PROX CL resemble LOOK SOL

 'With what should I compare this.'
- X 建型出升并非重要。 zyp hmyp shut hxex. сy kep mu ijix su ne 3P.SG result INT.how become NOM 2P.SG remember LOOK 'Try to remember how it ended.'

B. la 'come'

After adjectives, the directional verb la 'come' developed the grammatical function of inchoative auxiliary reminiscent of the Chinese $q\check{\imath}$ $l\hat{a}i$ 'rise' (Gerner 2002a: 64–66). As main predicate, la can stand alone or occur after other verbs of motion, see (17).

- (17) a. 日常复复用以来最为世界等。
 mu rryr dde dde mu la go shex da ngat hxie ndot.
 male name often come HAB STP 1P.SG.POSS heart bother
 'Mudge often comes to bother me.'
 - b. 州米利特的论。
 mu ga a ddit mga **la** ox.
 male name there pass come DP
 'Muga came through that place.'

c. 单叶月号门从美。

ngax sha mu hxit **la** xi mgu.

1P.SG be compassionate come hope

'I hope that you come and sympathize with me.'

As auxiliary, la occurs after adjectives with a potential dynamic onset, such as emotional states or states resulting from natural processes. The auxiliary is often accompanied by the dynamic perfect particle ox.

(18) a. រាំ២មិ្ឋមាលិ.

ax yi max su nrat **la** ox. child ART=CL-DET beautiful COME DP 'The child is becoming beautiful.'

b. 用以承知时间。

mu ga hxie qyt **la** sha **la**. male name worried COME worried COME 'Muga becomes very worried.'

c. 塗塗削上引手口⑩。

viex vie ggex su a hni **la** ox. flower ART=CL-DET red COME DP 'The flowers reddened.'

d. 🗦 ។ 🚳 🗓 🖟 。

syp vo hmip **la** ox. peach ripe COME DP 'The peaches ripened.'

C. qo zix 'insert'

The auxiliary *go zix* 'in process of' is composed of the indefinite pronoun *go* (section 5.4.1.F) and the verb *zip* 'insert'. As main verb, *zip* is illustrated in (19).

> nrur pop kat **zip** da su cy bbyx shut hxex shux. key where insert STP COMP 3P.SG COV remember LOOK CAUS 'Let him try to remember where he put the key.'

b. ド拿生が长で対立後。

vit gga ddie pip nzy **zip** da yyx zyr. clothes COV bassin insert STP dye 'Put the clothes into the basin and dye them.'

- c. サ矛はメルチョで対係。 vot njvx gur cv shu kap pit **zip** da mge. 3P.SG CAUS mouth pig skin insert STP chew 'He put a piece of pig skin in his mouth and chewed it.'
- mu rryr CO gep ndup bbur lie go zip. thigh male name people COV.add hit LOC insert, put 'Mudge wat beaten on his thigh.'

The verb zip is also part of several lexicalized expressions, as shown in the following table.

Table 7.3: Lexicalized expressions with zip

rrop zip 'replace'	lur ddip zip 'stairs'	ddop ggut zip 'exhort'
xyp mop zip 'divorce'	nrur zip 'enchain'	

As auxiliary, the verb together with the pronoun go was grammaticalized as progressive phase auxiliary go zix. It occurs before the main predicate.

- (20) a. at nvop go zix ddop hxip (ge). word female name INSERT speak **PROG** 'Anyo is in the process of saying something.'
 - b. 中野窟日口求判少, 中川泉平原。 nga go zix rre mop vup te go, nga mu hlie wep mo. 1P.SG INSERT money count when 1P.SG male name GET see 'When I was counting the money, Muhlie saw me.'
 - c. 肾过头器长片杆。 fu zzi **go zix** shyr jjo. su INSERT shout, crv NOM have 'There is a voice shouting.'

D. ddur 'exit'

The directional verb ddur 'exit' developed into the completive phase auxiliary ddur 'finish' (Gerner 2002a: 69). The grammatical function was established through metaphorical reanalysis. For native speakers, completing an activity is similar to leaving a physical container. Examples in (21)–(23) illustrate ddur, as independent verb and after other directional or cognitive verbs.

- (21) 少量子宜也到以。
 - ngop wox jjy gex ku vur hxi **ddur.** 1P.PL together inside enter outside exit 'We enter and go out together.'
- (22) 「半世業節。

cyp nyit **ddur** bbo ox. 3P.DL exit go DP 'They both went out.'

(23) a. サ**¥**X 其**切**口⑩。

nga syt cy jjit hxep **ddur** la ox. 1P.SG matter DEM.PROX CL see exit come DP 'I recognized this matter.' (*lit*. recognize = see-exit-come)

b. Xអ្មារអ្វីមួយប្រាំ

cy kap pit go xix hxip **ddur** la ox? 3P.SG mouth LOC INT.what speak exit come DP 'What did he speak of?'

As transitive verb, *ddur* predicates body substances such as *sweat*, *blood* or *ulcers*. A special lexicalized form is the verb *gox ddur* 'happen' (section 5.4.1.F).

(24) a. ຯ⊕⊕∄≢װีฃพิ๋。

nga gup ma ax nyi gge **ddur** ox. 1P.SG sweat QUANT.much CL exit DP 'I am sweating a lot.'

b. Ճ೪ԸԿՄ։

nit lot jy sy **ddur.** 2P.SG.POSS finger blood exit 'Your finger is bleeding.'

c. 11120U.

cyp ip mop ma wa **ddur**. 3P.SG.POSS stomach ulcer exit 'He has ulcers in his stomach.'

d. ΥΧΗΨΨω.

syt cy jjit **gox ddur** ox. thing DEM.PROX CL happen DP 'This thing has happened.' e. 引身平长便觉。 nuo su kut shyr **ddur** ox. Nuosu New Year appear DP 'The Nuosu New Year has arrived.'

After non-motion activity verbs (other than cognitive verbs), *ddur* developed into the phsasal auxiliary 'finish', as shown in the following examples.

- (25) a. 中海甸山區。
 nga zzax zze **ddur** ox.
 1P.SG food eat EXIT DP
 'I finished eating.'
 - b. ฟังโป๊ฟิดิง lat sse ax yi hmat **ddur** ox. male name child teach EXIT DP 'Laze finshed teaching the children.'
 - c. 春母節W節。 tep yy ssox **ddur** ox. book study EXIT DP '(He) finished studing.'

7.3 Resultative auxiliaries

Resultative auxiliaries reveal something about the state that is the outcome of the event. Resultative auxiliaries mark an event for being bound with the resultative state being the boundary. We investigate one periphrastic expression (section 7.3.1) and four grammaticalized verbs that indicate resultative states (section 7.3.2).

7.3.1 Specialized expressions

The serial verb construction *qot...jjip* indicates that something is transformed into a resultative state. The construction contains *qot* 'change' and the existential verb *jjip* 'become' (section 12.1.2.C).

(26) a. 傾間以前の登節。
nit uo nyie **qot** a qu **jjip** ox.
2P.SG.POSS hair change white become DP
'Your hair became white.'

yy jjur yy **qot** ndo ap- hxit su **jjip.** spring water change drink NEG- can NOM become 'The spring water became undrinkable.'

7.3.2 Grammaticalized verbs

Four productive resultative auxiliaries exist in Nuosu: *wex* 'get' (section 7.3.2.A), *sha* 'send' (section 7.3.2.B), *ssop* 'shine' (section 7.3.2.C), *ndox* 'put' (section 7.3.2.D). Their presence imposes an invariable OAV order on the clause (section 10.2.2.A). The resultative auxiliaries in this section have been analyzed in Gerner (2002a: 91–121).

A. wex 'get'

The verb *wex* 'get' (with allotones *wep* and *wex*) evolved into the preverbal modal auxiliary *wep* 'get the chance' and into the postverbal resultative auxiliary *wex* 'succeed'. In (27), its function as sole predicate is illustrated.

(27) 从州八 公 八 本 问。

cy sha vi ndur vi **wep** ox. 3P.SG hardship get DP 'He had endured some hardship.'

Before other main predicates, *wep* (with low or midtone) functions as a modal auxiliary with the meaning 'get the chance'.

> tep yy ne bbur da bbut su nga **wep** hxep ox. book 2P.SG write STP ART 1P.SG get chance see DP 'I got the chance to see the book you have written.'

The resultative auxiliary *wex* (with tone sandhi) is compatible with verbs of acquisition either physical, abstract or metaphorical.

(29) a. 并及升至原本指示章电影出。

mux dde mu gox si nip lat sse nyix nbi **wex** su nge. earth male name and male name NUM.2 distribute GET FOC COP 'The land will be distributed to both, Mugo and Laze.'

b. 🕸 🛣 🖟 🖟 🖟

syp vo xie **wex** ox. peach pick GET DP '(We) have collected the peaches.' c. 月 X 孝 本 **f n** 。

mu ga ggup cyr **wex** ox. male name save, preserve GET DP 'Muga was preserved (from danger).'

d. ଧୃତ୍ୟୁ ଅଧିକ ଅଧିକ ଅଧିକ ଓଡ଼ିଆ

le cyx ji mu rryr si **wex** ox. ox DEM.PROX CL male name choose GET DP 'Mudge chose this ox.'

. លិវិជាជម្រាក្សា . e.

rre mop cyp dur vat nga shep **wex** ox. money NUM.1000 dollar 1P.SG search GET DP 'I found 1000 dollars.'

. Պեժեռերեն . J

ax yi max su ap my sse mgur **wex** ox. child ART=CL-DET young woman take up GET DP 'The woman took the child up (in her arms).'

g. HKKDMORD.

mu ga hxie mgat hxop sso **wex** ox. male name Chinese language learn, acquire GET DP 'Muga has learnt Chinese.'

For the sight and audition verbs *mo* 'see' and *gge* 'hear', the auxiliary must be preposed rather than postposed: *we mo* 'see-get' and *we gge* 'hear-get' (not: *mo wex or *gge wex). (30) shows two verbs that are incompatible with wex.

B. sha 'send'

The Nuosu verb *sha* 'send' with cognates in other Yi languages (Gerner 2002a: 91–101) developed into a resultative auxiliary with the sense 'away'. As main predicate, *sha* appears as sole predicate or in serial verb constructions.

lat mop xy byp mux dde go **sha** ox. male name fertilizer carry soil PRO.PAT spill DP 'Lamo sprinkled the fertilizer on the soil.' (32) a. ទង្ឃាំ អ្នកស្នាហាស នេះ

ie gyt ggex su li hxi jox da. mu ga gep fur sha water ART TOP outside STP male name COV spill send 'The water was spilled outside by Muga.'

b. 母鼠是世界以外用对的。

CO ggex su go mgot hxi iox sha da ox. ART PRO.PAT chase outside STP person disperse DP 'Chase the crowd out and disperse them.'

The verb sha has merged with the indefinite pronoun gox (section 5.4.1.F) into the resultative auxiliary gox sha 'away' which cannot occur after intransitive verbs. The use of gox sha imposes the order OAV.

lyp dde cyx ji cy ap- shut **gox sha.** idea DEM.PROX CL 3P.SG NEG- remember SEND 'He discarded the idea.'

b. 承长用非为中争时。

hxie zyr ggex su cy tip **gox sha.** bird ART=CL-DET 3P.SG set free SEND 'He set the birds free.'

c. 州岸XE争时的。

sha hlox cy zhyr **gox sha** ox. wheat 3P.SG uproot SEND DP 'He uprooted the wheat.'

The resultative auxiliary *gox sha* is used after activity verbs for which the patient can be easily removed from the site of activity.

(34) a. 菜分子叶 b. 引子叶

qyr dixgox shasitgox shaburySENDkillSEND'bury''massacre'

. 東爭叶 d. Ø×爭叶

mgot **gox sha** bie cy **gox sha** drive SEND remove SEND 'drive out; drive away' 'remove'

- e. 氧爭中 f. 求爭中 pop **gox sha** vup **gox sha** open SEND sell SEND 'open up' 'sell out'

C. ssop 'shine'

The resultative auxiliary *ssop* 'endure' is derived from the verb *ssop* 'shine, affect'. The use of sole predicate is illustrated in the two following examples.

- (36) a. 北中世紀刊第四節。
 hxo bby xy ddur six cop wox **ssop** ox.
 sunlight exit RES 3P.PL shine DP
 'The light shines on them.'
 - b. 学说問出并拿口碰场送水筒。 syt cyx gge kep mu nyi la nit i qi ap- **ssop**. matter DEM.PROX CL INT.how also come 2P.SG.POSS head NEG- affect 'This matter will not affect you (*lit*. your head).'

As auxiliary, *ssop* conveys two meanings which depend on the word order of the clause. If the word order is AOV, then *ssox* (tone sandhi) is a deontic auxiliary with the sense *must*. This meaning surfaced through metaphorical reanalysis. If someone is obliged to do something, then he is affected by the activity. The deontic meaning of *ssox* is illustrated in (37a–d).

- (37) a. 豸伊氪尹荃ө。
 ne bur ix go bbo **ssox**.
 2P.SG return home go MOD.must
 'He must go back home.'

 - c. 用环电子系统。 lat sse li nop wox gox jie **ssox**. male name TOP 2P.PL PRO.PAT fear MOD.must 'You should be afraid of Laze.'

d. 沒可有多。 cyx li jjip yur **ssox.** 3P.SG TOP perfect MOD.must

'He must be perfect.'

If the word order is OAV, then *ssop* 'endure' (low tone) is a resultative auxiliary. The construction must be matched with an idea of affectedness.

- - mu hlie li mu ga ndup **ssop.** male name TOP male name hit END 'Muhlie endured Muga's beating.'
 - b. X中创学特局。
 cy gop bo go na **ssop**.
 3P.SG body LOC ill END
 'He is ailing in his body.'
 - c. 일윤보내지다해하 le jix su mu ga gep sit **ssop.** ox ART=CL-DET male name PASS kill END 'The ox was killed by Muga.'

There is a related auxiliary, *si ssop* 'need', which is derived from the verb *si* 'choose' and *ssop* 'shine'.

(39) 创业学量负担规则。
cox li vit gga nrat su ggat **si ssop**.
people TOP clothes nice NOM wear need
'People need to wear nice clothes.'

D. ndox 'put'

The resultative auxiliary *ndox* is derived from the main verb *ndop* 'put' (low tone), but this morpheme has almost lost its function of independent predicate. It only occurs in serial verb constructions to indicate the destination of a movement.

(40) a. 日本京主共司领学员。
mu rryr vix bbo cy ddie ngat liex bba
male name burden 3P.SG COV.prepare 1P.SG.POSS shoulder
go ndop.
PRO.LOC put
'Mudge put a burden on my shoulders.'

b. 料理集件の実性。 le nga mgot ggap mop go **ndop**. ox 1P.SG draw road LOC put

'I drew the ox onto the road.'

As a resultative auxiliary, *ndox* (sandhi tone) co-occurs with a large range of activity verbs and indicates a resultative positional state ('placed', 'secured').

(41) a. ∃ጋ୮ቶፀఱ៌ፀឝ**៉ា**છ៌。

rre mop cyp dur vat cox ma wep \mathbf{ndox} ox. money NUM.1000 dollar person CL get PUT DP 'Someone got the 1000 dollars.'

le jix su ci shur go vur lox yy **ndox** sy ox. ox ART fall lake LOC enter and descend PUT die DP 'The ox fell into the lake and drowned.'

c. አልኪጁል

cy ngop gep yu **ndox.** 3P.SG 1P.PL COV arrest PUT 'He was arrested by us.'

d. ዘΧ±+θπ**የ**δ.

mu ga nge dur vat zhot **ndox** ox. male name NUM.5000 dollar earn PUT DP 'Muga earned 5000 dollars.'

e. 并入至44日出来公司的。

xyp mop vu-ap-jji ma mu rryr zi hnat **ndox** ox. bride, wife true<NEG> CL male name deceive PUT DP 'A false bride deceived Mudge.'

The resultative auxiliary ndox requires verbs referring to activities that have a potentially successful outcome.

(42) a. 兴智 b. 『智 vy **ndox** sip **ndox** buy PUT take PUT 'buy successfully' 'take on'

c. 間曽 d. 魚휙 gge **ndox** si

hear PUT guess, slect PUT

'tune in one's ears' 'guess right, make a valid choice'

ndox

e. 美節 f. 子歌的 syp **ndox** jjiex mguo **ndox** know PUT understand PUT 'know accurately' 'understand correctly'

7.4 Progressive aspect

In Nuosu, there are two progressive aspect particles placed after the main predicate, *njuo* and *ge*. Both have overlapping uses, though *njuo* manifests more selectional restrictions than *ge* on the situation type of the lower clause.

7.4.1 The progressive particle njuo

The particle *njuo* is a grammaticalized verb and still has limited use as main verb. It means *move* or *float around* as shown in (43a–c). It cannot specify destinations, see (43b), only surface areas that contain the movement, see (43c).

- (43) a. 用导致品质。 lat ti shur nzix **njuo**. male name sea on surface of float, move 'Lati is floating around on the surface of the sea.'
 - b. *用母国英国网盟。

 *lat hxa pu jjit hxep da **njuo**.

 male name Puge county COV.watch move

 'Laha is moving towards Puge County.'
 - c. 氧化钼铅锶。
 vut jy a ddit **njuo**.
 female name there move
 'Vudje is moving around there.'

Unlike the English progressive, *njuo* imposes many selectional restrictions and is only fully compatible with homogenous events and positional states.

A. Punctual events

The progressive aspect marker *njuo* is incompatible with punctual events since these events do not allow a view *from within*.

(44) a. *创新设置总量设置。
 *cop wox lu po si nip jjyx- zzi **njuo**.
 3P.PL male name and RECL- meet PROG
 'They were meeting with Lupo.'

- *租金水中1电用* b.
 - *shax tur cyp ndup ji cv njuo. bullet NUM.1 CL 3P.SG shoot PROG 'He is shooting one bullet.'
- c. *用用口丫玑Â**同思。
 - *mu zzvr la syr a zzyx bbo ssop njuo. lightning come tree DEM.DIST **PROG** go **END** 'The lightning is striking the tree.'

The property of punctual event is not a clear-cut property but can have ambiguous readings. In (45), the use of *njuo* imposes an extended event time, although jumping over a door step is normally conceptualized as punctual.

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> cv ip ko mop tup gie njuo. 3P.SG door sill iump PROG 'He is jumping over the door step.'

The use of plural or mass nouns sometimes transforms punctual events into multi-occurrence events that allow a view from within.

- (46) a. 承刊月常慧。
 - mo mu mu hlit **njuo**. skv flash **PROG** 'The sky is flashing (many times).'
 - **说**是11以目录比例

shax tur ax nyi gge sip ndup njuo. cy bullet many many 3P.SG COV.take shoot **PROG** 'He is shooting many bullets.'

c. 戏刘涓步学从显摄。

zhap dap ggex su go zix bbit njuo. bomb ART=CL-DET INSERT explode **PROG** 'The bombs are exploding.'

B. Homogenous events

Homogenous events are extended in time and do not incorporate an endpoint or a holistic measure function. They are fully compatible with *njuo* except for a few cases discussed below.

(47) a. 网络的女孩全樣。

hxi jox cox ma ip ko ndup **njuo**. LOC.outside person CL door knock PROG 'There is someone knocking at the door outside.'

ax va nzup hxie zyr ma syr bbo go bbup ddi tur **njuo**. woodpecker bird CL tree LOC beak knock PROG 'A woodpecker is pecking with its beak at a tree.'

c. ልጋ@!!@\\\\ &.

ip mop mit sip gup lu lup mu mo **njuo.** belly hungry RES IDE ADVL growl PROG 'His belly is growling with hunger.'

cop wox syr juo go da yo hlix ndo max su shep **njuo**. 3P.PL forest LOC COV.put sheep lose ART seek PROG 'They were seeking for the lost sheep in the forest.'

cyp xip li xix ti su nge mu ngop die **njuo.** DEM.DD TOP INT.what mean NOM COP ADVL puzzle PROG '[They] were puzzling about what the meaning of this would be.'

As *njuo* is grammaticalized from a verb of undirected movement, it does not allow the specification of a destination or origin of movement.

(48) a. * 於於爭貫 d 出 ŷ f 內 蓋 概。

*hxie zyr wo jji yyx hmy jox hxep da bbo **njuo**. bird CL.group fly south to COV.watch go PROG 'A flock of birds is flying south.'

b. *净泉质门贯。

*vip si bur la **njuo**. houselord return come PROG 'The houselord is returning.'

c. * X 印 X 签 Y X 悬 X U.

*cv vi bbit bbo njuo. CVX bbop go da 3P.SG house DEM.PROX CLLOC COV.put **PROG** exit go 'He is coming out of the house.'

C. Quantized events

Quantized events typically involve an incremental verb and a quantified patient noun phrase. When the patient noun phrase has the singular reference type, the use of *njuo* is grammatical, but the sentence exhibits the so-called *imperfective paradox* (Landman 1992; Portner 1998).²

- (49) XMN1 & ME. yiet hxop sho viet njuo. cy cyp NUM.1 **PROG** 3P.SG song CLsing 'He is singing one song.' 。3.11月1日永以 b.
 - cy tep yy cyp zzit sip **njuo.** 3P.SG book NUM.1 CL hold PROG 'He is holding one book.'

When the patient noun phrase is quantified by numerals greater than one, then njuo implies that the patient referents are processed simultaneously leading sometimes to ungrammatical sentences.

- (50) a. 从知句前母兒話。

 cy va qip suo ma zze **njuo**.

 3P.SG egg NUM.3 CL eat PROG

 'He is eating three eggs (at the same time).'
 - b. *쌍守均出兴智慧。
 *lu ti yi nge ga ndo **njuo**.
 male name tobacco NUM.5 CL smoke PROG
 'Luti is smoking five cigarettes (at the same time).'
 - c. *州兴春日午宵长瑟。
 *mu ga tep yy ci zzit bi **njuo.** male name book NUM.10 CL read PROG
 'Muga is reading ten books (at the same time).'

² In both examples, the progressive focuses on a proper subevent of *singing one song* and of *holding one book*. Any proper subevent of *singing one song* is not again of the type *singing one song*, whereas any proper subevent of *holding one book* is again of the type *holding one book*. (49a) only yields true descriptions of the reality insofar the subevent can be extended into an event of the type *singing one song*. This, however, may not be possible in *all* contexts in which (49a) is uttered, but only in *certain* contexts. (49b) always gives true descriptions of the reality. The discrepancy of (49a) has been called in the literature the *imperfective paradox*.

It is possible to coerce a homogenous event denotation to imply a quantized reading through addition of elements like *once* or *twice* (On *aspectual type coercion*, see Moens & Steedman 1988.) The progressive particle is incompatible with forced quantized structures.

*at zop cyp vit mu rryr ndup **njuo**. female name NUM.1 time male name beat PROG 'Adzo is beating Mudge once.'

D. Bounded events

The progressive marker *njuo* is always ungrammatical with bounded events. Examples illustrate verbs with an inherent endpoint, as in (52a), with a resultative auxiliary, as in (52b+c), or with a directional element, as in (52d+e).

- (52) a. * ※ 新聞中 ※ 以 是 。
 - *cy ngiep zhep wep da sy **njuo**. 3P.SG cancer get STP die PROG 'Having got cancer, he is dying.'
 - b. * 开兴 马 C Y X 称 乐 瑟。
 - *mu ga rre zip ddu cy shep we **njuo**. male name purse 3P.SG seek GET PROG 'Muga was finding his purse.'
 - - *tep yy a zzyx zzit cy qy dit gox sha **njuo**. book DEM.DIST CL 3P.SG burn SEND PROG 'He is burning that book.'
 - d. * X 及 1 目 X 比。
 - *cy dduo hxo pu xi **njuo**.

 3P.SG climb mountain arrive PROG

 'He is climbing on the mountain.'
 - e. *哪方次口仰角页少多思。
 - *zhep sse cy gep njie mux dde go tit njuo. bowl 3P.SG COVthrow soil LOC put **PROG** 'The bowl was thrown by him onto the soil.'

Example (52a) has a similar syntactic structure as (53) which is grammatical. Example (53) allows the reading of homogenous event and is compatible with the progressive marker.

(53) 印刷累印@沙区盘。

le co mgot le ho go zip **njuo.** ox people chase stable LOC put into PROG 'The oxen are being chased into the stable.'

E. States

The progressive marker *njuo* is compatible with controlling positional states but does not match with any other state.

(i) Positional states

As *njuo* is grammaticalized from the sense of undirected motion ('wander', 'float'), it can co-occur with verbs of posture like *stand*, *sit*, *live*.

(54) a. 淋透的对季前中口器。

zza hmot co ip ko bbux xy hxit **njuo**. beggar door next to stand PROG 'A beggar is standing at the door outside.'

b. 增米用 £ 章 瑟。

nga lur mat tot nyi **njuo.**1P.SG rock LOC.on top of sit PROG
'I am sitting on a rock.'

c. 母第1目》目题。

cop wox hxo pu go it **njuo**. 3P.PL mountain LOC live PROG 'They are living in the mountains.'

d. X 坐中学 对 日 章 日 贯。

cy bbo xy go da it nyi gu **njuo**. 3P.SG grassland LOC COV.put sleep PROG 'He is sleeping on the grass.'

The semantics of *la hxex* 'wait' also matches the sense of undirected movement. The particle *njuo* can act as progressive marker.

(55) a. 公开砌分寸对片门策息。

nyop mu co ma hxa jjip su la hxex **njuo**. peasant rain become COMP wait for PROG 'The peasants are waiting for rain.'

Positional states in which the subject does not exert control over the situation cannot be marked by the progressive marker.

- (56) a. *1目計丫卦用器。
 - *hxo pu go syr go zzur **njuo**. mountain LOC tree PRO.LOC stand PROG 'There are trees on the mountain.'
 - b. *d腎量1目4컴糕。

*yy hnot pop hxo pu ma jjip **njuo**. river LOC.opposite mountain CL exist PROG 'There is a mountain on the other side of the river.'

(ii) Non-positional states

The progressive marker cannot be used in sentences that denote states other than positional states.

b. *坪量并是。
*syp vo hmip **njuo**. *nga jjix do **njuo**.
peach ripe PROG 1P.SG tired PROG
'The peaches are getting ripe.' 'I am getting tired.'

Auxiliary verbs express different modal meanings none of which is compatible with the progressive marker.

- (58) a. *创筆計量的程序體。
 *cop wox nuo su hxop hxip get **njuo**.
 3P.PL Nuosu language speak can PROG
 'They are able to speak the Nuosu language.'
 - b. *创争基础自建设的 so vur but **njuo**.

 *cop wox qie njot yy go vur but **njuo**.

 3P.PL jump icy water LOC enter dare PROG

 'They are daring to jump into the icy water.'

Stable relations such as kinship or nationality cannot be provided with a view from within. They are incompatible with the progressive marker *njuo*.

(59) * 液 以 於 负 世 赞 。
 *cyx li hxie mgat nge **njuo**.
 3P.SG TOP Chinese COP PROG
 'He is Chinese.'

Finally, the verb *hxie vur* 'like = enter the heart' can be coerced to match with *njuo*. The mental state is understood to be temporary and dynamic.

(60) 무통의 한 대 설 분 。
nga hmat mop cyx ma hxie vur **njuo**.
1P.SG teacher DEM.PROX CL like PROG
'I like this teacher.'

7.4.2 The progressive particle qe

The progressive particle *ge* overlaps with the marker *njuo*. Its etymology is unclear (certainly unrelated to the verb *ge* 'tell'). It does not manifest the same selectional restrictions as *njuo* and is sensible to the distinction of dynamized/stable states.³ The bigger picture of *ge* is similar to *njuo*: *ge* is compatible with homogenous events, incompatible with punctual and bounded events and partially compatible with quantized events. The particles *ge* and *njuo* differ in that *njuo* expresses a more colourful lexical meaning. While *njuo* conveys the view that the subject of the sentence moves through the activity expressed, *ge* only provides a general view from within.

A. Punctual events

The progressive *ge* is banned from sentences in which the event running time is reduced to a point.

- (61) a. *印式刘片兴宁。 *yi zhap dap go
 - *yi zhap dap gep hmur **ge**. house bomb COV.add blow up PROG 'The house is blown up by a bomb.'
 - - *cy bot ddat hmyp sat xi mguo **ge**.

 3P.SG run finishing line run through PROG

 'He is running through the finishing line.'

The verb 'sneeze' is ambiguous for the reading of unique/multiple occurrence. The particle *ge* selects the multiple-occurrence reading which corresponds to a homogenous event.

(62) 口气气量用小。 la hxa hxa tie mu **ge**. male name sneeze PROG 'Laha is sneezing.'

³ A dynamized state has a temporal structure and is a homogenous event (section 7.1.1.B).

B. Homogenous events

The progressive marker *ge* is compatible with homogenous event denotations as illustrated in the following three examples.

- - svr bbo go syr qi mu hly gep pur ci bbo ge. LOC leaf wind **PROG** tree COV blow fall go 'The tree leaves are being blown away.'
 - b. 水田岗田田本美色出界了。
 - ap ndip hxix mat hlop ngop wox shyx rruo mgot **ge.** yesterday noon 1P.PL roober chase PROG 'Yesterday at noon we were chasing the robber.'
 - c. 出来更引体以上。

ngat vyt vu hxa bit zy **ge.** 1P.SG.POSS elder brother vegetables plant PROG 'My brother is planting vegetables.'

The verb *zo* 'run into' is punctual with human patient noun phrases, but extended in time with abstract noun phrases like *we zze ddu* 'difficulty'. The abstract event denotation is compatible with *ge* but not with *njuo*.

- - nga we zze ddu zox **ge.**1P.SG difficulty run into PROG
 'I am running into difficulties.'
 - b. *型浆包光光键。

*nga we zze ddu zox **njuo**.

1P.SG difficulty run into PROG
Intended meaning: 'I am running into difficulties.'

C. Quantized events

Similar to *njuo* (section 7.4.1.C), the progressive marker *ge* can be used with an incremental verb and a noun phrase of the quantized reference type.⁴

(65) 육역1위험1.

ma hxa cyp vit jjip **ge.** rain NUM.1 time become PROG 'A rain shower is pouring down.'

⁴ The sentence (65) exhibits again the *imperfective paradaox* (Landman 1992, Portner 1998).

When the patient noun phrase is quantified by numerals greater than *one*, the processing of the patient referents must represent an incremental unique event, as in (66a+b). If this interpretation is not available, as in (67), then *ge* should not be used.

> mu ga vit gga suo ggu yyx cy **ge.** male name clothes NUM.3 CL wash PROG 'Muga is washing three clothes.'

b. স্ৎম্ম্মার্ম.

cy yyp ddu ly go hxip **ge.** 3P.SG joke NUM.4 CL say PROG 'He is telling four jokes.'

(67) #요리다위 15 (67)

#ma hxa nyip vit jjip **ge.**rain NUM.2 time become PROG
'Two rain showers are pouring down.'

D. Bounded events

The progressive marker *ge* is not compatible with bounded events. In (68a), the boundary is given by the resultative auxiliary *gox sha* 'away'. For (68b), the boundary is the destination of the movement, the hands of the subject referent.

(68) a. *母爭df引d肇步串爭咁J。

*cop wox yy hxox ax yy bbox su kie gox sha **ge**.

3P.PL pine tree great ART=CL-DET fell SEND PROG

'They are cutting down the great pine tree.'

*tep yy zzit cy six la **ge**. book CL 3P.SG RES come PROG 'He is taking a book into his hands.'

For motion events that do not imply that a destination is reached, the use of *ge* is possible. Such events are homogenous, not bounded.

(69) a. 世界可见日本工。

nga rruo nuo jox hxep da bbo **ge.** 1P.SG Mianning county to COV.watch go PROG 'I am going in the direction of Mianning county.' p. 利思公1目11。

vut jie dduo hxo pu li **ge.** female name climb mountain go up PROG 'Vujie is climbing the mountain.'

E. States

The progressive *ge* divides states up according to the dynamized/stable distinction. Unstable states that can undergo changes are compatible with the progressive *ge*.

(i) Dynamized states

The following examples represent unstable physical states that can take the progressive marker *ge*.

(70) a. 肇坐引至片与湘阜小。

viex vie a vu su ie qyt kop **ge.** flower dry NOM water need PROG 'The flower is needing water.'

b. Y#X+@\$.

syr zza lur ma hmip **ge.** fruit ripe PROG 'The fruit is becoming ripe.'

c. 浆似头浆划重重了。

bbut juop go bbut vut lo lo **ge.** grassland LOC grass green IDE~EXPR PROG 'The grasslands are becoming very green.'

Sleeping and waiting are unstable states that match the meaning of the progressive particle ge.

(71) a. イロウシ対サ拿せよ。

at nyop yi go da it nyi gu **ge.** female name house LOC COV.put sleep PROG 'Anyo is sleeping at home.'

b. ៕ដម្លាស្សម្នាប់ មួន ប្រុស្នា ស្រុក ស្តិស ស្រុក ស្ត

vut rryr ssox dde go da nex la hxex **ge.** female name school LOC COV.put 2P.SG wait PROG 'Vudge is waiting for you at school.'

Abstract mental states are unstable but not conceivable as dynamic situations in Nuosu. They are incompatible with *ge*.

- (72) a. *评量卡\$.
 *nga jjix do **ge.**1P.SG tired PROG
 - Intended meaning: 'I am tired.'
 - b. *ՈրՈրենանւ.
 - *ax yi ggex su hxie mat kat **ge.**child ART happy PROG
 Intended meaning: 'The children are happy.'
 - c. *炉州州常生。

*nga sha zzit gat **ge**.

1P.SG spice like PROG

Intended meaning: 'I like spice.'

(ii) Stable states

Most so-called individual-level states and many stage-level states (Carlson 1977; Kratzer 1995) are stable states that cannot be conceptualized with a dynamized initial phase. They are incompatible with ge.

- (73) a. *#មបារាំ៤។。
 - *lat hxa li ax yy **ge.**male name TOP big PROG
 Intended meaning: 'Laha is big.'

*vot a zzyx ma ngop -vi nge **ge**. pig DEM.DIST CL 1P.PL -POSS COP PROG Intended meaning: 'That pig belongs to us.'

The Nuosu language treats positional states as non-dynamic. Verbs of posture are ungrammatical with *ge*.

- (74) a. *វាហ្មិអូម្បុរៈដូរៈ
 - *ax yi max su it ggo tot hxit **ge.** child ART=CL-DET bed LOC.on stand PROG Intended meaning: 'The child is standing on the bed.'
 - b. * * 文 〇 以 志 扣 丰 市 H 礼 。
 - *vu nyop vit gga a hni su ggat **ge.** female name clothes red NOM wear PROG Intended meaning: 'Vunyo is wearing red clothes.'

7.5 Perfective aspect

Perfective aspect is one of the meanings of a verb particle, called *exhaustion particle*. This particle also functions as universal quantifier and superlative particle.

7.5.1 The exhaustion particle sat

The exhaustion particle *sat* (Gerner 2007a)⁵ is a cross-categorial modifier acting on noun phrases (as non-distributive universal quantifier), on verb phrases (as *completive* particle), and on adjectival phrases (as *superlative* particle). Its selectional restrictions are shown below (using labels introduced in section 7.1.1.B).

Table 7.4: Input structures of the exhaustic	on particle
--	-------------

	Objects	Events	States	EXH
Singular	individual	punctual	ungradable	*
Quantized	quantized	quantized	quantized comparison class	v
Homogenous	homogenous	homogenous	homogenous comparison class	#
Bounded	_	bounded	_	*

The exhaustion particle directly occurs after the predicate (SOV+EXH) and shares its position with a host of other verb particles. The exhaustion particle contributes up to three different meanings to the clause of which one or all may be cancelled because of its selectional restrictions (table 7.4):

- (i) EXH acts as universal quantifier of the sentence-initial noun phrase;
- (ii) EXH acts as completive particle for dynamic events;
- (iii) EXH acts as superlative particle for gradable states;
- (iv) combination of (i) and (ii), or of (i) and (iii).

These meanings are processed in parallel. One or several meanings may be cancelled due to the selectional restrictions of the exhaustion particle on the lower clause. If all meanings are cancelled, then the sentence is ungrammatical. If none is deleted, the sentence is ambiguous. This rare pattern of quantification is unfamiliar in European languages, but is attested cross-linguistically. Straits Salish, a native North American language, has a morpheme that covers the functions (i) and (ii) above (Jelinek 1995).⁶

⁵ The term 'exhaustion particle' is inspired from Björverud (1998: 82), although she uses this name for a type of particle which I characterize as *send* auxiliary (section 7.3.2.B; Gerner 2002: 88).

⁶ The Nuosu particle sat is reminiscent of Jelinek's Straits Salish quantifier $m \partial k'''$. There is one difference between the Nuosu particle and Salish $m \partial k''''$. The Salish quantifier does not seem to take a stative predicate in its scope with superlative meaning. Otherwise, there seems to be much similarity. Witness (Jelinek 1995: 512–514):

mək''' 1 'əw' ŋa-t- \emptyset cə sčeenx''. ALL 1P.NMT LINK eat-TR-3P.ABS DET fish

⁽i) 'We ate all the fish.' (ii) 'We all ate the fish.' (iii) 'We ate the fish up completely.'

A. Objects

The exhaustion particle *sat* quantifies over the clause-initial noun phrase, which may be an agent or patient noun phrase.

(i) Singular and dual objects

The exhaustion particle *sat* is incompatible with noun phrases that denote an individual or a pair of individuals. When, in addition, *sat* is incompatible with the verb phrase, as in (75a) and (75b), then the whole sentence is ungrammatical.

- - b. * H X 泉 永 如 ① (章) 坐 蜂 ⑩。

 *mu ga si nip vut nyop (nyix) bbo **sat** ox.

 male name and female name NUM.2 go EXH DP

 'Muga and Vunyo went both.'
 - c. 刊爭坐獎稅。 cop wox bbo **sat** ox. 3P.PL go EXH DP 'They all went.'

Example (76a) is ungrammatical, but if it was uttered in the Chinese prehistorical myth of a world with exactly 10 suns, the sentence would be acceptable and translate as 'The suns have all risen.'

- (76) a. *打机切理。
 *hxo bbu ddur la sat.
 sun exit come EXH
 Intended meaning: 'All the sun has risen.'
 - b. 间形母乎前對外,打机即1隻。 gge fut hlep shyp jjox te go, hxo bbu ddur la **sat**. day NUM.6 month NUM.7 have time sun exit come EXH 'In prehistorical times, all the suns arose.'

Numerals with value above two are compatible, and those below two are incompatible with *sat*. (77a+b) both show that *sat* targets patient noun prases in sentence-initial position.

- - *tep vv a zzvx nyip bbut nga sip bbo sat. 1P.SG book DEM.DIST NUM.2 CL take **EXH** go 'I took both books away.'
 - b. 承生引导张可染作上来。

tep yy a zzyx suo bbut nga gis bbo sat. book **DEM.DIST** NUM.3 CL 1P.SG **EXH** take go 'I took all three books away.'

Example (78a) exhibits a sentence-initial argument with vague number value. The exhaustion particle *sat* selects a plural interpretation that represents a culturally rare situation: Almost no individual has all the houses at the river side.

- (78) a. #「P더유컵集。
 - #cyp yi yy nzix jjip **sat**.

 3P.SG.POSS house river side be at EXH

 'His/her house is at the river side.'
 - b. എ២០អ៊ីឌ**េ**。

cop yi yy nzix jjip **sat.** 3P.PL.POSS house river side be at EXH 'Their houses are all at the river side.'

(ii) Quantized objects

Noun phrases with the quantized reference property are compatible with *sat*. The exhaustion particle acts as a universal non-distributive quantifier. Example (79) denotes a homogenous event with a quantized noun phrase in initial position.

- (79) 动口管压压口口匙。
 - co hxit yuop su tep yy hxep **sat**. people NUM.8 ART=CL-DET book see, read EXH 'The eight people are all reading books.'

Example (80) is a quantized event involving the gradual verb 'drink'. Its quantized incremental theme is in clause-initial position. This setting creates two readings, which turn out to be equivalent in meaning.

- - ie qyt nyip ji nga gax ndo **sat** ox. water NUM.2 CL.bottle 1P.SG COV.drop drink EXH DP
 - (i) 'Both bottles of water were drunk by me.'
 - (ii) 'Two bottles of water were completely drunk by me.'

The exhaustion particle is grammatical in (81a) and (81b) which exhibit two quantized NPs modified by the plural demonstrative and definite article; (81c), (81d), and (81e) use vague noun quantifiers that are incompatible with sat.

- (81) a.
 - ke a zzvx gge ip ko hxi jox iio sat. door dog DEM.DIST CLLOC.outside have EXH 'Those dogs are all outside the door.'
 - 品售店計畫< ke ggex su ip ko hxi iox iio sat. ART=CL-DET door LOC.outside have EXH 'The dogs are all all outside the door.'
 - *17月最份对季网贸用建。
 - *ke a zzvx ma ip ko hxi jox iio sat. dog DEM.DIST CLdoor LOC.outside have **EXH** Intended meaning: 'That dogs are all outside the door.'
 - d. *早間对季隊兇爭隻。
 - *ke gge ip ko hxi jox iio sat. CLdoor LOC.outside have EXH Intended meaning: 'Some dogs are all outside the door.'
 - *193章周对季网兜钉篷。
 - *ke ax nvi gge ip ko hxi iox iio sat. CL door LOC.outside have dog many EXH Intended meaning: 'Many dogs are all outside the door.'

(iii) Homogenous objects

The exhaustion particle cannot quantify mass bare nouns in sentence-initial position, unless the speaker wants to refer to the totality of this mass in the world. Example (82) has a noun phrase in initial position that refers to all trees and stones in the world.⁷

- Y雀※⇔中QE割隻⑩。 (82)
 - syr bbo lur ma shy jjip sat got qu ox. tree change silver gold become stone EXH DP
 - (i) 'All the wood and stones were changed into silver and gold.'
 - (ii) 'The wood and stones were changed completely into silver and gold.'

⁷ Quoted from the folk story "The emperor and his daughter" (Chén & Wū 1998: 266).

Example (83) refers to a gradable state and exhibits a mass bare noun in clause-initial position. The exhaustion particle acts as superlative marker and as universal quantifier on the mass bare noun.

(83) 図ず口泉寒寒暖。

shur fur yy mgo guo guo **sat**. lake: sea water cold too much too much EXH

- (i) 'All the water in the sea is extremely cold.'
- (ii) 'The water in the sea is the coldest.'

B. Events

There are four event types that interact with the exhaustion particle: punctual events, quantized events, bounded events and homogenous events. The exhaustion particle is fully compatible only with quantized events.

(i) Punctual events

The exhaustion particle cannot be used with punctual events denotations. The verb *zo* 'run into' is punctual and compatible with *sat* only when the clause-initial argument is not singular.

- (84) a. 母爭用象片集節。
 - cop wox mu hlie zo sat ox.

 3P.PL male name meet, run into EXH DP 'They all ran into Muhlie.'
 - b. *អុ១៩៛៛៛សិ。
 - *lat mop cop wox zo **sat** ox. male name 3P.PL meet, run into EXH DP Intended meaning: 'Lamo all ran into them.'
 - c. *用

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 - *mu ga at nyop zo **sat** ox. male name female name meet, run into EXH DP Intended meaning: 'Muga all ran into Anyo.'

Examples (85a+b) uses the intransitive verb 'sneeze', and (86a+b) the transitive verb 'electrify'.

(85) a. *X旬のH堰⑩。

*cy ax cie mu **sat** ox.

3P.SG sneeze EXH DP

Intended meaning: 'S/he sneezed completely.'

- b. 母爭和伊邦達的。
 ngop wox ax cie mu **sat** ox.
 1P.PL sneeze EXH DP
 'We all sneezed.'
- (86) a. *Y引递账单题。
 *syr a zzyx bbo die nyut **sat** ox.
 tree DEM.DIST CL electricity touch EXH DP
 Intended meaning: 'That tree completely received an electric shock.'
 - o. 丫刊录训诉⊕集前。 syr a zzyx gge die nyut **sat** ox. tree DEM.DIST CL electricity touch EXH DP 'All the trees got an electric shock.'

(ii) Quantized events

Quantized events stop when the patient entity is completely processed. The exhaustion particle contributes two distinct senses to quantized clauses that may collapse. It quantifies the sentence-initial argument, both agent and patient, and acts as completive particle. These two interpretations are equivalent if the sentence-initial noun phrase is the patient noun phrase.

- 母童 美米卡母 皇 追 û。 (87) a. cop wox svp hmi ci sat ma zze ox. 3P.PL nut NUM.10 CL eat EXH DP
 - (i) 'They all ate ten nuts.'
 - (ii) 'They completely ate up ten nuts.'
 - (iii) 'They all ate up ten nuts.'
 - h. cvsvp hmi ci ma zze sat ox. 3P.SG NUM.10 EXH nut CLeat DP 'S/he completely ate up ten nuts.'
 - 未半十分次包集前。 syp hmi ci ma zze sat cyox. nut NUM.10 CL 3P.SG eat EXH DP (i) 'All of the ten nuts were eaten by him/her.' (ii) 'Ten nuts were completely eaten by him/her.'

The idea in (88) is that of a fierce battle where Redisofu successively uses up nine loads of bamboo rods.⁸

⁸ Quoted from the folk story "Redisofu overcomes the sorceress" (Chén & Wū 1998: 237-252).

(88) 母型器爪件集。

ma dda ggu vi jyt **sat**. bamboo rod NUM.9 CL.load whip EXH

- (i) '(Redisofu) used up all nine loads of bamboo rods in beating (her).'
- (ii) '(Redisofu) completed all the beating that involved nine loads of bamboo rods.'

In the wash-face event in (89), the face is a quantized expression. The event stops when the washing of all parts of the face is completed.⁹

(89) a. ℙ₦Չ¼蚝௰。

nga ka nyuo cy **sat** ox. 1P.SG face wash EXH DP 'I have completed washing my face.'

b. 业争为显义生的。

ngop wox ka nyuo cy **sat** ox. 1P.PL face wash EXH DP

- (i) 'We have all washed our faces.'
- (ii) 'We have completely washed our faces.'
- (iii) 'We have all washed our faces completely.'

When the initial argument is singular as in (89a), then *sat* acts as a completive particle. When it is plural, as in (89b), three readings are implied.

(iii) Homogenous events

The exhaustion particle *sat* is incompatible with homogenous events, or pragmatically odd at best: '#Peter ran completely'. There are two types of homogenous events: events with nonincremental arguments, as in (90), or events with homogenous arguments, as in (91)–(92).

(90) a. *X望るりま。

*cy bbox dduo li **sat.**3P.SG mountain(ous area) climb go up EXH
Inteded meaning: 'S/he walks completely in the mountains.'

b. 母爭筆云**小生**。

cop wox bbox dduo li **sat.**3P.SG mountain(ous area) climb go up EXH 'They all walk in the mountains.'

⁹ Sentence (89a) is quoted from Li & Ma's conversational textbook (1981: 23).

Without temporal measure, rainfall cannot be by modified by the exhaustion particle; with a temporal frame it can.

```
(91) a. #母母君集節。
        #ma hxa jjip
                         sat
                               OX.
         rain
                 become EXH DP
         'It has stopped raining.'
    b. 月生對計、 母生習生節。
        mu ti
                   te go, ma hxa
                                          sat
                                 ijip
        sky dawn when rain
                                  become EXH DP
```

The verb ti 'dawn' is a gradual intransitive verb. Its argument mu 'sky' is homogenous and refers to sky layers. It cannot be quantified by sat.

'When it became dawn, the rain completely stopped.'

ox.

```
(92) a.
       H⊈Ŵ.
        mu ti
                    OX.
        sky dawn DP
        'It became dawn.'
    b. #H≢!®்.
        #mu ti
                     sat
                           ox.
         sky dawn EXH DP
         Intended meaning: 'It completely became dawn.'
```

(iv) Bounded events

The exhaustion particle is incompatible with bounded events because in contrast to quantized events, no measure of the entire event is given, only an endpoint. The directional verb la 'come' is a bounded event with an encoded endpoint.¹⁰ (The counterpart bbo 'go' is homogenous.)

```
·例订连连⑩?
(93) a.
                 la
                        sat sat
                                   ox?
         CO
         person come EXH~ALT
                                   DP
         'Did all the people come?'
         *XII!!!!! ( )?
     h.
         *cy
                 la
                        sat sat
                                   ox?
                 come EXH~ALT DP
          Intended meaning: 'Has he all come?'
```

^{10 (93}a) is quoted from Lǐ & Mǎ's conversational textbook (1981: 5) where the leader of an agricultural commune wonders whether all co-workers showed up for the daily work.

Every directional verb with an explicit destination represents a bounded event, as in (94).

(94) * 世 # 3 日 集 0 。

```
*nga rruo nuo yy sat ox
1P.SG Mianning go down EXH DP
Intended meaning: 'I have completely gone down to Mianning.'
```

Other verbs that encode a lexical endpoint are verbs such as *sy* 'die' or *ggot da* 'close'.

(95) 对季月光14日內達的。

```
ip ko mu hly gep ggot da sat ox. door wind COV close EXH DP 'All the doors were closed by the wind.'
```

Other bounded events are formed by compound verbs V_1V_2 with a main verb V_1 and a grammaticalized resultative verb V_2 which expresses a boundary of the whole event. The particle *sat* is ungrammatical with these events and shrinks to a universal quantifier.

(96) 月兴少量月兴郡荒塘⑩。

```
mu ga ngop wox mu ga shep wex \operatorname{sat} ox. male name 1P.PL male name seek GET EXH DP 'Muga found us all.'
```

C. States

Ungradable states exhibit a singular comparison class, gradable states a comparison class that is quantized or homogenous (section 7.1.1.B).

(i) Ungradable states

The exhaustion particle is incompatible with ungradable states whose comparison class is singular such as positional states (*sit*, *live*) and intensified adjectives (*brandnew*).

(97) a. * 学 X 所 手 章 **生** 。

```
*nga lur mat tot nyi sat.
1P.SG stone LOC.on sit EXH
Intended meaning: 'I all sit on the rock.'
```

```
ngop lur mat tot nyi sat.
1P.PL stone LOC.on sit EXH
'We all sit on the rock.'
```

In (98), the existential verb *ndit* 'have' (section 12.1.2.D) is ungradable. The exhaustion particle requires the clause-initial argument to be plural.

- (98) a. 4.14日,中心中心。 cop wox uo jyt ndit sat. cyp ji 3P.PL braidle NUM.1 CL have (body parts) EXH 'Each of them has one braidle.'
 - *从出代了中点证。 *cv uo ivt ji ndit sat. cyp braidle NUM.1 CL have (body parts) EXH Intended meaning: 'She has all one braidle.'
 - c. 1出4中中**逐**末入。 cyp uo jyt ndit sat yip sy. 3P.SG.POSS braidle have (body parts) EXH still 'She still has all her braidles.'

Ungradable states can also be formed by gradable adjectives modified by ideophones, Ideophones form a distinct part-of-speech in Sino-Tibetan languages adding a descriptive value to the adjective (see section 4.3.6).11

- Y¥削井刈H刈ΦΦ(H茸) **定**。 (99) a. svr bbo ggex su vut mu vut lo lo (mu ijix) sat. tree ART=CL-DET sap-green ADVL become EXH 'All the trees are sap-green.'
 - *syr bbo bbo vut mu vut lo lo (mu sat. CVX jjix) tree DEM.PROX CL ADVL become EXH sap-green Intended meaning: 'This tree is extremely sap-green.'

Example (99c) with sat but without the ideophonic element has the interpretation of *superlative* as the adjective *a vut* 'green' is gradable (as sole predicate without the ideophone, *vut* must carry the prefix a).

Y莱ੈ¥羽氡æ。 syr bbo cyx bbo a vut sat. tree DEM.PROX CLgreen EXH 'This tree is extremely green.'

¹¹ English approximations for ideophones or expressives are words like brand-new, crash-hot, triggerhappy and the like.

The following two examples use adjectives with their ideophone. The resulting complex predicates are ungradable.

- (100) a. 業性争争(H龍)集。
 bbut vie hnix lo lo (mu jjix) sat.
 flower very red ADVL become EXH
 'The flowers are all very red.'

(ii) Gradable states

Gradable states such as *Bill is tall* are compared to the size of other individuals. Each gradable state exhibits a class of objects, a comparison class. Every gradable state can be embedded into a context with a quantized or homogenous comparison class. The particle *sat* is compatible with the reading of quantized but incompatible with that of homogenous comparison class.

In (101a–i), the comparison class is a class of garments that is definite and quantized in the mind of the speaker. On a second reading, glossed in (101a–ii), the comparison class is cumulative / homogenous.

- (101) a. 划步引递氢⊕隻。
 - i dix a zzyx ggux nrat **sat.** garment DEM.DIST CL beautiful EXH
 - (i) 'That garment is the most beautiful.'
 - (ii) 'That garment is the most beautiful in the world.'

When the argument is marked as a definite plural, two readings are imposed by *sat*: universal quantification on the first noun phrase and superlative marking.

- b. 對表問作母**能**。
 - i dix ggex su nrat **sat.** garment ART=CL-DET beautiful EXH
 - (i) 'All the garments are beautiful.'
 - (ii) 'The garments are most beautiful.'
 - (iii) 'All the garments are most beautiful.'

The comparison class in (102) consists of two groups: the guests and others. There are again three meanings: universal quantification, superlative and a combination of both.

(102) a. 里は削りする®ま。

ddip vip ggex su ip mop mit **sat**. guest ART=CL-DET belly hungry EXH

- (i) 'All the guests are hungry.'
- (ii) 'The guests are extremely hungry.'
- (iii) 'All the guests are extremely hungry.'

The first and the third meaning are cancelled if the argument is changed into a singular noun phrase.

b. 物間計す、X対の重。
co ggex su go, cy ip mop mit **sat**.
people ART LOC 3P.SG belly hungry EXH
'Among the people present, he is the most hungry.'

The class of those who admire Anyo is potentially definite and quantized. The exhaustion particle contributes the meaning of superlative.

(103) 代创始HX地包集H靠。 at nyop dax mu ga hxie vur **sat** mu jjix. female name COV.put male name love EXH ADVL become 'Muga perhaps loves Anyo the most.'

D. Synthesis

The exhaustion particle has scope over both noun phrases in sentence-initial position and verb phrases. It occurs immediately after the predicate, but before other aspect and modality particles.

There are restrictions on the noun and verb phrases that serve as input of the exhaustion particle. Either noun or verb phrase must have the quantized reference property.

Only quantized domains are fully compatible with *sat*. The operation of EXH can be decribed as a second-order universal quantifier whose cumulative input is NPs and VPs (Gerner 2007a). Its operation on NPs can be described as universal noun quantifier (*all*), and its operation on VPs either as completive (*completely*) or as superlative (*most*).

	First NP: Object Denotation					
	Singula	ır	Quantiz	ed	Homog	enous
VP: Event Denotation	EXH	Example	EXH	Example	EXH	Example
Singular	*	(84c)	(∀,-)	(85b)	#	
Quantized	(-,∀)	(87b)	(∀,∀)	(87a)	(-,∀)	(82)
Homogenous	*(#)	(90a)	(∀,-)	(90b)	#	(92b)
Bounded	*	(94)	(∀,-)	(95)	#	(91b)
VP: State Denotation						
Singular	*	(97a)	(∀,-)	(98a)	#	(100a)
Quantized	(-,∀)	(101a-i)	(∀,∀)	(100b)	(-,∀)	(102a-ii)
Homogenous	#	(101a-ii)	(∀,-)	(83-i)	#	(83-ii)
		,	, , ,	t/state quantifi versal event/st	, , ,	., .,

Table 7.5: The quantificational meaning of the exhaustion particle

7.6 Quantitative aspect

Nuosu has a rich grammatical system of quantificational aspect with three aspect markers, *experiential* (section 7.6.1), *periodical* (section 7.6.2) and *habitual* aspect (section 7.6.3). In this subsection, I am using material published in Gerner (2004b).

(-,∀): universal event/state (and no universal object) quantification

Cross-linguistically, the *habitual* is widely attested. In the 94-language GRAMCATS sample (Bybee, Perkins & Pagliuca 1994), the *habitual* (without tense restrictions) is a grammatical category in 26 languages representing most of the major language families in the world. The *experiential* is restricted to two regions of the world: Africa and East Asia (Dahl 1985: 140). Languages with *experiential* aspect include Korean (Kim 1998), Japanese (Inoue 1975) and Chinese (Pān & Lee 2004). The experiential aspect is also standard in a wide range of Tibeto-Burman, Kadai and Miao languages. The *periodical* is a rare category and seems to exist only in Nuosu (Gerner 2004b).

Table 7.6: Three quantificational aspects in Nuosu

	Nuosu particle	Gloss
Experiential	nzop	'it happened once that'
Periodical	ndit	'once in a while'
Habitual	go shex	'often, be used to'

The resultative auxiliaries (section 7.3), the progressive (section 7.4) and exhaustion particles (section 7.5) are all *aspects of the first kind*. They interact with the situation type of the clause. The experiential, periodical and habitual are *aspects of the second kind* for which the situation type is not a revealing tool. These aspects are

sensible to a modal parameter and to the notion of repeatability which is defined in terms of the topic time (TT) and situation time (TS), see section 7.1.2.

Table 7.7: The modal parameter

impossible	The situation $cannot$ be realized in TT (e.g. $sunrise$ $tonight$).
possible	The situation can but $need$ not be realized in TT (e.g. eat).
necessary	The situation $must$ be realized in TT (e.g. $sunrise\ today$).

Table 7.8: The parameter of repeatability

unrepeatable	If the situation is realized once, then the situation <i>cannot</i> be realized another time afterwards (e.g. <i>die</i>).
weak-repeatable	If the situation is realized once, then the situation <i>can</i> but <i>need not</i> be realized afterwards (e.g. <i>wash a car</i>).
strong-repeatable	If the situation is realized once, then the situation <i>must</i> be realized at any later time (e.g. <i>mountain is high</i>).

