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**Introduction to Qiang Phonology and Lexicon:
Synchrony and Diachrony**

by

Jonathan Paul Evans

**B.S. (Duke University) 1989
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Committee in charge:

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Professor Gary B. Holland
Professor Yoko Hasegawa**

Fall 1999

Introduction to Qiang Phonology and Lexicon: Synchrony and Diachrony

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by

Jonathan Paul Evans

This dissertation is dedicated to the greater glory of God

A.M.D.G.

and is offered here with deepest gratitude to

My dear wife Wendy:

I cannot imagine writing this without your patient endurance and gentle encouragement.

and to

My wonderful parents, Hilary and Eunice Evans, who have waited a long time:

May you continue to bless others as you have blessed me.

and to

The Qiang people,

who have lavished on me their hospitality, patience, and friendship.

"May God cause His face to shine upon you, and be gracious to you, and give you peace."

**In Memory of
Elizabeth Evans
1965 - 1975
"...of such is the Kingdom of Heaven"**

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List Of Abbreviations

(P)LB	(Proto-) Lolo-Burmese
(P)ST	(Proto-) Sino-Tibetan
(P)TB	(Proto-) Tibeto-Burman
AGT	agent
CAUS	causative
CL	classifier
DEM	demonstrative
DIM	diminutive
DIR	verbal directional prefix
DO	direct object
JZY	Jiuziying
KMR	(Proto-)Kamarupan
LBZ	Lobuzhai
<i>LTBA</i>	<i>Linguistics of the Tibeto-Burman Area</i>
LX	Longxi
m1, m2	first/second morpheme
MC	Mianchi
MW	Mawo
MWQ	H. Sun n.d. (Mawo Questionnaire)
<i>MZYW</i>	<i>Minzu Yuwen</i>
NQ	Northern Qiang
PNQ	Proto-Northern Qiang
PNQP	J. Sun 1988
PQ	Proto-Qiang
PQic	Proto-Qiangic
PSQ	Proto-Southern Qiang
Q	Qiang language
Q'ic	Qiangic branch of TB
RDZ	Ruodazhai dialect of SQ
rGy	rGyalrong language (also 'rGyarong', 'Jiarong', etc.)
RH	Ronghong (Yadu)
s1, s2	first/second syllable
SQ	Southern Qiang
SS	<i>Studia Serica</i>
STC	Benedict, 1972.
STEDT	Sino-Tibetan Etymological Dictionary and Thesaurus
TP	Taoping dialect of SQ
TSR	Matisoff 1972a
VH	vowel harmony
WB	Written Burmese
WS	Wasi dialect of SQ
WT	Written Tibetan
X	Xixia (=Tangut), an extinct Qiangic language
YD	Yadu dialect of NQ
<i>ZGYW</i>	<i>Zhongguo Yuwen</i>
<i>ZMYC</i>	Sun Hongkai, et al., 1991
ZT	Zengtou dialect of SQ

Language names or abbreviations followed by initials represent data from STEDT questionnaires, e.g., rGyNW (SHK) refers to the Northwest rGyalrong questionnaire by Sun Hongkai, rGyalrong (DQ) represents the rGyalrong questionnaire provided by Dai Qingxia.

Acknowledgments

It is with great relief and satisfaction that I write these last few paragraphs of my dissertation. For many months I have been looking forward to this moment; anticipation of it has kept me pressing on, and has also kept me from causing physical harm to my occasionally fractious computer.

I would like to thank Professor James Matisoff for being my dissertation chairman; he has patiently and thoroughly read and commented on the various incarnations of these chapters. His love of languages and of *real data* are infectious; I will never tire of hearing him say, "That form has these cognates in Lahu and Jingpho..." Some of these delightful conversations are reflected in these pages by the reference "Matisoff, p.c." Working at STEDT has given me a much greater understanding of and appreciation for comparative Tibeto-Burman linguistics; I cannot imagine a better learning environment. Jim, you are a joy to work with. I thank God for the privilege of having been your student.

I would also like to thank Professor Gary Holland for the time and insights that he has shared with me. His knowledge of and facility in Indo-European languages is inspiring; taking his classes is a privilege. I deeply appreciate his careful reading of my papers, and his knowledge of literature relevant to my research.

A few years ago, on a sunny afternoon in the STEDT office, Dr. Jackson Sun suggested that I consider studying Qiang. I have never regretted following this advice. Jackson and Dr. Randy LaPolla have been very helpful *shixiong* since my earliest days in the department.

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Above all, I wish to thank my God and Savior, Jesus Christ, who has given me an everlasting relationship with him. He has blessed me with these friends, and with life itself.

Chapter I. Introduction

1.1 Objectives

This purpose of this dissertation is to discuss the phonological and lexical relationships among the dialects and sub-dialects of the Qiang (Chiang, Ch'iang) language, an important language of the Qiangic branch of Tibeto-Burman. Qiang is spoken by about 150,000 people in Northwest Sichuan Province, China, by members of the officially recognized Qiang nationality, as well as by those who are considered to be Tibetan (within Heishui county). Most Qiang people live within Aba Tibetan and Qiang Autonomous Prefecture (*Aba Zangzu Qiangzu Zizhizhou*), and most speakers of Qiang live within Mao, Li, Heishui, and Wenchuan counties. Northern Qiang speakers (including "Tibetans") use the autonym /rma/, /z.ma/, while Southerners call themselves /ma/.

In these pages I will focus on the more diverse and innovative Southern dialects rather than on the more homogeneous Northern varieties. However, phonological and lexical ties between the two groups will be drawn; in some cases, cognates in other Qiangic languages will also be identified.

In this dissertation I have chosen to highlight five key dialects, two Northern (Mawo, Yadu) and three Southern (Longxi, Mianchi, Taoping). These are the varieties about which the most information has been published, and which are most reliably described. Because these are the dialects that may be examined in the most depth, taken together they shed the most light on earlier stages of the language. There are a few other dialects that were reliably transcribed in the 1940's; of these, Jiuziying has the largest published lexicon. Data from these dialects have been used for auxiliary support in Chapters III and IV.

1.2 Significance of Proto-Southern Qiang reconstruction

Among the key dialects I have selected the three Southern varieties for in-depth comparison, because to compare the five dialects directly would conceal developments in the history of Southern Qiang (e.g., borrowing from Chinese, tonogenesis, lexical divergence from Northern Qiang, etc.), and would obscure the nature of the relationship between Northern and Southern Qiang. It is hoped that this dissertation, coupled with well-transcribed data from more Northern and Southern varieties will be a stepping stone toward the important work of reconstructing Proto-Qiang. A solid reconstruction of Proto-Qiang lexicon and sound laws is a necessary step to determining which Qiangic languages Qiang is most closely related to.

1.3 Brief overview of Qiang geography and history.

The Qiang people, numbering 243,500 in 1990, inhabit the mountains and river valleys of Northwestern Sichuan (103 to 104 degrees East, 31 to 32 degrees North). Although their culture shows influence from neighboring groups such as the Tibetans, in many ways their religion, architecture, etc. have a uniquely Qiang or Qiangic flavor (H. Sun 1989).

In Chinese written history, there are references to a people called "Qiang" as early as 1,000 BC; e.g., a reference to "Black Qiang," "White Qiang," and "*Gaoliang* West Qiang" on the stele *Xiu Deng Tai Wei Zi Bei*, 367 AD (Wen 1950a). The earliest references to this tribe place them in the middle reaches of the Yellow River. It is my impression that the denotation of the term "Qiang" has not been consistent throughout Chinese history, and so historical records must be used cautiously in trying to determine migration patterns. The great scholar of Qiang and historical Chinese, Wen Yu, concurred, saying "...we can imagine that the extent of the Ch'iang appellation of Ming [dynasty] time was much wider than it is today." (Wen 1950:67) If the term "Qiang" did not mean the same thing in 1570 (the date of the atlas that Wen cites) that it does today, it is unreasonable

to assume that older uses of "Qiang" have the modern sense. According to Shafer (1974), Wen was the first researcher to apply the term "Qiang" to the Dzorgaish tribe.

According to H. Sun, the Qiangs "migrated south during the Qin and Han dynasties [221 BC - 220 AD] and settled in the western and northern parts of Sichuan [and] were frequently written about because wars often broke out in those areas." (H. Sun 1989:106) Wars between the Qiang and the Han can be traced back to at least the Shu-Han period (221-263 A.D.), during which there was a Han Chinese garrison led by General Jiang Wei in Weizhou (modern Wenchuan), remnants of which are still visible. Qiang oral tradition states that their ancestors migrated to the current Qiang area about 2,000 years ago (Deng 1996). Both traditions indicate that there has been contact between these two groups in Sichuan for at least 1700 to 2000 years. The Qiang, especially the Northern settlements, have been in contact with Tibetans since at least the Tang dynasty (618-907 AD).

Since the founding of the People's Republic of China, the peace and prosperity of the Qiang area have increased. Near the NQ village of Yadu, I saw abandoned houses high on the hillside. I was informed that now that the land had become safe, the people had abandoned these homes to build ones more conveniently located near the river and the road. This is a drastic difference from the conditions encountered by Wen Yu and other scholars of the 1930's and 40's, a time when Wen wrote that dangerous conditions prevented his revisiting certain villages.

In the 1980's a Qiang script, based on the NQ dialect of Qugu was introduced. Today, it is used in the education of beginning primary school students. It is a systematic romanized script, but not helpful for doing the kinds of comparisons that are set forth in this dissertation.

1.4 Qiang dialects and the relationship between Qiang and Qiangic

Three systems of dividing up Qiang dialects have been presented. Wen 1941

divided the Qiang dialects of Wenchuan and Li counties into eight dialects, based on the degrees to which they exhibited morphological case. His eight dialects, and their locations are as follows:

1. Wa Si	S. Wenchuan, W bank of the Minjiang river. ¹
2. Yan Men	N. Wenchuan, S. Mao counties
3. Zhong San Ku	NE Li county
4. Hou Er Gu	Li county, west of 3
5. Jiu Zi Tun	NW Li county.
6. Pu Xi	SW Li county
7. Heishui	SE Heishui county
8. Lu Hua	NW Heishui county

Dialects 7 and 8 are in what is now considered Northern Qiang territory, all of the rest would be considered Southern. In Wen's day, the area of dialect 8 was so remote as to lack Chinese names for its villages.

Sun Hongkai (1962, 1981, henceforth *QYJZ*) was the first to divide Qiang into Northern and Southern dialects, based on the presence (Southern) or absence (Northern) of tones. There is also a lexicostatistic basis for this division: between NQ and SQ dialects there is generally a cognacy rate of 50 to 60%, while among NQ dialects the rate is mostly around 84% (although Mawo-Yadu is 68%) and among SQ dialects there is a rate of 64 - 67.5% cognacy (*QYJZ*:182, ff). Based on these figures, J. Sun has said that Northern and Southern Qiang would more accurately be considered to be two separate languages (PNQP). In *QYJZ* it is not clear what criteria were used to further subdivide Qiang dialects. H. Sun's division of dialects and population figures are given below. The figures for individual sub-dialects are rounded, so that the total numbers of speakers for Northern and Southern Qiang differ from the sums of the approximate subdialect figures. In the section on dialects (pp177, ff), no census year is given for these dates; however, in the introduction to *QYJZ* H. Sun cites a 1978 census figure of 80,000 Qiang people, of which Qiang

¹ The Minjiang, a tributary of the Yangtze, is the largest river in the Qiang area.

speakers should be a proper subset.. However, adding his figures for speakers of NQ and SQ dialects (pp177-8) yields a total of 130,000 speakers, a discrepancy of 50,000. Apparently, the figure of 80,000 does not include the Qiang-speaking "Tibetans" of Heishui.

Table 1.1 1978 Population figures of Qiang speakers²

Northern Qiang		
<u>Sub-dialect</u>	<u>Location</u>	<u>Population (1978?)</u>
1. Luhua	Heishui county	12,000 speakers
2. Mawo	Heishui county	15,000
3. Cimulin	small part of Heishui	9,000
4. Weigu	Heishui	15,000
5. Yadu	S. Heishui to N. Mao	10,000
Total		70,000
Southern Qiang		
<u>Sub-dialect</u>	<u>Location</u>	<u>Population (1978?)</u>
1. Dajishan	Li county	8,000 speakers
2. Taoping	Li county	4,000
3. Longxi	Northern Wenchuan	3,000
4. Mianchi	Central Wenchuan ³	14,000
5. Heihu	Central and S Mao	30,000 (QYJZ:177,ff)
Total		60,000

The third dialect breakdown of Qiang was presented by Liu Guangkun (Liu 1998b:16, ff). According to the 1990 census, the number of Qiang people (including Heishui "Tibetans") and speakers is as follows:

² For the Chinese characters for the place names given in this chapter, cf. Appendix C.

³ In the 1950's, this variety was spoken in the vicinity of present-day Wenchuan city, including the village of Buwa, where Qiang is no longer spoken

Table 1.2 1990 Census figures

County	Qiang population	Qiang Speakers	Percent speakers
Mao	89,000	72,000	80.9%
Li	16,000	9,700	60.6%
Wenchuan	29,000	18,000	62.1%
Songpan	2,300	1,700	73.9%
Beichuan	48,000	100	0.02%
Danba	1,200	0	0.0%
Heishui	58,000	49,600	85.5%
(totals)	243,500	151,100	62.1%

The distribution of Qiang speakers was as follows:

Table 1.3 Northern Qiang speakers (1990)

Sub-dialect	Locations (by county)	Number of Speakers
1. Luhua	Heishui: Luhua, Shashiduo, Yangrong, Zegai, Ergulu, Zhuogedu	14,000
2. Mawo	Heishui: Mawo, Zhawo, Shuangliusuo, Xi'er, Hongyan, E'en	12,000
3. Cimulin	Heishui: Cimulin, Gewo, Wumushu, Rewo, Qinglanggou	9,800
4. Weigu	Heishui: Weigu, Musu, Longba, Luoduo, Shidiaolou	11,000
5. Yadu	Maoxian: Chibusu, Yadu, Qugu, Weicheng; Heishui: Waboliangzi, Se'ergu	23,000
Total		69,800

Liu divides Southern Qiang into seven subdialects, but does not explain what this division is based on:

Table 1.4 Southern Qiang speakers (1990)

Sub-dialect	Locations (by county)	Number of Speakers
1. Dajishan	Lixian: Xuecheng, Shangmeng, Xiameng, Xinglong, Ganbao, LieLie, Jiuzi, Muka, Piaotou (Putou?), Puxi	7,400
2. Taoping	Lixian: Taoping, Jiashan, Ganxi, Sancha, Zengtou, Niushan, Xishang, Tonghua, Gucheng	4,900
3. Longxi	Wenchuan: Longxi, Bulan, Baduo, Xiazhuang, Mushang	3,300
4. Mianchi	Wenchuan (entire county, except for Longxi area)	15,700
5. Heihu	Maoxian: Heihu, Sujiaping, Feihong, Goukou, Weimen, Jiaoyuanping	16,000
6. Sanlong	Maoxian: Fengyi, Sanlong, Shaba, Huilong, Baixi, Wadi, Yazhuzhai	15,000
7. Jiaochang	Maoxian: Jiaochang, Shidaguan, Taiping, Songpinggou; Songpan: the Xice area of Zhenjiangguan; Beichuan: certain areas	19,000
(totals)		81,300

These population figures, coupled with the 1957 census figures (H. Sun 1962) give the following population trends:

<u>Year</u>	<u>NQ population</u>	<u>SQ population</u>	<u>Total</u>
1957	34,000	43,000	77,000
1978	70,000	60,000	130,000 (80,000)
1990	69,800	81,300	151,100

According to these figures, the NQ population more than doubled in the 21 years between 1957 and 1978. The great discrepancy between these two years (and between the two total population figures given in 1978) is no doubt due at least in part to the various ways that Heishui speakers of Qiang have been counted. It is not clear to me why the SQ population increased 35.5% from 1978 to 1990 while the NQ population held steady. Qiang has the interesting distinction of being a language in which the number of speakers is increasing at the same time that the language is dying. As mentioned in a note above, villages like

Buwa, which are near urban centers, no longer have Qiang speakers. In the speech of the younger generation of Qiang speakers, whole semantic fields are being replaced by Mandarin; during my time in the village of Mianchi, I noticed that when my consultant's children were speaking to each other in Qiang, they used Mandarin numerals. Yu Xiaoping, a college-educated Qiang who works for the Mao county government, has estimated that in fifty years, no one will speak Qiang, due to the great linguistic pressure of Mandarin (p.c.).

H. Sun (1983b) was the first in recent times to propose a separate Qiangic branch of TB; a grouping which corresponds rather closely to those that in the last century were termed "Hsi-fan" or "Sifan" (*pinyin* = Xi Fan) languages (Hodgson 1853, Lacouperie 1887:135), or, more recently, "Dzorgaish" (Benedict 1941⁴). H. Sun dates the breakup of the Qiangic languages to the end of the Han dynasty (221 AD). Until H. Sun's 1983/1990 paper, Qiang (and Qiangic languages generally) were variously considered Loloish or Bodish, based on some surface similarities. Using shared features within phonology, morphology, and syntax, Sun shows that the ten languages Qiang, rGyalrong, Primi (Pumi), Ersu, Namuyi, Shixing, Minyak (Miyao, Muya), Guiqiong, Ergong, and Zhábā⁵

⁴ Benedict's "Dzorgaish" seems to include Qiangic, sans rGyalrong(ic). Shafer (1955) uses "Dzorgaish" to refer to the Qiang language, and classifies it under Bodish. The other Qiangic languages are categorized as Loloish, with the exception of rGyalrong, which is accorded its own branch.

⁵ J. Sun, the translator of this article has added the following footnote to H. Sun's description of this language:

According to Huang 1987:19, Zhábā (a language recorded by Lu [Shaozun]) is mutually intelligible with Quèyū, another Qiangic corridor language not mentioned in this article, which is spoken in Xinlong, Yajiang, Litang Counties of the Ganzi Autonomous Prefecture. Huang, on the other hand, mentions another distinct corridor language: Zhábā, spoken in the Zhábā District of Daofu and Zhamai district of Yajiang, which is different from both Queyu and Liu's Zhábā.

Data from all of these languages are to be found in ZYC.

are more closely related to each other than any of them are to either Tibetan or Yi. From my own research, the most convincing evidence for "Qiangic" comes from the cognate orientation prefixes attached to verbs, and from the similar grammatical and semantic properties of these prefixes (Evans 1998b). Qiang has also been classified as "Rung" (Thurgood 1984), and as a member of "Qiang-Burmese" (Li 1988⁶). However, the arguments for these alternative TB branches do not present as convincing an argument for shared morphological innovations, unlike the data presented in Sun 1983b.

1.5 Previous research on Qiang

1.5.1 Descriptive works

B. H. Hodgson

Hodgson (1853) contains, to my knowledge, the first Qiang linguistic data in print. It presents anthropometric data along with parallel vocabularies of Thóchú/Thochu/Tho-chu (all three spellings are used), Sókpa, Gyámi, Gyarúng (rGyalrong), Hórpa (which J. Sun (1998) identifies as rGyalrongic), Tákpa, and Manyak (Muya, Minyak, etc.) Although there are only about 200 lexical items in his list, it is enough to show that Thochu is some variety of Northern Qiang. Hodgson does not state what village or county his Thochu speaker came from, so the exact location of this speech remains a mystery. Comparison of Hodgson's data with other NQ data shows that he did not accurately record certain initial clusters and exotic consonants like /ɣ/:

⁶ Benedict (1941) noted that Qiang and Burmish share some superficial phonetic similarities, such as the loss of final consonants and the retention of medial *-w- (e.g., Mianchi khuè 'dog', PTB *kwiy (STC 159). Nevertheless, Benedict felt that Qiang was closer to Tibetic than to Lolo-Burmese.

<u>Gloss</u>	<u>Thochu</u>	<u>Mawo</u>	<u>Ougu</u>	<u>Longhua</u>
star	ghada ⁷	ɛdzə	ɣdzə	zdzə
fish	izhá? ⁸	ɛdzə	ɛzə	ɛzə
five	wáré	ɛuɑ	ɛuɑw'u	ɛuɑj

Nevertheless, his work is precise enough to show that some palatalization of velars has occurred in NQ in the last century and a half.⁹

b.	<u>Gloss</u>	<u>Thochu</u>	<u>Mawo</u>	<u>Ougu</u>	<u>Longhua</u>	<u>Yadu</u>
	house	ki?	tci	tci	ki	tci
	egg	ki-wóst	tci wəst	jyst	jyst	wəs

Hodgson was impressed by the complex system of verb affixes found in rGyalrong, misidentified them as infixes, and on those grounds related rGyalrong to Tagalog.

Captain William Gill

Gill's notes on the *Song Pan Si Fan* or 'Western aliens of Song-pan ting' (translation by Lacouperie, Ollone more accurately translates *Si Fan* as *Barbares de l'Ouest*) were published posthumously in Lacouperie 1887. This language appears to be rGyalrongic, based on the final stop of 'seven': *tenit* (rGyalrong *teʃnit* (STC)). However, there are two few words (thirty-five), all of them impressionistically recorded, to identify this language with certainty. Gill himself made a transcriptional disclaimer, saying, "This orthography can convey but a feeble idea of the astounding noises the people make in their throats to produce these words." (Gill 1880, vol. i:378) It is not clear whether the Songpan alluded to here is the same as the present-day county located in Aba Prefecture.

⁷ All of Hodgson's data are given with the first letter capitalized, a convention I have not retained.

⁸ Hodgson signified final -? with italic *h*..

⁹ Or enough to show that Thochu is/was a variety that has not palatalized as much as other NQ dialects.

He also recorded about thirty words of 'Outside Man-tze', meaning the Man-tze in the western part or to the west of *Lifan fu* (present-day Li county). This would appear to be a reference to southern Heishui county, where Northern Qiang is spoken. Some of these forms were unpublished in his day, all are recorded in Lacouperie 1887. Col. H. Yule, in his introductory essay to Gill 1880, identified this language as close to Thochu (Hodgson 1853). I have not been able to relate it exactly to any published Qiang data. In Wen's map of that area, he has "Jyarung" written in the areas to the west of the Qiang dialects (Wen 1941).

In addition to Gill's Li county data, Hodgson (1853) also transcribed about thirty items in Li-fan Man-tze, which were posthumously published (Lacouperie 1887:101-2). The town of Li-fan is the present day county seat of Li county (*Lixian*). Making allowances for transcription, the data are almost identical to Taoping, as shown below:

<u>Gloss</u>	<u>Li-Fan</u>	<u>Taoping</u>
man/person	me ¹⁰	mə ³³
woman	chīme ¹¹	tci ³³
boy/son	chibye	tʃɿ ³³
water	tse	tsuə ³³
cold	pa [probably pæ]	mən ³¹ pe ⁵⁵
eat	gnädze	dzə
one	chek ¹²	tʃɿ ³³
two	nyě ¹³	ŋi ⁵⁵
four	zshe ¹⁴	dʒɿ ³³
six	true ¹⁵	xtsu ³³

Henri Marie Gustave, vicomte Ollone

Ollone (1912) impressionistically recorded over three hundred words in a number of Si-fan languages, among which Dzorgai, Kortsè (also spelled Kortsé), and Pinfang appear to be varieties of Northern Qiang, as the following examples show:

<u>Gloss</u>	<u>Pinfang</u>	<u>Dzorgai</u>	<u>Kortsè</u>	<u>NO (Mawo)</u>
sky	mota	mo	mo	mu tup
sun	mechi, mocha	mönn	mönn	mun
moon	chicha	suche	souchia	tʃhə ʒa
star	--	dje	dje	ɛdzə
wind	moo	mou houso	mou ho dze	mu ku
earth	ze	dje pou	dje pou	zəp
mountain	opo	ouopo	kseuk	qhsəp
smoke	mou	mouch	mou	mu xu
rain	mé	mich	mouje	mə ɛ'

¹⁰ "[T]he vowel short."

¹¹ 'woman' + 'person'.

¹² Hodgson says that the rhyme is "like *shirt* without *-rt*, but *ch* not *sh*; *-k* scarcely perceptible." This is probably very close to the Taoping pronunciation.

¹³ The vowel is "like English *ye*." Given the breve mark, he may mean /jə/, as in the expression "y'know."

