

Phonetic Features and Genetic Position of Cosao

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I. Cosao Ethnic People and Their Language

The Cosao ethnic people, with a population of 149 persons, live in a village in Mengla County, Xishuangbanna Dai Nationality Autonomous Prefecture, Yunnan Province, China, roughly at longitude 101°34' E and latitude 21°37'N. The local Government classified them into the Hani nationality in 2004 due to linguistic and cultural similarities. However Cosao language has not been well described previously. Thus the Cosao ethnic people, their language and culture is neither known by linguists, nor by the outside world.

The term Cosao tsho⁵⁵so⁵⁵ or tsho⁵⁵so⁵⁵tsho⁵⁵zə³¹, meaning “happy people on the rich land”, used in this paper comes from their own proclamation. However the local government, the Chinese and the Dai people call them phe³¹ko³¹zen³¹, literally meaning “horizontally horned people”, due to the shapes of women’s headdresses. Nowadays the Cosao people have also accepted this nickname. According to their oral stories, they constantly mention a historical place name la⁵⁵sa³³, where their ancestors migrated from. Later on, they moved back and forth in the jungles of the Mekong River region. In the long past they have had contact with Dai, Hani and Chinese people. Before the early 1940s they moved back and forth in the borders of China and Laos, and then they settled down in their current village in Mengla County of Xishuangbanna Dai Autonomous Prefecture. The first families who initiated the village are surnamed TAO, later on the families surnamed XIU, ZHAO, HU and LI moved into the village. In the last few decades, some Chinese Han from Hunan, Sichuan, Guangxi and also Hani, Yi, Yao, Dai and Khmu ethnic people have moved into the village due to inter-marriage. In Laos there are two Cosao hamlets, with around 400 people, who are their closest kin-clan, using the same language.

The Cosao village is a multi-lingual community with more and more non-Cosao speaking members joining the village. Therefore for some families, Cosao adults speak Cosao and Southwest Chinese Mandarin in the families’ domain, while for some families they speak Cosao, Southwest Chinese Mandarin, Hani, Yao or Yi. But for others, they speak more Southwest Chinese Mandarin only in the families and in the village. Most Cosao adults use Southwest Chinese Mandarin, as the regional lingua franca, and some use Dai to communicate with the outside world. Currently the Cosao people still maintain their ethnic identity. Nevertheless, with more and more contact with Chinese and Dai in the outside world and due to their very small population, their culture and language have undergone great change, and are facing assimilation, shifting and endangerment.

II. Phonology and Consonant Changes

Research data¹ find that there are some distinct differences between two generations, those under sixty years old (adult) and over sixty years old (elder). Linguistic data discussed in Tones, Consonants and Vowels in the following are recorded and reduced from an adult consultant, while the data indicated for Voiced to Voiceless Consonants, Voiced Consonant Clusters to Voiceless Palatalized are taken from an elder and an adult.

2.1 Tones, Consonants and Vowels

2.1.1 Tones

Cosao is a tonal language. Five basic tones are found in Cosao adult speech, namely, low falling 31, mid level 33, high level 55, high falling 53, and mid rising 24, for example:

ma31/mə31	not	la31	hand	ta31	paint
ma33	dream	la33	stir	ta33	ride
ma55	night	la55	length of arm spread	ta55	little amount
ma53	tired	la53	massage	ta53	look
xəŋ24	weld	təŋ ²⁴	bamboo joint	ta24	big

2.1.2 Consonants

36 consonants are found in Cosao, including 8 palatalized pj, phj, mj, tj, thj, lj, kj, khj, ŋj, as follows:

p	ph	m	w	pj	phj	mj	f	v
ts	tsh						s	z
t	th	n	l	tj	thj	lj		
tɕ	tɕh	ɲ					ɕ	ʑ
k	kh	ŋ	x	kj	khj	ŋj	ɣ	h
q	qh							

2.1.3 Vowels

43 vowels or finals are founds in Cosao as follows:

i	a	e	ɛ	ə	ɯ	u	o	ɔ	y
ɐ	ə	ɔ							
ei	ai	aɯ	au	əi	əu	ɔi	ua	uai	ui

¹ Our language consultants include an elder 82 years of age, Mr. TAO, an adult 50 years of age, Mr. ZHAO and Mrs. CHEN 45 years of age, who have been recommended by the community to collaborate with us for a long period of time.

am	an	aŋ	ɛn	ən	ɛŋ	əŋ	in	iŋ	uŋ
ɔm	ɔn	ɔŋ	uan	uaŋ	un	ym			
ak	ɛt	yp							

2.2 Consonant Changes

2.2.1 Voiced to Voiceless consonants

There are some distinct differences between the elder generation of over eighty years of age, and younger generations under sixty years of age, which displays some consonant evolution in the Cosao language.

In the processes of studying the Cosao language, we found that there are some remarkable sound changes. One of the salient changes is that voiced consonants have changed to voiceless consonants. The elders speak with more voiced consonants: b-, d-, g-, dz-, dz- in some words, while the younger generations speak with p-, t-, k-, ts-, tɕ- in those words. This phenomenon is of particular interest to us therefore we have examined these data carefully. Examples are given as follows:

eld. voiced	>	adult	voiceless	eld. voiced	>	adultvoiceless	
la ³¹ bu ⁵³	>	la ³¹ pu ⁵³	hand	bɛ ³³ ʒo ³¹	>	pɛ ³³ ʒo ³¹	dragon
bə ³¹ bu ⁵⁵	>	pə ³¹ pu ⁵⁵	face	nɛ ³¹ do ³¹	>	nɛ ³¹ to ³¹	jaw
bo ³³ mə ³³	>	po ³³ mə ³³	stomach	ny ³¹ by ³¹	>	ny ³¹ py ³¹	nasal discharge
by ³¹ khur ⁵⁵	>	py ³¹ khur ⁵⁵	silk	nə ³¹ bo ³¹ bo ³¹	>	nə ³¹ po ³¹ po ³¹	deaf
go ³³	>	ko ³³	pick up	su ³¹ dzu ⁵⁵ bo ⁵⁵	>	su ³¹ tsu ⁵⁵ po ⁵⁵	tree
ge ³¹	>	ke ³¹	leech	gu ³³	>	ku ³³	dry
dʒə ⁵⁵ ə ³³	>	tɕə ⁵⁵ ə ³³	live	dʒa ³³ ʒə ³¹	>	tɕa ³³ ʒə ³¹	property/domestic animals

2.2.2 Voiced Consonant Clusters and Voiceless Palatalized

The linguistic evidence shows that the elders have voiced consonant clusters bl, pl, phl, ml². Nevertheless the younger generations have changed all those voiced consonant clusters into voiceless palatalized consonants pj, pj, phj, mj, simultaneously voiceless unaspirated clusters into voiceless unaspirated palatalized and aspirated clusters into voiceless aspirated palatalized ones. Examples are given as follows:

elder bl	>	adult pj	meaning
bla ³³	>	pja ³³	open eyes

² During fieldwork, we have found that there are some interesting arguments among our language consultants. The younger informants sometimes disagree with the elder ones' pronunciation of some words. They argued and criticized that the elders are "neither correct, nor clear pronunciation", which arouse our attention more to the difference between generations in sound changes. The data was taken down in the Mangang village by BAI in July, 2015.