The Nuosu *experiential*, *periodical* and *habitual* aspects require situations whose occurrence is possible within the topic time. The *experiential* and *periodical* aspects are only compatible with weak-repeatable events not with unrepeatable and strong-repeatable events. The *habitual* aspect is incompatible with unrepeatable, but compatible with weak- and strong-repeatable situations.

7.6.1 The experiental particle *nzox*

The experiential particle *nzox* can co-occur with specific and unspecific events, the two other particles only with unspecific events.

A. Unrepeatable situations

The experiential marker is incompatible with unrepeatable situations, such as birth-, death-related events or unique events in the life span of a creature.

- (104) a. *#\$\$##운컴융.
 - *bbup ddi sse qot bbup hlup jjip **nzox.**caterpillar change butterfly become EXP
 Intended meaning: 'The caterpillar has already changed into a butterfly.'
 - b. *Ħ業な同の最出計例即18。
 *va zyt sse va qip bburx gur go da ddur la **nzox**.
 chicken egg shell LOC COV exit come EXP
 Intended meaning: 'The chicken has hatched out.'

*vot na sy **nzox**.

pig ill die EXP

Intended meaning: 'The pig was ill and died.'

d. *世工判斷主任業 3。

*ngat a hxo te jjyp go mga bbo **nzox**.

1P.SG youth PRO.DIR pass go EXP
Intended meaning: 'My youth has already passed.'

B. Weak-repeatable situations

The experiential marker *nzox* is compatible with weak-repeatable situations that are possible within the topic time (TT). The event of drinking water is possible within the time interval of *today* (TT). Within *one year*, however, the event of drinking water is necessary.

(105) a. 최다반더위중.

ip nyip nga yy ndo **nzox.** today 1P.SG water drink EXP 'Today I have drunken water.'

*ap hxiet ddip kut nga yy ndo **nzox.** last year 1P.SG water drink EXP Intended meaning: 'Last year I drank water.'

In (106), sunset at a specific time point of the evening is a possible event, whereas it is a necessary event within the time span of one day.

(106) a. 平日敞工爪谷刀火瓜對少年至司6。

ap ndi hxix hxo bbu ket mop shyp die te go ggot nuo yesterday sun evening NUM.7 hour time LOC close black

vur **nzox.** enter EXP

'The sun set yesterday at seven o'clock.'

. វ្ទ ខេម្សាវ ម្រុស qq ° qq °

*ap ndi hxix hxo bbu ggot nuo vur **nzox**. yesterday sun close black enter EXP 'The sun already set once yesterday.'

The following three examples are weak-repeatable and possible to occur within the implied time frame (TT).

- . 名录均址身只加工胜工录器。 (107) a. sho mo cyp kur hxo bbu ke zze su nga mo nzox. year before last sun dog eat NOM 1P.SG see **EXP** 'In the year before last I witnessed once a solar eclipse.'
 - b. ൃഷ級利拿用協多。 cyp uo nyie ax nyi mu ndit **nzox**. 3P.SG hair much ADVL exist EXP 'His hair was once abundant.'
 - c. 月兴山州名。 mu ga rry ni **nzox**. male name tooth grow EXP 'Muga already grew teeth.'

Unrepetable situations can be transformed into weak-repeatable if we allow the arguments to have unspecific reference.

- . MAQSUMRAKYU (108)a. shu kut zza ma ax hxie gep gax nzox ox. this year crops mouse PASS COV EXP DP eat 'This year's crops were already eaten by mice.'
 - b. 用氧字用字為字間分。
 mu vut go mu di jjit ap gge nzox.
 sky LOC cloud perceive-not-perceive EXP
 'Clouds in the sky already disappeared once.'

The experiential marker can be negated with the sense of *never*. The negation particle is placed between the main verb and the experiential marker.

- (109) a. 日常的总验学网络奎尔克。
 mu rryr yi cyx bbop go da bbit bbo ap- **nzox**.
 male name house DEM.PROX CL LOC COV leave NEG- EXP
 'Mudge has never left that house.'
 - b. 醫學原本的爭爭哲子 卷。
 lu po si nip cop wox jjyx zzi ap- **nzox**.
 male name and 3P.PL meet NEG- EXP
 'Lupo never met them.'

C. Strong-repeatable situations

Strong-repeatable situations are "eternal situations" or individual-level (Kratzer 1995). Strong-repeatable are incompatible with the experiental marker *nzox*.

- - *bbo a zzyx ma a hmu-jjy-a hmu **nzox**. mountain DEM.DIST CL high-very-high EXP Intended meaning: 'The mountain was once high.'
 - b. *1 ଶ ଶ ቱ ጎ ተ 🕯 ት ଶ 🕏 .
 - *cyp kur ne kop nge ci nyix ma jjo **nzox**.

 3P.SG year week NUM.52 CL have EXP Intended meaning: 'One year once had 52 weeks.'
 - c. *华正从刊户W小问闫刊完图刊引载。
 - *ngop jip xi nge get got bu liet tuo nge ddix xip ggat go 1P.PL ancestor all Gobulietuo COP LOC DEM place LOC

jjo **nzox**.

have EXP

Intended meaning: 'All our ancestors were once at a place called Gobulietuo.'

D. Synthesis

The experiential marker *nzox* exhibits complex selectional restrictions with aspectual, temporal, modal and quantificational components.

Table 7.9: Profile of the experiential marker

Constraints on underlying clause		Aspect-Tense	Quantification
unrepeatable weak-repeatable	impossible possible necessary	*(ungrammatical) *(ungrammatical) TS < TT *(ungrammatical)	'at least once'
strong-repeatable		*(ungrammatical)	

For clauses that are compatible with *nzox*, the experiential marker expresses that the situation occurred at least once before the topic time.

7.6.2 The periodical particle *ndit*

The aspect particle *ndit* marks low frequency events (*once in a while*). The marker *ndit* is only associated with unspecific events. It is only compatible with weak-repeatable situations that are possible within a given time frame (TT).

A. Unrepeatable situations

Similar to other quantificational aspects, the periodical marker is incompatible with unrepeatable situations. The following examples illustrate this point.

- (111) a. *塗坐浴」、引到台。
 - *viex vie cyx bu a vu **ndit**. flower DEM.PROX DEM.PROX dry PER Intended meaning: 'The flower has been dry once in a while.'
 - b. *1引目8年减中中。
 - *cyp ax pu ggit na yiet wep **ndit**.

 3P.SG grandfather incurable disease CL get PER
 Intended meaning: 'His grandfather had an incurable disease once in a while.'
 - - *ax yi cyx ma hmi cur **ndit**.
 child DEM.PROX CL name register PER
 Intended meaning: 'This child has been registered once in a while
 (at the Public Security Bureau in China; in Chinese: *shàng hùkoǔ*).'
 - d. *14用化出生以内域内。
 - *cyp a mat ap hxiet ddip kut mop jii **ndit.**3P.SG mother last year decease PER
 Intended meaning: 'His mother died last year.'
 - e. *处乎出陷对此平台。
 - *vo ap ndi hxix jjip su jjy **ndit.** snow yesterday become NOM melt PER Intended meaning: 'The snow that fell yesterday melted once in a while.'

B. Weak-repeatable situations

Weak-repeatable events with possible implementation are compatible. The particle *ndit* may be negated with the sense of *rarely, almost never*.

- (112) a. 昨日早日歩月至日登台。
 - fut hlep shyp hlep ngop mu ddix ma hxa jjip **ndit**. June July 1P.PL area rain become PER 'In June and July, it rained in our area every now and then.'
 - ። ተዋለተያ ተመፈተዋ ተመ fut hlep shyp hlep ndit. ngop mu ddix ma hxa qiji ap-**June** 1P.PL rain NEG-PER July area become 'In June and July, it almost never rained in our area.'
- 中g X中。 b. 中**贸**米水品。 (113) a. biex gie biex gie ndit. nga ndit. nga ap-1P.SG dance PER 1P.SG dance NEG-PER 'I dance sometimes.' 'I almost never dance.'

(114) a. 歩月乳HS☆。

ngop mu ddix mu lyr **ndit**.

1P.PL area shake PER

Our groe has had carthaughes ones in a c

'Our area has had earthquakes once in a while.'

p. 录用引用S水带。

ngop mu ddix mu lyr ap- **ndit.** 1P.PL area ground shake NEG- PER 'Our area almost never had an earthquake.'

The negative particle must be placed after the verb and before *ndit*. Most examples below have positive and negative versions.

(115) a. 开兴县英门哈.

mu ga pu jjit la **ndit**. male name Puge County come PER 'Muga comes to Puge County once in a while.'

mu ga pu jjit la ap- **ndit.** male name Puge County come NEG- PER 'Muga almost never comes to Puge County.'

(116) a. #生は削りするのは。

#ddip vip ggex su ip mop mit **ndit**. guest ART=CL-DET belly hungry PER Odd: 'The guests are hungry once in a while.'

b. #里时间比对口图4件。

#ddip vip ggex su ip mop mit ap- **ndit.** guest ART=CL-DET belly hungry NEG- PER Odd: 'The guests are rarely hungry.'

- 为其生品。 b. #######. (117) a. jjix do ndit. ndit nga #nga jjix do ap-1P.SG tired PER 1P.SG tired NEG-PER 'I am tired once in a while.' Odd: 'I am almost never tired.'
- (118) a. 机耐染液硬品。
 a ddit go hlyx guo pur **ndit**.
 there LOC storm blow PER
 'It is storming once in a while.'

- b. 组衍学说《伊尔特》 a ddit go hlyx guo pur ap- **ndit**. there LOC storm blow NEG- PER 'There is rarely a storm.'
- (119) a. 创新创资型目情。
 cop jiet co gox ku la **ndit**.
 3P.PL.POSS home person LOC steal come PER
 'Their home is broken into once in a while.'
 - b. 创新创新创订的。 cop jiet co gox ku la ap- **ndit**. 3P.PL.POSS home person LOC steal come NEG- PER 'Their home is rarely broken into.'
- (120) a. 『무용용성》 cyp gop bo vat **ndit.** 3P.SG body good PER 'His/her health is good occasionally.'
 - b. 工中®水母水量。 cyp gop bo vat ap- **ndit**. 3P.SG body good NEG- PER 'His/her health is rarely good.'
- (121) a. 《C.哈丽·哈·。
 vut jy hxie mat kat **ndit**.
 female name heart happy PER
 'Vudje is happy once in a while.'
 - b. 氧化原性系数。
 vut jy hxie mat kat ap- **ndit**.
 female name heart happy NEG- PER
 'Vudje is almost never happy.'

A portion of the above examples are odd because they are close to impossible or necessary situations.

(122) a. 引承肾氧位效量。 ax mo vit gga yyx cy **ndit**. mother clothes wash PER 'Mother washes clothes once in a while.'

- b. 引承學氧分類情。 ax mo vit gga yyx cy ap- **ndit.** mother clothes wash NEG- PER 'Mother almost never washes clothes.'
- (123) a. 光对系中情。 cy ip mo ggot **ndit**. 3P.SG belly ache PER 'His belly aches from time to time.'
 - o. 沒对系母书始。 cy ip mo ggot ap- **ndit**. 3P.SG belly ache NEG- PER 'His belly almost never aches.'
- (124) a. 以後分色集體。 ke cyx ma yo mgot **ndit**. dog DEM.PROX CL sheep chase PER 'This dog chases sheep once in a while.'
- (125) a. 打机管钉耳苯列帕。 hxo bbu dix nuo gep nba da **ndit**. sun cloud black PASS cover PER 'The sun is covered by black clouds once in a while.'
 - b. វូវភ្លើងប្រុស្ត្រអង្គ .

 hxo bbu dix nuo gep nba da ap- **ndit.**sun cloud black COV cover NEG- PER

 'The sun is almost never covered by black clouds.'

C. Strong-repeatable situations

The periodical particle *ndit* is incompatible with strong-repeatable, so-called eternal, situations.

- b. ★3片的引量 常田片工用目点。
 - ndit. *nuo su CO ax nvi ggux pa su sip chuo it Nuosu person many CL.part NOM Sìchuān live PER 'Most Nuosu lived in Sìchuān (*once in a while).'
- c. * 世界更多下了公司到到出台。

*ngat vvt vu yur nyip li ly hlep te go nge ndit. elder brother birthday TOP PER 1P.SG April time COP 'My brother's birthday is in April (*once in a while).'

D. The verbal meaning of *ndit*

The periodical aspect marker is historically derived from the existential verb *ndit* with the sense *have*, *wear* (section 12.1.2.D). It subcategorizes entities such as body parts attached to the body (*hand*), clothing items worn on the extremeties of the body (*gloves*), plants (*leaves*) and a few abstract items (*name*, *letter*).

- (127) a. X出版情。 cy uo nyie **ndit**. 3P.SG hair have 'He has hair.'
 - c. X爭協。 cy lot **ndit.** 3P.SG hand have 'He has hands.'
 - e. 丫**雀**丫於情。 syr bbo syr qi **ndit**. tree leaves have 'The tree has leaves.'
 - g. ፋርክ ዕክ። tep yy bbur ma **ndit**. book letter write 'It is written in the book.'

- b. X協。 cy hnap bo **ndit**. 3P.SG ear have 'He has ears.'
- d. X皇本情。 cy nyuo zzy **ndit**. 3P.SG eye have 'He has eyes.'
- f. 丫堇���愉。 syr bbo max ma **ndit**. tree fruit bear 'The tree bears fruit.'
- h. ※米蘭。 cy hmi **ndit**. 3P.SG name have 'He has a name.'

The verb *ndit* and the periodical aspect marker *ndit* can co-occur in one clause exactly if the possessee is alienable. The aspect particle *ndit* has preserved verb properties such as the possibility of negation and reduplication. If the aspect particle is reduplicated, the second copy has its tone lowered.

(128) 🎗 비용 🔭 온 혀 없 🕇 .

cyx li hlu njy jjut va ndit **ndi.**3P.SG TOP leather belt wear PER
'He wore a leather belt occasionally.' (Other meaning: Did he wear a leather belt?)

(129) 创争学兴怡問? cop wox jjyx- ga **ndit ndi**? 3P.PL RECL- beat PER~ALT

'Did they have a fight once in a while?'

E. Synthesis

The periodical marker *ndit* does not exhibit temporal meaning only aspectual meaning. Sentences with *ndit* express unspecific existential meanings and have a topic time with wide scope. The topic time contains the situation time.

Table 7.10: Profile of the periodical marker

Constraints on underlying clause		Aspect-Tense	Quantification
unrepeatable weak-repeatable	impossible possible necessary	*(ungrammatical) #(pragmatically odd) TS ⊊ TT #(pragmatically odd)	'once in a while'
strong-repeatable		*(ungrammatical)	

Clauses that have impossible or necessary implementation in the time frame (TT) are pragmatically odd with the periodical marker *ndit*.

7.6.3 The habitual particle go shex

The habitual marker *go shex* is grammaticalized from the verb *shep/shex* 'seek' and the versatile pronoun *go* (section 5.4.1.F). In the typological literature, various lexical sources for the habitual aspect were proposed such as *sit*, *live*, *know*, *see* but not *seek* (Bybee et al. 1994: 154–155). From early on, the Nuosu verb *seek* might have developed into the sense of *try several times*.

I sought to come to Xichang = I tried (several times) to come to Xichang.

This construction was used with human subjects and appeared in present and past tense. Later, it occurred with inanimate subjects as well.

A. Unrepeatable situations

The habitual particle *go shex* cannot mark events that are unrepeatable. The following four unrepeatable situations show this point.

(130) a. *≢€⑩對策。
 *syp nju hmip **go shex**.
 tangerine ripe HAB
 Intended meaning: 'The tangerine used to be ripe.'

- b. * # X 母 引 d **学 稿**。
 - *mu ga yur ax yy **go shex.** male name grow up great HAB Intended meaning: 'Muga has often grown up.'
- - *cy ip nyip syr bbo cyx bbo kie **go shex**.

 3P.SG today tree DEM.PROX CL fell HAB
 Intended meaning: 'He used to fell this tree.'
- - *bbox zze max su sot ggiep **go shex.**man ART=CL+NOM breath disrupt HAB
 Intended meaning: 'The man's breath stopped (= died) often.'

B. Weak-repeatable situations

Weak-repeatable situations are compatible with the habitual marker *go shex*. Events tagged by the habitual particle have unspecific and generic reference.

- (131) a. 引印闸井() (131) a. 引印闸井() (131) a.
 - ax yi shax jji bit **go shex.** child candy take HAB 'The child used to take candies.'
 - b. 學業眾爭議。
 nga hxe nyiet **go shex**.
 1P.SG fish go fishing HAB
 'I used to go fishing.'
 - c. 引目任意学辑。 ax pu yo hlut **go shex**. grandfather sheep pasture HAB 'Grandfather used to pasture the sheep.'

It is possible to transform unrepeatable into weak-repeatable events. This reading is selected by the habitual marker.

- - za pux go yiep sep ci bbo **go shex.**wall LOC color fall go HAB
 'Some of the wall's paint used to fall off.'
 - b. 母爭聞君爭雜。
 it mup chyp jjip **go shex.**corn decay HAB
 'Some of the corn used to decay.'

In (133), the event of losing the purse within 24 hours is repeatable but not an indefinite number of times. In a similar way, divorce in (134) is repeatable but not too many times. The use of *go shex* is odd in both constructions.

(133) *※ 果了 下 从 马 C 新 双 菜 四 字 稿。

*sho mo cyp nyip cy rre zip jjot bbip hlix ndo **go shex.** two days ago 3P.SG purse CL lose lose HAB Intended meaning: 'Two days ago he used to lose the purse.'

(134) #※ 果丁 下 汝 ∃ C 新 双 菜 智 字 幕。

#cyp pat vu xyp mop xyp **go shex.**3P.SG uncle wife marry HAB
'His uncle used to be married.'

The habitual particle *go shex* can occur with events that must happen within the time frame of the clause. For example, the events of sunrise and sunset are known to happen regularly. The habitual particle is grammatical, whereas the experiential and periodical particles are ungrammatical.

(135) a. *M ボ ボ W 型 M W U I . ボ 井 Ŷ M 乒 王 县 **6**/ 点。

*hxop bbu bbux ddur jox da ddur da la, bbu jji jox COV LOC exit LOC COV sun east come west nzox / ndit. ggot n110 vıır black enter EXP PER close

'The sun (*once) rose in the east and rose set in the west. / The sun rises in the east and sets in the west (*once in a while).'

ն. Թբենանական անանանան .d

hxop bbu bbux ddur iox da ddur la. bbu jji iox da LOC COV exit LOC COV sun east come west go shex. ggot nuo vur close black enter HAB

'The sun always rises in the east and sets in the west.'

cix zy hlep go nuo su kut shyr **go shex.** November LOC Nuosu New Year HAB 'The Nuosu always celebrate the New Year in November.'

b. 月泉泉泉津龍。

mu hlie zzax zze **go shex**. male name food eat HAB 'Muhlie always eats (he is a glutton).' c. 中Q事门山口日對對出**才能**。

at nyop yur nyip li suo hlep te go nge **go shex.** female name birthday TOP March time LOC COP HAB 'Anyo's birthday is always in March.'

For states of alienable possession, *go shex* does not express a recurrent but a continuous uninterrupted pattern. The periodical marker *ndit* cannot be used in these clauses.

(137) a. J ℍ 以 前 ≢ H ☆ **少 箱** 。

cyp uo nyie ax nyi mu ndit **go shex.** 3P.SG hair much ADVL attached to HAB 'His hair is always abundant.'

b. 为学们手办点**少靠**。

cy lot jy ci ji ndit **go shex.** 3P.SG finger NUM.10 CL attached to HAB 'He has ten fingers during all this time.'

The habitual marker *go shex* has preserved the verbal properties of negation and reduplication.

(138) a. X中門生水節。

cy yi ndo **go-ap-shex**. 3P.SG tobacco smoke HAB<NEG> 'He does not smoke often.'

b. ឬស្គាំង្គាំងនេះ

cy yi ndo **go shex she**? 3P.SG tobacco smoke HAB~ALT 'Does he often smoke?'

C. Strong-repeatable situations

The habitual marker *go shex* cannot be used with strong-repeatable or so-called eternal situations.

(139) a. *型部举引世子引世事命。

*ndap ssyp bbo a hmu-jjy-a hmu **go shex**. Ndase mountain high-very-high HAB Intended meaning: 'The Ndase mountain is always very high.'

*op rro lip mu mo ggux si nip a sho mu gat **go shex**. Xichang Meigu County with distant ADVL distant HAB Intended meaning: 'Xichang used to be at a very long distance from Meigu.'

```
c. *州兴山より登稿。
 *mu ga li cyp sse nge go shex.
 male name TOP 3P.SG.POSS son COP HAB
 Intended meaning: 'Muga is always his son.'
```

D. Synthesis

The habitual marker is incompatible with unrepeatable and strong-repeatable situations. It can also occur with situations that happen necessarily within a time frame. It then expresses *always*. Sentences with *go shex* are unspecific and generic. The habitual marker is associated with topic times that contain the situation time (TSit \subseteq TT).

Table 7.11: Profile of the habitual marker

Constraints on underlying clause		Aspect-Tense	Quantification	
unrepeatable weak-repeatable	impossible possible necessary	*(ungrammatical) *(ungrammatical) TS ⊊ TT TS ⊊ TT	'often, used to' 'always'	
strong-repeatable		*(ungrammatical)		

7.6.4 Verb classifiers

While the experiential, periodical and habitual aspects convey vague quantifica-tional values, verb classifiers provide precise frequency measures.

A. Terminology

Classifiers are morphemes with selectional restrictions in morphosyntactic constructions. Noun classifiers subcategorize nouns in numeral, quantifier, demonstrative pronoun and sometimes possessive constructions.

The classifier *yuo* requires human nouns and partitions nouns into human and nonhuman nouns. As a system, the set of classifiers categorize nouns into partially overlapping classes.

For verb phrases there is a frequency construction in which the verb is modified by a VP-adjunct, a numeral with an instrumental noun. The term *verb classifiers* for instrumental nouns is adopted.

```
(141) 肾斤魚素。
nga nyip cha zyt.
1P.SG NUM.2 VCL.pickaxe dig
'I dug with a pickaxe twice' (lit. I dug two pickaxes)'
```

Only a small range of verbs with the thematic role of instrument can be used in this frequency construction. Verb classifiers may be divided into *sortal* versus *mensural* verb classifiers. Sortal classifiers are verb classifiers proper derived from instrumental nouns. They exhibit proportional relations between the sets of classifiers and classifieds. The small Nuosu system of sortal verb classifiers is classificatory in this sense.

By contrast, mensural verb classifiers manifest no selectional restrictions and are not classificatory in a strict sense. They convey a temporal concept and are classificatory only in the sense that they occupy the same syntactic position as sortal verb classifiers.

```
(142) 学業了下景。
nga hxe cyp nyip mgot.
1P.SG fish NUM.1 day catch
'I have been fishing a whole day.'
```

The mensural verb classifier *nyip* 'day' imposes a temporal measure on the event.

B. Sortal verb classifiers

The Nuosu sortal verb classifiers occur in two types of constructions: one with a bare instrument noun, the other with an instrumental noun together with the general verb classifier *luo*.

```
(143) a. N_O NUM VCL V b. N_O INSTR N NUM VCL: luo V
```

The first construction uses one of the Nuosu VCL listed in Table 7.12 below. These morphemes are historically derived from instrumental nouns which in some cases were replaced by new forms, as in (144b).

```
。唯豫司特
(144) a.
          nga
                 nyip
                          cha
                                        njyr.
          1P.SG NUM.2 VCL.pickaxe
                                        dig
          'I dug with a pickaxe twice (lit. I dug two pickaxes).'
          中業2資車。
      b.
          nga
                 zyt mop
                            six
                                  njyr.
          1P.SG pickaxe
                                  dig
                            COV
          'I dug with a pickaxe.'
```

Table 7.12: Sortal verb clasifiers

Sortal Verb Classifier	Instrumental Noun	Nuosu VCL	Mandarin VCL
'hand'	lot ¥	=	 shǒu 手
'fist'	gup zyp ⊕ €	_	quán 拳
'palm'	lot bbu ¥1ñ	_	bāzhǎng 巴掌
'foot'	jy xy 佢中	_	jiǎo 脚
'mouth'	bba hluop ঋੴ	bba hluop ঋੴ	kŏu 🗆
'eye'	nyuo zzyp 일위	_	yǎn 眼
'knife'	ddox mu ∰H	_	dāo 刀
'gun'	hnap chot 矛盾	_	qiāng 枪
'hammer'	la tur 口师	_	chuí 锤
'pickaxe'	zyt mop ∦⊃	cha ⋪	chútou 锄头
'axe'	vi mop KƏ	_	fǔtóu 斧头
'scissors'	nyie da ∦⋈	_	jiǎnzi 剪子
'needle'	yit ď	kip ℤ	zhēn 针
'pen'	bip	- -	bǐ 笔

(145) አኮአላሪዮ % ৪.

cy nyip **bba hluop** ngax nzyt. 3P.SG NUM.2 VCL.mouth 1P.SG bite 'He bit me twice (*lit*. He bit me two mouths).'

The second construction employs a general VCL, the classifier *luo*, and an instrumental noun. It is also possible to omit the instrumental noun.

(146) X床#厅Φ单件。

cy **tep bbup** nyip **luo** ngax jyt. 3P.SG baton NUM.2 VCL.time 1P.SG beat 'He beat me twice with a baton.'

(147) XX21 \$Y46。

cy **vi mop** cyp **luo** syr kie. 3P.SG axe NUM.1 VCL.time wood cut 'He cut once with the axe.'

In Nuosu, there are only 3–4 sortal verb classifiers that categorize about 12 activity verbs (see table 7.12). With this low number of VCLs and classified verbs, it is difficult to justify them as classifiers since there must be a basic statistical ratio between the set of classifiers and classifieds. We continue to call them verb classifiers because they occur in the same position as sortal VCLs in Mandarin which number about 50 members and categorize 70–80 activity verbs (Gerner, forthcoming).

C. Mensural verb classifiers

Sortal VCLs actualize minimal temporal or phasal parts which are intrinsic to the verb concept, whereas mensural VCLs create or impose temporal boundaries which are not inherent to the verb (Matthews & Yip 1999).

The prototypical example of a verb concept with minimal parts is *beat*. Its phasal boundaries are given by the idea of punctual collision. Sortal VCLs such as rod or fist actualize the idea of collision. Verbs such as wait do not display any smallest phase. Mensural VCLs like day impose artificial temporal boundaries that are alien to the verb concept.

For mensural classifiers, another distinction can be recycled from the nominal domain. Some scholars divide mensural NCLs further into collective NCLs and measure NCLs (Bisang 1999: 122; Rijkhoff 1991). Collective NCLs erase the minimal part structure of an object and impose a different collective structure (a group of students, a collection of stamps, a flock of sheep). Entities without minimal parts do not permit collective classifiers: *a group of wine, *a collection of air. Measure NCLs modify nouns without inert minimal parts like a cup of water, a cubic meter of air. They can modify objects with minimal parts, but are pragmatically marked like in #a container of people, #a box of mice.

Table 7.13: Collective and measure noun classifiers

	Collective NCLs	Measure NCLs
Objects with minimal parts	group of students	#container of people
Objects without minimal parts	*group of wine	cup of water

Collective VCLs modify verbs that have individuable phases, and set up a new grouping of these parts. The noun round is a prototypical collective VCL. Temporal nouns like hour, day or year are measure VCLs. They impose standard time measures onto events. They naturally co-occur with verbs without minimal parts such as wait or love. However, many mensural VCLs have not a clear-cut behaviour for the collective vs. measure distinction. The generic VCL time, for instance, can modify verbs with and without individuable phases, although it is used more naturally with verbs with individuable phases.

Table 7.14: Collective and measure verb classifiers

	Collective VCLs	Measure VCLs
Events with minimal parts	box one round	(#)box for an hour
Events without minimal parts	#wait one round	wait for an hour

(i) Collective verb classifiers

There are five collective VCLs in Nuosu. Some of them manifest almost no selectional restriction and can be used with a wide range of verbs (for example the VCL *vit*). Some are restricted to a few verbs (for instance the VCL *jji*).

Table 7.15: Collective verb clasifiers

Collective Verb Classifier	Nuosu	Mandarin
'time'	vit ⊮	cì 次
'quick time'	luo ∮	xià 下
'round'	jji #	dùn 顿
'round' (mainly motions)	jo ∜	tàng 趟
'round'	ggup ₹	huí 回
'process'	-	biàn 遍

The classifier *luo* means *quick time*. In Nuosu, *luo* is selective though there is no straightforward semantic principle. The Chinese counterpart is xia which is compatible with a wide range of verbs.

Mandarin

(148) tā kū le yī **xià.**3P.SG cry DP NUM.1 VCL.time
'He cried once (briefly).'

Nuosu

- (149) a. XIC中口\$智。
 - cy jy xy nyip **luo** dut. 3P.SG foot NUM.2 VCL.time stamp on 'He stamped with his foot twice.'
 - b. X11 \$\$ \$.

cy nyip **luo** sot. 3P.SG NUM.2 VCL.time calculate 'He quickly calculated twice.'

c. Xip\$#。

cy suo **luo** ssyr. 3P.SG NUM.3 VCL.time press on 'He quickly pressed three times.'

. B⊉14 .b

nga cyp **luo** hxip. 1P.SG NUM.1 VCL.time speak 'I speak on a short occasion.' e. *少「食受。 *ngop cyp **luo** vu. 1P.PL NUM.1 VCL.time buy 'We bought (it) in one go.'

Three verb classifiers that can be translated by *round* with different ranges of compatible verbs each time. The VCL *jji* 'round' categorizes verbs of consumption such as *eat*, *drink*. Out of a sample of 122 basic verbs, 15 verbs are compatible and 107 verbs incompatible with *jji*.

- (150) a. 米海市井皇爺。
 cy zza nyip **jji** zze ox.
 3P.SG food NUM.2 VCL.round eat DP
 'He ate two meals.'
 - b. ង្គាមមេ គឺ ប៉ាត់ដ្ឋាមិ 。
 nga sha mut suox **jji** ndo ox.
 1P.SG noodles NUM.3 VCL.round drink DP
 'I drank three cups of noodles.'
 - c. 生物工#1季。 ddip vip cyp **jji** hxo lo. guest NUM.1 VCL.round depend 'The guests participated in one (meal).'

Another collective classifier is the morpheme *jo* 'round, section'. Out of a sample of 122 basic verbs, 33 verbs appeared compatible and 89 verbs incompatible with this VCL.

- (151) a. 肾州區學素節。
 nga mu suo **jo** zzy ox.
 1P.SG horse NUM.3 VCL.round ride DP
 'I rode a horse in three rounds.'
 - b. 學承新下學母節。
 nga ip ko nyip **jo** ggot ox.
 1P.SG door NUM.2 VCL.round close DP
 'I closed the door on two occasions.'
 - c. 性系氧化學學節。 lat sse gga cyp **jo** shyp ox. male name road NUM.1 VCL.round lead DP 'Laze led (people) along a path on one occasions.'

- d. 月周市學庭節。 mu jie suo **jo** bot ox. male name NUM.3 VCL.round run DP 'Mujie ran on three occasions.'
- e. 从市野电舱。 cy suo **jo** ku ox. 3P.SG NUM.3 VCL.round steal DP 'He engaged in two robberies.'

The VCL *ggup* 'round' can be traced back to the Proto-Yi directional verb for *go back* (Gerner 2002a: 29). The Mandarin VCL *hui* is also derived from *go back*. The selectional restrictions of *ggup* and *hui* are very different though. The Nuosu VCL *ggup* categorizes a large range of verbs but is incompatible with mental verbs like *think* and *know*.

- (152) a. 豸「葦巣峨。 ne cyp **ggup** ddiex bur. 2P.SG NUM.1 VCL.time correct, change 'Change it once.'
 - b. X 说出了学时?
 cy xix mu zzi cyp **ggup** mga?
 3P.SG INT.why bridge NUM.1 VCL.time cross
 'Why did he cross the bridge once?'
 - c. 义了学心思? cy cyp **ggup** jy jie? 3P.SG NUM.1 VCL.time fear 'He was afraid once.'
 - d. *坪「神文世。 *nga cyp **ggup** dde jji. 1P.SG NUM.1 VCL.time know 'I knew (it) once.'

In Nuosu, there is no VCL that is equivalent to the Mandarin *biàn* as in the following example.

Mandarin

(153) tā zhī le yī **biàn.**3P.SG weave DP NUM.1 VCL.process
'He engaged in one process of weaving (*lit*. he weaved once).'

'month'

'lifespan'

'year'

(ii) Measure verb classifiers

Measure VCLs are time-units, natural or man-made, and indicate the duration of an event or state. They typically modify verbs that do not incorporate minimal phases, although in practice they are also compatible with verbs with minimal phases. Measure VCLs select compatible verbs if the duration fits in the verb's time frame. Mandarin Chinese serves again as point of comparison.

Measure Verb Classifier	Nuosu	Mandarin	
'while / hour'	tu O (short) / put 디 (long)	kè 刻	
'two hours'	te	shí 时	
'evening & night'	hxuo ⊂	wǎn 晚	
'day'	nyip lī	tiān 夭	

bbu hlep √11 ⊖

iio ssv ##

kur ₫

Table 7.16: Measure verb classifiers

Measure VCL-phrases can be viewed as East Asian equivalents of FOR-adverbials in English (for two hours). They co-occur with homogenous events (Vendler 1967; section 7.1.1.A).

vuè 月

nián 年

bèi 辈

。美食用事件1均 (154) a. cvp iio ssv nga mu nex mgu. 1P.SG NUM.1 VCL.lifespan ADVL 2P.SG love 'I love you for all of my life.'

> b. ΧĤ፬1**110** θ. « cy mux dde bbu hlep cyp mo. 3P.SG soil NUM.1 month plough 'He ploughed the earth for one month.'

VCLs are incompatible with quantized events but acceptable with bounded events. Example (155a) without the VCL-phrase would be a quantized event. If the VCL was changed into a sort of IN-adverbial, as in (155b), the sentence would be grammatical. Example (156) is a bounded event.

(155) a. *从刊口即1亿句。 ndo. *cv nry nyip zhep cvp put wine NUM.2 CL.cup NUM.1 VCL.vague hour 'He drank two cups of wine in about an hour.'

- p. X1**Հ**∄ՀԱԿԱՐ ԱՐ
 - cy cyp **put** ax di mu nry nyip zhep ndo. 3P.SG NUM.1 VCL.vague hour only ADVL wine NUM.2 CL.cup drink 'He drank two cups of wine in an hour.'

cy cyp **hxuo** ax di mu ggax shu yy nzix xi. 3P.SG NUM.1 VCL.evening only ADVL road make river along arrive 'He walked to the river in one evening.'

The VCL *tu* 'while' manifests selection restrictions. It sometimes means *crisis time* and should co-occur with verbs compatible with this concept, as in (157). The VCL *put* 'vague hour' in (158) has almost no selectional restriction.

- (157) 引即108。
 - ax yi cyp **tu** ngo. child NUM.1 VCL.while cry 'The child cries for a while.'
- (158) 肾行口生。

nga nyip **put** ne.

1P.SG NUM.2 VCL.vague hour rest
'I have rested for two hours.'

D. Double classifiers of nouns and verbs

In Chinese, certain morphemes function as mensural VCLs and sortal/mensural NCLs (Paris 1989: 4–5; Matthews & Yip 1999: 11–12; Matthews & Leung 2001; Yang 2001: 129–137). The same type of overlap can also be observed in Nuosu.

(i) Certain mensural verb classifiers do function as noun classifiers

No sortal VCL in Nuosu can function as classifier of nouns. Certain mensural VCLs, however, also assume the function of NCL. Yang (2001: 129-137) described the Chinese generic $c\hat{i}$ 'time' as NCL and VCL.

The Nuosu generic VCL *vit* 'time' also has a double function of NCL and VCL. The generic VCL *vit* divides the class of nouns up into three subclasses, class₁, class₂ and class₃, defined by the grammaticality pattern (*= ungrammatical) that matches that of $c\hat{i}$ in Chinese (Yang 2001: 129–137), see table 7.17.

Semantically, class₁ nouns denote physical entities such as *table*, *book*; class₂ nouns denote physical entities that can be understood as events such as *film*, *rainfall*; class₃ nouns denote events or states such as *work*, *attack*, see table 7.18.

Class₁ nouns comprise most common and mass nouns. Class₁ nouns cannot be categorized by vit as agent or intransitive subject, as in (159c).

Table 7.17: Constructions	s with NO	Ls and the	generic VCL
---------------------------	-----------	------------	-------------

	S/A-slot			O-slot			Verb-slot
a.	Class ₁ -N Class ₂ -N *Class ₃ -N	NUM	NCL	(NP)			V
b.	NP			Class ₁ -N Class ₂ -N *Class ₃ -N	NUM	NCL	V
с.	*Class ₁ -N Class ₂ -N Class ₃ -N	NUM	vit	(NP)			V
d.	NP			Class ₁ -N Class ₂ -N Class ₃ -N	NUM	vit	V

Table 7.18: Class₁ nouns

Class ₁ Nouns	Nuosu	Mandarin
'food'	zza ⋊⊧	fàn 饭
'wine'	nry ∦	jiǔ 酒
'water'	уу व	shǔi 水
'person'	co 161	rén 人
'ox'	le 위	niú 牛
'clothes'	vit gga 半章	yīfú 衣服
'road'	gga ≨	lù路

多次中外紧重。 (159) a. Class₁ NCL in S/A-slot ji xiet ddop bbo. gga CVX road DEM.PROX NCL Xide Count go 'This road leads to Xide county.' b. Class₁ ¼¼통뒤**¾**☆。 NCL in O-slot сy vit gga nge ggu vy. 3P.SG clothes NUM.5 NCL buy 'He bought five sets of clothes.' *从表公为礼机。 c. Class₁ VCL in S/A-slot *vit gga ly vit aphe. clothes NUM.4 VCL.time NEGgood 'Four sets of clothes were not good.' 。沙界可拿敞片飞屿。 d. Class₁ VCL in O-slot ap ndi hxix gga vit ddie. nga nyip 1P.SG yesterday road NUM.2 VCL.time repair

'Yesterday I twice repaired the road.'

Semantically, class₂ nouns refer to weather phenomena as well as to entities that also represent events. The nouns refer to the physical entity or to the motion itself.

Table 7.19: Class₂ nouns

Class ₂ Nouns	Nuosu	Mandarin
'snow'	VO 약	xǔe 雪
'rain'	ma hxa 🕀 प	yǔ 雨
'hail'	zzi sy 칩ソ	báozi 雹子
'air, steam'	sot S	qì 气

Class, nouns can be modified by an NCL and by vit in every position of the sentence.

。同生坚长世十**1**120 (160) a. Class₂ NCL in S/A-slot ma hxa cyp tot ka nyuo ci ngat NUM.1 NCL.drop fall 1P.SG.POSS face rain go ssop. LOC endure 'One raindrop fell on my face.' 中央4世**泽长**亚对的。 b. Class₂ NCL in O-slot ma hxa pip nzy ddat nga suo da ox. 1P.SG rain NUM.3 NCL.basin STP DP fill 'I have collected three basins of rainwater.' c. Class₂ . @E4150 VCL in S/A-slot ma hxa vit jjip cvp ox. rain NUM.1 VCL.time fall DP 'There was a rain shower.' 4041AII®° d. ma hxa cyp vit Class₂ nga gge ox. VCL in O-slot 1P.SG rain NUM.1 VCL.time DP hear 'I heard a rain shower.'

Class₃ nouns refer to abstract states or relational events but not to physical objects or masses.

Table 7.20: Class₃ nouns

Class ₃ Nouns	Nuosu	Mandarin
'catastrophe'	hit vi धर	zāinàn 灾难
'activity'	ggep ddu ∜¥	huódòng 活动
'deal, business'	vy lot ∀₩	shēngyì 生意

Class₃ nouns cannot be categorized by a noun classifier in either syntactic position, though it can be modified by vit as agent and as intransitive subject.

- (161) a. Class₃ *片景山母水川景甸顶。 NCL in S/A-slot hlix ndo *vy lot suo ma ap mu ox. business NUM.3 NCL now lose DP 'Three business deals were lost.'
 - * 中型口片煮出的。 b. Class₃ NCL in O-slot *nga ip nvip vv lot lv ma mu ox. 1P.SG today business NUM.4 NCL do DP 'Today I engaged in four types of business.'
 - 。 展水 H 36 版 以 1 点 点 以 4 上 点 为 1 c. Class₃ VCL in S/A-slot vy lot cyp vit bbax yuo mu apjjip. business 3P.SG VCL.time smoothly NEGget 'The business did not run smoothly on three occasions.'
 - d. Class₃ 。00度日內可能分及 VCL in O-slot vvt lot vit cv nyip jjip ox. mu 3P.SG business NUM.2 VCL.time do get DP 'He did business on two occasions.'

(ii) Postverbal noun classifiers do not function as verb classifiers

Container nouns are used as measure NCLs to gauge an amount of mass. Certain container nouns can be viewed as instruments of a weighing activity.

- (162)a. X((∦)[x**X|0**00€. (zza) nyip bba hluop cv zze. NCL.mouth 3P.SG food NUM.2 eat 'He ate two mouthfuls of food.'
 - 4(4)1/ **K**4) b. nga (ie qyt) cyp pip nzy fur. 1P.SG water NCL.basin NUM.1 pour 'I poured a basin of water.'

It is not appropriate to analyze container nouns as sortal VCLs because its relationship with the verb is not instrumental. The container noun can always be complemented by the head noun, as indicated in (162) by the nouns in brackets.

E. Synthesis

The verb classifiers are incompatible with unrepeatable and strong-repeatable events, but can be used in weak-repeatable situations. Sentences with verb classifiers tend to be unspecific. Similar to the habitual and periodical markers, the verb classifiers are associated with topic times that contain the situation times (TSit \subseteq TT).

Table 7.21: Profile of the verb classifiers

Constraints on underlying clause	Aspect-Tense	Quantification
unrepeatable weak-repeatable	*(ungrammatical) TS ⊊ TT	'n-times, n-time units'
strong-repeatable	*(ungrammatical)	,

7.7 Perfect

The Nuosu particles da and ox both convey current relevance, the definitional property of perfect. They represent two types of perfect, an English-style (present perfect) and a Chinese-style perfect (the particle le). Both perfects relate the utterance situation to the discourse topic: $TU \subseteq TT$ (Klein 1992; section 7.1.2).

A controversial point in the literature on the English present perfect and of other languages (Mandarin's *le*) is whether *current relevance* is *encoded* in the perfect construction or *contextually derived* from its aspect-tense meaning. Those who think that current relevance is encoded propose distinctions like the following (Comrie 1976; Huddlestone 1969; Li & Thompson 1981):

- (163) Perfect of result/Stative perfect ('John has arrived')
- (164) Experiential perfect ('Mary has been in Moscow')
- (165) Perfect of persistent situation/ Inclusive perfect ('He/she has studied Chinese for ten years')
- (166) Perfect of recent past ('Who has left his/her socks here?')
- (167) 'Hot news' perfect ('The president has been assassinated')
- (168) Change of state (Li & Thompson 1981: 249)
 tiān hēi le. (Chinese)
 sky dark DP
 'It's dark (now).' Or: 'It has become dark (before it wasn't).'
- (169) Correct a wrong assumption (Li & Thompson 1981: 263)

 wŏ yào hē le. (Chinese)

 1P.SG want drink DP

'I want to drink it (contrary to what you might think).'

(170) Progress so far (Li & Thompson 1981: 271)
fēijī chū le máobìng le. (Chinese)
airplane exit DP trouble DP
'The airplane has developed some trouble.'

(171) What happens next (Li & Thompson 1981: 281)
kuài xiǎng le. (Chinese)
fast sound DP
'It's (i.e. the alarm-clock) about to ring (so let's get up).'

(172) Closing a statement (Li & Thompson 1981: 284)
xuéfèi tài guì le! (Chinese)
tuition too expensive DP
'(I tell you,) the tuition is too high! (This is what I think about it).'

Other authors think that current relevance is a consequence of a past event viewed from a present point of view (Declerck 1991; Depraetere 1998; Klein 1992; Michaelis 1994). These scholars derive current relevance from the interaction between the present perfect and the situation type of a construction. We adopt this view in our analysis of *da* and *ox*. This section uses material published in Gerner (2002b).

7.7.1 The stative perfect particle da

The particle *da* has a wide range of meanings of which *stative perfect* is one (section 7.7.1.A). The particle *da* combines with other grammatical particles to form the circumstantial conjunctions *mu da* and *nyi mu da* (section 7.7.1.B).

A. Basic analysis

The particle da conveys the view of a clause as stative situation with relevance for the ongoing discourse. It can be glossed by the English construction it is the case that. It is used at the end of a single / complex clause, or at the end of the first component clause of a complex clause. Current relevance (it is the case that) is only conveyed when da occurs at the end of clauses used in dialogue. If da is used at the end of a sentence in a narrative, it expresses that the propositional content is relevant for points mentioned in the narrative.

 $\begin{tabular}{lll} \it Tense: TT \ and \ TU & \it Aspect: TT \ and \ TS \\ Final \ position \ of \ clause & TU \subseteq TT & TS \subseteq TT \\ Non-final \ position \ of \ clause & - & TS \subseteq TT \\ \end{tabular}$

The particle *da* does not manifest any restriction on the use of deictic time adverbials such as *last year* or *next year*. The so-called *present perfect puzzle* (Klein 1992) has thus no relevance for the particle *da*.

(i) Punctual events

At the end of clauses used in dialogue, the particle da expresses that the event is relevant to the current time of speaking (TU). Punctual events are presented with a perfective perspective.

(173) 前心自習知。

ax jy vat jjip **da.** female name fall STP 'It is the case that Adje stumbled.'

(174) 录月到月第34。

mo mu go mu hlit **da**.
sky LOC lightening STP
'It is the case that there was lightening in the sky.'

(ii) Homogenous events

For homogenous events, da indicates the relevance of an ongoing event for the time of utterance.

(175) 水台城目別。

cy ciep yiet hxip **da**.
3P.SG something say STP

'It is the case that he is saying something.'

The perfect particle da is often used in imperative clauses. This use of da is expected, since commands have immediate relevance for the ongoing discourse.

(176) 対다ビ手坐図!

ip nyip yo hlut bbo **da**! today sheep pasture go STP 'Today go and pasture the sheep!'

The next example consists of a complement clause marked by da inside a main clause marked by ox.¹² The perfect particle da does not convey the meaning of *current* relevance but only *relative relevance*: the embedded event (*agreement of not exaggerating*) is relevant to the situation in the main clause.

ngap nyit ap-mgie-ap-shy jjyx- mu **da** su ne ap- shut **ox.** 1P.DL NEG-cheat<NEG> RECL- do STP COMP 2P.SG NEG- remember DP 'Have you already forgotten that we agreed not to exaggerate?'

¹² Quoted from the folk story "The drum and the ox" (Chén & Wū 1998: 224-225).

(iii) Ouantized events

For quantized events, the use of da expresses that the event as a whole has current relevance. The event itself can be in the past, present or future. The particle da thus corresponds to the English past, present and future perfect.

- (178) a.
 - da. lat ti yi suo ga ndo male name tobacco NUM.3 CL smoke STP 'It is the case that Lati smoked (smokes / will smoke) three cigarettes.'
 - b. 推生水型3型位长包效。 ap ndop hxot ndo da. lat ti vi suo ga male name vesterday evening tobacco NUM.3 CL smoke STP 'It is the case that Lati smoked three cigarettes last night.'
 - lat ti mup shy dex vi suo ga ndo mix da. male name tomorrow tobacco NUM.3 CL smoke FUT STP 'It is the case that Lati will smoke three cigarettes tomorrow.'

(iv) Bounded events

Example (179) illustrates an imperative clause whose aspectual structure is bounded. The perfect particle *da* adds a note of urgency to the command.

(179) 划步坐划! ix go bbo da! home go STP 'Go back home (I tell you)!'

The particle da in (180) is used to indicate that the clause is a relevant reply to a previous question.13

"早到全員打印月至少区內" 主。 (180)"ke i ndup six a ddit mux dde zip da" ddix. go dog LG.SG RES there soil LOC dig bury STP OUOT '(The elder brother:) "I have buried the dog in the ground over there".'

(v) States

The perfect particle da may freely co-occur with stage-level and individual-level predicates. The first two examples exhibit stage-level states that apply for a limited period of time.

¹³ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 216-221).

(181) 母菜問用番餅。

co cyx gge nry yit **da.**person DEM.PROX CL wine drunk STP
'These people are drunk' (i.e. difficult to deal with them now).

> cyx li rre gat zza gat su nge **da**. 3P.SG TOP money-greed-food-greed NOM COP STP 'He is very greedy.'

The English present perfect cannot be employed in individual-level states, whereas the particle *da* can be used if current relevance can be implicated.

(183) 母爭以承至量均也效。

cop wox li vyt vu ix yi nge **da**. 3P.PL TOP brother COP STP 'They are brothers (you know).'

(184) 3 比 明 景 本 代 员 明 至 不 分 对 。

nuo su co si nip hxie mgat co jjyx- ap- sup **da.** Nuosu people and Chinese people RECL- NEG- resemble STP 'The Nuosu and the Han are different.'

(vi) Co-occurrence with time deictic adverbials

The perfect particle *da* is compatible with time deitic adverbials. It differs from the English present perfect which cannot be used in this context.

(185) a. 哲拿山水型里半半次英月內。

nop wox li ap hxiet ddip kut syt cy jjit mu **da.** 2P.PL TOP last year thing DEM.PROX CL do STP 'You did this (same) thing last year.'

b. 私表可水升大次效升**效**。

nop wox li ap mu syt cy jjit mu **da**. 2P.PL TOP now thing DEM.PROX CL do STP 'You have done this thing now.'

c. 私贵可以吃店木大为英刊> 。

nop wox $\$ li nyiet hxie ddip kut $\$ syt $\$ cy $\$ jjit $\$ mu $\$ da. 2P.PL $\$ TOP next year $\$ thing DEM.PROX $\$ CL $\$ do $\$ STP 'You will do this thing next year.'

B. The conjunctions mu da and nyi mu da

The particle da can mark the first clause of a complex clause as being relevant for the second clause. The sense of *relative relevance* is roughly equivalent to the meaning of a circumstantial and temporal conjunction. With the verbs mu 'do' (section 5.3.2.J) and nyi 'sit' (section 12.1.2.H), da has formed circumstantial and temporal conjunctions: mu da and nyi mu da. They may also be used as periphrastic progressive markers in simple clauses.

(i) In simple clauses

The marker mu da is used in simple clauses after certain adjectives to emphasize the idea that the subject is positioned in the state. This use is derived from the main verb meaning of mu 'make' which is to indicate that the subject occupies an office or social position ('he is teacher', 'he is king', 'he is peasant').

- 次化世人<u>象</u>其象**升效**。 (186) a.
 - hxie mat syr shox jjix sho mu da. 3P.SG heart clean in the state of 'He has a clear conscience.'
 - ₩ИООЖПОТРЫ ВМИООЖПОТРЫ

lat hxa at nvop la hxex mu da. ma sup male name female name wait for CL resemble in the state of 'Laha resembles someone who is waiting for Anyo.'

The expression nyi mu da includes the positional verb nyi 'sit' and functions as periphrastic progressive marker. It is compatible with unbounded motion events, quantized and unbounded activities, and certain states.

- **. 依H暈**坐KḦ̂ 屮D#モwঙ (187) a.
 - hxep da nyi mu da. hxie zyr wo jji yyx hmy jox bbo fly south bird CL toward COV.watch go in process of 'A flock of birds is flying southward.'
 - **b.** XĦ ₹ H ≯ ⋈ + 门 **章 H ⋈**。

lur mat mo mu da ci la nyi mu da. LOC COV.put stone sky fall come in process of 'A meteroit was falling from the sky.'

KĴŁdľ∦K**≇H⋈**。 (188)

> bi mox nyi mu da. tep yy nyip zzit bi priest book NUM.2 CLread in process of 'The priest is reading two books.'

(189) 以⑩世≢升效。

cy gup ddur **nyi mu da.** 3P.SG sweat exit in process of 'He is sweating.'

(190) ÎNAODA (190). (190) ÎNAODA (190) (

ax yi tep yy sso da, rre mop kop **nyi mu da**. child book study STP money need in process of 'The child attends school and needs money.'

The marker *nyi mu da* exhibits selectional restrictions. It is incompatible with bounded events, as in (191), and individual-level states, as in (192).

(191) a. *∫∃CYX乖靠≢HM。

*cyp rre zip ddu cy shep wex **nyi mu da.**3P.SG.POSS purse 3P.SG search GET in process of 'He was finding his purse.'

b. *火出400以40多用事用效。

*shyp lyt hxa ma yi cy shyt gox sha **nyi mu da**. storm house 3P.SG blow SEND in process of 'The storm is destroying the house.'

(192) *ポロコル中は砂点車HM。

*bbu nyip mop jy xy hxit pot ndit **nyi mu da**. spider leg NUM.8 CL have in process of 'The spider has eight legs.'

The marker *nyi mu da* is ungrammatical with positional verbs such as *hxit* 'stand' or *it* 'lie' and even *nyi* 'sit' which is a component of *nyi mu da*.

(193) a. * X X 用 F 章 章 H X 。

*cy lur mat tot nyi **nyi mu da.**3P.SG rock LOC.on top of sit STP
'He is sitting on a rock.'

b. *¼₩Ŷ¾¤≢Ħ¾。

*cy hxi jox da hxit **nyi mu da.**3P.SG outside LOC COV.put stand STP
'He is standing outside.'

*₩₩₽₽₩#**±H₩**.

*hxi jox nyi mu da. kex ma go it outside LOC dog CL LOC STP lie 'There is a dog lying outside.'

(ii) In complex clauses

The marker mu da appends a stative, as in (194a), or negated clause, as in (194b), to the main clause.

。及化苯氏形成化毒医饥饿电别 (194) a.

> zyt jie jjip hnex mu da rruo nuo bbo apai. male name REFL because of CONI Mianning County go NEG- want 'Lati does not want to go to Mianning for private reasons.'

mu rrvr aplut mu ddie ne bbyp **mu da**, apmale name NEG- enough ADVL COV 2P.SG NEG- give CONI hxix ddap? nep nvit iivapda 2P.DL RECLspeak NEG-STP INT

'It is not the case that Mudge did not give you enough; didn't you both agree on it?'

The main function of nyi mu da is to mark one event as synchronic to another event. The expression nyi mu da is often complemented by the conjunction go ne 'when', as in (195b). Bounded events that as simple clauses cannot use nvi mu da. may append this marker when embedded in a complex clause, see (195c).

- 。门刊尔比以**灰儿拿**屯北张兜飞当往夜 (195) a.
 - ip ko wa nuo jox bbut su ggot nyi mu da cy a ddit mga la. door back ART close CONI 3P.SG there pass come 'He came through the back door which had been closed.'
 - b. 日常常国事**H**刻少丰, P对少量门的。 ddop hxip nyi mu da go mu rrvr ne, nga ip go vur male name word speak CONJ SENT.TOP TOP 1P.SG door enter la OX. come DP

'Just when Mudge was speaking, I entered the house.'

c. 爱州山丰川刘州忠甸。

ryrx rruo ku **nyi mu da** cop ndox. yu robber steal CONI 3P.PL **PUT** arrest 'Just when the robber was stealing, he was arrested.'

。[1] 具体, **核化** 自以 是以 分 可 3 外 。

```
hxie zyr nyip ma cy ndup shu la nyi mu da, vip si bird NUM.2 CL 3P.SG hit cause come CONJ houselord bur la.
return come

'While he shot down two birds, the houselord returned.'
```

7.7.2 The dynamic perfect particle ox

The perfect particle ox expresses current relevance derived from a complex aspecttense meaning. It emphasizes the time interval that lies after the rightmost time point encoded in the clause. When the clause is unbounded, the rightmost point is the beginning point TS_{BEG} and ox is inchoative. When the clause is bounded, the rightmost point is the endpoint TS_{END} and ox is perfective.

When *ox* occurs in non-final position of the clause, the sense of current relevance is deleted. The tense and aspect parts of the perfect particle *ox* can be sketched in the following way:

	Tense: TT and TU	Aspect: TT and TS
Final position of clause	$TU\subseteqTT$	$TT > TS_{BEG}$ (S homogenous)
	$TU\subseteqTT$	TT > TSit _{END} (S quantized, bounded)
Non-final position of clause –		$TT > TS_{BEG}$ (S homogenous)
	_	TT > TSit _{END} (S quantized, bounded)

A. Basic analysis

The study of *ox* is structured by the situation type of the example sentences: (i) punctual events, (ii) homogenous events, (iii) quantized events, (iv) bounded events and (v) states.

(i) Punctual events

The particle *ox* in punctual events places an emphasis on the aftermath of the event. The clause is perfective and relevant for the ongoing discourse.

```
(196) 承後單比並節。
hxie zyr jot sip bbo ox.
bird eagle take go DP
'A bird was caught by an eagle.'
```

(ii) Homogenous events

Homogenous events have no internal endpoint. The dynamic perfect particle *ox* expresses current relevance and an inchoative meaning.

- ₩₹%¶≯⋈€₩₽**Ю**° (197) a. cop wox lur kur da ddu go zze vv ox. 3P.PL citv LOC COV.put eat NOM DP buv 'They have been buying food in the city.'
 - b. 水の原件可有电镜。 ap ndip hxix nga huo se zze **ox**. yesterday 1P.SG peanut eat DP 'Yesterday, I ate some peanuts.'
 - c. 歩尾俳『印象節。
 ngop shyrx rruo cyp ma mgot **ox.**1P.PL robber NUM.1 CL chase DP
 'We have chased a robber.'
 - d. X 命 至 1 分 ⑥ ⑥ 。
 cy ssox dde cyp ma ju **ox**.
 3P.SG school NUM.1 CL run DP
 'He is running a school.'