¹⁴ The vowel is compared to that of "English *sir*, cut short." This is probably similar to the Taoping vowel.

¹⁵ "Like English *true*, cut very short."

Because there are so few lexical items and because the data do not appear to be systematically transcribed, this source is only used as a reference, and is not included in the lexical database.

Ollone also recorded words from Nameji (Namuyi, another Qiangic language). That his Nameji data may be identified as the same language that today is called Namuyi/Namuzi may be demonstrated by just a few words from his list:

<u>Gloss</u>	<u>Nameji (Ollone)</u>	<u>Namuyi (ZYC)</u>
sky	nakamou	nɛ ⁵⁵ ŋkɛ ³³ mu ³³
sun	himi	ɲi ⁵⁵ mi ⁵⁵
moon	hümi	ʈi ⁵⁵ mi ⁵⁵
star	trè	tɕɿ ³⁵
wind	mossè	mu ⁵⁵ ɕɿ ³³
water	ndza	ndzɿ ⁵⁵

Wen Yu

Wen Yu may rightly be considered the father of Qiang linguistics. While certainly not the first to publish lexical data, Wen was the first to write in-depth linguistic articles about the Qiang language, ranging from phonetics and phonology (1940a, 1943a, 1945, 1947. Wen and Fu 1943) to nominal and verbal morphology, (1940b, 1943b). He also recorded enough lexical data (e.g., 1950b) to fuel the first comparative/historical Qiang paper (Chang 1967), and he presented the first sub-classification of Qiang dialects (1941). He was the first to present Qiang linguistic data in standard phonetic transcription (his transcription was further regularized by Chang (1967), although this was a questionable improvement). He was also the first to present wordlists of more than three dozen forms (e.g., about 600 lexical items in Wen 1950b). Unlike later ethnologists, Wen recognized the Qiang speakers of Heishui as Qiangs, rather than as Tibetans.

Wen's transcriptions were very careful and systematic, and he is the first researcher

to analyze Qiang suprasegmentals. Wen did not generally use tones in his transcriptions; nevertheless, four tones are presented in Wen 1945 (pp133, ff.), and the Jiuziying (Chiu Tzu Ying) dialect is analyzed as having pitch accent in Wen 1950b.

Wen's fieldwork is all the more admirable for having been done at a time when no Qiang villages were accessible by wheeled vehicle (Graham 1958). Jiuziying, the most westerly (and perhaps remote) of the SQ dialects for which data have been published (cf. maps), is the best-described auxiliary SQ dialects this study.

Sun Hongkai and Liu Guangkun

This husband-and-wife team has produced works on Qiang (and other Qiangic languages) from the 1950's to the present, making them the most prolific Qiangic linguistics research team. In 1957 Sun trained researchers from the Southwest Institute of Nationalities (Chengdu) to carry out Qiang dialectal research. Sun and his team surveyed more than 30 data points (villages), in each one gathering over 3000 lexical items, about 500 example sentences, and some stories. Unfortunately, the vast majority of this data has languished unpublished for the last forty years. A fair amount of data from Mawo (Northern) and Taoping (Southern) Qiang have been published (e.g., *QYJZ*, *ZYC*), but only scattered lexical items from the other locations have appeared in print (e.g., Liu 1998a). Among his other accomplishments, Sun was the first to propose the two-dialect division of Qiang (cf. H. Sun 1987), which has remained undisputed, and the first in this century to propose an independent "Qiangic" branch of Tibeto-Burman consisting of Qiang, rGyalrong, Ersu, Pumi, et al (H. Sun 1988). The exact list of Qiangic languages, and the tests for membership remain to be worked out.

Although the phonetic accuracy and lack of phonemicization of their Qiang data have been criticized (J. Sun 1988), Sun and Liu's collective works form the greatest part of the available corpus of data on this language, and their works are far too important to

ignore. Part of the value of these works lies in their age: even in the 1950's, the younger generation of Taoping speakers was losing initial consonant clusters, evidence of which may be completely lost now. Liu has recently finished a book-length treatment of Mawo Qiang (Liu 1998b), which includes a lexicon of over three thousand words, the most in-depth Qiang lexicon that has been published heretofore. Sun and Liu are also the first Qiang researchers to systematically indicate tones throughout their data.

Huang Bufan

Huang Bufan, another researcher from China's Language Research Teams in the 1950's, has contributed more to studies of languages of the Qiangic branch than to the Qiang language *per se* (e.g., Huang 1988, 1991a, 1991b), although she contributed the Yadu Qiang data in *TBL* (as well as the Daofu, Zhaba, and Muya data), and was the primary linguist behind the development of the Qiang orthography. *Qiangwen* is used in primary school bilingual education in the Northern Qiang areas; because of the great differences between Northern and Southern Qiang, it is not helpful for students in the Southern areas.¹⁶ The writing system uses the unadorned Roman alphabet to convey about fifty different plain initial consonants (e.g., [ph] = *p*, [p] = *b*, [b] = *bb*, etc.). Because the orthography is not in general use, applies only to standard (Northern) Qiang, and differs greatly from the IPA, it is not used for data transcription in this paper.

Jackson T.-S. Sun

J. Sun 1988 "Problems in Northern Qiang phonology: Mawo dialect" contains the first modern published fieldwork by a scholar from outside the mainland of China. A significant impact of this work was to show that data from inside China had a tendency to

¹⁶ According to comments made to me by a primary school principal in the Southern Qiang area.

be over-transcribed and under-phonemicized. J. Sun showed that a simpler phonological inventory can account for the phones observed in *QYJZ*, and that certain sounds (e.g., /e/) are phonemic in borrowings, but not in native vocabulary.

Randy LaPolla and Huang Chenglong

LaPolla 1996 (written with the assistance of Huang Chenglong) is the second book-length treatment of Qiang, following *QYJZ*. They present an in-depth analysis of the phonology, morphology, and syntax of the Yadu dialect of Northern Qiang, followed by the first published Qiang texts with morpheme-by-morpheme translation (six stories). The book has an extensive glossary with phonemicized data from Ronghong Yadu (C. Huang's native dialect), and supplementary phonetic data from Qugu Yadu.

Jonathan Evans

The present author conducted fieldwork in Wenchuan Sichuan in 1997 on two varieties of Southern Qiang, Mianchi and Longxi. The data collected form the basis for Evans 1998a-c, and consist of phonological, morphological, and lexical information on dialects which were previously unpublished, with the exception of scattered forms in Wen's, H. Sun, and Liu's works.

1.5.2 Diachronic and comparative works

Historical and comparative works on Qiang begin, of course, at a more recent time than the earliest descriptive works. Lacouperie (1887, p134-5) appears to be the first to categorize Qiang into a larger family. He called this language family "Sifan," from the Chinese term for "Western barbarians." He grouped Sifan (pinyin: *xi fan*) within the "Tibeto-Burmese family" under Kuenlunic (Sino-Tibetan). Within this group he included the following languages (I have entered in the right column the currently accepted names or

subgroups of these languages, when decipherable):

<u>Sifan group</u>	Pre-Chinese Kiang	Qiang
	Meniak	Muya (Minyak)
	Sung-pan Sifan	Northern Qiang (?)
	Outside Mantze	Northern Qiang (?)
	Lifan Mantze	Southern Qiang
	Thotchu	Northern Qiang
	Horpa	rGyalrongic
	Takpa	(may be Monpa)

Lacouperie's grouping displays two insights that were quite forward-thinking. First, he grouped rGyalongic languages with Qiang, an analysis shared by Shafer (1974) and H. Sun, but not Benedict (1941). Second, he separated the Qiangic ("Sifan(ic)") languages into a distinct subgroup, independent from other TB groups. In this way he prefigured Benedict and Sun, although Shafer considered Qiang and rGyalrong to be Bodish ("Bhotish"), within the same subfamily as Tibetan. The differences are summarized in the following chart, which shows how each linguist categorized the languages now known as Qiang and rGyalrong:

	<u>Qiang</u>	<u>rGyalrong</u>
Lacouperie	Sifan	Sifan
Shafer	Bodish	Bodish
Benedict	Dzorgai ¹⁷	Bodish or separate branch ¹⁸
Sun	Qiangic	Qiangic

Sun and Lacouperie's hypothesis of a separate Qiangic/Hsi-Fan branch is the one followed in this dissertation.

Wen (1941) was the first to subcategorize Qiang into dialects, as mentioned in 1.4. Unfortunately, he did not use any data from Mao county, the area with the largest Qiang-

¹⁷ Perhaps within Bodish-Himalayish (STC:5).

¹⁸ rGyalrong ("Gyarung") is mentioned in the text (STC:7) as Bodish, but appears in the chart of subgrouping (STC:6) as a hypothetical separate branch "Gyarung (?)."

speaking population, so it is not clear whether he would have grouped the Northern dialects as closely as has H. Sun. Kun Chang used Wen's data, coupled with the data in H. Sun 1962, and his own materials on Zengtou to write a comparison of six SQ dialects, and to reconstruct PSQ phonology (Chang 1967). I have some disagreements with Chang's analysis (cf. Chapter III), nevertheless, it is a groundbreaking work in historical-comparative Qiang studies.

One of Chang's contributions is to further phonemicize Wen's data, although he warns that "none of the published descriptions of the Ch'iang dialects presents sufficient data to demonstrate clearly its phonemic structure." (Chang 1967:426) For this reason, I have relied on Chang 1967 only for supplementary material in chapter III.

Nearly all of Chang 1967 is devoted to comparison of initials, which are more clear-cut than are rhymes. Nevertheless, there are only a few 'good' sets (no irregularities) among the comparisons, further demonstrating the challenge that awaits the Qiang (and Qiangic) comparatist.

Chiu-Chung Liao (1973) compares Qiang data from Wen (1950b) with PTB, PLB, Written Tibetan, and Written Burmese, and concludes that Qiang either belongs in its own branch, or is to be linked with Tibetan (Shafer's analysis). His argument is based on features that Qiang and Tibetan share (e.g., prefixes), phonetic correspondences, and glottochronology. H. Sun has pointed out that at least some of these similarities are due to areal influences (H. Sun 1983b).

Chinfa Lien (1991) presents the fates of PTB *s-, *r-, *g-, *b-, *m-, and the effects of PTB prefixes and medials on Qiangic initials. Lien correctly identifies codas as secondary developments in Qiang. Some results of his research are included in section 3.3.1.8.

LaPolla (1985) gives sound laws relating PTB to Mawo and Taoping Qiang. He showed that *prefixes and *cluster initials are distinguished in Qiang reflexes, with

prefixes disappearing; e.g., Mawo *ɲu*, Taoping *zɯ⁵⁵*, PTB **s/m-raŋ* 'horse'. However, in some cases (such as this one), the addition of more data makes the analysis of PTB **prefixes* less convincing: Longxi *ɲò*, Mianchi *zòu* 'horse' point to some type of complex initial as late as PSQ; however, the exact nature of this **initial* is not clear (cf. discussion of **r*, 3.3.1.3).

1.6 The database

Much like the database in J. Sun (19??), the database I have used in this dissertation consists of both a primary and an auxiliary set of lexical data. The primary database consists of lexical data from the key dialects, including three SQ dialects (Longxi, Mianchi, Taoping) and two NQ dialects (Mawo, Yadu). Longxi (LX) and Mianchi (MC) data come from my own fieldwork, and the principal sources for Taoping (TP) and Mawo (MW) data are *QYJZ* and *ZYC*. Yadu data come from four villages, Ekou (*TBL*), Ronghong (LaPolla 1996), Qugu (*ibid.*), and Moyu (a STEDT body-part questionnaire filled out by Huang Chenglong). These three varieties of Yadu are not identical, although the differences are slight. In general, I have consulted Ekou Yadu first, and then referred to the other (unpublished) data second.

The auxiliary database consists of two parts. The first is the SQ data from Wen and Chang. These data are used in chapters III and IV to clear up ambiguities, and also to show distinctions that may have been lost in the primary dialects. The second part of the auxiliary database consists of data from other Qiangic languages, taken mostly from *TBL* and *ZYC*. These data are used to provide a "peek" at the Proto-Qiangic level, which has at least two advantages. First, it provides additional substantiation for certain PSQ roots where there is no established PTB etymon, but there are cognates in other Qiangic languages (e.g., PQic **pram* 'white' sections 3.3.1.8.1, 3.3.2.3). Second, consulting Qiangic languages assists in

finding out the time depth of certain Qiang traits. Key Qiang dialect words for 'five', reflexes of PTB *l-ŋa (STC 78) all have uvular initials (e.g., Longxi *kuè*). However, data from other Qiangic languages suggest that the velar nasal was preserved as late as Proto-Qiang:

Ergong	wŋuɛ
Ersu	ŋua ⁷³³
Guiqiong	ŋɛ ³⁵
Muya	ŋɑ ³⁵
Namuyi	ŋa ³³
Queyu	ŋua ⁵⁵ tcã ⁵³
rGyalrong	kə mŋo

To attempt to write this dissertation without consulting auxiliary Qiang dialects or languages that are near-relatives would be an unwarranted hindrance. Nevertheless, it is necessary to be both cautious and unequivocal about the conclusions drawn from such data.

1.7 Organization of the dissertation

The remainder of the dissertation consists of four chapters and two appendices. Chapter II is an introduction to the current phonological inventories of the key dialects. Chapter III presents what may be inferred at this time regarding PSQ segmental phonology. The fourth chapter endeavors to explain the origins of tone in the Southern dialects. The fifth chapter presents remaining questions and suggested future directions for Qiang research. Appendix A is a comparative SQ lexicon, with PSQ roots, NQ cognates, and PTB etyma. Appendix B is a glossary of Mianchi and Longxi words, arranged by English Gloss.

Chapter II. Synchronic phonology of the five key dialects.

"We shall need a recording by a phonetician who is not troubled by unusual sounds."
(Shafer 1974:451)

"There can be no doubt that these features [of Jiuziyang] will throw light on the reconstruction of proto-Ch'iang in the future." (Wen 1950b:21)

In this chapter I present phonological inventories and discussion for the five key Qiang dialects in the order Northern Qiang: Yadu, Mawo; Southern Qiang: Mianchi, Longxi, Taoping. At the end of the chapter I have inserted a few comments about some features of auxiliary dialects of Southern Qiang. The Qiang phonological inventories have many parallels with those of other Qiangic languages, as Sun Hongkai has observed. In general, Qiangic languages have

a large number of simple initial consonants — generally over 40; all of the languages have initial consonant clusters; the consonant clusters of some languages still retain features of the proto-language; the vowel systems in most languages do not distinguish between tense and lax vowels, but contrast retroflex vs. non-retroflex vowels; diphthongs are mostly rising; most languages have the medials [i], [u], and [y]; final consonants have largely been lost, and only a few languages still preserve them; tone plays only a small role in the phonological system and some languages have not yet developed phonemic tones at all. (H. Sun 1989:102)

2.1 Northern Qiang

Northern Qiang dialects are marked by complex consonant clusters, distinctive vowel quantity, and word-level stress, which is unmarked in all published sources, except for a few minimal pairs in *QYJZ*, *ZYC*, LaPolla 1996, Liu 1998a, b.

2.1.1 Yadu Phonological inventory

The Yadu data in this dissertation are from Ekou village in Yadu township, Maoxian (Mao county), and are taken from *TBL*. For comparison at some points, additional data have been taken from three other villages in the Yadu dialect: Ronghong, (LaPolla 1996), Qugu (*ibid.*), and Moyu (C. Huang, n.d.). Because there is much more published data from Ekou than from the other varieties (about 1900 forms), this dialect is

the unmarked variety of Yadu in this dissertation. The Qugu data are not phonemicized, and are thus used sparingly. The Ekou and Ronghong Yadu syllable canons are as follows:

Ekou Yadu (plain vowels):	(C) (C _i) V (V) (C) (C _f)
Ekou Yadu (long vowels):	(C _i) (V) V:
Ekou Yadu (rhotacized vowels):	(C) (C _i) (V) (V) V' (C) (C _f)
Ekou Yadu (long rhotacized vowels):	(C) (C _i) (V) V:' (C _f) ¹
Ronghong Yadu:	(C) (C _i) (V) V (V) (C) (C _f) [fric] [glide] [glide][fric]

2.1.1.1 Yadu Initials:

The initial phonemes of Yadu (Ekou) are given in *TBL* as follows:

Simple Initials:

p		t				k		q
ph		th				kh		qh
b		d				g		
		ts	tʂ	tʃ	tc			
		tsh	tʂh	tʃh	tch			
		dz	dʒ	dʒ	dz			
ɸ	s		ʂ		ç	x		χ
	z		ʐ		ʒ	ʏ		ʁ
m		n			ɳ	ŋ		
		ɿ						
w		l, r	ɹ		j			h

TBL records fifty initial clusters in Ekou, some of which are rare. I have put in parentheses the number of occurrences of rare cluster initials (five or fewer occurrences). The cluster /ʂɳ/ is in parentheses to indicate that it only occurs in a borrowing from Tibetan. The three forms that are struck through appear in the inventory, but not in the data.

¹ According to Dai 1992:636 (henceforth *TBL*), Yadu has native rhotacized triphthongs with long vowels /iæ:ə', ia:ə', ya:ə', uæ:ə'/; however, these are not attested in the data.

It may be the case that they occur on words that were not selected for inclusion in *TBL*.

Cluster Initials:

sp (2)	st	sl (1)	sq (5)		
ʂp	zd	zg (1)	ʂk	ʂq	
zɿb	ʂtʂ	(ʂn) (1)	ʂɿ		
cp	zɿm	zɿg			
xts (1)	ctɿ	zdz	xtʃ (2)		
ɣz	xl	xtʂ	ɣdzɿ (4)	ɣn (1)	
χs (5)	ɣr	ɣl	χtʂ	χʂ	χtʃ
ɸz	χt	χl	ɸl	ɸdzɿ (1)	ɸn (1)
khs	ɸd (1)	ɸɿ			
gz	khʂ	khl (1)			
qhʂ	gzɿ				
phɿ	qhs				
	bɿ	ɸɿ	wɿ		

Comments:

1) The Yadu data presented here differ from the key Southern dialects in having a phonemic alveolar series of affricates in addition to dental, palatal, and retroflex series. Comparison with Mawo (below) shows a correspondence with its alveolars, so this series will be reconstructed for proto-Northern Qiang. In both dialects, alveolars only occur as affricates, even though this series appears to be an ancient distinction. The three other Yadu sub-dialects for which there are published data do not have this series. The following table demonstrates the development of Old Yadu *alveolars in four varieties of Yadu:

Table 2.1 Comparison of Ekou alveolars to Ronghong, Qugu, and Moyu

Gloss	Yadu (Ekou)	Ronghong	Qugu	Moyu
	[alveolar]	[retroflex]	[palatal]	[retroflex, palatal]
child	tʃuj mɪ	xʃe-tʃuə ~ xʃe-tʃu̠ ('calf' (cow-child))		
cockscorn	wu piɛ qu dʒu		jypi qu tɕu?	
dark	xtʃap	xtʃap		
hoof	tʃuəχ	tʃuəχ		tʃuəχ
pregnant	tʃui miɛ lɛ			tɕy mi dɛl
weasel	tʃu qu	khua-tʃoqu(ses)		

The Old Yadu *alveolar series developed differently in the history of each of the four dialects above. In Ekou, it was maintained as an alveolar series. In Ronghong, it merged with the retroflex series; in Qugu it merged with the palatals, and in Moyu it appears to have merged with the retroflex series before back vowels and with palatals before front vowels. However, more Moyu and Qugu data are needed before definitive statements can be made about their correspondences. The voicing of the affricate in "cockscorn" is problematic: the difference in intervocalic voicing may reflect differences in syllabic stress (cf. J. Sun 1988 (herein *PNQP*), pp 2-5), or it may be a case of variation in an intervocalic environment (e.g., *kɛɪ wɛ tɕə* 'recall/remember', *kɛ' wɛ' dʒɛ*, 'recall/recollect'). Because stress is not marked in these sources, it is not possible to be more precise about this alternation in voicing.

Further evidence that Ekou alveolars are phonemic, and are not merely a transcriptional detail, comes from their correspondence to alveolars in Mawo. Table 2.2 shows the correspondence of Ekou alveolars to Mawo alveolars, Table 2.3 shows that in Mawo, PQ *alveolars palatalized before /i/. Table 2.4 indicates that there are some forms that do not follow this pattern. I do not yet have an explanation for these irregular

correspondences.

Table 2.2 Correspondence of Ekou alveolars to Mawo alveolars:

Gloss	Ekou Yadu	Mawo
chew	tʃuɑχ tʃuɑχ dzə	tʃɑq tʃɑq dzə
kill	tʃə	tʃə
knife	dze tʃue	dʒatʃ
shoe	tʃu wa	tʃə βɑ
doctor	miə tʃhe pəm	sman tʃən
point/head	qu dʒu	dʒə

Table 2.3 Correspondence of Ekou Yadu alveolars to Mawo palatals:

Gloss	Ekou Yadu	Mawo
eleven	he tʃe	he tʃi
man	tʃɪ	tʃim
meet	ɛ tʃe tɛ piɛ	e tʃi ti pi
nephew	dʒɪ	dʒi

Table 2.4 Irregular correspondence of Mawo forms to Ekou alveolars:

Gloss	Ekou Yadu	Mawo
step on/tread	tʃhuen	tʃha ŋi
mule	ke tʃe	tʃə

2) According to the discussion in *TBL*, /r/ does not occur in word-initial position. “It is sometimes pronounced as /dz/, as in *mə ʋe rəp* ‘vulture’ [*mə ʋe dzəp*? – JPE].” (*TBL*:636, translation mine) *TBL* does not give the environments in which [r ~ dz], although we may note that the forms *ʋdzə* ~ *ʋrə* are both given for ‘star’. In addition, the forms *tu ru* ‘broom’ and *dzu dzu* ‘sweep’ probably demonstrate this same alternation. [r] can occur in initial

clusters: *mə grɥ* 'strike (thunderbolt)', word-medially: *tu ru* 'broom', and word-finally: *ar* 'dissolve'. It is apparent from its distribution and variation that [r] is an allophone at least of /dz/, and perhaps of other r-like sounds as well. Problems associated with these sounds are discussed below (comment 7).

3) $x > \epsilon / _iV, yV$ diphthongs. (*TBL*)

4) /ŋ-/ in native vocabulary is labialized. (*TBL*)

5) /h/ only appears in word-initial position. (*TBL*) It is not clear from examining the data whether it is an allophone of another sound, or whether it disappears word-medially.

6) There are certain clusters whose transcriptions are problematic; a careful analysis leads to a simpler list of clusters than are found in *TBL*. As an example, we consider the /gr-/ cluster of *mə grɥ* 'strike (thunderbolt)', which is the only instance of this cluster in the source, and is not given in the list of clusters (*TBL*:636), although /gz/ is listed there. This cluster is likely a typographical error, or the result of a recent metathesis, as seen by comparison with other Ekou words for 'thunder' and 'rain' (which is the first morpheme of 'strike (thunderbolt)'):

<i>məə'</i>	rain (n.)
<i>məəɪ dɑ ɪɑ</i>	fall (rain) (v.)
<i>mə zɣuə</i>	thunder (n.)
<i>mə dɑ ɪɣuə</i>	thunder (v.)
<i>mə grɥ</i>	strike (thunderbolt)

The variation in the transcription of the 'thunder' words indicates that the clusters {gr-, zɣ-, ɪɣ-} all represent the same sound sequence, either at an underlying phonemic level, or at least diachronically. The 'rain' forms in the above list, along with Ronghong *mə'-gũ*

'thunder'. support the positing for 'strike (thunderbolt)' of an underlying sequence of an *r*-like sound (phonemically /ɹ/, comment 7), followed by /g-/. The two forms given for 'rain' indicate that there is a morpheme boundary before the /g-/ of thunder. The place of insertion of *da* in Ekou 'thunder (v.)' points to a reanalysis of morpheme boundaries by speakers.

The following Ekou forms for 'repay, return', coupled with the 'thunder' words, cast further doubt on the reputed /z_ɹg, gz_ɹ, gr/ distinction:

ɔcyə z _ɹ gʉɛ	repay (a debt)	ɔcyə gz _ɹ ə	return (a pen)
mə z _ɹ gʉə	thunder (n.)	mə grʉ	strike (thunderbolt)

For comparative purposes, these three clusters will be treated as phonemically identical.