bla ³¹ u ³³	>	pja ³¹ u ³³	taro
bla ⁵³ khy ³³	>	pja ⁵³ khy ³³	stride over
bo ³³ bla ⁵⁵	>	po ³³ pja ⁵⁵	break
blə ³¹ tchi ⁵⁵	>	pjə ³¹ tchi ⁵⁵	honey
blə ³¹ xəm ³¹	>	pjə ³¹ xəm ³¹	beeswax
blə ³¹ po ³¹	>	pjə ³¹ po ³¹	honeybeebbox (man-made)
ɔŋ ³¹ blɛ ³¹ u ⁵⁵	>	ɔŋ ³¹ pjɛ ³¹ u ⁵⁵	rice-milk
ku ⁵⁵ blə ³¹	>	ku ⁵⁵ pjə ³¹	gooseflesh
zə ³¹ blɛ ³³	>	zə ³¹ pjɛ ³³	baby
blo ³¹	>	a ³¹ pjo ³¹ mə ³¹ pjo ³¹	leak not leak
blo ³³ əŋ ⁵⁵	>	pjo ³³ əŋ ⁵⁵ ə ³³	help
li ⁵⁵ li ⁵⁵ blo ³³	>	li ⁵⁵ li ⁵⁵ pjo ³³	Wind blows.
khə ³¹ blo ³¹	>	khy ³¹ pjo ³¹	throat
blo ⁵⁵ to ⁵³	>	pjo ⁵⁵ to ⁵³	widower
nɔ ⁵⁵ blo ⁵⁵	>	nɔ ⁵⁵ pjo ⁵⁵	grasshopper
di ⁵⁵ blo ³³	>	ti ⁵⁵ pjo ³³	fan
blau ⁵⁵	>	pjau ⁵⁵	buffalo
tɕhɔ ³¹ blo ⁵³	>	tɕhɔ ³¹ pjo ⁵³	penis
a ³¹ blo ⁵³ sɔŋ ³³ ə ³³	>	a ³¹ pjo ⁵³ sɔŋ ³³ ə ³³	teacher
a ³¹ blo ⁵³ tu ³¹ ə ³³	>	a ³¹ pjo ⁵³ tu ³¹ ə ³³	pupil

elder pl	>	adult pj	meaning
xə ³³ pla ⁵⁵ a ³³	>	xə ³³ pja ⁵⁵ a ³³	break off with hands
plə ⁵⁵ plə ⁵⁵	>	pjə ⁵⁵ pjə ⁵⁵	to have pus
ʒa ³³ plau ⁵⁵	>	ʒa ³³ pjau ⁵⁵	broom

elder phl	>	adult phj	meaning
a ³¹ phlə ³¹	>	ə ³¹ phjə ³¹	thigh
nɔ ³³ phla ³³	>	nɔ ³³ phja ³³	soybean
khi ⁵⁵ the ³³ phla ³³	>	khi ⁵⁵ the ³³ phja ³³	broken crotch of trousers
tsha ⁵⁵ phle ⁵³	>	tsha ⁵⁵ phje ⁵³	braid

elderml	>	adultmj	meaning
mla ³³ blə ⁵³	>	mja ³³ pjə ⁵³ mə ³¹ pjə ⁵³	blind not blind
mla ³³ məŋ ³¹	>	mja ³³ məŋ ³¹	eyebrow
mla ³³ bi ⁵⁵	>	mja ³³ pi ⁵⁵	tears
mlɔ ⁵³	>	mjo ⁵³	lick

mləm ⁵³	>	mjəm ⁵³	swallow down
khə ⁵⁵ mlə ⁵³	>	khə ⁵⁵ mjə ⁵³	many
ɔm ³¹ mlɛ ³³ kha ³³	>	ɔm ³¹ mjɛ ³³ kha ³³	thunder
swu ³¹ mla ³³	>	swu ³¹ mja ³³	tree wart

III. Words and Cognate Correspondence

3.1 Parts of Speech

About 3000 words that we have recorded in the last few years include some nouns, pronouns, numerals, classifiers, adjectives, verbs, adverbs, conjunctions, particles and interjections. Here are listed just a few examples for some parts of speech.

3.1.1 Nouns

Nouns include various aspects of object names for concrete and abstract ideas.

Names of concrete objects:

tso ⁵⁵	house	min ³¹	fire
i ³¹ tha ³¹	rain	la ³¹ phau ³³	stone
ma ⁵⁵ tan ³³	watermelon	ma ⁵⁵ min ⁵⁵	cat
ma ⁵⁵ lɔm ⁵³	ball	ma ⁵⁵ kjɔ ³³	pumpkin

Names of abstract concepts:

nu ³³ və ³³	conscientious	a ³¹ sa ³¹ lɔ ⁵⁵	soul
ne ³¹ khu ³¹ ma ³¹	supernatural being	ne ³¹ kha ³³	devil
a ³¹ thu ⁵⁵	sound	su ³¹ tu ³¹	language
a ³¹ thu ⁵⁵	sound	su ³¹ tu ³¹	language

Names of Times:

i ³¹ ŋji ³³	yesterday	i ³¹ ma ⁵⁵	last night
a ³¹ mu ⁵⁵ tɔ ³³	recent	a ³¹ mu ⁵⁵ thə ³¹ thə ⁵⁵	future
lɔ ³³	month	naŋ ³³	year

Names of Locations:

pu ⁵⁵ tɔ ³³	east	pu ⁵⁵ qə ³³	west
a ³¹ u ⁵³	front	a ³¹ tha ⁵³	above
a ³¹ khɛ ³¹	in side of a house	a ³¹ tɕa ³³ la ³³	out side of house
la ³¹ au ³¹ la ³¹ mɔ ⁵⁵	left and right	ʒa ⁵⁵ pha ⁵³ na ⁵⁵ pha ⁵³	here and there
a ³¹ ɔ ³¹ pjɔ ⁵⁵	beneath	tso ³³ tho ⁵³ tso ⁵⁵ tɕa ⁵⁵	front and back of house

Terms of Kinship

ə ³¹ phy ⁵³	grandpa	ə ³¹ phi ⁵³	grandma
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ə ³¹ pu ³³	father	ə ³¹ mə ³³	mother
zə ³¹ ʒo ³³	son	ə ⁵⁵ mən ³³	wife of mother's brother
zə ³¹ mi ³¹	daughter	a ³³ tshai ³³	elder sister
lan ³³	grandchild	khəi ³³	daughter's husband
a ³³ zə ⁵³	elder brother	ə ⁵⁵ ky ³³	mother's brother
ʒə ³³ tɕi ⁵⁵	husband	khə ³¹ mə ³³	wife

Names of New Utensils Loaned from Chinese

səu ³¹ tɕi ³³	mobile phone	tho ⁵⁵ la ⁵⁵ tɕi ⁵⁵	tractor
mo ³¹ tho ³¹ tshə ³³	motor	piŋ ⁵⁵ ɕaŋ ⁵⁵	refrigerator
tjen ²⁴ lu ³¹	electricity stove	ve ⁵⁵ ɕi ⁵⁵ ti ⁵⁵	VCD

3.1.2 Pronouns

Personal Pronouns:

psn cas		1 person	2 person	3 person
sl	NOM	ŋə ⁵⁵ I	nə ⁵⁵ you	a ³¹ nəm ³¹ he/she
	ACC	ŋa ³¹ me	nə ⁵⁵ you	a ³¹ nəm ³¹ him/her/it
	GEN	ŋə ³¹ ə ³³ my	nə ⁵⁵ ə ³³ yours	a ³¹ nəm ³¹ ə ³³ his/her/its
pl	NOM	ŋa ⁵⁵ ŋje ⁵³ we two	na ³³ ŋje ⁵³ you two	a ³¹ nəm ³¹ ŋje ⁵³ he/she two
	ACC	ŋa ⁵⁵ ŋje ⁵³ we two	na ³³ ŋje ⁵³ you two	a ³¹ nəm ³¹ ŋje ⁵³ he/she two
	GEN	ŋa ⁵⁵ ŋje ³¹ ə ³³ we two's	na ³³ ŋje ⁵³ ə ³³ you two's	a ³¹ nəm ³¹ ŋje ⁵³ ə ³³ he/she two's
	NOM	ŋə ³³ yu ⁵³ we	nə ⁵⁵ yu ³³ you	a ³¹ nəm ³¹ zəu ³³ they
	ACC	ŋə ³³ yu ⁵³ us	nə ⁵⁵ yu ³³ you	a ³¹ nəm ³¹ zəu ³³ them
	GEN	ŋə ⁵⁵ yu ³³ ə ³³ our	nə ⁵⁵ yu ³³ ə ³³ your	a ³¹ nəm ³¹ zəu ³³ ə ³³ their