(iii) Quantized events

For quantized events, the particle *ox* functions as perfective marker and conveys current relevance.

- (198) a. 代公園粗影中級節。 at nyop ce te sox ji hlu **ox**. female name dish NUM.3 CL cook DP 'Anyo has cooked three dishes.'
 - b. 歩手コスドキのい。
 ngop wox rre mop hxit dur vat sot **ox**.
 1P.PL money NUM.8000 dollar count DP
 'We have counted 8,000 dollars.'
 - c. 日東世份景節。
 pat chap nge ma bbit **ox**.
 firecracker NUM.5 CL explode DP
 'Five firecrackers have exploded.'
 - d. 日桑主导队分千分以间。
 mu hlie nuo su bbur ma ci ma bbur **ox**.
 male name Nuosu character NUM.10 CL write DP
 'Muhlie has written ten Nuosu characters.'

(iv) Bounded events

In bounded events, the dynamic perfect particle *ox* conveys perfective meaning and current relevance. In (199), the first occurrence of *ox* is in a bounded event.¹⁴

(199) 划分中销重米至汇架争时的。

bba ma ji ijox nyi vvt vu sip qyr gox sha ox. bamboo CL have also elder brother COV burn **SEND** DP nvop bbop zze apdop OX. labor NEG-DP eat can

"My brother has burnt the bamboo shoot and [now I] have no way to earn a living."

The following two examples describe movement with an explicit destination.

(200) a. 以51目以**6**。

cy dduo hxo pu xi **ox.** 3P.SG climb mountain arrive DP 'He climbed up a mountain.'

b. YWXEHQIA®.

syr zhep cy zhyp mux dde go njie **ox.** wodden bowl 3P.SG bash soil LOC break DP 'He broke the cup on the ground.'

(v) States

With adjectives or stative verbs, both stage-level and individual-level, the perfect particle ox indicates a change of state. In (201), both occurrences of ox modify stage-level predicates.¹⁵

(201) 里尔印度里子的美, 本口印度中语子的。

ddip vip curx su nyi jjy **ox** mgu, xyp mop max su qot ddop njyp **ox** guest ART also true DP think wife ART nonsense believe DP 'The guests believed (= started to believe) that the nonsense his wife was telling was true.'

The following examples all illustrate changes of state: (202a) for a positional verb and (202b–d) for stage-level adjectives, (202e–f) for individual-level states.

¹⁴ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 216-221).

¹⁵ Quoted from the folk story "The earnest man" (Chén & Wū 1998: 223).

- (202) a. 创第日海销量用料的。
 cop wox rre zza ax nyi mu jjo **ox**.
 3P.PL wealth much ADVL have DP
 'They are wealthy now (before they weren't).'
 - b. 例说出生的。
 co cyx gge nryp yit **ox.**person DEM.PROX CL wine drunk DP
 'These people are drunk now.'
 - c. 美性 ⑩ ඕ。 syp vo hmip **ox**. peach ripe DP 'The peaches are ripe now.'
 - d. 日光龍井⑩。 mu ga jjix do **ox**. male name tired DP 'Muga is tired now.'
 - e. 创美以税负出舱。 cop wox li hxie mgat nge **ox**. 3P.PL TOP Chinese COP DP 'They are Han now.'
 - f. 工术以来变量型划量。
 cyp nyit li vyt vu ix yi nge **ox**.
 3P.DL TOP elder & younger brother COP DP
 'They are brothers now.'

B. Co-occurrence of ox and da

The particles da and ox may co-occur in both orders, da ox and ox da, but only the first is attested in text material, and this rather frequently. The combination da ox often occurs in commands or suggestions as a special mark of emphasis.¹⁶

·**稅**條氧口學歌,口米H俳呂 (203)hxit jjo mu dep la. zzax zze la mix da ox. get up come food eat come **FUT** DP quick ADVL 'Get up immediately and have some food! [Quickly! Don't be so lazy.]'

The combination *ox da* appears to be used mainly in states. The particle *ox* marks a change of state and *da* expresses relevance for the time of speaking.

¹⁶ Quoted from textbook "600 Liángshān Yi language dialog sentences", Lǐ & Mǎ (1981: 22).

7.7.3 Appendix: The particle da

The particle *da* originates from the verb 'put'. It underwent polygrammaticalization and developed several grammatical functions.

- (i) Main verb da 'put'
- (ii) Conjunction *mu da* (section 7.7.1.B)
 (iii) Stative perfective particle *da* (section 7.7.1.A)
 (iv) Stative perfective particle *da* after coverbs (section 6.2)
 (v) Location coverb *da* (section 6.2.5.A)
 (vi) Source coverb *da* (section 6.2.5.A)

Below, I briefly illustrate these six uses and will reconstruct the path of polygrammaticalization that *da* has taken.

A. The main verb da 'put'

The particle da is derived from the verb 'put' still actively used in the language.¹⁷

- - ... ie qyt ggu bu cyx gge shep yi mox mgap water NUM.9 CL DEM.PROX CL search house facing eaves

lap vut **da** yix ne ngap nyit le mgo six sit zze la mo. LOC.under put provided that 1P.DL ox pull RES kill eat come MOD '"[If you can help me] find [...] nine barrels of water and put them under the eaves, then we two can kill an ox and eat it."'

B. The conjunction mu da

The use of da as a circumstantial conjunction is analyzed in section 7.7.1.B. The following example provides an additional illustration (Dài & Hú 1998: 50).

cy ip ko ap- nrur **mu da** bbit bbo ox. 3P.SG door NEG- lock CONJ exit go DP 'He went out, not having locked the door.'

¹⁷ Quoted from the folk story "Redisofu overcomes the sorceress" (Chén & Wū 1998: 243-244).

C. The perfect particle da

For a detailed analysis of da as a stative perfect particle, see section 7.7.1.A. The following example illustrates da as main verb and as stative perfect particle.

vut nvop vit gga ddie a ddit da da. female name clothes COV.prepare there **STP** put 'It is the case that Vunyo put the clothes there.'

D. The perfect particle da with coverbs

The particle da has grammaticalized with a few verbs into complex coverbs or postpositions. After the following three coverbs, da is obligatory (section 6.2).

Table 7.22: Three complex coverbs with da

Verb	Complex coverb	Meaning
mga 'pass, cross'	mga da	'according to'
mo 'watch' hxep 'see'	mox da hxep da	'with regard to' 'toward'

Each of these complex coverbs is illustrated with an example. (208b) is quoted from Chén & Wū (1998: 253) and (208c) from (1998: 229).

(208) a. **年**里平里計**列**尹丰 Î.

kop ddie ddu ddie mga da nga ne bbyx. NOM COV.prepare COV 1P.SG 2P.SG give 'According to your needs, I'll give.'

。H**K第**1第11年ほど生礼米 .d

byp ma la nvit sse go zzi six cvp **mox da** mga. sheep skin drum carry CL come RES 3P.SG COV 'A priest carrying a drum made of sheep skin passed by in front of him.'

cy (...) ip ko **hxep da** la lox ip ko go mga 3P.SG come CON:and door DIR pass door COV ne, lot ji ggu bo da (...) la go come SENT.TOP TOP finger hurt 'He came toward the door and, as he passed through, he hurt his finger.'

E. The location coverb da

The particle da is also employed as coverb. In combination with non-motion verbs, it functions as location coverb. ¹⁸

> cyp nyip ne syr jo ggut lyp ma go **da** lat mop wa ba. NUM.1 day TOP forest corner CL LOC COV tiger behind discuss 'One day, they met in a corner of the forest and spoke about the tiger.'

F. The source coverb da

With verbs of movement, *da* functions as source coverb which marks the place from which an entity moves, as illustrated in the following example.¹⁹

(210) "却多兴世贸过州和中军豪举第110世代11世(...)" 至。

"i ku jox it niep ga da a nyut qv six bbo STP monkey raise LOG.SG pumpkin inside RES sleep go lox a nuvt ddu da sip (...)" ddix. la nge CONJ.and monkey home COV take come COP **QUOT**

'[The brother:] "When I slept in the pumpkin, a monkey lifted it up and took it home from where [the gold] was taken away."

G. Historical development

The two groups of grammatical meanings sketched above, coverb and perfect, originate from the main verb da 'put' through syntactic reanalysis in serial verb constructions.

Preverbal reanalysis:
$$NP_i + [NP_j + da] + [NP_k + V] \rightarrow NP_i + [NP_j + da + NP_k + V]$$

Postverbal reanalysis: $NP_i + [NP_k + V] + [NP_i + da] \rightarrow NP_i + [NP_k + V + NP_i + da]$

The meaning of coverb surfaced through preverbal reanalysis and the function of perfect particle through postverbal rebracketing. It is difficult to decide which type of reanalysis occurred first.

Step 1 (preverbal syntactic reanalysis)

When da occurred before other verbs whose referring events have a fixed place, the scope of that verb extended to da and its complement NP_j. Speakers started to view the complement NP_j of da as a complement of the main verb. The verbal meaning of da was semantically reanalyzed as locative postposition.

¹⁸ Quoted from the folk story "The forest meeting" (Chén and Wū 1998: 260).

¹⁹ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 220).

Step 2 (postverbal syntactic reanalysis when $NP_k = NP_i$ coreferential)

When da occurred after other verbs, the complement NPi of da was deleted whenever it was coreferential with the complement NP_k of the preceding verb. Native speakers started to understand da as a presentative particle of the whole sentence which then developed into a perfect particle.

Step 3 (complex coverbs and conjunctions)

When da was grammaticalized as perfect particle, it further underwent changes in the neighbourhood of a few verbs which were on a path of grammaticalization themselves. The verbs mga 'pass', mo 'watch' and hxep 'see' merged with da into complex coverbs.

7.8 Tense

Tense is defined as a relationship between the topic time and the utterance time of a sentence. In section 7.1.2, we defined three types of abstract tense.

TT and TU Past tense TT < TU Present tense $TU \subseteq TT$ Future tense TT > TU

No particle in Nuosu exclusively marks the meaning of past tense or present tense, but the particle *mix* is reserved for future tense.

7.8.1 The future tense particle mix

The morpheme *mix* is a future tense particle with an evidential constraint (section 7.8.1.A) which requires that the speaker must be the controlling subject of the clause (section 7.8.1.B). The use of mix implies future time reference (section 7.8.1.C). It assumes a limited function of relative future tense (section 7.8.1.D). In combination with other aspect articles, the first person effect might be suspended (section 7.8.1.E). I incorporate materials published in Gerner (2013a).

A. Introduction

Examples in (211) illustrate that the use of mix is a sufficient but not necessary condition for future time reference.

The morpheme mix encodes future tense and is incompatible with explicit non-future time reference, as shown in (211a+b). Future time reference can also be expressed without the particle, as illustrated in (211c).

(211) a. PAAA.

nga xyp mop xyp **mix.**1P.SG wife marry FUT
'I will get married (in the future not now).'

nga ap mu syt cy jjit ngop **(*mix)**. 1P.SG now affair DEM.PROX CL think FUT 'I will look into this problem now.'

nyiet hxie ddip kut nga la su nge. next year 1P.SG come NOM COP 'It is the case that I will come next year.'

The particle *mix* is subject to a first person constraint. It is compatible with first person, and incompatible with second and third person subjects.

(212) a. 黑虎宝半岁季可以是。

nyiet hxie ddip kut nga yiep yot zy **mix.** next year 1P.SG potato plant FUT 'I will plant potatoes next year.'

nyiet hxie ddip kut ne yiep yot zy **(*mix).** next year 2P.SG potato plant FUT 'You will plant potatoes next year.'

c. 以化生术为象引以(***发**)。

nyiet hxie ddip kut cy yiep yot zy **(*mix).** next year 3P.SG potato plant FUT 'He will plant potatoes next year.'

B. First person effect

A sentence denotes a situation controlled by the speaker if and only if a first person pronoun assumes the function of subject and the predicate allows the idea of control. The speaker makes an assertion whose outcome s/he garantees. This idea is present in the following examples.

(213) a. 片语米 f h k b y y h x x k k .

nga nit hmi max su bbur ngat lot go
1P.SG 2P.SG.POSS name ART=CL-DET write 1P.SG.POSS hand LOC
dit da **mix.**attach put FUT

'I will write your name on my hand.'

b. 水量季可分間包压**是**。

ngop wox yiep yot cyx gge zze sat **mix**. 1P.PL potato DEM.PROX CL eat EXH FUT 'We will eat up these potatoes.'

. \$\frac{1}{2} \text{L} \text{E} \text{P} \text{Q} \text{L} \text{E}

nga rre mop ci vat ddie ne bbyx **mix**. 1P.SG money NUM.10 dollar COV 2P.SG give FUT 'I will give you 10 RMB.'

Examples in (214) exhibit second, third person subjects or impersonal subjects. They represent situations not controlled by the speaker.

(214) a. * \$ 月 \ @ 內 f f 自 # @ k 。

*ne mu ga mgex da hxox ssex zha syp mgep **mix.**2P.SG male name COV.mix STP while CL chat FUT
'You will chat with Muga for a while.'

- b. *୪୮୪%୧୪ଝିଃ, ଦି୪ଅ**ଛି**ଞ
 - *cy mat hlop zzax zze ggup jjux ne, yix ga ndo **mix.**3P.SG noon food eat CONJ.after tobacco CL smoke FUT
 'He will smoke a cigarette after lunch.'
- c. * 个 8 黑 於 里 坐 前 即 而 即 工 前 日 車 日 **是** 。

*at zop nyiet hxie ddip kut ax yi suo yuo cyp zzip mu female name next year child NUM.3 CL NUM.1 CL ADVL yur la **mix**. bear come FUT 'Adzo will bear triplets next year.'

- - *shyp hlep te go dut zie **mix**.

 July time LOC Torch Festival FUT

 'The Torch Festival will be in July.'
- e. *世里口山口日對對土稅。
 - *ngat yur nyip li nyip hlep te go nge **mix**.

 1P.SG.POSS birthday TOP February time LOC COP FUT
 'My birthday will be in February.'
- f. * 单 X 0 世 1 是。

*hlyx guo pur la **mix**. storm, hurricane blow come FUT 'A hurricane will be coming.'

- g. *\$E\$\$H\$€11**\$**.
 - *mup shy dex mo mu gga mgop la **mix**. tomorrow sky, weather cold come FUT 'Tomorrow the weather will get cold.'
- h. *学者以是。
 *vo jjip la **mix**.
 snow become come FUT
 'It will be snowing.'

In (215), the speaker assumes the function of non-controlling subject. As the predicates convey a low degree of control, the sentences are ungrammatical.

- (215) a. *坪島の昆。
 *nga o qu **mix**.
 1P.SG head white FUT
 'I will have grey hair.'
 - b. *學切然學說。
 *nga i qi na **mix**.

 1P.SG head ill FUT
 'I will have a headache.'

Many languages with evidentials in the grammatical system exhibit "first-person" effects (Aikhenvald 2004: 219–233). When the speaker talks about an event in which she or he participates, the evidence of this involvement will semantically react to the use of evidentials. Certain evidentials may acquire secondary meanings and overtones when a first person pronoun is employed. The range of secondary meanings attested in different languages is covered in the literature by the term "first-person" effects.

The particle *mix* indicates the evidence that the speaker as controlling event participant possesses. Situations in which this kind of control-evidence is not available are incompatible with *mix*. First-hand evidence is not a sense encoded in *mix* but arises from the elements *mix* co-occurs with.

The particle mix can be used in reported speech clauses, if the subject of the embedded clause is co-referential with the speaker whose speech is reported, as in (216a+b). If the subject of the embedded clause is not co-referential to the secondary or primary speaker, then the use of mix is ungrammatical, as in (217b).

(216) a. 日光划系句从附出是出目。
mu ga i tep yy cy zzit bbur **mix** mu hxip.
male name LOG.SG book DEM.PROX CL write FUT ADVL say
'Muga said that he will write this book.'

。 В Н 其 К 靠 Н 來 В 非 間 的 h.

> hxip go co ggex su оp mu ddix a zzv ggat person ART=CL-DET say LOC LOG.PL area DEM.DIST CL. ggax jije **mix** mu hxip. leave FUT ADVL say 'The people said that they will leave the area.'

(217) a.

> lat sse i tep yy bbut bbur mix mu male name LOG.SG letter CL write FUT ADVL sav 'Laze said that I will put the letter in the mailbox.'

*40घ३४६४**५**३%

*at nyop hxip go ma hxa jjip mix ddix. female name say SENT.TOP rain become FUT OUOT Intended meaning: 'Anyo said that it will rain.'

C. Sufficient condition of future tense

If mix is appended to a simple clause, the clause always refers to the future of the time of speaking (sufficient condition). The converse is not true. Future time reference does not necessarily trigger the use of mix (necessary condition). Most scholars view linguistic forms whose use is either sufficient or necessary for past/present/future time reference as encoding tense.

For simple clauses, the sufficient condition and failure of necessary condition was already illustrated in examples (211). In this section, we catalogue further examples in which *mix* is prohibited: clauses with past tense reference and generic clauses. Habitual clauses with speaker control are grammatical with mix.

(218) a. *水口焖炒米の以昆。

Past Time

*ap ndi hxix nga che qu vy mix. 1P.SG rice vesterday buy FUT Intended meaning: 'I bought rice yesterday.'

b. *មិបាវាអ្មា**ខិ**。

Timeless

*ngax li nuo su nge mix. (individual-level) 1P.SG TOP Nuosu COP FUT Intended meaning: 'I will be a Nuosu.'

Habitual

nga ket mop cyp hxuo zzix ap zzi nrv ndo QUANT.every wine drink 1P.SG evening NUM.1 CL go shex mix. HAB **FUT**

'I will always drink wine every evening.'

The particle *mix* can only occur in declarative sentences but not in imperative or optative sentences. Imperative clauses refer to orders that are relevant at the time of speaking, not in the indefinite future to which *mix* points. Optative clauses prohibit *mix* because they refer to events that are not controlled by the speaker.

(220) a. *紅蔥菜中作業最。 Imperative *ne jjot bbip cyx ma sip bbo **mix**.
2P.SG bag DEM.PROX CL take go FUT Intended meaning: 'Take this bag away!'

b. *\$智用回灯幕。 Imperative
*ne xip mu tat- ge **mix**.
2P.SG DEM.DD NEG.IMP- stupid FUT
Intended meaning: 'Don't be stupid!'

c. *፟ቝ፟፟፟፟፟፟፟ቚ፞ዼ፟ *nga xyp mop xyp ddep lox **mix**. 1P.SG wife, bride marry WISH FUT Intended meaning: 'Hopefully, I will get married.'

D. Relative future tense

For *absolute tense*, topic time and utterance time are identical. For *relative tense*, topic time and utterance time differ. Comrie (1985: 74–75) defines *relative past tense* and *relative future tense* as follows.

Relative past tense: situation time < topic time Relative future tense: topic time < situation time

Relative past tense has two cross-linguistically attested exponents (Comrie 1985: 65–71): *pluperfect* and *future perfect*. Relative future tense also has two exponents, *future in the future* and *future in the past*, but these two concepts are not widely expressed in the world's languages. For future in the past, English employs the temporal *would* which must be distinguished from its modal use (Comrie 1985: 75), see table 7.23.

The particle *mix* conveys *absolute future tense* with one exception. In reported speech constructions, *mix* takes the deictic center of the embedded clause and expresses future in the past, as in (221a). In all other complex clauses, *mix* is prohibited, as in (221b), or encodes absolute future tense, as in (221c).

- b. $\Pi \hat{\mathbf{x}} = \mathbf{x} + \mathbf{x} +$ zzip hxex te go nga we dox (*mix) su nga go njvp ox. compete when 1P.SG get able FUT COMP 1P.SG PAT believe DP 'I believe that I will win the competition.'
- nit xyp mop xyp dde la mix su qop bop a zzyx 2P.SG.POSS bride marry NOM come FUT NOM friend ma nga mo ox. CL 1P.SG see DP

Table 7.23: Four relative tenses

Types	Definition	English Examples
Pluperfect Future perfect	TS < TT < TU	'John had already left at 10pm.' 'John will have left by tomorrow.'
. ata. e periodi	Cases: (a) TS < TU < TT	→ He has already left.
	(b) $TS = TU < TT$	→ He is leaving now.
	(c) TU < TS < TT	→ He will leave before midnight.
Future in the future Future in the past	TU < TT < TS	'John will be about to leave.' 'John said that he would return.'
	Cases: (a) TT < TS < TU	→ John has already returned.
	(b) $TT < TS = TU$	→ John returns now.
	(c) TT < TU < TS	\rightarrow John has not returned yet.

E. When the first person effect is suspended

The particle mix has compounded with several other aspect particles to convey the meaning of definite and immediate future tense.

Table 7.24: Four compound particles for definite and immediate future

Compound Particle	Type and Gloss	FUT	PROG	STP	DP
mix da	DefFut: 'it is the case that…will'	mix		da	
mix ox	ImFut: 'about to'	mix			ox
mix da ox	ImFut: 'definitely about to'	mix		da	ох
mix ge ox	ImFut: 'about to, very soon'	mix	ge		ox

These compound particles are not subject to the type of person and control constraints described for bare mix. Among these four particles, mix da is a definite future particle.

^{&#}x27;I saw the friend who will attend your wedding.'

(222) a. 爭毛董母母司及親。
mup shy dex ma hxa jjip la **mix da.**tomorrow rain become come DEFFUT

'Tomorrow it will rain.'

- c. 醫學於前洋兼司X 包養 入 国 海 中 章 环 丁。
 lu po cy ax di vyt tuo lur kur bbo **mix da**, hxip kax ddi
 male name 3P.SG only Yuexi County go DEFFUT say INT.who
 nyi ap- ge.
 also NEG- tell
 'Lupo will go to Yuexi County on his own, so he doesn't tell anyone.'

The marker *mix ox* with the perfect particle *ox* adds urgency to the sentence. The underlying clause must be dynamic but no meaning of speaker control is required.

- (223) a. 母爭最對重義的。
 cop wox ix go bbo **mix ox**.
 3P.PL home go IMFUT
 'They went home immediately.'
 - b. 歩爭用半旬中発用口是⑩。
 ngop wox mu kut a shyt zzyx jie la **mix ox**.
 1P.PL year new celebrate come IMFUT
 'We are about to celebrate the New Year.'

The triple marker *mix da ox* combines the idea of definite and immediate future. It is frequently used and often occurs in imperative clauses, as in (224b).

- (224) a. 岡山田尾知節。 va bu gu la **mix da ox**. rooster cry come IMFUT 'The rooster is about to cry.'

c. 學爭重度知節。 vo jjy bbo sat **mix da ox.** snow melt go EXH IMFUT 'The snow is about to melt completely.'

The compound *mix ge ox* including the progressive marker *ge*. This complex particle has imminent future and progressive meanings.

(225) a. 坪平英英多泉北節。
nga syt cy jjit ngop **mix ge ox.**1P.SG matter DEM.PROX CL think IMFUT
'I am thinking about this problem right now.'

b. 与自学海雀崇龙总统小说。
hxo pu go zza bbo yyt zzy hxit **mix ge ox**.
mountain LOC crops harvest can IMFUT

'The crops on the mountain can be harvested soon.'

The idea of remote future can only be expressed by bare *mix* (by respecting the person and control constraint).

(226) 伊马斯利学主任日学的分号。
nga mop su te go ne hxo pu go yix ma vy **mix**.
1P.SG old man time SENT.TOP TOP mountain LOC house CL buy FUT
'When I am old I will buy a house in the mountains.'

7.8.2 Appendix: The particle mix

The morpheme *mix* functions as discourse particle soliciting feedback from the addressee. It also occurs in preverbal position as focus particle (*even*) of the noun phrase it follows.

A. As solicitation particle

In *wh*-questions and alternative questions, the discourse marker *mix* emphasizes the speaker's wish for feedback, glossable as 'what do you think'.

(227) a. 昀溪丰泉字平甫,屯雀麓?
co cyx yie ix go ap- jjo, kat bbo **mix**?
people DEM.PROX CL home NEG- have INT.where go SOL
'Nobody is at home, where have they gone?'

b. 沒以稅母目生₩҂У稅?

cyx li xix ma hxip ddie ddur yip sy **mix**? 3P.SG TOP INT.what CL say need still SOL

'Needless to say something about him! (lit. What needs to be said about him?)'

c. 肾量凝凝目以重生**能**?

vit gga cyx ggu pu kep nyi bbyp **mix**? clothes DEM.PROX CL price QUANT.how many give SOL 'How much is the price of this garment?'

?\$III们坐手CA刚出来。h

ap ndi hxix hmat mop tit go lax la **mix**? yesterday teacher here LOC come~ALT SOL 'Did the teacher come vesterday?'

B. As focus adverb

The morpheme *mix* can occur before the verb in various positions and functions as a focus adverb (*'even'*) of the NP it follows (section 9.1.3.B). It can scope over noun phrases in every syntactic position. In (228a), it focuses the initial S-argument; in (228b) the A-argument; in (228c) the benefactive NP; and in (228d) an oblique object.

(228) a. 开兴**是**口黑 0。

mu ga **mix** la nyiet ox. male name FOC.even come late DP 'Even Muga came late.'

ne **mix** gge syt cy jjit ne gge ox. 2P.SG FOC.even hear matter DEM.PROX CL 2P.SG hear DP 'Even you have heard about this matter.'

c. 从另州里里是北顶。

cy ka bba ddie nga **mix** bbyp ox. 3P.SG present COV.prepare 1P.SG FOC.even give DP 'He even gave a present to me.'

d. 为举长剩主竞争不归。

cy kut shyr te go **mix** go ap-la. 3P.SG new year time LOC FOC.even PRO.DIR NEG-come 'He does not come home even for the New Year.'

Chapter 8

Modality and evidentiality

After a brief introduction (section 8.1), we analyze the modal auxiliaries (section 8.2) and the evidential particles in Nuosu (section 8.3).

8.1 Introduction

Modality is the expression of attitudes ascribed to speech participants (Lyons 1977: 739; Palmer 1986: 16). Most scholars distinguish between *epistemic modality* and *deontic modality*. Epistemic modality describes the knowledge, belief or opinions of speech participants. Deontic modality captures the obligation, permission or prohibition for speech participants to perform acts. *Evidentiality* is defined as the linguistic encoding of information sources used for asserting a proposition.

The relationship between epistemic modality and evidentiality is not agreed upon (Dendale & Tasmowski 2001: 342). Some scholars include evidentiality within epistemic modality (Palmer 1986: 51; Mithun 1999: 170; Willett 1988: 52), others establish epistemic modality under evidentiality (Chafe 1986: 271; Matlock 1989: 215). Still others identify an overlap (van der Auwera & Plungian 1998: 86). A fourth group of scholars emancipates evidentiality and modality as two distinct categories (Lazard 1999, 2001: 360; Faller 2002: 8; Aikhenvald 2004: 7).

Epistemic modality and evidentiality are conceptually close. The source from which information is gained naturally impacts truth judgment. We can distinguish between *encoding* and conversationally *implicating* a linguistic concept. The critical test is the possibility of cancelling an interpretation in the Gricean sense of cancelling a conversational implicature (Grice 1975: 57–58). Encoded meaning can never be cancelled independently of the context considered, whereas implicated meaning can be cancelled.

A form encoding epistemic modality implicates an inferential process as the information source. A marker encoding the information source of inferential process implicates the sense of epistemic modality.

The Nuosu particles expressing modality are analyzed in this and other chapters (section 13, section 15). In this chapter, we decribe modal auxiliary verbs which are defined by morphosyntactic properties (section 8.2). Evidentiality is mainly encoded by matrix verbs (section 13.2). There is one evidential type that is grammaticalized in Nuosu, the quotative information source (section 8.3.1).

8.2 Modality

In section 8.2.1, we define modal auxiliaries by morphosyntactic properties. The class of modal auxiliaries is closed and has 15 members (section 8.2.2).

8.2.1 The morphosyntax of modal auxiliaries

Modal auxiliaries are defined as distribution classes based on language-specific morphosyntactic properties: ten criteria in Mandarin Chinese (Li & Thompson 1981: 172–183), or seven criteria in English (Radford 1988: 149–154). Nuosu modals exhibit twelve properties separating them from matrix verbs and adverbs.

Table 8.1: Morphosyntactic	properties	of modal	auxiliaries
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		Modal auxiliaries	Matrix Verbs	Adverbs
Sole predicate		no	yes (most)	no
NP-complement		no	yes (most)	no
VP-complement		yes	yes/no	no
Clause-complemen	nt	no	yes	no
With complementia	zer	no	yes (most)	no
Focus construction	su nge	no	yes	no
Answer fragment		yes	yes	no
Position in senten	ce	end	end	variable
Negation		yes	yes	no
Reduplication (alt.	question)	yes	yes	yes/no
TAM particles	with ox	yes	yes	no
	with other TAM	(generally) no	yes/no	no
Gradable		yes/no	yes/no	yes/no

These tests are presented in two groups in which they help contrast modals with matrix verbs (section 8.2.1.A), and modals with adverbs (section 8.2.1.B).

A. Modal auxiliary verbs versus matrix verbs

Modal auxiliaries are different from matrix verbs in six regards: (i) sole predicate; (ii) NP-complement; (iii) VP-complement; (iv) clause-complement; (v) presence of complementizer; (vi) focus construction with ...su nge.

(i) Modal auxiliaries cannot occur as sole predicates

Modal auxiliaries cannot occur as the sole predicate of an independent sentence. They share this property with adverbs. Matrix verbs generally can stand alone.

Modal auxiliary verbs can be used as the sole predicate only in answer fragments to a question. In this case the eclipsed verb is understood. In (1)–(3), the (a) version is ungrammatical unless it assumes the function of answer fragment. The (b) version is grammatical as it incorporates a VP-complement.

(1) a. *HK**回以**。

*mu ga **tat xi.** male name MOD.should

Intended meaning: 'Muga should.'

> mu rryr xyx ne **tat xi** ox. male name rest MOD.should DP 'Mudge should have a rest.'

(2) a. *¼¼.

*cy **qi**.
3P.SG MOD.want
Intended meaning: 'He wants.'

b. **从**岁**拿以**效。

cy vit gga vy **qi** ox. 3P.SG clothes buy MOD.want DP 'He wants to buy clothes.'

*cy zyt jie ax di **hna**.

3P.SG REFL only MOD.be willing
Intended meaning: 'He is willing alone.'

b. 从季出引为季水。d

cy zyt jie ax di bbo **hna** ox. 3P.SG REFL only go MOD.be willing DP

Matrix verbs can occur as sole predicate independently of other predicates. This is even true for the matrix verbs which do not take NP-complements. When these verbs occur as sole predicate, the clause-complement is a pro-drop argument.

(4) a. 対爭而重**坐**E。

nop wox cuop luo **po shy**. 2P.PL a little solve problem 'You tried to solve the problem.'

cy cop wox kep mu ix go bbo su **po shy** njuo. 3P.SG 3P.PL INT.how home go COMP solve problem PROG 'He is solving the problem of how to get home.'

(5) a. HC世序。

mu jy **nge hna**. male name agree, promise 'Mudje agrees.' \mathbf{b} . $\forall \mathbf{k} \mathbf{\Theta} \mathbf{\Theta} \mathbf{k} \mathbf{v}$

nga bbur ma sso bbo go pat mop **nge-ap-hna**. 1P.SG education study go COMP parents allow<NEG> 'My parents do not agree that I should be a student.'

The matrix adjective *jox jjip* 'possible' is not an independent predicate. It only takes one obligatory argument which is a clause. One may want to classify *jox jjip* 'possible' as modal auxiliary but for two core properties it behaves like a matrix verb. It subcategorizes clause-complements and disallows VP-complements. (It disallows VP-complements by virtue of the fact that the subject of the embedded clause cannot control the predicate *jox jjip* 'possible'.)

- - *syt cy jjit **jox jjip** ox. matter DEM.PROX CL possible DP Intended meaning: 'This event is possible.'
 - b. গুদুরাাট্রিয় তি

ip mi vo jjip la **jox jjip** ox. this evening snow fall come possible DP 'It may be snowing this evening.'

(ii) Modal auxiliaries cannot take NP-complements

Modal auxiliaries do not subcategorize NP-complements, but most matrix verbs do. This property is illustrated in (7)–(9) for the modal auxiliaries *but* 'dare', *dop* 'can' and *ssox* 'should'.

- (7) a. *\$景界⑩。
 - *ne ddop **but** ox. 2P.SG word MOD.dare DP Intended meaning: 'You dare (to speak) words.'
 - b. 🛊 # 🛮 🛱 🖟 0.

ne ddop hxip **but** ox. 2P.SG word speak MOD.dare DP 'You dare to talk.'

- (8) a. *\mathbf{\psi}\text{\psi}
 - *bbox zze cyx ma mge fu suo ma **dox**. man DEM.PROX CL barley loaf NUM.3 CL MOD.can Intended meaning: 'This guy can eat three barley loaves.'

bbox zze cyx ma mge fu suo ma zze **dox**. man DEM.PROX CL barley loaf NUM.3 CL eat MOD.can 'This guy can eat three barley loaves.'

(9) a. *中域口**分**⑩。

*nga ip nyip **ssox** ox.

1P.SG today MOD.should DP
Intended meaning: 'I should today.'

b. 中域にQ袋業**ө**ө.

nga ip nyip nyop bbop bbo **ssox** ox. 1P.SG today work go MOD.should DP 'I should go to work today.'

Most matrix verbs take NP- and clause-complements, but disallow VP-complements. The matrix verb *nzit* 'appropriate' is an exception. It subcategorizes NP- and VP-complements but cannot take clause-complements.

- (10) a. XYឱ្យជានុង្គា.
 - cy vit gga a vut xip ggu **nzit**.

 3P.SG clothes blue DEM.INDEF CL appropriate 'Blue clothes suit him.'
 - b. № ԳԵՐՈՒՅԻ .d

lat hxa hmat mop mu **nzit.**male name teacher do appropriate
'It is appropriate for Laha to be a teacher.'

c. * X 生 张 X 均 万。

*cy ne bbut cy ndo **nzit.**3P.SG 2P.SG medicine drink appropriate

Intended meaning: 'It is appropriate for you him to take some medicine.'

(iii) Modal auxiliaries should take VP-complements

Many matrix verbs can take clause-complements but not VP-complements. In (11a-d), we illustrate matrix verbs that cannot take VP-complements.

(11) a. *X 智用 f y 。

*cy nry ndo **durx xie.**3P.SG wine drink block, resist
Intended meaning: 'He resisted drinking wine.'

- b. * ኢላ ዓ ፀ ጁ ዙ **ሄ ሄ** . .
 - *cy bbur ma sso bbo su **ngop die.**3P.SG written material study go COMP doubt
 Intended meaning: 'He doubts whether he himself went to school.'
- c. * 次(業間) 於用 稅 少 片 事 岳。
 - *cy (zyt jie) hxie mat xix ngop su **sip ngop** njuo.

 3P.SG REFL heart INT.what think COMP test PROG
 Intended meaning: 'He tested what he was thinking in his heart.'
- - *cop wox yix cur su **ke bbo** ox.

 3P.PL house build COMP allow DP

 Intended meaning: 'They allowed themselves to build a house.'

On the other hand, modal auxiliaries take VP-complements but no clause-complements as illustrated in (12a-d).

- - nga syr zyt lur zyt **get.**1P.SG tree-work-stone-work MOD.can

 'I can move the tree.'
 - b. 划兴州郡县城。
 - vut ga vot she zze **qi**. male name pig meat eat MOD.want 'Vuga wants to eat pig meat.'
 - c. E 🖁 片 勛 步 门 🗓 ≢ 。
 - yo max su ix go la **yix syp.** sheep ART=CL-DET home come MOD.can 'The sheep can find their way back home.'
 - d. 母爭爭對對口哲學手。
 - cop wox tit go nge nyip ggep **jox dop.**3P.PL here LOC NUM.5 day play MOD.prepare 'They prepare to play here for five days.'

(iv) Modal auxiliaries do not take clause-complements

For clause-complements, the situation is inversed. Matrix verbs subcategorize clauses, whereas modal auxiliaries never scope over clauses. In (13a–d), the subject of the matrix verb/auxiliary verb is different from the embedded subject.

(13) a. 引承目引列EX非希别。

ax mo li ax da yo vup su **durx xie.** mother TOP father sheep buy COMP resist 'Mom objected to Daddy's buying a sheep.'

b. 从域代用说事件事。

cy nit hxie mat xix ngop su **sip ngop**. 3P.SG 2P.SG heart INT.what think COMP test 'He put to the test what you were thinking in your heart.'

c. 界次界台母菜乳井承城。

nga cy bbur ma sso bbo ddix su **ngop die.** 1P.SG 3P.SG written material study go QUOT COMP doubt 'I doubt whether he (really) went to school.'

d. 界切母業是次是業份。

nga op rro bbo su cy **ke bbo** ox. 1P.SG Xichang go COMP 3P.SG allow DP 'He allowed me to go to Xichang.'

(14) a. *X P 或 M 或 创 手。

*cy nga yiet hxop yiet ggep **get**.

3P.SG 1P.SG song amuse MOD.can
Intended meaning: 'He can I sing songs and have fun.'

b. *២។ខ្សាមគម្គី».

*nga at zop li vot she zze **qi**.

1P.SG female name TOP pig meat eat MOD.want
Intended meaning: 'I want Adzo to eat pig meat.'

c. *អូមិ១៩មិក អូទ្ធារក្សូង នេះ

*mu nyox li yo max su ix go la **yix syp.**male name TOP sheep ART=CL-DET home come MOD.can
Intended meaning: 'Munyo enables the sheep to find its way back home.'

(v) Modal auxiliaries do not co-occur with complementizers

Nuosu exhibits several complementizers (see section 13.2). Matrix verbs take one of the complementizers (*su*, *go*, *ddix*). Modal auxiliaries never mark VP-complements with a complementizer.

ax mo li ax yi ssa hxuo la su **hxo lo.**mother TOP child capable COME COMP hope
'Mother hopes that the child becomes capable of everything.'

- b. 星周則平中租口手为**年**化。
 - ddip vip ggex su ngap jiet la go cy **ddie**-ap-**mga**. guest ART=CL-DET 1P.SG.POSS home come COMP 3P.SG please<NEG> 'He is not pleased that the guests come to my house.'

lu dda li ax yi cyx ma co ap- ku ddix male name TOP child DEM.PROX CL people NEG- steal COMP

ddop zy ssi.

testimony use

'Ludda testified that this child did not steal from others.'

It is ungrammatical to use complementizers together with modal auxiliaries as demonstrated for the following three auxiliary verbs.

- (16) a. * 對爭用 # H # K # 生 U 。
 - *nop wox a hnat mu we ga su **ddie ddur.**2P.PL especially make effort COMP MOD.need
 Intended meaning: 'You need to make a special effort.'
 - b. *¼រា៩ឃំមិនៈ
 - *cy bbu shy yu ddix **but**.

 3P.SG snake snatch COMP MOD.dare
 Intended meaning: 'He dares to catch a snake.'
 - c. * ※ 次 中 宏 1 世 点 3 事 集 章。
 - *cy xyx hnie cyp zzip vy go **mo mgu.**3P.SG shoe NUM.1 CL buy COMP MOD.intend
 Intended meaning: 'He intends to buy a pair of shoes.'

(vi) Modal auxiliaries do not occur in the focus construction ... su nge

Nuosu involves the nominalization particle *su* and the copular *nge* to emphasize certain elements of the sentence individually (section 14.2.2). Modal auxiliaries cannot occur as the sole verbal element in this focus construction. The nominalized auxiliaries in (17) and (18) are therefore ungrammatical.

(17) A: 州於日山百米米, 北第山主附北子。

hxip guo guo, ma li ngop wox co cyx li TOP uncontrollable 1P.PL person DEM.PROX CL TOP go hxix apdop.

PRO.PAT say NEG- MOD.can

'This man is uncontrollable. We cannot persuade him.'

B: *料等まませ。 *nop wox **dop** su nge. 2P.PL MOD.can FOC COP Intended meaning: 'You can.'

cy nit jop yyp ddu bit **tat**-ap-**xi**.

3P.SG 2P.SG to joke make, open MOD.should<NEG>
'He shouldn't joke with you.'

B: * X 豆 X 以 计 ± 1。

*cy **tat xi** su nge. 3P.SG MOD.should FOC COP Intended meaning: 'He should.'

By contrast, matrix verbs and ordinary verbs can be nominalized in the focus construction with *su nge*. This property is illustrated for the matrix verb *hxie nep ndit* 'regret' in a short piece of dialogue.

syt cy jjit mu go cy **hxie nep**-ap-**ndit.** act DEM.PROX CL do COMP 3P.SG regret<NEG> 'He doesn't regret having done it.'

B: 从北省出上土。

cy **hxie nep ndit** su nge. 3P.SG regret FOC COP 'He does.'

B. Modal auxiliaries verbs versus adverbs

Modal auxiliaries differ from adverbs for (i) answer fragments; (ii) sentence-end position; (iii) negation; (iv) reduplication; (v) TAM particles; (vi) gradability.

(i) Modal auxiliaries occur in answer fragments

Modal auxiliaries cannot be nominalized in focus constructions, but can occur in minimal answer fragments by omitting the subject. Adverbs cannot be involved in either construction.

(20) A: 增工到英国异型水口?

nga syt xip jjit hxip **hxit** ddap ap- **hxit**? 1P.SG matter DEM.INDEF CL speak MOD.can or NEG- MOD.can 'Can I say such a thing?' B: (*╡) ຊ. (*ne) **hxit.** 2P.SG MOD.can 'You can.'

ne hxie mgat hxop hxip **yix syp** ddap ap- **syp**? 2P.SG Chinese language speak MOD.can or NEG- MOD.can 'Can you speak Chinese?'

B: Ŷ**∮**≸≢。

yix-ap-syp.
MOD.can<NEG>
'No, I can't.'

(22) A: 雪面百台或异生U重生乐U?

ne ip nyip ciep yiet vy **ddie ddur** ddap **ddie-**ap**-ddur**? 2P.SG today things buy MOD.need or MOD.need<NEG> 'Do you need to buy something today?'

B: 生U。

ddie ddur.

MOD.need

'I do.'

Adverbs do not serve as the sole element in an answer fragment, as shown in (23)–(24). An exception is the lexical adverb *nyiet* 'late', as illustrated in (25).

(23) A: 15月11至平门?

ne **ap nryr mu** la ddap ap- la? 2P.SG definitely come or NEG- come 'Will you definitely come?'

B: * \$ \$ H .

*ap nryr mu.

definitely

Intended meaning: 'Definitely.'

(24) A: 从贸修重贸求修孝Y⑩?

cy iet zyr ddap iet-ap-zyr **yip sy** ox? 3P.SG small or small<NEG> still DP 'Is he still young?'

B: *孝y。
*yip sy.
still
Intended meaning: 'Still.'

(25) A: 均省及强导减重水煤?

bbup zzi cy zzax zze **nyiet** ddap ap- **nyiet**? afternoon 3P.SG food eat late or NEG- late Intended meaning: 'Did he eat late in the afternoon?'

B: 水源。 ap- **nyiet.** NEG- late 'Not late.'

(ii) The position of modal auxiliaries is at the end of the sentence

Modal auxiliary verbs are placed after the VP-complement at the end of the sentence. Most adverbs occur in the middle of the sentence, some after the verb.

(26) 歩筆季♥以表章。
ngop wox yiep yot zy **mo ddix**.
1P.PL potato plant MOD.committed
'We are committed to growing potatoes.'

Most adverbs occur in the middle of the sentence, as exemplified in (27a). A small set of adverbs can also be posed after the main predicate (section 9.1.4).

(27) a. ≝ป์ชมมมชิ⊚⊈.

po lix **at ggop ggop mu** gox rrur sat. bamboo basket in vain, idle PRO.LOC stay EXH 'The bamboo baskets are all staying here without any use.'

b. 身州月宝宝是出来逐大。 niep sha mu ddix nop wox io mga арsat sy. Liángshān area 2P.PL pass through NEG-EXH still, vet 'You have not yet passed through the whole Liángshān area.'

(iii) Modal auxiliaries can be negated

Modal auxiliaries can be negated like ordinary verbs, while adverbs cannot be negated. If the modal auxiliary is monosyllabic, then the negation particle *ap* is prefixed; if it is polysyllabic, then *ap* is infixed before the last syllable (for negation rules, see section 9.2). The adverb *nyiet* 'late' is an exception, see (29c).

(28) a. 增業周引性局坐並分。

nga zyt jie ax di ix go bbo ap- **but.**1P.SG REFL only home go NEG- MOD.dare
'I do not dare to go home on my own.'

ngop jiet ax yi zzyx **ddie**-ap-**ddur.**1P.PL home child escort MOD.need<NEG>
'It is not necessary to escort our children back home (from school).'

(29) a. *# 5 **文 文 f H** Â H 。

*lat sse **dde dde**-ap-**mu** zzax mu. male name often<NEG> food, dish make Intended meaning: 'Laze does not often cook food.'

b. *X对口以下来中前。

*cy ip mop **hxi**-ap-**yip** na ox.

3P.SG belly again<NEG> ill DP
Intended meaning: 'His belly wasn't again aching.'

c. 岁11月4岁。

va bu gu ap- **nyiet.**rooster crow NEG- late
'The rooster has not crowed late.'

(iv) Modal auxiliaries can be reduplicated in alternative questions

Modal auxiliaries can be reduplicated to express the sense of alternative question. Monosyllabic auxiliaries are wholly reduplicated. If it has a low or middle tone, then the first copy appears in the low tone [21]. Dissyllabic modal auxiliaries have their second syllable reduplicated.

(30) a. ୬∮ିର୍ଡ଼ି⊕?

ngop wox mop mgep **ssox-sso**? 1P.PL have meeting MOD.should~ALT 'Should we have a meeting?'

b. ዙርዴወንመርቆ**፲አ**አ?

sux yy mo nyop mup mit ju hmox **tat xi-xi**? leader farming circumstance control MOD.should~ALT 'Should the leader control the farming activities?'

ax yi sse a ddit hxit **dop dox**? infant there stand MOD.can~ALT 'Can the infant stand on his feet?'

d. ተወ አ አ ተ ት?

at nyop xi zzy **get-get**? female name thread weave MOD.can~ALT 'Can Anyo weave?'

e. ฐы୩**≭**≢3.

ne le sit **yip syp-syx**? 2P.SG ox kill MOD.can~ALT 'Can you kill an ox?'

The reduplication of modal auxiliaries is a short version of a more elaborated construction which involves ddap (section 15.1.1). The modal auxiliaries can also occur in this longer construction.

ax pu ip nyip yo hlut bbo **qi** ddap ap- **qi**? grandpa today sheep pasture go MOD.want or NEG- MOD.want 'Does grandpa want to pasture the sheep today?'

b. ቑቜ፞፞፞፞ቘ፞፞፟ቜፙቔፙጜ**፠**?

nga nex shut **tat xi** ddap **tat**-ap-**xi**? 1P.SG 2P.SG remember MOD.should or MOD.should<NEG> 'Should I remember you?'

Most manner adverbs are partially reduplicated with the sense of increased vividness. Syntactic adverbs cannot be reduplicated. (32a) shows a reduplicated and (33b) a non-reduplicatable manner adverb. (33a) exhibits one rare reduplicated syntactic adverb, *ax di di mu* 'only'. The syntactic adverb *jjy gex* 'together' in (33b) cannot be reduplicated.

(32) a. មាទិសិស្សអុស្នេឲ្ត.

cop wox **hxix-hxi mu** ggap mop bie quo. 3P.PL intentionally road destroy 'They destroy the road on purpose.'

cyp uo lur mu hly **hxo ap lo tu-(*tu) mu** pur six bbo ox. 3P.SG.POSS hat wind suddenly-suddenly blow RES go DP 'His hat was suddenly blown away by the wind.'

(33) a. 以口母并**们**对于中国的。

xyp mop max su **ax di-di mu** gox ci lox ox. wife ART=CL-DET only-only PRO.LOC remain DP 'His wife remained very much alone.'

co cyx nyip bbup nyop -vi **jjy gex (*-gex)** bbop. person DEM.PROX NUM.2 CL labor -POSS together~ALT do 'Both households are working very much together?'

(v) Modal auxiliaries generally do not co-occur with TAM particles

Modal auxiliaries cannot co-occur with TAM particles *except for* the perfect particle *ox*. Adverbs can co-occur the perfect particle *ox* but with no other TAM.

(34) a. X对厅手学门**豆以**60。

cy ip nyip tit go la **tat xi ox.** 3P.SG today here LOC come MOD.should DP 'He should come here today.'

b. አር፠ችጟች。

cy nyop bbop **hna** -jjy- **hna ox.** 3P.SG work MOD.willing very MOD.willing DP 'He is very much willing to work.'

c. 从世术下文系变的。

cy vot bbu sse vup **mo mgu ox.** 3P.SG piglet sell MOD.intend DP 'He intended to sell a piglet.'

Other TAM particles cannot be directly attached to modal auxiliaries with several exceptions. The auxiliary *dop* 'able' allows the experiential marker *nzox* and the auxiliary *mo ddix* 'committed' the progressive marker *njuo*.

nga a shyt te go nry nge jip ndo **dox nzox**. 1P.SG young time wine NUM.5 pound, liter drink MOD.can EXP 'When I was young, I could drink five liters of wine.'

hmat mop ssox sse nge yuo zhux by **mo ddix njuo**. teacher student NUM.5 CL praise MOD.committed PROG 'The teacher commits himself to praising the students.'

Only sentence-end adverbs can be marked by TAM particles. Example (36a) illustrates an ungrammatical use of *ox* after a preverbal adverb. TAM particles can be placed after the postverbal adverb *nyiet* 'late' in (36b).

(36) a. *母爭**水**H**0**H至平計。

*cop wox **ap mu ox** pat vu ddu jjo.

3P.PL now DP uncle home have
Intended meaning: 'They are now at their uncle's home.'

. **ទិ** 🕻 🕻 ប្រក្សា 🖟 វិ 🖟

ssox sse max su nyip vit la **nyiet nzox**. student ART NUM.2 time come late EXP 'The student was late twice.'

(vi) Modal auxiliaries are gradable

Most modal auxiliaries are gradable and can use the infix intensifier -*jjy*-, as shown in (37). A few auxiliaries ban the infix -*jjy*-, as in (38).

(37) a. አወላ‡ # ሦለኳ**የ**ችል.

- cy co ap- syp su jox bbur jjyt **but -jjy- but.** 3P.SG person NEG- know NOM to talk MOD.dare very dare 'He very much dares to talk with unfamiliar people.'
- b. 化含物型化水子水。
 at zop njie ggup syr **hna** -**jjy hna**.
 female name courtyard sweep MOD.willing very willing 'Adzo is very much willing to sweep the courtyard.'
- c. 例争日のS生世子生型。
 cop wox rre mop sot **ddie ddur -jjy- ddie ddur**.
 3P.PL money count MOD.need very need
 'They definitely need to count their money.'
- - *nga zzax zze **ssox** -**jjy ssox**.

 1P.SG food eat MOD.should very should
 Intended meaning: 'I should absolutely eat something.'

Manner adverbs can be intensified by the infix -*jjy*- as well, but adverb intensification is available only if the adverb is derived from an adjective.

- (39) *从(梯) 网络别用磁头角用用门上出。
 - *cy **(hxix) hxi -jjy- hxix mu** nit jop kax sha sha la su nge. 3P.SG intentionally very intentionally 2P.SG to thank come FOC COP Intended meaning: 'He came with the strong intention of thanking you.'

cy **ap nryr** -**jjy**- **ap nryr mu** tep yy bbur nga bbyx. 3P.SG really very really letter write 1P.SG COV.give 'He really wrote me a letter.'

Syntactic adverbs may not be modified by the infix intensifier *-jjy-*. This impossibility is illustrated in (41) for the adverb *hxi yip* 'again'.

> hxi vip -iiv-*cv hxi yip nbur zze apox. DΡ 3P.SG again verv again eat NEGfull Intended meaning: 'He didn't eat his fill again.'

C. List of modal auxiliaries

Modal auxiliary verbs are defined by twelve morphosyntactic properties that distinguish them from matrix verbs and adverbs. An overview of modal auxiliary verbs is provided in Table 8.2.

Table 8.2: Modal auxiliaries

ddie ddur 'need'	hna 'be willing'	yix syp 'can, know'
tat xi 'should'	but 'dare'	hxi nyi 'intend'
ssox 'should'	get 'can, able'	mo mgu 'intend'
ddip ssox 'should'	hxit 'can'	mo ddix 'committed'
qi 'want'	dop 'can'	jox dop 'prepare to'

Two expressions are not listed in this table but show affinities with modal auxiliary verbs. The optative *sy jjo* 'do only' only takes VP-complements (like modal auxiliaries) but cannot be negated or reduplicated (unlike modal auxiliaries). The string *sy jjo* is used in optative speech acts, whereas modal auxiliaries are employed in declarative sentences.

(42) a. 新原分析!
ne zzax zze **sy jjo!**2P.SG food eat OPT.do only
'Have some food!'

*ne zzax zze sv-ap-iio! 2P.SG food eat OPT.do only<NEG>

Intended meaning: 'May you not have some food!'

The lexicalized expression si ap ssop 'not need' must occur in negative imperative clauses, and cannot be negated.

(43) a. 對爭重母目**鬼**乎同。

nop wox ddop ma hxip si ap ssop. IMP.need not 2P.PL word sav 'No need to say anything.'

b. *對爭点母目象不好問。

*nop wox ddop ma hxip **si** ap-**ap-ssop**. 2P.PL word sav IMP.need not<NEG> Intended meaning: 'You need to say something.'

8.2.2 The semantics of modal auxiliaries

In Nuosu, there is no modal of necessity corresponding to English must. There are two weaker forms ('should') and four markers of possibility ('can' and 'may').

A. The modal ddie ddur 'need'

The modal auxiliary ddie ddur 'need' differs from the matrix verb kop 'need'. Morphosyntactically, kop takes NP-complements, whereas ddie ddur only subcategorizes VPs, as illustrated in (44).

kox.

- 。律的意味中。 (44) a. na-mgux-co nga
 - 1P.SG ill-heal-person need
 - 'I need a doctor.'
 - b. 指5系d对步长到3分串**里U**。

lat sse tep yy zzit su bi te go ijiex mguo ddie ddur. male name book ART read when understand MOD.need 'Laze needs to show understanding when reading the book.'

Semantically, ddie ddur refers to a need that can be assessed in an objective manner.

(45) a. 月周月母岸**生**U。

mu jie mu ma ssi **ddie ddur.** male name horse CL use MOD.need 'Mujie needs a horse (*lit*. Mujie needs to use a horse).'

> cy syt xip lot buop **ddie ddur.** 3P.SG matter DEM.DD help MOD.need 'He needs help in this regard.'

c. 及重母問項於百**生U**。

cy ddop ma gge nit jop hxip **ddie ddur.** 3P.SG word CL 2P.SG to speak MOD.need 'He needs to tell you something.'

d. 月10日以外的, 对主张本本们。

mu cyp ma nga vy da ox, nga go hxex bbo **ddie ddur.** horse NUM.1 CL 1P.SG buy STP DP 1P.SG PRO.PAT see go MOD.need 'I have just bought a horse, I need to inspect it.'

B. The modal tat xi 'should'

In Nuosu, there is no strong deontic modal corresponding to 'must' but there are two weak deontic modals (Palmer 1986: 100): *tat xi* (section B) and *ssox* (section C). A strong deontic meaning can be expressed by combining the modal *tat xi* with the preverbal adverb *ap nryr mu* 'definitely'.

(46) a. 哲爭術及於日本回从。

nop wox bbu dde cyx ma hna **tat xi**. 2P.PL story DEM.PROX CL listen MOD.should 'You should listen to this story.'

b. 照中對爭世界门**回**級。

lat ti ngop wox wa mgot la **tat xi**.
male name 1P.PL after follow come MOD.should 'Lati should follow us.'

c. 以口水上上多形口水。

cyx li ap nryr mu hnat gox sha **tat xi.** 3P.SG TOP definitely admonish SEND MOD.should 'He must be given a warning.'

nop wox nga yyx **tat**-ap-**xi**. 2P.PL 1P.SG laugh MOD.should<NEG> 'You shouldn't laugh at me.'

As other modal auxiliaires, tat xi cannot be nominalized in the focus construction with ...su nge.

(47)*并升化图片部口图水净引用法*

> *we-mu-su zze ddu ndo yy wep li tat xi su su nge. food and drinks get worker NOM TOP MOD.should FOC COP 'The peasants should receive their salary (= food and drinks).'

C. The modals ssox 'should' and ddip ssox 'should'

The modal auxiliaries ssox and ddip ssox 'should' are derived from ssop/ssox 'shine' (section 7.3.2.C) which is associated with the alternation of OAV/AOV order (see section 10.2). The morpheme ssop (associated with OAV) developed into a resultative auxiliary verb (section 7.3.2.C), whereas ssox (associated with AOV) evolved into a modal auxiliary verb. The obligation of doing something is metaphorically viewed as similar to the state of being affected by it.

While the auxiliary tat xi 'should' (section 8.2.2.B) expresses a meaning of general obligation, ssox has a sense of involuntary obligation.

- કુ ମ દ્રા के **છુ** i (48)a.
 - li jjip yur ssox! nex 2P.SG TOP perfect MOD.should 'You should be perfect!'
 - 。母鼠全量以出生化比例

zzi apsvp su nop wox gox jie person meet NEG- know NOM 2P.PL PAT fear MOD.should 'You should fear people you are not familiar with.'