The following comment further addresses problems associated with *r*-like sounds in Ekou.

7) The Yadu sounds /r, ɹ, -ɹ, z_ɹ, ʒ/ may all be broadly considered rhotics, or "r-like" sounds. As I have shown, there is no small amount of interchange among these sounds, and *TBL* has apparently drawn too many distinctions among them. As stated above, [r ~ dz_ɹ] in certain (unstated) environments. This indicates the questionable nature of the phonemic status of [r].

The distinction drawn between /-ɹ, -ɹ/ is also problematic. The following forms indicate that there is no phonemic distinction between them in final position (while [ɹ] can occur initially (*ɹu* 'horse'), [ɹ] of course, cannot²).

² However, 'dig, excavate' is given as *ph'ɹ phʉɛ*.

mæɪ dɑ ɹɑ	fall (rain)	mæʰ	rain
khɯ su	eighty	khɛʰ	eight
(ɑ) əɪ	classifier for bowls	(ɑ) əʰ	classifier for eggs, etc.
kɛɪ wɛ tɕə	recall/remember	kɛʰ wɛʰ dʒɛ	recall/recollect

It is clear that [-ʰ], the rhotacization of the vowel nucleus, is not to be distinguished from final [-ɹ]. Thus, either both sounds should be treated as /ɹ/, or both should be treated as /ʰ/, when in final position. The first solution has the advantage of greatly simplifying the vowel inventory, eliminating all rhotacized vowels /Vʰ/, as these would now be treated as sequences of V + ɹ (e.g., /-ɹp, -ɹm, -ɹs, -ɹn, -ɹʒ, -ɹʒʒ/). However, this analysis has two drawbacks: first, it complicates the syllable canon, changing it from

(C) (C) V (V) (V/:) (C) (C)

to

*(C) (C) V (V) (V/:) (ɹ) (C) (C)

in order to accommodate the single form *khoʰyz* 'file (tool)'. Second, all unambiguous Ekou final clusters agree in voicing (attested: ʒz, ʒtʂ, ʒʂ, ʒl). However, if /Vʰ/ is interpreted as /Vɹ/, then the following clusters which disagree in voicing are introduced:

-ɹp	<i>khɛʰp</i>	full
	<i>a khəʰp</i>	blind, be (acquired/postnatally)
-ɹs	<i>qhaʰs</i>	wall (stone)
-ɹʂ	<i>tuəʰʂ</i>	younger brother (address by o. brother)
-ɹʒ	<i>kəʰn kaʰʒ</i>	thin
	<i>qəʰʒ</i>	ban/forbid/prohibit

The second possible analysis, and the one adopted in this dissertation, is to treat

final /-ɹ/ as vowel rhotacization /Vʹ/. This analysis does not have the advantage of simplifying the vowel inventory, however it does not introduce the aforementioned complications. In this dissertation, /Vɹ/ and /Vʹ/ are both taken to signify vowel rhotacization.

Both analyses have the benefit of reducing the set of r-like phonemes to four: /r, ɹ (ʹ), z, ʒ/. Among these sounds, it is not clear whether the phones [ɹ (ʹ), z] are to be considered distinct phonemes, or whether their differences are marginal/non-existent. The following two pairs of words show that this opposition is to be questioned:

<i>ɲu pu</i>	cave (mountain)	<i>ju zu</i>	cave/hole
<i>məəʹ</i>	rain (n.)	<i>mə z-guə</i>	thunder (n.)

These two pairs of words indicate that there is no meaningful distinction between [ɹ / -ʹ] and [z], and hence there are no more than two voiced r-like phonemes in Yadu, /r/ and the phoneme represented by the set of graphs /{ɹ, -ʹ, z}/, which I will call /ɹ/. This last distinction is supported both by the following set of minimal pairs, as well as by the fact that /r/ is in (limited?) variation with /dz/ (*TBL*:636), while this claim is not made for the other rhotic sounds.

$r \neq z$	(o) <i>ru</i>	bundle/sheaf	<i>o zu</i>	lose (something)
$r \neq ɹ, -ʹ$	<i>gur</i>	pal/partner; placenta	<i>guʹ guʹ</i>	dove

This phonemic analysis is similar to what is found in the phonology of Proto-Southern Qiang, for which both *z, *r have been reconstructed, based on the synchronic evidence of Longxi and Taoping (Evans, 1998a).

Ekou /r, ɹ/ appear to correspond to Moyu and Qugu /dz, z/. Although the correspondence of Ekou /ɹ/ to Moyu /z/ is well-supported, there are not enough available Moyu cognates of Ekou /r/ to make an unequivocal statement of correspondence. Similarly, the available Qugu data are scarce, so that correspondence with these two Ekou

phonemes is only suggestive. Ronghong /z/ clearly corresponds to Ekou /ʃ/, but correspondence with /r/ is uncertain. These correspondences may be seen in the following table (Qugu forms in parentheses):

Table 2.5 Comparison of Ekou /ʃ, r/ with Ronghong, Moyu, Qugu

Gloss	Ekou	Ronghong	Moyu (Qugu)
cave	ʃu pu, ju zu	zɔ:pu	
skin	ʃe piɛ	səf zə pi (tree-skin = 'bark')	ze pi
thresh grain	ʃe	ze	
horn	ʃəχ	zaq (raq)	
stone	ʃa kuɑ	za wa	
branch	səf ʃa li	za ji	(Qugu [zɑr])
pound (v.)	ɑ zu	zete	
thunder	mə zguə	me ² -gu	
fox	zguɛ	zgue	
open	zge		zge
speech/words	zuə ²		zə wa
gruel/porridge	gzɛm	yzɛm	
dream	ku zu		?u zmə, ?u zu
buffalo	tsuəz	tsuə-z	
ash	tɕu xu bu zu	tɕu-xu-bu zu	
bite	ɛ ɣɛ		ɣdzɛ
pheasant	wu ru	wu-lu	(Qugu [ju dzu / wu dzu])
star	ɛrə ~ ɛdzɛ	ɛdzə	(Qugu [(mutu) ɛdzə])

/s/, the voiceless rhotic, contrasts with /r, ʃ/ prevocally (Table 2.6) and postvocally (Table 2.7):

Table 2.6 Yadu r-like initials

/ɣ/ forms		/r/ forms		/ɹ/ forms	
ɣu	lake	ru	broom	ɹu	spit
ɣə	reserve (seed)	rə	separate	ɹɛɹ	horn

Table 2.7 Yadu r-like finals

/-ɣ/ forms		/-r/ forms		/-ɹ/ forms	
qheɣ	chest, box	mer	solidify	qhe ^ɹ	break/smash
ɑɣ tse	taste	ɑr	dissolve		
quɣ we	shape, appearance			nu qu ^ɹ	bend at the waist

However, this contrast disappears in clusters, as demonstrated below.

8) /h/ only appears in word-initial position. (*TBL*) It is not clear whether it is an allophone of another sound, or whether it is a phoneme which disappears postvocally. It only occurs in Ekou as a verb prefix meaning 'out(ward)' (a), and as the number 'ten' (a').

- a) come out (past) *ha la*
 drag for/dredge up *he ɣtɣe*
 left over, be/remain *ho ɹgu*
- a') ten *ho dzu*
 sixteen *ha tɣhuə*
 thirteen *he se*

However, in the closely related sub-dialect Ronghong, /h/ may occur either initially (*ha-qa*, 'mount a hill') or word-medially (*məq maha*, 'dandelion'). Comparison between Ekou and Ronghong shows that /h/ in the two dialects cannot be directly correlated, as the following three tables demonstrate:

Table 2.8 Ekou /h-/ corresponding to Ronghong /h-/

Gloss	Ekou	Ronghong
ten	ho dzu	hotcu
twelve	ha nɔ	ha-nɪ
OUT prefix	ha ʂkuə 'borrow'	ha-tʂha 'creep (vi.)'

In the above table, the morpheme for 'ten' is given twice to show that the two varieties share the same vowel harmony on this syllable.

Table 2.9 Ekou /χ/ corresponding to Ronghong /h/

Gloss	Ekou	Ronghong
cooked rice	stua χa	stuaha
mire/muddy	mɑ' χɑ'	maha
wheat bran/straw	χɑ	paha

Table 2.10 Ekou /χ/ corresponding to Ronghong /χ/

Gloss	Ekou	Ronghong
brass/bronze	χα' xue'	χα
ditch	χuξ	tsə-χũ (water-ditch)
hawk	χlu	χlu
wash	xlua	qə'-χuəla (rice-wash)
snare/trap	χαη so (b?)	χansu
cucumber (b.)	χuaη kua	χuaηkua

9) Ekou Yadu clusters in *TBL* are over-differentiated and under-phonemicized in the transcription of their pre-initials (in Tibeto-Burman linguistic terminology, "pre-initial" refers to a consonant that precedes an initial obstruent, while "initial" refers to the second consonant). In contrast to this transcription, LaPolla points out that in Ronghong:

Phonemically, consonant clusters are formed by /s/ and one of the following initials: /p, t, k, q, tɕ, b, d, g, m, dz/, /x/ followed by /l, s, tɕ, ʂ, l, z, dz, z, dz/, or /χ/ followed by /l, s, ʂ, l, z, n, dz, n, z, dz/. Phonetically the situation is more varied, as the preinitials all become voiced before voiced initials, and /s/ becomes [s] before /t/ and /d/, and becomes [ç] before /pi/, /pe/, /tɕ/ and /dz/. (LaPolla 1996:8)

The situation given for Ekou is more elaborate, although simpler than the way it is presented in *TBL*. Dai lists sixteen pre-initials: /s, z, ʂ, z, ç, x, γ, χ, κ, kh, qh, g, ph, b, φ, w/. /φ-/ will not be considered further because there are no examples of φ-clusters in the data. The following distribution charts and rules of distribution show that a much simpler list could have been given:

The following chart shows the distribution of the pre-initials /ɬ, ʂ, ç, z/.

Table 2.11 Distribution of Yadu /ɟ-, ʂ-, ʈ-, z-/ clusters:

initial> ----- pre-initial	p	b	m	tc	dz	ɳ	tʂ	k	g	ŋ	q
ɟ		•	•						•	(•)	
ʂ	•					(•)	•	•			•
ʈ	•			•							
z					•						

With the exception of /ʂ, ʈ/ _p, it is clear that these four pre-initials stand in complementary distribution with each other. A closer look at the distributions of /ʂp, ʈp/ reveals that these two clusters are in complementary environments, determined by the height and backness of the following vowel:

hardworking	tə ʂpa
pea	ʂpəd
key	ʂpu ku
kidney	ʂpəl
jackal	ʈpiɛ
scar	ʈpi xli

Clearly, ʂ > ʈ/ _pi, pi³. If we take the sole instance of /ʂn/ ʂnət 'crupper strap' as an exception due to its status as a borrowing from Tibetan (WT *smed*, A Li Ke dialect *ɳet*), then the pre-initial [ʂ-] only occurs before voiceless initials, and we may write the following rules:

³ There is only one example of ʈpi in the data: ʈpi xli 'scar'. There is also one counter-example to this rule, found in the morpheme common to the following words: ɛ ʂpij 'aunt (mother's brother's wife)', ɛ ʂpij 'mother-in-law'. I believe this problem to be more transcriptional than phonological, because I wonder about the exact nature of the diphthong ij. These two terms for female relatives of an older generation also show the tenuousness of the distinction between /ɛ, e/. These sounds are not distinguished in either Ronghong or Moyu dialects.

ɿ > ʂ/ [-voice]
 > z/ _dz
 ʂ > ʃ/ _tʃ, pi, pi

The subsequent table shows the distribution of the pre-initials /s, z, kh, g, x, ɣ/:

Table 2.12 Distribution of Yadu /s-, z-, kh-, g-, x-, ɣ-/ clusters:

initial > ----- pre- initial	p	t	d	ts	s	z	n	l	r	ŋ	tʃ	ʂ	z	dz	tʃ	g	q
s	•	•						•									•
z			•													•	
kh					•			•				•					
g						•							•				
x				•				•			•				•		
ɣ						•		•	•	•				•			

For this set of pre-initials, the occurrence of voiced pre-initials may be predicted, with the exception of /xl, ɣl/, by the rule:

C > [+voice]/_ [+obstruent, +voice].

Based on the phonemic analysis presented in *TBL*, Ekou /x, ɣ/ are separate phonemes, probably due to the fact that both occur before /l/:

me xliɛ	move	dzɯ ɣliɛ	drill/auger
ɕpi xli	scar	hɑ ɣli	turn inside out (clothing).
xlua	wash (clothes)	ɣlɔ	drill

According to *TBL*, the occurrence of /ɣ/ is restricted to cluster-initial position (however, there is one instance in the data of /ɣV/: ɣə' xpəl 'fist'. This entry is problematic, as it is

actually given in the source as having a vowel onset: $və'xpəl$, although the vowel / v / is not listed in the Yadu inventory. For this reason, I do not consider it a *bona fide* exception to the cluster-only rule, as the initial [ɣ] is my own interpretation of an apparent typological error). In Ronghong, [ɣ] is the allophone of / x / that occurs before voiced consonants (R. LaPolla, 1996:6. LaPolla's lexicon includes the form *xliex-buz* 'loess', which should be *xliex-buz*, (R. LaPolla, p.c.). Given the fact that in Ekou, the pre-lateral environment is the only one where both / x , $ɣ$ / may both occur, and that Ekou has phonemic / $ʌ$ /⁴, I think it is best to interpret { x l} as / $xʌ$ /, and { $ɣ$ l} as / $xʌ$ /. Thus, the items above should be phonemically transcribed as follows:

/mɛ xliɛ/	move	/dzɥ xliɛ/	drill/auger
/ɕpi xli/	scar	/hɔ xli/	tum inside out (clothing).
/xʌuɔ/	wash (clothes)	/xʌ/	drill.

The following table shows that Ekou $ɕ > qh$ / _[-voice]:

Table 2.13 Distribution of / $ɕ$ -, qh -/

initial >	d	s	z	n	l	ɲ	dz	ʂ
pre-initial								
$ɕ$	•		•	•	•	•	•	
qh		•						•

⁴ In *TBL*, / $ʌ$ / only occurs in pre-vocalic position, and only appears in the following four lexical items:

ju pu ʌ: ʌ	cliff
də ʌɥ	move (house)
ʌ ʌ	quick/fast
ʌ: ʌ	smooth/glossy/sleek

Thus, the list of pre-initials may be reduced to /ph, b, (ϕ), s, z, x, kh, w, χ, ʁ/⁵.

10) There are at least two transcriptional problems with the clusters in *TBL*:

a. /ʃtʃ-/ occurs in the inventory, but not in the data.

b. The clusters /ʃts-, ʃtʃ-/ are in the database, but not in the inventory. Each of them appears once:

ʃtsem wife
ʃtʃə χɑ yellow

2.1.1.2 Yadu Rhymes

Parentheses indicate segments that are found only in borrowings from Chinese; vowels that are struck through appear only in the inventory.

Simple Vowels:

<u>Plain</u>			<u>Long</u>			<u>Rhotacized</u>	
i, y	u			u:			u'
ɪ	o			o: ⁶		ɪ'	
ɛ	ə		ɛ: (3)			ɛ'	ə'
æ (4)	ɑ		æ:	ɑ:		æ'	ɑ'

⁵ Double check this list!

⁶ This segment is recorded in the data and in the discussion, but is not given in the phonological inventory.

Long rhotacized

æ: ^r	u: ^r ɑ: ^r
-----------------	------------------------------------

Diphthongs:

The following chart shows that many of the diphthongs attributed to Ekou are ill-supported: either they occur only in borrowings, or they occur rarely or not at all in the data.

iɛ	iə	iu		(iu:)		yɛ	yə
iæ		ia		iæ: ^r iə: ^r		(yæ)	(ya) (2), yə: ^r
				(ia: ^r) (1)			
ui							
uɛ	uə					uɛ: ^r	
uæ		ua		uæ: ^r ua: (3)		uæ: ^r , uæ: ^r	ua: ^r , ua: ^r (1)
(æi)	ui			(au) (1) (əu)		əy	uy (5)
(iə')							
ɛə: ^r əə: ^r				iə: ^r		(iəə') (1)	yəə: ^r
æə: ^r , æ: ^r				ɑə: ^r (2), ə: ^r		iæ: ^r	yæ: ^r
uɛə: ^r (1)	uəə: ^r						
uæ: ^r				(iau)		(uæi) (2)	
				uæ: ^r			

Comments:

1) /ə/ > ɿ/ [dentals]_, > ʅ/ [retroflex]_, ʌ elsewhere. (*TBL*)

2) The distinctions between /u, u:/, /o, o:/ are marginal in native words. Most instances of /u:, o:/ are in borrowings from Chinese. (*TBL*) In Jiuziyang there is a similar fluidity of /u, o/ (Wen 1950:18-19).

3) -y and y-initial diphthongs are almost always preceded by palatals, with the exception of a few instances of x- and l-. (*TBL*) The only such forms in the source are the following:

(ɛ) xyɛ	classifier for leaves
ɛ xyɛ	dizzy, feel/giddy
kuɛ' su lɿ	silk

This distribution is very similar to Standard Mandarin, in which /y/ only follows palatals and /l/.

4) Note that /a/ does not occur in the inventory. However, it does occur in seven forms in the database, where it is assumed to be a typographical error. However, this can only be proven in the case of *xua tha* 'draw (a picture)', where comparison with other verbs shows that the second syllable, which is appended to verbs borrowed from Chinese, should be *tha* (e.g., *khau tha* 'rely/depend on'). For the sake of comparison, other instances of the graph {a} will also be treated as /a/.

5) Voiceless vowels do not appear in the *TBL* inventory, although they are mentioned in the discussion and appear in the data. The following voiceless vowels occur in Ekou:

l	ɥ, ɥ'		ɥʉ, ɥʉ'
ʉ'			

According to *TBL*, voiceless vowels generally occur on the final syllable, although they sometimes occur on the penultimate; e.g., *ɛ ky liɛ* 'plant (beans)'. I expect that they only occur on unaccented syllables; however, stress is not given for any forms in *TBL*.

6) All but one instance of /æ/ are borrowings from Chinese (e.g., *miæn χua* 'cotton'). The form *tsæm* 'girl' appears to be the lone native form.

7) /ui/ is listed in *TBL* as occurring only in borrowings. However, the following forms appear to be native to Yadu:

tʃui miɛ lɛ	pregnant, be
ʃui dɛ	puttee
wui zɪm	swallow (n.)

8) Although not listed in the inventory, the rhotacized diphthong /ɪə'/ occurs in the Chinese borrowing *cin tɕɛ jɪə'* 'Tuesday', which appears to be over-transcribed.

Final consonants:

Simple finals:

p	t	tɕ	tʃ	tɕ	k	q
				tɕh		
	d (1)	dʒ			g	
m	n			n̥ (2)	ŋ	
ɸ	s	ɕ		ç	x	ɣ
	z	ʒ		ʒ		
w	l			j		ɤ (5)
		r, ɹ				

Clusters:

Northern Qiang finals are of secondary origin, as discussed further in section 4.4.3. Complex finals are very rare, although they may be complex: e.g., /-ɣtɕ/ only occurs in the classifier (a) ɣtɕ 'row (wheat, houses)'. The nine clusters that have been struck through appear only in the inventory.

st̥ zɬ ʒg̥ ɕt̥ khs̥ khɕ̥ ɕʃ̥ ɣz (4) ɣt̥ ɣtɕ (1) ɣs̥ ɣɕ (2) ɤl (2)

2.1.1.3 Yadu Stress

TBL mentions that Northern Qiang dialects do not have tones (p637). Stress is not mentioned in *TBL*, although Northern Qiang is generally regarded as having syllabic stress (*QYJZ*, *PNQP*, R. LaPolla 1996, Liu 1998, Peter Lester p.c., *et al.*).

2.1.2 Mawo Phonological inventory

The primary source for Mawo data was gathered in the 1950's, and has been published in part by Sun Hongkai (*QYJZ*, *ZYC*) and Liu Guangkun (Liu 1998).

Additionally, there are body-part vocabulary provided to the STEDT project at UC Berkeley by Jackson Sun (J. Sun, n.d.) and by Sun Hongkai (H. Sun, n.d.), both of which differ slightly from the data presented in the main sources. The most insightful phonological analysis of Mawo is to be found in *PNQP*, in which J. Sun points out the problems caused by under-phonemicization in the published materials, and argues for a simpler segmental system. Aside from the aforementioned body-part vocabulary, J. Sun has not provided a lexicon. H. Sun's phonological inventory of Mawo (ZYC, pp182-191) was translated into English and published in Namkung 1996. The bulk of that inventory is reprinted here, with some additional comments. Comments from H. Sun are labeled (SHK), those from J. Sun are labeled (JTS), and my own comments are labeled (JPE). The Mawo syllable canon may be formulated as follows:

short vowels: (C) (C_i) V (V) (ʔ) (C) (C_f)

long vowels: (C) C_i (V) V: (ʔ/q ⁷)

2.1.2.1 Mawo initials

⁷ There is one instance of a coda following a Mawo long vowel: *ti:q* 'top'.

Simple Initials:

p	t	ts	tʂ	tʃ	tɕ	k	q	
ph	th	tsh	tʂh	tʃh	tɕh	kh	qh	
b	d	dz	dʒ	dʒ	dʒ	g		
ɸ		s	ʂ		ɕ	x	χ	h
β		z	ʒ		ʒ	ɣ	ʁ	
m	n				ɲ	ŋ		
w	l	r	ɹ		j			
	ʈ(4)	(ʈ)(4)						

Initial Clusters

Along with the inventory, Sun has included one example of each segment, cluster, and diphthong. For some rare clusters and finals, these charts provide the only support, as they do not appear in the published lexicon. These forms have been treated as *hapax legomena*, are followed by (1) in the charts below, and the corresponding forms been added to my database. All segments and segment combinations with five or fewer supporting forms are specially indicated. A few of the segments are not given in his inventory, but appear in the data. They have been included in the following charts.

mdz (1)
 sp (2) st sk (1) sq (1) (stc) (1) sm (1) (sn) (1) (sn̩) (1) (sl) (1)
 zb (1) zd zg (1)
 rp (1) rb rd (1) rk (1) rg rts (1) rdz (1) rtʃh (1) rdʒ (1) rdz (1)
 rm rŋ (1) rl (1) rw (1)
 ʃp (1) ʃt (1) ʃk (1) ʃts (1)
 ʂp ʂk ʂq ʂtc (3)
 khs khʂ (1) khɕ
 gz gʒ gz (1)
 xp (1) xts (1) xtʂ xtʃ (2) xtc (1) xl (5)
 ɣb (1) ɣdʒ (4) ɣdʒ (2) ɣdz (2) ɣl (5) ɣn (1)
 qhs (5) qhʂ (3)
 χt (1) χts (1) χtʂ χtʃ (1) χtc (1) χl (1)⁸
 ɛd (1) ɛdz (4) ɛdʒ (4) ɛdʒ (2) ɛdz (1) ɛŋ (1) ɛz (1) ɛl ɛz (1)

Comments:

1) /ɸ/ is found mainly [but not exclusively -- JPE] in Chinese loans. (SHK)

2) /β/ and /ɣ/ are found mainly [exclusively – JPE] in the second syllable of compounds and in consonant clusters. (SHK) This is also true for /ɣ/. As observed by J. Sun (*PNQP*) these sounds should probably be treated as allophones of /b, r, g/. Their appearance in the initial position of second syllables is due to stress (*PNQP*:2, ff.), which unfortunately has been left unmarked, as in all of the published sources of Northern Qiang

⁸ *EAGLE *glaŋ

lexical data.

3) /ŋ/ is labialized in native vocabulary. (SHK)

4) The retroflex affricates are very lightly fricated, and are closer to stops than to affricates. (SHK)

5) /r/ is trilled as an initial, but flapped in clusters; it corresponds to Taoping /dz/ or /ʎ/. (SHK)

6) Dental stops are dentalized and affricated before central vowels /ə, ʏ/. (SHK)

7) Older speakers differentiate another series of palatals. (SHK) Unfortunately, it is not clear how to interpret this comment.