Demonstrative Pronoun

i⁵⁵ this, ni⁵⁵ that, i⁵⁵le³³ this one, ni⁵⁵le³¹ that one, i⁵⁵zəu³³ these ni⁵⁵zəu³³ those

Interrogative Pronoun

thə ³¹ ɕi ³³	who	khə ⁵⁵ lu ³¹ lai ⁵⁵	how many persons
a ⁵⁵ tɕhə ³¹	what	khə ⁵⁵ lu ³¹	how many things
khə ³¹ ɕi ⁵⁵	which	khə ²⁴ lə ³³ thə ⁵⁵	how many often
khə ³¹ ə ³³ lai ⁵⁵	which one	khə ³¹ məŋ ³³ zəŋ ³¹	when
ə ⁵⁵ tɕhə ³³ ye ⁵³	which kind	a ⁵⁵ tɕhə ³³ lai ²⁴	why
khə ³¹ ə ²⁴ thə ³¹ ki ⁵⁵	which matter	a ⁵⁵ tɕhə ³³	how
khə ³¹ pa ³³	where	a ⁵⁵ tɕhə ³³ le ⁵³	how about

3.1.3 Numerals

Cardinal Numerals: thə³¹ one, ŋje⁵³ two, sa³³ three, li⁵³ four, ŋə³¹ five, khjo³¹ six, ɕei⁵³ seven, ɛ³¹ eight, ky³¹ nine, tshə⁵⁵ ten.

Cosao have been using the local Chinese numbers: ʒi³¹ one, ə²⁴ two, san⁵⁵ three, su²⁴ four, wu³¹ five, lu⁵³ six, tɕhi³¹ seven, pa³¹ eight, tɕə³³ nine, su⁵³ ten, liŋ³¹ zero (Chi) .

Cosao have been using the local Dai numbers: nun³³ one, sɔŋ³³ two, san³³ three, ɕi²⁴ four, ha²¹³ five, hok²⁴ six, ɕai⁵³ seven, pjet²⁴ eight, kau²¹³ nine, ɕet²⁴ ten, hɔi³³ hundred, pan³¹ thousand, mun⁵⁵ ten thousand.

3.1.4 Classifiers

Classifiers are numerous. They are likely constituent with own classifiers, Dai and Chinese loaned classifiers which could be divided into several subcategories according to its origins and functions. Classifiers always follow nouns and numerals to compose a pattern: NP + NUM + CLF.

Individual classifiers reduplicate noun or its constituents. They are consistently used with designated nouns, which is popular in Cosao:

pjen ⁵⁵	thə ³¹	pjen ⁵⁵	a piece of board
board	one	CLF-board	
pɔ ³³	thə ³¹	pɔ ³³	a book

Individual classifiers reduplicate stem of nouns instead of prefixes:

a ³¹ sa ⁵³	thə ³¹	sa ⁵³	a life
life	one	CLF-life	
a ³¹ u ⁵⁵	thə ³¹	u ⁵⁵	a piece of intestine
intestine	one	CLF-intestine	

Classifiers reduplicate key constituents of compound nouns:

khə ³¹ sə ³¹	thə ³¹	khə ³¹	a rice bowl
bowl	one	CLF-bowl	
ʒa ³³ pjau ⁵⁵	thə ³¹	ʒa ³³	a broom
broom	one	CLF-broom	
su ³¹ pha ⁵³	thə ³¹	pha ⁵³	a leaf
tree-leaf	one	CLF-leaf	
su ³¹ tu ³¹	thə ³¹	tu ³¹	a word
word	one	CLF-word	

Sharing classifier mɔm⁵⁵ “body, stem” is originated from ə³¹mɔm⁵⁵ meaning “body”, which is used to account of whole body of animals, birds and insects.

mjɔm ⁵³	sa ³³	mɔm ⁵⁵	three horses
horse	three	CLF	
pu ³¹ na ³³	ŋə ³¹	mɔm ⁵⁵	five buffaloes
buffalo	five	CLF	

a ³³ phə ³¹ phə ³¹ phju ⁵⁵	thə ³¹	məm ⁵⁵	a white rooster
cock	one	CLF	
ne ³¹ kha ³³	thə ³¹	məm ⁵⁵	a demon
demon	one	CLF	

Personal classifier lai⁵⁵ for measuring human beings is frequently used:

zə ³¹ min ³¹	ŋje ⁵³	lai ⁵⁵	two daughters
daughter	two	CLF	
a ⁵⁵ zau ⁵³ a ³³ pa ⁵³	sa ³³	lai ⁵⁵	three brothers
brother	three	CLF	
tsho ⁵⁵ zə ³¹	sa ³³	lai ⁵⁵	three people
people	three	CLF	

Object classifier le³¹ for measuring articles:

tha ⁵³ zə ³¹	thə ³¹	le ³¹	a chisel
chisel	one	CLF	
min ³¹ tuw ⁵³	thə ³¹	le ³¹	a lighter
lighter	one	CLF	

Classifier u³³ originates from “egg”, for accounting “egg”:

a ³¹ au ³³	thə ³¹	u ³³	a chicken egg
chicken-egg	one	CLF	
qhe ³¹ u ³³	thə ³¹	u ³³	a bird egg
bird-egg	one	CLF	

Classifier u³³ also accounts for egg-shaped roots and tubers:

pja ³¹ u ³³	thə ³¹	u ³³	a taro
taro	one	CLF	
muw ³¹	thə ³¹	u ³³	a Chinese yam
Chinese-yam	one	CLF	
tso ⁵⁵ lo ³³ pa ⁵⁵	thə ³¹	u ³³	a cassava
cassava	one	CLF	
za ³¹ zi ⁵⁵	thə ³¹	u ³³	a potato
potato	one	CLF	

Classifier sə³¹ originates from ə³⁵sə³¹ “fruit” for accounting fruit, fruit-shaped objects, or alike:

ə ³¹ sə ³¹	thə ³¹	sə ³¹	a fruit
fruit	one	CLF	
sə ³¹ phy ³¹	thə ³¹	sə ³¹	a wild apple
wild apple	one	CLS	
əŋ ³¹ ki ⁵⁵	thə ³¹	sə ³¹	a star
star	one	CLF	

phju ⁵⁵ mə ⁵⁵	thə ³¹	sə ³¹	a silver coin
silver	one	CLF	

Classifier tse³¹ for accounting pairs of articles:

khi ⁵⁵ tshu ⁵³	thə ³¹	tse ³¹	a pair of shoes
shoes	one	CLF-pair	
tche ³³ thu ³¹	sa ³³	tse ⁵³	three pairs of chop sticks
chopstick	three	CLF-pair	

Classifier khəŋ⁵⁵ a body part of pairs, or a single of pairs:

na ³¹ pha ³¹	thə ³¹	khəŋ ⁵⁵	one ear
ear	one	CLF	
la ³¹ pu ⁵³	thə ³¹	khəŋ ⁵⁵	one hand
hand	one	CLF	
mja ³³ sə ³¹	ŋje ⁵³	khəŋ ⁵⁵	two eyes
eye	two	CLF	
a ³¹ khi ⁵⁵	thə ³¹	khəŋ ⁵⁵	one foot
foot	one	CLF	

Classifier xε³³ for measuring a sheet, piece or pair of clothing:

pha ⁵⁵ tɕen ³³	thə ³¹	xε ³³	a piece towel
towel	one	CLF	
mau ³¹ than ^{33;31} kja ⁵⁵	thə ³¹	xε ³³	a sheet of blanket
blanket	one	CLF	