- 次并拿作、 穿拿穿串**分**。 hnax nyi hna, jjiex nvi iiiex mguo ssox.
 - 3P.SG hear also hear understand also understand MOD.should 'He should listen and understand.'
- d. it jji nyuo tuo da ssox. mu 2P.SG guard, keep alert ADVL put MOD.should 'You should keep alert.'
- ŶJ: "IREK! \$: "ne ssox! bbur-tat-jjyt!" cvx li: ddix. 3P.SG TOP stop MOD.should speak<NEG.IMP> QUOT 'He said: "You should stop. You should be silent."'

The dissyllabic modal auxiliary *ddip ssox* 'should' is composed of the quotative particle *ddip/ddix* (section 8.3.1) and *ssox*. It represents the obligation as verbally expressed by the sentence.

(49) a. 当片系 4 年 6 日 **2 日**。

ne ggap mox ne kop cix ma mga **ddip ssox.**2P.SG road distance of 500m NUM.10 CL pass MOD.should 'You should walk five kilometers of road.'

b. ង្គិរាជ្ជាជាធ្លាធ្លាធ្លាធ្លាម អង្គម្នាំ !

nop wox li jjo sa ddie sa ggep sa bie sa zze sa ndo sa mu 2P.PL TOP comfortable amusing delicious ADVL

jjo ddip ssox!

have MOD.should

'You should enjoy comfort, fun, delicious food!'

cyp nyit bbyp yix zzur gax di shux **ddip ssox**! 3P.DL give become a family CAUS MOD.should 'You should let them both marry.'

D. The modal qi 'want'

The meaning of the two buletic modal auxiliaries qi 'want' (section D) and hna 'willing' (section E) differs. The modal auxiliary qi encodes a general buletic meaning, whereas hna encodes the consent of the subject. The non-volitional process of growing up is only compatible with qi but not with hna.

(50) a. 用象争争可然。
mu hlie yur ax yy **qi**.
male name grow big MOD.want

'Muhlie wants to grow up.'

p. *#\\ # 到 d **非**。

*mu ga yur ax yy **hna**.
male name grow big MOD.willing
'Muga is willing to grow up.'

The morpheme qi satisfies all the properties of modal auxiliaries (Table 8.1). Its use is illustrated below.

(51) a. 升量未付为下长效。

mu nyox tep yy cy nzit bi **qi**. male name book DEM.PROX CL read MOD.want 'Munyo wants to read this book.' b. 出资利生门黑水效。

te kop la nyiet nga CVX ap-qi. 1P.SG DEM.PROX time come late NEG-MOD.want 'I do not want to upset this time schedule.'

cy ip nyip syr kie **qi** -iivqi. 3P.SG today tree fell MOD.want very MOD.want 'He wants to fell the tree today.'

dde iii syt jjit nga qi. cvmatter DEM.PROX CL 1P.SG know MOD.want 'I want to know about this situation.'

The auxiliary qi must be distinguished from the main non-auxiliary verb ka 'want' which only takes NP-complements but no VP- or clause-complements.

(52) a. .KY₽Łθqβ

> ax yi max su ggep ddu ka. child ART=CL+NOM tovs want 'The child wants toys.'

*火州片色北州。

*cy sha zzit zze ka. ap-3P.SG NEG- want chilli eat Intended meaning: 'He does not like chili.'

E. The modal hna 'willing'

The modal auxiliary hna 'willing' satisfies all morphosyntactic conditions of modal auxiliaries but must be distinguished from related forms illustrated in (54).

(53) a. 1.4.4.4.4.4.4.1.

> viet zha nyix ke bbo ap-3P.SG kind CL all promise NEG- MOD.willing 'He is not willing to cooperate at all.'

bbox zze max su rre mop sur hna -jjy- hna. ART money return MOD.willing very MOD.willing 'The guy is very willing to return the money.'

c. 用賽Q袋水壓水水?

mu nyox nyop bbop **hna** ddap ap-hna? male name work MOD.willing or **NEG-MOD.willing** 'Is Munyo willing to work or not?'

d. 单口类用用重加单次工作。

ngax li zyt jie mu ddix co ngax zy ap-**hna.** 1P.SG TOP REFL area person 1P.SG accept NEG-MOD.willing 'People of my area are not willing to accept me.'

The modal auxiliary *hna* 'willing' is related to the main verb *nge hna* which also means *be willing*. In contrast to *hna*, *nge hna* can be used as independent predicate and takes VP-complements with the complementizer *go*.

- (54) a. !米礼世型 !米礼切* h. nge hna *nga nga yip! hna !qiv 1P.SG willing **EXCL** 1P.SG MOD.willing **EXCL** 'I am willing!" 'I am willing!'
 - nga ne mgex zzax nge hna zze go su nge. 1P.SG 2P.SG mix COMP willing FOC COP food eat 'I am willing to eat with you.'

Furthermore, the modal auxiliary *hna* is homophonous with two unrelated main verbs: *hna* 'ask' and *hna* 'listen'.

- (55) a. 肾素母乳乳素。
 nga ddop ma go nex **hna.**1P.SG word LOC 2P.SG ask
 'I asked you something.'
 - b. 紫色深間深環境。
 ddop ma cyx gge cy **hna** ox.
 word DEM.PROX CL 3P.SG listen DP
 'He heard these words.'

F. The modal but 'dare'

As modal auxiliary verb, *but* 'dare' only takes VP-complements, cannot occur as independent predicate, cannot be nominalized, but can be negated and reduplicated. Most of these properties are illustrated below.

(56) a. *첫비롯비위# 번?

*cyx li ap mu **but** su nge.

3P.SG TOP now MOD.dare FOC COP

Intended meaning: 'He is daring now.'

b. ጿብጹዝଶ≢ፀልል?

ap mu it nyi gu but but? CVX li 3P.SG TOP now MOD.dare~ALT sleep 'Is he daring to sleep now?'

. **८** भहिमाया की सम्बन्धा । उ

ggap mox a ddit bbu jix su go co gox mga ap-but. there side ART LOC people PRO.LOC pass NEG-MOD.dare 'People don't dare to pass on the side road.'

. **兄**先 是来 做 到 北 似 光 采 径 比 . b

mu gox ijie-ap-mgur bur hxi yip nex hna **but**. su male name understand<NEG> COMP return again 2P.SG ask MOD.dare 'Mugo isn't clear, so he dares to ask you again.'

e. ¼ሀՁዩ፲೪ደ ተተ የ ዓ.

nyuo zzyp gex qyp tot hxep ap-3P.SG TOP eve even raise up look NEG- MOD.dare 'He does not dare to raise his eyes and look up.'

ax pa ne ngax zvp fup la but person other TOP 1P.SG associate come MOD.dare NOM ma ax di jjo. cyp NUM.1 CL only have

'There was only one who dared to associate with me.'

g. ኯ፟፝፞ኯ፞ቜ፞፞፞፞ኯኯ፞ጜ**ዾ**፝

ngax li ix go li ap-1P.SG TOP home go NEG- MOD.dare 'I don't dare go back home.'

G. The modal get 'can, able'

The modal auxiliary get refers to the ability of the subject to perform the action described by the sentence. This meaning of get is partially complementary with the other possibility auxiliaries, hxit (section H), dop (I) and yix syp (J).

ngop mu ddix ddop ma hxip сy get. dialect, patois 3P.SG speak MOD.can 'He is able to speak our local dialect.'

ne tep yy kax bi get su li. ne syp ox. TOP 2P.SG book CLF read MOD.can NOM 2P.SG know DP 'What you can read, you already know.'

- c. 月じ斑片をみた。
 - mu jy rrup ssi **get** -jjy- **get**. male name chopsticks use MOD.can very MOD.can 'Mudje can use chopsticks very well.'

cy syt cy jjit hxip ryt ap- **get.**3P.SG matter DEM.PROX CL confess NEG- MOD.can 'He is unable to admit this bad situation.'

Besides the meaning of *able*, the auxiliary *get* has also developed a more abstract epistemic meaning. It occurs in nominalized constructions in which the potential existence of the noun referent is stated.

(58) Existential construction: N+VP+su jjo get.

Possible and impossible existence of events is illustrated in (59).

- (59) a. 粉業置學園丟新必書出科學。
 - co zyt jie gop bo bop shep ap- syp su jjo **get.**person REFL body preserve NEG- know NOM have MOD.can
 'There may be someone who does not know how to care for himself.'
 - b. 例类肾中①圭亚化丰片有水净。
 - co zyt jie gop bo bop shep ap- syp su jjo ap- **get.** person REFL body preserve NEG- know NOM have NEG- MOD.can 'There can't be anybody who hates his/her own body.'
 - c. 奶以见对主意作机。
 - co hxi jox ip ko ndup su jjo **get**.
 person outside door knock NOM have MOD.can
 'There may be somebody outside knocking at the door.'

vit gga go ddut pa qip su jjo ap-**get**. clothes LOC cloth darn NOM have NEG- MOD.can 'There can't be anybody darning the clothes.'

H. The modal hxit 'can'

The second possibility modal is *hxit*. It expresses external and moral permission. The negated form *ap hxit* conveys prohibition.

(60) a. 的冰水片、的设水片。

cox ra ap- **hxit**, co ndux ap- **hxit**.

person curse NEG- MOD.can person beat NEG- MOD.can
'You must not curse and must not beat others.'

b. 학생() 王보다。

nop ngat qop bop ddie **hxit.**2P.PL 1P.SG friend make, prepare MOD.can 'You can be my friends.'

c. 对第份出口列码以及15.

nop wox lu po hxep da sso **hxit** -jjy- **hxit.** 2P.PL male name COV.watch learn MOD.can very MOD.can 'You can learn very much from Lupo.'

d. 重量发生X宽口。

ne xyx hnie ddie cy box **hxit**. 2P.SG shoe COV.prepare 3P.SG show MOD.can 'You can show him your shoes.'

e. 增水与黑月丰宜水沟水片。

nit xyp mop kep mu nyi nbot hat da ap-**hxit**. 2P.SG wife IND.however hide put NEG-MOD.can 'You really can't hide your wife.'

. 日本別名事份14 . 1

nga cyp zha nyix lyr nyie ap-**hxit**. 1P.SG NUM.1 VCL.a little bit also move NEG-MOD.can 'I can't even move it a little bit.'

I. The modal dop 'can'

Among the four possibility modal auxiliaries, *dop* 'can' is the broadest. It covers permissive, ability and epistemic meanings.

(61) a. 从照即业网景门水手。

cy jie yi go da bbit la ap-**dop**. 3P.SG prison LOC COV.put exit come NEG-MOD.can 'He cannot come out of prison.'

b. 岗面市岗账下置着。

va qip qot va zyr sse jjip **dox.** egg change chicken become MOD.can 'The egg become a chicken.' lur kur cyx ma gox zzur **dox.** city DEM.PROX CL LOC stand MOD.can 'This city can stand firm.'

. दी स्पेन स्मिन सिवारि . h

ax yi max su nge ci jix byp **dox**. child ART=CL-DET NUM.50 CL.pound carry MOD.can 'The child can carry 50 pounds.'

e. ※※※※410100</l

cy zzyt bbo mu yyx jy **dox.**3P.SG alone swim MOD.can 'He can swim alone.'

f. 当角果片世界效、手单果乎手。

ne kax mo su nga mo qi, tit gox mo ap- **dop**. 2P.SG CLF see NOM 1P.SG see MOD.want but PRO.PAT see NEG- MOD.can 'I would like to see what you see, but I can't.'

J. The modal yix syp 'able, know-how'

The modal auxiliary *yix syp* 'can' has a more restricted sense of (mental) ability. Its first syllable is without relevant meaning, but the second syllable is the verb *syp* 'know'. The auxiliary *yix syp* cannot be used as sole predicate.

(62) a. ¼¾爭爭的≢。

cy lur nbie nbie **yix syp.** 3P.SG slingshot sling MOD.can 'He can sling a slingshot.'

b. ១៤៧៤៦៦0€.

a yit uo fa mguo **yix syp.** female name headscarf embroider MOD.can 'Ayi can embroider headscarves.'

ngat mup mit ne zyt die **yix**-ap-**syp**. 1P.SG situation 2P.SG analyze MOD.can<NEG> 'You cannot analyze my situation.'

shyrx rruo la go ne, ku ax di ku, robber come COMP TOP steal only steal

bie ax di bie quo **yix syp.** destroy only destroy MOD.can

'When, the robber comes, he is only able to steal and to destroy.'

nex li rre zza ax di zyr **yix syp.** 2P.SG TOP wealth=money+food only amass MOD.can 'You are only able to amass wealth.'

The following example juxtaposes two possibility modals. One modal refers to an internal property of the subject (ability), while the other to an external sense of obligation.

sux yy ddie su li co hmat **yix syp ssox.** leader function NOM TOP people teach MOD.can MOD.should 'A leader should be able to teach others.'

K. The modal hxi nyi 'intend'

The modal auxiliary *hxi nyi* 'intend' consists of the truncated syllable *hxi*, derived from *hxie mat* 'heart', and *nyi* 'sit'. These components have lexicalized by the metaphor *intentions sit in the heart of an agent*. The morphosyntactic properties of modal auxiliaries (e.g. intensification, possibility of negation, impossibility as sole predicate) are illustrated for *hxi nyi* below.

(64) a. 卅51H頁月**≚以**≢。

lat sse cyp pat vu hxep bbo **hxi nyi**. male name 3P.SG.POSS uncle see go MOD.intend 'Laze intends to visit his uncle.'

b. X⊕QX+6×1×±.

cy ssox dde cyx ma ju **hxi**-ap-**nyi**.

3P.SG school DEM.PROX CL manage MOD.intend<NEG>
'He does not intend to run this school.'

c. 引录录门删**以**量字**以**量。

ax mo vap la chyp **hxi nyi** -jjy- **hxi nyi**. Mom Nuosu cloak with fringes weave intend very intend 'Mom really wants to weave a Vala cloak.'

The modal *hxi nyi* 'intend' can only be nominalized in combination with a VP-complement. This is shown in the following minimal sentence pair.

(65) a. *ө¼¼¼¼¼±±±。

*ssox sse max su **hxi nyi** su nge. student ART MOD.intend FOC COP 'The student is intending.' b. Өтөнүлүкүнөтө.d. Өтөнүлүкүнөтө.

ssox sse max su ka bba cyp vit wep **hxi nyi** su nge. student ART prize NUM.1 VCL get MOD.intend FOC COP 'The student intends to win a prize.'

The modal auxiliary *hxi nyi* is compatible with the dynamic perfect marker *ox* and with the experiential marker *nzox* (section 7.6.1), but not with the progressive *njuo* (section 7.4.1) or periodic marker *ndit* (section 7.6.2).

(66) a. 增生型的商用基**以**事贷。

nga ap hxiet op rro it bbo **hxi nyi nzox.**1P.SG before Xichang live go MOD.intend EXP
'I once wanted to live in Xichang.'

b. *រាំ២៧៧±៩。

*ax yi la **hxi nyi njuo.**child come MOD.intend PROG
Intended meaning: 'The child is willing to come.'

L. The modal mo mgu 'intend'

The modals *mo mgu* (section L) and *hxi nyi* (section K) have similar meanings but have different lexical make-up: *mo mgu* means 'see-think'; *hxi nyi* is derived from 'heart-sit'. The string *mo mgu* satisfies all properties of a modal auxiliary (e.g. sole main predicate, only VP-complements but no clause-complements).

(67) a. ĝリ¦器『J表笺。

ngax li ke dit sip li **mo mgu.** 1P.SG TOP dog lead go MOD.intend 'I intend to lead the dog away.'

b. 增享料丰丰并**承爱**。

nga ie qyt tip ne dox **mo mgu.** 1P.SG water scoop 2P.SG give to drink MOD.intend 'I will scoop water for you to drink.'

c. 引世丫说或章里对**尽**爱。

ax pa syt xix yiet nyi ddie jjip **mo mgu**. other matter IND.whatever CL also manage MOD.intend '(He) intends to manage all things.'

. इम्मार्थित सहस्मित हे भी भी प्रति । b

kax ddi ma ngat jop hxip su nga gox hna **mo mgu**. INT.who CL 1P.SG to speak NOM 1P.SG PRO.PAT listen MOD.intend 'I intend to listen to who was speaking to me.'

e. 开关引的竞步界引来工术水类。

mu ga ax yi zhax su jo ax mo bbyp **mo**-ap-**mgu**. male name child ART hand over mother COV MOD<NEG> 'Muga does not intend to give the infant to his mother.'

M. The modal mo ddix 'committed'

The modal *mo ddix* 'committed' is related to the modal *mo mgu* 'intend' but is more intense. It is composed of the quotative *ddix* (section 8.3.1). The auxiliary *mo ddix* is ungradable but satisfies all other properties of modals.

- (68) a. * 母爭對對目**表**爭爭第3。
 - *cop wox nop jiet la **mo ddix** -jjy- **mo ddix**.

 3P.PL 2P.PL home come MOD.committed very MOD.committed Intended meaning: 'They are very committed to come to your home.'
 - b. X的口母已要混集第。
 - cy co nyip ma wa ddop shep **mo ddix.**3P.SG person NUM.2 CL behind accuse MOD.committed 'He is committed to accuse two people.'
 - c. 对行创争图呈表求争。
 ip nyip cop wox chot ndup **mo**-ap-**ddix**.
 today 3P.PL gun hit MOD.committed<NEG>
 'Today they are committed to shooting with the gun.'
 - d. X第1前級以表籍。
 cy zhyx ge ax lu bbur yu **mo ddix**.
 3P.SG name of god portrait carve MOD.committed
 'He is committed to carving a portrait of Zhyxge'alu.'
 - e. 斯坦凯牙母岛军争电压系统。
 bbu jji ggex su cop ggit cyr gox sha sat **mo ddix**.
 enemy ART 3P.PL eliminate SEND EXH MOD.committed
 'They are committed to eliminating their enemies completely.'

N. The modal jox dop 'prepared'

The auxiliary *jox dop* 'prepared' is lexicalized by morphological reanalysis of the postposition *jox* 'to' and the verb *dop* 'point at'. If *jox dop* directly modifies a noun phrase, both components are used with their original meanings, as in (69a).

(69) a. X學學竟\$學\$。

cy lot rrep ssox sse **jox dop**.

3P.SG hand stretch students to point at

'He stretched out his hand and pointed at the students.'

b. 81HX**94**MBH±.

xip li mu ga **jox dop** da hxip su nge. DEM.DD TOP male name to point at STP say FOC COP 'This is referring to (*lit*. talking about) Muga.'

The string *jox dop* can also be preceded by a verb phrase. In this function, it was reanalyzed as modal auxiliary with the sense *prepared to*. It acquired all morphosyntactic properties of modal auxiliary verbs. Semantically, its meaning shifted from *pointing to an object* to *preparing a state of affairs*.

- (70) a. 회문 X 회 확 된 🏵 🗜 。
 - ip mi cy ip ko qup **jox dop**. today evening 3P.SG door guard MOD.prepared 'This evening he is prepared to guard the door.'

nga sut tep yy chyr hxex **jox**-ap-**dop**.

1P.SG other people letter open see MOD.prepared<NEG>
'I am not prepared to open and read other people's letters.'

- \mathbf{c} . 北東 $\hat{\mathbf{e}}$ 北 $\hat{\mathbf{e}}$ 从 $\hat{\mathbf{e}}$ 以 $\hat{\mathbf{e}}$ $\hat{\mathbf{e}}$ 以 $\hat{\mathbf{e}}$ $\hat{\mathbf{e}$ $\hat{\mathbf{e}}$ $\hat{\mathbf{e}}$
 - su hlit max su cy zy cox gu bbo shux **jox dop.** young person ART 3P.SG prompt people inform go CAUS MOD.prepared 'He was prepared to encourage the young man to inform everyone.'
- - *cop wox mux dde nra **jox dop** -jjy- **jox dop**.

 3P.PL ground measure MOD.prepared very MOD.prepared
 Intended meaning: 'They are very much prepared to survey the land.'
- e. 从点料复张举用**卯** £。

cy ie qyt six bbut vie sha **jox dop.** 3P.SG water COV.take flower water MOD.prepared 'He is prepared to water the flowers.'

8.3 Evidentiality

Evidentiality is the domain of information sources which indicate how one learnt something (Aikhenvald 2004: 1; Willet 1988: 51). In about a quarter of the world's languages, information sources are encoded in the grammatical system. With bound morphemes, the sentence must indicate the type of source on which it is based. In a chapter of the World Atlas of Language Structures, De Haan (2005) identifies North and South America as the principle areas of languages with grammaticalized information sources.

Individual languages exhibit between one and five grammaticalized information sources (Aikhenvald 2004: 60): visual testimony (VIS); auditory (AUD); sensory and participatory experience (EXP); specific quotative (QUOT) and unspecific hearsay (HEAR). In Nuosu, evidentiality is not encoded in the grammar — with one exception, quotation (section 8.3.1). All other information sources are lexically encoded and are briefly surveyed in section 8.3.2.

8.3.1 The quotative information source

Information reported to the speaker originate from a quotative source. In Nuosu, the quotative source is marked by the sentence particle *ddix*. This morpheme also serves other grammatical functions, as particle of direct and indirect quotation (section A) and as complementizer (section B). There are also lexical expressions containing ddix (section C).

A. The quotative particle ddix

The particle *ddip/ddix* is the formal mark of quotative constructions. It is grammaticalized from the proto-Yi main verb *di 'say' (Gerner 2012). Ddip (low tone) can be used as independent predicate to introduce a quote.

- (71)The quotative particle ddix:
 - a. ddip go+[quotative clause]+ddix
 - b. *ddip go*+[quotative clause]+*mu hxip*
 - c. hxip go+[quotative clause]+ddix
- a. 月常里沙切所井(水)。 (72)

mu rrvr ddip go i shax jji bit ddix. male name say SENT.TOP LOG.SG candy chew QUOT 'Mudge said that he is chewing candies.'

b. 月常望沙却所其徐月夏。

mu rryr ddip go i shax jji bit mu hxip. male name sav SENT.TOP LOG.SG candy chew ADVL say 'Mudge said that he is chewing candies.'

c. 用常图》却用并含第。 mu rryr **hxip** go i shax jji bit ddix. male name say SENT.TOP LOG.SG candy chew QUOT 'Mudge said that he is chewing candies.'

The verb *ddip/ddix* also occurs as the sole predicate of a clause with the sense *be* named. It does not mean speak. (73a) illustrates a well-formed and (73c) an ill-formed example.

- (73) a. 以刊**分**.
 - cy mu gox **ddix**.
 3P.SG name be named 'His name is Mugo.'

Otherwise, *ddix* is the formal mark of direct quotes, as in (74), and of indirect quotes, as in (75). It is always the element of final sentence closure.

- (74) a. 日光里宇: "甲苓烯皂环口⑥" 争。 mu ga ddip go: "nga ket zza zze ap- la ox" **ddix**. male name say SENT.TOP 1P.SG dinner eat NEG- come DP QUOT 'Muga said: "I won't come for dinner".'
 - b. 英州到州君: "七の子事節" 者。 sut co xip mu hxip: "at nyop jjiex mguo ox" **ddix**. other people DEM.DD say female name understand DP QUOT 'Other people say: "Anyo has understood it".'
 - c. 用习目:"P業黨是"爭。 lat mop hxip go: "nga hxe nyiet njuo" **ddix**. male name say SENT.TOP 1P.SG fish catch DP QUOT 'Lamo said: "I am fishing".'

The quotative particle *ddix* is used as closure of indirect quotes, often in combination with logophors (section 5.4.1.B). Sometimes, the adverbial *mu hxip* can be used as well, see (75d).

- (75) a. 日光目学对导动论等。
 mu ga hxip go ip ko i gep ggot da ox **ddix**.
 male name say SENT.TOP door LOG.SG PASS shut STP DP QUOT
 'Muga said that the door was shut by him.'
 - b. 有母外类世皇司的争。
 ne hxip go cy shut jji nyuo tuo ox **ddix**.
 2P.SG say SENT.TOP 3P.SG recover consciousness DP QUOT
 'You said that he regained consciousness.'

- c. 创新生生系元的日间等。
 cop wox ddip go hmat mop op gu ox **ddix**.
 3P.PL say SENT.TOP teacher LOG.PL call DP QUOT
 'They said that the teacher called them.'
- d. 代母母乳的免患系質性的用。 at nyop hxip go ax yi max su hmat dde jji ox **mu hxip.** female name say SENT.TOP child ART teach grow up DP ADVL say 'Anyo said that the child is educated.'

Direct quotes embedded within other direct quotes are marked with two successive occurrences of *ddix*, as shown in (76a). Indirect quotes within other indirect quotes are marked with only one occurrence of *ddix*, as in (76b).

(76) a. X里字:"确身长网目:'长雪口顶'笔"笔。
cy ddip go: "cox ma shyr da hxip: 'shyr rruo la ox'
3P.SG say SENT.TOP person CL shout STP say robber come DP
ddix" ddix.
QUOT QUOT

'He said: "Someone shouted: 'A thief has come'".'

b. H氏电影灯, HK生钞, 粉字用闭章冰壁。
lat hxa hxip ngop ge, mu ga ddip go,
male name say 1P.SG tell male name say SENT.TOP
i syt lat ax nyi guo ddix.
LOG.SG affair many extraordinary QUOT
'Laha told us that Muga said that he is extremely busy.'

The quotative particle at the end of the sentence cannot be reduplicated and negated by ap.

- - *ne hxip go lu po mu dut jie ox **ddix ddix**?

 2P.SG say SENT.TOP male name fire lighten DP QUOT~ALT
 Intended meaning: 'Did you say that Lupo lit a fire?'
 - b. *氢目录以当日经用论文章。

 *ne hxip go lu po mu dut jie ox **ap- ddix**.

 2P.SG say SENT.TOP male name fire lighten DP NEG- QUOT Intended meaning: 'You did not say that Lupo lit a fire.'

Moreover, *ddix* is used in two types of nominalizations. With a proper name, it is nominalized with the sense of *so-called*, see (78a). With an indirect speech clause and a classifier, it encodes a nominal complement clause, as in (78b).

(78) a. 🕅 山州で乳舟井出。

cyx li mu jy **ddix** max su nge. 3P.SG TOP male name be named ART=CL-DET COP 'He is the one who is called Mudje.'

b. "从可以自动可见,是是不是不是,

"cyx li hxie mgat ma nge" **ddix** gox su ddop vu-ap-jji. 3P.SG TOP Chinese CL COP QUOT ART=CL-DET word true<NEG> 'The statement that he is a Chinese is not true.'

B. The complementizer ddix

The particle *ddix* also functions as complementizer of speech verbs, the same verbs which co-occur with the quotative particle *ddix*. The verb of speech occurs after the complementizer *ddix*.

(79) The complementizer ddix:

NP+[embedded clause]+ddix+V_{SPEECH}.

The complementizer *ddix* is illustrated below for several verbs of speech.

(80) a. មាទិ៧៩២೪៣米០៨វិ a.

cop wox hxi yip ngat jop op hmi tat- ti 3P.PL further 1P.SG to LOG.PL.POSS name NEG.IMP- spread

ddix hxip.

COMP say

'They further told me not to spread their name.'

b. ብጠ ው ም ገ ች ች ን አለ ፎ .

a mat ngop jox tat- bbo **ddix** gox xie njuo. grandmother 1P.PL to NEG.IMP- go COMP urge PROG 'The grandmother urged us not to leave.'

c. $\lambda \mathbb{L} = \widehat{\theta} \mathbb{L} \mathcal{M} \mathcal{L} \mathcal{A} \widehat{\mathcal{L}} \mathbb{L} \mathbb{L}$

cy sip hni max su co ap- ku **ddix** ddop zy ssi. 3P.SG woman ART people NEG- steal COMP testimony use 'He testified that the woman had not stolen from other people.'

Ddix is the complementizer for direct and indirect quotes. It contrasts with the English complementizer *that* which does not subcategorize direct quotes.

(81) a. ។0 "១៨៤៧៩៩?" មិវៈ

at nyop "ne ip nyip la hxit hxit" **ddix** hna. female name 2P.SG today come can~ALT COMP ask 'Anyo asked: "Can you come today?"'

- b. 代码计学制域行程等并。 at nyop nga jop i ip nyip la hxit **ddix** hna. female name 1P.SG toward LOG.SG today come can COMP ask 'Anyo asked whether she could come today.'
- (82) a. 서울병생 "반대자임" 환화병.
 mu ga ngat jop "nga la ap-hxit" **ddix** ddop bur.
 male name 1P.SG to 1P.SG come NEG-can COMP reply
 'Muga said to me: "I cannot come".'
 - b. 用以伊孚切凡水总氧素质。
 mu ga ngat jop i la ap- hxit **ddix** ddop bur.
 male name 1P.SG to LOG.SG come NEG- can COMP reply
 'Muga said to me that he cannot come.'

C. Other expressions incorporating ddix

Several expressions in Nuosu integrate the morpheme *ddix*. They relate back to the blending of the verb **ddi* 'say' and other forms at an earlier stage of the language.

Table 8.3: Expressions including ddix

Term	Meaning	Section of grammar
ddix ddip ssox	'at' (for people) 'should'	section 6.2.5.B section 8.2.2.C
mo ddix	'committed'	section 8.2.2.M
ap ddi ddix ddix ap bbo	'if' 'furthermore'	section 13.1.2.A section 13.1.3.B
ddix sy ne	'as soon as'	section 13.1.2.C

The postposition *ddix* 'at the place of' must co-occur with human nouns (reminiscent of the French preposition *chez*). It is probably cognate with the quotation particle *ddix*.

- (83) a. メメート≒ฦฐ๎๚ฃ。 cy cyp xyp mop **ddix** ap- li. 3P.SG 3P.SG.POSS wife LOC.at place of NEG- go 'He didn't go to his wife.'
 - b. 米刈旬的分子系列子盖的。
 nyit cy li ax yi max su **ddix** da jjie bbo ox.
 ghost TOP child ART=CL-DET LOC.at place of COV.put leave go DP
 'The ghost left the child.'

Moreover, *ddix* is part of the two modal auxiliaries *ddip ssox* 'should' (section 8.2.2.C) and *mo ddix* 'committed' (section 8.2.2.M). Both modals have commissive meanings with a more or less direct link to speech.

(84) a. **1** 单位 O 至 O H M **生 O**。

ne ngax ddie nit qop bop ma mu da **ddip ssox.** 2P.SG 1P.SG COV.prepare 2P.SG.POSS friend CL do put MOD.should 'You should adopt me as one of your friends.'

. # ሊወ ሞ ዚ **፪ አ** ሀ አ

cy la **mo ddix** su nga dde-ap-jji. 3P.SG come MOD.committed COMP 1P.SG know<NEG> 'I don't know whether he intends to come.'

Finally, there are three conjunctions containing *ddix*. The conjunction *ap ddi ddix* 'if' (section 13.1.2.A) is composed of the quantifier *ax di* 'only' (section 5.3.2.G) and *ddix* 'say'. *Ap ddi ddix* prompts the use of *yix ne* at the end of the first clause.

(85) 水生乳中生乳的生, HKの母本なに。

ap ddi ddixma hxa jjipyix ne,mu gaop rroifrainbecome provided that male name Xichangbbo ap-hxit.goNEG-MOD.can

'If it is raining tomorrow, Muga can't go to Xichang.'

The conjunction *ddix ap bbo* 'furthermore' contains the intransitive verb *bbo* 'go'. The meaning *furthermore* is reanalyzed in two steps from *not going to say* and then *needless to say*.

mu ga ap ndip hxix cyp ix go li ox, ddix ap bbo male name yesterday 3P.SG.POSS home go DP furthermore ngap nyit gex jjyx- mo ox.

1P.DL all, even RECL- see DP

'Muga went to his home yesterday, and both of us met there.'

The conjunction *ddix sy ne* 'as soon as' is composed of **ddi* 'say', *sy* 'yet' and the topic marker *ne*. These three words literally mean *while saying*. This meaning was reanalyzed as *as soon as*.

(87)ax da ssox dde xi la ddix sv ne, svt cv iiit cv father school arrive come as soon as matter DEM.PROX CL 3P.SG hxip ngop ge. sav 1P.PL tell

'As soon as the father arrived at the school, he told us what happened.'

8.3.2 Other information sources

In Nuosu, only the quotative information source is grammatically encoded. In the Yi group on a whole, evidentiality is not a feature of the grammar.¹

In Nuosu, the information sources of visual (VIS), auditory (AUD) testimony, sensory/participatory experience (EXP) are expressed lexically, mainly with matrix verbs.

- (88) a. ddip vip kep nvix la mu su wep mo ox. nga INT.how much ADVL come COMP 1P.SG GET see DP 'I have seen that guests are coming in high numbers.'
 - b. 业量对量少年不工作用XIII的。 ngop wox nop wox go hxep apddi su mu ga gge ox. 1P.PL 2P.PL PRO.PAT see NEG- evil COMP name hear DP 'Muga heard that we do not despise you.'
 - gop bop go nax mu ddu apmgo su 3P.SG.POSS body LOC illness bear NOM recover event NEGiio cy sip ngop ox. su have COMP 3P.SG feel DP

'He felt that he had completely recovered from his illness.'

¹ In Weishan Lalo, a Yi language spoken in Yúnnán Province, the visual information source is expressed as grammatical particle (Björverud 1998: 136-138).

Chapter 9

Adverbs and negation

In this chapter, we analyze adverbial expressions (section 9.1) and negation strategies (section 9.2).

9.1 Adverbs

Adverbs modify parts of speech other than nouns: verbs, adjectives, other adverbs and clauses. We present syntactical and semantic differences of adverbs in section 9.1.1 and classify them syntactically in section 9.1.2.

9.1.1 Adverbial constructions

We distinguish between predicate-level and sentence-level adverbials (section A). We identify the Nuosu equivalent of depictives (section B). We elaborate on the semantic orientation of adverbials toward the agent, the patient or the event (section C). We investigate free adjuncts, adverbials that are loosely attached to the main predicate (section D).

A. Predicate-level and sentence-level adverbials

Predicate-adverbials modify the predicate, whereas sentence-adverbials target the whole sentence. Sentence-adverbials often reflect the speaker's attitude.

Predicate-level and sentence-level adverbials can be morphosyntactically derived from each other. In (1a), the adjective *gex yi* 'stupid' gives rise to the predicate-level adverb *gex yi mu* 'stupid'. In (1b), the sentence-level adverbial construction can be expressed by a nominalization predicated by *gex yi* 'stupid'.

- (1) a. 州兴宁均州崇伊。
 mu ga **gex yi mu** ddop bur.
 name stupid ADVL answer
 'Muga answered the question stupidly.'
 - b. 州兴縣於沙伊井,劉山軍即計出。 mu ga ddop cyx go bur su, xip li **gex yi** name word DEM.PROX CL return SENT.TOP DEM.DD TOP stupid su nge. NOM COP

'It was stupid of Muga to answer the question.'

In many cases, the sentence-level adverbial which corresponds semantically to the predicate-level adverbial must be constructed differently.

(2) a. 引**以知**#用素目。

rrop jji mu ddop hxip. ax ga female name naturally word sav 'Aga spoke naturally.'

hxip ddie-ap-ddur, ax ga ddop hxip ox. sav need<NEG> female name word sav DP 'Naturally (= it was obvious that), Aga spoke.'

B. Constructions equivalent to depictives

Cross-linguistically, secondary predication is a syntactic construction with two predicates that express two relations within the same event (Himmelmann & Schultze-Berndt 2005). Secondary predication is reminiscent of serial verb constructions and can be subdivided into depictives and resultatives.

- (3) a. George bought the carrots **fresh**. Depictive secondary predication
 - Georges boiled the carrots **soft**. Resultative secondary predication

In Nuosu, the closest equivalent of English secondary predications are adverbial constructions (section 9.1.1) and resultative constructions (section 12.2). The Nuosu equivalent of English depictives is a construction in which the second predicate is adverbialized by -mu, as shown in (4a). The adjective cannot be simply appended to the main predicate, as illustrated in (4b).

hxix ke vop nzi a shyt shyp mu vy six la. mu rrvr СУ male name carrot fresh ADVL 3P.SG buy RES come 'Mudge bought the carrots fresh.'

vy a shyt (shyp). *mu rrvr hxix ke vop nzi cy male name carrot 3P.SG buy fresh Intended meaning: 'Mudge bought the carrots fresh.'

The adverbializer -mu is described in detail at different places of this grammar (section 5.3.2.J, section 9.1). In Nuosu, depictive and adverbial constructions are structurally indistinguishable and contrast with English (see gloss of 5a).

(5) a. ↑ 學**來\$ 學 場** 升 切 ୬ 対 息 ≚ ⑩。

at gop **guo luo mut zzy** mu yi go da bbit bbo ox. female name angry ADVL house LOC COV go out DP 'Ago left the room angry/Or: Ago left the room angrily.'

The adverbializer -mu conveys manner. Semantic nuances such as circumstantial or resultative can be captured by other particles.

at gop **guo luo mut zzy** da yi go da bbit bbo ox. name angry STP house LOC COV go out DP 'Having become angry, Ago left the room.'

c. 化导发重要增加到效息率的。

at gop **guo luo mut zzy** six yi go da bbit bbo ox. name angry RES house LOC COV go out DP 'Ago was so angry that she left the room.'

C. Oriented adverbials

Predicate-level adverbs can be event-oriented, agent-oriented or patient-oriented. Event- and agent-oriented adverbs generally take the adverbializer mu, as in (6a+b), patient-oriented adverbs are posed after the predicate often together with the resultative particle sip/six (section 12.2.2), as illustrated in (6c).

(6) a. አ**ብ** ት ሃ ዘ ሃ .

cy **a shyt shyp** mu sy. 3P.SG young ADVL die 'She died young.'

cop wox **iex ssa ie ssa** mu ssox dde max su hxep da bbo. 3P.PL very slowly ADVL school ART COV STP go 'They went to the school very slowly.'

c. 用

用

mu ga niep ga cy jot **ix nu** ox. male name pumkin 3P.SG boil soft DP 'Muga cooked the pumkin soft.'

D. Free adjuncts

Free adjuncts are adverbial expression consisting of a secondary predicate that is only loosely attached to the primary predicate. Stump (1985: 41–42) distinguished between weak and strong free adjuncts. Weak free adjuncts set the momentary stage

for the main predication while strong free adjuncts provide a permanent platform for the predication.

- (7) a. weak: Standing on a chair, John can touch the ceiling.
 - b. If he stands on a chair, John can touch the ceiling.
- strong: Having unusually long arms, John can touch the ceiling. (8)
 - b. Because he has unusually long arms, John can touch the ceiling.

Free adjuncts in Nuosu correspond to serial verb constructions and other coordinate clauses. The equivalent of Stump's examples in Nuosu is provided in (9): weak free adjuncts in (9a) and strong free adjuncts in (9b).

(9) a. 章 文 4 F C 的 5 T H 予 ¥ F 的 5 比。 nyix dde ma tot hxit vix ne, mu gox seat CL on top stand provided that male name hand stretch

> vi lo hmv.

collar beam reach

'Standing on a seat, Mugo can reach with his hand up to the collar beam.'

lot

rrep

lot a sho-jjy-a sho da, mu gox lot rrep vi lo hmy. arm long-very-long STP male name hand stretch collar beam reach 'Having very long arms, Mugo can touch the collar beam.'

9.1.2 Movable adverbs

We use the term movable adverbs in a similar way Li & Thompson (1981: 320) do for Chinese. Movable adverbs occur in clause-initial position or after the first NP which might be the subject or direct object. Movable adverbs set an interpretative frame for the whole sentence. There are temporal adverbs and other adverbs in this category.

A. Temporal adverbs

Temporal adverbs locate the reference time with respect to the event time and utterance time. Temporal adverbs are sentential and contrast with aspectual adverbs ('already') and frequency adverbs ('always') which are not sentential.

The examples below illustrate the two syntactic positions in which temporal adverbs occur.

Table 9.1: Movable temporal adverbs

ap mu 'now'

ap mut sip 'just now'

ap mut sip 'just now'

ap hxiet miep jox 'before'

kep te gex nep 'already before'

ip nyip 'today'

mup shyp nyip 'tomorrow'

ap ndi hxix 'yesterday'

ap hxiet ddip kut 'last year'

hxo bbu ddur wa 'in the morning'

jjo hnox la 'ever'

wax la cyp nyip ne 'in future' (...)

(10) a. **አ**ኮአክፅኧዐ兴ላ。

ip nyip cy op rro che qu vy yy. today 3P.SG Xichang rice buy go 'Today, he went to Xichang to buy rice.'

b. X **૪ 1** 1 10 0 0 3 4 0 5 4 .

cy **ip nyip** op rro che qu vy yy. 3P.SG today Xichang rice buy go 'He went to Xichang today to buy rice.'

(11) a. វេទេវេសិ 🛮 វិធីប្រាំ .

ap mut sip cox gge ne shex la ox. just now people CL 2P.SG look for come DP 'Some people are looking for you just now.'

b. ស្ព្រាស្សារ និព្រសិន

cox gge **ap mut sip** ne shex la ox. people CL just now 2P.SG look for come DP 'Some people are looking for you just now.'

(12) a. **ដេៗវិ**្រាស្សិត្សិ。

kep te gex nep nga nop jox hxip ox. already before 1P.SG 2P.PL toward say DP 'I told you so before.'

b. የ**ዜቂኒቱ** ክውል .

nga **kep te gex nep** nop jox hxip ox. 1P.SG already before 2P.PL toward say DP 'I told you so before.'

wax la cyp nyip ne nga rre mop ddie nex sur mix. in future 1P.SG money COV 2P.SG return FUT 'I will return the money to you.' (The topic marker *ne* is lexicalized) b. 增量口口量可工口量增。

nga **wax la cyp nyip ne** rre mop ddie nex sur mix.

1P.SG in future money COV 2P.SG return FUT

'I will return the money to you.' (The topic marker *ne* is lexicalized)

The movable adverb *jjo hnox la* 'ever' must co-occur with the negated experiential aspect marker *ap nzop* to convey the meaning *never before*.

(14) a. #ប៉ាប្រែខាជិងអាមិន្ទិសិន្

jjo hnox la vo xip yyx bbo co gox mo ap- **nzop**. ever snow DEM.DD big CL person PRO.PAT see NEG- EXP 'Such a big snowfall was never seen before.'

b. ឋស្សីដ្ឋាធិប្រាស្សិន្ត្រសិ

vo xip yyx bbo **jjo hnox la** co gox mo ap- **nzop.** snow DEM.DD big CL ever person PRO.PAT see NEG- EXP 'Such a big snowfall was never seen before.'

B. Other adverbs

Other movable adverbs consist of attitudinal adverbs, which convey the speaker's attitude, and one frequency adverb.

Table 9.2: Other movable adverbs

nyip mop nyip 'in the past'

cyx luo mu 'suddenly'

hxix hxi mu 'intentionally'

hxo ap lo tu ddix 'at once'

tuo tuo mu 'by chance'

wox dde mu go 'originally'

ap bo ap de (mu) 'by any standard'

o njit mu 'roughly'

bip ap jjo mu 'for no reason'

hxix hxi mu 'intentionally'

nyuo ba ba mu 'clearly'

nyuo mo hne gge mu 'obviously'

ap dda yix nyi 'at least'

ap lop ne 'apparently'

bur lop bur mu 'again and again'

Most of the sentential adverbs in Table 9.2 append the phrasal suffix -mu (section 5.3.2.J, section 9.1.2.A). These adverbs are not derived from adjectives, at least not synchronically. The presence of -mu is a general marker of adverbhood. The following examples show the adverb in initial position and after the first NP.

(15) 다 그 다 박 위 의 .

nyip mop nyip nga nry ndo. in the past 1P.SG wine drink 'In the past, I drank wine.' (16) a. X \$ # H + 年 智 的。

cyx luo mu ma hxa jjip ox. suddenly rain become DP 'Suddenly, it rained.'

b. ម្ន**ស្ទា**អ្នក្សា ំ

ma hxa **cyx luo mu** jjip ox. rain suddenly become DP 'Suddenly, it rained.'

(17) a. M华季O乳工手均用光映 魚 × 的。

hxop ap lo tu ddix cyp hlut bbup mu hly pur six bbo ox. at once 3P.SG.POSS hat wind blow RES go DP 'His headscarf was blown away at once.'

b. ፲≢ជ**៧⊀ΦΟ፯**ዝሦሙ፬ፏ໓。

cyp hlut bbup **hxop ap lo tu ddix** mu hly pur six bbo ox. 3P.SG.POSS hat at once wind blow RES go DP 'His headscarf was blown away at once.'

(18) a. **爭叉用**對X单署异中事。

wox dde mu go cy xyx hnie vy ji ngop. originally 3P.SG shoe buy want, think 'Originally, he wanted to buy shoes.'

b. 次**第页H**3中 化 片 中 本 。

cy **wox dde mu go** xyx hnie vy ji ngop. 3P.SG originally shoe buy want, think 'Originally, he wanted to buy shoes.'

tuo tuo mu nga la cyx zo da. by chance 1P.SG come 3P.SG meet STP. 'I came to meet him by chance.'

b. 中国国刊门资州网。

nga **tuo tuo mu** la cyx zo da. 1P.SG by chance come 3P.SG meet STP. 'I came to meet him by chance.'

(20) a. 奶\$HX目習的。

o njit mu cy hxip jjip ox. roughly 3P.SG say become DP 'He said it roughly.'

b. X.0.5.Ha្នាំ ំ

o njit mu hxip jjip ox. 3P.SG roughly say become DP 'He said it roughly.'

(21) a. 尾水料从※砌兜車。

bip ap jjo mu cy sut co jox zyt. for no reason 3P.SG other people toward abuse, scold 'He abuses others for no obvious reason.'

b. አ**፪**ጜ**#**ዝ፟፟፠፟፞፞₩ሧ፟፞፞፞፞፞፞፞፞፞፟፟፟፟፟፟፟

bip ap jjo mu sut jox CO zvt. 3P.SG for no reason other people toward abuse, scold 'He abuses others for no obvious reason.'

(22) a. ឱ្យដ្អាស្តាមិប.

(adversity context)

nyuo ba ba mu cy mgie ngax ge obviously 3P.SG cheat 1P.SG tell 'Obviously, he cheated me.'

b. X **ឱ ដ ដ អ** អ អ មិប .

(adversity context)

nyuo ba ba mu mgie ngax ge. cv 3P.SG obviously cheat 1P.SG tell 'Obviously, he cheated me.'

The adverb ap dda yix nyi 'at least' is a quantificational adverb that requires a quantificational expression in the sentence.

(23) a. **水型り**≢ ₹ ± ± + ⊖ ₩ ₩ 。

ap dda vix nvi ne nge ci vat ddur luop. 2P.SG NUM.50 dollar exit REGR 'You should give out at least 50 RMB.'

b. 1水型的事份1份息。

ap dda yix nyi bbop cyp zha zze. 2P.SG at least invite, request NUM.1 CL eat 'You are at least invited to eat a little bit.'

The adverb ap lop ne 'apparently' must occur in a comparative construction or co-occur with the verb sup 'resemble'.

· 0 0 4 4 4 4 X E @ Y (24) a.

> ap lop ne cy nga apsyp ma sup. apparently 3P.SG 1P.SG NEG- know CL resemble 'He looks like someone who doesn't know me.'

b. \$\hat{\parallel{h}}\delta\d

nga cyx si nip **ap lop ne** jjy-yyx. 1P.SG 3P.SG with apparently RECL-big 'I and he apparently have the same size.'

The sole frequency adverb in this group is bur lop bur mu 'again and again'.

(25) a. **F由FHYXXSTEESWDD**.

bur lop bur mu syt cy jjit ne hxip ddie-ap-ddur ox. again and again matter DEM CL 2P.SG say need<NEG> DP 'You need not repeat this matter over and over again.'

b. 業皇於母**伊爾伊**州周內里亞家。

bbox zze cyx ma **bur lop bur mu** jie shat jo njuo go shex. man DEM CL again and again street turn move HAB 'This man staggers forth and back in the street.'

9.1.3 Immovable adverbs

Immovable adverbs only occur after the first NP, not in sentence-initial position. Immovable adverbs fall into two semantic categories: manner adverbs and functional (quantificational, syntactic) adverbs.

A. Manner adverbs

Manner adverbs append the phrasal suffix -mu (section 5.3.2.J) which assumes a function similar to the Germanic suffix -*lv and the Romance suffix -*ment.

Table 9.3: Immovable manner adverbs

at ggop ggop mu 'aimless, in vain' (A)	iex ssa iex ssa mu 'slowly'
xy xy zzyt zzyp mu 'meticulously' (A)	bbop bbop do do mu 'soberly'
ryr ggur ggur mu 'earnestly' (A)	cy jjip cy jjix mu 'naturally'
guo luo mut zzi zzi mu 'angry' (A)	ax ddie ddie mu 'alive'
gex zhy mu 'really' (A)	hxie ggur nyuo gga mu 'enthusiastically'
vu jji mu 'truly' (A)	miep wa mu 'orderly'
nji mu 'quickly' (A)	ap si si mu 'secretely'
hxit jjo mu 'quickly'	ggup lep mu 'in a circle'

Some manner adverbs are not derived from adjectives. The suffix *-mu* only functions as a general mark of adverbhood. Adverbs derived from adjectives are indicated by (A) in Table 9.3. Many manner adverbs are derived from simple, reduplicated or antonymic adjectives by appending *-mu*.

(26) a. 「歩⊌歩り。

cyp ngop lu **ap ggop.**3P.SG.POSS thought aimless, in vain 'His thought is futile.'

ip nyip cop wox **ap ggop ggop mu** ix go jjo. today 3P.PL aimless, in vain home be at 'Today we remained idle at home.'

Manner adverbs occur after the subject and before or after the direct object. Manner adverbs are oriented toward the event or toward the NP that immediately precedes them.

syt cy jjit nga **xy xy zzyt zzyp mu** ti hox bbap ga co event DEM.PROX CL 1P.SG carefully spread village people ge bbo ox. tell go DP

'I communicated carefully what happened to the villagers.'

nga lat hxo jox **ryr ggur ggur mu** gox hxix. 1P.SG male name toward earnestly admonish 'I warned Laho earnestly.'

nga **guo luo mut zzi zzi mu** cy gep bie cyp luo bbyp. 1P.SG angry 3P.SG COV kick NUM.1 VCL give 'I was kicked by him severely.'

(30) a. X **第** X H 争 X 时 的。

cy **gex zhy mu** gox xi la ox. 3P.SG real LOC arrive come DP 'He really arrived (= It is the reality that he arrived).'

b. 从**至**#升争从口觉。

cy **vu jji mu** gox xi la ox. 3P.SG truly ADVL LOC arrive come DP 'He truly arrived (= It is the truth that he arrived).' Not every adjective gives rise to a manner adverb. Some adjectives denoting physical properties cannot co-occur with the suffix -mu. The adjective cu 'fat' cannot form an adverb but the adjective $ix\ fi$ 'thin' can.

(31) a. * 输纵用 b. 题针针用 ix fi fi mu jjix fat-fat ADVL thin-thin ADVL become '*fatly' become thin'

Not all manner adverbs can be derived from adjectives. They are lexicalized adverbs which were derived from adjectives at an earlier stage of the language. The adjective dropped out of use. The structure of the adverb suffixed by -mu became opaque.

- - b. 哲學科科科學工。
 nop wox **hxit jjo mu** ngax lot buop.
 2P.PL quickly 1P.SG help
 'Help me quickly!'
- (33) 学利豪英亞登州哥伊尔。
 syt a zzyx jjit **miep wax mu** hxip cop ge.
 affair DEM.DIST CL front-behind=orderly say 3P.PL tell
 "Tell them what happened one after the other."
- (34) Y並X電X電H中口⑩。 syr bbo **cy jjip cy jjix mu** hni la ox. tree naturally grow out come DP 'Branches naturally grew out.'
- (35) 引印發身引生出和爭滋。
 ax yi zhax su **ax ddie ddie mu** mgie ngax zi.
 child ART alive, obvious cheat 1P.SG cheat
 'The child obviously cheated me.'
- (36) 歩筆電影子計量低海電息。
 ngop wox **bbop bbop do do mu** mip yit zza shex zze.

 1P.PL soberly self food seek eat
 'We soberly looked ourselves for food.'

(37) 月紫华泉县内郊迎州间上世景门。

ap si si mu hxi jox co ggex su gu six la. mu rrvr male name secretly foreigner ART call RES come 'Mudge secretly summoned the foreigners.'

(38) 母童於89章用9月季節。

cop wox hxie ggur nyuo gga mu vo mu bop shep. 3P.PL enthusiastically king serve 'They enthusiastically serve the king.'

B. Other adverbs

There are several other immovable adverbs with quantificational and coordinating functions. Some append the phrasal suffix -mu but are not derived from adjectives, at least not in Modern Nuosu. Two exceptions are the non-manner adverbs ryx mu 'early' and ap nryr mu 'really' which are derived from adjectives. Some adverbials originate from negated verbs: ap ne mu 'not-cease = constantly' and sat ap hxit mu 'exhaust-not-can = in great numbers'. Three adverbs function also as coordinate conjunctions: vix nip 'just now' (section 13.1.2.C), gex nep 'originally' (section 13.1.2.C) and tat lyp 'but' (section 13.1.3.C).

Table 9.4: Other immovable adverbs

a hnat mu 'verv' ax nyi pa jop 'in many ways' a hnat...a hnat... 'the more...the more...' ap bo ap de mu 'by any standard' dax mu 'rather' zzip mu 'together' ijox dde ijox 'gradually' dde dde mu 'often, always' cuop luo 'a little bit' lot ggo mu 'immediately' miep 'in advance, first' hxi mu 'especially for' ggup lep mu 'around, in a circle' hxi yip 'again' ax di 'only' ryx mu 'early' nge get 'all' ap nryr mu 'definitely, really' jjy gex 'together, all' ap ne mu 'constantly' mix 'even' sat ap hxit mu 'in great numbers' nyi 'also' yix nip 'only then' ap lo 'almost' gex nep 'originally, actually' go mox 'beginning' tat lyp 'but'

These immovable adverbs occur after the subject or topic noun phrase, and before or after the direct object. The first adverb, a hnat mu 'very', modifies gradable adjectives and verbs. It also occurs in complex clauses as a hnat...a hnat... 'the more...the more...'.

(39) a. 中旬申刊CH的。

nga **a hnat mu** jy jie ox. 1P.SG very fear DP 'I was particularly afraid.'

φ. ፯¼‡¼₭₢⋈Ѳ。

ne **a hnat mu** hxie zut da sso. 2P.SG very make efforts STP study 'You must make special efforts in your studies.'

nga **a hnat** ddop hxip **a hnat** jy jie ox. 1P.SG the more word speak the more fear DP 'The more I speak the more I am afraid.'

The adverbs *dax mu* 'rather' and *jjox dde jjox dde* 'gradually' are used with gradable adjectives and verbs.

name and name NUM.2 TOP name rather body big 'As for Muga and Mugo, Mugo is taller.'

get zo zza ma **jjox dde jjox dde** ix nyi la. cupboard cereals gradually few COME 'The cereals in the cupboard decreased gradually.'

The adverb *cuop luo* 'a little' modifies activity verbs and indicates the extent of the activity carried out.

(42) 對第回(米州內, 汉介 太 年 司 单)。

nop wox tat-ra mu da, cy bbyx **cuop luo** hxip shux. 2P.PL NEG.IMP-noisy ADVL 3P.SG COV a little speak CAUS 'Be silent and let him speak a little.'

The adverb *miep* 'at first' can be employed in simple clauses and also co-occur with the adverb *wax* 'afterwards' in coordinate clauses.

(43) a. 紧到邓目!

vyt vu **miep** hxip! elder brother at first speak 'The elder brother may speak first.' b. ՄԷԾԵՐԺՉԵՐՋՉ.

miep ddip vip zha vix nip wax vip si zze. at first guest feed only then after homeowner eat 'Entertain the guests first, let the homeowner eat afterwards.'

The adverb hxi yip 'again' cannot be oriented towards the past, as in (44a+b), but only toward the present or future, as in (44c).

- (44) a. *១+៌្រ**\% ***៌្ម១៙៝៝៰ *le jix su **hxi yip** hlix ndo ox. ox ART again lose DP 'The ox was lost again.'
 - b. *1对2**以**来律例。 ip mop hxi vip na *cvp da. 3P.SG.POSS stomach again ache, ill STP 'His belly was aching again.'
 - **hxi yip** cyp vit hxip! ne 2P.SG again NUM.1 time say 'Please say again!'

The adverb ax di 'only' modifies the immediately preceding NP. The principal function of ax di is determiner (described in section 5.3.2.G) not adverb.

(45) a. ችጋፀዙ **វ**ነታ ነተ ቅ. xyp mop max su ax di gox ci lox. bride ART only LOC leave over 'The bride remained alone.'

The adverb nge get 'all' quantifies over the clause-initial NP. Noun phrases in second position are not within its scope.

- (46) a. bbox zze ggex su **nge get** ip mop mit da, nyop bbop apdop ox. ART all belly hungry STP work NEG- can DP 'All the men were hungry and couldn't keep working.'
 - b. ՅՀՎՔ Գ 🗦 Տ છે . rre mop **nge get** cop wox sot ox. money all 3P.PL count DP 'They counted all the money.'

c. 日刊爭址序写前。 rre mop cop wox **nge get** sot ox. money 3P.PL all count DP 'They counted all the money.'

The quantificational adverb *jjy gex* 'together, all' quantifies over the clause-initial NP which refers to a set of two or more.

(47) a. ๗ጰ፫ቱወሂ¥፲ᢡ。

co cyx nyip bbup nyop vi **jjy gex** bbop. person DEM.PROX NUM.2 CL labour together do 'These two families are working together.'

cop wox **jjy gex** ix go bbo ox. 3P.PL together, all home go DP 'They all went home.'

The focus adverb *mix* 'even' modifies the immediately preceding noun phrase which assumes different semantic roles (see also section 7.8.2.B).