8) /m, n, l/ are velarized before /ʏ/. (SHK)

9) As has been observed for Yadu (above), J. Sun (*PNQP*:7, ff.) points out that the published initial cluster system of Mawo should be simplified. In Qiang, the set of pre-initials is much more restricted than is the set of initials. H. Sun divides clusters into two types according to the pre-initial: those that are stops (Type II, *QYJZ*, pp29, 30), and those that are not (Type I, *QYJZ*, pp 27-29). After summarizing the pre-initial system, J. Sun observes that, with the exclusion of *ʂ*- and *m*- (which can only be found in the morpheme *mdza* 'beautiful'), Type I pre-initials can be arranged according to oppositions of voicing (*PNQP*:7):

<u>Voiced</u>	<u>Voiceless</u>
ʙ-	χ-
ʝ-	ɣ-
z-	s-
r-	ʃ ⁹

The first two pairs of sounds are distinguished before /l/ (*ɣlə* 'wheat', *χlu* 'eagle', *ʝləʝu* 'wheat', *ɣlə* 'marrow'). However, before obstruents, voicing is predictable:

ʝdzə	'eel'
xtʃə	'gall'; 'louse'
ɣdzə	'star'; 'bell'
χtʃə	'spear'; 'six'

Similarly, /z-/ only appears as a pre-initial before voiced obstruents /b, d, g/, whereas /s-/ occurs before both voiceless obstruents /p, t, k, q, tʃ/ and sonorants /m, n, ŋ, l/. Thus, just as in Yadu, there is no phonemic distinction between /s, z/ in pre-initial position.

The next distinction to consider concerns the pair /r, ʃ/ and the retroflex /ʂ/. The following chart is taken from *QYJZ:27* and *PNQP:8*:

Table 2.14 Distribution of Mawo /ʃ-, r-, ʂ-/ in clusters:

initial>	p	b	t	d	k	g	q	ts	dz	tʃh	dʒ	tɕ	dz	m	ŋ	l	w
pre-initial																	
ʃ	•		•		•			•									
r	•	•		•	•	•		•	•	•	•		•	•	•	•	•
ʂ	•				•		•					•					

J. Sun argues that ʃ- is best considered as an allophone of /r/, given that it only occurs before voiceless obstruents. However, *QYJZ* also includes the clusters /rp, rts, rtʃh, rk/,

⁹ In *Jiuziying* (SQ), r > ʃ / #[-voice] _ . (Wen 1950:20)

which run counter to that analysis. Nevertheless, J. Sun observes that these four clusters occur word-medially, and not initially, as in the following data (taken from *ZYC*):

ɲa-rpa	steward, house-keeper (p185) ¹⁰
ka rpu	lime (stone)
phu-rtsuq	hole in the top of a tent for a rope (p185)
da-rtʃhal	big cymbal (p185)
za-rka	medicinal root (notopterygium) (p185)

J. Sun does not cite any counter-evidence from *QYJZ*. There are, however, the following two forms from the introductory pages to *ZYC* (published after *PNQP*) that show /ɣ/ occurring word-medially in a post-vocalic environment:

phə-rpa	device used when reciting scriptures (p185)
biɣa	rope

According to the distribution given below in Table 2.16, these instances of [ɣ] should be allophones of /tʃh/ occurring in unstressed environments. However, there are no other instances of the cluster /tʃhp-/ in the data or phonemic analysis. At present I have no explanation for the phonetic shape of the form *phə-rpa*. Nevertheless, I agree with J. Sun's characterization of [ɣ] as an allophone of /r/, in spite of these apparent contradictions (which may also be typographical errors (for a discussion of this problem in *ZYC*, cf. J. Sun 1992). The sound [ɣ] is very rare: out of 1004 entries in the body of *ZYC*, the only other form with this voiceless rhotic is *ɣsa* 'rust'. Although I follow J. Sun's analysis and consider this sound to be an allophone of /r/, I do not alter H. Sun's original transcription in this dissertation.

J. Sun observes that for his own Mawo consultant, [ɣ, ʂ] were freely varying

¹⁰ Lexical items that appear only in the phonological discussion, and not in the general lexicon have their *ZYC* page numbers indicated.

allophones of [r], occurring word-initially before voiceless consonants other than /k, q/ (PNQP:10). Thus, among the pre-initials, occurrences of [ʃ, ʒ] are sub-phonemic. According to J. Sun's analysis, the total number of Mawo phonemic Type I pre-initials is eight: /m, r, s, x, ɣ, ɕ, ʁ, (s)/. Even simplified, this system is much more complex than the Ronghong Yadu system of three underlying pre-initials /ʃ, x, ɕ/.

Another rhotic issue, not raised by J. Sun, is the degree to which post-vocalic /ɹ/ is to be distinguished from rhotic clusters:

bʒə tsi	thin
bəɹ tsi	thin (slender)

By merely examining the printed Mawo data, it is not possible to tell whether these forms are in free variation. Nevertheless, I have observed that for some b-initial words, sounds which are transcribed in Mawo with either rhotacized vowel or final /-ɹ/ occur as initial clusters in other Qiang dialects. It is not clear to what extent this is due to a true phonetic change in Mawo, and how much of this difference is due to transcriptional difficulties:

Table 2.15 Correspondence of Mawo /ʃ, ɹ/ to rhotics in the other dialects

Gloss	Mawo	Yadu (Ekou)	Taoping	Mianchi	Longxi
brother (elder)	tə baʰ		tu ⁵⁵ bʒɑ ³¹		
big	bɑɹ	bɹɛ	bʒɑ ³³	bʒà	bɹà. bà
dragon	bəʰk	ʒbə	ɕbə ²⁴¹		
high/tall	buʰ	bɹɹ		bʒú	

Mawo (and Yadu) clusters may become simplified when in coda position. The numerals two, three, four, six, and nine demonstrate this change when they appear as 'teens'. Although the following examples are from Mawo, similar properties obtain for the

Yadu numerals.

<i>a; tci</i>	one	<i>he tci</i>	eleven
<i>ɣnə</i>	two	<i>han</i>	twelve
<i>khsi</i>	three	<i>hesi</i>	thirteen
<i>gzə</i>	four	<i>haz</i>	fourteen
<i>ɸua</i>	five	<i>ha ŋu</i>	fifteen
<i>χtʂə</i>	six	<i>hatʂ</i>	sixteen
<i>stə</i>	seven	<i>hast</i>	seventeen
<i>kha'</i>	eight	<i>ha kha'</i>	eighteen
<i>rguə</i>	nine	<i>ha rguə</i>	nineteen

2.1.2.2 Mawo Rhymes

Vowels:

The following vowels are found in uninflected words:

Monophthongs

Plain

i i: , y	u u: (5)
e ə	ɣ ɣ: (1)
a a: (2)	ɑ ɑ: (2)

Retroflex

i' (4) , y' (1)	u' u:' (1)
e' (2), e:' (1) ə' ə:' (3)	ɣ' (1)
a' a:' (2)	ɑ' ɑ:' (1)

Diphthongs

Plain

(ie) (ue) (2)	uə	(uɣ)
ia (ya) (1)	ua	ua: (1)
ia ua	ua: (3)	

Retroflex

ue' (5)	uə' (4)	uə:' (1)
ua'	ia' (1)	ua:' (1)
ia' (3)	ua' (5)	ua:' (1)

Comments:

1) There are also vowels with offglides /ai, au, əu, iu, uai, iau/ which are mainly found in Chinese loans. (SHK)

2) /ia:, ia:', ya, ya:, ya:'/ appear only in inflected words. (SHK) However, in the data, /ya/ also appears in the Chinese borrowing *yan pi* 'pencil'.

3) Note that the native diphthongs all proceed from more close to more open. [JPE]

Final Consonants

As in Yadu, many of the possible final consonants and clusters are rare; most of the final clusters are *hapax legomena*. The following charts show that final affricates and voiced obstruents are generally less common than are other codas.

Simple Finals:

-p	-t	-ts (2)	-tʂ (5)	-tʃ (3)	-k	-q
-b (1)	-d (1)			-dʒ (1)		
-ɸ (1)		-s	-ʂ			-χ (1)
		-z (2)	-ʐ			
-m	-n				-ŋ	
	-l	-r (3)				
		-ʀ (3)				

Final Clusters:

-st	-zd (1)		
-rb (1)	-rg (1)		
-ʂp (1)	-ʂk (2)		
-xs (2)	-xts (1)	-xtʂ (1)	-xtʃ (1)
-ɣz (1)	-ɣl (1)	-ɣdʐ (1)	-ɣʐ (1)
-χp (1)	-χs (1)	-χl (1)	-χʂ (2)
-ɸdz	-ɸz (1)	-ɸl (1)	-ɸdʐ (2)

Comments:

- 1) Voiceless stop codas are released, often with slight aspiration. (SHK)
- 2) Final /-b/ only occurs in rhotic environments. The following are the only instances of final /-b/ in the data:

wurb	bird's nest
qhə'rb	eddy, vortex
tʂə'b	ring a bell

I strongly doubt that [-rb, -'rb, -'b], all *hapax legomena*, are phonemically distinct finals. As in Yadu, I will continue to distinguish /-'/ and other rhotics based on the following two observations: 1) The consonants in all final clusters agree in voicing. 2) There are voiceless consonants (including /p/) that may follow /-'/ . Hence, the (voiced) sound [-'] is best considered to be part of the vowel nucleus, rather than an element of the coda:

khə'p	full
təkha't	saw (n.)
ɕə't	broad bean
ʂquə'tʃ	bend ¹¹
quŋkhua's	razor
kha'ʂ	August
ku'ŋ bə'k tshu	kneel
khu'q	wake up
phia'q	wet

- 3) There is one instance in ZYC of /' / in an initial: 'bə'q-phi, 'piece of land' (p. 190). Given the fact that /' / represents vowel retroflexion, this must be a typographical error. It most likely should have been written /r/, as /rb-/ is an attested initial cluster, occurring in the (possibly cognate) *rbə tshi* 'rake', among other forms.

¹¹ Check gloss

4) *PNQP* also demonstrates that in native vocabulary H. Sun's /e/ vowel is subphonemic.

The distribution (with examples) is as follows:

/i/ -> [e] / [uvulars]_	qəp	'urn'
/a/ > [e] / _C ₀ i	esi	'a day' (< /a/ 'one')
/i:/ > [eɛ ~ e:]	eɛ	'next year'
/ui/ > [e]	be	'plate' ¹²
ɣ-i > [e]	dzɣ:dzɛ	'hot' dzɛ < dzɣ-i (hot-AGR:3s)

The one other source of Mawo [e] is in recent Chinese loanwords. In this set of words, /e/ is phonemic:

pe	'north' (b)
pi	'pig'
pa	husk

Thus, it is clear that while from a synchronic perspective /e/ is a phoneme, it is of secondary historical origin.

2.1.2.3 Mawo Stress

There are no phonemic tones in Mawo, but there is contrastive stress in some words. Stress is not marked in the data. (SHK) It is unfortunate that stress is not marked, as it is not predictable. Moreover, as J. Sun (*PNQP*:3) has observed, H. Sun himself pointed out that certain stops and affricates are lenited when they occur in unstressed word-medial position (*QYJZ*, pp43-9). The following chart from *PNQP*:3 summarizes those changes:

¹² J. Sun's consultant pronounced this word [b^wɿ]. Note that /ui/ (*hapax*) is unaffected: tsə gui''ditch'.

Table 2.16 Word-medial changes in unstressed syllables (*PNQP*)

ph	→	ϕ
b		β
ts		s
dz		z
tʃh		ʃ
dz̥		r/z̥
tʃ		ʃ
dʒ		z̥
tch		ç
dz		z
kh		x
g		ɣ
qh		χ

This chart, coupled with observations given above, indicates that [β] is almost certainly an allophone of /b/, occurring in the weakened environments of word-initial clusters and intervocalically as the initial consonant of weakened syllables.

2.2 Southern Qiang

Southern Qiang dialects are characterized by simpler syllable canons than those found in Northern Qiang (e.g., total lack of consonant clusters in some varieties), and by the presence of tones or pitch/accent. They also have noticeably fewer consonants in their inventories; e.g., Ekou Yadu has 45 plain initials and fifty initial clusters, whereas Mianchi has 37 plain initials and three clusters. Southern Qiang dialects also have a much higher percentage of vocabulary that are borrowed from Chinese. For data collected in the 1950's, Northern Qiang dialects show a rate of borrowing of 15%, versus 30% in Southern Dialects (*QYJZ*). At the present time, Sinicization of vocabulary seems to be occurring at a faster rate in Southern Qiang than in Northern.

In this section I will first present phonological summaries of Mianchi and Longxi, the two Southern Qiang sub-dialects on which I have done fieldwork. I will then present data on Taoping, taken from QYJZ and ZYC.

2.2.1 Mianchi phonological inventory

Syllable Canon.

The minimal Mianchi syllable consists of a vowel (V) bearing a tone or pitch (T/P). The onset may contain an initial consonant (C) or consonant cluster (CC) in which the second segment is a retroflexed fricative, or a semi-vowel. If there is no coda, the rhyme may contain either a monophthong (V) or diphthong (V V_f). Monophthongs and diphthongs may be nasalized or voiceless, but only if there is no final consonant. The only possible codas are nasals (N), which may not follow triphthongs. In short,

Mianchi: $(C) (R) (V_i) \overset{T/P}{V} (V_f / N)$

T/P = Tone/Pitch

R = /ʂ, ʐ/

V_i = /i, y, u/

V can be nasalized or voiceless

V_f = /i, u/ in native words, and /a, æ, e, ε/ in borrowings.

N = /n, ŋ/

2.2.1.1 Mianchi initials

Simple Initials:

p	t	ts	tɕ	tɕ	k	q	
ph	th	tsh	tɕh	tɕh	kh	qh	
b	d	dz	dʒ	dz	g		
(f) ¹³		s	ɕ	ɕ		ɕ	
		z	ʒ	z		ʒ	fi
m	n			ŋ	ŋ		
	l						

Cluster Initials:

pɕ bʒ {mʒ}

Comments:

1) The distinction between /w,y/ is neutralized after palatal initials, where only /y/ occurs:

2) Stop [+dental] > [+labialized] / _ u

defecate *duá* [bduá] nail (v) *tù* [ptù]

The coarticulation in 'nail' sounds like the [-pt-] of the English word 'captain'. The articulation of this allophone is not visually distinct from /p-, b-/. Nevertheless, the consultant would not accept [p-, b-] as substitutes. Secondary articulations are found in other dialects of Qiang; Randy LaPolla (p.c.) reports that in Qugu Yadu the plosion of a retroflex affricate may blow the lips apart, causing a secondary coarticulated bilabial. This phenomenon also occurs before /u/ in two of Wen's dialects. In Ruodazhai secondary [ɸ, β] precede /s, z/, and [p, b] precede voiceless/voiced stops and affricates. In Jiuziyang, /p, b/ occur before voiceless/voiced obstruents. In Jiuziyang the conditioning environment has

¹³ Parentheses indicate segments which only occur in borrowings, and onomatopoeics, like 'sneeze', below. Curly braces indicate segments that are rare or marginal in native vocabulary (five or fewer forms).

been lost, leading to phonemic pre-labialized clusters:

Gloss	Jiuziying	Longxi	Mianchi	Taoping
water	ptsɿ	tsù	tsuè	tsuə ³³
boy, son	tsɿ	tcì	tsì	tʃɿ ³³
small	ptʃɿ	-tsú (suffix)	-tsú (suffix)	
mole, wart (b)	tʃɿ	tsǐ	tʃǐ	tʃɿ ¹³
chopsticks	bɖv	bə tcá	dù [bdù]	duə ³³
give birth	ɖv			də ³³

According to Wen's Longxi consultant(s), 'chopsticks' was pronounced *bu cia* (Wen 1950:39n). It appears that the labializing /u/ has been lost in the years between Wen's recording of data and my own.

3) [tʃ] occurred in some speakers' pronunciation of 'moon' as [tʃə], whereas the chief language consultant pronounced it [lə]. Although the consultant would criticize others for using the voiceless pronunciation, it preserves a trace of the Proto-Tibeto-Burman (PTB) *s- prefix (*s-la, STC 144). As this was the only occurrence of [tʃ] encountered, it is not recorded as a phoneme.

4) /ph, b/ > [pc, bz]/_i. (/p/ is unaffected) e.g.:

guest	<i>tè phi</i>	[pcì]
picture	<i>bì</i>	[bzì]
Qiang priest, shaman	<i>pí</i>	[pí]

This phonological rule is shared by Northern Qiang (cf. Table 2.3). Pumi also has a series of palatalized labial stops (Matisoff 1997), as does the SQ dialect Jiuziying (cf. 3.3.1.8.1).

5) $f \sim \phi$. These sounds occur only in borrowings; the alternation is a feature of the local variety of Mandarin, in which standard Mandarin /h/ is also pronounced [f ~ ϕ]:

(lè)- ϕ ù-rá
wheat-bran (b)-skin
'(wheat) bran' (b)¹⁴

tshà-fù
tea (b)-pot (b)
'teapot' (b)¹⁵

Table 2.17 Examples of Mianchi initials

p	peì	old (of person)	pià	pig	pù lò	kidney
ph	phaò tshù	pickax (b?)	phiè	CL for leaf	phù	clothing
b	bò lò	bug	bè zì	dirt	bá	old (of things)
(f)	feì	CL for portion (b)	fù thà	crazy (b.)	fóng fóng	gap, interval (b)
m	mú pià	sky	mià-peí	old woman	mú tì	spark
t	tè tì	straight, erect	tó tuì	slow	tú tyà	pull up (weeds)
th	thiò	sculpt	thoû	break into	thuà	stack up
d	dò kò	firewood knife	duá	defecate	deì	bean
n	nà	good	nò	thou	nè kò	pillow
l	là	arrow	lè	wheat, barley	lú	row (CL)
ts	mè tsò	hold meeting	tsáo tsào	only, alone	tsà	ride, straddle
tsh	tshè	goat	tshù là	rough	tshí	thorn

¹⁴ (b) indicates a lexical borrowing from Mandarin Chinese, or a word that is part borrowing and part native (in this case, the morpheme 'bran').

¹⁵ *Chá hú* in standard Mandarin (pinyin transcription).

dz	tè dzwê	gather together	dzè kè	tooth	dzò lò	millstone
s	sé	tight	sù	mountain	sèi	wolf
z	zò	chisel	zè	piquant	zá	foodstuff
tʂ	tʂuà	handful (b?)	tʂá	blow nose	tʂèi tʂá	chew, munch
tʂh	tʂhù	sweat	tʂhà ʂì	spider	tʂhè	drive animal
dz	dzòu	tael, liang	dzuá	bore (hole)	dzì ló	limit, end
ʂ	ʂè bzǎ	flood	ʂù	age	ʂé	good
ʐ	(dè) ʐǎn thà	forgive (b)	ʐì thá	infect	ʐà	night (CL)
tɕ	tɕí	home	tɕá qà	often	tɕè	daughter
tɕh	tɕhì	voice	tɕhò	rice (cooked)	tɕhá	push down
dz	dzue	soldier	dzà	stamp, chop	dzí	ache
c	cà	write	cì	iron	cí	lifetime (CL)
z	zé	fly (v)	zòu	light-weight	zà	ox (CL)
ɳ	ɳà	and	ɳù	be worth	ɳó	operate (vehicle)
k	kú ~ kù	harvest	ké zì	self	kò	hide (v.t.)
kh	khò kǐ	test, examine	khuí	enclose	khaó thà	knock
g	gòu pà	sole	guì	rust	gé gè	deceive
ŋ	ŋà	I, me	ŋá	have, exist	ŋó	silver
q	(lòu) qà tá	under (building)	qê	shout, yell	qé qè	headman
qh	qhòu	smoke (meat)	qhà	bitter	qhué	build (house)
χ	χá	yellow	χó-khuè	hound	χòu	tasty, fragrant
κ	κuà qó	five	κà	itch, tickle	κó	turn around (v.i.)

fi	fià	that	fiá nǎ	darken	fià cǎ	sink (v)
pɕ	pɕí	white	pɕè	news, letter	pɕú thè	way, means
bz̥	ná bz̥à	parent's sister	bz̥ú	tall, high	bz̥í	thin, slender
mz̥	mz̥e ³⁵ tsà	afternoon	mz̥ì	rain	(only these two mor- phemes)	

Notes on forms:

1. For 'old woman' (/m-/), note that the tone on *peí* is different from *peì* 'old'. This is not an error, but an instance of the unpredictable nature of tone sandhi in this language.
2. For 'handful' (/tɕ-/), cf. Mandarin *zhuā* 'seize'.
3. For 'forgive', note that *thà* 'do' is a common suffix on borrowed verbs (Longxi *dà*, Taoping *tha*³³, Mawo *tha*).
4. fi- occurs only in the verb prefix 'down', and as an initial in deictic words. The second example here is the only occurrence of a high tone word with fi- initial. The 'down' morpheme is represented in the second and third examples, albeit with an unpredictable tone variation (it is usually in the Low-Falling tone). This morpheme is cognate to the 'down' prefix /ha/ found in Northern Qiang (LaPolla, p.c.).

Comments:

Palatals are often followed by non-phonemic palatalization of the following vowel. This is not indicated in the data.

The cluster /mz̥/ appears to be of secondary origin. There is no evidence for it in the other two dialects, even though Taoping has many initial clusters (cf. 2.2.3.1). For both 'afternoon' and 'rain' it appears that the initial /m/ is a reduced form of the weather

morpheme /mú ~ mù/.¹⁶

2.2.1.2 Mianchi rhymes

Vowels

Monophthongs:

<u>oral</u>			<u>nasal</u>			<u>voiceless</u>		
i, y	i	u	iN ¹⁷ , (yN)			{i}	i̥	{ɥ}
e	ɛ̃	o	{eN}	aN	{oN}	{ɛ̃}		{ɔ̃}
ɛ	ə		æN ¹⁸			{ɛ̃}		
æ ¹⁹	a						ḁ	

Diphthongs:

<u>oral</u>			<u>nasal</u>			<u>voiceless</u>		
		iu				ui		
ie		io	{ye}			ue		(uo)
	ia		{yɛ}	ya		uɛ	ua	

¹⁶ My thanks to Professor Jackson T.-S. Sun for this observation.

¹⁷ To avoid confusion with tone diacritics, nasalized vowels are indicated by -N.

¹⁸ /æN/ occurs mostly in borrowings, but there is at least one native form *læN tà* 'behind', where the vowel in question may have arisen due to vowel harmony.

¹⁹ /æ/ usually occurs as a result of VH, when not borrowed from Chinese.

		<u>nasal</u>		<u>triphthongs</u>	
ei	ou ao	(iaN) (yæN)	{uaN} ²⁰ {uiN}	(uei)	iou (iao)
	ai				

voiceless: (ou)

Table 2.18 Examples of Mianchi rhymes

i	í dzè	arm	ýN tchì	fortune, luck (b)	á tshì là	sparrow hawk
y	ý s̃	jade (b)	tshè c̃y c̃y	c̃icada	tchý thà	funny
e	tché	steelyard	dè	idle	mé mè	wind (n)
ɛ	tché	feces	dè	f̃irst	mè	extinguish
æ	z̃æ k̃ou	bone	k̃æ bz̃í	onion (wild)	m̃æ qá	other person
i	á t̃i	parent-in- law	χ̃à s̃i	recognize	ì t̃s̃i	fill in (barrel)
ɔ̃	s̃à ph̃	break (thread) (v.i.)	tè à̃	stand up	ph̃	open (eye)
ə	í ñè q̃è	finger	ná	red	là	moon
a	bz̃á	big	là là	exchange	s̃è qá	select
u	f̃u z̃á	bran	dà p̃ú	forehead	dù	chopsticks
o	qó	kernel (CL)	phò	tree	bò lò	insect, bug
iN[ī]	t̃iN pò	tip, top	kh̃è-ñiN ñi	bell (m-b)	p̃iN tá	kidney bean (b)
(yN)	ýN tchì	fortune, luck (b)	(hapax)			
{eN}	c̃éN c̃èN	father's younger brother's wife	laǒ z̃èN	rowdy (b)	(only these two examples)	

²⁰ This final occurs only in borrowings, with the exception of 'clump of trees (CL)' *tsuàN tsuáN*.