Classifier po⁵⁵ originating from su³¹tsu⁵⁵po⁵⁵ “stem of plant” counting for plants:

tho ³¹ xu ³¹ ə ³¹ po ⁵⁵	thə ³¹	po ⁵⁵	a pine tree
pine-tree	one	CLF-tree	
su ³¹ tɕhau ³¹ a ³¹ po ⁵⁵	thə ³¹	po ⁵⁵	a plum tree
plum	one	CLF-tree	
səŋ ³¹ a ³¹ po ⁵⁵	thə ³¹	po ⁵⁵	a peach tree
peach-tree	one	CLF-tree	

Classifier tsho⁵³ for measuring cluster, tuft of plants:

pho ³¹ tɕhi ⁵⁵	thə ³¹	tsho ⁵³	a tuft of sugar cane
sugarcane	one	CLF-cluster	
ŋa ³³ tɕhə ⁵⁵	thə ³¹	tsho ⁵³	a tuft of banana
banana	one	CLF-cluster	

Classifier xo³¹ for counting rod, or log of plants:

pho ³¹ tɕhi ⁵⁵	thə ³¹	xo ³¹	a sugar cane
sugar can	one	CLF-rod	

və ³¹	thə ³¹	xo ³¹	a bamboo rod
bamboo	one	CLF-rod	
suu ³¹ tsu ⁵⁵ po ⁵⁵	thə ³¹	xo ³¹	a log
tree-stem	one	CLF-rod	

Classifier lo³³ originating from “a longish piece of bamboo from joint to another joint” which measures objects with joints:

və ³¹	thə ³¹	lo ³³	a joint of bamboo
bamboo	one	CLF-joint	
la ³¹ lo ³³	thə ³¹	lo ³³	a low part of arm
arm	one	CLF-joint	

Classifier lo³³ also extending to measuring for longish plots of land, and road:

ti ³³ ko ⁵³	thə ³¹	lo ³³	a long plot of paddy field
paddy	one	CLF-plot	
a ⁵⁵ lo ³³	thə ³¹	lo ³³	a pass in mountains with weeds covered
passage	one	CLF-field-pass	

Classifier tɔŋ²⁴ for counting piece of log:

xo ⁵³	thə ³¹	tɔŋ ²⁴	a piece of log
log	one	CLF	
pho ³¹ tɕhi ⁵⁵	thə ³¹	tɔŋ ²⁴	a piece of sugar cane
sugar-cane	one	CLF	

Classifier tsu³¹ for counting of bundles:

ku ³¹ tɕi ³¹	thə ³¹	tsu ³¹	a bundle of vegetables
vegetable	one	CLF-bundle	
i ⁵³	thə ³¹	tsu ³¹	a bundle of thatch grass
thatch-grass	one	CLF-bundle	

Classifier the³³ for counting wrapped matters:

a ³¹ kja ³¹	thə ³¹	the ³³	a package of thing
thing	one	CLF-package	
ɔŋ ³¹	thə ³¹	the ³³	a package of rice
rice	one	CLF-package	

Classifier haŋ³³ for counting a set of farm tools:

phu ³³	thə ³¹	haŋ ³³	a hand harrow
hand-harrow	one	CLF-harrow	
phei ³³	thə ³¹	haŋ ³³	a foot harrow
foot-harrow	one	CLF-harrow	

Classifier tso³³ for counting young seedling or plant:

ko ³³ zə ³¹	thə ³¹	tso ³³	a young plant
-----------------------------------	-------------------	-------------------	---------------

young-plants	one	CLF-seedling	
tsha ⁵⁵ tsə ⁵³	thə ³¹	tsə ³³	a seedling of rapeseed
rapeseed	one	CLF-seedling	

Classifier tsho⁵³ for counting plants cluster:

za ⁵⁵ kha ³³ ty ³¹ py ³³	thə ³¹	tsho ⁵³	a cluster of weeds
weed	one	CLF-cluster	
ku ³¹ po ⁵⁵	thə ³¹	tsho ⁵³	a cluster of scallion
scallion	one	CLF-cluster	

3.1.5 Adjectives

Adjectives are mainly monosyllable stems:

naŋ ⁵³	deep	pə ³¹	shallow	ko ³³	curve	pi ³³	transverse
tshym ³³	tine	mə ⁵⁵	thin	muŋ ³¹	good	səu ³¹	bad
lo ⁵⁵	hot	u ⁵³	far	məm ³¹	old	nən ³¹	tender
nə ³¹	near	mjə ⁵³	more	pu ⁵⁵	gray	ə ³¹	correct

There are some bi-syllable adjectives:

zə ³¹ su ⁵³	clever	la ⁵⁵ ŋa ⁵³	stupid
pjo ³³ tu ⁵³	lazy	tho ³¹ khə ³¹	vertical
ŋe ³¹ na ⁵⁵	fragrant	ta ⁵³ muŋ ³¹	beautiful

However more dissyllable adjectives are derived from mono-syllables with prefix a³¹-, or zo³³- which function as nominatives:

a ³¹ pu ⁵⁵	grayness	a ³¹ mi ³¹	purple color
a ³¹ lan ⁵⁵	blueness	a ³¹ mə ³¹	short height
a ³¹ pje ³¹	thickness	a ³¹ ŋje ³¹	emptiness
zo ³³ mə ³³	bigness	zo ³³ mjoŋ ⁵⁵	height

Other adjectives are formed with the nominalizing prefix, and then with a suffix where the vowel is the vowel of the adjective stem, which form a vowel harmony pattern of [-lv]:

a ³¹ ko ³³ lo ³³	curvedly	a ³¹ pə ⁵⁵ lə ⁵⁵	deep red
a ³¹ pi ³³ li ³³	transversely	a ³¹ hu ⁵⁵ lu ⁵⁵	very yellow
a ³¹ pu ⁵⁵ lu ⁵⁵	gray	tho ³¹ khə ³¹ lə ³¹	vertically
a ³¹ mə ³¹ le ³¹	very shortly	a ³³ lo ³¹ lo ³¹	brightly

A few adjectives are formed with negative mə³¹ “not” to contrast with their partners:

ta ⁵³ muŋ ³¹	beauty	mə ³¹	ta ⁵³ muŋ ³¹	ugly
look-good		NEG-not	look-good	
ə ³¹	correct	mə ³¹	ə ³¹	error
correct		NEG-not	correct	

Different degrees of adjectives are always indicated by adverb tsəi⁵⁵ “very”:

çən ³¹	tsəi ⁵⁵	very new	pə ³¹	tsəi ⁵⁵	very shallow
new	very		shallow	very	
ny ⁵⁵	tsəi ⁵⁵	very short	təhə ⁵⁵	tsəi ⁵⁵	very sour
short	very		sour	very	

Some adjectives with tsəi “very” are reduplicated, which forms a pattern of ABB+ tsəi to describe their nuances and functions:

a ³¹ pə ³¹	pə ³¹	tsəi ⁵⁵	very shallow
PREF-shallow	REDUP	very	
a ³¹ kheŋ ³¹	kheŋ ³¹	tsəi ⁵⁵	very narrow
PREF-narrow	REDUP	very	

Adjective for colors are consisted of prefix, and suffix with l- plus a reduplicating preceding vowel to functioning adverbs:

a ³¹ pə ⁵⁵ lə ⁵⁵	redly	a ³¹ phju ⁵⁵ lu ⁵⁵	whitely
PREF-red-SUFF		PREF-white-SUFF	
a ³¹ na ³³ la ³³	darkly	tɕi ³¹ ny ⁵⁵ ly ⁵⁵	greenly
PREF-black-SUFF		PREF-green-SUFF	

3.1.6 Verbs

Mono-syllable verbs are constantly followed by an ə³³, ɛ³³ or a³³ to compile a verb phrases:

ku ⁵⁵	ə ³³	to call	se ⁵³	ə ³³	to splash	khe ³¹	ɛ ³³	to bite
call	PRT		splash	PRT		bite	PRT	
the ³³	ɛ ³³	to pat	tsha ⁵³	a ³³	to teach	tsha ³¹	a ³³	to tell
pat	PRT		teach	PRT		tell	PRT	