(48) HX₽ # U00.

mu ga **mix** it nyi gu ox. male name even sleep DP 'Even Muga slept.'

The adverb *ap lo* 'almost' is used before and after the predicate (see section 9.1.4). It implicates one or two meanings. It implicates that an activity was not carried out at all. For incremental verbs, it implicates that an activity was not carried out completely.

(49) a. HIJD母**\$**季荃。

lat hxo op rro **ap lo** bbo. male name Xichang almost go 'Laho almost went to Xichang.' (i.e. 'Laho did not go to Xichang.')

b. 用10044以来。

lat hxo op rro **ap lo** xi bbo. male name Xichang almost arrive go

'Laho almost went to Xichang.' [(i) 'Laho did not go to Xichang.'

(ii) 'Laho did not go all the way to Xichang.']

The adverb *go mox* 'at first' is already sketched in section 7.2.1.A. The adverb *ax nyi pa jop* 'in many ways' is related to the conjunction *cyp pa jop* 'in one aspect' (section 13.1.2.B).

(50) 军权英权引拿世势时刻东水里岳。

ax nyi pa jop mga da svt cv iiit cv cha hna go njuo. affair DEM.PROX CL 3P.SG in many ways according to investigate LOC PROG 'He is investigating what happened from many aspects.'

The sentence adverb ap bo ap de mu 'by any standard' often prompts the use of the postverbal adverb guo 'too much' but not the other way round (section 9.1.4).

(51) 华泉水田水素川前末溪。

ggap mox ap bo ap de mu mgax we guo. road by any standard pass-ddificult too much 'By any standard, the road is impassable.'

The adverb zzip mu 'together' modifies a plural NP in clause-initial position. The morpheme *zzip* is derived from *zzi*, the classifier for pairs (section 5.2.1.E).

ssox sse **zzip mu** shvr ddop bur. da hmat mop jox student together speak loudly STP teacher toward answer 'The students replied to the teacher in unison.'

The adverb dde dde mu means often or always and is employed together with the habitual aspect marker go shex (section 7.6.3).

(53) a. មិ្សាវិម**្គស្កា**ប្រមាធិន

ma **dde dde mu** la nviet go shex. ssox sse a zzvx student DEM.DIST CL often, always come late HAB 'The student often comes late.'

b. ቑ**፬፬ዘ**¥ፄቾ₭₫፟፟፟፟፟ዘዜ

nga dde dde mu syt ne kax hxie vur su mu. affair 2P.SG CLF like 1P.SG always NOM do 'I always do what you like.'

The deictic adverb lot ggu mu 'immediately' achors the event in the immediate future. The adverb hxi mu 'especially' informs about the mental motivation of the subject.

lat ti lot ggo mu xix nvi cv ga gox sha ox. male name immediately what also 3P.SG drop SEND DP 'Lati dropped everything at once.'

(55) 母爭以升手內亞學角性用目出出。

cop wox **hxi mu** tit da nit jop kax sha sha la su nge. 3P.PL especially here 2P.SG to thank come NOM COP 'They came here especially to thank you.'

The preverbal adverb *ryx mu* 'early' is derived from the adjective *ryx* 'early' and contrasts with the postverbal adverb *nyiet* 'late' (see section 9.1.3).

(56) a. 母爭以解爭解。

cop wox li **ryx** -jjy- **ryx**. 3P.PL TOP early very early 'They were very early.'

b. មាទិ**គិ**អបានលិ。

cop wox **ryx mu** la sat ox. 3P.PL early come EXH DP 'They all arrived early.'

The adverb *ap nryr mu* 'really' is derived from the adjective *ap nryr* 'honest' with a slight semantic shift.

> co cyx ma **ap nryr** su nge. person DEM.PROX CL honest NOM COP 'This person is honest.'

b. 增水學用責任。

nga **ap nryr mu** ddiex bur. 1P.SG really correct 'I really want to improve.'

The following two adverbs are derived from two negated verbs.

(58) a. 刊**拿43111311**

cop wox **ap ne mu** ip ko ndup. 3P.PL not-cease=constantly door knock 'They knocked constantly at the door.'

vit gga **sat ap hxit mu** sip go vux njuo. clothes exhaust-not-can=in great numbers take PRO.PAT sell PROG 'Take clothes in large numbers and sell them.'

The adverb *yix nip 'only then'* depends on the clause-initial constituent which is interpreted as a condition for the realization of the event. In (59a), *tomorrow* is interpreted as temporal condition of the event. In (59b), the subject NP is understood as abstract condition of a potential event. In (59c), the subject NP is understood as a default temporal condition of a completed event.

- (59) a. X ទ ៩ និ បិ 🗗 ប 🖨 🕽 ខិ
 - cy mup shy dex **yix nip** op rro la dox. 3P.SG tomorrow only then Xichang come can 'He cannot come to Xichang until tomorrow.'
 - b. **ଶបិ៤** ¥ እ ጅ ዘ ቶ .

ne **yix nip** syt cy jjit mu dox. 2P.SG only then affair DEM.PROX CL do can 'It is only you who can manage this thing.'

c. 1947 X X H 生 的。

ne **yix nip** syt cy jjit mu sat ox. 2P.SG just now affair DEM.PROX CL do EXH DP 'It is just now that you have completed this task.'

The adverb *gex nep* 'originally' is a temporal focus adverb. *Gex nep* also functions as conjunction whose meaning is described in section 13.1.2.C.

(60) H\(\hat{\Pi}\beta\) #\(\hat{\Pi}\beta\) #

cop wox **gex nep** xip sso ap- nzop da. 3P.PL originally, actually DEM.INDEF study NEG- EXP STP 'Originally they did not study such content.'

The adverb *tat lyp* 'but' marks contrast with a previous utterance or situation. The sentence in which it is used stands alone. *Tat lyp* also functions as backward-linking conjunction (section 13.1.3.B).

syt cy jjit **tat lyp** ne hxip gox sha tat xi. affair DEM.PROX CL but, after all 2P.SG say SEND should 'After all, you should solve this.'

9.1.4 Postverbal adverbs

There are several postverbal adverbs with aspectual or frequency meanings. They are listed in the following table.

Table 9.5: Postverbal adverbs

guo 'too much'	ddep lox 'originally'
ap lo 'almost'	sy 'still'
da qix 'almost'	yip sy 'still, yet'
ap cy 'more'	nyiet 'late'
bur 'again'	lut 'enough'

The adverb intensifier *guo* 'too much' is placed after gradable adjectives, as in (62a+b). The adverb *ap lo* 'almost' implicates two interpretations for incremental verbs: *almost do* and *not completely do*, as in (63). The adverb *da qix* 'almost' is an intensifier restricted to states of extensive fatigue, as in (64).

(62) a. 肾氧氟氢氧卤炔, 骨头用水手。

vit gga cyx ggu ax yy **guo**, nga go ggat ap-dop. clothes DEM CL big too much 1P.SG PRO.PAT wear NEG- can 'This garment is too big, I cannot wear it.'

b. ชิโนิปิฟิ

ip nyip mo mu cax **guo**. today sky hot too much 'Today the weather is too hot.'

(63) 发射關制水車。

cy nry zhep ndo **ap lo**. 3P.SG wine CL drink almost

'He almost drank a bowl of wine.' [(i) no wine drinking;

(ii) wine drinking but of less than a bowl]

cy jjix do sy **da qix** da, cyp nyip xyx ne ox. 3P.SG tired die almost STP NUM.1 day rest DP 'He got extremely tired and rested for a whole day.'

The adverb *ap cy* 'more' is used in comparative structures (section 11.4.1.A).

(65) 1目於日1日1第日世本以。

hxo pu cyx ma hxo pu a zzyx ma hmup **ap cy**. mountain DEM.PROX CL mountain DEM.DIST CL high more 'This mountain is higher than that mountain.'

The frequency adverb bur 'again' is derived from the verb bur 'return' (section 6.4.1), as illustrated in (66).

(66) \$∃2\$**⊌**。

rre mop sot bur. ne 2P.SG money count again 'Count your money again.'

The two-syllabic *ddep lox* is an optative particle in clauses with present or future time reference (section 15.3.1). In clauses with past time reference it functions as adverb 'originally'.

(67) 序2中40 (76)

hmat mop xyx ne ox ddep lox. teacher rest DP orginally 'Originally, the teacher was resting.'

The adverbs in Table 9.5 disallow TAM particles except for *ddep lox*, sy, yip sy, nyiet, bur and lut which are compatible with ox. The perfect particle ox is appended left of *ddep lox* and right of the other adverbs. Below are illustrations.

- 1070H670° (68)a.
 - vat -jjy- vat mu ssox sy ox. 2P.SG well very well ADVL study still DP 'You studied very well.'
 - b. 引录到到中母终**承**好的。

te go nga iet zvr **vip sv** ox. a zzvx DEM.DIST time 1P.SG small still DP 'At that time I was still young.'

- c. 华岛南景俊里, 丰米说出发版的?
 - ap ndip hxix mo mgep go, nep nyit xix mu xi **nviet** ox? meeting SENT.TOP 2P.DL arrive late DP why 'Why did both of you arrive late at the meeting yesterday?'
- d. 母母家童命。

zzax zze lut cop iiet ox. 3P.PL.POSS family food eat enough DP 'Their family has already enough to eat.'

Subject

9.2 Negation

In Nuosu, the negation particle *ap* 'not' is used in declarative and interrogative clauses, and the particle *tat* 'do not' in imperative clauses. They occur in different slots and scope over different constituents of the sentence.

9.2.1 Nouns

There are no negative determiners in Nuosu that negate nouns. English no+N constructions are translated by negated existential constructions. Most of these constructions are nominalizations with -su and the existential verb jjo 'have'.

- (69) a. ^第內切對**米**母對**少**對。
 - zzax da yi go **che ma** go **ap-** it storehouse LOC rice LOC NEG- lie 'No grain is left in the storehouse.'
 - b. 例的自己是不甘。

co op rro la su ap- jjo. Subject person Xichang come NOM NEG- have 'Nobody came to Xichang.'

- C. 即而口烟水 电 前。
 - nga suo nyip **zza ap-** zze ox. Direct object 1P.SG NUM.3 day food NEG- eat DP 'I have eaten no food for three days.'
- d. 世米中国的工作事情。

ngat hmi nga hxip **cox** ge su **ap**-jjo Indirect object 1P.SG.POSS name 1P.SG say person tell NOM NEG-have 'I have revealed my name to nobody.'

e. አ**ለጋ**ብበረላለ .9

cy **vi mop ax-** sip syr kie su nge. Instrument 3P.SG axe NEG- COV tree fell NOM COP 'He felled the tree without an axe.'

9.2.2 Noun quantifiers

Noun quantifiers are negated with nominalization constructions with -su and the copular verb nge. The negated copular verb has the effect of negating the quantifier.

- - nyop mu co **nge get** jie shat bbo su **ap-** nge. peasant all street go NOM NEG- COP 'Not all the peasants went to the street market.'
 - b. ※例よ間(乳字)※非本生。 cy co **cyp gge** (ax di) zi su **ap-** nge. 3P.SG person some only cheat NOM NEG- COP

'He cheated not (only) a few people.'

- d. 从用句章用四片环也。
 cy nry **ix nyi** mu ndo su **ap-** nge.
 3P.SG wine few ADVL drink NOM NEG- COP
 'He not only drank a little wine.'

9.2.3 Adjectives

Gradable adjectives are monosyllabic or dissyllabic, sometimes multisyllabic. They can be negated by placing the particle ap before the last syllable of the adjective. The particle ap is a prefix in (71a–b) and an infix in (72a–c).

- (71) a. 日孫分本學。 mu cyx ma **ap-nji**. horse DEM.PROX CL NEG-quick 'This horse is not fast.'
 - b. X年学董皇书录分本事。
 cy hxep go bbox zze a zzyx ma **ap-ge**.
 3P.SG see SENT.TOP man DEM.DIST CL NEG-stupid
 'In his view, that man is not stupid.'
- (72) a. 网午氪水业。 hxop ci **ix-ap-fu**. rope thin<NEG> 'The rope isn't thin.'
 - b. 咧坦卡塚门沙孔水章?
 co nge ci yuot la go **ax-ap-nyi**?
 person NUM.15 CL come SENT.TOP many<NEG>
 'Fifteen people are not many?'

ngat ddox mu cyx ji **mip-ap-ji**. 1P.SG.POSS knife DEM.PROX CL keen<NEG> 'My knife is not keen.'

The negation strategy for ungradable adjectives is more complicated. Several ungradable adjectives in English (*alive*, *dead*, *pregnant*) are translated in Nuosu by positional verbs which are negated as verbs.

> cy go **ap-jjo**. 3P.SG LOC NEG-have 'He is not here.'

cy go **ap-jjo** ox. 3P.SG LOC NEG-have DP 'He is not alive.'

(74) a. X前的水管。

cy ax yi **ap-bbop**. 3P.SG child NEG-sit, possess 'She is not pregnant.'

b. አብክ**ጙ**ዴው ໍ

cy ax yi **ap-bbop** ox. 3P.SG child NEG-possess DP 'She did not have children.'

Second, ungradable adjectives are formed by a root and an ideophonic element which is often reduplicated (section 4.4.4). The negation particle is infixed between the adjective and the ideophone, generally in non-reduplicated form.

(75) a. 串引菜+ 電子+。

she a zzyx ma **chyp-ap-hni**. meat DEM.DIST CL smelly-IDE<NEG> 'This meat is not very smelly.'

b. 데미역 양환 기비 .

cit la hxa bit **jjip-ap-hmur** mu it. basket vegetable full-IDE<NEG> ADVL lie 'The vegetable basket is not completely full.' c. MUN*X.

cit la ggop-ap-ga.

basket empty-IDE<NEG>

'The basket is not completely empty.'

d. Υብ፟፟፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞ ሃልት ተቋ፟ ።

syr a zzyx bbo **vut-ap-lo** mu jjix. tree DEM.DIST CL green-IDE<NEG> ADVL become 'That tree is not sap-green.'

ie qyt a zzyx zhep **mguox-zhyr-ap-zhyr**. Reduplicated water DEM.DIST CL cold-IDE~EXPR<NEG>
'This bowl of water is ice-cold.'

9.2.4 Verbs

Verbs are mono- or dissyllabic, sometimes also multi-syllabic. Verbs are negated by inserting the negation particle *ap* before the last syllable of the verb.

(76) a. 以1目344.

cy hxo pu go syt **ap-mu**. 3P.SG mountain LOC affair NEG-do 'He is not working on the mountain.'

nga yi suo ma **ap-bbop.** 1P.SG house NUM.3 CL NEG-possess 'I do not possess three houses.'

syt cy jjit **gat-ap-qip**. affair DEM.PROX CL delay<NEG> 'The event was not delayed.'

d. ¼#d¥#₭。

cy tep yy **jjie-ap-shyr.** 3P.SG book, paper tear<NEG> 'He did not tear apart the book.'

syr bbo lyr bbur-ap-cyr.

tree move<NEG>

'The tree does not move.'

f. H:1 X & I'B.

lat hxo **guo luo-ap-mut.** male name upset<NEG> 'He did not get angry.'

Negated events are interpreted as states which can be complemented by the stative expression *mu da* (section 7.7.1.B).

(77) 「「公型及系团厂附外长用网。

nyip nyip kep ku cy tep yy nyip zzit **ap- bi** mu da. day NUM.2 within 3P.SG book NUM.2 CL NEG- read make 'It is the case that he hasn't read two books in two days.'

9.2.5 Adverbs

There are movable, immovable and postverbal adverbs. Movable adverbs set a frame for the whole sentence. Negating the predicate entails that the event did not take place in the frame set by the adverb.

(78) 水場上出影はヨコ米水山筋。

ap mut sip mu gox nit rre mop hxe **ap-** li ox. just now male name 2P.SG.POSS money borrow NEG- go DP 'Mugo has not borrowed money from you just now.'

Similarly, immovable adverbs can only be negated when the predicate is negated, as in (79). Sometimes a negated existential construction is used, as in (80).

(79) 岁引却月**亡乎**别。

nga a hnat mu **jy-ap-jie.** 1P.SG very fear<NEG> 'I am not particularly fearful.'

syr bbo **cy jjip cy jjix ap-** jjip **mu** hni la. tree naturally NEG- become ADVL grow come 'The tree did not grow out naturally.'

Several manner adverbs derived from verbs can be directly negated. The effect is the same as negating the predicate directly.

cy syt mu **xy-ap-zzyt-mu**.

3P.SG business do carefully-ADVL<NEG>
'He did not work carefully.'

b. 从中参划升片水升。

cy **xy zzyt zzyp-mu** syt ap-**mu.** 3P.SG carefully-ADVL business NEG-do 'He did not work carefully.'

The postverbal adverbs *guo*, *nyiet*, *bur* and *lut* can be negated, as shown in (82). No other adverb of Table 9.5 can be negated, as illustrated in (83).

(82) a. 剁串刧蟴⊀★。

le she i nu **ap-guo**. beef soft NEG-too much 'The beef is not too soft.'

b. Ջֈֈֈֈֈֈ

cy ssox dde la **ap-nyiet.** 3P.SG school come NEG-late 'He did not come late to school.'

c. XERS\$#.

cy rre mop sot **ap-bur**.

3P.SG money count NEG-again

'He did not count the money again.'

(83) a. *州</br>

*mu ga zzax zze **ap-sy**.

male name food eat NEG-still

Intended meaning: 'Muga has not eaten yet.'

b. *ዘ፡ታ ሀን ብር ላይ ተመመመ ነው።

*lat ti ngat jop ax yy **ap-ap-cy**.
male name 1P.SG.POSS to big more<NEG>
Intended meaning: 'Lati is not taller than me.'

c. *¼¥ዘ៙៝**4**៛ቇ。

*cy syt mu ox **ddep-ap-lox**.

3P.SG business do DP originally<NEG>
Intended meaning: 'Originally, he hasn't being doing business.'

9.2.6 TAM

Most TAM particles are grammaticalized verbs that preserved the property of negation. The negation particle is prefixed to the TAM particle not to the verb.

- (84) a. *X®¥U髭。
 - *cy gup **ap-**ddur **njuo**.

 3P.SG sweat NEG-exit PROG
 Intended meaning: 'He is not sweating.'
 - b. XOUSE.

cy gup ddur **ap-njuo**. 3P.SG sweat exit NEG-PROG 'He is not sweating.'

- (85) a. *奶菜問用**华**口**集**。
 - *co cyx gge mu **ap-**la **sat.**person DEM.PROX CL all NEG-come EXH
 Intended meaning: 'Not all the people have come.'
 - b. ₩¾##11**1114 15** .

co cyx gge mu la-**ap-sat**. person DEM.PROX CL all come-NEG-EXH 'Not all the people have come.'

- - *cop jiet mu ti vot she **ap-**jot **da**.

 3P.PL family morning pig meat NEG-cook STP

 Intended meaning: 'It is the case that their family didn't cook pork in the morning.'
 - b. 创新月時快年單本列。 cop jiet mu ti vot she jot-**ap-da**. 3P.P.L family morning pig meat cook-NEG-STP 'It is not the case that their family cooked pork in the morning.'
- - *lu dda cyp nyip **ap-**zze **nzop**.

 male name NUM.1 day NEG-eat EXP

 Intended meaning: 'Ludda experienced not eating for a day.'
 - b. 習当は報告ます。 lu po ke she zze-**ap-nzop.** male name dog meat eat-NEG-EXP 'Lupo has not eaten dog meat (yet).'

(88) a. *1102水2片。
*cyp op mop **ap-**mop

3P.SG head NEG-dizzy PER

Intended meaning: 'His head is almost never dizzy.'

ndit.

p. 110224中。

cyp op mop mop-**ap-ndit.**3P.SG head dizzy-NEG-PER
'His head is almost never dizzy.'

(89) a. *少量付出水包到路。

*ngop wox vot she **ap-**zze **go shep.**1P.PL pig meat NEG-eat HAB
Intended meaning: 'We are used to not eating pork.'

b. 华第17234世界中国中华。

ngop wox cyp nyip zzix ap zzi vot she zze **go-ap-shep**. 1P.PL NUM.1 day every pig meat eat HAB<NEG> 'We are not used to eating pork every day.'

The perfect particle ox and the future tense particle mix cannot be directly negated. The negation particle must precede the predicate.

- (91) a. ង ម វា និ ម ង ម លិ bbur ma a zzyx ma bbur **ap-**yot **ox.** character DEM.DIST CL write NEG-wrong DP 'This character is not wrong.'
 - b. 异创银行兼承兼是。
 nga ca pot nyip hxe **ap**-mgot **mix**.
 1P.SG day after tomorrow fish NEG-catch FUT
 'I will not catch fish the day after tomorrow.'

9.2.7 Declaratives and interrogatives

Declarative and interrogative clauses always use the negation particle *ap*; negative imperative clauses employ the particle *tat* 'do not' (section 9.2.8). Examples (92) illustrate two declarative and (93) three interrogative sentences.

- (92) a. X회쌍岳奎숭H회**사**됨。
 - cy i xiet ddop bbo nzox mu xip **ap-hxip.** 3P.SG LOG.SG Xide county go EXP ADVL DEM.DD NEG-say 'He did not say that he went to Xide County.'
 - b. Xdx的对外X。

cy nit vup lut jjip **ap-qi.** 3P.SG 2P.SG.POSS neighbour become NEG-want 'He did not want to become your neighbour.'

(93) a. 升心引動?

mu jy ap-**nge** ddap? male name NEG-COP INT 'Wasn't this Mudje?'

b. 照好工师你不**有**重?

lat hxa sse suo yuo ap-**jjo** ddap? male name son NUM.3 CL NEG-have INT 'Hasn't Laha three sons?'

C. 发放性放出重要多水器?

zza cyx jji xix mu ne zze go ap-**nbop**? food DEM.PROX CL why 2P.SG eat SENT.TOP NEG-good 'Why don't you enjoy your meal?'

9.2.8 Imperatives

Negative imperative sentences have the illocutionary force of interdictions. They use the negation particle *tat* which is infixed before the last syllable. In (94), *tat* is prefixed to a monosyllabic verb; in (95), it is infixed.

(94) a. 雪丁求求升弖戬⑩!

ne ge yip yip mu **tat-jjip** ox! 2P.SG stupid ADVL NEG.IMP-become DP 'Don't behave stupidly!'

b. ୬ଐକ୍ରନ୍ୟସ**ସ**!

ne nit sso qop jox ddop **tat-hxip!** 2P.SG 2P.SG.POSS classmate toward word NEG.IMP-say 'Don't talk to your classmates!'

syt cy jjit go da mgat jip **tat-shep**! affair DEM.PROX CL LOC COV advantage NEG.IMP-look for 'Don't take advantage of this situation!'

(95) a. \\ \\ X\ X () (] () ()

syt cy jjit **hxie-tat-yyp!** affair DEM.PROX CL trust<NEG.IMP> 'Don't believe that this event happened!'

ne nga **la-tat-hxex**! 2P.SG 1P.SG wait<NEG.IMP> 'Don't wait for me!'

With third person subjects, the imperative particle *tat* also expresses interdictions.

(96) a. H爭用叉回\.

cop wox mux dde **tat-nra**!
3P.PL field, soil NEG.IMP-measure, gauge 'Don't let them measure the field!'

cy jip xi **hxo-tat-lo!**3P.SG relatives depend<NEG.IMP>'Don't let him depend on his relatives.'

With first person subjects, *tat* functions as optative particle. It expresses the speaker's hope that the event does not happen. In many languages of the world, imperative inflections together with first person subjects implicate the meaning of optative mood (Whaley 1997: 223). Examples (97a+b) show first-person optatives. Clauses with *tat* and first person subjects disallow controlling verbs, as illustrated in (98).

(97) a. ሥአθ៕ቕ፟θ**አ**፭ህ。

nga bbur ma a zzyx ma **bbur-tat-yot**.

1P.SG character DEM.DIST CL write<NEG.IMP>
'I wish I am writing this character correctly.'

b. 少爭回逝。

ngop wox **tat-bbo**. 1P.PL NEG.IMP-go 'I wish we will not leave.'

(98) * # # 第 # 3 # 3 .

*nga cop wox **dit-tat-lyp.**1P.SG 3P.PL persecute<NEG.IMP>
Intended meaning: 'I hope I won't pressure them.'

Chapter 10

Subject and object

Nuosu exhibits a syntactic split conditioned by aspect. This chapter uses materials published in Gerner (2004a). Simple clauses fall into three aspectual categories:

- (i) imperfective clauses with AOV order,
- (ii) resultative clauses with OAV order,
- (iii) clauses with variable word order and potentially ambiguous semantic roles.

Bare simple clauses with two human arguments are ambiguous. A clause like *John Mary bite* can mean *John bites Mary* or *Mary bites John*. In coordinate and relative clauses, Nuosu exhibits a consistent constraint for the deletion of the second coreferential NP which must be in *initial* position of the second clause. The (partial) grammatical relations can be defined as follows:

	Intransitive clauses	Imperfective clauses	Resultative clauses
SUBJECT	Unique NP	First NP	First NP
OBJECT	_	Second NP	Second NP

10.1 Introduction

Many languages manifest inconsistencies in their morphosyntax. They may display an ergative morphology (alignment of S and O) along with an accusative syntax (alignment of S and A). Several scholars have questioned the status of ergativity as 'deep' language feature (Anderson 1976, 1977; Dixon 1994; Haig 1998). In the typological literature, their position is a correction to earlier scholars who believed ergativity (or accusativity) are 'deep' phenomena (Shaumjan 1985; Plank 1985).

Nuosu is not an ergative language, but it manifests great consistency in aligning agent and patient across syntactic constructions. We show the existence of grammatical relations in the following constructions:

- (i) the simple-clause construction (section 10.2);
- (ii) the coordinate-clause construction (section 10.3.1);
- (iii) the relative-clause construction (section 10.3.2);
- (iv) the matrix-clause construction (section 10.3.3).

Simple clauses associate S with A or O morphosyntactically. Complex clauses display syntactic constraints for the deletion of co-referential noun phrases. These

¹ S, A and O are pervasive labels in the typological literature (Dixon 1979, 1994). They represent intermediate notions between semantic role (agent, patient) and syntactic relation (subject, object). In contrast to the syntactic relations of subject and object, S, A and O are universal. They are best understood as an *extensional* grouping of semantic roles.

constraints in terms of S, A and O are also called *pivots*. The notion of pivot is construction-specific: pivot for coordinate clauses, pivot for relative clauses and so forth.

A construction in a language has an S/A (or S/O) pivot if the coreferential NPs are S and A (or S and O) in their respective clause. Liángshān Nuosu is pivotless as it allows deletion independently of S, A and O (see section 10.3).

We call a *sequence* a pair of coreferential NPs with the second NP being deleted. A sequence is tied to individual complex clauses. There are nine logical sequences which can be grouped together into the following six types:

```
S-S = {S_1=S_2};
    S-A = \{S_1=A_2, A_1=S_2\};
- S-O = {S_1=O_2, O_1=S_2};
- A-A = \{A_1 = A_2\};
- A-O = \{A_1=O_2, O_1=A_2\};
- 0-0 = {0<sub>1</sub>=0<sub>2</sub>}.
```

Nuosu exhibits a syntactic split word order AOV / OAV imposed by the aspectual orientation of the clause. Several authors described the basic word order in Nuosu as AOV but did not mention the existence of OAV clauses (Fù 1997; Chén & Wū 1998: 31; Bradley 1990: 134).

10.2 Simple clauses

In Nuosu, bare monotransitive clauses with two human NP arguments are ambiguous.

```
(1) 指5月至。
    lat sse
               mu gox
                          ndup.
    male name male name beat
    'Laze beats Mugo.'/or: 'Mugo beats Laze.'
```

I presented this and a set of similar examples to ten Nuosu students of an Yi class at the Central University for Nationalities (Beijing) in 1995. Half of the students were unsure about the interpretation. Those who opted for AOV or OAV did so because they embedded (1) in serial verb constructions of the type Laze beat Mugo and ran away or of the type Laze was beaten by Mugo and cried.

We investigate the split syntax in Nuosu in the following sections: Imperfective clauses with AOV order (section 10.2.1); resultative clauses with OAV order (section 10.2.2); and residual clauses with variable word order (section 10.2.3). Clauses with rigid AOV or OAV order extrapose noninitial topics into initial position by leaving a resumptive pronoun in the original slot (section 10.2.4). The exhaustion particle always targets the clause-initial NP (section 10.2.5). A and O are both candidates for pro-drop (section 10.2.6).

10.2.1 AOV order in imperfective clauses

The feature of *imperfective* has a broader scope than the notion of progressive aspect. *Imperfective* clauses in Nuosu are marked by the following lexical and grammatical elements:

- Progressive aspect markers;
- A- or V-orientated manner adverbs:
- $V = V_1V_2$ (V_1 is an activity verb and V_2 is a directional verb).

Imperfective clauses in Nuosu always require AOV order. The initial noun phrase is always interpreted as A and the second noun phrase as O.

A. Progressive aspect markers

When the continuous aspect markers *njuo* and *ge* are posed after a transitive verb, the compulsory order is AOV.

- (2) a. HX代8世代。
 - mu ga at zop gur **njuo**. male name female name frighten PROG 'Muga is frightening Adzo.'
 - b. 代码用领用策算。 at nyop mu gox la hxex **ge**. female name male name wait PROG 'Anyo is waiting for Mugo.'
- (3) a. *料狀學歷。
 - *zza mu rryr zze **njuo.**food, meal male name eat PROG
 Impossible meaning: 'The food is eating Mudge.'
 - b. *®X\U\\f'_\alpha
 - *gup cy ddur **ge.**sweat 3P.SG exit PROG
 Impossible meaning: 'The sweat is pouring out of him.'

If njuo or ge was omitted in (2), we would face the same kind of ambiguity described above in example (1). Consider another example.²

² Adapted from the folk story "Looking for mother" (Chén & Wū 1998: 253).

su nyit ddip go ne: "ngax li nyit fup bi fup **njuo**, sorcerer say SENT.TOP TOP $\frac{1P.SG}{A}$ TOP $\frac{ritual\ text}{O+V}$ PROG

nex mgo ap- lit" ddix. 2P.SG pull out NEG- free QUOT

'The priest said: "I am very busy reading the texts.

I am not free to lift you out [of the pit]."'

B. A- or V-oriented manner adverbs

Manner adverbs relate semantically to the verb (e.g. *dance beautifully*), to the A-argument (e.g. *answer eagerly*) or to the O-argument (e.g. *write clearly*). In Nuosu, A- and V-oriented manner adverbs impose the AOV order.³

mga yy ox. pass go down DP

"A sorceress, talking and carrying a tree, passed by."

C. $V = V_1V_2$ (V_1 activity, V_2 directional)

An activity verb (V_1) before a directional verb (V_2) implies a purposive meaning as in *He came to collect vegetables*. The obligatory order is AOV_1V_2 .⁴

(6) 1口主港及身边引往机業门身。

cyp nyip ne vyt vu ix yi ddix lap bbu NUM.1 day TOP elder brother younger brother LOC oxO

 $\frac{\text{hxe}}{\text{borrow}} \ \frac{\text{la}}{\text{come}} \ \frac{\text{lox...}}{\text{and}}$

'One day, the elder brother came to borrow an ox from his brother...'

³ Example (6) is quoted from the folk story "Redisofu overcomes the sorceress with wisdom" (Chén & Wū 1998: 246).

⁴ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 216).

10.2.2 OAV order in resultative clauses

Resultative clauses refer to the state and the preceding action it resulted from (Nedjalkov & Jaxontov 1988: 6). The concepts of resultative state and bounded event are different (e.g. *John goes to the bus station* is bounded but not resultative). In Nuosu, resultative clauses include one of the following elements:

- Resultative auxiliaries:
- O-orientated manner adverbs
- $V = V_1$ -six- V_2 (V_1 is an activity verb and V_2 a directional verb)

Resultative clauses require the OAV order: the first noun phrase is interpreted as O, the second as A.

A. Resultative auxiliaries

Resultative auxiliaries are grammaticalized verbs that often have preserved their original verbal meaning (section 7.3.2). In Nuosu, resultative auxiliaries form a small set.

Table 10.1: Nuosu resultative auxiliaries

Resultative auxiliaries	Verbal origin
wex	'get'
gox sha	sha 'send'
ssop	'shine'
ndox	'put'

The resultative auxiliary *wex* imposes the order OAV. The verb plus the resultative auxiliary means *find* and requires the order OAV.⁵

"uo nyie	suo	li	jjip	su	ne	shep	wex	dop do?"
hair	NUM.3	TOP	become	NOM	2P.SG	search	GET	can~ALT
		0			A		V	

^{&#}x27;Are you able to find three-meter-long hair?'

The auxiliary *gox sha* 'away' is compatible with a wide range of transitive activity verbs and imposes the OAV order (section 7.3.2.B).⁶

⁵ Quoted from the folk story "Looking for mother" (Chén & Wū 1998: 254).

⁶ Quoted from the folk story "The drunk man" (Chén & Wū 1998: 230).

"nry mu nry yuot sip lot ji ji nga jjuo gox sha ox." wine do wine wrong CONJ
$$\underbrace{\text{finger CL}}_{O} \underbrace{\text{1P.SG}}_{A} \underbrace{\text{cut off SEND}}_{V} DP$$

The following example illustrates the auxiliary *ssop* which cannot occur as independent predicate (section 7.3.2.C).

(9) 1到於母裏書口。

cyp i qi cop wox ndup **ssop.** 3P.SG.POSS head 3P.PL beat END 'He endured their beating on his head.'

B. O-oriented manner adverbs

Manner adverbs that depend on the O impose OAV word order. The manner adverb *snow-white* in (8) occurs after the predicate without the adverbializer *mu*.

'The clothes were washed snow-white by Mum.'

C. $V = V_1$ -six- V_2 (V_1 activity, V_2 directional)

When the linker *six* is inserted between an activity and a directional verb, it conveys resultative meaning and requires OAV order, as illustrated in (11).⁷

(11) 译术以来**夏**奎争,以上引导的。

$$\frac{\text{ox}}{\text{O}} \quad \frac{3\text{P.SG}}{\text{A}} \quad \frac{\text{bnrow}}{\text{V}_1} \quad \frac{\text{cONJ}}{\text{V}_2} \quad \frac{\text{go}}{\text{V}_2} \quad \text{and} \quad 3\text{P.SG} \quad \text{take kill eat DP}$$

10.2.3 The indeterminate word order

Simple clauses that are not imperfective or resultative are ambiguous if both arguments are humans. Nuosu has several means of dealing with this ambiguity: with a

^{&#}x27;Because of the wine, I have cut off my finger.'

^{&#}x27;The ox was borrowed and he killed it and ate it.'

⁷ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 216).

grammatical tone on singular pronouns (section A); with a grammatical tone on a set of monosyllabic verbs (section B); with a patient pronoun (section C); and passive marker (section D).

A. The grammatical tone on pronouns

There are three tones in Nuosu with a solid phonological status: the 55-, the 33-, and the 21-tone. The 44-tone is a sandhi tone with weak phonological standing. Few independent monosyllabic lexemes carry this tone.

- (12) xip 'such a' xi 'arrive' xix 'what'
- (13) cyp 'one' cy 'he/she' cyx 'this'

Almost all other occurrences of the 44-tone are sandhi tones derived from an underlying 33-tone (section 3.2.2). Additionally, there are grammatical 44-tones on pronouns and verbs. Singular personal pronouns exhibit 33/44-tone variants encoding the contrast of S/A versus O-roles (section 5.4.1.A).

Table 10.2: Nuosu tone-sandhi pronouns

Singular pronouns	S/A	0
1P.SG	nga	ngax
LOG.SG	i	ix
2P.SG	ne	nex
3P.SG	су	cyx

The following sentence contrasts the second person O-pronoun nex with the first person A-pronoun nga and illustrates also the second person S-pronoun ne.⁸

 ${f \hat{r}}$ የመሄር ማሀኪ ቴ ደሀ ቼ ሂገ ሁ ኤ ቪር አዙ ፕ ሂዝ ተላጋ ይ ${f \hat{t}}$ ይወጃ ነ እላ ይወደ ጀ ጀ ጀ አል እንር ማሀኪ ቴ ደሀ ቼ ሂገ ር ዝ ተላ (14)nyip mop nyip vox sse si nip va vu go || ssa kuo-ijy-ssa kuo hen catch TOP || courage-very-courage STP 2P.SG In the past lamb and mup dde nep **nex** pu yy || ap mu cyx ggup lat mop jox ddop ma nga 2P.SG admire | 1P.SG really now DEM VCL tiger to word Α nyip go hxip li go NUM.2 CL sav

"In the past you caught a lamb and a hen. You are extremely courageous and I really admire you for this. This time just go to the tiger and speak a few words with him. It is up to you to do this first."

⁸ Quoted from the folk story "The forest meeting" (Chén & Wū 1998: 261-262).

B. The grammatical tone on verbs

Certain monosyllabic verbs alternate between the 21- and 44-tones. Verbs in the 21-tone are associated with the OAV order, in the 44-tone with the AOV order. Native speakers do not agree on the verbs that manifest these alternations. They appear to be restricted to the Shynra dialect. Chén & Wū (1998: 129–130) provide a list of 36 monosyllabic verbs.

OAV	AOV	English gloss
hxep	hxex	'see'
ndup	ndux	'beat, hit'
sip	six	'take'
lup	lux	'rob'
vup	vux	'sell'
рор	pox	'open'
sup	sux	'resemble'
syp	syx	'know'
hxop	hxox	'paint'
shep	shex	'look for'

Table 10.3: Nuosu tone-sandhi verbs (excerpt)

Examples (15) illustrates the OAV order for the verb *hxop* 'paint' and (16) the AOV order for the verb *shex* 'search'.⁹

yi max su cy hxop six vut mo mo mu da. house
$$\overline{ART}$$
 \overline{O} \overline{A} \overline{V} RES bright green make

C. The pronoun go

The pronoun *go* tracks O-arguments and disambiguates potentially ambiguous frames (section 5.4.1.F). The ambiguous clause can be disambiguated by inserting *go* after the second NP. It is interpreted as being coreferential with the first NP.

^{&#}x27;He painted the house in bright green.'

^{&#}x27;The sorceress was tricked by him to search for them [= the objects].'

⁹ Example (16) is quoted from the folk story "Redisofu overcomes the sorceress with wisdom" (Chén & Wū 1998: 244).

(17) a. HXHAB7。

$$\frac{\text{mu ga}}{\text{male name}} \; \frac{\text{lat mop}}{\text{male name}} \; \frac{\text{dit lyp.}}{\text{oppress}}$$

$$\frac{\text{O/A}}{\text{O/A}} \; \frac{\text{oppress}}{\text{V}}$$

'Muga oppresses Lamo.'/ 'Lamo oppresses Muga.'

mu ga ₁	lat mop	\mathbf{go}_1	dit lyp.
male name	male name	PRO.PAT	oppress
0	A	0	V

^{&#}x27;Muga₁, Lamo oppresses him₁.'

Unambiguous frames cannot use the resumptive pronoun in the same way. Example (18) is thus ungrammatical.

*mu ga	zza	go	zze.
male name	food	PRO.PAT	eat
0		0	V

Intended meaning: 'Muga eats food'

Many stative predicates do not have ambiguous frames but encode the semantic roles as AOV. The use of the resumptive pronoun *go* is ungrammatical.

$$\frac{\text{mu ga}}{\text{A}} \quad \frac{\text{at nyop}}{\text{female name}} \quad \frac{\text{mgu.}}{\text{miss, love}}$$

'Muga loves Anyuo.'

*mu ga ₁	at nyop	\mathbf{go}_1	mgu.
male name	female name	PRO.PAT	miss, love
0	A	0	V

Intended meaning: 'Muga₁, Anyuo loves him₁.'

Native speakers do not agree which predicate with two human arguments represents an ambiguous frame. The following table indicates tendencies.

Verbs with unar	mbiguous AOV order (<i>go</i> forbidde	n)	
bba	'carry on back'	hxo	'feed, bring up'
duo	'hold in arms'	mgu	'love'
Verbs with unar	mbiguous AOV order (go possible)	
nzur	'hate'	hxo lo	'depend on'
shut	'remember'		
Verbs with inhe	rently ambiguous coding (<i>go</i> obli	gatory)	
lop bop	'help'	bie	'kick'
јир ро	'rule, administer'	zi	'cheat'
dit lyp	'oppress, force'	ggup cyr	'save'
bu dex	'praise'		

Table 10.4: Unambiguous and ambiguous verb frames in Nuosu

D. The passive marker gep

The passive particle gep also disambiguates between A and O by fixing the word order as OA gep V (section 11.1). Passives can be defined in a language, only if it has the grammatical relations of subject and object. In section 10.4, we claim that Nuosu has subjects and objects. Below are given two illustrative examples.

- 引的X1X 4 X 的利米市。 (20) a. **gep** zi hnat da ax vi cv cox ku bbo shux. child 3P.SG COV lure STP people steal go CAUS 'The child was lured by him into stealing.'
 - cv ax yi max su **gep** shu ke ci -jjy- ke ci ox. 3P.SG child ART=CL-DET COV COV obey very obey DP 'She was made obedient by the child.'

10.2.4 Left-dislocation

Left-dislocation is the placement of a noninitial NP into initial position by leaving an optional resumptive pronoun in the original slot. Syntactic constraints on left dislocation reveal how a language aligns S, A and O.

In Mandarin Chinese, for example, the basic order is AVO. Left-dislocation of O is possible but a pause (particle) must be used after O. Pauses or pause particles do not appear after S and A which occur in front position naturally.

(21) nèi
$$\operatorname{zh\bar{i}}$$
 gŏu $\left\{ egin{array}{l} \varnothing \\ a \\ me \\ ne \end{array} \right\}$ wŏ yĭjing kàn guo le. $\operatorname{DEM.DIST}$ CL dog PAUSE 1P.SG already see EXP DP

'The dog, I have already seen.' (Li & Thompson 1981: 86)

In Nuosu, left-dislocation of the noninitial noun phrase in both AOV and OAV orders is possible. The following example illustrates both types of left-dislocation (the resumptive pronoun is marked in bold font).¹⁰

"co qot a mat ₁ sorceress	nga 1P.SG	cyx ₁ 3P.SG	shy over	come N	ap- NEG-	do _l abl	p mu le ADVL			
topic	A	0			V					
	la ru dried	meat	cy ₁ 3P.SG	gax COV.d	rop (zze eat	lox CONJ.and	bbo go	ox" DP	ddix. QUOT
)	A		-	V				

[&]quot;I could not overcome the sorceress and she just took the meat."

The extraposed topic of (22), the sorceress, is tracked in both clauses by a resumptive pronoun. Left-dislocation does not exhibit syntactic constraints on A or O.

10.2.5 The exhaustion particle

The exhaustion particle *sat* (section 7.5.1) always scopes over the clause-initial noun phrase, either A or O. *Sat* thus targets not a semantic role but a syntactic position, *the subject*.

(23) a. 创拿釜圳绿色石山堰。

- (i) 'They all climbed up the mountain.' (ii) 'They completely climbed up the mountain.'
- b. 华第对季前网第日第**建**。

'We are all waiting for you at the entrance door.'

¹⁰ Example (22) is quoted from the folk story "Redisofu overcomes the demon with wisdom" (Chén & Wū 1998: 239).

c. 母爭月打豪問型集。

(i) 'They all finished the wine.' (ii) 'They completely finished the wine.'

(24) a. 爿引录间刊争增集。

'They finished all the wine.'

。**创建**门址呈以北间33 % . d

'He has shot down all the birds.'

'I endure all hardships.'

Initial NP is O

Initial NP is A

Initial NP is O

10.2.6 Pro-Drop

Pro-drop (or zero-anaphora) is the omission of obligatory arguments in contexts in which they are understood. Pro-drop is widespread in languages with verb agreement like Italian but not allowed in languages with no or poor verb agreement like English (Rizzi 1986). An exception are languages like Chinese, called *radical pro-drop languages*, which lack agreement but allow pro-drop (Huang 1984; Neeleman & Szendröi 2007). Sometimes languages reveal additional constraints on the argument that is omitted.

In Nuosu which is radical pro-drop, zero-anaphora is unconstrained for S, A and O. Restrictions only exist for peripheral roles, as shown in Table 10.5 below.

Benefactive

Locative

'Customer: "This hat is too small, give me a bigger one."'

In (25a), the coverb *sip* must be specified. When the O-argument is omitted, as in (25b), the coverb *sip* is optional.

Customer: "uop lur cyx ma da dop ox, hat DEM.PROX CL put able DP

Ø Ø sip nga bbyx la."

[empty] [empty] COV.take 1P.SG give come

'Customer: "This hat is suitable, give it to me."'

Benefactive and oblique NPs cannot be deleted whatever the discourse settings are. The arguments in bold font must be specified.

'I write him/her a letter.'

 $\frac{\text{cy}}{\text{S}_1} \quad \frac{\text{op rro}}{\text{it, nga nyi tit go}} \quad \text{it.}$ $\frac{3P.SG}{S_1} \quad \frac{\text{live}}{V_1} \quad \frac{1P.SG}{S_2} \quad \text{also here PRO.LOC} \quad \frac{\text{live}}{V_2}$

'S/he lives in Xichang, and I also live there.'

By contrast, the semantic role of *direction* can be omitted in appropriate discourse settings (Lǐ & Mǎ 1981: 2).

'A: "I go to Xichang." (...) B: "I also go to Xichang."'

The constraints on pro-drop of various semantic roles is summarized in Table 10.5.

Table 10.5: Semantic roles and pro-drop in Nuosu

Semantic roles	Pro-drop
S	✓
Α	✓
O (with or without the coverb sip)	✓
Benefactive (with the coverb bbyp)	×
Benefactive (without the coverb bbyp)	×
Instrument (with the coverb sip)	×
Location	×
Direction	✓

10.3 Complex clauses

When two noun phrases in a complex clause are coreferential, the second noun phrase can be elipsed *if* both coreferential noun phrases occur in initial position of their respective clause. In this section, we investigate coordinate clauses (section 10.3.1), relative clauses (section 10.3.2) and matrix clauses (section 10.3.3).

10.3.1 Coordinate clauses

The second coreferential noun phrase in S-A, S-O and A-O sequences can be deleted.

A. S-A sequence

The second clause in (28) is imperfective with obligatory order AOV. The elipsed noun phrase is in initial position of the second clause. The coordinate clause is an S-A sequence.¹¹

¹¹ Quoted from the folk story "The drunk man" (Chén & Wū 1998: 229).

Ø che mu yy hxex bbo. [empty] rice water field see go

'On a day, Jjimuvuho was drunk and went out to inspect his rice field.'

The next example is an A-A-S sequence of coreferential noun phrases.¹²

(29) a. 母片对至前少生以中原外对手生例目。

$$\frac{\text{ddie}}{V_2} \text{ da} \quad \left\| \begin{array}{c} \emptyset & \text{it} \\ \hline [\text{empty}] & \text{sleep} \\ \hline S_3 & \hline V_3 \end{array} \right.$$

'Mister Pu's family blocked the entrance gate with stone bricks and then fell asleep.'

The property of coreferential deletion in initial position can be tested by imposing in the second clause the word order OAV (with the resultative auxiliary *gox sha*). The modified construction is ungrammatical.

b. *重片利至前少多米分景网对多Ø生争用网目。

*pup su vut vu ix go ne lur juo six da male name home TOP stone brick take
$$O_1$$
 O_2 O_2 O_3 O_4 O_4 O_5 O_5 O_7 O_8 O_9 O

$$\frac{\text{ddie}}{\text{block}} \begin{array}{c|c} \textbf{gox sha} & \text{da} \\ \hline \text{block} \\ \hline V_2 \end{array} & \text{SEND} & \text{STP} \end{array} \left\| \begin{array}{c|c} \emptyset & \text{it} \\ \hline [\text{empty}] & \text{sleep} \\ \hline S_3 & \hline V_3 \end{array} \right.$$

Intended meaning: 'Mister Pu's family blocked up the entrance gate with stone bricks and then fell asleep.'

Example (30) is an S-A-S-S sequence with four verb phrases.¹³

¹² Quoted from the folk story "The sleepy Mister Pu" (Chén & Wū 1998: 233).

¹³ Quoted from the folk story "Fear the wives" (Chén and Wū 1998: 226).

(30) 发达昨点的巨州的事事对表及 (…)

 V_3

 S_4

Example (31a) contains an A-S sequence.¹⁴ If we permute the order of arguments in the first clause, the coreferential NP is not in the initial position and the whole construction is ungrammatical.

$$\frac{\text{Ø}}{\text{S}_2} \quad \frac{\text{it nyi gu ap-} \quad \text{hna}}{\text{Sleep}} \quad \frac{\text{ap-} \quad \text{hna}}{\text{NEG-}} \quad \text{willing}}{\text{V}_2} \quad \text{DP}$$

'In the evening the emperor caressed his silver and gold so that he did not want to sleep.'

 \mathbf{b} . * \mathbf{F} MQS \mathbf{A} 31 \mathbf{U} 1 \mathbf{E} 1 \mathbf{K} 8 \mathbf{A} 4 \mathbf{U} 1 \mathbf{E} 1 \mathbf{K} 8 \mathbf{A} 3 \mathbf{U} 1 \mathbf{E} 1 \mathbf{E} 1 \mathbf{E} 1 \mathbf{E} 1 \mathbf{E} 2 \mathbf{E} 3 \mathbf{E} 3 \mathbf{E} 4 \mathbf{E} 3 \mathbf{E} 4 \mathbf{E} 5 \mathbf{E} 5 \mathbf{E} 5 \mathbf{E} 6 \mathbf{E} 6 \mathbf{E} 7 \mathbf{E} 7 \mathbf{E} 7 \mathbf{E} 7 \mathbf{E} 8 \mathbf{E} 9 \mathbf{E} 8 \mathbf{E} 9 $\mathbf{$

*tit da qu shy ket mop ne vo mu max su ngo da thus
$$\frac{\text{silver gold}}{O_1}$$
 evening TOP $\frac{\text{king}}{A_1}$ $\frac{\text{ART}}{V_1}$ $\frac{\text{touch}}{V_1}$

$$\frac{\text{Ø}}{\text{S}_2} \quad \frac{\text{it nyi gu ap-} \quad \text{hna}}{\text{Sleep}} \quad \frac{\text{ap-} \quad \text{hna}}{\text{NEG-}} \quad \text{willing}}{\text{V}_2} \quad \text{DP}$$

Intended meaning: 'In the evening the silver and gold was caressed so much by the emperor that it did not want to sleep.'

^{&#}x27;These four men hid and drank wine behind the house; they sat there and discussed...'

¹⁴ Quoted from the folk story "The emperor and his daughter" (Chén & Wū 1998: 265).

B. S-O sequence

The type of sequence displayed in (32) is INSTR-S-0.15

'He took the dog to plough the soil, but it didn't want to move. So he beat the dog to death.'

Sentence (33) represents an S-O sequence. The second clause is resultative with an O-orientated adverb.¹⁶

'At the place where the dog's body was buried, a bamboo shoot was growing. He took it and sharpened it to a point.'

Example (34) is an O-S sequence.¹⁷

¹⁵ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 217).

¹⁶ Quoted from the folk story "The elder and the younger brother" (Chén & Wū 1998: 217).

¹⁷ Quoted from the story "Redisofu overcomes the demon with wisdom" (Chén & Wū 1998: 239).

ji jie va nyi zzur max su cy gur male name ART
$$\frac{3P.SG}{A_1}$$
 $\frac{frighten}{V_1}$ \emptyset jie bbyp bbyp mu gox nyi. [empty] afraid IDE IDE ADVL PRO.LOC $\frac{1}{S_2}$ $\frac{1}{V_2}$

C. A-O sequence

The following example exhibits an A-O sequence.¹⁸

(35) 中間科別世母母目用以不用用母表的中和田口密的利路。

Α

Another example of an A-O sequence is the following sentence which we already encountered in section 10.2.3.B.

'The sorceress was tricked by him to search for them [= the objects].'

10.3.2 Relative clauses

The Nuosu split syntax is also obvious in relative clauses with -su (section 5.2.4). If the extraposed head noun is coreferential to the initial NP of the relative clause, it is gapped; if is coreferential to a noninitial NP, it is tracked by a resumptive pronoun.

^{&#}x27;Djidjevanidzu, frightened by her, was sitting there trembling.'

^{&#}x27;Djidjevanidzu swang the feather-duster but without effect. Rather, with a breath from the sorceress he was blown onto the roof.'

¹⁸ Quoted from the story "Redisofu overcomes the demon with wisdom" (Chén & Wū 1998: 239).

Obligatory word order in relative clause	Role of extraposed head	Use of resumptive pronoun
AOV	А	[_{RC} ∅ _{A] +su+N}
OAV	Α	$[_{RC} PRO_A V] + su + N$
AOV	0	$[_{RC} \ \emptyset_{0}] + su + \mathbf{N}$
OAV	0	[RC PRO o V] +su+N

Table 10.6: Gapped and resumed head nouns of relative clauses

We will again use the notion of *sequence* to refer to pairs of coreferential noun phrases in the main clause and relative clause.

A. S-A sequence

In (37), the relative clause has the word order AOV. The gapped head noun has the A-role and is in initial position of the relative clause.¹⁹

The relative clause in (38) is resultative and has obligatory OAV order. The extraposed head noun has the A-role but does not occur in initial position of the relative clause. It leaves a resumptive pronoun in the original slot.

B. S-O sequence

The relative clause in (39) contains the resultative auxiliary *gox sha* and has obligatory OAV order. The extraposed head noun has the O-role and is in initial position of the relative clause.

¹⁹ Quoted from the folk story "The drum and the ox" (Chén & Wū 1998: 224).

(39) 未付出人的多用作和体系和体。

$$\frac{\text{tep yy}}{\text{book}} \parallel \frac{\emptyset}{\text{O}_2} \quad \frac{\text{mu ga}}{\text{A}_2} \quad \frac{\text{gup}}{\text{brow SEND}} \quad \frac{\text{su}}{\text{NOM}} \parallel \frac{\text{a shyt -jjy- a shyt}}{\text{new very new}} \\ \frac{\text{new very new}}{\text{V}_1}$$

'The books which were thrown away by Muga were brand-new.'

The relative clause in (40) is imperfective with obligatory AOV word order. As the extraposed head noun is O but not in initial position of the relative clause, it is leftdislocated by leaving a resumptive pronoun in the original slot.

'The clothes that Mum is washing are many.'

10.3.3 Causative clauses

Causative clauses seem to align S with A versus O. The causee must be either S or A but not O. This alignment of S and A does not reveal anything about the syntax of Nuosu but is implied by universal semantic properties of causative constructions.

A. Causee = S

When the causee is coreferential with the S of a causative clause, it is deleted. The causee can be animate, as in (41), or inanimate, as in (42).

'The neighbour makes me happy.'

cop wox yy sse jix su bbyx
$$\frac{3P.PL}{CAUSER}$$
 river ART $\frac{COV}{V_1}$ $\frac{[empty]}{S_2}$ around $\frac{pass}{V_2}$ $\frac{go}{V_2}$ CAUS 'They cause the river to flow around [the village].'

B. Causee = A

The causee can be coreferential to the A of an imperfective causative clause, as in (43), 20 or to the A of a resultative causative clause, as in (44).

C. Causee ≠ O

The causee cannot be coreferential to the O-argument of a causative clause.

10.4 Synthesis

Some authors argued that a language uses the notion of *subject* and *object* only if it morphosyntactically aligns S with A or with O (van Valin & LaPolla 1997). LaPolla (1993) demonstrated that in Mandarin Chinese a viable definition of subjects and objects is not possible as there are no clear S/A or S/O pivots.

In Nuosu, S is not morphosyntactically aligned with A or with O either. However, a purely syntactic definition of subject and object is possible. The initial NP is the subject, the second NP is the direct object. This definition is only partial. It does not account for *indeterminate clauses*, which are neither imperfective nor resultative.

²⁰ Example (43) is quoted from the folk story "Redisofu overcomes the sorceress with wisdom" (Chén & Wū 1998: 238).

Table 10.7: Partial grammatical relations in Nuosu

	Intransitive clauses	Imperfective clauses	Resultative clauses
SUBJECT	Unique NP	First NP	First NP
OBJECT	-	Second NP	Second NP

The syntax of Nuosu requires a revision of the idea that syntactic relations should be defined in terms of S/A or S/O pivot (Dixon 1994; van Valin & LaPolla 1997). Gerner (2004a) discusses these findings in detail.

Chapter 11

Valency changing constructions

Nuosu employs two valency decreasing constructions, passive (section 11.1) and reciprocal (section 11.2), and two valency increasing constructions, causative (section 11.3) and comparative (section 11.4).

11.1 Passive

In section 10, we argued for the existence of subject and object in *imperfective* and *resultative* clauses. For languages with syntactic relations, we can evaluate the existence of passive constructions. (For languages without subject and object, the concept of passive cannot be defined.)

A passive construction satisfies the following three properties (Dixon 1994: 146; Haspelmath 1990: 27; Palmer 1994: 117–141; Siewierska 1984: 2–3):

- (1) a. the subject is demoted to a non-core argument or deleted,
 - b. the object is promoted to subject,
 - c. the valency of the predicate is decreased.

We argue in this section that the coverb *gep* (section 6.2.1.A) is the formal mark of constructions that satisfy (a), (b) and in a certain sense also (c). Nuosu therefore exhibits a passive construction though not the most prototypical.

We discuss the origin of the coverb *gep* in section 11.1.1, the concept of adversity often associated with passives in East Asian languages in section 11.1.2, the omission of unimportant demoted subjects in section 11.1.3, and the exclusion of low-transitivity verbs in section 11.1.4. This subsection uses material published in Gerner (2004a).