æN	sæN	umbrella (b)	læN kuà	pumpkin (b)	tsæn thà	dip pen
aN	mì lán pà	mute	mù tié màN pé	pupil of eye	pàN pán	rod, stick
{oN}	bòN bó	protruding	tchòN kàN kàN	shin	χòŋ nòN	throat (b)
{i}	diá tchì	next year	tán phì	rafter	íŋ phì	earthen jar
{ɛ}	(fià) pé tchɛ	reduce, decrease	nó sɛ	yesterday	zì tsé sɛ	lucky day
{ɛ}	pé tchɛ	few	tǎ khɛ	probably (b?)	(only these two examples)	
ə	(dè) són thə	loose (b)	khǎn thə	to dry (grain) (b)	tiá thə	pick up (basket)
ɨ	dá tshɨ	play	dé mè tsɨ	final, last	ɕí tchɨ	waste
{y}	dzá khɨ	shy	tsé pɨ	this year	(only these two examples)	
{ɔ}	ná tchɔ	lunch	(hapax)			
ia	(duè)-piá pià	purse lips	z uà (tiá)	knead (b)	zòu miá	mare
ie	(bà) diè	rest	biě	urine	giè tsí	evening, night
iu	iá liù-phò	willow (b)	mí tiù	blind	à iú tè pù	join (sections)
io	diò	door	qhué thiò	quilt	tuà liò	hammer
ya	cyá	bright	tyà	weave	tchyà	step on
{ye}	yè	medicine (b?)	thyé	smoke (cigarette)	(only these two mor- phemes)	
{yɛ}	yé	flat	cyè thá	peel with knife(b)	(only these mor- phemes)	
ue	nuè	correct, right	ɣé χuě	develop (a sore)	fià qhué	cover (v.t.)
(uo)	uò	goose (b)	uó thə	sunken, concave (b)	uó sìn	asparagus lettuce (b)

ua	(mù) tshuá	shave	(mè) kwâ	call (person)	χuà là	wash
ue	ɲuè	know how to	duè	warm	dzé kuè	rat, mouse
ui	dè thu ì	return a purchase	ʂé χuì	regret, repent	fià ku ì kè	big enough
ei	ì séi tà	midnight	tcíŋ tèi	moss (b)	tcé (tsì) mèi	wife
ai	(kiè) ka ì tà	ought to (go)	kán tsài	sugar cane (b)	qǎi qá	in the past, formerly
ao	tè tçào tcè (zî)	worry (b)	phaò tshù	pickax	paò tò	sock, foot wrap (b)
ou	(dè) thoú	loose	dì sóu	three days from now	dòu miá	"poison cat" (kind of witch)
(oʊ)	piá tshoʊ	pig trough (b?)	(hapax)			
(iaN)	iàN χò	matches (b)	ià phiàN iáN	opium (b)	(only these two forms)	
(iæN)	iæN ý	potato (b)	miæN χuà	cotton (b)	iæN tcè	soap (b)
(yæN)	yæN pá	courtyard (b)	cyæN	tinea (b)	cyæN thá	danger
{uaN}	kuàN kuáN	food steamer	mà χuàN	leech (b)	tsuàN tsuáN	clump of trees
{uiN}	ku ìN ku ìN	wheel	(hapax)			
(iao)	iaò khù	short pants (b)	má tiaó nì	squirrel (b)	á thiaò-pù	sneeze
iou	ióu	sheep	ioú ŋù cì	continue	liòu χuàŋ	sulfur (b)
(uei)	ú khuéi	tortoise (b)	ʂuèi maò tsì	otter (b)	χuàŋ suèi lǎ	yellow weasel (b)

Notes on forms:

1. Voiceless vowels are not marked for tone.

Comments:

1) In all three SQ dialects I have treated the sounds in medial position as /i, u, y/, and not */j, w, ɥ/ for the following three reasons. First, treating these sounds as consonants would introduce CCC- clusters (e.g., TP *χtie⁵⁵bzɑ³¹* (lazy ('heart-big'))) and affricate clusters (e.g., TP *tə³¹tshie³³* 'wrong/mistaken', *dzyi³³la⁵⁵* 'wring (e.g. wet cloth)') to dialects that are cluster-poor. Second, in native vocabulary, these sounds occur entirely before simple vowels; thus, treating them as vowels does not complicate the native syllable canon. There are resulting triphthongs (above); however, all are Chinese borrowings. Third, this analysis is more consistent with published sources, making similarities and differences more apparent. For the sake of consistency, I treat these sounds as vowels in my reconstructions of Proto-Southern Qiang (PSQ).

2) The e/ɛ distinction is not stable, and many forms have variation. Nevertheless, there are consistent minimal pairs (in addition to those cited in the above table), such as

dɛ̃ bad *dè* spear, pike.

Each form cited with /e/ or /ɛ/ occurred at least one time with that pronunciation, and variation is noted for some forms in the appended lexicon. For comparative purposes, the distinction /e, ɛ/ is not significant.

3) A few of the /iao/ forms are onomatopoeic rather than borrowed, e.g., *á thiaò-pù* 'sneeze'.

4) Voiceless vowels occur only on unaccented syllables following voiceless obstruents, and have the following restricted distributions:

ĩ - occurs only after /ph, tch/.

ɛ, ʏ, ɔ, ɔʏ - are very restricted, only occurring in the above-cited examples.

ɛ̃ - only occurs in the word 'reduce, decrease', and in a morpheme meaning '-day', such as 'yesterday', 'lucky day', 'today', etc.

ə̃ - only occurs in the verb suffix thə̃ (appended to borrowed verbs), but only in seven instances.

ĩ̃ - occurs ten times.

Voiceless vowels do not appear to have phonemic status; they occur in a very restricted environment, and often as variants of voiced vowels (e.g., ə̃). However, although they are not *distinctive* (no minimal pairs distinguished by voicing), they are *characteristic* of certain words, such as those in Table 2.18.

5) /y/ occurs as a full vowel only after palatals or Ø- initial; medially, it occurs in the same environments, and also following /t, l/. Nevertheless, /y/ is quite rare after /t, l/, occurring in only the following three morphemes (out of 49 instances of /y/ (1.6% of lexical items)): cà lyà 'discuss', tú tyà 'pull up (weeds)', tyà 'weave (basket)'.

6) Mianchi (as well as other Southern Qiang dialects) is subject to irregular vowel harmony. Compare the following:

dog	<i>khuè</i>	puppy	<i>khuà là tsú</i>
hand	<i>ì pá</i>	bracelet	<i>pè ku ì</i>
thunderbolt	<i>mù gó</i>	rainbow	<i>mè ɣóu</i>
tree	<i>phò</i>	bark (n.)	<i>phò-zà piá</i>
weather (morpheme)	<i>mù</i>	light, bright	<i>mù cà ~ mè cà</i>

There is no rule that can account both for the changes in 'puppy', 'bracelet', 'rainbow' and the lack of change in 'bark', 'thunderbolt', and the variation in 'light'. Although vowel harmony is always anticipatory, it does not appear to be regular in any of the dialects (e.g., Longxi has two words for 'menstruate': *phì sà lò*, *mà só lò*, both of the form 'm-blood-come'. The second form displays both vowel harmony and tonal dissimilation.) Because vowels in non-final syllables are subject to this irregular vowel harmony, proto-rhymes are much

more difficult to compare and reconstruct than are proto-initials (henceforth, in lieu of 'proto-rhymes', 'proto-initials', I shall write '*rhymes', '*initials', etc.). In the comparative lexicon (Appendix A), PSQ *initials, *rhymes, and *tones are given in separate columns, so that attention may be given to specific problems. This method also allows for the independent comparison of the strength of attestation for each of these three components in a given lexeme.

Final consonants:

The nasals /-n, -ŋ/ may occur as finals:

Table 2.19 examples of Mianchi finals

-n	χùn-phè	spirit (b-m)	tshón xuà	groan, humph	tán phj	rafter
-ŋ	còŋ tɛ̀	turban	íŋ phj	earthen jar	tíŋ tsɛ̀	nail (b)

Comments:

1) The above-cited nasal codas are not homorganic with the following initial, and hence cannot be considered nasalized vowels with an anticipatory closure. Nevertheless, there is some variation between nasalized vowels and final nasal consonants. In some words, there appears to be a syllable final /-m/. However, this sound only occurs after nasalized vowels which are followed by labial initials, and is thus ruled to be of secondary origin:

folkdance	<i>tàN pə̀-<u>sóú</u></i>	[tàm pə̀ sóú]
mute	<i>mì <u>láN</u> pà</i>	[mì lám pà]
tip	<i>tìN pò</i>	[tìm pò]

2) The codas /-n, -ŋ/ are very rare in native words, and often alternate with nasalized vowels:

rod, stick	<i>pàN páN ~ pàn pán</i>
wooden tray (b)	<i>sè-phàn phón ~ sè-phàn phón²¹</i>
dark sugar (b)	<i>χuàŋ thàn ~ χuàN thàn</i>

There are 22 instances in the data of unambiguous nasalized vowels /-N/ in native words, but only seven occurrences each of /-n/, /-ŋ/. Most occurrences of /-n/, /-ŋ/ are either in borrowings, or alternate with /-N/. It is not possible to reconstruct nasal vowels or codas for Proto-Southern-Qiang (PSQ); further research is required to uncover the origins of nasalization on native words.

3) In both Mianchi and Longxi, there are r-colored sounds that can be interpreted as final /-ɹ/, or as RV, as there is variation in their pronunciation. In Longxi, this sound often appears as a final [-ɹ] followed by a shwa. Since unambiguous syllable-final consonants are restricted to /n,ŋ/, and even these are found mainly in borrowings, I have chosen to interpret these rhotacized elements as RV. e.g.,

MC	envy, despise	<i>ù sù mí qè zà</i>	[qè zà ~ qèɹ]
MC	extinguish, exterminate	<i>tè kè bzè</i>	[bzè ~ bèɹ]
LX	feces	<i>qhà ɹə</i>	~ [qhàɹ]

I have recorded this as /ɹ/ in Longxi, because this sound does not vary with /z/, and because it is phonetically distinguishable from [z], the allophone of /z/. In Mianchi, it is recorded as /z/ because there is no other evidence for an independent /ɹ/ initial. Longxi /ɹ/ occurs almost exclusively with the vowel /a/, with the exceptions being a few forms with shwa ('feces' (above), 'treat, cure' /pò ɹə/), and one with /i/ ('color' /í quí/).

²¹ Note that borrowed morphemes are subject to reduplication, as are native morphemes.

4) There are regular patterns of alternation found in reduplicated verbs, involving /u-, y-/ diphthongs. The data show that the added syllable is prefixed to the base morpheme, and /u-, y-/ diphthongs are simplified to /u/. Indirect evidence for the preposing of the reduplicated syllable comes from the non-predictability of the vowel of the second syllable. Direct evidence comes from Longxi, which also has this phenomenon, and which includes the form /(\v{u}) kuá/ 'drive animal', in which the first (optional) syllable must be the added one. Mianchi reduplications may be found for the diphthongs /ua, ue, ui/:

blink	tshù tshuá	tidy up	sù sué
to count (b)	sú suà	hide, conceal (v.t.)	sù sué
cut, slice (vegetable)	tshù tshuá	pull up (weeds)	tú tyà
fall (of hair)	thù thui		

In spite of the great number of instances of this pattern, it is not completely productive, as there are Mianchi forms in which the full diphthong is reduplicated:

hot	khué khuè
lack, be short (one person) (b.)	tchuè tchuè-(à-tiò-uè)
expand, swell	(tè) sué suè

Note that there is no predictable tone pattern in reduplicated words, except that there are no instances of two High tone syllables, an expected result, as discussed in the following section.

2.2.1.3 Mianchi Tones.

Inventory:

Following are the tones and their total and relative frequencies in the corpus (total number of instances = 6369).

mà	Low-Falling, (L) (ma ³¹).	4288 instances.	67.3% of total
má	High level tone (H) (ma ⁵⁵).	1775 instances.	27.9% of total
mǎ	Low (Falling) Rising (R) (ma ¹³ ~ ma ²¹³).	226 instances.	3.5% of total
mâ	High-Falling tone (F) (ma ⁵¹).	76 instances.	1.2% of total
ma ³⁵	Mid-Rising tone (M) (ma ³⁵).	4 instances.	0.1% of total

Examples:

Table 2.20 Examples of Mianchi tones

L	mà	Qiang nationality	mò	dream	ŋò	cow
H	má	oil	mó	corpse	ŋó	silver
R	tshǔ	vinegar (b)	tè taì pǔ	admit	dè mǒ	earthquake
F	(mè) kwâ	call (person)	tàe qà pû	obtain, reap	tè mô	rub, abrade
M	pæŋ ³⁵ -khà	freshwater clam (b)	pei ³⁵ tcí kù	spine (b)	mze ³⁵ tsà	afternoon

Comments:

1) 'Afternoon' is the only Mid-Rising form that is clearly not a borrowed lexeme, although the first syllable of 'afternoon' results from the coalescence of mù ~ mú with another morpheme (cf. 2.2.1.1). The remaining M form is *ŋæ³⁵ uò*, 'wild goose (b?)'. In addition to the above forms, the initial syllable of *íŋ phj* 'earthen jar' is sometimes pronounced [iŋ³⁵].

2) R and F tones are not mere variants of L and H, as evidenced by the following minimal pairs:

R v. L	dzí qě	complete	dzí qè	run fast
F v. H	fià kô	bend over	kó ~ kò	willing

Nevertheless, there are significant restrictions on the occurrence of the three rare tones. The Mid-Rising tone only occurs in one definitely native word ('afternoon'), and in no monosyllables. The R and F tones most often occur in the final syllables of verbs, where they are part of the aspect marking and person agreement. In verbs, R has only a falling component when it occurs non-finally; that is, it occurs as L. In nouns, R sometimes varies with L, as in $\chi\check{a} \text{ n}\check{\alpha} \sim \chi\grave{a} \text{ n}\check{\alpha}$ 'necklace (b?)'. Some occurrences of R are clearly of secondary and recent origin, arising from a dropped or coalesced syllable, as in

thà á	~ thǎ	rabbit
qé ì sì sì	~ qá ì sì sì	ancient times
fiǎ dzì dzá	~ fiǎ dzì	crevice, crack

3) For those words that have no occurrence of M, R or F tone (most of the lexicon), the distribution of tones within polysyllables is more like pitch accent than tone, with a limit of one high pitched syllable per word. This restriction accounts in large part for the great difference in frequency between H and L tones cited above (L occurs 2.4 times as often as H). F and R do not occur more than once in a word, and F is limited to word-final position. F and H do not co-occur. R and H can co-occur, although there are only 35 instances, while there are 174 instances of collocation of R and L (L is 5.0 times more common in collocations with R than is H). The resulting picture is one of a half-developed tone system, which for most of the native lexicon (especially nouns) is really a pitch accent system, while some borrowings have lexical tone, and verbs seem to have a combination of pitch accent and morphological tone.²² By comparing Mianchi with Longxi and Taoping

²² One reviewer of an earlier version of this discussion contested that pitch accent languages do not distinguish H/L on monosyllables, H-H/L-L on disyllables, etc. However, it is just this condition which occurs in Japanese, a language universally held to be of the pitch accent sort (e.g., e 'handle', e^{51} 'picture' in Hirosaki dialect (Haraguchi 1977:74, notation adapted)). In addition, Greek has the following monosyllabic minimal pairs distinguished by accent:

one sees that this is the predominant pattern of SQ "tones." Taken together, they indicate a predominantly *pitch accent system for PSQ. The PSQ suprasegmental system is explored in detail in chapter IV. An autosegmental representation of MC pitch phenomena is offered in Table 4.3.

4) The following lexical items show that the tones of a compound are not predictable given the tones of its component morphemes²³:

Table 2.21 Accent sandhi in Mianchi compounds

a. Disyllabic combinations

Low + Low:

L + L -> L-L	bzà + mù = bzà-mù	adult (big-person)
L + L -> L-L	dê+bzà = dê-bzà	expand, inflate (pfx-big)
L + L -> L-L	diò + bzà = diò-bzà	front gate, door (door-big)
L + L -> L-L	lò + bzà = lò-bzà	stone, boulder (stone-big)
L + L -> L-H	là + bzà = là-bzá	long month (calque) (month-big)
L + L -> L-H	zì + bzà = zì-bzá	bull ox (bull-big)
L + L -> H-L	tshè + mù = tshé-mù	wool (goat-fur)

Low + High:

L + H -> H-L	sù + ná = sú-nà	gums (tooth-red)
L + H -> H-L	lò + pǝí = ló-pǝì	flint (stone-white)

High + Low:

H + L -> H-L	lá + bzà = lá-bzà	eagle (eagle-big)
H + L -> H-L	mú + khuè = mú-khuè	warm self by fire (fire-put.near.fire)

High + High:

H + H -> L-L	tí + pǝí = tì-pǝì	panda (bear-white)
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τίσ, τί	who?, which?, what?	τισ, τι	any(one/thing), some(one/thing)
πῆ	by which way? where?	πη	in some way
ποῖ	whither?	ποι	to some place
ποῦ	where?	που	somewhere, anywhere; to some degree, perhaps
πῶσ	how?	πωσ	somehow, in any way, at all

²³ For a similar situation in Pumi, cf. Matisoff 1997.

b. Trisyllabic combinations:

High + High + Low:

H + H + L → H-L-L nǎ + nǎ + tsì = nǎ-nǎ-tsì bright red, glowing (red-red-sfx)
 H + H + L → H-L-L mú + phú + diò = mú-phù-diò tube to blow on fire (fire-blow-door)

Low-High + Low:

LH + L → L-L-H kǎ mú + phò = kǎ mù-phó almond tree (almond-tree)
 LH + L → L-L-L bè liú + bzǎ = bè liù-bzǎ bachelor (young.man-big)

Low + Low-High:

L + LH → L-L-H phò + zǎ piá = phò-zǎ piá bark of tree (tree-skin)
 L + LH → L-L-R dè + bzǔ bzǐ = dè-bzǔ bzǐ become smaller (pfx-small)

2.2.2 Longxi phonological inventory

The Longxi syllable has the same range of possible consonant, vowel and tone combinations as Mianchi, although the segmental and supra-segmental inventories are not identical.

Longxi: T
 (C) (R) (V_i) V (V_f / N)

R = /ʃ/

V_i = /i, u/

V_f = /a, i, u, e, o/

N = /n, (ŋ)/

2.2.2.1 Longxi initials

Simple Initials:

p	t	ts		tɕ	k	q	
ph	th	tsh		tɕh	kh	qh	
b	d	dz		dz	g		
(f/ɸ)		s		ɕ		ɕ	h
		z				ɕ	h
m	n			ɲ	ŋ		
m ²⁴				ɲ	ŋ		
w	l		ɹ	j			

Cluster Initials: bɹ gɹ

Table 2.1 Examples of Longxi initials.

p	pā	thick, wide	poú	CL for book	pú	drip
ph	phà	splash	phiá	picture	phù	news
b	bā	low	biè phà	young man	bó	flock
(f/ɸ)	fā sī	vow (v) (b)	fū tóu ~ fū tóu	broad bean (b)	fā	portion (CL) (b)
v	vù	thou	veí lià	yourselves		
m	mǒ	without	mà	CL for leaf	mú	dark
t	tà	wear (hat)	tuì	carry with pole	tó	cool

²⁴ The consultant claimed that this series of nasals were "emphatic," or fortis (not voiceless), and constitute a separate series; however, emphasis/fortis was not always apparent to the researcher. When the fortis quality was apparent, it sounded like pre-glottalization. Fortis nasals were recorded in the following words, although the sounds under consideration often sounded no different to the investigator than the unmarked varieties:

Qiang nationality	mà
pit, stone	mì
other person	mè i
buttonhole	ɲù mià (b?)
be	ɲù

Hereafter, these forms are recorded with the initials /m, n, ŋ/ respectively.

th	thà	that (less distant)	thuà	row (CL)	thó	soup (b)
d	dà	disappear	duà	lower half of body	dò gò	roll over
n	nà	good	nà	two	ní c̣j	yesterday
l	lià	thick (of paper)	là sà	song	lí kù	cubit
ts	mà tsà	glue	pià tsú	panda	pá tsù	flower
tsh	tshà	chisel, bore	tshù tshú	stomp feet	tshè	three
dz	dzù	plowshare	dzì	muscle, pulse	dzù	plowshare
s	sà	blood	suì qò	circle, linger	só	study
z	zà	net	zuè	target	zú zú	dissolve
ɹ	jà	write	ɹí quí	color	kuà jà	throw
tc	tcà	daughter, female	tcì	male	tcý	carry (money)
tch	tchá	shallow	tchò	bold	tché í	raise (hand)
dz	dzà	believe	(dzý) dzý	gasp	dzuà	mouth
c	cà	death	cì cí	tight	cù	harvest (v)
ɳ	ɳà	kiss	ɳí	black	ɳú	live (a life)
k	kuà	animal pack (CL)	kà	braid (v)	kú	suck
kh	khà	hand span	khù	dog	khú khuá	hot
g	guà	answer (v)	gà	pry	gú	nine
ŋ	ŋàn dà	doubt (b?)	ŋù	real, genuine	ŋú	silver
q	qà	I	què	pile up, fold	qó	drink
qh	qhà	bitter, salty	qhò	shoot	qhú	shed (skin)
χ	χà	smooth, slippery	χuá	thin (of person)	χò	kite, hawk
ɸ	ɸà	fish	ɸué	raise with hook	ɸèi	Han Chinese
h	hǎn dà	weld (b)	haó dà	hoe (v) (b)	hà há pù	yawn

fɿ	fà	down (pfx)	à fù	start	fà dzó	ten
bɿ	bjà	big	(hapax)			
gɿ	gò cì	sole of foot	(hapax)			

Comments:

1) Unlike Mianchi and other Qiang dialects, the distinction between dental and retroflex affricates and fricatives has disappeared, and the series /ts, tsh, dz, s, z/ freely varies with [tʂ, tʂh, dz, ʂ, z]. This loss of distinction has probably occurred under influence from Mandarin, for the local variety of Sichuanese also does not preserve this distinction.²⁵

2) /h/ only occurs in the two borrowings and the onomatopoeic form above, and in *hàN* *háN* 'corridor', where the origin of /h/ is unexplained, although one notes that /x/ does not occur as an initial on native syllables with nasal final. The nasalization may also have arisen due to "rhinoglottophilia," an affinity between nasals and glottal sounds, described by James Matisoff.

3) [thi] does not occur in LX or MC, except in the following borrowings:

LX	iæn thí	spleen (b)	MC	thí thiè ~ thí thì	antimony (b)
MC	lò thì	set of steps (b)	MC	thí	shave (b)
MC	ɲæn thì	spleen (b)	MC	thì khà	hoof (b)

It appears that in both MC and LX *thi > tchi. Since borrowings do not undergo this transformation, one may infer that this rule is no longer operational in LX or MC. [ti] may

²⁵ An observation based on the researcher's experience in Sichuan, and discussion with various researchers.

occur in native words (37 instances in LX and 50 in MC), such as the following:

(LX) tǐ-qhú	hard snot	(MC) tì kù	porcupine
(LX) kò tì	horse fodder	(MC) tí	straight

/tch-/ may occur before non-high-front vowels, as in the initials chart above.

4) [v] ~ [β] only occurs in words derived from Proto-Qiang (PQ) *u 'you' (cf. Ronghong Yadu /ʔũ/). Specifically, it occurs in ù [vù] 'thou' (and its compounds), ú-lià [vú lià] 'we (incl)' (and the dual form), and ué ì [vé ì] 'yourself' (and its plural and dual forms). There are two possible analyses of this sound to consider.

a) This sound represents a morpheme /v/. Note the following contrasts:

[vé ì] yourself	pè ì now	mè ì other person
-----------------	----------	-------------------

These near-minimal pairs are enough evidence to support the existence of a morpheme /v/. The downside of this analysis is that it adds a new element to the phonological inventory (one not present in other Qiang dialects), just to solve one difficult case.

b) This sound is an allophone of Ø- /#u. To support this claim, one may observe that a pure [u] never occurs word-initially. This rule has the advantage of not adding any new segments to the inventory, and also indicates the secondary origin of this rare sound. However, a u-drop rule will need to be written in order to get the reflexive form. Thus, I posit the following two ordered rules:

1. Ø > [v] / #u.
2. u > Ø / v_V.