Dissyllable verbs:

no ³³ ta ⁵³	listen to	thau ³³ tha ⁵³	hold on
bla ³³ khy ³³	cross over	i ³¹ thi ⁵³	sleep soundly
xə ³³ kja ⁵³	tear break	le ³³ ku ⁵⁵	throw off
ka ³¹ to ³³	extend to	phə ⁵⁵ tha ⁵³	hold in

It is common for a verb to reduplicate, or to copy a noun stem:

a ³¹ pə ³³	pə ³³	A sprout sprouts.	a ³¹ ze ³³	ze ³³	Flowers flower.
PREF-bud	REDUP		PREF-flower	REDUP	
a ³¹ au ³³	au ³³	Hatch an egg.	a ³¹ min ⁵⁵	min ⁵⁵	Name a name.
PREF-egg	REDUP		PREF-name	REDUP	

It is common for a verb to reduplicate a compound constituent to form a clause :

ma ³¹ min ⁵⁵	ma ³³	Dream a dream.	lo ³³ phau ³³	phau ³³	Break a stone.
dream	REDUP		stone	REDUP	
mi ³¹ tho ³¹	tho ³¹	Light is on.	u ³¹ pha ³¹	pha ³¹	Dress headdresses.
light	REDUP		dress	REDUP.	
u ³¹ tsho ³¹	tsho ³¹	Wear a hat.	i ³¹ tche ³¹	tche ³¹	Pee a pee.
hat	REDUP		pee	REDUP.	

3.1.7 Adverbs

Adverbs might be defined as modifiers of verbs or adjectives for increasing their intensities. They might be categorized into adverbs of degree, time, manner, range, probability, negation, sequence, frequency and interrogation.

Adverbs of degrees always follow a verb or adjective, of them tsəi⁵⁵ “very” is a very common one:

i ⁵⁵	khə ³¹ mə ³³ zə ³¹	ta ⁵³ muŋ ³	tsəi ⁵⁵	lə ³³ .	
DEM-this	woman	look-good	very	PRT	
This woman is very beautiful.					
i ⁵⁵	va ³¹	mə ³¹	po ³¹	tsəi ⁵⁵	lə ³³ .
DEM-this	pig	NEG-not	fat	very	PRT
This pig is not fat.					

Adverbs of sequence always proceed in a cause. Here are a couple of examples as follows:

ə ³¹ u ³¹	a ³³ tshai ³¹	a ³³	pi ³¹	tsə ³¹ ,	a ⁵⁵ nə ³³	nə ³³	tsə ³¹ .
first	elder-sister	CAU.PRT	CAU.giving	eat	then	2SL-you	eat
First let elder sister eats, then you eat.							
ə ³¹ u ³¹	zə ³¹ ku ³³	tu ⁵³	ə ³³ ,	ə ³¹ zəu ⁵⁵	ku ³¹ nan ³³	ɕie ⁵³	ə ³³ ,
first	field	dig	PRT	then	seeds	sow	PRT
a ³¹ nə ³³ nə ³³ mo ⁵⁵	i ⁵⁵ tcho ⁵³	xy ⁵⁵	ə ³³ .				
finally	water	water	PRT				
First dig field up, then sow seeds in, finally water the field.							

3.1.8 Conjunctions

Coordinating conjunctions always connect a series of phrases:

ŋə ³¹	ə ³¹ nəŋ ⁵⁵	khjo ³¹	tca ³³ kau ³³ phu ⁵⁵	ə ⁵⁵
five	CONJ	six	put-together	PRT
tshə ⁵⁵ thə ³¹	tə ³³	lə ⁵⁵ .		
ten-one	produce	come		
Put five and six together makes eleven.				
khə ³¹ mə ³³ zə ³¹	ə ³¹ nəŋ ⁵⁵	zə ³³ ku ³¹ zo ³³		
woman	CONJ	children		

tə ³³ məm ⁵³	ŋə ³¹ tə ⁵⁵	tshau ³³	ə ³³ .	
all	fish	catch	PRT	
Women and children are all fishing.				

3.1.9 Particles

Structure particles

Structure particles make various structure phrases in Cosao, ə³³ and li³³ are two of them. Structure particle ə³³ has many functions. One of the most salient uses of ə³³ is to attach to a verb forming a verb phrase:

nəm ³¹	ə ³³	stamp	tsə ³¹	ə ³³	eat
stamp	STPT		eat	STPT	
tu ⁵³	ə ³³	dig	phje ³³	ə ³³	cut
dig	STPT		cut	STPT	

Structure particle li³¹ is attached to frequent noun khə³³mən³³ “often, any time”:

ŋə ³³	khə ³³ mə ⁵⁵	khə ³³ mən ³³	li ³¹	a ⁵⁵ khu ³³	ku ³¹	zi ⁵⁵	zə ³³ .
1SG.GEN-my	wife	often	STPT	vegetable	sell	go	PRT
My wife often sells vegetables.							
ŋə ⁵⁵	khə ³³ mən ³³	li ³¹	pi ³¹ təha ³¹	lə ³³	ə ³³ .		
I	often	STPT	Mengban	come	PRT		
I often come to Mengban.							

Topic particles

There are a few topic particles. Particle ə³³ is one of the topic particles, which follows a noun:

i ⁵⁵	zə ³¹ ku ³³	ə ³³	ŋə ³¹	a ³³ zau ⁵³	ə ³³ .	
DEM-this	child	TOP	GEN-my	elder-brother	GEN.PRT	
This child is my elder brother's.						
i ⁵⁵	ku ³³ pha ³¹	ə ³³	a ⁵⁵ tɕa ³³	li ³¹	tsə ³¹	mə ³¹
DEM-this	vegetable	TOP	cooked	yet	eat	NEG-not
ŋu ⁵⁵	qhəu ³³	a ⁵⁵ tɕin ³¹	li ³¹	tshə ³¹	qhəu ³³ .	
be	AUX-can	raw	also	eat	AUX-can	
This kind of vegetable can not only be eaten cooked but also raw.						

Agent and Patient Particles

Agent particle ə³³ is placed after an agent and patient particle a³³ is placed after a patient. However, when agent and patient are confused, the particles might not occur.

a ³³ mə ³³	ə ³³	ŋa ³¹	ŋa ³³ sə ³¹	pi ³¹	tshə ³¹	la ³³ .
mother	AGT	1SG-me	banana	CAUS-giving	eat	PRT

Mother gave me bananas to eat.						
a ³³ zau ⁵³	ə ³³	ŋa ³¹	tɕa ³³ kə ³¹	pi ³¹	tsə ³¹	ə ³³ .
elder-brother	AGT	1SL.ACC-me	medicine	CAUS-giving	eat	PRT
Elder brother gave me medicine to take.						

Locative particle a³³ follows after a location:

ŋə ³¹	zə ³¹ ku ³¹	a ³³ ŋə ³³ təu ³¹	tso ⁵⁵	a ³³	tɕo ⁵⁵	ə ³³ .
1SG.GEN-my	child	alone	home	LOC	stay	PRT
My child is at home alone.						
lo ⁵⁵ tshi ⁵³	a ³³	ŋə ³¹ tə ³³	tɕo ⁵⁵ ,	pi ³¹ tɕha ³¹ no ³³ pju ⁵⁵	li ³¹	tɕo ⁵⁵ .
river	LOC	fish	exist	Dai-grasshopper	also	exist
There are fish and shrimp in the river.						

Progressive Particles y⁵⁵, y⁵⁵ə³³, ə³³ indicate an action is in progress:

ŋə ⁵⁵	ŋə ³¹	tsə ³¹	y ⁵⁵ ə ³³ .		
1SL	dinner	eat	PRT		
I am having dinner.					
ŋə ³¹ ə ³³	khə ³¹ mə ³³	ŋə ³¹	mə ³¹	tsə ³¹	y ⁵⁵ .
1SL.GEN-my	wife	meal	NEG-not	eat	PRT
My wife is not having meal.					
a ³¹ ŋəm ³¹ zə ³¹	kho ³¹ pha ³¹	u ⁵⁵	ə ³³ .		
3PL-they	vegetable	buy	DU.PRT		
They are buying vegetables.					