11.1.1 The passive postposition

The postposition *gep* is derived from the verbal predicate *gep* 'add' (section 6.2.1.A). Its meaning as predicate is illustrated in (2).

```
(2) ⑨ 判析 以 ( ) 。
ce te sha zzit gep (da hlu).
dish chili add STP cook
'Add chili to the dish (and cook it).'
```

In the passive construction, the postposition gep marks the agent noun phrase in second position.

cyp lot cy **gep** zhe sy ddur ox. 3P.SG.POSS hand 3P.SG COV cut blood exit DP 'His hand, cut by himself, bled.'

ka bba ax yy cy **gep** ngo ndox ox. prize big 3P.SG COV touch PUT DP 'A big prize was won by him.'

The passive meaning is historically derived from the main verb *add*. A noun phrase referent was associated with the patient as a companion in the event. The meaning of companion was eventually reanalyzed as agent.

11.1.2 The concept of adversity

Many East Asian languages have passive constructions that convey adversity, the idea that the situation is unfortunate. The concept of adversity is unknown in the languages of Europe. In Nuosu, adversity is not conveyed by *gep*. The particle *gep* is compatible with euphemic contexts without implicating adversity.

(4) 生母间步次母亲居免析学析。
ddip vip ggex su cy **gep** zzyx jie six he -jjy- he.
guest ART 3P.SG COV entertain RES good very good

'The guests were entertained very well by him.'

11.1.3 Omission of unimportant demoted subjects

Pro-drop is widespread in Nuosu (section 10.2.6). It is possible to delete A whenever it may be inferred from the context and represent unimportant pragmatic information. It is not possible to delete A when it is marked by *gep*. By contrast, the Chinese passive marker *bèi* allows deletion of the agent NP.

(5) tā **bèi** Ø mà le. (Li and Thompson 1981: 493) 3P.SG PASS [empty] scold DP 'He/she was scolded.'

In the following Nuosu example, it is not possible to delete the agent *Xido Bo'ondju* before the postposition *gep*, although it can easily be inferred from the context.¹

^{1 (6)} is quoted from the folk story "Redisofu overcomes the sorceress with wisdom" (Chén & Wū 1998: 241).

(6) 中间表现受害害害化型月次口能的利路。

11.1.4 Exclusion of low-transitivity verbs

The *gep*-construction does not exhibit morphological marking on the verb, but decreases the transitivity of the predicate in a more abstract way. Clauses using *gep* have a high degree of transitivity (Hopper & Thompson 1980). Clauses with low transitivity cannot co-occur with *gep*. Languages with passives typically exhibit this transitivity constraint. For example, the Nuosu verb *gur* 'frighten' is morphologically derived from the verb *ggur* 'fear'. The high-transitive verb *gur* can co-occur with *gep* but the low-transitive verb *ggur* cannot.²

'He was so frightened by the wives so that he stood speechless.'

*mu ga nga **gep** ggur ox name 1P.SG COV fear DP

'Intended meaning: 'Muga is feared by me.'

The following verbs may not co-occur with *gep*: *sy* 'know', *bbop* 'own', *hxie vur* 'love', *mgu* 'love', *hxep* 'see', *hna* 'hear' and *hnip* 'smell'. Clauses with *gep* therefore have reduced transitivity (Hopper & Thompson 1980).

Gep-constructions in Nuosu are passives, if we substitute the constraint of valency decrease in (1c) by the looser requirement of transitivity decrease. *Gep*-constructions are the passive of both AOV and OAV clauses. For imperfective AOV clauses (section 10.2.1), it is straightforward to view OA+*gep*+V as the derived passive. Resultative OAV clauses (section 10.2.2) exhibit the same word order as the *gep*-construction, their passive construction to which they bear resemblance.

^{&#}x27;Xido Bo'ondju repeatedly stamped his feet, but in vain. He was blown up onto the roof by the witch.'

^{2 (7)} is quoted from the fold story "Fearing the wives" (Chén & Wū 1998: 227).

In summary, Nuosu displays two sorts of passives: an imperfective passive derived from ongoing AOV clauses and a resultative passive derived from resultative OAV clauses.

11.2 Reciprocal

In a reciprocal clause, two noun phrases occupy interchangeable semantic roles of the predicate. The clause John and Peter shoot arrows at each other implies that John shoots arrows at Peter and Peter shoots arrows at John. Cross-linguistically, reciprocal constructions use anaphors such as each other or verb affixes. Reciprocal anaphors do not decrease the valency of the predicate but verb affixes do.

The Nuosu verb prefix jjy- decreases the valency of the predicate. It cannot be prefixed to intransitive verbs, only to mono- and ditransitive verbs.

```
(8) a. * H X 泉 & W 专 ¥ 年 的。
        *mu ga
                     si nip lu ti
                                        iiy-
                                               na ox.
                            male name RECL- ill DP
         male name and
         'Intended meaning: 'Muga and Luti are both ill.'
    b. * 少 米 ¥ 知 的。
        *ngap nvit iiv-
                           nbur ox.
         1P.DL
                    RECL- full DP
         'Intended meaning: 'Both of us are full.'
```

The predicate must allow two argument slots to be permutable. It must be possible that both arguments occur variably in both semantic roles.

```
(9) a. 哲爭孕口策內坐。
        nop wox jjyx-
                       la hxex da
                                   bbo.
                               STP go
        2P.PL
                RECL- wait
        'When you go wait for each other.'
```

b. ՈրԲզֈ»Չֈեն ax yi sux yy mox da iiy-mgot njuo. child older people in front of STP RECL-pursue PROG 'The children chase each other in front of older people.'

```
c. 少米 学 图 X 。
   ngap nyit jjyx- hxi zy.
    1P.DL
              RECL- trust
    'We both trust each other.'
```

d. 水瓷去水沉水未。

ngop wox **jjy**- ap-ly-ap-tie.

1P.PL RECL- NEG-discuss<NEG>
'We did consult each other.'

e. មិរាអ្វិក្រាស្ត្រិត្ន ្

ssox sse a zzyx nyip bbot ip nyip **jjyx**- hxip bot. student DEM.DIST NUM.2 CL today RECL- debate 'Those two groups of students argue today with each other.'

The reciprocal marker *jjy*- can also be prefixed to ditransitive verbs and even to coverbs.

cop wox ka bba ddie **jjy**-bbyx. 3P.PL present COV RECL-give 'They gave each other presents.'

h. «የተጀተተ

ngop nyip bbup **jjyx**-nre sur.

1P.DL family RECL-debt return

'Our families are paying off debts to each others.'

c. 本美太豊日州電台。

ngop wox **jjy**-rrox mu da ddop hxip. 1P.SG RECL-COV STP word speak 'We are speaking on behalf of each other.'

ax mo ax yi **jjy**-mgex da ngo. mother child RECL-COV.mix STP cry 'Mother and child are weeping together.'

The reciprocal prefix *jjy*- has a derived function in comparative constructions (section 11.4.1.C). It indicates that two referents share a property to the same extent.

ggap mop cyx ji si nip a zzyx ji **jjy**- shox. road DEM.PROX CL and DEM.DIST CL RECL- long 'This road is as long as that one.'

b. ≢ሄጴኮθ¥₫。

syp ga cyx nyip ma **jjy**- yyx. pear DEM.PROX NUM.2 CL RECL- big 'Both pears are equally big.' c. 224che mu cvx jot si nip a zzvx iot iiv-ap-fi. rice paddy field DEM.PROX CL and DEM.DIST CL RECL-NEG-wide 'This rice field is not as wide as that one.'

11.3 Causative

Three structural causative types are reckoned in the typological literature (Whaley 1997): lexical causatives (kill = cause to die), morphological causatives (affix + Verb), and analytic causatives (make to do). Haiman (1983) argued for an iconic correspondence between the structural types and the concept of direct causation. Lexical causatives display a close relation between the causing event and the caused event, whereas for analytic causatives the link is looser.

Table 11.1: Haiman's iconic causation correspondences

Structural Types	Causation Types
lexical causatives	more direct
morphological causatives	medial
analytic causatives	less direct

Nuosu has several analytic causatives with different semantic nuances and overtones. These constructions have two formal marks, the causative coverb and the causative particle *shux* which occurs after the verb of the embedded clause.

Table 11.2: List of causative coverbs

Coverb	occurs after	Structure
bbyp/bbyx 'give'	causee	bbyp/bbyxV + shux
ddie 'prepare'	causer or causee	ddieV + shux
ga 'drop'	causer or causee	gaV(+ shux)
shu 'make'	causer or causee	shuV

We survey the four causative coverbs in section 11.3.1 (see also section 6.2.3) and the causative particle *shux* in section 11.3.2.

11.3.1 Causative coverbs

Languages with morphological case use different cases for the causee. Comrie (1989) argues for an iconic link between case and the degree of control that the causee retains in the event. Nominative case encodes greater control for the causee than accusative case.

Table 11.3: Comrie's iconic case-control correspondences

Morphological case	Causee's degree of contro	
nominative oblique	high less	
accusative	none	

The Nuosu coverb bbyp/bbyx 'give' encodes the causee as a recipient to whom an event is commissioned. The control retained by the causee is low. The coverbs ddie 'prepare' and shu 'make' treat the causee as a manipulated patient with no control over the event. The coverb ga 'drop' has permissive meaning giving the causee a high degree of control over the event.

Table 11.4: Nuosu coverbs and the causee's degree of control

Nuosu causative coverbs	Causee's degree of contro	
bbyp/bbyx 'give'	less	
ddie 'prepare'	none	
ga 'drop'	high	
shu 'make'	none	

The coverb bbyp/bbyx 'give' (section 6.2.3.A) is adjacent to the causee noun phrase and requires the predicative particle shux at the end of the clause.

(12) a. មេរាហ្វិទេមអ**ា**.

nga ax yi **bbyx** mup dut jie **shux**. 1P.SG child COV.give fire burn CAUS 'I summon the child to light a fire.'

b. ХĴd@Нd₽.

cy **bbyx** yy lut mu yy **shux**. 3P.SG COV.give laugh enough ADVL laugh CAUS 'Let him have a laugh.'

The coverb *ddie* 'prepare' (section 6.2.3.B) is postposed after the causer, the second noun phrase. The causee appears in sentence-initial position. The use of the predicative particle *shux* is obligatory.

(13) a. 水华里州市网州兴门策护。

cy ngop **ddie** a ddit da mu ga la hxex **shux**. 3P.SG 1P.SG COV.prepare there COV male name wait CAUS 'We caused him to wait there for Muga.'

hnip mop ax mo **ddie** vit gga ggut shup. elder sister mother COV.prepare clothes sew CAUS

'My mother made my sister sew the clothes.'

The coverb ga 'drop' (section 6.2.3.C) can be adjacent to the causer or causee noun phrase. It does not require the particle shux at the end of the clause.

(14) 남원∦X회환률급**8**..

ke max su ga ix go vur tat-shup. dog ART COV.drop house enter NEG.IMP-CAUS 'Don't let the dog come in.'

The coverb *shu* (section 6.2.3.D) is derived from a dummy verb. The postposition shu cannot co-occur with the predicative particle shux. Shu is adjacent to either causer or causee.

(15) 月兴少争,少省府举。

mu ga ngop wox shu zzi mga bbo. male name 1P.PL COV.make bridge cross go 'Muga made us cross the bridge.'

11.3.2 The causative particle

The postverbal particle *shux* is the formal mark of causative constructions. Its presence encodes the embedded clause as caused event. It is grammaticalized from a verb that is unproductive in Modern Nuosu, the same verb that developed into a causative postposition (section 6.2.3.D) before the main predicate.

(16) a. ※ X 永 間 X X 矛 首 年 **沪**。

bbyx yyx sha shux. bbut cv cvx gge ga cy DEM.PROX CL COV 3P.SG COV sprinkle CAUS 'Let him pour water on the herbs.'

b. **€Ê** ₩ **Î** .

za pux cop ga gox iiuo shux. 3P.PL COV.drop PRO.LOC collapse CAUS wall 'They let the wall collapse.'

11.4 Comparison

Three basic comparison constructions exist in Nuosu (section 11.4.1) as well as strategies to intensify predicates and to form their superlative (section 11.4.2).

11.4.1 Comparative Constructions

There are superiority constructions (section A), inferiority constructions (section B) and equality constructions (section C).

A. Superiority

The superiority construction exhibits a short and an extended version, as presented in (17). Constituents that may be compared are noun phrases or nominalized verb phrases suffixed by *-ddux*, as in (18).

- (17) a. ObjectComp+StandardComp+Predicate *ap cy* Short
 b. ObjectComp+StandardComp-*jox+ap cy-mu*+Predicate Extended
- (18) a. ObjectComp and StandardComp are both NPs
 b. ObjectComp and StandardComp are both VP-ddux
 VPs

The string *ap cy* functions as adjective and adverb. Example (19a) illustrates *ap cy* as main predicate, (19b) as postverbal adverb and (19c) as adverbialized adjective. As adjective, *ap cy* can be nominalized by *-ddu* with the meaning *ap cy-ddu* 'advantage', see (19d).

- (19) a. ትወህ∃ጋሦ**⊀**⊁ታህ
 - gop bo li rre mop jox **ap cy** su nge. body TOP money toward more NOM COP 'Health is more (important) than money.'
 - b. ②壬戌章水刈組以及日息口。 qop bop miep nyix **ap cy** xip gge cy gu six la. friend before many more DEM.INDEF CL 3P.SG call RES come 'He invited more friends than the previous time.'
 - c. 世场浮墾塗入山守水外州引車。
 ngat i dix viex vie cyx bu jox **ap cy mu** a hni.
 1P.SG.POSS clothes flower DEM.PROX CL toward more ADVL red
 'My clothes are more reddish than this flower.'

Only a few dimensional adjectives can be employed in the short version (17a). These adjectives can also be prefixed by the equality morpheme *jiy*-.

Table 11.5: Comparative forms of dimensional adjectives

adjective ap cy 'more'		jjy- (equality)	
ax yy 'big'	yyx ap cy 'bigger than'	jjy-yyx 'as big as'	
ax fu 'rough'	*fu ap cy 'rougher than'	jjy-fu 'as rough as'	
ax hmu 'high'	hmu ap cy 'higher than'	jjy-hmux 'as high as'	
ax sho 'long'	sho ap cy 'longer than'	jjy-shox 'as long as'	
ax fi 'wide'	fi ap cy 'wider than'	jjy-fix 'as wide as'	
ax du 'thick'	du ap cy 'thicker than'	jjy-dux 'as thick as'	
ax nyi 'many'	nyi ap cy 'more than'	jjy-nyix 'as many as'	
ax ly 'heavy'	ly ap cy 'heavier than'	jjy-lyx 'as heavy as'	

(20) a. HK♥Â⊀¼.

mu ga nga yyx **ap cy**. name 1P.SG big more 'Muga is bigger than me.'

p. ዝአፁሕ**ኊኊዝ**ฃ៤°

mu ga ngat jox ap cy mu ax yy. name 1P.SG to more ADVL big 'Muga is bigger than me.'

Extended

Short

Short

(21) a. ΨΗΧΘΗΑΘΥΧ.

vot ba cvx ma a zzvx ma lvx ap cv. DEM.PROX CL DEM.DIST CL heavy more pig 'This pig is heavier than that one.'

b. ቀፎጷቀብጷቀ**አነ**ዝ∄ፕ.

Extended vot ba cvx ma a zzvx ma jox **ap cy mu** ax ly. DEM.PROX CL DEM.DIST CL to more ADVL heavy 'This pig is heavier than that one.'

Other multisyllabic adjectives can only occur in the extended version, as illustrated in (22).

mu chur mu nyi **jox** ap cy mu mgo. autumn summer toward more ADVL cold 'The autumn season is colder than the summer season.' shy hni li qu **jox ap cy mu** pu lu ggo su nge. gold TOP silver toward more ADVL precious NOM COP 'Gold is more precious than silver.'

In addition to adjectives, we can use gradable verbs, verbs modified by speed and manner adverbs and auxiliary verbs in the superiority construction.

(23) a. ዘአ₩፷**ዏ፟፟፟፟፟፟፟፟፟**አህዝጅሦ.

mu ga lu dda **jox ap cy mu** bot nji. male name male name toward more ADVL run quickly 'Muga runs faster than Ludda.'

cy nga **jox ap cy mu** zzax zze nyiet. 3P.SG 1P.SG toward more ADVL food eat late 'He is eating later than I am.'

ngat tep yy cyx zzit tep yy a zzyx zzit **ap cy mu** hxep qi. 1P.SG.POSS book DEM CL book DEM.DIST CL more ADVL see want 'I like to study this book more than that book.'

Verb classifiers (section 7.6.4) indicate the degree by which the object of comparison is superior to the standard of comparison.

(24) 背下到於**司水**从。

nga nyip kur cy yyx **ap cy**. 1P.SG NUM.2 year 3P.SG big more 'I am older than he by two years.'

When subjects are compared, the order of elements should be as in (25).

(25) 肾了**學水**以升氧於利計也。

nga cyp **jox ap cy mu** nex hxie vur su nge. 1P.SG 3P.SG toward more ADVL 2P.SG love NOM COP 'I love you more than he does.'

Direct objects can only be compared in nominalized VPs with -*ddux*. The order of constituents should be as in (26b) not as in (26a).

*nga nex cy **jox ap cy mu** hxie vur su nge. 1P.SG 2P.SG 3P.SG toward more ADVL love NOM COP 'Intended meaning: 'I love you more than I love him.'

h. ካያሉፈሦዋ\አሉፈሦሦአለተለል !!!.

nga nex hxie vur ddux nga cyx hxie vur -ddux **jox**1P.SG 2P.SG love NOM 1P.SG 2P.SG love -NOM toward **ap cy mu** hxie vur su nge.
more ADVL love NOM COP

'I love you more than I love him.'

For gradable matrix predicates like *zhet* 'good', the object and standard of comparison are argument clauses nominalized by *su*.

op rro bbo su op rro ap- bbo su **jox ap cy mu**Xichang go NOM Xichang NEG- go NOM toward more ADVL
zhet su nge.
good NOM COP

'It is better to go to Xichang than not to go.'

B. Inferiority

There are two structures, one for noun phrases, the other for nominalized verb phrases. For noun phrases, inferiority is expressed by *ngex ngep* suffixed to the constituent that serves as standard of comparison and by the negation particle *ap*-. For verb phrases, two constituents nominalized by the suffix *-ddux* are compared in a construction using the negated existential predicate *jjip* 'become'.

The following examples illustrate inferiority constructions. The negation particle is infixed before the last syllable of the predicate (section 9.2).

b. ԵԴ ԹԵՐ ԱՆ ԳԱՐՍ . Ե

ngat mu cyx ma nit mu **ngex ngep** bbur-**ap**-jjip. 1P.SG.POSS horse DEM.PROX CL 2P.SG.POSS horse similarly obey<NEG> 'My horse is less obedient than yours.'

ne cy **ngex ngep** lie-**ap**-ba su nge. 2P.SG 3P.SG similarly dangerous<NEG> NOM COP 'You are less in danger than he.'

d. ዝአ**፯ ቻው** ሪ**ኊ**ዮ°

mu ga ne **ngex ngep** but-**ap**-ndit. name 2P.SG similarly daring<NEG> 'Muga is less courageous than you.'

e. ፵፱ጲብብ¼ት∰መብሄዬ。

zze ti cyx ma li a zzyx ma **ngex ngep** a-**ap**-du. table DEM.PROX CL TOP DEM.DIST CL similarly thick<NEG> 'This table is less thick than that table.'

When subjects of a gradable verb are compared, then the construction follows (30a). When direct objects are compared, then the comparison is constructed with the nominalizer -ddux as in (30b).

(30) a. 中主電子外入磁盘子外**主動水**型。

nga nex ddop njyp ddux cy nit ddop njyp ddux 1P.SG 2P.SG word believe NOM 3P.SG 2P.SG.POSS word believe NOM

ngex ngep ap- jjip.

similarly NEG- become

'I believe you less than he does.'

b. 박물로무위막무로구위**원 사용** :

nga nex ddop njyp ddux nga cyp ddop njyp ddux 1P.SG 2P.SG word believe NOM 1P.SG 3P.SG.POSS word believe NOM

ngex ngep ap- jjip.

similarly NEG- become

'I believe you less than I believe him.'

C. Equality

The equality construction has short and extended versions. The extended version substitutes the reciprocal prefix *jjy*- by the expression *jjy sux mu*. Both NPs and nominalized VPs can be compared in the equality construction.

(31)a. ObjectComp+StandardComp-si nip+jjy-Predicate Short Extended

b. ObjectComp+StandardComp-si nip+jjy-sux-mu+Predicate

(32)a. ObjectComp and StandardComp are both NPs NPs

b. ObjectComp and StandardComp are both VP-ddux

VPs

The postposition *si nip* 'with' has several functions that are analyzed elsewhere in this grammar (section 5.3.3, section 12.2.1). The reciprocal prefix jjy- (section 11.2) is prefixed in (33b) to the main verb *sup/sux* 'resemble'.

(33) a. 小剂网第。

sse ax da sux.

son father resemble

'The son resembles his father.'

b. ⊕ €¥ €.

cop wox jjy-sux.

3P.PL RECL-resemble

'They resemble each other.'

Only disyllabic size adjectives of Table 11.5 may occur in the short version. In this case, the size prefix a- or i- is omitted (compare with section 11.4.1.A).

(34) a.

> vit CVX ji ngat uo nyi cyx ji si nip **jjy-**sho. needle DEM.PROX CL 1P.SG hair DEM.PROX CL with RECL-long 'This needle is as long as this hair of mine.'

● 常作用電子
● 常作
● 電子
● 電
● 電
● 電
● 電
● 電
● 電
● 電<

cyx ji ngat uo nyi cyx ji si nip jjy-sux-mu a sho. vit needle DEM CL 1P.SG hair DEM CL with RECL-resemble-ADVL long 'This needle is as long as this hair of mine.'

(35) a.

> *ap mu shu kut ap hxiet ddip kut si nip jiy-zzyr muo. with RECL-peaceful last vear 'Intended meaning: 'This year is as peaceful as last year.'

b. 水川州本本品高木省大量,以中国、

ap mu shu kut ap hxiet ddip kut si nip jjy-sux-mu zzyr muo. this year last vear with RECL-resemble-ADVL peaceful 'This year is as peaceful as last year.'

The prefix *jjy*- is derived from the reciprocal prefix *jjy*- (section 11.2). The sense of *equality* is a secondary meaning derived from the sense of *reciprocity*.

(36) អ្មីស្ងឹងមិ្សិំ.

vyt vu ix yi si nip ngax **jjy-**gix. elder brother younger brother with 1P.SG RECL-care 'My elder brother is concerned about me as is my younger brother.'

The extended version of the equality construction does not require the predicate to be gradable since it only expresses that two different referents participate in a state or event in an equivalent way.

(37) ଜୌଟେଟ୍ଟେଟ୍**ନି**ମ୍ହିଅଟି.

nit yo ngat yo si nip **jjy-sux-mu** hlix ndo nzox. 2P.SG.POSS sheep 1P.SG.POSS sheep with RECL-resemble-ADVL get lost EXP 'Your sheep got lost as did mine.'

A similar meaning can also be expressed by the adverb *ngex ngep* 'similarly'. It does not require the predicate to be gradable.

(38) a. HX乳目泉本性生乳目乳+Y的。

mu ga ax pu si nip lat hxa ax pu **ngex ngep** sy ox. male name grandfather with male name grandfather similarly die DP 'Muga's grandfather is dead and so is Laha's grandfather.'

b. ¥₭₩₩₰₽₽₽₽₽₽₩»

kut shyr vot ba cyx ma si nip a zzyx ma **ngex ngep** cu. New Year pig DEM.PROX CL with DEM.DIST CL similarly fat 'The New Year's pig is as fat as this pig.'

vit gga a hni su si nip vit gga a shy su **ngex ngep** nrat. clothes red NOM with clothes yellow NOM similarly nice 'The red clothes are as beautiful as the yellow clothes.'

11.4.2 Intensification and superlative

There are two infixes that are inserted between a gradable predicate and its reduplicated last syllable or its full copy. The intensifier *-jjy-* and superlative *-lop-* occupy the same morphological positions in the predicate.

A. The intensifier -ijy-

The infix -ijv- 'very' must be distinguished from the prefix jjv- 'each other' (section 11.2). The infix -jjy- is inserted before a fully reduplicated copy of a gradable predicate.

- mu ga qop bop ddop mu -jjy- ddop mu. male name friend obev very obey 'Muga obeys his friends very much.'
 - b. ዘዴቼθጲዘĝ«ጵ(ĝ) w° gge ngox die -ijy- (ngox) die. mu rrvr ddop ma cyx male name word DEM.PROX CL doubt very doubt 'Mudge doubts very much these words.'
 - c. $\lambda \pi \xi 1 \hat{\lambda} \psi \hat{k} 1 \xi 1 \hat{k} \hat{k}$ bbu shy a zzyx ji mo go jjur hla -jjy- jjur hla. 3P.SG snake DEM.DIST CL see COMP anxious very anxious 'He is very anxious to encounter that snake.'
- xvx hnie cvx zzip a shyt -ijy- (a) shyt. shoe DEM.PROX CL new verv new 'This pair of shoes is brand new.'

Ungradable predicates can co-occur with the infix -jjy-, sometimes with a derived meaning. It indicates a greater speaker certainty for making an assertion. Alternatively, -jjy- can simply convey the sense of intense activity.

- (41) a. 。業者業区間内 nga jie shat bbo -jjy- bbo. 1P.SG street go very go 'I am absolutely staying on the road.'
 - b. 11 ½! ¥¥¥Î. a bbe! jjie -**jjy**- jjie ddix. EXCL burn very burn QUOT 'Oh! This is to say that it is burning strongly.'
 - c. ฏิทูล¥ล. ax yi ngo -jjy- ngo. child weep very weep 'The child is crying bitterly.'

The infix *-jjy-* can also be inserted in the middle of a fully reduplicated common noun. It intensifies the defining properties of a noun concept. It can be glossed by *real* or *worthy of its name*.

- (42) a. X 全 學 ¥ 全 中 出。
 - cy bbox zze -**jjy** bbox zze ma nge. 3P.SG man very man CL COP 'He is a man worthy of this name.'
 - b. 岁廿页山门至子门至中廿。

nop it dde li la dda -**jjy**- la dda ji nge. 2P.PL township TOP valley very valley CL COP 'Your township is a real valley.'

c. 1413945599

cyp ke a zzyx ma ke -**jjy**- kex ma nge. 3P.SG.POSS dog DEM.DIST CL dog very dog CL COP 'His dog is really a good dog.'

B. The superlative -lop-

The superlative infix *-lop-* is inserted between a gradable predicate and its fully reduplicated copy.

- (43) a. ※買於●買於營計世。
 - cy iet zyr -**lop** iet zyr zhax su nge. 3P.SG small SUP small ART COP 'He is the smallest.'
 - b. 升爭リ州≢●州≢ ⊕ ± ⊕ ± ...

mu nyox li ggut nyi -**lop**- ggut nyi ma nge. male name TOP diligent SUP digilent CL COP 'Munyo is the most diligent.'

c. 『丰州 \$ 曲 州 \$ 中 1 市 1 寸 1 寸 5

sip hni shax ndur **-lop-** shax ndur ma a ddit go it. woman diligent SUP arduous CL there LOC live 'The most diligent woman lives there.'

d. 11₩₩₩₩₽.

la ru nbop -lop- nbop su. bacon fragrant SUP fragrant NOM 'the most fragrant bacon' e. \$\$\!**\!**\!

-lop- ke hxa bit ke su. vegetable bitter SUP bitter NOM 'the most bitter vegetable'

f. 前目半中山手型<>計引角前引用計畫。

kut ti li tit bbap ga go ax yy -lop- ax yy max su nge. grandfather age TOP here village LOC old SUP old ART 'Grandfather is the oldest in the village.'

Chapter 12

Versatile constructions

In this chapter, we scrutinize presentative constructions (section 12.1), resultative constructions (section 12.2) and extent constructions (section 12.3).

12.1 Presentative constructions

Presentative constructions introduce a new discourse referent in space and sometimes time. Presentative constructions consist of an existential verb, an indefinite noun phrase, and a locative noun phrase. The presentative construction in which the locative NP comes first contrasts with the locative construction in which the presented NP comes first.

```
(1) a. NP + Locative NP + Existential Verb Locative
b. Locative NP + Presented NP + Existential Verb Presentative
```

Presentative constructions in East Asian languages have special features, either special word order as in Mandarin Chinese (section 12.1.2.M) or large sets of existential verbs as in Nuosu and other Tibeto-Burman languages (section 12.1.2).

12.1.1 The presented and locative noun phrases

The presented noun phrase consists of a common noun, as in (2), or a proper noun, as in (4). If it is a common noun, it must be indefinite not definite, as in (3).

- (2) a. 序乐学说委引拿用句。 get sse go **bburx yyr** ax nyi mu it. litte box LOC picture many ADVL lie 'There are many photographs in the little box.'
 - b. 再手號競爭句。 get sse go **bburx yyr ma** it. litte box LOC picture CL lie 'There is a photograph in the little box.'
 - c. 學學學說用學習到達用?
 njie ggup go xix mu **fu zzi xip yyx su** jjo?
 courtyard LOC why voice DEM.INDEF great NOM have
 'Why is there such a loud noise in the courtyard?'

*bbop jox **bbut vie juox juox max su** go jjix.
in front garden ART LOC located
Intended meaning: 'In front there is the garden.'

tit go mu ga **it ix**? here LOC name live~ALT 'Does Muga live here?'

The locative phrase consists of a common noun, place name, or possibly of a locative particle (e.g. *go*, *tot* and so forth).

(5) NP + (Locative Particle)

As the locative phrase occurs in sentence-initial position, the coverb da is not associated with the presentative construction (see section 6.3.1).

12.1.2 The existential predicate

Most languages have two or three existential verbs such as *be*, *have* and *exist* in English. Several authors report high numbers of existential verbs for Tibeto-Burman languages: Qiang (LaPolla 2003), Hani (Bái 1991), and Nuosu (Walters & Ndaxit 2006). In these languages there are between five and thirteen existential verbs. Nuosu has the maximal number of thirteen verbs which are decribed in detail by Walters & Ndaxit (2006), see table 12.1 below.

Some of these verbs are pure existential verbs, others are posture verbs with implied existential meanings. Existential verbs vary for the range of entities whose existence they state. An entity might be predicated simultaneously by several existential verbs with different nuances of meaning, as in (6) and (7).

a ddit syr bbo bbo **zzur.** there tree CL stick up 'There is a tree (standing).'

a ddit syr bbo bbo **rrur**. there tree CL lie flat 'There is a tree (lying flat).'

¹ For a cross-linguistic study of existential verbs, see LaPolla (1994: 75).

Table 12.1: Existential verbs

Verb	Section	Description
jjo 'have'	12.1.2.A	location, existence, possession for animate, inanimate
rrur 'lie about'	12.1.2.B	disorderly posture for inanimate entities
jjip 'located'	12.1.2.C	location for landmarks in landscape
ndit 'attached'	12.1.2.D	attachment for inanimate entities
qo 'contain'	12.1.2.E	animate, inanimate entities included in larger groups
rryp 'stick to'	12.1.2.F	attachment for inanimate entities
it 'lie'	12.1.2.G	posture for animate and some inanimate entities
nyi 'sit'	12.1.2.H	posture for animate and some inanimate entities
hxit 'stand'	12.1.2.I	posture only for animate entities
zzur 'stick up'	12.1.2.J	posture for mainly inanimate entities
ke 'nest'	12.1.2.K	existence for nests of birds and bees
bbu 'exist'	12.1.2.L	existence for several unrelated inanimate entities

- (7) a. 國第章母對稱。 hxi jox kex ma go **jjo**.
 - outside dog CL LOC have 'There is a dog outside.'
 - b. 网第中分對母。 hxi jox kex ma go **it**. outside dog CL LOC live, lie 'There is a dog lying outside.'
 - c. 國第章母對擊。 hxi jox kex ma go **nyi.** outside dog CL LOC sit 'There is a dog sitting outside.'

Existential verbs are mainly intransitive, stative and ungradable. They cannot be modified by intensifiers. Existence is a black-and-white property.

A. The existential verb jjo 'have'

Of all existential verbs, *jjo* 'have' covers the broadest range of meanings. Example (8a) expresses possession, (8b) existence in space, (8c) existence in time, and (8d) abstract containment.

(8) a. ଖ爭∃海暈暈暈。
cop wox rre zza ax nyi mu **jjo**.
3P.PL possessions many ADVL have
'They have a lot of possessions.'

- - ngop bbap ga go bbox zze vut ga hmi xip ma **iio**. 1P.PL village LOC man name named DEM.INDEF CL exist 'In our village there is a man whose name is Vuga.'
- \mathbf{c} , \mathbf{t} ap mu shu kut xyp xi hni jyx vit iio. wedding
- VCL.time have 'This year there is a wedding.'
 - kur ne kop nge ci nyix ma **jjo**. cyp NUM.1 year week, section NUM.52 CL have 'A year has 52 weeks.'

The verb *jjo* also states existence in time. The following example is quoted from Walters & Ndaxit (2006: 134) and Zhaò & Zhū (1986: 1).

. # 中 18 定 日 出 尼 卫 张 2 尺 北 下 生 性 毫 2 夏 2 尺 〇 比 系 泉 反 ip si mox a hle sy sse six sse vurx te go nuo su sy sse a long time ago supernatural being born when Nuosu supernatural being zhyx ge ax lu nge ddix xip ma **iio**. COP QUOT DEM.INDEF CL have name 'Long ago in the days of supernatural men, there was a Nuosu immortal

B. The existential verb rrur 'lie about'

called Zhygeaxlu.'

The verb *rrur* means 'lie about' and is used for inanimate entities that lie about on the ground in a disorderly way.

- (10) a. 세대활፠θᆌ여입원활Φ. a ddit go lur ma ax yy xip ma go rrur. there LOC stone big DEM.INDEF CL LOC rest 'There is a big stone.'
 - syr ggut kat go rrur? plough where LOC rest 'Where is the plough?'
 - C. Yax θ x ŷ o. syr zza lur ma bbo gox rrur. fruit CL LOC rest 'There was a pile of fruit.'

C. The existential verb jjip 'located'

The intransitive verb *jjip* 'located' is mainly used for places in the landscape such as mountains, rivers or pieces of land in an area, as shown in (11). It also situates the progress of events in time, as illustrated in (12).

(11) a. d質量1目分割。

yy hnot pop hxo pu ma **jjip**. river opposite mountain CL located 'There is a mountain on the opposite side of the river.'

. 情点区景主任3000年。

a zzy ggat gat zyr go ne jie shat ji **jjip.**DEM.DIST place middle LOC TOP street CL located 'In the middle of that place there is a street.'

c. X 到到 经 目 引 页 升 对 。

lur kur go hot pu ggep dde ma **jjip.** city LOC public park CL located 'In the city there is a public park.'

(12) T¥A¥VI#H₹®.

cyp xyp mop xyp da cyp bbu hlep **jjip** ox. 3P.SG.POSS wife marry STP NUM.1 month located DP 'He has been married for one month already.'

The verb *jjip* has several related meanings. It functions as adjective with the meaning *full*; it is the predicate of weather droppings, and it serializes with the verb *qot* to convey the meaning *change into*.

(13) a. 방원 # 컴 Y 컵 .

ngat pax shu **jjip** -jjy- **jjip**. 1P.SG bag full very full 'My bag is completely full.'

b. ልቦብናል.

ip nyip ma hxa **jjip.** today rain become 'Today it is raining.'

c. $MY \stackrel{?}{=} h \times X \stackrel{?}{=} \Phi \stackrel{?}{=} \Upsilon$?

co sy ggup jjux qot nyit cy **jjip** ddap ap- **jjip**? person die after change ghost become or NEG- become 'After someone dies, does he become a ghost?'

Finally, the verb *jiip* has compounded with other words and given rise to a range of lexicalized words.

Table 12.2: Lexicalized expressions with jjip

jox jjip 'possible'	jjip hnex mu 'therefore'	lat jjip 'spoiled'
bbur jjip 'overcome'	ke jjip 'praise, agree'	hmat jjip 'educated'
hxop jjip 'overripe'	bup jjip 'brittle, rotten'	

D. The existential verb ndit 'attached'

The existential verb *ndit* is used for inanimate entities that can be attached to other things such as body parts (arm, hand, leg), fruits and vegetables, written characters on a surface and so forth. Ndit also has the grammatical function of quantificational aspect (section 7.6.2).

- za pux go bbur ma ly ndit. ma go LOC written character NUM.4 CL LOC attached 'Four letters are written on the wall.'
 - b. 内包圭屯集进事刊學。 ngat qop bop miep zyt ax nyi mu 1P.SG.POSS friend beard much ADVL attached 'My friend has full beard.'
 - c. 北口口中中口邸由。 bbu nyip mop ji xy hxit pot **ndit**. leg NUM.8 CL attached 'The spider has eight legs.'

E. The existential verb go 'contain'

The existential verb qo predicates animate or inanimate entities that are contained in bigger ensembles or masses. Only very small animals such as worms may co-occur with the existential verb *qo*.

- (15) a. 무亞業母系砂片也。 gop bo yyr hla apqo su nge. spirit NEG- contain NOM COP 'The body is without spirit.'
 - b. \$\frac{1}{2}\hat{1}\text{0}\hat{1}\text{0}\hat{1}\text{0} ngop wox cyx qo zzax zze. 1P.PL 3P.SG contain food eat 'We had a meal with him.'

- c. 東海沙米尼丘砂。
 - cha zza go lur zhyr sse **qo.**rice LOC little stone contain
 'There are little stones in the rice.'
- d. ③對沙亞軍五秒。

ce te go bbup ddi sse **qo**. dish LOC worm contain 'There are worms in the dish.'

e. #ዘ୬ዛሮ8% .

mo mu go mu jy hlop bbop **qo.**sky LOC star moon contain
'There are the stars and the moon in the sky.'

The existential verb *qo* 'exist' is incompatible with bigger animals in a confined area for which *it* 'lie' or *jjo* 'have' should be used.

- (16) a. *d對業前≢H砂。
 - *yy go hxe ax nyi mu **qo**.
 river LOC fish much contain
 'The river contains many fish.'

*syr juo go ssyt **qo**. forest LOC tiger contain 'There are tigers in the forest.'

F. The existential verb rryp 'stick to'

The existential verb *rryp* 'stick to' is similar to *ndit* 'attached' but is used for other referents. The verb *rryp* 'stick to' mainly predicates inanimate entities that somehow stick to other entities. Some of these associative relations are alienable, some are inalienable.

(17) a. ೪೨೦೯೪೪ a.

le o ho nyip pot **rryp.** ox horn NUM.2 CL stick to 'The ox has two horns.'

b. ፲៤+୬+৪+ ዓ.

cyp jy xy go ma wa ma **rryp.** 3P.SG.POSS foot LOC wound CL stick to 'There is a wound on his foot.' c. 1署步机6均46。

cyp lot go bbu shy ji **rryp**. 3P.SG.POSS hand LOC snake CL stick to 'There is a snake stuck to his hand.'

The following example is quoted from Walters & Ndaxit (2006: 141) respectively from Zhaò & Zhū (1986: 42).

(18) a. 新孚重圖計過工學國學籍集例。

hex jjy pup mit ggex su pur cyp gop bo go **rryp** sat da. pot ashes ART blow 3P.SG.POSS body LOC stick to EXH STP 'There were ashes from the pot all over her body.'

G. The existential verb it 'lie'

The existential posture verb *it* 'lie' as well as the verbs in the next two sub-section *nyi* 'sit' and *hxit* 'stand' predicate animate, especially human, referents.

(19) a. 1目手刊 章 計り。

hxo pu tot cop wox go **it.** mountain on top of 3P.PL LOC live 'They live on the mountain.'

b. 440.

mot **it** dde soldier live NOM 'barracks'

The verb *it* also takes inanimate subjects, as shown in (20). The entity is presented in lying position although, of course, the idea of posture cannot be defined for liquids. (20a+b) are quoted from Walters & Ndaxit (2006: 131, 136).

(20) a. ៨ម៌≢ក្បិទ្ឋមុនY。

yy ix nyi nyip gex lo go **it** yip sy. water, soup little little pot live still 'There is still a little soup in the pot.'

hox ho sse ku jox yit ji ax di go **it.** box within needle CL only LOC lie 'There is only one needle in the box.'

c. 19月沙量州村。

cyp nyuo zzyp go pop chep **it.** 3P.SG.POSS eye LOC splinter lie 'There is a splinter in his eye.'

H. The existential verb nyi 'sit'

The existential posture verb *nyi* 'sit' is typically used with animate referents but also predicates inanimate subjects, sometimes with metaphorical meaning.

(21) a. 划€爭≢浏問以串。

a yit gox **nyi** da uo fa mguo. name LOC sit STP turban embroider 'Ayi is sitting there embroidering a turban.'

b. Ŷ♀≯ヹゟゟ゚ま。

siex nyuo go hxie zyr ma gox **nyi**. window LOC bird CL LOC sit 'A bird is sitting in the window.'

c. 汝州承**章**。

cy hly mo **nyi**. 3P.SG boat sit 'He is going by boat.'

The following examples lack the idea of control by the subject referent. The existence stated by *nyi* is abstract and metaphorical.

(22) a. ្មឋាន៊ឹមឃុំបាំធ្វា៖ អ្**៖**。

syp vo a zzyx ma ku jox yy ax nyi mu **nyi.** peach DEM.DIST CL inside water, juice much sit 'That peach has a lot of juice.'

b. 北岳海事片。

bbu shy ddut **nyi** su snake poison sit NOM 'poisonous snake'

gop po go sy **nyi.**body LOC blood sit
'There is life in the body.'

d. \#@1\#\$**#**。 gop bo li sv nvi sot nyi. TOP blood sit breath sit body

'He is someone with blood and flesh.'

Furthermore, the verb *nyi* is part of several compound words that describe mental states.

Table 12.3: Lexicalized expressions with nyi

we nyi 'strong'	xy nyi 'consider, reflect'	shot nyi 'honest'
hxie zyp nyi 'patient'	ggut nyi 'diligent and frugal'	

I. The existential verb hxit 'stand'

The posture verb hxit is restricted to animate referents and has not developed metaphorical extensions as the other posture verbs it 'lie' and nyi 'sit'.

(23) a. 网见开兴机识局网。

hxi jox mu ga a ddit hxit da. outside name there stand STP 'There is Muga standing outside.'

b. **全**单分片发生以外。

bbox zze max su dep go hxit da. rise LOC stand STP man ART 'The man rose and stood there.'

J. The existential verb zzur 'stick up'

The verb zzur 'stick up' states the existence of entities that stick out of the ground or landscape. It has secondary meanings such as stand up and establish.

。**用**化化作用。 (24) a.

> hxo pu go syr go ap- zzur. mountain LOC tree LOC NEG- stick up 'There are no trees on the mountain.'

b. X 型 网 单 页 负 压 单 重 车 手 。

lur kur hxi jox ssox dde max su gox **zzur** apoutside school ART LOC stick NEG- can 'The school cannot be built outside the city.'

c. 从点目的的声。

cy ddop hxip ngax jox **zzur.**3P.SG word say 1P.SG toward stand up, oppose 'He speaks out against me.'

The verb *zzur* is a component of a range of complex words with metaphorical or abstract meanings. The verb *bbur zzur* 'seem', for example, is composed of *bbur* 'image' and *zzur*, and has the meaning of *seem* = *image+stand up*.

Table 12.4: Lexicalized expressions with zzur

hxie zzur 'naughty'	hmi zzur 'famous'	zzurx xie 'oppose'
bbur zzur 'seem'	mut zzur 'angry'	

K. The existential verb ke 'nest'

The existential verb *ke* 'nest' functions as classifier of birds and bees (section 5.2.1.E). It is also found as existential predicate for the same kind of entities.

- (25) a. \$0 \$P 张 * 부 * 부 * 1.
 - o bbop jox bbut vup ke go **ke**. ahead ant CL LOC nest 'There is an antnest ahead.'
 - b. 自力事業品表表。

vat bu go jjix ke go **ke**. mountain rock LOC bee CL LOC nest 'There is a bee hive on the mountain rock.'

c. 早業上承終日事品。

syr bbo tot hxie zyr ke go **ke.** tree top of bird CL LOC nest 'There is a bird nest on top of the tree.'

L. The existential verb bbu 'exist'

The verb *bbu* 'exist' is used for predicating a few specific but unrelated nouns such as doors, wrinkles and footprints. The verb has lost productivity and might disappear from the language in the future.

(26) a. 手對对季朱**术**。

tit go ip ko jjur **bbu**. here LOC door CL exist 'The door turns on its hinges.'

- - cyp ax pu nyiet gga **bbu** ox. 3P.SG.POSS grandfather wrinkle have DP 'His grandfather has wrinkles on his face.'
- c. 手卦片口中机。

tit go ggap mop ji **bbu.** here LOC road CL have 'There is a road here.'

. ከ ፪ ዜ ተ

vo go xyx ddux gox **bbu**. snow LOC footprint LOC have 'There is a footprint in the snow.'

e. €Ê∮₽₽¶。

za pux go buo gga **bbu.**wall LOC crack have
'There is a crack in the wall.'

M. Motional verbs are not presentational

In Mandarin Chinese, clauses with motional verbs can express existential meanings if the order of the presented noun and the verb is inverted. The following example contrasts this presentative construction with the ordinary intransitive construction.

- (27) Mandarin Chinese (Li & Thompson 1981: 517)
 - a. chū lái le yi ge kèren. Presentative construction exit come DP NUM.1 CL guest 'There is a guest coming out.'
 - b. yi ge kèren chū lái le. Intransitive construction NUM.1 CL guest exit come DP 'A guest has come out.'

In Nuosu, both Mandarin constructions collapse. Motional verbs cannot be used with a special presentational meaning.

(28) a. နေဝାଉିହେମ୍ୟୁ କ୍ରେଖ୍ର ୬ ୫.

tep yy dax dde go bbup zhyt gap nyiep ma gox **njuo**. book shelf LOC cockroach CL LOC move around 'A cockroach moves around on the bookshelf.'

b. 低印θ爭堇⑩。 yo nyip ma **jjie bbo** ox. sheep NUM.2 CL leave go DP 'Two sheep ran away.'

- c. ∅¾1∥∮¼№.
 - rrur ggu cyp gge gox **xi** ox. goods QUANT.some PRO.LOC arrive DP 'A load of goods arrived.'
- d. 业长口雪页3HK景采H争拿角字9级门。

ngop ket mop ggep dde go mu ga si nip mu gox nyix
1P.PL evening amuse NOM LOC name and name NUM.2
ax di gox xi la.
only PRO.LOC arrive come

'Only Muga and Mugo came to our evening gathering.'

. መ**ጠበ**ሚᢂ#ፀላኬ .e

bbu sse ma **jji** hxi jox **ddur la** ox. fly CL fly outside exit come DP 'A fly flew outside.'

12.2 Resultative constructions

According to Boas (2003), linguists of English distinguish three classes of resultative constructions (RP = resultative phrase):

- (i) the RP predicates a subcategorized object of a transitive verb;
- (ii) the RP predicates a nonsubcategorized object of an intransitive verb;
- (iii) the RP predicates a nonsubcategorized object of a transitive verb.
- (29) i. I dved **my grey school skirt** *dark red*. (Boas 2003: 1)
 - ii. Frank sneezed the napkin off the table. (Goldberg 1995: 152)
 - iii. She drank **him** *under the table*. (Boas 2003: 7)

In English, it is not possible that the resultative phrase predicates the subject of a transitive verb, a property that Levin & Rappaport (1995) call the *direct object restriction*.

(30) *John drank the whiskey drunken.

By contrast, Nuosu resultative phrases can predicate the subject of a transitive verb. There are three classes: agent-resultative constructions (section 12.3.1); patient-resultative constructions (section 12.3.2); resultative constructions of non-arguments (section 12.3.3). Some of the examples in this section are Nuosu equivalents of examples in Boas's book that I dicussed with native Nuosu.

12.2.1 Agent-resultative construction

We can ascribe a resultative state to the agent of a clause by a special construction which uses a reduplicated verb and the conjunction *si nip* (section 5.3.3).

(31) NP+(NP)+Verb Verb+si nip+Resultative Phrase

One important constraint is imposed on this construction. The verb must be intransitive, as in (32), monotransitive, as in (33), or unergative (section 6.1.4), as in (34a-c). It cannot be unaccusative, as in (34d).

- (32) a. HX延回泉&SボSEΨ̂⑩。
 - mu ga bot bo **si nip** sot bbu sot shy ddux ox. male name run run and breatlessly DP 'Muga got out of breath from running.'
 - b. 歩筆後無象登器 wind sinip fup sot ox. 1P.PL shout shout and hoarse DP 'We yelled ourselves hoarse.'
 - c. 代무 비 보고 보고 있는 영화 보고 있는 이 보고 있는 이
- (33) a. W型角狀果果魚砂片的。

lu dda ax rryr mgot mgot **si nip** hxie ci ox. male name female name persue persue and give up = heart-fall DP 'Ludda courted Adge to the point of giving up.'

- b. 减量性软管包裹食等等的。
 - vut gop vot she zzex zze **si nip** ndat-jjy-ndat ox. female name pork eat eat and disgusted-very-disgusted DP 'Vugo felt disgusted after the consumption of so much pork.'
- c. 醫學用發色雜類象食量中的。
 lu ti mu cyx ma zzyx zzy **si nip** jjix do ox.
 male name horse DEM.PROX CL ride ride and exhausting DP
 'Luti rode this horse and was exhausted.'

The verbs *yy* 'laugh', *ddiex bur* 'change' and *ngo* 'cry' are unergative. A resultative state can be ascribed to their agent by the structure (31). By contrast, an unaccusative verb, like *mge* 'boil' in (34d), is ungrammatical in this stucture.

- (34) a. ≼#dd�æ₽∫₩Ю̂。
 - vut rryr yyx yy **si nip** nyuo bby ddur ox. female name laugh laugh and tears-come out DP 'Vudge laughed herself to tears.'
 - b. X 望 手 是 全 引 丰 月 月 日 前 。
 - cy ddiex bur bur **si nip** a hnat mu mu vat ox. 3P.SG change change and especially ADVL good DP 'He became so good.'
 - c. XBBB421#XB.
 - cy ngox ngo **si nip** nyuo bby hat ga ox. 3P.SG cry and tear consume DP 'He cried to the point of desperation.'
 - - *hxa bit mgex mge **si nip** ax hxo jjip ox. vegetable boil boil and porridge become DP 'The vegetable is boiled soft and becomes (a kind of) porridge.'

Resultative compounds usually do not use resultative linkers but can be coerced as in the examples (35b) and (36b). The resultative phrase predicates the subject.

- (35) a. 「引×≠Y[®]。
 - cyp ax da **na sy** ox. 3P.SG.POSS father ill dead DP 'His father died of illness.'
 - b. 1乳刈貨井**景**套Y⑩。
 - cyp ax da nax na **si nip** sy ox. 3P.SG.POSS father ill ill and dead DP 'His father died of illness.'
- (36) a. X∃วรซฺพิ.
 - cy rre mop **sot yot** ox. 3P.SG money count wrong DP 'He made a mistake in counting the money.'
 - b. X∃ƏSS\$**≹**��û̂。
 - cy rre mop sot sot **si nip** yot ox. 3P.SG money count and wrong DP 'He made a mistake in counting the money.'

12.2.2 Patient-resultative construction

Another construction is available to ascribe a resultative state to the entity that undergoes the situation. This construction uses the linker sip/six and requires the undergoing NP to be in sentence-initial position.

(37) NP+(NP)+Verb+sip/six+Resultative Phrase

The linker is historically derived from the verb *sip/six* 'take' (section 6.2.1.D). In order to use *sip/six* for ascribing a resultative state, the main verb must allow for the idea of disposal. We can employ intransitive and monotransitive verbs in (37) if the first noun phrase is the undergoer of the situation. In (38), we consider intransitive verbs, in (39) monotransitive verbs and in (40) unaccusative verbs.

- (38) a. 网络比米斯的。 shur njot **sip** ga jie jie ox. lake freeze RES hard, solid DPD 'The lake froze solid.'
 - b. 了董承榮麗州縣州前口節。
 cyp bbo lo wop **six** a hnat mu ax yy ox.
 3P.SG.POSS face swollen RES especially big DP
 'His face swelled very big.'
- (39) a. 醫學用電氣器以水子節。 lu po nry yit **six** dep la ap- dop ox. male name wine drunk RES rise come NEG- MOD.can DP 'Lupo got so drunk that he could not stand up.'
 - b. 《母讯录图象页版》。
 mge vat ax mo xip **six** iet zyr guo ox.
 buckwheat cake mother cut RES small very much DP
 'Mother cut the buckwheat cake into small pieces.'
 - c. 引級用公戶(東華家)。
 zhuop zi mu ga gep syr **six** bbox sho ox.
 table male name COV sweep RES clean DP
 'The table was swept clean by Muga.'
 - d. 均分并升銀網第11年刊200。
 yi max su mu nyox hxop **six** a hni mu da ox.
 house ART male name paint RES red ADVL DP
 'Munyo painted the house red.'

- e. 系d对比化生宏**第**门 0。
 - tep yy zzit su at gop yu **six** la ox. book ART female name take RES come DP 'Ago took the book away (= take-come).'

syr ddip mup bat gep mgo **six** bax juo juo ox. log horse COV pull RES smooth DP 'The horses dragged the logs smoothly.'

g. 宣生敞升生性生性性质量 引擎的 。

wax ddip hxix mu ti te go mu ga nga cy gep lit next day morning when name 1P.SG 3P.SG COV shake

six it nyi la ox.

RES awake COME DP

'The next morning Muga shook me awake.'

h. 涨率用的口引用**是**创集集的。

bbut vie lat hxa gep yyx sha **six** yyx jjur jjur ox. flower male name COV water RES flat, full of water DP 'Muga watered the flowers well.'

Unaccusative verbs can ascribe a resultative state to the entity that undergoes the effect of the event by using the linker *six*.

(40) a. 🛪 មេ មិ មេ ប្រឹក្សិ ដែល 🖟 នេះ

vup du jix su lix qy **six** rret mop ddur ox. bone ART break RES piece exit DP 'The bone broke into pieces.'

b. 肾氧型 f 原 引 手 H M D 。
vit gga po hxo **six** a hni mu da ox.
clothes dye RES red ADVL DP
'The clothes were dyed red.'

Resultative phrases that comment on the event rather than on the patient of the main verb should not use the marker sip/six.

(41) a. ★年及の(#氪)量刊⑩。
ip kop cy bie (#six) pop la ox.
door 3P.SG kick RES open come DP
'He kicked the door open.'

- b. 위拿되「½박 (#**ફ**) 감호。 cop wox nry cvp ndo (#six) zzi lox. gig wine NUM.1 bottle drink RES left over 'They drank wine leaving one bottle.'
- c. イー・1、全人を表し、「本人をよる」。 at gop cyp bbox zze cv zyt (*six) ke she zha apname 3P.SG.POSS man 3P.SG scold RES flea CL NEG- become 'Ago scolded her husband that he would become a good for nothing bum.'

12.2.3 Nonargument-resultative constructions

There is a category of resultative constructions in which the resultative phrase ascribes a state to a non-argument. The first kind of non-arguments are body parts or items related to the agent. They are ascribed a resultative state by si nip.

- (42) a. 歩爭É₭魚♂≵州 梤预Ê梤SÔ。 ngop wox shyrx shyr **si nip** zyt jie fup bbip mix fup sot ox. 1P.PL shout shout and REFL throat even hoarse DP 'We yelled ourselves hoarse.'
 - b. ₩≌dd**\$**ቆ¦ՐֈՐֈֈֈֈֈ lu pox si nip sip ggot ox. vvx vv male name laugh laugh and liver pain DP 'Lupo laughed so much that he got a stomach ache.'
 - c. አርር**ያ** ቀካነው。 hxit hxit si nip xy li ggot. 3P.SG stand stand and leg ache 'His legs ached from standing so long.'
 - d. ÎPÎ#\$\$\$\$#\$\$\$. ax yi max su ngox ngox si nip hxie mat ho ox. child ART weep weep and heart sad DP 'The child cried so much he became sad.'
 - e. 从生产用开发体型个册间面面的。 hxa tie mux mu **si nip** lot syr pa yyx ggie ggie ox. handkerchief soggy, wet 3P.SG sneeze sneeze and DP 'He sneezed (so much) his handkerchief (became) soggy.'
 - f. አፅፅ**ጳጳጳ**ወፓቱፓቀ፴。 ngox ngo si nip o kup nyo bby lo ox. and pillow tears block DP 3P.SG crv crv 'She cried so much that the pillow became wet with her tears.'

A non-argument can also be predicated by the resultative phrase by using the linker *six*, if it is related to the patient referent who undergoes the effect of the activity.

。60. 他可以去的认了的非常的生**餐**有高大口里。 (43) a. ddiex bur six tep yy bbur su tep yy cy co bbyx book 3P.SG change RES book write NOM person CAUS hxie kat-jjy-hxie kat shux ox. happy-very-happy CAUS DP 'He changed the book in such a way that the author was very happy.'

ngop wox cy gga shyx six syt ddur ox. 1P.PL 3P.SG lead RES event exit DP 'We were led by him into calamity.'

The use of si nip in (44a) and sip/six in (44b) depends on the availabality of a resultative interpretation. If resultative meaning is only a marginal interpretation, then *si nip* and *six* should be omitted.

- 重見(#見**見**母) 頃十田日毘片山頂。 (44) a. zze (#zze si nip) nit ne gop bo hit njuo nge ox. 2P.SG eat eat and 2P.SG.POSS body harm PROG NOM COP DP 'You are eating yourself to death.'
 - b. ଧ୍ୟଞ୍ଜ (#**ફ**) ፲¼፱፻५ ... nry cop wox ndo (**#six**) cyp mix zzi-ap-lop. pip wine 3P.PL drink RES NUM.1 bottle even left<NEG> 'They drank up the wine with nothing left.'