Rule #2 indicates that /u/ is not pronounced when it is between [v] and a vowel.

In the interest of segment economy and phonological consistency with other dialects, I will employ approach b). 'Yourself' will be written /u^é ì/, etc.

As a lexical semantic aside, note that the first person inclusive plural/dual forms differ from the second person forms only by tone. The first morpheme of the first person exclusive forms is the word 'I'.

ù n̄.í	you two	ú n̄.ì	we two (incl)	qà n̄.í	we two (excl) ²¹
ù lià	you (pl)	ú lià	we (incl)	qà lià	we (excl)

5) As demonstrated in the chart of initials, LX's two consonant clusters each have only one appearance in the collected data. Note that within LX there are two forms for 'big', *bɹà*, *bà* and that MC has *bzà* for 'big'. The data suggest to us either that LX borrowed the cluster form from MC (or another dialect: Taoping has *bzà*³³) after LX had lost consonant clusters, or else that the *bɹà* form is autochthonous, and may be undergoing the process of simplifying the cluster initial. The case of *gɹò cì* 'sole of foot' is less clear. Other sources do not include forms for 'sole of foot', and searching other dialects, no similar form for 'bottom', 'edge', etc. has been found. Nevertheless, Jackson Sun (p.c.) has pointed out the following evidence to suggest that this form may reflect a TB root *gro 'foot': the rGyarongic forms *gro* (Yelong), *krschwa* (Mu'erzong), and the Taron form *groŋ*. The LX form could also reflect the STC root (r-)kaŋ, as TB *-aŋ > LX (and other dialects) /-o/ (*s-raŋ ~ m-raŋ 'horse' > LX *ɹò*, *maŋ 'dream' > *mò* (*zè*)).

2.2.2.2 Longxi rhymes

Vowels

Monophthongs:

<u>oral</u>			<u>nasal</u>			<u>voiceless</u>		
i, y	i	u	(iN)			i	{j}	ɥ
e	ə	o	(eN)	(əN)	{oN}			ɸ
(æ) ²⁶		a	(æN)		{aN}			

Diphthongs:

<u>Oral</u>			<u>Nasal</u>			
(ai)		(ao)	ie	iu io	ei {ye}	eu
			(iæ) ia			
ui		ou				(ouN)
ue		uo	ieN	ioN		
	ua		(iæN) iaN			(uæN) uaN

Triphthongs

{uei}	(iua)
(uai)	(iou)
(iuæN)	(iao)

Table 2.1 Examples of Longxi rhymes

i	mì iá	bad (character)	tɕì piá	cheek, chin	cí	(hit one) time (CL)
y	ỳ	chicken	pià cỳ	boar	lỳ cỳ	finger ring

²⁶ The vowel /æ/ only occurs nasalized or before a nasal final, except for derived environments, as in the third person INC marker /bæ/. All other instances are borrowings, except for tshà ɕuæN 'thrush' (imitative?).

e	sè	alive	pé	fathom	κə χé	awn of wheat
í	sí	who	jà ká pà tsì	bone	zí zá	crevice, crack
ə	fiá	thick (porridge)	cuə	moss	ə ~ á	CL for rope
a	ná	a little (CL)	qhà	bitter, salty	zǎ	bleat
u	kú tù	grain measure	sù	tooth	pú	buy
o	bò bò	tingle	dà qò	tired	có	lean on
(æ)	iæn dá	grind (Ch. medicine)	iæn tshe í	pickle vegetables	iæn thí	spleen
(iN)	khè líN	bell (b)	phìN	bottle (b)	tcuè tíN	decide
(eN)	toèN	alkali (b)	thou cèN	surrender (b)	(only these two forms)	
(æN)	χò cǎN	fennel, anise (b)	phàN tsì	plate (b)	nə-tchàN	two dollars (b)
(əN)	táN lòn	lantern	(hapax)			
{aN}	pàN bá qə	thumb	hàN hán	corridor	mán lán lán	cymbals
{oN}	lòn	CL for clump of trees	á còN	younger brother	fón	letter (CL. b)
ì	ní cǐ	yesterday	dzá tcǐ	next year	iæn ³⁵ tchǐ	admire, envy (b)
{j}	pe í tsǐ tsǐ	shiny blue	ì dzí sǐ	front side	(sǐ) tchǐ tchá	redeem. ransom
ə	ν.í (χə χə)	purple	qù lá qə	straight, upright	zə mə cǐ	set on fire
ɸ	phò-jà í-mù	tailor	mù bá bà	old woman	dá mù	fog
(ai)	paì dà	discuss (b)	tsha í dà	guess (b)	qài à tcì pú	a few years ago
(ao)	thao ³⁵ dà	match (clothes) (b)	gaǒ dà	pry (b)	khao ³⁵ dà	rely on
ie	liè mì	arm	də pié ν.í	black soybean	qə tiè	blow up
iu	qhə-iú	anus	tə iú	enlarge	iú	grow

ia	pià	pig	íá	ache	tà liá	admit
(iæ)	jæn ³⁵ tchj	admire, envy (b)	iæn tshe í	pickle v(t) (b)	iæn thí	spleen (b)
io	ió	convince	pió sú	father's y. brother (b)	ió ì	her- /himself
{ye}	cyé tsì	boot (b)	fià dzyè dzy	broken to bits	cyé dà	peel with knife (b?) (only these forms)
ei	kèi	Han Chinese	nei ³⁵ dzì tsí	last night	mù pèi	old man
{eu}	deú kù	forehead	(hapax)			
əi	à tshəi	hundred	tsəi	barnyard grass	kò-bəi	reins (horse- rope)
{ui}	suì qò	circle, linger	tuì	carry with pole	guí sè	clothing
ue	tuè	accord with	suè	ache	què	bundle (CL)
ua	íó qhuà	upper half of body	kuà sà	monkey	zuà ká	buckwheat
{uo}	suò bó	coffin	(hapax)			
ou	tchòu	bundle	tshòu	carry	pié tshòu	pig trough (b?)
{iaN}	tiàN	drop of (CL) (b?)	iàN χó	matches (b)	piàN zú	piglet
(ieN)	ià phièN íá	opium (b)	tiéN mà	tuber of elevated gastrodia (b)	(only these)	
(iæN)	phièN	CL for page (b)	mièN χuá	cotton wadding (b)	ièN tchì	envy (b)
{ioN}	ióN	comfort, console	(hapax)			
(uæN)	cuèN	tinea (b)	tshà kuèN	thrush	lòN dzuæN	bamboo steamer (b)
(uaN)	khuán	basket(CL) (b)	tsuán	brick (b.)	(only these mor- phemes)	

(ouN)	moùN	mǔ (measure of land (b))	(hapax)			
(iua)	ỳ-iuà kù	chicken shed (b)				
(iao)	thiào tèn	conditions (b)	thiào pò-pù	instigate (b)	thiào ká	spoon (b)
(iou)	sì lióu	pomegran- ate (b)	iàN lióu- phù	willow tree (b)	(only these)	
{uei}	kuèi tçy	rule, custom (b)	suei ³⁵	taxes (b)	dzuei	seed
(uai)	kuai ³⁵ -dà	blame so. (b)	kuai ³⁵ -dà	strange, odd (b)	(only these two forms)	
(iuæN)	iuæN bá	courtyard (b)	(hapax)			

Notes on forms given above:

1. The initial syllable of 'a few years ago' (/ai/) is not a borrowing, but of secondary origin, likely from /qe i/.
2. /iæ/ and /uæN/ only occur on the three forms given here.
3. In addition to the /ui/ forms given above, there are merely two other occurrences of this diphthong in Longxi: *ʃí quí* 'color', *tui* 'spit (phlegm)'.
4. /iua/ only appears in this borrowed morpheme for 'animal shed'. Note that the tones on this syllable change with regard to the animal term it is compounded with:

chicken shed	ỳ-iuà kù
cow shed	sì-iuà kù
horse shed	ʋò-iuà kù ~ ʋó-iuá kù
pig shed	piá-iuá kù

All four animal terms are low-toned when free-standing; 'horse' and 'pig' are high-toned in some compounds. I interpret this as a perseveratory pitch height rule affecting the first syllable of the borrowed component. Such a rule has not been noticed in any other segment of the Southern Qiang lexicon.

Comments on coda-less rhymes:

1. /æ/ is included with plain vowels because it is redundantly nasalized.

1) /e/, /ei/ is clearly a phonemic distinction, as seen in the following minimal pairs:

<i>peí</i>	green	<i>pé</i>	fathom
<i>χeí</i>	on (the wall)	<i>χέ</i>	awn (of wheat)

Nevertheless, in some cases, /e, ei/ is not a stable distinction. There are a few forms which allow free variation between /e, ei/:

<i>queí ~ qué</i>	abundant (methods)	<i>χέ ~ χèi</i>	needle
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Every form cited in the lexicon containing /e, ei/ has been pronounced at least one time with the given vowel, although some forms may allow variation, and not all variation is marked. This distinction does not hold for the PSQ level.

2) /ou/ ~ [əu]. /u/ ~ [ʊ]

3) /y, u/ are separate phonemes, even maintaining distinction after palatals, as the following minimal pairs show:

<i>lỳ</i>	roll up (fabric)	<i>lú</i>	blend with water
<i>cỳ</i>	fishy smelling (b)	<i>cù</i>	harvest (v)

However, there are restrictions on the environments in which each may occur. The vowel /y/ occurs only after palatals, /th, d/ (both hapax), /l/, Ø. The palatal environment is by far

the most common. /y/ is more common in LX than in MC, with 129 instances (4.0% of corpus), as opposed to MC's 49 (1.6%). Although /u/ may occur as a rhyme after palatal initials in either dialect, /u/ does not occur medially after palatals in either LX or MC.

4) /i/ occurs after sibilants as [ɿ] and after their retroflex free variants as [ɿ̥].

5) Voiceless vowels in LX and MC are characteristic of certain syllables. They are not truly distinctive (no minimal pairs), but are stable non-predictable features in some words. In both LX and MC, they usually follow high tone syllables. In LX, reduplicated syllables that are voiceless can often be pronounced voiced, in which case they occur with a low tone. LX has the following restrictions on the occurrence of voiceless vowels.

i̥ / /tch-, c-/ _ (14 occurrences)

ɿ̥ / /s-, ts-/ _ (4 occurrences)

ə̥ / {[+sonorant], [-voice, + stop/+ fricative]} _ (8 occurrences)

u̥ / /p-, ph-, m-, t-, ts-, s-/ _ (21 occurrences)

6) In a manner similar to that observed in MC and Northern Qiang, there is some interchange between final /-ə̥/ and the syllable /rə̥/. E.g.,

rust *cà-qhə̥* ('iron-feces') vs. feces *qhà jə̥*

Coda Finals: /n, (ŋ)/

Unambiguous native codas are rare. That is, almost all final /-n, -ŋ/ are either borrowings, or are followed by a homorganic initial, so that distinguishing between VN

[V] and Vn/Vŋ is not possible. There are no unambiguous examples of /-ŋ/, and only two for /-n/, both of which follow the vowel /a/:

tshàn bù cì often *cuá qàn bè* sunrise

2.2.2.3 Longxi Tones

Inventory:

The following five tones are attested with the indicated frequencies (total of 6150 syllables in 3247 entries):

mà	Mid or Low-falling (L) (ma ³³ ~ ma ³¹).	(3912 instances)	63.61% of total
má	High level tone (H) (ma ⁵⁵).	(2173 instances)	35.33%
mǎ	Low (falling) rising (R) (ma ¹³ ~ ma ²¹³).	(43 instances)	0.70%
ma ³⁵	Mid-rising tone (M).	(19 instances)	0.31%
mâ	High-falling tone (F) (ma ⁵¹).	(3 instances)	0.05%

Table 2.1 Examples of Longxi tones

L	mà	leaf (CL)	zì	stick (CL)	fià sè	fade
H	má	like (to V)	zí (bè)	enough	fià sé	thirteen
R	mǎ	without (v.i.)	tsǒ dà	file down (b)	kuǎ tà	cry out
M	mo ³⁵	disappear	t ³⁵ dà	deep fry (b)	ku ³⁵ tà	use, employ
F	kò lú	stone	tcēN	alkali (b)		

The third instance of the F tone is non-phonemic, and is discussed below.

As in Mianchi, the H and L tones together account for over 95% of the syllables in the corpus of data. (MC: 95.2%, LX: 98.9%). In LX as in MC, the Low-Falling tone is much more common than the High tone. Longxi does not restrict the number of High tones in native words, so the difference in frequency between High and Low-Falling tones is not

as great as in MC (in MC the relative frequency of L to H tones is 2.4:1, whereas in LX it is just 1.8:1). Due to this lack of restriction on co-occurrence, LX is a true syllabic tonal system ("omnisyllabic" Matisoff 1998), with two primary tones and three rare tones (accounting for less than 1.1% of the corpus).

The R tone, while accounting for only 0.7% of the total number of entries, cannot be ruled out as merely secondary, the result of borrowing, etc. Observe the following corresponding forms in Longxi and Mianchi (the third example is a probable cognate, not definite):

<u>gloss</u>	<u>Longxi</u>	<u>Mianchi</u>
bleat, grunt, etc.	zǎ	zě
call	kuǎ	kuǎ
explain, notify	ǎ	quà tè ǎ zì ('instigate')

Origins of this tone are explored in depth in 4.4.6.

The Mid-rising tone more clearly appears to be secondary. Out of nineteen instances, fourteen are probable or definite borrowings. Three of the remaining lexemes are the following '-day' terms (for comparison, and probable origin of these syllables, I also have included the Mianchi forms):

<u>gloss</u>	<u>Longxi</u>	<u>Mianchi</u>
tonight	pei ³⁵ dzì tsí	pè gié tsí
tomorrow night	tà pei ³⁵ dzì tsí	tà péi giè tsí
last night	nei ³⁵ dzì tsí	nè gié tsí

In this set, each of the M toned syllables appears to be a conflation of a syllable (probably cognate to MC gié/giè), along with the morphemes for 'today' (pú cǐ), 'tomorrow' (tà bǎi cǐ), or 'yesterday' (ní cǐ), respectively. At this time, I have no explanation for the origins of the M tone in the remaining two forms ('disappear', 'use, employ', (cf. tone chart, above)), although 'use, employ' replaces a M tone with a R tone on the first syllable of the passive form. Although these two forms are not yet explained, nevertheless, for seventeen

out of nineteen forms (89%), the M tone is clearly of secondary origin.

For the F tone, the third instance (two are given in the chart above) is sub-phonemic, and shows the probable route of development of the tone in the one remaining autochthonous F tone word: *zá ká mỳ* 'armpit' (/ká mỳ/ ~ [kâm]). Unlike 'armpit', 'alkali' it is not evident that the contour tone on *kò lû*, 'stone' is of recent origin. Observe that Taoping has *kò²⁴¹* 'stone', also employing a contour tone. In section 4.4.6 I present further evidence for a shared origin of contour tones in SQ dialects.

In LX, as in MC, tones in a given word often vary. Most instances are verbs, and the variations may be affected by differences in tense/aspect/mood/voice. There does not appear to be any predictability to this variation.

simmer	qó ~ qò
funny, amusing	χuá dā ~ χuà dá (b?)
heat (rice)	dá ~ dà

In addition, there is tonal variation in some classifiers and adjectives:

rope (CL)	ə̂ ~ ə̃
row of grain (CL)	lú ~ lǔ
heavy (of color)	ɳí ~ ɳì

Words for the fingers also lack stable tones. During at least one session, I recorded the following (note that all but "index finger" have low tones on the first morpheme):

finger	lià cú	ring finger	liè-ná
middle finger	liè-sé	little finger	liè-tsá, liè bé
index finger	lié cú		

However, during another elicitation session, the consultant recited all of these forms with H tones on all syllables.

Other morphemes have stable variants; that is, the tones differ according to the

compound, but each compound has a stable tone pattern. The following 'sheep' words are compounds in which the tone of the 'sheep' morpheme cannot be predicted from the environment:

sheep	ió ²⁷	lamb	ió mù tsù
ram	iò dò	wild herbivore	iò ʒó
ewe	iò mià	Mongolian gazelle	κò-ió 'horse-sheep'

2.2.3 Taoping phonological inventory

Aside from LX and MC, the Southern Qiang dialect with the most extensive lexical data is Taoping (TP), which has been chosen for comparison with MC and LX. It is more similar to MC, but its initials are more conservative. Among these three dialects, the correspondence of initials is much more straightforward than that of rhymes or tones. I first present Sun's phonological inventory of Taoping (ZYC, pp178, ff. Taoping data are from ZYC and Sun, 1981.):

2.2.3.1 Taoping initials

Simple Initials²⁸:

²⁷ PTB *yaŋ ~ yak.

²⁸ There is no special indication of borrowed morphemes or phonemes in this source. However, /f/ clearly occurs only in borrowings (as in MC and LX). Italics indicate segments that are not phonemic.

p	t	ts	tʂ	tʃ	tc	k	q
ph	th	tsh	tʂh	tʃh	tch	kh	qh
b	d	dz	dʂ	dʒ	dz	g	G ²⁹
(f)		s	ʂ	ʃ	c		χ
		z	ʐ	ʒ	z		ʁ
m	n				ɲ	ŋ	
	l						

Consonant Clusters: χp, χb, χm, χt, χd, χn, χtʂ, χdz, χtʃ, χdʒ, χtc, χdz, χn, χk, χg, χŋ, χq, χG, pz, phz³⁰, bz, pʐ, phʐ, bʐ.

Comments:

1) The alveopalatal series [tʃ, tʃh, dʒ, ʃ, ʒ] is allophonic of the palatal series, occurring only before the apical vowel /ɿ/. There are two counterexamples of this rule in the data in ZYC, [ɕe⁵⁵ 'die', and χdʒi³¹ 'throw'. Given the overwhelming number of syllables that conform to our rule (thirty-eight out of forty), these two forms appear to contain errors. 'Die' is also the only instance of /ʃ/ in TP.

2) As in Northern Qiang, Taoping χ- assimilates to the place and voicing of the following initial. Combinations of χ + nasal are often pronounced as voiceless nasals. Many of the χ- clusters come from the PTB *s- prefix.³¹

3) Based on the observations and discussion of Mawo (2.1.2.1), and on the auxiliary Southern Qiang dialects recorded in Chang 1967 (especially Wasi, Jiuziying, Ruodazhai), it is clear that the /χ/ pre-initial assimilates to the voicing of the following initial; e.g., /χp, χb/

²⁹ Occurs only in χGa²⁴ce³³ 'gnaw'.

³⁰ This cluster appears in the segment inventory, but not in the published data. It may be missing due to a typographical error, or may have occurred in a word that did not appear in the published list.

³¹ Thanks to James Matisoff for this observation.

= [χp, ɤb], etc.

2.2.3.2 Taoping rhymes

Open syllables:

Monophthongs:

l		u
i, y		o
e	ə, ə'	ɑ
a		

Diphthongs:

ie	io	yi	ye		uə		ua		uɑ
	ia		ya				yɑ ³²		

Triphthongs:

(ei)			(uai)
	(əu)		(iəu)
	(ai)	(ɑu)	(iɑu)

Comments

1) The apical vowel /ɿ/ occurs after dental, retroflex, and alveopalatal (palatal) fricatives and affricates. Given this wide distribution, /i/ would be a more accurate representation. I have not changed the original transcription.

2) /y/ is more common in TP (108 instances, accounting for 10.7% of the data) than in LX

³² Occurring only in last syllable of three plural pronouns; e.g., qa³¹thya⁵⁵ 'we'. Possible over-transcription.

or MC, and occurs in wider environments. As with the other dialects, /y/ may occur after palatals and Ø. In addition, medial /-y-/ may follow /th, tsh, s, kh, χ/, and vocalic /y/ may occur after /d, z, l, χg, χd, χtʰ/.

3) Nasalized vowels are not recorded for Taoping.

Coda-bearing syllables:

in, an, un, ən, yn, ian, uan, yan, iŋ, aŋ, uŋ, əŋ, iəŋ, uaŋ, uəŋ.

2.2.3.3 Taoping tones

Inventory:

The following six tones are attested with the indicated frequencies. Total number of words = 1008³³ (1754 syllables):

a ³³	764 instances	43.6%	a ²⁴¹	94 instances	5.4%
a ⁵⁵	495 instances	28.2%	a ¹³	43 instances	2.5%
a ³¹	337 instances	19.2%	a ⁵¹	21 instances	1.2%

The three tone categories in the left column account for 91% of the data, similar to the percentages in the other two dialects for the frequency of the principal tones. If the 33 and 31 tones are considered as one tone (as they are in LX), then the ratio of this tone's frequency (1101 out of 1754, or 62.8%) to that of the 55 tone (495/1754 = 28.2%) is 2.2:1, a figure comparable to MC's ratio of 2.4:1.

³³ I have attempted to eliminate all redundant entries between the two sources. Note that the two sources are based on the same body of data.

2.2.4 Other Southern Qiang Dialects

Data from the auxiliary Southern Qiang dialects are presented throughout the subsequent chapters. Due to the small amount of data available, it is not feasible to perform an in-depth systematic comparison between these dialects and the key dialects. Some of these dialects have unusual phonological traits, such as fortis/lenis obstruents, that no doubt occasioned the quote from Shafer that heads this chapter. In **Ruodazhai** (Wen 1945:129) all vowels except /y, æ, ə/ occur with both rounded and unrounded variants; minimal pairs are presented below alongside Qiang cognates. For the first pair, 'throw away'/'dry in sun', Longxi appears to preserve a conditioning environment for lip rounding. However, for the other forms, there is no indication what features in PQ or PSQ might correspond to Ruodazhai lip rounding. In the following table, 'rd' indicates lip rounding, 'pl' indicates plain articulation, and underlined initials are fortis (cf. 3.3.1.9).

gloss	Ruoda-zhai	Longxi	Mianchi	Taoping	Jiuziying	Mawo	Yadu
throw away	ɤdz̥i (rd)	s̥ɬ dzuá		ɣdz̥i ³¹	ɤdzi (attested in Chang 1967: p429n)		zdzu
dry in the sun	ɤdz̥i (pl)	zɛ́	ɣɛ́ dz̥í	dz̥i ³³	<u>dzi</u>		
wide	le (rd)	lá	lá	lie ³³	lə (ka) ('thick')		la
accuse, report on	le (pl)	lá	lé		lə sɿ		
chisel	dzo (rd)		zò		ts'o		ɤzue
to sit	dzo (pl)	fià zú	dzó	dzo ³³	dzo	dzu	ɤzue

gloss	Ruoda-zhai	Longxi	Mianchi	Taoping	Jiuziying	Mawo	Yadu
blood	sa (rd)	sà	sà	sɑ ³³	sa	sɑ	sɑ
who	sa (pl)	sí	sí lè	sɿ ⁵⁵	sa ti	sə	sə
kill	tshu (rd)	tsò tsó	tsì teá	tʃɿ ³³	tʃ'u	tʃə	tʃə
jump	tshu (pl)	tshó (tà)	soú	tshu ³³	?ts'u	qhsu	qhsu qhsu

I am not aware of this phenomenon occurring in any other dialect.

Wen's brief phonological inventory and glossary of Jiuziying (Wen 1950b) is a phonetic and lexical thumbnail sketch of a Southern Qiang dialect before a drastic increase in the linguistic pressure on Qiang that has been exerted by Mandarin Chinese since 1949. Although tones are not recorded, it appears to be phonetically very precise. In addition to the lexical data, there are a few sentences with word/morpheme glosses scattered throughout the lexicon.

In the 1940's Jiuziying was undergoing cluster simplification via the loss of certain pre-initials. Wen 1950:20 documents this in the case of pre-initial /ɸ/, which "is always optional due to its lightness, e.g. /ɸza/ (easy) sometimes /za/. It is regularly omitted in juxtaposition, e.g. /ɸbe ɸbe/ [ɸbe be] (bent)." This kind of simplification of the SQ syllable canon has played an important role in the genesis of tones (cf. 4.4.3).