3.2 Cognate Words

Lexically, Cosao is an isolate language related to the languages of the Yi-Burmese language group³ of Tibeto-Burman language family, such as Hani, Jinuo, Sadu,⁴ Yi, Lisu, Lahu, Naxi, Nu⁵. Many cognate words are found in its vocabulary. Here are some cognate words as follows:

Cosao	Hani	Jinuo	Yi	Lisu	Lahu	Naxi	NU	Sadu	English
tɕha ⁵³	tɕa ³¹	tʃha ⁵⁵	tɕo ⁵⁵	tɕa ⁵⁵	tɕa ³⁵	tɕo ⁵⁵	dza ⁵³	tɕa ⁴²	cock
pa ⁵⁵	bjo ⁵⁵	plɛ ³¹	dzi ³³	bɛ ³³	po ³¹	mbi ³¹	bia ³³	bɛ ²¹	fly
tshai ⁵³	tshi ³¹	tshɿ ⁴⁴	tshɿ ³³	tshɿ ³¹	tshɿ ⁵³	tshor ³³	tshɿ ⁵⁵	tshɿ ³³	wash
tɕa ³³ la ³³	dza ³³	tɕa ³¹	ndzo ³³	dze ³³	dza ⁵³	ndə ³³	dza ⁵³	dza ⁵⁵	drop

³ Yi, Hani, Lisu, Lahu, Naxi, Nu, Jinuo data have been cited from. Tibeto-Burman Language Phonology and Word List. Beijing. China Social Sciences Press. Our sincere thanks to those authors who have contributed to linguistics society.

⁴ Sadu words are quoted from Studies on the Sadu Language. Beijing. Nationalities Press.

⁵ Cognate World List has been cited from Sino-Tibetan Language Researches. Beijing. Beijing University Press.

tsə ³¹	dza ³¹	tsə ⁴⁴	dzur ³³	dza ³¹	tʂa ⁵¹	ndzɿ ³³	dza ⁵⁵	dzo ³³	eat
i ³¹ thi ⁵³	ʒu ³¹	ji ⁴⁴	i ⁵⁵	e ³¹ ta ⁵⁵	zɿ ²¹	ʒi ⁵⁵	iɔ ⁵³ ɔ ³¹	zə ⁴²	sleep
mɔm ³¹	mo ³¹	kha ⁴²	mo ³¹	mo ³¹	mɔ ⁵³	mo ⁵⁵	mur ⁵⁵	mo ³¹³	old
na ³³	na ³³	a ³³ na ⁴²	a ⁴⁴ no ³³	nɛ ⁴⁴	na ⁵⁴	na ³¹	na ³⁵ na ⁵³	na ⁵⁵	black
tɕho ³¹	ga ³³	tʃho ⁵⁵	ŋgo ³³	dze ³³	ka ⁵³	tɕhi ⁵⁵	ga ⁵³	dza ⁵⁵	cold
tɕhi ⁵⁵	tɕhu ⁵⁵	a ³³ tʃhi ³³	tɕhɿ ³³	tʃhɿ ³³	tshɔ ³³	tɕhi ⁵⁵	ga ⁵³	tshɿ ²¹	sweet
tɕho ⁵⁵	tɕhe ⁵⁵	a ³³ tʃhu ³³	tɕi ³³	tɕur ³³	tsi ³³	tɕi ³¹	tɕɤ ³³	tsi ³³	sour
tɕha ⁵³	tɕa ³¹	tʃha ⁵⁵	tɕo ⁵⁵	tɕa ⁵⁵	tʂa ³⁵	tɕo ⁵⁵	dza ⁵³	tʂa ⁴²	cock
mɛ ⁵³	mɛ ³¹	mɛ ⁴⁴	mi ⁵⁵	mur ⁴¹	mə ¹¹	zu ³¹	muɔɿ ⁵³	mi ⁴²	hung ry
phi ³¹ thu ⁵⁵	thu ⁵⁵	a ³³ thu ⁵⁵	a ³³ tu ³³	thu ³³	thu ³³	la ⁵⁵	thu ³³	thu ²¹	thick
pə ³¹	ba ³¹	a ³³ pə ³³	i ³³ bo ³³	ba ³¹	pa ⁵³	mbe ³³	ba ⁵³	bo ³³	thin
ŋje ⁵³	ni ³¹	ni ⁵⁵	ni ³¹	ni ³¹	ni ⁵³	ni ³¹	ni ³¹	ni ²¹	two
ŋə ³¹	ŋa ³¹	ŋɔ ³³	ŋu ³³	ŋua ³¹	ŋa ⁵³	ua ³³	ŋa ⁵⁵	ŋo ³³	five
e ³¹	ɕe ³¹	xɛ ⁴⁴	hi ⁵⁵	he ⁴¹	xɛ ³⁵	xo ⁵⁵	ʂaɿ ⁵³	xɛ ⁴²	eight
ky ³¹	ɣə ³¹	tɕy ³³	gu ³³	ku ⁴⁴	qɔ ⁵³	ŋgv ³³	gu ³⁵	gu ³³	nine
khu ³¹	khu ³¹	khu ⁴⁴	khi ⁵⁵	kho ³¹	ko ³³	khu ⁵⁵	khu ⁵⁵	khə ⁴²	fill
mɔ ⁵⁵ kh ur ⁵³	a ³¹ khur ³¹	khur ³³ jo ³³	khu ³³	khu ³¹	phu ⁵³	khur ³³	khui ⁵⁵	khui ³³	dog
tse ³¹	dzo ⁵⁵	tsə ⁵⁵	dzi ³¹	dze ³³	tse ³³	dzi ³³	dza ³¹	dza ²¹	pair
tshə ⁵³	tsɿ ³¹	to ³³	tsɿ ⁵⁵	tho ³³	tsɿ ⁵³	tʂəɿ ⁵⁵	tsɿ ⁵³	tsɿ ⁴²	joint
ŋɔ ⁵⁵	ŋa ⁵⁵	ŋɔ ³¹	ŋa ³³	ŋua ³³	ŋa ³¹	ŋə ³¹	ŋa ³³	ŋo ²¹	I
nɛ ⁵⁵	no ⁵⁵	nɛ ³¹	nu ³³	nu ³³	nɔ ³¹	nu ³¹	nu ⁵⁵	nə ²¹	you
mə ³¹	ma ³¹	mɔ ³³	a ³¹	ma ³¹	ma ⁵³	mə ³³	ma ⁵⁵	ma ²¹	not
thə ³¹	tha ³¹	thɛ ³³	tha ³¹	thə ³¹	tʂa ⁵³	tha ³¹	tha ⁵⁵	ta ⁴²	don't
tu ⁵³	du ³¹	tu ³³	ndu ³³	tɕhu ⁵⁵	du ⁵³	ndv ³³	du ⁵⁵	kə ⁴²	dig
xi ⁵⁵ phju ⁵⁵	se ⁵⁵	ʂaɿ ⁵⁵	ʂu ³³	xu ³³	se ³³	ʂo ³³	ʂə ⁵⁵	se ²¹	louse
pjə ⁵³	bja ³¹	pjo ³³	dzi ³³	bie ³¹	pɛ ⁵³	mba ³³	bia ⁵⁵	bjo ⁵⁵	bees
a ³³	a ³¹ xa ³³	ja ⁴²	va ³³	a ⁵⁵ ɣa ⁵⁵	ɣa ⁵⁴	æ ³¹	ɿɿ ⁵³	ɣa ⁵⁵	chicken
ko ³¹ ke ³¹	a ³¹ ɣo ³¹	a ³³ tɕə ⁵⁵	zi ⁵⁵	ɣo ⁴¹	ɣo ¹¹	ko ³¹	ɣa ⁵³	ɣə ²¹	needle
min ³¹ tsə ³¹	mi ³¹ kho ³¹	mi ³³ tsə ³³	sɿ ³³	sɿ ³⁵	sɿ ⁵³	səɿ ³³	si ⁵³	ɕi ⁵⁵	fire wood
mjɔm ⁵³	mo ³¹	mjo ³³	mu ³³	a ⁵⁵ mo ⁵³	i ³⁵ mu ⁵³	zoa ³³	mju ³¹ la ⁵⁵	mu ³³	horse