Chapter 13

Complex sentences

In this chapter, we analyse two types of complex sentences, coordinating constructions (section 13.1) and subordinating constructions (section 13.2). *Serial verb constructions* are sentences that contain two or more juxtaposed verb phrases without any syntactic marker that indicates the semantic relationship between them. Some serial verb constructions are coordinating constructions, others are subordinating constructions.

13.1 Coordinating constructions

We examine serial verb constructions in section 13.1.1, coordinate sentences with a conjunction in the first clause in section 13.1.2, and coordinate sentences with a conjunction in the second clause in section 13.1.3.

13.1.1 Zero linking

Cross-linguistically, serial verb constructions (SVCs) are constructions with at least two verbs satisfying the following features (Aikhenvald 2006: 4–21). SVCs have (i) single event interpretation; (ii) single clause intonation; (iii) shared tense, aspect and modalidy values; (iv) at least one argument shared by two verbs.

SVCs are common in Nuosu and generally comply with these four conditions except that SVCs can refer to two closely associated events. The semantic relationship between both events is often vague and ambiguous. SVCs give rise to consecutive, simultaneous, conditional, circumstantial, purposive interpretations, or to any combination of these.

- (1) X爭華风簾兒豆狀。 cy gox nyi da zzax zze tat xi. 3P.SG LOC sit STP food eat should Simultaneous: 'He should sit and eat.'
- (2) 用于即刊印目於中。 lat hxo yi ku jox la nga hxip cyx ge. male name house inside come 1P.SG say 3P.SG tell Consecutive: 'Laho went inside the house and I told him.'
- (3) 有單用可模學內世冊。
 ne ddox mu ggep nit lot cy zhe mat.
 2P.SG knife play 2P.SG.POSS hand 3P.SG cut FEAR
 Conditional: 'If you play with a knife, you will hurt your hand.'

(4) 次年ポ系多号手。

cy lap bbu mo mup bat hlut.

3P.SG ox plough horse pasture

Simultaneous: 'He is ploughing and pasturing.'

Circumstantial: 'As he was ploughing the earth with an ox, he pastured some horses.'

vy ddu ax nyi mu jjo vu ga vit gga vy.

items much ADVL have name clothes buy

Causal: 'Because there are many items, Wuga bought clothes.'

Circumstantial: 'As there are so many items, Wuga bought some clothes.'

(6) 라디숖ᆳ히

nga yy mge furx ndo.

1P.SG cool water pour drink

Consecutive: 'I poured cold water (in my cup) and then drank it.'

Purposive: 'I poured cold water (in my cup) to drink it.'

(7) 母爭口便以前。

cop wox mop mgep la ox.

3P.PL hold meeting come DP

Purposive: 'They came to hold a meeting.'

Generally, it is not possible to convey resultative interpretations by SVCs. Resultative constructions employ syntactic markers such as *six* (section 12.3). The following three examples contrast purposive, consecutive and resultative meanings.

cy lap bbu hxe bbo.

3P.SG ox borrow go

Purposive: 'He went to borrow an ox.'

(8a) is an SVC; the movement of the person is prior to the borrowing of the ox. When we employ the consecutive conjunction *lox*, the movement of the person is posterior to the borrowing, see (8b). When we insert the resultative marker *six* and inverse the order of subject and object, it is the ox which moves as a result of the action of borrowing, see (8c).

b. 为绿机果拿苯。

cy lap bbu hxe lox bbo.

3P.SG ox borrow and then go

Consecutive: 'He borrowed an ox and then went away.'

c. 绿瓜为菜   基本。

lap bbu cy hxe six bbo.

ox 3P.SG borrow RES go

Resultative: 'He borrowed an ox and (as a result) the ox was gone.'

13.1.2 Forward-linking conjunctions

Similar to adverbs (section 9.1), there are three types of forward-linking conjunctions: movable conjunctions (section A), immovable conjunctions (section B), clause-final conjunctions (section C).

A. Movable conjunctions

Movable conjunctions can occur at the beginning of the first clause or after the topic. The only forward-linking movable conjunction is *ap ddi ddix* 'if'. It co-occurs with a clause-final conjunction in the first clause, either *yix ne* or *go li*.

- (9) a. **水**乳乳素的1, 世界目。
 - ap ddi ddixnebboyix ne,ngatjophxip.if2P.SGgoprovided that1P.SGtosay'If you leave, please tell me.'
 - - cy **ap ddi ddix** vit gga vy **yix ne**, ngat ddip vy la.

 3P.SG if clothes buy provided that 1P.SG at buy come 'If she wants to buy clothes, let her come here to get some.'
- (10) a. 水生乳中类水土乳1, 1类。

ap ddi ddixngabboap-dopgo li,nebbo.if1P.SGgoNEG-canSENT.TOP2P.SGgo'If I can't go, then (please) go.'

nop **ap ddi ddix** mop mgep **go li**, nga la ap- qi. 2P.SG if hold meeting SENT.TOP 1P.SG come NEG- want 'If you hold a meeting, I don't want to come.'

B. Immovable conjunctions

Immovable forward-linking conjunctions can be used only after the topic in the first clause. They require the presence of a backward-linking conjunction in the second clause.

Table 13.1: Immovable forward-linking conjunctions

Forward-linking conjunction	Required Backward-linking conjunction	Adverb
cyx pa jop 'on the one hand'	a zzyx pa jop 'on the other hand'	_
miep pa jop 'firstly'	wa pa jop 'secondly'	
nyi 'bothand'	nyi 'both…and'	section 9.1.3.B

The first two forward-linking conjunctions occur before the direct object. The conjunction *nyi...nyi...* is inserted between the direct object and verb in both clauses.

- (11) a.
 - cyp pa jop rre mop shep, a zzyx pa jop bbur ma sso. 3P.SG on one side money earn on one side course study 'They both work for a living and attend lessons.'
 - 。房事D录,数章网数货化贷订1申W。 cyp nyip zzix ap zzi yiet hxop nyi yiet, tep yy nyi bbur. also sing book also write male name every day song 'Luti is singing and writing letters every day.'

C. Clause-final conjunctions

Most forward-linking conjunctions are found at the end of the first clause. A list of these conjunctions is presented in Table 13.2. With two exceptions, conjunctions do not require a conjunction in the second clause. Furthermore, two of these conjunctions can be used as adverbs in simple sentences (section 9.1.2.B).

Table 13.2: Clause-final forward-linking conjunctions

Forward-linking conjunction	Compatible Backward-linking conjunction	Adverb
yix ne 'provided that'		
ax diyix ne 'except that'		
yix nyi 'even if'		
yip go 'although'		
dda mo 'no matter what'		
ax diap nge mu 'not only'	ddix ap bbo 'but also, furthermore'	
lox 'and then'		
hnox 'until'	te go xi 'up to when'	
yix nip 'only then'		section 9.1.2.B
te go 'when'		
ggup jjux ne 'after'		
ddix sy ne 'as soon as'		
sy zzy mu 'as long as'		
gex nep 'at the origin of'		section 9.1.2.B

The conjunction vix ne 'provided that' presents the first clause as background information. It is compatible with conditional, causal and temporal interpretations.

ne hxip da **yix ne**, nga hxip ddie-ap-ddur ox. 2P.SG say put provided that 1P.SG say need<NEG> 'Given the fact that you made the point, I need not add anything.'

With the adverb ax di 'only', vix ne frames the VP of the first clause as an event excluded from a set of background events. The combined conjunction expresses the meaning except that.

ax di ke she zze vix ne, ngop wox nge get vot she 3P.SG only dog meat eat given that 1P.PL pig meat eat DP all 'We were all eating pig meat except that he was eating dog meat.'

If the verb phrase in ax di...vix ne is empty, the conjunction changes into a postposition with the sense except for.

ke she **ax di yix ne**, ax pa cy xix she nvi zze. other 3P.SG INT.what meat also eat dog meat except 'Except for dog meat, he eats everything else.'

There are four concessive conjunctions in Nuosu: the conjunctions *yix nyi* 'even if', vix go 'although', dda mo 'no matter what' and ax di...ap nge mu 'not only...but also...'.

- - ndit vix nvi, ne xip mu cvp iox zvt tat-ap-xi. 3P.SG bear even if 2P.SG DEM.DD 3P.SG.POSS to scold should<NEG> 'Even if he bears the responsibility, you should not scold him.'
 - b. 用争引的岛世**承沙**, 声平引拿用重。 ax yi zha nge **yip go**, syp ddu ax nvi mu male name child CL COP although knowledge much ADVL have 'Although Mugo is a child, he has a lot of knowledge and skills.'

ax pa syt xix ijο dda mo. ca pot nyip 2P.SG other affair INT.what have no matter what day after tomorrow go shex. come HAB

'No matter what other things you have on, you must come the day after tomorrow.'

 \mathbf{d} . ይሆር ሂደላይ የተመተለተ ነገር እንደ ነገር

mu gox **ax di** la su **ap nge mu**, ddix ap bbo ap mop ax yi male name only come NOM not only but also mother child jiy gex la sat. together come EXH

'Mugo came not alone but together with his wife and children.'

The remaining conjunctions in this group convey temporal meanings. The most common is the consecutive linker *lox* 'and then' which juxtaposes two events in the temporal order in which they occur.

(16) 负手削上母生命, 字子划少举的。

ssox sse ggex su sso sat **lox**, jjy gex ix go bbo ox. students ART study EXH and then together home go DP 'The students finished the lesson and (then) went home together.'

The conjunction hnox 'until' in the first clause must be co-associated with the expression $te\ go\ xi$ 'up to when' in the second clause.

(17) a. 从月本四月节, 引印分上争利主从。

cy nry ap- ndo mu **hnox**, ax yi max su yurx te go xi. 3P.SG wine NEG- drink ADVL EXT.until child ART bear when arrive 'She did not drink wine until the birth of her child.'

b. 州肇平世司, **党**母D录第H. d

mu nyox tep yy sso **hnox**, nyip zzi kut te go xi. male name book study EXT.until NUM.20 year when arrive 'Munyo attended school until the age of twenty.'

The conjunction *yix nip* 'only then' encodes temporal succession and logical implication. It also functions as adverb in simple clauses posed after the topic noun phrase (section 9.1.2.B).

(18) a. 中国於小**印**香, X集口。

nga hxip cyx ge **yix nip**, cy shut la. 1P.SG say 3P.SG tell only then 3P.SG remember come 'He did not remember until I told him.'

The remaining conjunctions of this group emphasize different temporal relations such as immediate sucession, simultaneity and precedence.

- (19) a. 引河最早以口電子電子工廠 ax da ix go xi la **ddix sy ne**, syt cy jjit cy hxip ngop ge. father home arrive come as soon as event DEM CL 3P.SG say 1P.PL tell 'As soon as Daddy came home, he told us what had happened.'
 - b. 水堇爭軒又採用,斥稅非尺以降水手。 ap bbo gox jjo **sy zzy mu**, sse max su nzy ke ssi ap-dop. father LOC have as long as son ART power use NEG- can 'As long as a father is alive, the son is not able to exert power.'
 - c. 引印母拿水母父貸倉, 海里溪岛。 ax yi it nyi-ap-gu sy **gex nep**, zza ddie cyx zha. child sleep<NEG> still at the origin of food COV 3P.SG feed 'Before the child is sleeping, let him eat.'

The linkers *te go* 'when' and *ggup jjux ne* 'after' are standard temporal conjunctions. The linker *te go* is composed of the truncated noun *te kop* 'time' and the locative marker *go*.

- (20) a. 用兴岛签判,及复用城内城。 mu ga nyop bbop **te go**, dde dde mu yiet hxop yiet. name work when often song sing 'When Muga is working, he often sings songs.'

13.1.3 Backward-linking conjunctions

Four types of backward-linking conjunctions can be distinguished in Nuosu based on their syntactic slot: clause-initial conjunctions (section 13.1.3.A), movable conjunctions (section 13.1.3.B), clause-second conjunctions (section 13.1.3.C) and clause-final conjunctions (section 13.1.3.D).

A. Clause-initial conjunctions

There are two backward-linking conjunctions that are placed in initial position of the second clause (and cannot occur after the subject noun phrase). They do not require the co-occurrence of forward-linking conjunctions in the first clause.

Table 13.3: Clause-initial backward-linking conjunctions

Compatible Forward-linking conjunction	Backward-linking conjunction	Adverb
	tit 'however, but'	
	ap nge ox go 'either…or…'	

The first conjunction, tit 'but', is derived from the demonstrative tit 'here' (section 5.4.3.D). It indicates a shifting topic in the same way the demonstrative adverb now in Now that wasn't a bad idea marks a discourse shift in English.

(21) 增华口头对册第号介门第, 手册第34门。

nga ggap mop go da cop wox ke hxox ji la hxex, 1P.SG road LOC COV 3P.PL long period wait

tit cop wox go ap- la. however 3P.PL. LOC NEG- come

'I was waiting on the road for a long time, but they did not come.'

The disjunctive conjunction ap nge ox go is composed of the negated copular verb nge, the perfect particle ox and the complementizer go. The whole complex literally means '(if) it is not the case that'.

rre hxep bbo, ap nge ox go cop qo mu zyt bbo. 2P.SG pasture livestock go 3P.PL follow soil dig go or 'You pasture the livestock or you go with them to dig the soil.'

B. Movable conjunctions

Several backward-linking conjunctions occur in initial and non-initial position of the second clause. They are movable and are presented in Table 13.4.

Table 13.4: Movable backward-linking conjunctions

Compatible Forward-linking conjunction	Backward-linking conjunction	
	xip hnex 'therefore'	
	jjip hnex 'therefore'	
	ddix ap bbo 'moreover, actually'	
	cyp ggup jjux 'afterwards'	

The implicative conjunction *xip hnex* 'therefore' does not require a linker in the first clause.

(23) 水均附升付付,到季水量の资水生。

ap ndi hxix ma hxa jjip, **xip hnex** ngop wox nyop bbop ap-bbo yesterday rain get therefore 1P.PL work NEG-go 'Yesterday it was raining, therefore we did not go to work.'

The conjunction *ddix ap bbo* 'moreover' literally means 'needless to say' but has the current menaing of 'actually'. It details information provided by the first clause.

> cy ap ddi hxix op rro la ox, **ddix ap bbo** ngap nyit gex 3P.SG yesterday Xichang come DP actually 1P.DL both

jjyx- mo ox.

RECL- see DP

'He came to Xichang yesterday, so we actually saw each other.'

b. ፝፞፞፝፝፝፞፝፝፝፝፝፟፝፝፟፟፟፟ ፝፞፞ቜቜጚቜ፟ጜፙ,ፙቘቔጚቜ፞፞ቜዾፙ፞፞፞፟

ngop wox cyp jox ba ox, ngap nyit **ddix ap bbo** cyp 1P.PL 3P.SG toward notify DP 1P.DL actually 3P.SG.POSS

ix go li ox.

home go DP

'We briefed him. Two of us actually went to his home.'

The conjunction *cyp ggup jjux* 'afterwards' is formed of the proximal demonstrative *cyp* and the postposition *ggup jjux* 'after'.

ne hxip nga nyip vit ge, nga **cyp ggup jjux** syp ox. 2P.SG say 1P.SG NUM.2 time tell 1P.SG afterwards know DP 'You told me twice and I was aware of it afterwards.'

C. Clause-second conjunctions

There are three backward-linking conjunctions that must occur after the first noun phrase of the second clause: *tat lyp* 'but', *gga gga lox* 'moreover' and *bur six* 'to the contrary'. All three conjunctions are immovable.

Table 13.5: Clause-second backward-linking conjunctions

Compatible Forward-linking conjunction	Backward-linking conjunction	Adverb
yip go 'although' yix nyi 'even if'	tat lyp 'but'	section 9.1.2.B
(ax di ap nge mu 'not only')	gga gga lox 'furthermore' bur six 'to the contrary'	

The conjunction tat lyp 'but' marks overt contradiction with the previous clause that is either uttered by the same speaker or by someone else. If the previous clause is not uttered by the same speaker, tat lyp assumes the function of immovable adverb (see section 9.1.2.B).

(26) 발뉴더유 비용함, 집합위 중에 비용

sux yy ma nge yip go, tat lyp cop mgex da mu. 3P.PL mix STP do 2P.SG leader CL COP although but 'Although you are a leader, you nevertheless socialize with them.'

The conjunction gga gga lox 'furthermore' presents the second clause as a piece of information unrelated to the information in the first clause.

ggap mop mga-ap-sa su ax di apnge mu, road easy to pass<NEG> NOM only NEG- COP ADVL cop wox gga gga lox la ma hxa jjip xip luo zo. furthermore come rain become DEM.INDEF time meet 3P.PL 'The road is not only hard to travel, furthermore it began to rain.'

The conjunction bur six 'to the contrary' marks irreconcilable contrast and conveys a stronger value than *tat lyp* 'but' (above) or *tit* 'however' (section 13.1.3.A).

日間日子"自じ回用" f, 从**月**月日日。 (28)mu jie "ne iv-tat-jie" ddix, cy hxip go male name say SENT.TOP 2P.SG fear<NEG.IMP> OUOT 3P.SG bur six mu jie yyx. to the contrary male name laugh 'Mujie said (to him) "Don't worry", but he laughed at Mujie.'

D. Clause-final conjunctions

There are two backward-linking conjunctions that occur at the end of the second clause. They are immovable.

Table 13.6: Clause-final backward-linking conjunctions

Compatible Forward-linking conjunction	Backward-linking conjunction	Adverb
(su)	yy ddi 'because'	_
(go)	ssi ap dda 'so perhaps'	

They do not require a linker in the first clause, but the first clause provides background information and is optionally marked by su (section 5.2.4.C) or go (section 5.4.1.G). The marker yy di 'because' is the standard causal conjunction and typically co-occurs with the sentence topic particle su.

```
ma yi ngox su
    ax yi a zzyx
                                     li
    child DEM.DIST CL cry
                            SENT.TOP TOP
                                     yy ddi.
              ax mo cyp
                          iox
                                zvt
    3P.SG.POSS mother 3P.SG toward scold because
    'The child is crying because his mother scolded him.'
```

The conjunction ssi ap dda 'so perhaps' evaluates the likelihood of a situation based on information provided in the first clause.

```
(30) 对几分与对于几度引用作及事。
                                      mu jy
     ip nyip ma hxa jjip
                                                ix go ijo
                                                            ssi ap dda.
                            go
     today
            rain
                    become SENT.TOP male name home have so perhaps
     'Todav it is raining, so perhaps Mudje is at home.'
```

13.2 Subordinating constructions

Subordinate constructions consist of two clauses in which one clause, the *embedded* clause, is the syntactic argument of the predicate of the second clause. The superordinate predicate is called the matrix predicate. In section 8.2.1.A, we compare matrix verbs and modal auxiliary verbs. Matrix verbs can occur as sole predicates of the clause, can take NP-complements as well as clause-complements (though generally not VP-complements), and require one of three complementizers (go, su, ddix) with a few exceptions.

We investigate matrix predicates without complementizers in section 13.2.1, with complementizer go in section 13.2.2, su in section 13.2.3 and ddix in section 13.2.4. Semantically, matrix predicates designate mental activities or states and also speech events. The complementizer go tend to subcategorize mental activities, su mental products and *ddix* speech events, although there are exceptions.

13.2.1 Zero marking

In Mandarin Chinese, matrix predicates do not mark the embedded clause with a complementizer. Subordinate constructions are therefore serial verb constructions (Li & Thompson 1981: 598–606).

In Nuosu only few matrix predicates do not mark the embedded clause. There are several intransitive matrix predicates which do not take any NP or VP but only the embedded clause as argument: *bur zzur* 'seem', *jox jjip* 'possible' and *jjox bbu* 'probable'. These intransitive matrix predicates subcategorize clause-complements and not of VP-complements.

(31) a. *HX⊌№.

*mu ga bur zzur.

name seem

Intended meaning: 'Muga appears.'

- b. *从少拿口少以对张以**任**用。
 - *cy ngop wox yy go hxit da hxe nyiet **bur zzur.**3P.SG 1P.PL river LOC stand STP fish catch seem
 Intended meaning: 'For him we seem to stand at the river fishing.'
- c. 当界水丰佳區。

ne nga ap- syp **bur zzur.** 2P.SG 1P.SG NEG- know seem 'It seems that you do not know me.'

cy nra hxex su nrax ddur **bur-ap-zzur.**3P.SG examination measure-exit seem<NEG>
'It does not seem that he was successful at the exam.'

*syt cy jjit **jox jjip.**event DEM.PROX CL possible
Intended meaning: 'This event is possible.'

ip mi ma hxa jjip la **jox jjip** ox. this evening rain become come possible DP 'It is perhaps raining this evening.'

c. 对口間对少事升見用分子(

ip nyip jie shat go zziet ma pu jjo **jox-ap-jjip.** today street LOC pepper price have possible<NEG> 'It is impossible that pepper is expensive in the street market today.'

*syt suo jjit **jjox bbu**.
event NUM.3 CL probable
Intended meaning: 'Three events are probable.'

```
b. X¥Ñ#¶n̂®。
         bbo ox jiox bbu ox.
   cv
   3P.SG go DP probable DP
   'It is probable that he is going.'
```

Two verbs of thinking, vip mgu and mgu mu ngop, do not mark the embedded clause with a complementizer. Both ascribe a belief to a subject and embed the belief as a clause.

```
次中型口口水产来至。
(34) a.
              nga ip nyip la
                                 ap-
                                      dox yip mgu.
        3P.SG 1P.SG today come NEG- can consider
        'He considered that I could not come today.'
```

b. भैग्रीभुग्नै‡**₹भ**कु ngax li mu gox jjix do mgu mu ngop. 1P.SG TOP male name tired think 'I think that Mugo became tired.'

13.2.2 With complementizers su and go

The complementizers su and go assume other functions analyzed in different parts of this grammar. For overviews of their meanings, see section 5.2.4.C (su) and section 5.4.1.G (go). Most matrix verbs can co-occur with both complementizers with a difference in meaning. The complementizer su marks the embedded clause as a proposition, while go imports the meaning of abstract locative ('in the event of'). The following table lists matrix verbs compatible with both *su* and *go*.

Table 13.7: Matrix predicates using go and su

lie ba 'dangerous'	hxi zv 'trust'	nuo chex 'spy on'
ggap jjyx 'easy'	bbup 'admire'	hxip ryt 'confess'
00 1 ///	•	' '
nbop 'good'	ddie mga 'please'	durx xie 'oppose, block'
zhet 'fine'	ke bbo 'promise, allow'	nge hna 'agree, allow'
hxie kat 'glad'	hxie ca 'eager'	jjur hla 'fear'
gat qip 'delay'	nrax xie 'measure'	

To start with a controversial predicate, the adjective vu jji 'true' sub-categorizes noun phrases not clauses. Vu jji is not a matrix predicate although its English equivalent true is. Vu jji cannot take clause arguments, as shown in (35c), but can take headless relative clauses, as in (35d).

- (35) a. 日本教養養事業。
 rre mop cy bbut vu-ap-jji.
 money 3P.SG CL true<NEG>
 'This bill is fake.'
 - b. 点色变量分割。
 ddop ma vu jji cyx go.
 word true DEM.PROX CL
 'one true word'

 - d. $\begin{tabular}{lll} & \begin{tabular}{lll} & \begin{tabular}{$

The following matrix adjectives are intransitive and take noun phrases and clauses as arguments.

- (36) a. 확회법원.
 nop lie ba ox.
 2P.PL dangerous DP
 'You are in danger.'
- (37) a. 丫葉身相母母子。 syt jjit su a hnat mu ggap jjyx. issue ART very easy 'The issue is very easy (to solve).'

book DEM.PROX CL 1P.SG study COMP easy DP 'It is easy for me to study this book.'

- (38) a. 柳原母果果。 co cyx ma nbop-jjy-nbop. persons DEM.PROX CL good-very-good 'This man is very good.'
- (39) 学家美工网络 【集】 重重?

 nga nex lot buop da bbur {su go} zhet zhet?

 1P.SG 2P.SG help STP write COMP good~ALT 'Is it ok that I help you write the letter?'
- (40) a. 日周早年日本日代任意。
 mu jie syt jjit su yy di mu hxie kat nzox.
 male name issue ART because of glad EXP
 'Mujie was very glad about what happened.'

Most matrix verbs are monotransitive and subcategorize noun phrases, verb phrases and clauses as arguments. The matrix subject and the embedded subject may be identical.

(41) a. 🖇 🖺 ស 🗎 ស 🕽 ស 🕽 🖂 🕳 🖰 🧸

ngop wox op rro da cyp nyip gat qip.

1P.PL Xichang COV NUM.1 day delay

'(On our trip) we were delayed in Xichang for a day.'

b. X中米州 {#} ※①⑥。

cy nga hxe nyiet $\begin{cases} \mathbf{su} \\ \mathbf{go} \end{cases}$ gat qip ox.

3P.SG 1P.SG fish catch COMP disturb DP

'He disturbed me when I was fishing.'

(42) a. 炒米 🖁 🛱 🐰 .

ngap nyit jjyx- hxi zy.

1P.DL RECL- trust

'We both trust each other.'

nga cy syt mu $\begin{cases} \mathbf{su} \\ \mathbf{go} \end{cases}$ hxi zy.

1P.SG 3P.SG matter do COMP trust

'I am trusting in his way of doing business.'

(43) a. 以世前世年。

cy ngat shax jji bbup.

3P.SG 1P.SG.POSS candy admire, envy

'She envies my candies.'

b. ឃុងឆ្នៃ { 🖁 🐧 ជម្ងា.

nga cy zzax zze $\begin{Bmatrix} \mathbf{su} \\ \mathbf{go} \end{Bmatrix}$ bbup-jjy-bbup.

1P.SG 3P.SG food eat COMP admire-very-admire

'I admire very much his eating.'

(44) a. \(\frac{1}{1}\) 文 \(\frac{1}{2}\) 工 \(\frac{1}{1}\) \(\frac{1}{2}\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\)

syt cyp jjit cyp ddie-ap-mga.

issue NUM.1 CL 3P.SG please<NEG>

'He was not pleased with what happened.'

- (45) a. X日入出年日日荃。 cy rre mop nge hxa vat ke bbo. 3P.SG money NUM.500 RMB promise 'He promised 500 RMB.'
 - b. $\mathbb{P} \mathbb{D} \oplus \mathbb{E} \left\{ \begin{array}{l} \mathbb{F} \\ \mathbb{F} \end{array} \right\} \times \mathbb{P} \mathbb{E} \widehat{\mathbb{D}}$ sunga op rro bbo $\left\{ \begin{array}{l} \mathbf{su} \\ \mathbf{go} \end{array} \right\}$ cy ke bbo ox. 1P.SG Xichang go COMP 3P.SG promise DP 'He promised that I would go to Xichang.'

There are several control predicates such as *hxie ca* 'eager' which can take noun phrases and verb phrases but not clausal arguments.

The following matrix predicates subcategorizes noun phrases and clauses but not verb phrases.

$$b. \quad \mathbb{A} \, \widehat{\mathbb{A}} \, \widehat{$$

hmat mop ssox sse xix $ngop \begin{cases} su \\ go \end{cases}$ nrax xie njuo. teacher student INT.what think COMP measure PROG 'The teacher is finding out what the students think.'

- (48) a. 米斯爾茅。 cy bbu jji nuo chex. 3P.SG enemy spy on 'He spied on his enemies.'
 - b. 全电负压电 争军用 【集】 主菜思。
 bbox zze max su cop wox syt mu {su go} nuo chex njuo.
 man ART 3P.PL thing do COMP spy on PROG
 'The man is spying on how they are working.'
- (49) a. X可以也特目狀節。
 cy yot vi nge ji hxip ryt ox.
 3P.SG crime, sin NUM.5 CL admit DP
 'He admitted five crimes.'

The matrix verb nge hna 'willing, agree' in (51) cannot take noun phrases but only verb phrases and clauses as arguments.

(51) a.
$$\mathbb{X}\widehat{\oplus}\mathbb{X}^{\underline{*}}$$
 $\mathbb{Y}^{\mathbb{F}}$ $\mathbb{Y}^{\mathbb{F}}$ cy ssox dde bbo $\begin{cases} \mathbf{su} \\ \mathbf{go} \end{cases}$ nge hna. 3P.SG school go COMP willing 'He is willing to attend school.'

The matrix verb jjur hla 'fear' in (52) only takes clauses as arguments not noun phrases or verb phrases.

13.2.3 With complementizer su alone

The use of *go* is more restricted than that of *su*. The verbs in Table 13.8 require *su* but reject go. They are incompatible with the idea of locative expressed by go.

Table 13.8: Matrix predicates using su but rejecting go

hxo lo 'depend'	shy gox 'deceive, conceive'	hxip pie 'attest'
ngop jix 'consider'	njyp 'believe'	po shy 'deceive'
ngop bur jix bur 'reconsider'	ngop die 'doubt'	mox po 'evade, avoid'
turx jo 'defend, prevent'	nra hox 'train, measure'	xi mgu 'hope'
sso 'learn, imitate'	shut die 'remember'	jie 'afraid'

Several matrix predicates subcategorize, noun phrases, verb phrases and clauses, as the verbs in (53)–(55).

- (53) a. 學用素預例工事。
 nga ax mo ax da hxo lo.
 1P.SG parents depend
 'I depend on my parents (for a living).'
 - b. $\widehat{\mathfrak{A}}$ \widehat
- (55) a. ⑩♯州埠節屮。 gup na bba na turx jo. plague prevent 'prevent a pandemic'

Others co-occur only with noun phrases and verb phrases not with whole clauses in which the subject is different from the subject of the matrix predicate.

(56) 부처 하
$$\left\{\begin{smallmatrix} \$ \\ * * \end{smallmatrix}\right\}$$
 Θ 분 \circ nga bbur ma bbur $\left\{\begin{smallmatrix} \mathbf{su} \\ *\mathbf{go} \end{smallmatrix}\right\}$ sso njuo.

1P.SG written language write COMP study PROG 'I am learning how to write.'

Still others select noun phrases and clauses as arguments but reject verb phrases for which the subject is the same as the matrix subject.

(57) a. ¼♀⊀⊖減€ᢤ₶。 cy syt ap- vat jjit shy gox njuo. 3P.SG matter NEG- good CL conveive PROG 'He is conceiving something bad.'

(58) a. 从例付外并并分分。
cy co zzi-ap-syp su njyp nzox.
3P.SG person familiar<NEG> NOM believe EXP
'He once trusted someone unfamiliar.'

(59) a. 界泉歩水。
nga cyx ngop-ap-die.
1P.SG 3P.SG doubt<NEG>
'I do not doubt him.'

cop wox mux dde nge jot nra hox ox. 3P.PL land NUM.5 CL measure DP 'He took measurements of five plots of land.'

nga lur mat ggex su kax ddi gep bbo a ddit da $\begin{Bmatrix} \mathbf{su} \\ \star \mathbf{go} \end{Bmatrix}$ nra hox njuo.

1P.SG stone ART who COV pile there put COMP find out PROG 'I am finding out by whom the stones were piled up there.'

(61) a. 以10至分片业化。

cy cyp qop bop max su shut die. 3P.SG 3P.SG.POSS friend ART remember 'He remembered his friend.'

b. 华美X前等工 {# *對} *%。

ngop wox cy cox lot buop $\begin{Bmatrix} \mathbf{su} \\ *\mathbf{go} \end{Bmatrix}$ shut die.

1P.PL 3P.SG people help COMP remember 'We remember how he helped others.'

(62) a. X字际英国电 ô。

cy syt suo jjit hxip pie ox. 3P.SG matter NUM.3 CL attest DP 'He testified in three cases.'

b. $\exists \mathbb{R} \left\{ \begin{array}{c} \mathbf{H} \\ \mathbf{H} \end{array} \right\}$ $\exists \mathbb{R} \left\{ \mathbf{H} \right\}$

mu rryr cyp zyt jie nuo su co ma nge $\begin{Bmatrix} \mathbf{su} \\ \mathbf{\star go} \end{Bmatrix}$ hxip pie ox. male name 3P.SG REFL Nuosu person CL COP COMP attest DP 'Mudge proved his Nuosu identity.'

si hni max su lat rep suo yuo mox po njuo. woman ART thief NUM.3 CL flee PROG 'The woman is escaping from three thieves.'

Finally, the following two matrix predicates only subcategorize clauses but cannot take noun phrase and verb phrase arguments.

13.2.4 With complementizer ddix

The morpheme *ddix* functions as quotative marker (section 8.3.1) and as complementizer. As quotative marker, *ddix* occurs at the end of the clause. As complementizer, it is placed before the matrix predicate.

(66) a.
$$N+V_{SPEECH}+go+[reported speech clause]+ddix$$
. quotative $ddix$ b. $N+[embedded clause]+ddix+V_{SPEECH}$. complementizer $ddix$

The matrix predicates that co-occur with the complementizer *ddix* are speech act verbs. The embedded clause is conceptualized as speech product.

Table 13.9: Matrix predicates using the complementizer ddix

gox xie 'exhort, urge'	hxip 'say'	ddop bur 'reply'
ddop zy ssi 'witness'	hna 'ask'	

Speech act verbs subcategorize both noun phrases and clauses. For the following verbs, (a) exemplifies NP arguments and (b) clause arguments. In (b), *ddix* can be substituted by the complementizer *su* but not by *go*.

- (67) a. ቆ፞ቜ፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞ መጀት አስተመጀት አ ngop wox ax yi cyx ma cuop luo gox xie. 1P.PL child DEM.PROX CL a little encourage 'We encourage this child a little bit.'
 - b. $\mathbb{P} \oplus \mathbb{P} \times \mathbb{H} \times \mathbb{P} = \mathbb{P} \left\{ \begin{array}{l} \mathbb{F} \\ \mathbb{F} \end{array} \right\} \oplus \mathbb{F} \otimes \mathbb{F} \otimes$
- (68) a. 坪J Ө州縣 X 环译。
 nga cyp rrox mu ddop zy-ap-ssi.
 1P.SG 3P.SG COV.for witness<NEG>
 'I did not witness for him.'
 - b. X前的於中地本地 {#} 紫本序。

 cy ax yi cyx ma co ap- ku {su ddix} ddop zy ssi.

 3P.SG child DEM CL person NEG- steal COMP witness 'He attested that this child did not steal from anybody.'

The logophor i/op may be used in embedded clauses with the complementizer ddix. This is illustrated in (69) for i.

(69)
$$\mbox{13.4} \mbox{13.4} \mbox{14.5} \mbox{15.5} \mbox{15.5} \mbox{16.5} \mbox{16.5}$$

Chapter 14

Topic and focus

Topic and focus are information units the speaker uses to stratify the discourse. We analyze Nuosu topic constructions in section 14.1 and focus constructions in section 14.2.

14.1 Topic

Topic is an important concept in Nuosu. The topic is the discourse portion *about which* the predication is made (Dik 1997: 312–314, Lambrecht 1994: 118, Reinhart 1982: 58–59) or which *sets a framework* within which the predication holds (Chafe 1976: 50, Li & Thompson 1981).

Topics in Nuosu occupy an extra-clausal position ("specifier of CP"). A topic consists of a noun phrase, time adverbial or whole sentence. Topics can be morphologically marked. Nuosu employs the following topic particles.

Syntactic unit	Topic particle	Function	Section
NP, time adverbial	ne	Maintaining topic	section 14.1.1
NP, time adverbial	li	Contrasting topic	section 14.1.1
Clause	su	Sentence topic	section 14.1.2
Clause	su ne	Maintaining sentence topic	section 14.1.2
Clause	su li	Contrasting sentence topic	section 14.1.2
Clause	go	Sentence topic	section 14.1.3
Clause	go ne	Maintaining sentence topic	section 14.1.3
Clause	go li	Contrasting sentence topic	section 14.1.3

The sentence topic particles *su* and *go* also function as complementizer (section 13.2.2 and section 13.2.3). Both functions target clausal constituents.

14.1.1 The topic particles ne and li

The morpheme *ne* marks *maintaining topic* (Dik 1997: 315–316), the sense that a piece of information fits under the ongoing discourse topic. *Li* encodes *contrasting topic*, the idea of a change in the discourse topic or of unexpected information about the current discourse topic.

Both topic particles are appended to common nouns, proper nouns, locative expressions and time adverbials.

(1) a. អ្នក្សេក្សេក្សេក្សេក្សេក្ស

mu ti mu jy max su **li** ket mop mu jy max su nge. common noun morning star ART TOP evening star ART COP

'The morning star is the evening star.'

(Context: Someone might think that the morning star and the evening star are two different stars)

b. শ্ជា ԱՍ Իւթյան թեր առաջան հայարարան առաջանությանն արագրությանն արագրությանն արագրությանն արագրությանն արագր

vut sa **ne** nyop mu cox ma nge. proper noun name TOP peasant CL COP

'Vusa is a peasant.' (Context: Vusa was mentioned before)

c. ሕୱ1% ଶ୍ୟୁ ପ୍ର ተ ।

xiet ddop **ne** lur kur ax yy ma nge. locative noun city name TOP city big CL COP

'Xide is a big city.' (Context: Xide was mentioned before)

a ddit wa jop **li** yy mop hmo jjip. locative phrase there behind TOP river CL locate 'Behind there is a river.' (Context: The addressee should pay attention)

e. 半长少少多分布息。

kut shyr go **li** ngop wox vot she zze. temporal noun Yi New Year LOC TOP 1P.PL pork eat 'During the New Year we eat pork.' (Context: Contrast to other festivals)

f. 多E拿**多 3 3 3 3 9 1 1 1 .**

mup shy dex **ne** vut nyop yur nyip nge. temporal adv tomorrow TOP female name birthday COP 'Tomorrow is Vunyo's birthday.' (Context: Question about tomorrow)

Cross-linguistically, noun phrases marked by topic particles are often definite (Portner & Yabushita 1998: 119–120), either previously mentioned or identifiable through an entity that is familiar.

(2) 少量的最少从门至第, 下坐以少量好量每至每。

ngop wox cop ix go xi la ggup jjux, sip po **li** ngop wox 1P.PL 3P.PL home arrive come after houselord TOP 1P.PL zo six vat -jjy- vat. entertain RES good very good

'After we came to their home, the houselord entertained us very well.'

(3) 「用達山營世帝。 cyp jjo ssy **li** sho ddep lox. 3P.SG.POSS life span TOP long WISH 'His lifespan is hopefully long.'

The maintaining topic marker *ne* requires definite noun phrases, whereas the shifting topic marker *li* also co-occurs with indefinite noun phrases.

The topic particles (*ne* or *li*) can be used after the definite noun phrase in (5a) but *ne* is not natural in (5b).

- (5) a. 引来多季; 中省/山泉 中市。 ax mo ko lo ko; nga **ne / li** ix go it mo. mother bedspread cover 1P.SG TOP home stay intend 'My mother made up the bed; I wanted to stay at home.'
 - b. 乳素季季; 聖母 (#氢/以) 最早世录。 ax mo ko lo ko; ddip vip ma (#**ne/li**) ix go it mo. mother bedspread cover guest CL TOP home stay intend 'My mother made up the bed. As for the (/*a) guest, he wants to stay at home.'
- (6a) is taken from the opening section of a folk story. The first sentence of (6a) introduces the protagonist of the story. The second sentence establishes this new referent as major discourse topic by using the shifting topic marker li.¹
- (6) a. 兴识风州党全电景设计学创业学中。蓬曼龙舟以海景学本美,...
 ga lu la da mu ddix bbox zze got gop ddix xip ma go
 place name place man name be called DEM.INDEF CL LOC
 it. bbox zze cyx ma li zza gat ddix ap bbo,...
 live man DEM CL TOP stingy not only
 'In Galulada there was a man whose name was Gogo. This man was
 not only stingy,...'

¹ Quoted from the folk story "The earnest man" (Chén & Wū 1998: 221).

In (6b), the topic moves from the story's protagonist to his wife and then to a particular day in their life. The noun phrases are marked by the maintaining topic particle $ne.^2$

ndit ro qix ma, tit cyp earnest face put on DEM.INDEF CL however 3P.SG.POSS xyp mop max su **ne** ssa hxuo ggup jjux ddop hxip get wife ART TOP capable further word say can nyip **ne**, cyp xip ma cvp jiet ddu ddip vip DEM.INDEF CL NUM.1 day TOP 3P.SG.POSS home cur gox xi la.... CL LOC arrive come

'..., but was also putting on an earnest face. His wife, however, was skillful and capable in speech. On one day, there were guests who came to their home.'

The topic marker li is used in the middle of a folk story to shift attention to a discourse referent different from the one mentioned before.³

- (7) "主战引来引风平差,护山北京公司张宁也盖来" 宝 "ne nit ax mo ax da ddu bbo, ngax **li** ndu 2P.SG 2P.SG.POSS parents home go 1P.SG TOP crawl niep ga kux lur jox it bbo mo" ddix. pumpkin inside to live go intend QUOT 'Go back to your parents. As far as I am concerned I plan to dig into a pumkin and live in it.'
- \mathfrak{s} ጓ \mathfrak{r} አ \mathfrak{r} \mathfrak{r} አ \mathfrak{r} \mathfrak{r} አ \mathfrak{r} \mathfrak{r} tit yuo nyiet jie da cyx suo da however STP DEM.PROX NUM.3 CL embarrased STP iex ssa iex ssa mu nuo six go hxex la go ne, slow slow ADVL covert RES LOC see come SENT.TOP TOP li xyp mop ggex su gep gur bbur jjyt ap-3P.SG TOP wife ART COV frighten answer NEG- can 'However, the three were embarrassed and slowly withdrew; he (mentioned before) was frightened by the wives being left speechless.'

² Quoted from the folk story "The earnest man" (Chén & Wū 1998: 221–222).

³ (7) is quoted from the folk story "The elder and younger brother" (Chén & Wū 1998: 219) and (8) from the story "Fearing the wives" (Chén & Wū 1998: 226–227).

The contrastive topic marker li is used in parallel predications in which two referents are contrasted for some properties.

- (9) a. 坪山計井,沁山飛む。
 nga **li** nuo su, cyx **li** hxie mgat.
 1P.SG TOP Nuosu 3P.SG TOP Han
 'I am Nuosu, he is Han.'

The topic marker *ne* is a lexicalized part of several conjunctions (section 13.1.2.C). The conjunction *ddix sy ne* 'as soon as' literally means *while still speaking*. The conjunction *xix mu ne* 'it is because' is composed of *xix mu* 'why' and *ne*. The conjunction *yix ne* 'provided that' merged the exclamation particle *yip* and *ne*.

- (10) a. X 绿皂连氧 Y N,X Y 圣 D 。
 cy zzax zze sat **ddix sy ne**, cy jjie bbo ox.
 3P.SG meal eat EXH as soon as 3P.SG leave go DP
 'As soon as he finished his meal, he left.'
 - b. 凝H\$X(以) \$日開口計世。
 xix mu ne cy (li) ap ndi hxix la su nge.
 it is because 3P.SG TOP yesterday come NOM COP
 'It is because he came yesterday.'

14.1.2 The sentence topic particle su

The topic particle su marks a clause for being an extra-clausal constituent. Sentence topics marked by su can be often glossed by because. The sequence su ne in (11) has the maintaining topic marker ne as optional component.

In (12), the accident of Jimu Vuho's finger cut off is described in the preceding discourse and is thus familiar. It is marked by *li* as it introduces unexpected information.⁴

(12) 黑光剛計學則用:"莊州潔冷學心營事以用電句事事..."
bbap ga co ggex su xip mu hxip: "jjix mu vyt hop lot jy jjuo village people ART DEM.DD say name finger fell

su li nry yit yy ddi su..."

SENT.TOP TOP drunk reason NOM

'The village people said the following: "Jimu Vuho cut off his finger, because he was drunk".'

14.1.3 The sentence topic particle go

The sentence topic particle go marks a clause as condition for the main clause. This interpretation of topics was first proposed by Haiman (1978). The topic marker go is compatible with both ne and li.⁵

(13) "爭求, 於實知的內球用學事所用例確學習到了主管" 爭。
"jjy yip, cyx **ne** le xip ji ap- jjo **go ne**very-EXCL DEM.PROX TOP ox DEM.INDEF CL NEG- have SENT.TOP TOP
kep mu da nit go zzi xip zyt dop hxax" ddix.
INT.how STP 2P.SG.POSS drum DEM.INDEF sew can IMP QUOT
'O yes, given this (situation), if there is no such an ox, how can you sew such a drum?'

In (14), the sentence topic marker *go ne* marks a direct speech clause as background information.⁶

(14) a. zyt zze ddix" go sip mu 2P.SG what, why COV ground dig eat QUOT SENT.TOP TOP "it ke zyp dde go bba ma ii i LOG.SG.POSS dog bury NOM LOC bamboo CL LOG.SG fell lox, cyx ji sip mu zvt zze" ddix. sip la take come and DEM CL take earth dig eat QUOT 'When (the elder brother asked) how he would plough the ground, (his brother replied that) he felled the bamboo tree that grew out of the place where his dog was buried and ploughed the ground with it".'

⁴ Quoted from the story "The drunk man" (Chén & Wū 1998: 230).

⁵ Quoted from the folk story "The drum and the ox" (Chén & Wū 1998: 225).

⁶ Quoted from the folk story "The elder and younger brother" (Chén & Wū 1998: 218).

Example (15), taken from spoken discourse, also exhibits the semantics of conditional clauses.

ne sut co lot-ap-bop **go li** sut co nyi nex 2P.SG other people help<NEG> SENT.TOP TOP other person also 2P.SG lot-ap-bop.

help<NEG>

'If you don't help others, others won't help you.'

14.2 Focus

14.2.1 The focus particle li

When the morpheme li is postposed after the first constituent, it encodes the constituent as contrastive topic. After the second constituent, it marks it as the contrastive focus and must be followed by a second contrastive sentence.

(16) Xヨコリダ軒,手サは引拿出軒。

cy rre mop **li** ap- jjo, tit vot va ax nyi mu jjo. 3P.SG money TOP NEG- have but pig chicken many ADVL have 'He has no money, but he has a lot of pigs and chickens.'

14.2.2 The sentence focus particle su

The morpheme *su* in optional combination with the copular verb *nge* form a focus construction, called the *association with focus pattern*, which we analyzed in section 6.1.2.B.

- - ax mo nyo bby ddur go hxie kat **su** nge, hxie qyt **su** ap- nge. mother tears exit SENT.TOP happy FOC COP sad FOC NEG- COP 'Mother is weeping. It is for joy and not for sadness.'
- (18) 紫色液学有量量量,及目睛变量。
 ddop ma cyx go ne hxip **su** nge, cy hxip **su** ap- nge.
 word DEM.PROX CL 2P.SG say FOC COP 3P.SG say FOC NEG- COP
 'You made this statement not he.'

14.2.3 The pseudo-cleft construction with kax

Nuosu pseudo-cleft constructions use the preverbal particle *kax* and the nominalizer *su*. Pseudo-cleft constructions are either headless or appended right to a head noun. Like relative clauses, they restrict the reference of the head noun. Unlike relative clauses pseudo-cleft constructions only relativize S- or O-arguments, but never A-arguments.

- (19) Pseudo-cleft constructions: (i) $(N_A)+kax+V+su$; (Headless)
 - (ii) $(N_A)+kax+V+CL'$; (Headless)
 - (iii) $N_{S/O}+(N_A)+kax+V+su$; (Restrictive)
 - (iv) $N_{S/O}+(N_A)+kax+V+CL'$ (Restrictive)

Pseudo-cleft constructions function as new or contrastive topic at the beginning of a larger sentence. They can be glossed by *what is happening is [comment]* (if the relativized verb is intransitive) or *what X is doing is [comment]* (if the relativized verb is monotransitive).

- (20) a. ¥新報 A 图 V B U B 出。
 - syt **kax** jjo cyx gge gox ddur su nge. matter CLF have DEM.PROX CL happen FOC COP
 - 'All these things actually happened' (*lit*. those things that exist actually happened).
 - b. ՀԳԿԿՈՐԱՄԵՐԱԳԵՆ

ddop ma ke go **kax** ddur la ggex su ngat hxie vur. word mouth LOC CLF exit come ART=CL-DET 1P.SG like

'I like the words that came out of (your) mouth.'

In (21), the pseudo-cleft constructions are headless and relativize the O-argument of a monotransitive verb.

- (21) a. X 利用 出 中 予 页 环 # 。
 - cy **kax** mu su li nga gox dde ap jji. 3P.SG CLF do NOM TOP 1P.SG PAT know<NEG>

'I was not aware of what he was doing.'

b. 着时间上手网上原本学用子单。

kax zzi ggex su ne hxip su si nip jjy-mu-jjy-sux. CLF encounter ART=CL-DET 2P.SG say NOM and RECL-make-RECL-resemble

'What (we) encountered corresponds to what you said.'

(22a+b) are pseudo-cleft constructions with obligatory AOV resp. OAV order. The head noun is resumed by the pronoun gox in the AOV clause (22a). It cannot be resumed by gox in the resultative clause (22b).

- (22) a. 乳腺及乳素排乳,及乳糜用制⑥原。
 ax yi cy gox **kax** mgu su ne, cy ap nryr mu cop ju hmat.
 child 3P.SG PAT CLF love NOM TOP 3P.SG really 3P.PL take care
 'She really takes care of the children she loves.'
 - b. 均用層(*学)預M原用自M的非出版學目標。
 yi mu jie (*gox) **kax** hxop six a hni mu da ox su li
 house male name PAT CLF paint RES red do STP DP NOM TOP
 hxep sa -jjy- hxep sa.
 beautiful very beautiful

 'The houses that Mujie painted red are very beautiful.'

Pseudo-cleft constructions with *kax* are productive. In addition, there is a lexicalized expression, *kax nyi mu* 'all' (*nyi* 'sit' and *mu* 'all'). The whole expression is used as a universal quantifier for properties such as 'strength', 'intelligence'.

(23) 秘书工新華出版。
cox ma cyp we **kax nyi mu** shyr.
person CL 3P.SG.POSS strength CLF-sit-all call
'There is someone crying with all his strength.'

Chapter 15

Speech act particles

Several sentence-end particles encode the illocutionary function of an utterance: interrogative (section 15.1), imperative (section 15.2) and expressive (section 15.3).

15.1 Interrogative

15.1.1 The particle ddap

The morpheme *ddap* assumes two functions. It connects a positive and negated verb form as choices in an alternative question.

- - nit le jix su bbur jjip **ddap** bbur-ap-jjip? 2P.SG.POSS ox ART submissive INT submissive<NEG> 'Your ox is submissive, isn't it?'
 - b. 事可口次举口时重化计?

ne ip nyip zza bbo hxep mga **ddap** ap-mga? 2P.SG today crops inspect INT NEG-inspect 'You inspect the crops today, don't you?'

c. 填累比求重比求求?

nit lot sip ngop **ddap** sip-ap-ngop? 2P.SG.POSS hand feel INT feel<NEG> 'You feel your hand, don't you?'

As sentence-end particle, *ddap* encodes an utterance as Yes/No-question, as shown in (2). It might be preceded by the discourse particle *yip* which communicates that the utterance is up for discussion, as illustrated in (3).

- (2) a. 升爭可到升的机率升重?
 - cop wox li xip mu o bbu hne nji **ddap**? 3P.PL TOP DEM.DD clever INT 'Are they so clever?'
 - b. 当印鱼冈圭亚?

ne op zzup hxop syp **ddap**? 2P.SG Tibetan language know INT 'Do you speak Tibetan?' (3) a. 粉身又次於用矛盾的於水壓?

lu ti syt cy jjit mu dox su ne cy njyx yip **ddap**? male name affair DEM CL do can COMP 2P.SG 3P.SG believe META INT 'Do you believe that Luti can do this?'

b. X智里T负温和资本重?

cy nop ddip cyp mgat jip she

cy nop ddip cyp mgat jip shep nzox yip **ddap**? 3P.SG 2P.PL at 3P.SG.POSS advantage search EXP META INT 'Did he take advantage of you?'

Another use of the sentence-final particle *ddap* is in suggestive questions in which the predicate is negated.

(4) a. X手世里 Y 门 重?

cy tit ngat ddip ap- la **ddap**? 3P.SG here 1P.SG at NEG- come INT 'Didn't he come here?'

co ddop ma hxip max su hxie mgat co ap- nge **ddap**? person word say ART Han person NEG- COP INT 'Isn't the one who is speaking a Chinese?'

c. 承母於附續業間於生量。 tep yy cy zzit nit zyt jie -vi ap- nge **ddap**? book DEM CL 2P.SG.POSS REFL -POSS NEG- COP INT 'Isn't this book yours?'

15.1.2 The particle mix

The discourse marker *mix* is co-associated with *wh*-questions and alternative questions. It solicits the addressee's feedback, glossable as 'what do you think'.

(5) a. ម្ស៊មអ៊ីវេយៈវេដ្ឌិ?

le cyx ji kax ddi tut -vi nge **mix**? ox DEM.PROX CL INT.who family -POSS COP SOL 'This ox belongs to whose family?'

syt cy jjit li cy xix sip gox hne sup hxit **mix**? matter DEM.PROX CL TOP 1P.SG INT.what take PRO.PAT compare can SOL 'With what should he compare this event?'

- c. 英刀切伸坐並觉, 衆衆疑?

 xyp mop a shyt po bbo ox, mgot mgot **mix**?

 wife new run go DP chase~INT SOL
 - 'The bride escaped. Should we chase after her?'
- d. 行為行為雇用以主義,或行為用以為非世紀?
 nyip mop nyip cy ryx mu la go shex, ip nyip xix mu la nyiet usually 3P.SG early come HAB today why come late su nge mix?
 NOM COP SOL

'Usually he comes early. Why is he late today?'

It is homophonous to the future tense particle *mix* (section 7.8.1 and section 7.8.2.A).

15.2 Imperative

Three particles encode imperative clauses, the first person imperative particle mo (section 15.2.1), the second and third person imperative particle map (section 15.2.2) and the politeness particle $yip \ su$ (section 15.2.3).

15.2.1 The particle mo

As bare verb particle, *mo* is restricted to first person subjects and communicates a gentle self-oriented summon to action. *Mo* also combines with other particles and relaxes then some of these constraints (see section 15.3.3).

- (6) a. 常則 多爭進 (命) 兼!
 dep la! ngop wox bbo (ssox) **mo**!
 stand up come 1P.PL go should IMP
 'Get up! Let's go!'
 - b. 伊克里泉域计算从其中国新工术!
 nga jix po xix yiet sip syt cy jjit mu su nga hxip
 1P.SG method what CL COV matter DEM CL do COMP 1P.SG say
 nop ge mo!
 2P.PL tell IMP
 'Well, let me tell you the method I am using for doing this.'

ngop wox cop wox bbyx syt cy jjit ju hmox shux **mo**! 1P.PL 3P.PL give matter DEM CL arrange CAUS IMP 'Well, we let them take care of this.'

Second and third person subjects cannot be used with the bare verb particle *mo*. This constraint is lifted if *mo* combines with other verbal particles.

- - *ne tep yy a shyt zzit su dop cyx box **mo!** 2P.SG book new ART point at 3P.SG show IMP Intended meaning: 'You may show him the new book.'
- (8) a. * X 目 永!

 *cy hxip **mo**!

 3P.SG say IMP

 Intended meaning: 'Let him say something.'
 - b. X目沪承!
 cy hxip shux **mo!**3P.SG say CAUS IMP
 'Let him say something.'
- (9) * 아이전자!
 *ma hxa jjip **mo!**rain become IMP
 Intended meaning: 'May it rain!'

The clause in which the bare particle *mo* is used must allow subject control. If the predicate does not allow control, the use of *mo* is ungrammatical.

The following two examples are proverbs built on the particle *mo*.

- (11) a. 레门丁汀等兼!
 sit la cyp nyip kuo **mo!**warfare NUM.1 day hero IMP
 - 'Want to be a hero in a day of war!'
 - b. ՕՍԼԵԴԱ։

nyop mu cyp nyip ggat **mo!** labour NUM.1 day rich IMP 'Want to be rich in a day of labour!'

15.2.2 The particle map

The imperative particle *map* is complementary to *mo. Map* requires second or third person subjects and is incompatible with first person subjects.

> ne cy go ap- shut **map!** 2P.SG 3P.SG PRO.PAT NEG- remember IMP 'Don't remember him!'

b. X♥¥!

cy zze **map!**3P.SG eat IMP
'Let him eat!'

c. $\psi \forall x, 1 \hat{\eta} 1$!

nga vy bbo mo, ne xyx ne **map!** 1P.SG buy go IMP 2P.SG rest IMP 'I will go shopping. Have a rest here!'

hxi jox mgo-jjy-mgo, lu dda vit gga ddie ggat **map!** outside cold-very-cold male name clothes COV wear IMP 'It is very cold outside. Ludda should wear clothes!'

First person singular subjects cannot co-occur with *map* but first person plural subjects can. *Mo* sets a gentler tone than *map*, as illustrated (13b+c).

(13) a. *♥均≢¥!

*nga le hlut **map!**1P.SG ox pasture IMP

Intended meaning: 'I may pasture the oxen!'

```
b. 歩均≢景!
                         ngop le hlut
                             ngop le hlut
                   mo!
                                            map!
   1P.PL ox pasture IMP
                             1P.PL ox pasture IMP
   'Let us pasture the oxen.'
                             'We must pasture the oxen.'
```

Map also combines with the perfect particle ox as a regret particle (section 15.3.3).

```
(14) 水の刷用S向¥。
     ap ndip hxix mux lyr
                             ox map.
     yesterday
                  earthquake REGR
     'Unfortunately, there was an earthquake yesterday.'
```

15.2.3 The particle yip su

The preverbal particle vip su softens the tone of a command and corresponds to English *please*. It often co-occurs with the imperative particle *map*.

```
(15) a. 豸寒片♥蒸菜♀ௌ♀♀♀ (15) a. 豸寒片♥
               yip su nga
                           bbo ggu ddux ne
                                                go
                                                         jox hxip map.
         2P.SG IMP
                      1P.SG go after
                                          2P.SG PRO.PAT to say
         'After I am gone, please talk to him.'
```

```
b. 煮水片缸¥!
   ne
         yip su it
                      map!
   2P.SG IMP
                 sleep IMP
   'Please have a sleep.'
```

15.3 Expressive

Expressive speech act particles express the attitude of the speaker, his wishes (section 15.3.1), his fears (section 15.3.2) and his regrets (section 15.3.3). This section uses material published in Gerner (2010).