Jiuziying shares a number of allophonic properties with Mianchi (cf. 2.2.1.1). A characteristic of Jiuziying obstruents not found in the key dialects is the fortis/lenis distinction on the aspirated and voiced affricates; e.g., /ts'i/ 'to replace', /tɕ'i/ 'three'. Fortis initials come from PQ *velar and *uvular pre-initials (cf. 3.3.1.9). Jiuziying has voiceless nasal initials, which come from PSQ *χm- / *sm-:

<u>Gloss</u>	<u>Jiuziyang</u>	<u>Taoping</u>
pine	mi	χmɔ ⁵⁵
smell (v.)	(ty) mie	χmi ⁵⁵
snot	pe	χni ⁵⁵ tsuə ³³
seven	py	ciŋ ³³

2.3 Conclusion

In this chapter I have presented not only the phonological inventories of the five key dialects, but also the special problems their transcriptions provide. In the next chapter I will discuss the diachronic phonology of Southern Qiang, and examine the special problems that it presents.

Because of the great degree of lexical divergence between Northern and Southern Qiang (only about 60% cognacy among 1800 commonly used words (*QYJZ* p182)), because of the phonological differences (e.g., simplification of clusters and tonogenesis in Southern Qiang, presence of finals in Northern Qiang), and because comparative Qiang studies are only at a rudimentary level, I have chosen in this dissertation to reconstruct Proto-Southern Qiang, rather than comparing Northern and Southern Qiang dialects directly. This method allows exploration and definition of the unique aspects of Southern Qiang, some of which would be lost by direct comparison with the Northern dialects, which are generally more conservative. The following chapter presents the methodological issues involved in reconstructing PSQ, as well as a systematic presentation of PSQ *initials, *rhymes, and *tones.

Chapter III. Phonological reconstruction of Proto-Southern Qiang

"Ch'iang has been very badly altered phonetically, has many phonemes difficult to record, and has formed some compounds which -- because of the degenerate phonetic state of the language -- are difficult to recognize." (Shafer 1974)

"From the forms of some words, the Ch'iang seems to be older than the Classical Tibetan." (Wen 1941:71)

3.1 Introduction

This chapter aims to uncover the phonological relationships among the three key Southern Qiang dialects (Taoping, Longxi, Mianchi) and to propose the most economical phonological proto-system to account for their similarities and differences. While the primary data will be taken from these three dialects, we will allow ourselves to "peek" at Northern Qiang data to resolve ambiguities. This method allows us to identify initial clusters that are no longer directly evident in Southern Qiang dialects, but must have been present at the time of PSQ. It also enables us to resolve ambiguous rhymes when data from a key dialect are missing (cf. the assigning of 'wrinkle' to *ui, rather than *y, 3.3.2.2). We will also consult the Southern Qiang data presented in Chang 1967 ('SQD'), which includes the dialects Wasi, Lobuzhai, Zengtou, Jiuziying, Ruodazhai¹.

3.2 Methodological issues and reconstruction philosophy

Correspondences in Qiangic are often not as straightforward as a researcher would hope. A number of factors are at play that make comparison difficult. The observations made in this section about Qiang apply to many other languages in the Qiangic branch.

At this time nothing is known about Qiang dialect mixture or migration patterns, aside from some references in Chinese historical documents, where it is not clear to this

¹ Chang also includes data from Taoping (H. Sun 1962), but this is redundant with the other Taoping data.

author that the group being referred to is the same as that which is today called "Qiang." These sources do make it clear that the Qiang have migrated both toward and away from the Chinese-speaking cities in their area. Little to nothing is known of the influences of languages other than Chinese (primarily on Southern dialects) and Tibetan (on Northern dialects), and it further remains unknown what other forces have shaped the phonologies and lexica of Qiang dialects.² For these reasons, I have taken parallel tacks in presenting cognate sets: in the support for each proto-segment, I first present the exemplary sets which follow the rules without exception. After thus establishing the phonological relationships among the dialects, I then present imperfect cognate sets (where these exist), in which not all phonological developments adhere to the established rule. Given the undeveloped state of the field, there are defective sets which are still "too good to throw away." Some of my sets will no doubt be revised by subsequent research; nevertheless, I wanted to provide here a basis on which such research may commence. Forms whose cognacy is in question are put in curly braces.

Not all reconstructions are equally definite. In some cases cognates are missing from key dialects. In addition, there are sets with inexplicable variations. Even sets that have a clear parent form in PTB may have problematic reflexes in at least one dialect (e.g., the reflexes of PTB *-wa, 3.3.2.2). The most difficult segments to correlate are generally rhymes, due to vowel harmony in some non-final syllables, and to unknown factors. In cases where the vowel is indefinite, *V will be given in the reconstruction. If it appears that the proto-vowel should be low, toward the upper front, or toward the upper back, then *A, *I, *U will be used in the reconstruction. For supporting forms where one dialect has an aberration in its reflex, the comments '(I!)', '(R!)' will be used to signal divergences in initials and rhymes.

² E.g., the extent of borrowings from the closely related languages of rGyalrong and Xixia.

Reconstructions are provided in the appendix, arranged and numbered by English gloss. The *initials, *rhymes and *tones/accents are provided in three separate columns, with all possible reconstructions given for each position. For *tones/accents, I have used the following convention:

- a) If all dialects have the same pitch, then it is reconstructed unchanged.
- b) If a majority of dialects agree on the *tone/accent, but there is counter evidence from one dialect, then the *tone/accent is reconstructed as 'L?' ('Low'), etc.
- c) If the *tone/accent is ambiguous, then it is given as '-'.

The reconstruction of PSQ *suprasegmentals is quite complicated, and discussion is reserved for Chapter 4.

Sound laws and reconstructions provide a foundation for comparison with Northern Qiang; Appendix A presents NQ cognates alongside SQ etymological sets. This dissertation lays groundwork for reconstructing proto-Qiangic, and for doing principled sub-grouping of the entire branch. Nevertheless, it must be stated that even at the micro-level undertaken here, many questions arise as to the strength of attestation of certain roots, and many sound laws are far from regular for one dialect. Because of these irregularities at even the micro-level, I maintain that it is too ambitious to try to reconstruct Proto-Qiangic, or even Proto-Qiang (combining Northern and Southern dialects), without laying out clearly the relationships and correspondences which are described in this chapter. The primary purpose for dividing these two dialect groups and examining just one of them is to discern the lexical and phonological properties of intermediate stages, observations that would be lost if Proto-Qiang were reconstructed directly from the extant dialects. Nevertheless, as an aid to further research, I have included PTB roots from *STC* and from the *STEDT* project alongside the supporting forms. I have indicated with a question mark those PTB roots that may not be cognate to the Southern Qiang forms.

The order of presentation of *segments is the same as for the synchronic discussion in Chapter 2, namely *initials followed by *rhymes, with supporting forms given for each. For each reconstructed segment there is given an estimate of the total number of supporting sets, to provide the reader with an additional measure for determining the strength of attestation. Because of the complexity of the genesis of tones in SQ, I will address super-segments in the following chapter.

As mentioned above, it has seemed best to me to include not only the exemplary sets, but also some of the 'bad' correspondences: sets in which one or more of the supporting forms is divergent from the sound laws, but nevertheless appears to be from the same etymological root. As an example, I cite the following, in which the second syllable of Longxi has inexplicably lost its initial. Note, however, that it has the same tonal pattern as Mianchi, and the same initial syllable as Mianchi and Taoping.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PSQ</u>
now	pè ì	pè tì	pə ³¹ tì ⁵⁵	*pè ti (L?) ³

In the data there are many semi-regular sets similar to this one. For aberrant supporting forms such as the Longxi form cited here, much would be lost by their exclusion, and a more in-depth understanding of Southern Qiang dialectology is gained by their inclusion. Nevertheless, whenever possible, I will use exemplary sets to establish the validity of proto-segments before presenting more marginal correspondences. As mentioned above, aberrancies in support are indicated in the reconstructions, with irregular reflexes tagged by '(I!)', '(R!)', and '(T!)' to indicate unexplained initials, rhymes, and tones, respectively.

In cases where supporting forms disagree on a particular segment, such as the

³ In this reconstruction, the pitch of the first syllable is uncontroversial, it is marked in the same manner as Longxi and Mianchi Low tones/pitches. The tone of the second syllable is only probable, and is thus given after the segmental reconstruction, and is followed by a question mark. For many PSQ roots, it is not possible to reconstruct the *tone/pitch.

vowel in the initial syllable of 'now' (above), the unambiguous support of two forms is taken as indicative of the proto-form. Thus, PSQ 'now' is reconstructed **pe ti*, and not **pə ti*. In cases where the supporting segments (usually vowels) are wildly divergent, the aforementioned cover vowels **I*, **A*, **U*, and **V* will be used.

The purpose of these methods is to demonstrate the strength of attestation of PSQ proto-segments and proto-forms, as not all reconstructions are created equal.

3.3 PSQ phonological system

Proto-Southern Qiang appears to have had a relatively simple syllable canon, not much different from that found in extant dialects. As a maximal syllable, PSQ had an initial two-consonant cluster followed by a diphthong:

$$* (C1) (C2) \overset{T?}{V1} (V2)$$

For each dialect, segmental changes do not occur in isolation, but certain patterns may be observed; e.g., all three dialects tend to palatalize **dentals* before high front vowels. In all three dialects labial, uvular, and **ŋ* initials are unchanged from their PSQ reconstructions. There is no evidence in any dialect for PSQ ***gi*,⁴ ***ki*, ***ŋi* (but **khi* 'owe'), or ***ŋə*. The following three paragraphs summarize the changes to be found in each of the key southern dialects.

Longxi always palatalizes **dentals* and **velar stops* before high front vowels, except for **z*, as [z] does not occur in Longxi. All **retroflex* obstruents have become dentals, although Longxi preserves **r* as a retroflex approximant (the other two dialects have lost evidence that PSQ **r* was distinct from **z*). Most **palatals* have become dentals

⁴ Taoping has *χgie*²⁴¹ 'stone' which contains the sequence /gi/. For irregularities related to this rhyme, see discussion under **velars*, section 3.3.1.5.

before /i/, just as Proto-Lolo-Burmese *palatals have become dentals in the same environment in Lahu (Matisoff, p.c.). Longxi and Mianchi give evidence for *fi, but only two cognates have been discovered so far. All *cluster initials except for *br, *gr have been simplified to phonemes similar to one of the components of the *cluster. Thus, in most cases (*bz, *br, *sl, *χl, *χd, *χm), Longxi has more than one possible reflex of the cluster. For *χl, the initial has broken into two syllables (e.g., *kò lû* 'stone' PTB *r-luŋ (STC 88)). For *sl, evidence for the *cluster is preserved by free variation (*sì cuà* ~ *lè cuà*, 'moon' PTB *s-la (STC 144)). In Longxi, as in the other two dialects, *monophthongs are mostly unchanged, although Longxi and Mianchi do not preserve a distinction between *a and *ɑ. Nevertheless, there is often unexplained variation in the reflexes, which is due in part to vowel harmony processes that have not been applied evenly throughout the lexicon (cf. 2.3.1). Most *diphthongs have become monophthongs. Longxi and Mianchi /y/ does not appear to be relatable to PSQ *y, unlike Taoping.

Mianchi preserves *velar stops unchanged. It palatalizes much less regularly and extensively than Longxi, with only *l and *dz affected.⁵ As in Taoping, *r > /z/. As in Longxi, PSQ *c has become /s/ before /i/. Although Mianchi has more preserved more distinctions than Longxi in its consonantal inventory, it has irregular reflexes for *bz, *phr, *br, *χtɕ, *χdz; thus, with regard to clusters, it is about as innovative as Longxi. Except for unpredictable changes in *y and the loss of the *a/*ɑ distinction, monophthongs are unchanged from PSQ. Mianchi has evidence for seven out of nine *diphthongs.

Taoping is the most phonologically conservative of the three dialects, especially with regard to clusters and vowels (e.g., preserving the *a/*ɑ distinction). Nevertheless, in the expected environments it palatalizes dental stops and nasals, as well as voiceless retroflexes and velars, while palatals are unchanged. It directly preserves seven out of nine

⁵ It may in fact be said to resist palatalization by hyper-correcting borrowings, as in Mianchi *ké*, Longxi *tcí*, Taoping *tce*³³ 'catty (half kilogram)' (Mandarin *jī* [tci⁵⁵]).

*diphthongs, but maintains no trace of *fi.

3.3.1 Initials

Following my reconstructions of PSQ proto-initials are the ones offered by Kun Chang (*SQD*, pp339-40). There are some striking differences between the two systems, which are discussed below.

The simple initials of PSQ are as follows:

Table 3.1 Proto-Southern Qiang initials⁶

	labial	dental	retroflex	palatal	velar	uvular	glottal
vl. stop	*p	*t			*k	*q	
asp. stop	*ph	*th			*kh	*qh	
vd. stop	*b	*d			*g		
vl. affric		*ts	*tʂ	*tɕ			
asp. affric		*tsh	*tʂh	*tɕh			
vd. affric		*dz	*dʐ	*dʒ			
vl. fric.		*s	*ʂ	*ɕ		*χ	
vd. fric.		*z	*ʐ	*ʒ		*ʁ	(*fi)
nasal	*m	*n		*ɲ	*ŋ		
approx.		*l	*ɭ				

Chang reconstructs the following simple initials:

⁶ Parentheses in charts of *consonants and *vowels indicate proto-segments with two or fewer supporting sets.

Table 3.2. Proto-Southern Qiang initials (*SQD*)

	labial	dental	palatal	retroflex	velar	uvular	glottal
vl. stop	p	t			k	q	
asp. stop	ph	th			kh	qh	
vd. stop	b	d			g	g	
vl. affric		ts					
asp. affric		tsh					
vd. affric		dz					
vl. fric.		s			x		h
vd. fric.		z			ɣ		ɸ
vl. nasal	mh	nh			ŋh		
vd. nasal	m	n			ŋ		
vl. approx		ʈ					
vd. approx	w	l	j	r			

The primary differences between these two systems are that I posit *palatal and *retroflex fricates where Chang reconstructs *clusters, and that Chang proposes voiceless *nasals and *lateral where I reconstruct *s- clusters. Differences between these two systems will be evaluated in the discussion of each series. Support for some of Chang's reconstructions is weak: he admits,

"I do not have enough examples to support all the initials that I suggest for the proto-language. In some cases, however, the reconstructed initials are sufficiently reflected in these dialects." (*SQD* p439)

3.3.1.1 Labials

Labials are unchanged in all three dialects.

*p > LX, MC, TP /p/ (about 32 sets with reflexes in at least two dialects)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB (STC #)</u>
pig	pià	pià	pa ³³	*pwak (43)
skin	jà piá	zà piá	z a ⁵⁵ pa ⁵⁵	*p(w)ak (JAM)
snow	peì	mù pà	m ə ³¹ p a ⁵⁵	*p-wal (JAM-LITB 8.0)
hole	zà pù	z è pù	z a ³³ p u ³³	*puŋ (STEDT)
cheek	tèi piá	tèi piá	tʃɿ ³¹ p a ⁵⁵	*s-bi ≠ s-bay (STEDT)
body	cì pí	cì peí	ce ⁵⁵ pe ³³	
buy	pú	dè pó	po ⁵⁵	
do	pù	pù	pu ³³	
old (of people)	(fià) peì	(à) peì	p ə ³³	
thing	pà nà	pà nà	p a ³¹ n e ³³	
tomb	mú pú	mé pù	m ə ³¹ p ə ⁵⁵	

*ph > LX, MC, TP /ph/ (about 15 sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
blow (with mouth)	phú	phú	phə ³³	*pu (JAM)
price	phù	phè	phə ³³	*pəw (41)
swell up	phú	phò	t ə ⁵⁵ ph o ³³	*s-bwam (172)
clothing	phò	phù	ph u ⁵⁵	
plant (wheat)	phià	phià	ph i a ³³	

*b > LX, MC, TP /b/ (about 19 sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
bug, insect	bù ló	bò lò	b ə ³¹ d z a ³¹	*baw (27)
bury	bé	(fià) bí	b e ⁵⁵	
flour	bà lò	lè-bè-liù	b a ³¹ l y ³³	
low, short	bà ~ bè	bè	b e ³³	
man	biè phà	bè liú	b a ³³ p h e ⁵⁵	
old (of things)	bá	bá	b a ³³	
pile up	bù	bò	b o ²⁴¹	

*m > LX, MC, TP /m/ (about 40 sets)

Gloss	Longxi	Mianchi	Taoping	PTB
mushroom	mə̀ ə̀	mè ẓú	mɑ ³¹ ẓu ³³	*g-məw (455)
mother	á mà	á mà	mɑ ³³ ; mɑ ⁵⁵ mɑ ⁵⁵	*ma (487)
NEG	mí	mì	mi ⁵⁵	*ma (p96)
rice (cooked)	mà má	mà má	me ³³	*may (p65)
fire	mú	mú	mi ³³	*mey (290)
dark	mú	mò	mu ³³	*mu:ŋ (362), *r-mu:k (357)
person	mù	mè	mə ³³	*r-mi(y) (p127)
heart	ɕì mì	tié mù	χtie ⁵⁵ mə ⁵⁵	?*moŋ (STEDT)
fruit	ɕì mì	sè mù	sie ⁵⁵ mə ⁵⁵	
language,speech	zà mú	zuè mé	zɿ ³¹ mə ⁵⁵	
tears	mə̀ lí qà	mù lé qè	mi ⁵⁵ ʁo ³³	
cooked	(fià) mù	(fià) mù	mi ³³	
cat	mà ɳù	mè ɳòu	mɑ ³¹ ɳy ⁵⁵ 8	
wife	tɕè mì	tɕé (tsì) mèi	tɕi ⁵⁵ me ³¹	(cf. 'person?')

In addition to the above labials that I have reconstructed, Chang reconstructs the voiceless nasal *mh, based on the data to which he had access at that time. Although he gives data from Taoping, he only had access to the few forms in H. Sun 1962, and not to the more than one thousand forms in *QYJZ* and *ZYC*, or he would have seen that the voiceless nasals in Wasi, Zengtou, Jiuziying, and Ruodazhai come from PSQ *fricative-nasal clusters. The following table is based on his "Examples to Chart 9," with his blank Taoping column filled in with data from *ZYC* and *QYJZ*. I have included not only data concerning *m̥, but the other voiceless *nasals as well. Note that Lobuzhai, which is near Mianchi, has no voiceless nasals. A comparison with *STC* shows that many of these initials come from PTB *s-N clusters.

7 PST *k/m-ləy.

8 There is no published PTB root, but cf. Lahu *mé-ni*.

9 There is no PTB root, but cf. Lahu *mé-ni*.

Table 3.3 Southern Qiang voiceless nasals

English	Wasi	Lobuzhai	Taoping	Zengtou	Jiuziyang	Ruodazhai	PTB
hair	ɲə		χmə ³³	ɲə	ɲə		*s-mul
smell (v.)	ɲe		χmi ⁵⁵	ɲi	ɲje		*s-nam
name			χmə ⁵⁵		hmə	ɲi	*s-min
silver		ɲu	χɲu ⁵⁵	ɲu	hɲu	ɲhu	*s/d-ɲul
knee	ɲotsho		χɲu ⁵⁵ tshu ⁵⁵	gu əltsho	hɲu əltsho		
oil, fat			χno ⁵⁵	no	ɲje	ɲjo	
red	ɲə		χni ³¹ ni ³³	ni	ɲi	ɲi	*s-nəy
nasal mucus	ɲe		χni ⁵⁵ tsu ə ³³	ɲe	ɲe		*s-nap
seven	ɲe		ciŋ ³³	ʃē	ɲə		*s-nis
nose			χni ³¹ qo ⁵⁵ pə ³³	niqopə	ɲəpaqə	ɲə	*s-na

Strangely, Chang cites the Taoping form for 'nose', but alters the initial cluster to /ɲ/, whereas before oral sounds he retranscribes Taoping /χ/ as /h/. The set 'seven' has unexpected initial reflexes in Taoping and Zengtou. For more on numerals, and odd reflexes of prefixed proto-initials, cf. Matisoff 1995.

3.3.1.2 Dentals

The three dialects are prone to palatalize *dentals. For Longxi, it is difficult to distinguish *dz, *z.

*t > LX, TP {/tɕ/ /_ *i, *y; /t/ elsewhere}, MC /t/ (about 25 sets). For the dental stops and nasal, Mianchi is without variation, but Taoping and Longxi palatalize before *high-front vowels, as evidenced by the last two examples in the chart.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
hat	tà bá (χà)	tà bá	tə ³³
lead (cow)	tá	tá	tə ³³
plow (n)	tò	tò kè	tə ³³
upward (pfx)	tà - ~ tà-	tè -	tə ³¹
younger brother	tú-tsù	tòu tsú	tu ⁵⁵ tsuə ³¹
among, between	tèi gó	gó tì	--
animal herder	khù pià cù mù	khùè-pià-tiù-mú ~ khùè-pià-tiú-mù	--
mule	--	kè tì	ke ³¹ tce ³³
see	à tó	tiú (cà)	tcy ³³

The data include the following two counter-examples. The first appears to be the result of a different proto-initial than *t, as both LX and Taoping differ from the expected reflexes of *ti. I posit some form of *CC-, but do not know what its segments would have been. In the set 'mince, chop' the /ia/ diphthong of Mianchi corresponds to the /e/ of Taoping, as expected (cf. 3.3.2.2). However, the Taoping initial has not palatalized, in contrast to the sets above.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
now	pè ì	pè tì	pə ³¹ tì ⁵⁵
mince, chop	--	tshóu tià	tshuə ⁵⁵ te ⁵⁵

*th > LX{/tch/ /_i, /ts, tsh/_u; /th/ elsewhere}, MC /th/, TP{/tsh/ /_y; /th/ elsewhere} (about 11 sets). Taoping palatalizes only in the rare environment preceding /y/: Longxi palatalizes the most freely, a rule which could be quite recent, given the variation in 'quilt'. Following the supporting sets I offer a possible rule for the appearance of /ts/ in Longxi.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
frost	piã thò	pe i thòu	χpa ³¹ thu ³³
slow	--	phiè thá	phi ³¹ tho ⁵⁵
soup	thó	--	thu ⁵⁵
that	thà	--	tha ³³
there	thò gá	--	thə ³¹ χe ⁵⁵
drink	tchí	thié	thie ³³
quilt	sù thiá ~ sù tchá	qhué thiò	--
bucket/barrel	tsù tì	thiò	thio ³³
sneeze (v.)	á tshù-pù	á thiaò-pù	χα ⁵⁵ tshye ³³ pu ³³

It appears that Longxi deaspirates /tsh/ before /u/, as in the following correspondences:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
burn	à tsú	șè thè thòu	--
cut, slice (veg.)	tsù tsuá	tshù tshuá	tshu ⁵⁵
sixteen	fiá tsú	fiá tshòu	χα ³¹ tshu ³³
squirrel	zî kú tsù	tshù lié	--

However, there are at least two counterexamples:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
sneeze	á tshù-pù	á thiaò-pù	χα ⁵⁵ tshye ³³ pu ³³
kick	tshù ~ tshú tá	tshù	tchye ³³

'Sneeze' has probably maintained its aspiration due to onomatopoeia; I have no explanation for the aspiration in 'kick'.