ɕi ³¹	sɿ ³¹	a ³³ ɕi ⁴⁴	sɿ ³³	sɿ ³¹	sɿ ³¹	sæ ³³	sui ⁵⁵	sɿ ³³	blood
a ³¹ u ⁵⁵	u ⁵⁵	a ³³ vu ³³	vu ³³	vu ³³	ɔ ³¹ yu ³¹	bv ³³	u ³⁵ a ⁵⁵	u ²¹	intestine s
zə ³¹ zə ³³	za ³¹ zə ³³	zə ³³ ku ³³	zu ³³	za ³¹	ɔ ³¹ zA ⁵³ p A ¹¹	zo ³³	za ⁵⁵	zo ³³	son
va ³¹	a ³¹ ɣa ³¹	va ⁴⁴ ni ⁴⁴	vo ⁵⁵	a ⁵⁵ vɛ ⁴¹	va ²¹	bu ³¹	vq ⁵³	va ⁴²	pig
phi ³¹ khi ⁵⁵	phi ³¹ kh u ⁵⁵	a ³³ phe ³³	tɕɿ ³³	tɕɿ ⁴⁴	ɔ ³¹ kə ⁵⁵	ku ³³	kɿ ³³	tɕi ³³	gallblad der
tshy ³¹ m ɛ ³³	a ³¹ tsi ³¹	tɕhi ⁴⁴ pɛ ⁴ 3	tʂhɿ ⁵⁵	a ⁵⁵ tɕhɿ ⁴¹	A ³⁵ tshe ² 1	tshu ⁵⁵	tʂhɔ̃ɿ ⁵⁵	tshə ⁴²	goat
khi ⁵⁵ the ³³	la ³¹ tshə ³ 1	la ³³ tsho ³ 3	ɬa ⁵⁵	lu ⁵⁵ the ³ 3	xA ³¹ thə ³ 3	le ³³	ɬa ⁵⁵	lo ³¹³	trousers
ne ³¹ khu ⁵ 3	ɔ ³¹	tshu ⁴⁴ n a ⁴²	mo ³³ m ³³	mo ³¹ kua ⁴⁴	mu ⁵³ nə ³ 3m ³³	mu ³³	mu ⁵⁵	mu ³³	sky
mi ⁵⁵ nə ⁵³ m ⁵³	nu ³¹ ni ⁵⁵	mɛ ⁴² nə ³ 3	nə ³³ ni ³³	a ⁵⁵ ni ³³	nu ⁵³	na ³¹ yu ³ 3	nə ⁵⁵	ni ³³	caw
mja ³³ su ⁵³	mja ³³	mja ⁴² tsi ⁴ 4	nə ³³ dzɿ ³ 3	miɛ ⁴⁴ su ³¹	mɛ ⁵⁴ si ¹¹ 3	miə ³¹ ly ³ 3	miə ⁵³ dzi ³¹	mja ⁵⁵	eye
həu ³¹ zu ⁵ 5	xə ³¹	tɕhə ³³	khu ³³	khu ³¹	qho ⁵³	khu ³³	khui ⁵⁵	khui ³³	steal

3.3 Sound Correspondences

From the data, Cosao sound correspondences to the related languages is very obvious which demonstrates that Cosao is in the Yi-Burmese branch. It is likely that Cosao nasal consonants correspond to the other compared languages above, for example the word “ŋə⁵⁵ I” and “ŋə³¹ five”, its initial consonant corresponds to the rests : ŋ ~ ŋ, no exception. “na³³ black” and “ne⁵⁵ you ”, its initial consonant corresponds to its counterparts: n ~ n. “me⁵³ hungry” and “mə³¹ not”, its initial consonant corresponds to the comparisons: m ~ m. While “məm³¹old ”, its initial consonant corresponds all but only one exception of Jinuo: m ~ kh.

Two negative forms, “mə³¹/ma³¹ not ” and “thə³¹/ tha³¹ don’t” in Cosao agrees to: m~m, th~th.

Other stop consonants, such as “khu³¹ fill ” and “-khu⁵³ dog ”, its consonant agrees the counterpart: kh ~ kh. “ky³¹ nine ” and “ko³¹- needle ” corresponds: k ~ y/tɕ/g/z/k/q/ŋg, points and manners of articulation are almost the same.

Affricate consonants show the most consistent evolution rules, such as “ɕi³¹ blood ” corresponds to: ɕ ~ ɕ/s, “zə³¹- son” consistent to: z ~ z, “tsə³¹ eat”

corresponds to: ts ∼ ts/dz/ndz.

As for these palatalized consonants, they show more complicated patterns of sound changes. For instance, “mja³³- eyes” : mj ∼ mj/ɲ/mi, “pjə⁵³ bees”: pj ∼ bj/pj/dz/mb/p/bi. However, they display more closely correspondences to some of the languages discussed in this paper. Here are some more cognate words and their palatalized consonants correspondences in Cosao and Hani.

Cosao	∼	Hani	
pja ³³	∼	bje ³³	to open eyes
open-eye		open-eye	
po ³³ pja ⁵⁵	∼	bja ³³	break
open-break		break	
pjə ³¹ tɕhi ⁵⁵	∼	bja ³¹ tɕhu ⁵⁵	honey
bee-sweet		bee-sweet	
pjə ³¹ xəm ³¹	∼	bja ³¹ sə ³¹	beewax
honey-waste		honey-waste	
ɲa ³³ pja ³¹	∼	a ⁵⁵ bja ³¹	banana flower petal
banana-petal		banana-petal	
pjə ⁵⁵ pjə ⁵⁵	∼	bjo ⁵⁵ bjo ⁵⁵	To have pus.
pustopus		pustopus	
ə ³¹ phjə ³¹	∼	sa ³¹ phja ³¹	thigh
PREF-thigh		flesh-thigh	
tsha ⁵⁵ phje ⁵³	∼	tshə ⁵⁵ pjə ⁵³	braid
hair-braid		hair-braid	
əm ³¹ mje ³³	∼	ɔ ³¹ mjo ³¹	thunder
sky-lighten		sky-lighten	
mja ³³ pi ⁵⁵	∼	mja ³³ bi ⁵⁵	tears
eye-tear		eye-tear	
və ³¹ mja ³³	∼	xa ³¹ mja ³³	bamboo joint
bamboo-eye		bamboo-eye	
su ³¹ mja ³³	∼	so ³¹ mja ³³	tree-wart
tree-eye		tree-eye	
mje ³¹ tshy ³³	∼	kə ³³ mja ³¹	arrow
arrow-point		bow-arrow	
khə ⁵⁵ mje ⁵³	∼	xa ⁵⁵ mja ³¹	many
how-many		how-many	
mjo ⁵³	∼	mje ³¹	lick
lick		lick	

mjom ⁵³	~	mje ³¹ tho ³³	swallow down
swallow		swallow into	
a ³¹ mje ³³ mə ³¹ mje ³³	~	ɔ ³¹ mja ³³ ma ³¹ mja ³³	not to be late
PREF-late not late		sky-late not lat	

IV. Syntax

Syntactically Cosao is an SOV language. However in some cases, a verb is not present in a sentence, which might be an SN sentence, OV or an SV sentence. Syntax examples⁶ are given in the following:

4.1 SN Sentences

i ³¹	khi ³¹ thu ³³ .	
DEM.SG-this	PRED-stool	
This is a stool.		
ŋɔ ⁵⁵	tsho ⁵⁵ sɔ ⁵⁵ tsho ⁵⁵ zə ³¹ .	
1SG.NOM-I	Cosao~people-offspring.	
I am a Cosao person.		
ŋə ³³ yü ⁵³	phə ³¹ zə ³¹	ŋje ⁵³ .
1PL-we	M-father.M-son	DU-two
We two are father and son relation.		