15.3.1 The wish particle ddep lox

The verb particle *ddep lox* expresses the wish of the speaker. It communicates the same meaning as optative mood conjugations in Ancient Greek or Sanskrit.

(16) a. 哲第分1111日本は**3**6。

nop wox kax ddi nyi zzyr muo **ddep lox.** 2P.PL who also peace(ful) WISH 'May you enjoy peace!'

b. ¥€₦問辦者章。

kut shyr vot ba cu **ddep lox.**New Year hog fat WISH
'It is desirable that the New Year's pig is fat.'

c. ប៊ិស្ត្រៃស្±៥ឆិ្

lyx dde cyx ji cy syp **ddep lox.** common sense DEM.PROX CL 3P.SG understand WISH 'It is desirable that he understands this argument.'

. 免货目出风量混成船 . b

co ip ko pop da su jjo **ddep lox.** person door open STP NOM have WISH 'It is desirable that someone opens the door.'

Ddep lox conveys the perspective of an impersonal agent which functions as a guise for the speaker's own wishes. The speaker's and the impersonal agent's attitude cannot be separated. Moore's Paradox (Levinson 1983: 105) holds therefore for *ddep lox*. (17) shows that the speaker cannot use *ddep lox* and negate the wish in the same sentence.

(17) 网对手军网上打打争, # 字 中 的 对 手 军 网 上 从 上 至 。

co ip ko pop da su jjo **ddep lox,** person door open STP NOM have WISH

#tit nga co ip ko pop da su **xi-ap-mgu**. but 1P.SG person door open STP NOM hope<NEG>

Intended meaning: '#It is desirable that someone opens the door, but I don't want that to happen'.

Ddep lox cannot be used in sentences that express socially unacceptable values. The predicate *xi mgu* 'wish', by contrast, can ascribe values that are contrary to the Nuosu norm. The attitude holder is then depicted as abnormal.

(18) a. #ሦዠፕፁሎጁኧኞጵላቴ률.

#shyp lyt hxa ma zza bbo cy dip guox bba **ddep lox**. storm crops 3P.SG destroy ferocious WISH 'It is desirable that the storm destroys the crops!'

b. 对果别可分准素次多溪湖片观查。

shyp lyt hxa ma zza bbo cy dip guox bba su xi mgu. 3P.SG destroy ferocious NOM hope 1P.SG storm crops 'I hope that the storm destroys the crops'.

Ddep lox cannot be used in sentences that presuppose the speaker's knowledge. For example, a wedding requires mental and practical preparation. Nobody can be unaware of his own wedding on the eve of the ceremony.

#mup shv dex nga bbox zze ma ddix jjip bbo **ddep lox**. tomorrow 1P.SG man CL to, at become go WISH '#It is desirable for me to get married tomorrow.'

As wish particle, *ddep lox* applies to non-past events. When the clause has past time or completed reference, it switches to the sense of *originally* (section 9.1.4).

. **ቒ፟** ይፙቔኯ፟፟ርፈፒዝ (02)

lat hxo hmat mop xyx ne ox ddep lox. male name teacher rest DP WISH 'Originally, Teacher Laho was taking a nap.'

15.3.2 The fear particle mat

The verb particle *mat* voices the speaker's anxiety. It has similar properties as *ddep* lox which we investigate below.

(21) a. 彩月沒食食效品以**肝**。

zzyt mu cyx ma zzux lup ba la mat. world DEM CL throw into disorder FEAR 'It is to be feared that the world is being thrown into disorder.'

b. 为引制长用。

a hnat mu shyr mat. cy 3P.SG very much shout FEAR 'I am afraid of his shouting.'

c. 제반여ር서ዚ운 보고

sse nge yuox su pat mop yix kur mat. son NUM.5 ART parents house share FEAR 'It is to be feared that the five sons share their parents inheritance.' *Mat* expresses the stance of the speaker via an impersonal agent in similar way as *ddep lox*. Again, the speaker's and the impersonal agent's attitude cannot be separated. (22) shows that the speaker cannot use *mat* and negate this fear in the same sentence.

(22) 早舟门町、#季世早水駅。

ke ma la **mat**, # tit nga ke ap- **jie**. dog CL come FEAR but 1P.SG dog NEG- fear '#It is to be feared that a dog is coming, but I am not afraid of dogs'.

Mat cannot be used felicitously for situations that express socially positive values. On the other hand, the predicate *jie* 'fear' can take clauses with ethically positive values but then the attitude holder is presented as abnormal.

(23) a. # ʃ 부 圭 埠 爿 平 ៛ fff 。

#cyp gop bop sa mu ddu ap- jjo **mat**.

3P.SG.POSS body recover event NEG- have FEAR

'It is to be feared that he completely recovered.'

b. 1 台至市日本农村平隔。

nga cyp gop bop sa mu ddu ap- jjo su **jie.** 1P.SG 3P.SG.POSS body recover event NEG- have COMP fear 'I fear that he completely recovered.'

Furthermore, anxiety cannot be voiced about situations that the speaker is supposed to be aware of. *Mat* cannot be used in such situations.

(24) #步爭用爭步を口引要爭用零冊。

#ngop wox mu ddix go yyp mop a sho-jjy-a sho **mat**.

1P.PL place LOC river long-very-long FEAR

'#It is to be feared that a very long river goes through my native place'.

In coordinate clauses, *mat* can be attached to the first and second clause. After the first clause, *mat* expresses fear about a potential situation that would be the outcome if the warning expressed by the second clause were not considered.

ne cy ap- dda **mat**, go tat- gep. 2P.SG 3P.SG NEG- overcome FEAR 3P.SG NEG.IMP- wrestle 'I am afraid that you won't overcome him, so don't wrestle with him.'

After the second clause, *mat* communicates fear about a situation that would be the outcome, if the advice encoded in the first clause were not accepted.

```
(26) 当到第3, 对季从中沟册。
                   jox hxip, ip ko cy
                                         ggot da mat.
     ne
           go
     2P.SG PRO.PAT to say door 3P.SG close
                                                FEAR
     'Talk to him, otherwise, I am afraid, he will close the door.'
```

15.3.3 Regret particles

There are three compound particles that communicate the speaker's regret about a situation. These compound particles are composed of the perfect particle (section 7.7.2) and different imperative and exclamative particles. Furthermore, the simple particle *luop* expresses the speaker's complaint.

Table 15.1: Three re	ret compound	particles
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Particle	Meaning	1st particle	2nd particle
ox mop	regret about situation in distant past	ox	mo (section 15.2.1)
ox map	regret about situation in close past	ОХ	map (section 15.2.2)
ox lip	regret about loss or fallout	ox	lip
luop	complaint		

The compound particle ox mo represents new meaning not closely related to the imperative particle *mo* (section 15.2.1). *Ox mo* adds a note of fate to the proposition: that's it, we can't do anything about it.

- (27) a. E\quad \quad \q vo hlix ndo ox mop. sheep loose REGR 'The sheep is lost (it is too late).'
 - b. አሤጣቱ**ທິ**ጋ。 CV cep vy wep **ox mop**. 3P.SG cold get REGR 'He caught a cold, unfortunately.'
 - c. 40001Sina. ap ndip hxix mux lyr ox mop. yesterday earthquake REGR 'Yesterday, there was an earthquake.'

The particle *ox map* communicates a similar but more emphatic meaning. The proposition is supposed to be closer to the time of utterance.

- (28) a. EH承罢Y**⑩**¥。
 - yo lat mo xit sy **ox map.** sheep wolf bite die REGR 'Alas, the sheep was bitten to death by the wolf.'
 - \mathbf{h} $\mathbf{\mathcal{L}}$ $\mathbf{\mathcal{L}}$
 - cy wax ap- ci mu kep te gex nep xi la **ox map**. 3P.SG back NEG- fall ADVL early then arrive come REGR 'Alas, he did not delay but arrived early.'
 - c. 毛×手水来搜索。

ne cy go ap-shut **ox map.** 2P.SG 3P.SG PRO.PAT NEG-remember REGR 'Alas, you don't remember him.'

The particle *lip* only occurs in *ox lip* with a sense of complaint and regret.

- (29) a. CΨĤθ羞ffኞff羞ffኞੈΦ。
 - zip ddu cyx ma bbox-ap-sho -jjy- bbox-ap-sho **ox lip.** jar DEM CL clean<NEG> very clean<NEG> REGR 'This jar has become so dirty.'
 - b. H: 街 **並 № ⊕**。

lat zzi bbo **ox lip.** male name go REGR 'Oh dear, Ladzi left.'

The monosyllabic particle *luop* occurs in noun phrase exclamations, as in (30). By using it as a verb particle, the speaker complains about a situation, as in (31).

(30) a. 對爭爭示於問**報!**

nop wox ssox sse cyx gge **luop!** 2P.PL student DEM.PROX CL EXCL 'Oh you students!'

b. ፯ቄቭቯጲት**ង**!

ne co ax yy cyx ma **luop!** 2P.SG person great DEM CL EXCL 'Oh you great man!'

(31) a. 写说用字母語? ne xix mu ap- zze luop? 2P.SG why NEG- eat REGR 'Oh why don't you eat?'

- b. 打机切割头,⑥头の悬。 hxo bbu ddur la te go, cax -jjy- ca **luop**. sun exit come when hot very hot REGR 'The sun has risen, it is so hot!'
- c. 有角象牙用印製!
 ne cuop luo nji mu la **luop!**2P.SG a little bit quick ADVL come REGR
 'Oh come more quickly!'

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Appendix

Folk Stories

The following three folk stories were compiled in 2000 with the help of Sūn Zi Xiā Xiā 孙子呷呷, a native Nuosu speaker from Xǐdé County 喜德县.

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МЭКЙ#FHЙЮЮ
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vo co xix mu rre ddie yix go zip da vo^{33}ts^ho^{33} xi^{44}\mathring{m}^{33} dz_{im}^{33} de^{33} zi^{44} ko^{33} tsi^{21} ta^{33} mankind INT.why livestock COV.prepare house LOC insert, put STP
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Why do men have their livestock stay close to home?

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れるれ事を出てEをは他の合作第11年
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ip sip shex a hlex vo co si nip rre mop ssyr nyuo nyix bbu hxit bbu $i^{21}si^{33}$ $\S9^{44}a^{33}!u^{44}$ $vo^{33}ts^ho^{33}$ $si^{33}ni^{21}$ $dz_iu^{33}mo^{21}z_i^{233}n_io^{33}$ $n_i^{144}b^vu^{33}hi^{55}$ b^vu^{33} long ago old generation mankind and livestock wild animal In ancient times, the people and all the animals

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\mathbf{x}
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xix xix nyi nyop mu vi yot yix-ap-syp yip sy te go, $\wp_1^{44}\wp_1^{44}$ \wp_1^{i33} \wp_1^{i33} \wp_1^{i33} \wp_2^{i33} $\wp_2^{$

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ルコル書を省る出てE降FALF高
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Япиквонкавия.

CVX gge hxop hmat six nyop mu vi yot ddix da. zze mo tshi44 gw³³ ho²¹ma⁵⁵ si⁴⁴ no²¹m³³ $vi^{33}z0^{55}$ dzui³³ mo³³ di⁴⁴ ta³³. DEM.PROX CL teach, train RES work carry load eat IMP QUOT STP to plough the earth and to carry loads.

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サメドは

様性

とこれ

にいま
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nyix bbu hxit bbu | lyr lyr | go | kax | jjo | mu | cy | gu | $\mathfrak{n}.i^{44}b^{\nu}u^{33}hi^{55}b^{\nu}u^{33}$ | $l\underline{i}^{23}l\underline{i}^{23}$ | ko 33 | $k^{h}a^{44}$ | d z^{03} | $\mathring{\mathfrak{n}}^{33}$ | ts $^{h}i^{33}$ | ku 33 | wild animal | moving entity | LOC | CLF | have | ADVL | 3P.SG | call

All the wild animals and everything that moves

Y和貨工書列出责办: "AL

cy rep six cyp gga da cop wox jop: ngat sse $ts^h\dot{i}^{33}$ z_iu^{21} si^{44} $ts^h\dot{i}^{21}ga^{33}$ ta^{33} $ts^ho^{21}vo^{44}$ tco^{21} : " ηa^{55} zuu^{33} 3P.SG gather RES together STP 3P.PL toward 1P.SG.POSS son were brought together by him and told, "My sons

事后长美点足员每**山**座美界和

ngat lu wo ip nyip lip wax ne nop wox kax ddi nyi ηa^{55} lu³³ γo^{33} i²¹ ηi^{21} li²¹ γa^{44} nur³³ no²¹ γo^{44} kha⁴⁴di³³ ηi^{33} 1P.SG.POSS grandson CL today afterwards TOP 2P.PL INT.who also and grandsons, starting from today you all

身份的月页豆页月,份重工长刀黑淵集

zyt jie we vi go hxo lox da, mux dde wax dde mux yot da zze $tsi^{55}tce^{33}$ $\gamma ur^{33}vr^{33}$ ko^{33} $ho^{33}lo^{44}$ ta^{33} , $\mathring{m}^{44}dur^{33}\gamma a^{44}dur^{33}$ $\mathring{m}^{44}zo^{55}$ ta^{33} dz ur^{33} REFL strength LOC depend STP earth and field act, do STP eat must rely on your own strength to cultivate the earth."

ወቅደሴ" f. ELEH

yix nip zhet ox" ddix. tit cyp ddop mu $zi^{44}ni^{21}$ t_su^{55} o^{44} " di^{44} . t^hi^{55} ts^hi^{21} do^{21} \mathring{m}^{33} only then good, ok DP QUOT but 3P.SG.POSS word do However, there wasn't anyone who was willing to obey,

化比尔其什, 吵咧到出几些什么。

hna su ap-jjo mu, vo co ax di cyp ddop mu da. $_{\eta a^{33}}$ su $_{3}^{33}$ $_{4}^{21}$ -d $_{2}$ o $_{3}^{33}$ $_{\eta a^{33}}^{33}$, vo $_{3}^{33}$ tsho $_{3}^{33}$ $_{4}^{44}$ ti $_{3}^{33}$ tsh $_{1}^{21}$ do $_{2}^{21}$ $_{\eta a^{33}}^{33}$ ta $_{3}^{33}$. MOD.willing NOM NEG-have ADVL man only 3P.SG.POSS word do STP and only human beings listened to his words.

,01401,11411

cyp nyip lox cyp nyip, cyp hlep lox cyp hlep, ts^hi^{21} ts^hi^{21

1401446146

cyp kur lox cyp kur mu mux dde mu yot zze. \$\$ts^hi^{21}\$ k^hu^{33}\$ lo^{44}\$ ts^hi^{21}\$ k^hu^{33}\$ \mathring{m}^{33} \mathring{m}^{33} \mathring{m}^{34} duu \mathring{m}^{33} \mathring{m}^{33} \mathring{m}^{33} do \mathring{m}^{33} dzuu duu \mathring{m}^{33} . NUM.1 year and NUM.1 year ADVL earth do (farming) eat year after year, they cultivated the earth.

Χ∜∯ρΧιβιαβοβθων

vo co mux dde wax dde mu yot zzax zy yy qix su vo 33 ts h o 33 \mathring{m}^{44} du 33 ya 44 du 33 \mathring{m}^{33} zo 55 dza 44 ts $\overset{1}{i}$ 3 2 z 33 tc h t 44 su 33 mankind earth and field do (farming) plant seedlings NOM When he (= Zhege'alu) saw that men cultivated the earth and

. 兜性网班奥班别从, 主管性氧从

cy mox te gox ne, cy hxie kat nyuo kat da go jox: $ts^h\dot{i}^{33}$ mo⁴⁴ $tut^{33}ko^{44}$ nut³³, $ts^h\dot{i}^{33}$ he³³ $k^ha^{55}n\cdot 3^{33}k^ha^{55}$ ta³³ ko³³ tco⁴⁴: 3P.SG see when TOP 3P.SG very happy STP 3P.PL toward planted seedlings, he was very glad and told them,

北京承惠网, 比取代惠明笔译"

"nop wox ngat ddop mu hla mu, hxop ddop hmat ddop hna "no 21 yo 44 ng 55 do 21 n 33 4 a 33 n 33 , ho 21 do 21 nga 55 do 21 nga 33 2P.PL 1P.SG.POSS word do soul do admonish word teach word listen "You obeyed my words and listened to my teaching"

4146030代表录, 2美本以及

ip nyip ggup jjux ne, nop wox shu nyop bbop da zze -ddu ggat -ddu i^{21} n, i^{21} gu 21 dzu 44 nw 33 , no 21 yo 44 şu 33 n,o 21 bo 21 ta 33 dzu 33 -du 33 ga 55 -du 33 today afterwards SENT.TOP 2P.PL make labour STP eat NOM wear NOM so from today on, you will get enough food and clothing.

。定"说从页巾砚页算用笔阵,再

wep, nop wox shu jjox dde o bbu dde xi shux" ddix. $\gamma u u^{21}$, $no^{21}\gamma o^{44}$ ςu^{33} $dz o^{44}$ $du u^{33}$ $o^{33}b u^{33}$ $du u^{33}$ ςi^{33} ςu^{44} di^{44} . get 2P.P.L make live, have the more intelligent the more arrive CAUS QUOT You will become more and more intelligent."

cy nyix bbu hxit bbu ggex su jox ne: "nop wox ngat $ts^h\dot{i}^{33}$ $n\dot{i}^{44}b^vu^{33}hi^{55}$ b^vu^{33} $guu^{44}su^{33}$ tco^{44} nuu^{33} : " $no^{21}\gamma o^{44}$ ηa^{55} 3P.SG wild animal ART toward TOP 2P.PL 1P.SG.POSS He said to the wild animals. "You were

患利患风切, 礼礼用即用患

ddop mu hla mu ap- hna, ngat hxop ddop hmat ddop do 21 \mathring{m}^{33} $\overset{1}{4}a^{33}$ \mathring{m}^{33} a^{21} . $\overset{1}{n}a^{33}$, na^{55} ho 21 do 21 $\overset{1}{m}a^{55}$ do 21 word do soul do NEG- willing 1P.SG.POSS admonish word teach word not willing to obey my words and listen to my teaching,

川毫度, 主第军门及; ⑥北北北比

mu ap- hna su ngox; ip nyip ggup jjux ne, nop wox shu \mathring{n}^{33} a^{21} . $\mathring{n}a^{33}$ su^{33} $\mathfrak{n}^{0^{44}}$; $i^{21}\mathfrak{n}.i^{21}$ $gu^{21}dzu^{44}$ nuu^{33} , $no^{21}\gamma o^{44}$ $\mathfrak{s}^{u^{33}}$ do NEG- willing COMP think today afterwards TOP 2P.PL make so from today on, you must

bbut zze da jjo ddep lox ddix. ap mu cyx te go bu 55 dzu 44 ta 33 dzo 33 du 21 lo 44 dr 44 . a 21 m 33 ts h i 44 tuu 33 ko 33 grass eat STP live WISH QUOT now DEM.PROX time live by eating grass." This is the reason why from that very moment

。定在DIBL出入来身张内区包部CE

rre mop ssyr nyuo tat lyp bbut zze yip sy su li xip yy ddi ddix. dz μ^{33} mo 21 z μ^{33} n. μ^{33} tha 55 livestock but grass eat still, yet TOP TOP DEM.DD because QUOT livestock were eating grass.

月の月刊を省の組み常生間からか書

nyix bbu hxit bbu ggex su gat zyr ssyt nuop si nip lat ne nyop mux $\mathfrak{g}_{\mathfrak{g}}^{44}\mathfrak{g}_{\mathfrak{g}}^{44}\mathfrak{g}_{\mathfrak{g}}^{33}$ gw $\mathfrak{g}_{\mathfrak{g}}^{44}\mathfrak{g}_{\mathfrak{g}}^{33}$ ka $\mathfrak{g}_{\mathfrak{g}}^{55}\mathfrak{g}_{\mathfrak{g}}^{33}$ zi $\mathfrak{g}_{\mathfrak{g}}^{55}\mathfrak{g}_{\mathfrak{g}}^{21}$ si $\mathfrak{g}_{\mathfrak{g}}^{33}\mathfrak{g}_{\mathfrak{g}}^{12}$ la $\mathfrak{g}_{\mathfrak{g}}^{55}$ nw $\mathfrak{g}_{\mathfrak{g}}^{33}$ $\mathfrak{g}_{\mathfrak{g}}^{64}\mathfrak{g}_{\mathfrak{g}}^{44}$ wild animal ART=CL-DET middle tiger and wolf TOP work

K引电孔化, 机多丰色化化。 主网

tit da vi vot nvi aphna, bbux hluo nyi zze hna. apvi³³zo⁵⁵ n.i³³ a²¹na³³, b^vu⁴⁴13³³ n.i³³ dzui³³ a²¹na³³. thi55ta33 carry load also NEG- willing grass also eat NEG- willing thus didn't like to work and didn't like to eat grass.

3、床、水影、乌龟引圆角货炉台收售

nyix bbu hxit bbu ax pa ggex su mup bat lap bbu qyt yo $p_i i^{44} b^v u^{33} hi^{55} b^v u^{33}$ $a^{44} p^h a^{33}$ a^{44}

LIPII LAK ELETIK

cyx gge ne zhyt ge ax ly ddix da nyo lyx gge hmot la. $ts^h i^{44}$ gw³³ nw³³ ts^{55} kw³³a⁴⁴li³³ di⁴⁴ ta^{33} r_so^{33} li⁴⁴gw³³ r_so^{55} la³³. DEM.PROX CL TOP name of god COV.at STP complain come came to Zhege'alu to complain.

C别专桌创集主第军司及调巨引"

"jy tat- jie ip nyip ggup jjux ne ssyt nuop si nip lat mop "tçi 33 tha 55 - tçe 33 i 21 n,i 21 gu 21 d $_{z}$ u 44 nui 33 zi 55 no 21 si 33 ni 21 la 55 mo 21 gall NEG.IMP- fear today afterwards TOP tiger and wolf (Zhege'alu told them,) "Don't fear, from today on the tiger and the wolf

21年2米4年間に14日の14日間

ggex su jie bop cop lie gga la, cv mop zhot lyr cop gui⁴⁴su³³ tce³³po²¹ tsho²¹ le³³ ga^{33} $1a^{33}$. tshi33mo21 $tso^{55}li^{33} ts^ho^{21} va^{33}$ ART 3P.PL neck harness come gunpowder bullet 3P.PL after rope will be tamed with a rope around their neck, and gunpowder and bullets

化圆光圆尺册专桌回集。论"车页目

lax dde ggup" ddix. ssyt nuop si nip lat mop ggex su gge go la 44 du 33 gu 21 " di 44 . zi 55 no 21 si 33 ni 21 la 55 mo 21 gu 44 su 33 gu 33 ko 33 come want QUOT tiger and wolf ART hear SENT.TOP will follow them." When the tiger and the wolf heard that

. ԹՈՒՉՎՈՍՈՒՉՀՀԿՊԵ

ne pur rrep mop ssyr nyuo ax pa ggex su jox da lax da, n u^{33} $p^h u^{33}$ $dz u^{33} mo^{21} z i^{33} n o^{33}$ $a^{44} p^h a^{33}$ $g u^{44} s u^{33}$ $t c o^{44}$ $t a^{33} l a^{44}$ $t a^{33}$, TOP turn around livestock other ART toward treat STP the other animals had turned against them,

们身兴气马身身体, 你我。你我不会是不够的。"

mup ba lap bbu \ vot qyt si nip vo go xit zze la, tsho²¹ m²¹pa³³ la²¹b^vu³³ vo⁵⁵ tc^hi⁵⁵ si³³ni²¹ zo³³ ko³³ ci⁵⁵ dzui³³ la³³. 3P.PL horse sheep PAT bite eat ox pig goat and come they came to bite and eat the horse, ox, pig and goat.

多、以、水、E身体的炎川至斯內, H

mup $\$ le $\$ qyt $\$ yo $\$ si nip vot cyx $\$ gge bop shep da, cop \mathring{m}^{21} $\$ lui $\$ tc $\$ $\$ tc $\$ $\$ $\$ si $\$ 33 $\$ si $\$ si $\$ 33 $\$ si $\$ si $\$ 121 $\$ vo $\$ 55 $\$ ts $\$ $\$ ts $\$ $\$ gui $\$ 33 $\$ po $\$ 21 $\$ yui $\$ 1 ta $\$ 33, ts $\$ horse ox goat sheep and pig DEM.PROX CL protect STP 3P.PL In order to protect the horse, ox, goat, sheep and pig, so that they were not

主的豪传, 定承见岛化州郡里

ddie ssyt lat ap- zha shux mo ddix, jjip hnex cop ne de 33 zi 55 la 55 a 21 - tşa 33 şu 44 mo 33 dı 44 , dzı 21 nuu 44 tsho 21 nuu 33 COV tiger wolf NEG- feed make committed therefore 3P.PL TOP killed, Zhege'alu hid them

三工引以市的永区外。 对上没剩3件

zhyt ge ax ly ddie yix go zip da. ip nyip cyx te nuo su $t_\$p^{55}kui^{33}a^{44}li^{33}$ de 33 z_1^{44} ko^{33} tsi^{21} ta^{33} . $i^{21}n_ii^{21}$ ts^hi^{44} t^hui^{33} $no^{33}su^{33}$ name of god COV house LOC insert STP today DEM.PROX time Nuosu in the house of the human beings. This is the reason why, until this very day,

ddie vix rre go zip da hxo sux li xip vv dde nge $dzuu^{33}$ de³³ zı⁴⁴ ko³³ tsi²¹ ta³³ ho³³ su⁴⁴ li³³ ci²¹ zə³³dui³³ nui³³ livestock COV house LOC insert STP feed SENT.TOP TOP DEM.DD reason COP the Nuosu keep their livestock at home.

∦∜ . yip ddix. zi²¹ di⁴⁴. EXCL QUOT (In deed)

国界多年版目

 $\begin{array}{llll} tap \ hly & si \ nip & got \ pu \\ t^ha^{21}l \vartheta^{33} & si^{33}ni^{21} & ko^{55}p^hu^{33} \\ dove & and & cuckoo \end{array}$

The dove and the cuckoo

D乳氨度北角B陽凡北洋除点坐

ddu ndit kax jjo su mu got pu max su si six sux yy d $_{\rm B}u^{33}$ ndi 55 ka 44 d $_{\rm Z}o^{33}$ su 33 \mathring{m}^{33} ko 55 p $^{\rm h}u^{33}$ ma 44 su 33 si 33 si 44 su 44 z 33 bird CLF NOM QUANT.all cuckoo ART choose RES leader When the community of birds chose the cuckoo as leader,

: 华臣以, 州孔里州匡, 宦径风日

mu da gox ne, tap hly ddie-ap-mga, cy hxip go: $\mathring{\eta}^{33}$ ta 33 ko 44 nur 33 , tha 21 la 33 de 33 -a 21 -nga 33 , tshi 33 hi 21 ko 33 : do STP SENT.TOP TOP dove please<NEG> 3P.SG say SENT.TOP the dove was not pleased and said,

ብፁ ተላ ታይ ጠ መ ቴ ለ ብ ብ

"ngat vit gga got pu -vi iox ap cv mu nrat ngat "na⁵⁵ vi⁵⁵ga³³ ko⁵⁵p^hu³³ -vi³³ $a^{21}ts^{h}i^{33}$ m^{33} tco⁴⁴ $ndza^{55}$ ηa^{55} -POSS toward more 1P.SG.POSS clothes cuckoo ADVL pretty 1P.SG.POSS "My feathers are more beautiful than the cuckoo's.

域内丰州目办水外刊列往市, 中沟

viet hxop nyi got pu jox ap cv mu da na sa, nga dax ta³³ na³³sa³³. ze⁵⁵ho²¹ ni³³ ko⁵⁵phu³³ tco⁴⁴ a²¹ts^hi³³ m⁴⁴ ta⁴⁴ also cuckoo toward more ADVL STP pleasant to hear 1P.SG COV song My songs are also nicer than the cuckoo's. Therefore I should be

sip sux yy mu tat xi" ddix. a zhat jix po shyx da tap hly si 21 su 44 zə 33 \mathring{n} 33 tha 55 çi 33 " di 44 . a 33 tşa 55 tçi 44 pho 33 şə 44 ta 33 tha 21 tə 33 take leader do should QUOT magpie method conceive STP dove the leader." The magpie conceived a solution and said to the dove

16米4年11年3名": 长米目附各原

si nip got pu nyit jop: "mup shy dex mu ti ne nep nyit kax ddi $si^{33}ni^{21}$ $ko^{55}p^hu^{33}$ ni^{55} tco^{21} : " $\mathring{m}^{21}sp^{33}tuu^{33}$ $\mathring{m}^{33}t^hi^{33}$ nuu^{33} $nuu^{21}ni^{55}$ $k^ha^{44}di^{33}$ and cuckoo NUM.2 toward tomorrow morning TOP 2P.DL INT.who and the cuckoo, "Tomorrow, whoever of you will

井頂水屋。追"井戶道定廃主開承隊

dax mo ry ne kax ddi sux yy ddie" ddix. tap hly miep jji ta^{44} mo³³ z_9 ⁴⁴ nui³³ $k^ha^{44}di^{33}$ su⁴⁴ z_9 ³³ de³³" di⁴⁴. $t^ha^{21}l_9$ ³³ me²¹ d z_1 ³³ COV call early TOP INT.who leader do QUOT dove at first fly sing first should become leader." The dove flew away first.

从用了货车下的事员并以, 领本

bbo ox, cy jji six yit kie go vur bbo lox ax mo sha bbur bo 33 o 44 , ts $^{h}i^{33}$ d zi^{33} si 44 $zi^{55}k^{h}e^{33}$ ko 33 v u^{33} bo 33 lo 44 a $^{44}mo^{33}$ şa $^{33}bu^{33}$ go DP 3P.SG fly RES village LOC enter go and mother wool It flew to a village, and took its mother's wool

次可赏的工月网, 针次承季打串

cy duo six o kup mux da, it cy ngop go it sa $ts^h\dot{i}^{33}$ to^{33} si^{44} $o^{33}k^hu^{21}$ \mathring{m}^{44} ta^{33} , i^{55} $ts^h\dot{i}^{33}$ ηo^{21} ko^{33} i^{55} sa^{33} 3P.SG pick up RES pillow do STP sleep 3P.SG think LOC sleep well to make a pillow. It intended to sleep well that night

H114例的1, 第5家H年到1

hxo it da yix ne mup shy dex mu ti mu cvp gox ne tshi²¹ ho³³ i⁵⁵ $ta^{33} zi^{44}nw^{33}$ m²¹sə³³tw⁴⁴ $m^{33}t^{h}i^{33}$ ko⁴⁴ $\mathring{\mathrm{m}}^{33}$ nu^{33} ADVL NUM.1 night sleep STP provided that tomorrow morning SENT.TOP TOP in order to sing well in the morning.

乘风乘电览。 美兴井岳白美入毛, 木苧

yiet hxop yiet sa ox. mgu cy jji ot it ddix sy ne, ddu ndit ze⁵⁵ho²¹ ze⁵⁵ sa³³ o⁴⁴. ŋgu³³ ts^hi³³ dzi³³ o⁵⁵ i⁵⁵ di⁴⁴si³³nui³³, dbu³³ndi⁵⁵ song sing well DP think 3P.SG fly, fall down sleep as soon as bird As it fell asleep and dreamt about becoming leader

事不付, 主人長日事付事 做出 计下息

ddie su iet muop muo it nyi gu vix ne, it apnyi su⁴⁴zə³³ de³³ su³³ ı⁵⁵mɔ²¹ mo³³ i⁵⁵ni³³ku³³ zi⁴⁴nui³³. **i**55 a²¹ n_i^{33} leader do NOM dream provided that sleep NEG- wake do sleep of the birds, it slept so well that it

· 创工并丰昌縣 。 创总户44口出出

mu dep la ap- dop lix ndo ox. got pu nyi jji bbo ox. \mathring{m}^{33} tu^{21} la^{33} a^{21} to^{21} li^{44} ndo^{33} o^{44} . $ko^{55}p^hu^{33}$ ni^{33} dzi^{33} bo^{33} o^{44} . ADVL rise come NEG- can go PUT DP cuckoo also fly go DP could not wake up. The cuckoo also flew away.

用X電楽は生品を含み食は以

cy jji six yyp mop yyx nzi go it bbo lox lur mat $ts^h\dot{i}^{33}$ $dz\dot{i}^{33}$ $s\dot{i}^{44}$ $z\dot{\circ}^{21}mo^{21}$ $z\dot{\circ}^{44}$ ndzi 33 ko^{33} i^{55} bo 33 lo^{44} $lu^{33}ma^{55}$ 3P SG fly RES river water side LOC sleep go and stone It flew to the river to stay at the riverside over night.

#11111104

map lix bu mu qix dur six o kup da, ma cvmu. ot it ma³³ ts^hi³³ tu³³ si^{44} $o^{33}k^hu^{21}$ \mathring{m}^{33} , o^{55} ma²¹li⁴⁴pu³³ m³³ ci²¹ ta³³. ADVL DEM.DD CL 3P.SG pick up RES pillow do under stay STP It took a round stone as a pillow, with the following idea in mind.

քանելընեւ X Ա ռը 1 Մեր Գ Բ Ենր Ի Բ Ե

i nyi gu VV yix ne, lur mat map lix bu max su lip lip nbo VVX i³³ni³³ku³³ zə³³ zi⁴⁴nui³³, ma²¹li⁴⁴pu³³ ma⁴⁴su³³ li²¹li²¹mbo³³ zə⁴⁴ lu³³ma⁵⁵ provided that stone, rock round sleep ART roll go When it slept, the round stone would roll away

da, it jji ox. lur mat map lix bu max su suo vit lip lip nbo ta 33 , i 55 d $_{z1}^{133}$ o 44 . l $_{y3}^{13}$ ma 55 ma 21 li 44 pu 33 ma 44 su 33 so 33 vi 55 li 21 li 21 mbo 33 STP sleep awake DP stone round CL NUM.3 time roll so that it would wake up. (In the night) the round stone rolled away three times

iii bbur ddur got pu nvi suo vit mu it ox. mo mu ko⁵⁵p^hu³³ ni³³ so³³ v_1^{55} \mathring{m}^{33} **i**55 dzi^{33} o⁴⁴. mo³³m³³ bu⁴⁴du³³ chuckoo also NUM.3 time ADVL sleep awake DP sky east and the cuckoo woke up three times. When the sky dawned

房田目開, E 倒来和北颌门第公孔

ap mop bbop la ox su wep mo gox ne, got pu ddur kax $a^{21}mo^{21}bo^{21}$ la³³ o⁴⁴ su³³ $\gamma uu^{21}mo^{33}$ ko⁴⁴ nuu³³, ko⁵⁵p⁴u³³ dgu³³ ka⁴⁴ bright come DP NOM see SENT.TOP TOP cuckoo wing flap, beat in the East, the cuckoo saw it, started to flap its wings and,

"!BW!BW": HUREYMAKEYY

lox, syr lot go hxit da fu zzi ax hmu mu: "got pu! got pu!" lo^{44} , $s_{\dot{1}}^{33}lo^{55}$ ko³³ hi⁵⁵ ta³³ fu³³dzi³³ a⁴⁴mu³³ m³³: "ko⁵⁵phu³³! ko⁵⁵phu³³!" and branch LOC stand STP voice high ADVL cuckoo cuckoo standing on a branch, called with a loud voice, "Cuckoo! Cuckoo!"

¥≇,፴በՎԵՂΒ₩≇ĥՆ Ֆե

mu yiet. hxo bbux nyi got pu gep gu shu la ox, nyi hly \mathring{n}^{33} $\mathring{z}e^{55}$. $ho^{33}Bu^{44}$ $n\dot{i}^{33}$ $ko^{55}p^hu^{33}$ kw^{21} ku^{33} $\mathring{s}u^{33}$ la^{33} o^{44} , $n\dot{i}^{44}lo^{33}$ ADVL sing sun also cuckoo COV call make come DP spring wind The sun was called into rising by the cuckoo, the spring wind

nyi gu shu la ox. got pu nyop mu co jox "nop zzax cy yy n_ii^{33} ku³³ şu³³ la³³ o⁴⁴. ko⁵⁵phu³³ $n_io^{21}m^{33}ts^ho^{33}$ tço⁴⁴ "no²¹ dza⁴⁴ ts^hi^{33} zo^{33} also call make come DP cuckoo peasant toward 2P.PL crops plant crops was called into existence. The cuckoo told the peasants, "(It is time to) plant

ልሣじ፣ . ፪ ୬ እ በ ላሀልት ጠ'

qyp da ox!" ddix. bbox ot cy gu vut la hlop gop ddur, $t_c^{h_i^{21}}$ da³³ o⁴⁴!" di⁴⁴. bo⁴⁴ o⁵⁵ $t_c^{h_i^{23}}$ ku³³ vu⁵⁵ la³³ło²¹go²¹ dgu³³; put STP DP QUOT mountain below 3P.SG call green IDE~EXPR exit the crops". The mountains were called into becoming very green.

张门&秦为承秦出出⑩。 化中卡律母

bbut la hlu vie cy yiet vie kep kep ox. ddu ndit dur lap vat $bu^{55}la^{33}lu^{33}ve^{33}$ ts^hi^{33} ze^{55} ve^{33} $t^hu^{21}k^hu^{21}$ t^{44} . t^{44} t^{44}

中!水化E":B兜化E。@U光头以H

ox. tap hly jox hxip: "tap hly ap! mu cv shyr dep la nga o⁴⁴. t^ha²¹lə³³ tco⁴⁴ hi²¹ "tha214a33 a21 $\mathring{\mathrm{m}}^{33}$ tshi³³ sə³³ tw²¹ la³³ na³³ ADVL 3P.SG shout rise come DP dove dove EXCL 1P.SG to sav thousands of birds were urged to sing. It said to the dove, "Oh dove! I

ddu ndit dur lap vat mu shyr dep la ox. ne it nyi ax di d $_{\rm B}u^{33}$ ndi 55 t u^{33} la 21 va 55 u^{33} la 55 l

gu hxi jit ap- get ox?" ddix. tap hly ne: "Gu! Gu! Gu!" mu ku^{33} $hi^{33}t$ ç i^{55} a^{21} . ku^{55} o^{44} ?" di^{44} . $t^ha^{21}l$ ə 33 nu^{33} : " ku^{33} ! ku^{33} ! ku^{33} !" \mathring{m}^{33} sleep shameful NEG- can DP QUOT dove TOP EXCL EXCL ADVL was sleeping. Aren't you ashamed?" The dove only replied: "Gu! Gu! Gu!",

。 6 里 D 乳 出 平 区 全 主 目 器 。 6 口 6 印

ox. got pu vi ngox la ne tit da ddu ndit sux vv ddie ox. zi³³no⁴⁴ $1a^{33}$ 0⁴⁴. ko⁵⁵p^hu³³ nui³³ t^hi⁵⁵ta³³ dви³³ndi⁵⁵ su⁴⁴zə³³ de³³ o⁴⁴. cry, weep COME DP cuckoo TOP thus bird leader ob DP and started to weep. The cuckoo thus became the leader of all the birds.

គារ្សភ្ជាក់អ

Zhege'alu tames the thunder

水,秋原去秋度郊田东外出"Cg收革

ip si ax hlex mop, mu vut go mu zyr lix guo -jjy- lix guo, cy i 21 si 33 a 44 tur 44 mo 21 , \mathring{m}^{33} vu 55 ko 33 \mathring{m}^{33} ts \mathring{i}^{33} li 44 ko 33 -d $_{2}$ i 33 - li 44 ko 33 , ts h i 33 long time ago sky on thunder powerful very powerful 3P.SG A long time ago, the thunder in the sky was very powerful.

के हिए, मेराभार रिस्फार्थ प्रवृ

dde dde mu vo co go ax di nzie la go shex, xip jjip hnex d $\mathrm{u}^{33}\mathrm{d}\mathrm{u}^{33}\mathring{\mathrm{n}}^{33}$ vo $^{33}\mathrm{ts}^{\mathrm{h}}\mathrm{o}^{33}$ ko 33 a $^{44}\mathrm{ti}^{33}$ ndze 33 la 33 ko $^{33}\mathrm{su}^{44}$, çi $^{21}\mathrm{d}\mathrm{zi}^{21}\mathrm{n}\mathrm{u}^{44}$ often man to, at only strike come HAB therefore It often came to strike mankind. As a result,

71。《《校文》以外上的《京文》

mux dde go vo co ne mu zyr jie sy da qix. cyp nyip \mathring{m}^{44} dui³³ ko³³ vo³³ts^ho³³ nui³³ \mathring{m}^{33} ts \mathring{i}^{33} ts $\mathring{i}^$

UK, è@Ckutîîı≧, ε∉ŧн

mu ti gox ne, zhyt ge ax ly shu ip mop mit lox, cy shu $\mathring{m}^{33}t^hi^{33}$ ko⁴⁴ nu³³, tşə⁵⁵kur³³a⁴⁴li³³ şu³³ i²¹mo²¹ mi⁵⁵ lo⁴⁴, tshi³³ şu³³ morning LOC TOP name of god make belly hungry and 3P.SG make in the morning, Zhege'alu became very hungry and

生母成为母王, 上身常歌生代为母

ggat go zza shex zze li, tit it kie CVX ma go i⁵⁵k^he³³ ga⁵⁵ ko³³ dza³³ sur⁴⁴ dzw³³ li³³, t^hi⁵⁵ i⁵⁵k^he³³ ts^hi⁴⁴ $ma^{33} ko^{33}$ go but village DEM:PROX CL village CL LOC food look for eat LOC went into a village to look for food. But in the whole village

co mup dut jiex da zza mu su cyp bbup nyi ap- jjo. ts^ho^{33} $\mathring{m}^{21}tBu^{55}$ tce^{44} ta^{33} dza^{44} \mathring{m}^{33} su^{33} $ts^h\dot{\imath}^{21}$ Bu^{21} $n\dot{\imath}^{33}$ a^{21} dzo^{33} . person fire burn da food do NOM NUM.1 family also NEG- have there was no family who cooked food.

: 北长丰晚里以, 区部沿星以及

cy cy shu ap zzep zzep da, cy shu cox yie go hna: $ts^h i^{33}$ $ts^h i$

H Y 歌 K 强 B 发 章 立 T 的 K H 放 "

"xix mu da co cyp bbup nyi mup dut jiex da zza ap- mu " ε i 44 \mathring{n} , 44 ta 33 ts h o 33 ts h i 21 Bu^{21} \mathring{n} i 33 \mathring{m} 21tBu 55 t ε e 44 ta 33 dza 33 a 21 \mathring{m} 3 INT.why STP person NUM.1 family also fire burn STP food NEG- do "Why isn't there any household that is cooking?"

ሁ ተመደም ፣ ተብርተው ይ ይ ሲተዋ

su nge" ddix. co bbup sux ne: "ngop wox zzax mu yy yot su³³ η u"?" di⁴⁴. ts^ho^{33} $Bu^{21}su^{44}$ nuu^{33} : "o²¹ γ o⁴⁴ dza^{44} \mathring{m}^{33} zə³³ zo⁵⁵ NOM COP QUOT person ART TOP 1P.PL food do soup, water do Members of that household replied, "It is not the case that we don't want

日歌工业别日, 日医水土家工身日

zze ap- qi su ap- nge mu, mu zyr ngop bbyp zzax mu dz \mathbf{u}^{33} a²¹. \mathbf{t}^{c} hi 33 su 33 a²¹. $\mathbf{\eta}\mathbf{u}^{33}$ $\mathring{\mathbf{n}}^{33}$, $\mathring{\mathbf{n}}^{33}$ ts $\dot{\mathbf{s}}^{33}$ \mathbf{n}^{21} bz 44 dza 44 $\mathring{\mathbf{n}}^{33}$ eat NEG- think NOM NEG- COP ADVL thunder 1P.PL COV food do to cook food and soup, but the thunder doesn't allow us to cook

X, E Γ ሀ ሁ ዚ ለ ‡ ቴ ଝ ଂ ୩ ፄ አ ፅ

zze ap- shup su. kax ddi yie ddu mu gu ddur lix ne, cy dz \mathbf{u}^{33} a 21 \mathbf{s}^{1} su 33 . $\mathbf{k}^{h}\mathbf{a}^{44}\mathbf{d}\mathbf{i}^{33}$ $\mathbf{z}^{e^{33}}\mathbf{d}\mathbf{B}\mathbf{u}^{33}$ $\mathbf{\mathring{m}}^{33}\mathbf{k}\mathbf{u}^{33}$ d $\mathbf{\mathring{u}}^{33}$ li 44 n \mathbf{u}^{33} , ts $^{h}\mathbf{\mathring{i}}^{33}$ eat NEG- CAUS NOM INT.who house smoke rise go up TOP 3P.SG and to eat. Whichever household has smoke going up, is

. ក្សម្រុក នេះ ក្រុម នេះ ក្រុម

kax ddi yie ddu go nzie la su. zhyt ge ax ly ne co jox: $k^h a^{44} di^{33}$ $z e^{33} dBu^{33}$ ko^{33} $ndz e^{33}$ la^{33} su^{33} . $t s^{55} k u ^{33} a^{44} l i^{33}$ $nu ^{33}$ $t s^h o^{33}$ $t c o^{44}$: INT.who household LOC strike come NOM name of god TOP person toward struck by thunder." Zhege'alu told them,

"zyt dop da mup dut jiex da zzax mu zze li, ap ddi ddix mu zyr "tsi⁵⁵to²¹ ta³³ m²¹tвu⁵⁵ tçe⁴⁴ ta³³ dza⁴⁴ m³³ dzur³³ li³³, a²¹di³³di⁴⁴ m³³tsi³³ prepare STP fire burn STP food do eat go if thunder "Go, make a fire and prepare food. If the thunder is going to strike,

口的主体多家口家"等。 医工引公司人生

la yix ne nga gox yu la mo" ddix. zhyt ge ax ly li sy sse la 33 zi 44 nu 33 ŋa 33 ko 44 zu 33 la 33 mo 33 " di 44 tşə 55 kur 33 a 44 li 33 li 33 si 33 zur 33 come given that 1P SG PAT seize come IMP QUOT name of god TOP son of god I'll seize it." As Zhege'alu is a god,

, 网孔录工事汇除, 网近舟孔景

six sse ma ngex da, kax ddi nyi cyp ddop mux da, si 44 zur 33 ma 33 ngur 44 ta 33 , k h a 44 di 33 n,i 33 ts h i 21 do 21 n h 4 ta 33 , angelic being CL COP STP INT.who also 3P.SG.POSS word do, listen STP everyone obeyed him,

表图说效资用语。 用用拍性资色多

mup dut jiex da zzax mu sat. mu gu it kie cyx ma gox \mathring{m}^{21} tBu 55 tçe 44 ta 33 dza 44 \mathring{m}^{33} sa 55 . \mathring{m}^{33} ku 33 i 55 khe 33 tsh 44 ma 33 ko 44 fire burn STP food do EXH smoke village DEM.PROX CL LOC lit a fire and cooked food. When smoke went up from the village,

北空湖田, 尾尾棒匠M网

da ddur lix te gox ne, mu zyr jix su mgot nop gox ddur la ta 33 db 33 li 44 th 14 um 33 ko 44 nu 33 , in 13 ts 13 tc 14 su 33 ngo 55 no 21 ko 44 db 13 la 33 STP exit go up when TOP thunder CL run pass LOC exit come the thunder reached out.

lox, zhyt ge ax ly si nip cyp vit jjyx- ga lox, zhyt ge ax ly lo 44 , tşə 55 kur 33 a 44 li 33 si 33 ni 21 ts h i 21 vi 55 dzə 44 ka 33 lo 44 , tşə 55 kur 33 a 44 li 33 and name of god and NUM.1 time RECL- drop, make and, after name of god and drew Zhege'alu into a fight but could not overcome him.

ap- dda, tit da mu zyr jix su po mu vut go nbot bbo, a²¹- da³³, t^hi⁵⁵ta³³ \mathring{m}^{33} ts \dot{i}^{33} tç \dot{i}^{44} su³³ p^ho³³ \mathring{m}^{33} vu⁵⁵ ko³³ mbo⁵⁵ bo³³, NEG- win thus thunder ART run sky LOC hide go Then the thunder went back to hide in the sky.

สาษ์ สหาชิดหาสหราบกาย

zhyt ge ax ly cyp vit gga cy hlo ggat da lox mu zyr jix su $t_\$o^{55}ku^{33}a^{44}li^{33}$ t_8hi^{21} vi $^{55}ga^{33}$ t_8hi^{23} t_9hi^{23} t_9hi^{23}

wa mgot mu vut go vur bbo. mu vut gox da mu zyr max su she γa^{33} ηgo^{55} $\mathring{\mathfrak{m}}^{33}vu^{55}$ ko^{33} $v \mathring{\mathfrak{u}}^{33}$ bo^{33} . $\mathring{\mathfrak{m}}^{33}vu^{55}$ ko^{44} ta^{33} $\mathring{\mathfrak{m}}^{33}ts \mathring{\mathfrak{t}}^{33}$ $ma^{44}su^{33}$ \mathfrak{su}^{33} after see sky LOC enter go sky LOC COV thunder CL steel into the sky. In the sky he saw that the the thunder was preparing steel thunder

以底55 。 第以书留书刻日去身首引

mu zyr si nip jiy mu zyr jyt njuo su cy mo. zhyt ge ax ly \mathring{m}^{33} ts $\mathring{\mathfrak{s}}^{133}$ si 33 ni 21 d $\mathring{\mathfrak{s}}^{23}$ \mathring{m}^{33} ts $\mathring{\mathfrak{s}}^{133}$ t $\mathring{\mathfrak{s}}^{155}$ nd $\mathring{\mathfrak{s}}^{233}$ su 33 ts $^{h}\mathring{\mathfrak{s}}^{133}$ mo 33 . t $\mathring{\mathfrak{s}}^{255}$ kw 33 a 44 l $\mathring{\mathfrak{s}}^{133}$ thunder and lead thunder beat PROG NOM 3P.SG see name of god and lead thunder. Zhege'alu

ne ap- jjix sho mu: "hxax yip, mu zyr vyt vu, ne jjy jyt she n u^{33} a 21 . d z^{144} so 33 \mathring{m}^{33} : "ha $^{44}z^{121}$, $\mathring{m}^{33}ts^{13}$ v $^{155}vu^{33}$, n u^{33} d z^{33} t 155 su 33 TOP NEG- know pretend ADVL EXCL thunder brother 2P.SG lead beat steel put on a brave front and asked: "Hah, brother thunder! For what purpose

บันาฐ เมษ์ अห งาน ั้น เมื่อ

jyt six xix mu mix?" ddix hna. mu zyr jix su ne zhyt ge ax ly $t \in i^{55}$ si⁴⁴ $e^{i^{44}}$ m^{33} mi⁴⁴?" di⁴⁴ n^{33} . $m^{33} t \in i^{44} su^{33}$ nur³³ $t \in i^{44} su^{33}$ nur³³ $t \in i^{44} su^{33}$ beat RES INT.what do SOL say ask thunder CL TOP name of god do you prepare steel and lead?" The thunder did not recognize Zhege'alu

文化工营表F代本资本点。 "本年少义

cy cyx ap- syp da: "nga ddie six shyp mux nge jjyx zhyt ge ax ly ts^hi^{33} ts^hi^{44} a^{21} . si^{21} ta^{33} : " a^{33} de^{33} si^{44} $sp^{21}m^{44}$ $nur^{33}dzp^{44}$ $ts^{55}kur^{33}a^{44}li^{33}$ 3P.SG 3P.SG NEG- know STP 1P.SG do RES Universe Earth name of god (who had changed his clothes) and said, "I am committed to strike Zhege'alu

¥₩d£î£" î° ETÎT4: "1

go nzie yy mo ddix su" ddix. zhyt ge ax ly ne: "ne ko³³ ndze³³ zə³³ mo³³di⁴⁴ su³³" di⁴⁴. t\$ə⁵⁵kwu³³a⁴⁴li³³ nw³³: "nw³³ PRO.PAT strike go MOD.committed FOC QUOT name of god TOP 2P.SG on earth or in heaven." Zhege'alu continued, "On what day are you

.មិ "ឧ២៧૩" . មិ "ទ្ធែង២៧% ៧

mu nyip xix nyip yy mo ddix?" ddix. "shy nyip yy mo" ddix. \mathring{n}^{33} n, I^{21} \mathfrak{c}^{144} \mathfrak{n}^{121} \mathfrak{z}^{233} \mathfrak{m}^{033} di 44 ?" \mathfrak{d}^{144} . " \mathfrak{s}^{23} \mathfrak{n}^{33} n, \mathfrak{s}^{133} \mathfrak{z}^{233} \mathfrak{m}^{033} " \mathfrak{d}^{144} . days INT.what day go MOD.committed QUOT snake day go IMP QUOT committed to do this?" "On the day of the snake."

រាំប្ន: "ឱក្រាភិឝ៤៥្ភ" រូំ

ax ly ne: "ne kep mu gox nzie yy mix?" ddix. $a^{44}li^{33}$ nui³³: "nui³³ $k^hui^{21}mi^{33}$ ko⁴⁴ ndze³³ zi^{33} mi⁴⁴?" di⁴⁴. name of god (abbreviated) TOP 2P.SG INT.how PRO.PAT strike go SOL QUOT Zhege'alu asked, "How are you going to strike?"

开路岭北国水水火水宜重, 引发对邻:

mu zyr jix su hxip ap- hmy sy go gex nep, ax ly go jox: \mathring{n}^{33} ts \mathring{i}^{33} tç \mathring{i}^{44} su 33 hi 21 a 21 \mathring{m}^{i33} s \mathring{i}^{33} ko 33 kw 44 nw 21 , a 44 l \mathring{i}^{33} ko 33 tç \mathring{o}^{44} : thunder ART say NEG- reach still SENT.TOP only then name of god PAT to Before the thunder could answer,

"hxip ngax ge, mu zyr ne xix yiet jie?" ddix. "nga xix "hi 21 ng 44 ku 33 , n 33 ts 13 nu 33 ci 44 zie 55 tce 33 ?" di 44 . "nga 33 ci 44 say 1P.SG hear thunder 2P.SG INT.what CL fear QUOT 1P.SG IND.whatever Zhege'alu said, "Tell me what do you fear." The thunder said, "I don't

事化制, 中侧的关系中重1000

ddie cvp nvi apiie. nga co hex iiv ggu o ma $n_i^{33} a^{21}$ tce³³, na³³ tsho33 $\chi u^{44} dz^{i33} gu^{33}$ $ma^{33} de^{33} ts^{h}i^{21}$ 0^{33} ma³³ also NEG- fear 1P SG person pot COV 3P.SG.POSS head NUM.9 CL fear anything except the one who can cover his head with nine pots,

。定"黑式尼亚西去多树、黑花匠母校到活车。

go zyp dax ma ax di jie, hxi yip jjy hxap kuo ax di jie" ddix. ko^{33} tsi^{21} ta^{44} ma^{33} $a^{44}ti^{33}$ tce^{33} , $hi^{33}zi^{21}$ dzi^{33} $ha^{21}k^ho^{33}$ $a^{44}ti^{33}$ tce^{33} " di^{44} . LOC cover STP CL only fear still lead net only fear QUOT and except nets made of lead."

至日於川川文章事, 須以目刊文

ddop ma cyx gge gge ggup jjux ne, ax ly bur nge jjyx do 21 ma 33 ts $^{h}i^{44}$ gur 33 gur 33 gur 21 dzur 44 nur 33 , a 44 li 33 pur 33 gur 33 dzə 44 word CL DEM.PROX CL hear after TOP name of god return this world Upon these words, Zhege'alu returned to this world

恢定出资忠从34代,全门主集协议区

da cyx ggep zyt dop la lox, mu zyr cy yu six she gox bba ta^{33} ts^hi^{44} gw^{21} $ts^i5^5to^{21}$ la^{33} lo^{44} , $\mathring{m}^{33}ts\overset{1}{i}^{33}$ ts^hi^{33} zu^{33} si^{44} su^{33} $ko^{44}ba^{33}$ STP DEM.PROX CL prepare come and thunder 3P.SG grasp RES smash wretched and made some preparations. Then he engaged the thunder in a fierce battle

3HE \hat{R} \hat{Y} , \hat{W} \hat{Y} \hat{Y} \hat{Y} \hat{Y} \hat{W}

lox, mu zyr cy ndup ke cix da, cyx ggup jjux ne mu zyr lo^{44} , $\mathring{m}^{33}ts\mathring{i}^{33}$ $ts^{h}\mathring{i}^{33}$ nd_Bu^{21} $k^hu^{33}ts^h\mathring{i}^{44}$ ta^{33} , $ts^h\mathring{i}^{44}$ $gu^{21}dzu^{44}$ nuu^{33} $\mathring{m}^{33}ts\mathring{i}^{33}$ and thunder 3P.SG beat surrender STP DEM.PROX after TOP thunder and beat it into surrender. Thereafter, the thunder did not

cox nzie ap- but, ddi ap bbo jjy xi he xix nyi jie ox. ts^ho^{44} ndze³³ a²¹- bu^{55} , di³³a²¹bo³³ dzi³³ çi³³ xuu³³ çi⁴⁴ t_0 i³³ tçe³³ o⁴⁴. person strike NEG- dare moreover lead wire steel wire also fear DP dare to strike people again, and feared also wires made of lead and steel.

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