4.2 SV Sentences

nɛ ⁵⁵	tu ³¹ ,	ŋɔ ⁵⁵	mə ³¹	tu ³¹ .
2SG.NOM.AG	beat	1SG.NOM	NEG-not	beat
You beat, I don't beat.				
a ³¹ ŋəm ³¹	kho ³¹	ə ³³	lɔ ³¹ .	
3SG	speak	PRT	PRT	
He has spoken already.				

4.3 OV Sentences

a ³¹ u ⁵³	a ³¹	pi ³³	to ⁵³	ɛ ³³ .
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⁶ Annotation of the syntax examples are referred to The Leipzig Glossing Rules formatted May 31, 2015.

uncle	OBJ.PRT	ACC.AUX-giving	wait	ACC.PRT		
Let uncle wait.						
ə ³¹ phy ⁵³	a ³¹	phe ⁵⁵ khau ⁵³	pi ³³	tsə ³¹	ta ³¹	ɛ ³³ .
OBJ.AG-grandpa	OBJ.PRT	OBJ-olive	ACC.AUX-giving	eat	try	ACC.PRT
Let grandpa taste /eat olive.						
a ³¹ nəm ³¹	a ³¹	i ⁵⁵	a ³¹ ze ³³			
OBJ.AG-him	OBJ.PRT	DEM-this	OBJ-flower			
pi ³³	ta ⁵³	ta ³¹	ɛ ³³ .			
ACC.AUX-giving	look	try	ACC. PRT			
Let him look at this kind of flowers.						

4.4 VV/SVV Sentences

ko ³³	phje ³³	mə ³¹	phje ³³ ?
OBJ-rice	cut	NEG-not	cut
Do you cut rice or not (cut)?			
zu ⁵⁵	mə ³¹	zu ⁵⁵ ?	
want	NEG-not	want	
Do you want to take it or not?			
zu ⁵⁵	ən ³¹ .		
want	DET		
Yes, I do.			
mə ³¹	zu ⁵⁵ .		
NEG-not	want		
No, I don't.			

va ³¹	po ³¹	mə ³¹	po ³¹ ?
SUJ.TOP-pig	fat	NEG-not	fat
Is the pig fat or not fat?			
po ³¹	ən ³¹ .		
TOP-pig	PRT		
Yes, it is fat.			

4.5 SOV Sentences

a ³³ tshai ³³	i ⁵⁵ təhə ⁵³	pa ⁵³	zi ⁵⁵	lə ³¹ .
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elder-sister	water	carry	go	PRT					
The elder sister went to carry water.									
ŋə ⁵⁵ yu ³³	a ³¹ kja ³¹	zu ⁵⁵	ky ³¹	lə ³³ ,	tso ⁵⁵	a ³¹	ko ³¹	li ³³	ə ³³ .
1PL-we	stuff	collect	PRT	PRT	home	LOC	back	go	PRT
We collected the stuff and went back home.									
ti ³³ kə ⁵³	a ³³		ŋə ³¹ tə ⁵⁵		tɕu ⁵⁵		ə ³³ .		
field	LOC		fish		exist		DU.PRT		
In the fields, there are fish.									
ŋə ⁵⁵ yu ³³	tsho ⁵⁵ sə ⁵⁵ ma ⁵³		mə ³¹		ŋu ⁵⁵ .				
1PL-we	Cosao-ethnic		NEG-not		be				
We are not Cosao ethnic people.									

4.6 SOOV Sentences

ə ³¹ mə ³³	i ³³	za ³¹ ku ³¹	a ³¹			
SUBJ.AG-mom	AGT	OBJ.NOM-baby	PTPT			
nəm ³³	pi ³¹	nəm ³³	ə ³³ .			
OBJ-milk	ACC.AUX-giving	V-milk	DU.PRT			
Mom milks baby milk.						
a ³³ pa ⁵³	i ³³	su ³¹ la ³¹				
SUBJ.AG-brother	AGT	tree-branch	ACC.AUX-making			
əŋ ⁵⁵	khy ³³	zi ⁵⁵	lo ³¹ .			
break	go-down	PRT	PRT			
It is my brother who made the tree-branch break.						
pu ³¹ na ³³	e ³³	lə ³¹	a ³³	thu ³³	ɕi ⁵³	lə ³³ .
SUBJ.AG-buffalo	AGT	OBJ-tiger	PRT	butt	die	PRF
It is buffalo who butted the tiger to death.						

V. Tentative Conclusion

In conclusion, the Cosao language is previously not well described. The above reported phonology, lexicon and syntax characteristics of Cosao demonstrates that it shares many common aspects with related languages such as Hani, Akha, Jinou, Yi, Lisu, Lahu, Naxi, Nu and Sadu of the Yi branch languages. But it has more features, such as more diphthongs, nasal final endings, and palatalized features which are far different from Yi branch languages. In addition it has also taken in more morphology constituents from Dai language therefore it might be considered as a language of the

Yi-Burmese branch languages, but not any lect of these mentioned languages even though they are affiliated with the Hani minority nationality identity.

An interesting linguistic phenomenon is found in Cosao where voiced consonant clusters bl-, pl-, phl-, ml- in the elders' speech developed into pj-, pj-, phj-, mj-. We wonder if it is a coincidence or due to similar processes that in the peripheral languages, like Hani, Yani, Jinuo and Sadu, there might have taken place such an evolution of their palatalized consonants. It surprises us that a phonological shift occurred so fast, in a few decades, if it is a definite rule. It remains to be verified.

It is of note that the Cosao language is facing serious endangerment for a couple of salient causes: very small population mixed with dominant language speaking people in the village and surrounded by dominant languages such as Chinese, Dai, and Hani. There is need of various efforts to help protect this venerable, but vulnerable language.

Appendixes

1. Abbreviation

Abbreviation	English	LNK	clause linker
1sg	1st person singular	LOC	location particle
2sg	2nd person singular	NMLZ	nominalizer
3sg	3rd person singular	OBJ	object
1dl	1st person dual	PRED	predicative
2dl	2nd person dual	PREF	prefix
3dl	3rd person dual	PRT	clause/sentence final particle
1pl	1st person plural	PTPT	patient Particle
2pl	2nd person plural	PRT	particle
3pl	3rd person plural	PT	Patient
ACCPT	accusative Particle	QUES	question marker
AG	agent	STPT	Structural Particle
AGT	agentive marker	SUF	suffix
ASP	aspect marker	SUJ	subject
BEN	benefactive marker	TEPT	Temporal Particle
CAUS	causative marker	TOP	topic marker
DEM	demonstrative	TTA	tentative Aspect
DET	determiner	TTV	tentative Verb
GEN	genitive	VEPT	verb Ending Particle
IMP	imperative marker	VPT	verb Particle
INST	instrumental marker		

2. References:

- 1 . Tibeto-Burman Language Phonology and Word List Compiling Team:1991. Tibeto-Burman Language Phonology and Word List. Beijing. China Social Sciences Press.
- 2 . Xueliang, MA: 1991. Sino-Tibetan Language Researches. Beijing. Beijing University Press.
- 3 . Qingxa, DAI:2009. Studies on Akha Language. Beijing. China Social Sciences Press.
- 4 . Guangyou, JIANG: 2010. Studies on the Jinuo Languages. Beijing. China Social Sciences Press.
- 5 . BAI & XU: 2015. Studies on the Cosao Language. Beijing. Nationalities Press.