*d > LX{/dz/ /_*i; /d/ elsewhere}, MC /d/, TP {/dz/ /_*i (hapax); /d/ elsewhere} (about 25 sets). Longxi palatalizes regularly, but Taoping in only one form. This aberrant form ('puttee') could be the result of dialect mixture, or of data having been recorded from multiple consultants.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
bean	dà piá	de ì	də ³³
chopsticks	--	dù	duə ³³
forehead	deú kù	dà pú	da ³¹ χku ³³
ghost, demon	dù	dù	du ³³
hit target	dà uà	dè uě	da ³¹ ye ³³
belt	dzí	dì	--
celebrate new year	dzá	diá dià	dia ²⁴¹
day after tomorrow	sò dzí c}	sòu dì	sy ⁵⁵ dy ³¹
door	dzù ~ dzú	diò	diò ²⁴¹
fine, small (of rice grains)	dzà	dì	--
many	dzú	dió	dió ²⁴¹
puttee, leg wrap	{zù de í}	diòŋ dí	dzo ³³ de ²⁴¹

*ts > LX {/tʃ/ /_i,y (or *i, *y); /ts/ elsewhere}, MC, TP /ts/ (about 32 sets). This is the best-supported trend, although there are many sets which have other voiceless affricate reflexes. I first give the forms which provide the most clear-cut support (for Longxi palatalization of 'sharp', 'spring', note the presence of /i/ in Taoping):

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
sour	tsuà	tsu í	--	*swa:r (42)
flea	tsó ŋ,ì	tsouí nà	tsu ⁵⁵ lu ⁵⁵	*s-ləy (440)
sharp	tcà	tsè	tsie ³³	*s-ta (STC p22)
water	tsù	tsuè, tsuè	tsuə ³³	*tʃu (STEDT)
ride	tsà	tsà	tsa ³³	?*dʒon (72)
year, this	tsé pù	tsé pù	tsɿ ³¹ pə ³³	
rot, spoil	tcéy qá	tsuè qá	tsuə ⁵⁵ qa ⁵⁵	
spring, summer	tcà qe í	tsè-qè	tsie ⁵⁵ qa ³³	
twig fence	tsà pià	tsà kí	--	
stove	tsò zò	tsì qò	--	
grandchild	z í-tsù	zé-tsù	zɿ ³¹ tsuə ³³	

The second morpheme of 'grandchild' is a diminutive suffix; the first morpheme is 'child' (PTB *za (STC 59)). Mianchi 'pain' may be a borrowing from Sichuanese.

The following sets appear to be reflexes of *ts, but are problematic in one or more of the dialects:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
kill	tsò tsó	tsì tcá	(tʃ ³³) (tshie ³³)	*g-sat (58)
soul, spirit	tsí	--	--	*tsu (Matisoff 1974, #36)
NEG IMP prefix	tsì-	{tcì-}	ts ⁵⁵ -	
flint, steel for flint	(tshà mià)	tsuè mià	--	

At this point, I have no explanation for the appearance of /tʃ/ [tʃ] in Taoping 'kill', except that it may reflect the reconstructed PTB velar pre-initial; another possibility is that there may be two roots for 'kill', with both forms represented in the Mianchi compound. The palatalization of Mianchi NEG IMP prefix may have come about from the phonetic processes which often accompany grammaticalization. The forms for 'flint' and 'soul' could just as easily be classified under *tsh.

*tsh > LX{/tch/ /_i, y; /ts/ elsewhere}, MC /tsh/ TP{/tch/ /_i, y; /ts/ elsewhere} (about 27 sets). *tsh seems to have remained fairly stable in all three dialects, with LX palatalizing similarly to *ts.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
bridge	tshá (tò)	(lò) tshá	tshie ³³ da ²⁴¹	*dzam
lung	tshù	tshouù	tshu ⁵⁵	PQic *C-tsos (STEDT), PTB *tsywap (239)
salt	tshí	tshì-bé	tsh ³³	*tsa (214)
thorn	tchí	tshí	tsh ³¹	*tsow (276)
meat	pià-tshì	mé tshè	tʃh ⁵⁵	*tsil (p16)
bird	ì tshá	ì tshé	i ³¹ tshie ⁵⁵	
kneel	(gò) tshú	ŋó tshò	χŋu ⁵⁵ tshu ⁵⁵	
pitiful	mè tshweì	mè tshuè pú zì	--	
pot, wok	tshà piá	tshà	tshie ⁵⁵ pa ⁵⁵	
village	tshuá-kù	tshuá, tshuà qó	--	
squirrel	tchỳ lí qè	tshù lié	--	
sweet	tshú	tshú	tchy ³³	

The second syllable of 'meat' (first syllable in Taoping) is glossed in STC as 'fat' (Mawo *tshv* 'fat (meat)'). Another possibility is that it is related to 'goat' (below): note that the tones are the same, and that the initials in Mianchi and Taoping are consistent. The first

syllable of Longxi 'meat' is 'pig' (cf. Yadu *pies* 'meat', *piε* 'pig'). 'Sweet' looks as though it could be related to PTB *twi(y) (STC 166) or *d̥zim (STC 71). However, the following forms make it clear that as far back as PQic the initial was a voiceless aspirated affricate:

Ergong	tchuw tchuw
Ersu	tʃho ⁵⁵
Namuyi	ntshɿ ³³
rGyalrong	kə ɕchi
Shixing	tchye ³⁵

The following *tsh sets are problematic for at least one dialect (problematic forms in braces):

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
goat	{tchà}	tshè	tshie ⁵⁵	PLB *tsit (STC p88)
phlegm	tshù	{tsù zɛ́}	tsho ⁵⁵ qha ³³ χne ³³	

The first syllable in Longxi, Taoping 'phlegm' is 'lung'. Mianchi 'phlegm' may have been influenced by *tsuè* 'water.' The only explanation I have for the palatalization of Longxi 'goat' is that it may have come from a form like *tshie or *tshia (cf. PLB *V-ci:t (TSR 27 Low)), with loss of *i and subsequent transphonologization of the initial.

*dz > LX /z/ (no [z] in LX), MC, TP /dz/ (about 16 sets). Longxi has preserved the affricate nature of the initial in 'money' following a sonorant final. I have no explanation for the loss of voicing for this form in Mianchi. This irregularity indicates that it is probably an ancient borrowing, although the language of donation is not clear (Chinese has *qián*, Written Tibetan has *dṅul* (cf. 'silver')). Unlike the previous two affricates, there is no evidence of how Longxi treated *dz/_i,y. In fact, there are no unambiguous PSQ **dzi, **dzy, *zi, *zy forms, which probably indicates that in this environment *dz, *z had already palatalized at the time of PSQ.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
frog	zò piá	dzò-piá	dzua ³¹ pu ⁵⁵ ma ³³
heavy	zì	dzì	dzɿ ³³
itch	zè zè	dzì dzà	dzɿ ³¹ za ²⁴¹
sit	fià zú	dzó	dzo ³³
money	sàn dzé	(tsèn tseí)	ci ³³ dzie ²⁴¹

*s > LX{/c/_ i,y; /s/ elsewhere}, MC, TP /s/ (about 45 sets). These sets are all completely regular, with LX palatalizing as expected.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
fruit	cì mì	sè mù	sie ⁵⁵ mə ⁵⁵	*sey (57)
blood	sà	sà	sa ³³	*s-hwiy (222)
finger nail	liè sí qè	ì sè	sie ⁵⁵ qə ⁵⁵	*m-(t)sin = m-tsyen (74)
autumn, winter	sò qe í	só qè	sio ³³ ko ³³	
liver	cí já	sè	sie ⁵⁵	*m-sin (234)
day	cì	sè	sie ³³	*s-nəy (GSTC)
wood, timber	cì tò	sè	sie ³³	*sin (233)
learn	só	soú	tə ³¹ sy ⁵⁵	
understand	sì	sì uà	sɿ ⁵⁵	
crow (v.)	cí	tè sǐ	sɿ ⁵⁵	
yesterday	ní cǐ	ná sè	nɿ ³¹ sie ³³	
comb (n.)	qè-cý	qè su í	qə ³¹ suə ³³ 10	

*z > LX, MC, TP /z/ (about 15 sets). As mentioned above, there are no palatalizations for this set, probably owing to very early palatalization of *zi, etc. While Longxi /zi/ occurs in forms such as zì 'turn around (self)' and zí zí tsù 'only, alone', these appear to be innovations, as no cognates have been found in Mianchi or Taoping (cf. discussion at *z, below).

10 PTB *m-si(y) (STC #466).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
grandchild	zɿ tsù	zé tsù	zɿ ³¹ tsuə ³³	*za (59)
cry, weep	zǎ	zà	zɑ ³³	
field	zù	zuè	zuə ³³	
language, speech	zè mú	zuè mé	zɿ ³¹ mə ⁵⁵	
tongue	zè qə	zɿ qé	zɿ ³¹ qə ⁵⁵	

*n > LX, TP {/n/ / _ i; /n/ elsewhere}, MC /n/ (about 17 sets). Taoping palatalizes regularly, but Longxi has one counterexample ('yesterday'). The palatalization appears to have occurred before present-day /i/, and not PSQ *i, as Mianchi allows the sequence /ni/ ('what'). How PTB *s- became PSQ *ts 'flea' is not clear (PTB *s-ləy (STC 440)). The PTB *l > n/n̥ changes may have been influenced by the local variety of Southwest Mandarin, in which /n,l/ distinctions are not maintained. However, this change may have occurred too early to have been influenced by Mandarin, as evidenced by the NQ forms (Mawo, Yadu *tsun*).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
good	nà	nà	nɑ ³³
thing	pà nà	pà nà	pɑ ³¹ ne ³³
what	ná ì	ní lè	na ⁵⁵
bed	n̥.ì sɿ qà	nè bà	ne ⁵⁵ ci ³³
year, last	nó pù	né pù	n̥.ɿ ³¹ pə ³³
yesterday	ní c̥]	nó s̥è	n̥.ɿ ³¹ sie ³³
flea	tsó n̥.ì	tsóu n̥è	tsu ⁵⁵ lu ⁵⁵

*l > LX {/n/ / _ i; /l/ elsewhere}, MC {/n/ / _ *y; /l/ elsewhere}, Taoping /l/ (about 32 sets). For this set Taoping is completely invariant. I have no explanation for the fact that Mianchi palatalizes before *y ('come'), but not before /i/ ('expensive', 'thread'). To account for Mianchi 'come', the rule could be rewritten to include palatalization before /u/, but there would be no articulatory precedent for such a rule. Note that for 'come', the backing of *y probably occurred in Longxi before palatalization, but afterward in Mianchi. How PTB *s- became PSQ *ts 'flea' is not clear. The *l > n/n̥ changes were probably also influenced by

the local variety of Southwest Mandarin, in which /n,l/ distinctions are not maintained.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
exchange	lá lá	lè là	tə ⁵⁵ lɑ ³¹	*lay (283)
kidney	pú lù	pú lò	χpə ³³ lo ⁵⁵	*rpul (STEDT)
pestle	tshí pù kò lù	sá dè kù lò	ko ²⁴¹ lə ³³	*r-luŋ 'stone' (88)
clothes (CL)	lè	lè	lɑ ³³	
expensive	phú lú	phé liù	phə ³¹ ly ⁵⁵	
host	tcè lè pú	tcì lè pú	tcɛ ⁵⁵ lə ⁵⁵ pə ³³	
musk deer	tshí lè	sè lè	tchi ³¹ lə ³³	
wide, broad	lá	lá	la ³³	
come	lò	ŋù	ly ³³	
thread	sà ŋí	sè lì	siɑ ³³ li ⁵⁵	

In addition to *l, Chang reconstructs PSQ *ɬ, based on the following two forms in Wasi, and their cognates. I have cited these forms below, along with cognates from Longxi, Mianchi, and Mawo. Taken together, it is clear that Wasi /ɬ/ is the reflex of PSQ clusters, and not of an independent proto-phoneme *ɬ.

eagle	PTB	*k/g-laŋ (STC 333, p72 n.)
	PSQ	*χlV
	Wasi	ɬa
	Taoping	χua ⁵⁵
	Zengtou	xwa
	Jiuziying	xa
	Ruodazhai	xwa
	Longxi	χò
	Mianchi	lá (bzà)
	Mawo	χlu

The Mawo form directly indicates that PQ had a *cluster initial. Among Southern Qiang reflexes, the fact that some dialects have velar and uvular fricatives while two have laterals is further proof that *xl- or *χl- survived into PSQ.

moon/month	PTB	*s-(g)la (STC 144)
	PSQ	*sIV
	Wasi	la
	Lobuzhai	he (fya)
	Taoping	ɣl ³³ ('month') cy ³³ cya ⁵⁵ ('moon')
	Zengtou	ɣw
	Jiuziying	su
	Ruodazhai	(hpe) ɣw
	Longxi	lè cuà, sì cuà
	Mianchi	lè, lè (some speakers)

For this set, the extant dialects preserve sibilants and laterals, with Longxi preserving both. The forms in these two sets unquestionably indicate different initial clusters at the PSQ level, and neither suggest the presence of *ʎ in PSQ.

3.3.1.3 Retroflexes

For Longxi, the entire retroflex series of obstruents has disappeared, as noted earlier. All reconstructed retroflex 'fricatives' (a cover term for affricates and fricatives), have merged with their corresponding dentals. For most segments, Mianchi and Taoping preserve retroflexion; however, for Taoping, both /tɕ, ʂ/ advance to dentals before /i/.

*tɕ > LX /ts/, MC /tɕ/, TP {/ts/ /_ i; /tɕ/ elsewhere} (about 24 sets).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
navel	pú tsì qà	pè tɕì tɕí	--
stinking	bè tsá	bù tɕá	--
pick up	tsé	(tè) tɕè	tsi ³³
look at	tsà	kè tɕè	tsia ³³
head	qè bá tsì	{qà bzá tsì}	qə ³³ po ⁵⁵ tɕl ³³

'Head' is the only problematic form; its dental initial in Mianchi probably arising by analogy with other Mianchi nouns, both native and borrowed from Chinese:

<u>Native Mianchi:</u>		<u>Borrowings from Mandarin:</u>	
bachelor	à qó tsì	animal pack	tuó tsì
boot	bè tsì	brush	suà tsì
child	kè bzì tsì	sock	uá tsì

The evidence for a retroflex initial in the final syllable of 'head' is supported by Northern Qiang (Ekou and Ronghong Yadu, Mawo all have *qə patʂ*, indicating a retroflex affricate at the PQ level).

*tʂh > LX{/ts/ / _ u; /tsh/ elsewhere}, MC, TP /tʂh/ (about 22 sets). For discussion of Longxi deaspiration before /u/, cf. discussion of *th (3.3.1.2). Note that Taoping does not front *tʂh, *dz, or *z, although *tʂ, *ʂ become dentals before /i/.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
eight	tshá	tshè qó	tʂhe ³³	*(b-)g-ryat (163)
hundred	à tshə̀ì	à tʂhì	tʂhi ⁵⁵	*r-gya (164)
kick	tshù ~ tshú tá	tʂhù	tchye ³³	
lay (egg)	fià tshí	tʂhí	tʂhi ⁵⁵	
spider	tshì tshì	tʂhà ʂì	tʂh ⁵⁵ tʂh ³¹	
cut (vegetable)	tsù tsuá	tʂhù tʂhuá	tʂhu ⁵⁵	*tsywar=tśwar (240)

*dz > LX{/dz/ / _ i; /dz, z/ elsewhere}, MC {/dz/ / _ ε; dz elsewhere}, TP /dz/ (about 20 sets). This set is regular, but the palatalization of Mianchi before /ɛ/ is unusual, given that there is no palatalization before /i/ (long objects (CL)). PSQ *dz comes from PTB *r-clusters.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
laugh	(dá) zá ló	dzà	dzɑ ³³	*rya-t (202)
long objects (CL)	zì	dzí	dzǐ ²⁴¹	*s-rɨŋ (433)
strength	dzì ~ zì	dzà qà	dzǐ ²⁴¹ qɑ ³³	*(k/b)-ra(ŋ/m) (STEDT)
muscle	dzì	dzè	dzǐ ²⁴¹	*graw
matter, affair	zì	dzì	dzǐ ³³	
tael, liang	zò	dzòu	dzǐ ³¹	
year before last	dzí pù ~ zí pù	dzé pù	dzǐ ²⁴¹ pa ³³ pə ³³	
limit, end	dzí tò	dzǐ ló	--	
relatives	qà zè	kè dzè	kie ³¹ dzǐ ³³	

The only explanation for the lack of palatalization in Longxi 'matter', is that its initial would have gone to /z/, but has not, because Longxi lacks this phoneme. For 'muscle', cf. Mawo gəʔ.

*ɕ > LX /s/, MC /ʃ/, TP {/s/ /_ ɿ; /ʃ/ elsewhere} (about 7 sets). As stated above, *ɕ behaves in Taoping like *tɕ. All instances of /ʃ/ before /ɿ/ in Taoping are secondary; e.g., ɕǐ³³ 'month' (PSQ *sIV), ɕǐ¹³tsǐ³¹ 'persimmon' (borrowing).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
pretty	(tsà) sé	pà ɕé	χpa ³³ ɕe ³³	
alive	sè	ɕà	--	s-rɨŋ ≈ s-raŋ (404)
age	pù sù	ɕù	--	
good	--	ɕé	ɕe ³³	
irrigate, water	sù	--	ɕue ⁵⁵	
outward (pfx)	sì -	ɕè -	sǐ ³¹ -	
who	sí	ɕí lè	sǐ ⁵⁵	

*z > LX {∅/_ i, /z/ elsewhere}, MC, TP /z/ (about 6 sets). 'Ax' is an ancient borrowing from Tibetan (Written Tibetan *sta n*); given the fact that it is subject to the same phonological changes as 'stand', I take it to be a borrowing at the level of PSQ or earlier. As mentioned above, there is no contemporary constraint against /zi/ in Longxi, as evidenced by zì 'protect', zǐ 'hold in mouth', and about twenty other forms.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
crack (v.)	zǐ zá	--	zɑ ⁵⁵	
hole	zà pù	zè pù	zɑ ³³ pu ³³	
watery, dilute	zò	zǎ	ze ³³ ze ³³	
lie (n.)	ì zì	zè zè	--	
ax	tà í	tè zì	χta ³¹ zi ⁵⁵	
stand	tà ì	(tè) zì	--	*g-ryap (246)

*r > LX /ɿ, ə/, MC, TP /z/ (about 7 sets). Among the key dialects, only Longxi distinguishes *r and *z. Jiuziyang, which distinguishes /z, ɿ, z/ has /ɿ, ə/ in its cognates for this set (no pattern has yet been established for the Jiuziyang reflex of *z).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziyang</u>	<u>PTB</u>
bone	jà ká	zǎ ɛou	--	pts'ə ə	*rus (6)
skin (human)	jà piá	zà piá	za ⁵⁵ pa ⁵⁵	ja pi	*s-graw (121)
horn	jà kó	zè ké	zɑ ³³ qə ⁵⁵	ə	*rwa-t (p113)
cry out, call out	qá jà	--	ɛua ³³ zɑ ³³	--	
outside	jà lì	ɛua zà	zɑ ⁵⁵ lə ⁵⁵	ja lu	
skin/flay	jà qá	zǎ qà	--	ja ke	
supper, dinner	jà tí	zà té	za ⁵⁵ χte ⁵⁵	ja χte	
dry	tə ə	zǐ	zi ⁵⁵ kua ⁵⁵	ja kua	

The following forms are ambiguous between *r, *z, due to a lack of Longxi cognates, although Jiuziyang suggests PSQ *r.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziyang</u>
cliff	--	zà (ló)	ze ³³	ja
saw (n.)	--	kè zǐ	kie ³³ zi ⁵⁵	ka ɛ

The following two sets probably reflect PSQ *r- clusters (as in PTB *s/m-ran 'horse'). However, at this point, they are reconstructed with *plain initials, as there is no evidence for what form such a proto-cluster might have taken in PSQ. 'Divide', 'horse' are the only instances of the correspondence Longxi ɛ- vs. Mianchi, Taoping z-.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziyang</u>	<u>PTB</u>
horse	ḅò	z̥òu	z̥u ⁵⁵	ɹu	*s/m-raŋ (145)
divide	ḅò ḅó	z̥ì z̥óu	z̥u ³³ z̥u ⁵⁵	dz̥ɿ ts̥'a ts̥'a	?*bra (132)

Like Longxi and Jiuziyang, Wasi and Lobuzhai distinguish prevocalic /z/ and /r/. However, there are not enough forms in the available data to establish their correspondence with the key dialects.

3.3.1.4 Palatals

SQD identifies three to four series of sibilant affricates and fricatives in extant dialects, but nevertheless only reconstructs a dental series. Apparently Chang preferred to reconstruct clusters (e.g., *tsjh*), rather than simple initials (e.g., *tch*). Chang maintained this approach in spite of his presentation of over thirty cognate sets of alveolar/palatal¹¹ and retroflex forms in an earlier part of the paper (pp 431-3), in which these initials were treated as unitary phonemes, rather than as clusters.

For this series, Taoping is the most stable, with no changes from the PSQ reconstructed initials. In Longxi, Mianchi *palatals tend to become dentals before /i/.

*tc > LX /tc/, MC {/ts/ /_ i; /tc/ elsewhere}, TP /tc/ (about 30 sets). Recall that Taoping [tʃ] is an allophone of /tc/ occurring before /ɿ/. 'This' apparently had variation as far back as PQ; TP is cognate with Mawo *tsa:*, Yadu *tsəx* ('these'). Similarly, MW has *ɣua tsa* 'step over'. There is no explanation yet for the initial in Mianchi 'eleven'.

¹¹ I have put these together because of his normalization and interpretation of Wen Yu. In his Chart 4 (p431) he transcribes on separate lines the Taoping affricates /tʃ, tʃh, dʒ/ and /tʃ, tʃh, dʒ/. It is not evident which of these transcriptions is supposed to represent H. Sun's palatals. Regardless of his interpretation, Chang has apparently missed the fact that, properly phonemicized, Taoping has only three series of affricates (cf. 2.2.3.1).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
cheek	tcì piá	tcí piá	tʃɿ ³¹ pa ⁵⁵	*(t)si (STEDT)
man (male person)	tcì	tsì	tʃɿ ³³	*s-kyu (STEDT)
house, home	tcé kù	tcí ~ tcì qó	tcí ⁵⁵ ko ³³	*k-y(i/u)m (53)
eleven	fià tcí	{fià tʃ}	χa ³¹ tʃɿ ³³	*t(y)ik=g-xyik (p84)
daughter	tcà	tcè	tcí ³³	*krwiy (244)
hard	{qò cà}	koù tcà	χku ⁵⁵ tca ³¹	
older brother's wife	kuá tcí	kuè tcì	--	
this	tcà	tcà qó	{tsa ³³ }	
step over/across	(dà) kuá tcà	(dé) tcà	{kuá ³³ tsa ³³ }	

The morpheme being compared in 'eleven' means 'one'; in Mianchi and Longxi it occurs only in compound numerals (Mianchi à qó, Longxi à 'one').

*tch > LX {/tsh/ / _ i, *i¹²; /tch/ elsewhere}, MC /tch/, TP {[tʃh] / _ ɿ; /tc/ elsewhere} (about 40 sets). Because it is not possible to distinguish aspiration before a voiceless vowel, Longxi 'year' is not inconsistent with the rule as stated. Again, Longxi shares a phonological rule with Lahu, where /ch/ -> tsh/_ i.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
narrow	tchá	--	tche ³³	?*tʃi:p ('shut, close', #370)
tread/step on	--	tchya	tchya ³¹	
weigh	tchì tchí	tché	tche ⁵⁵	
year, next	dzá tcj	diá tchj	da ²⁴¹ tʃhɿ ³³	
feces	tshè	tché	tʃhɿ ³³	*kləy > tšəy (125, STEDT)

*dz > LX {/dz, z/ / _ i; dz elsewhere}; MC /dz/; TP {[dʒ] / _ ɿ; /dz/ elsewhere} (about 20 sets). Note that the variation in Taoping is merely allophonic. I have no explanation for the appearance of /z/ in Mianchi 'wing', 'lightweight', or for the aberrations in Longxi 'square'. I have included them here because they warrant further examination and comparison.

¹² The same rule is found in Lahu.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
wing	dzuà ɹà	{zà kè}	dze ²⁴¹ qe ³³	*g-(t)s(y)əw-k (STEDT)
believe	dzà	dzá (zà)	dza ²⁴¹	?*(m-)kyen (223)
lightweight	dzó	{zóu}	dzy ³³	?*r-ya:ŋ (328)
charcoal	mú dzí	mè dzí	--	
Jew's harp	dzuà pú	dzòu	--	
niece/nephew	dzì qhuá	dzì	dzi ³¹	
throw/discard	sì dzuá	--	χdzì ³¹	
square	{zuè}	dzè dzè	dʒɿ ²⁴¹ χdzo ³¹	

For the initial of 'wing', cf. Mawo *gzi gua'*, Yadu *gzij pa*.

*c > LX, MC {/s/ / _ i; /c/ elsewhere}, TP /c/ (about 21 sets).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
ocean/lake	có ~ cý	bú zì sì	cye ³³	*ši (STEDT)
die	à cà	té sì	je ⁵⁵	*səy (232)
iron	cà (mó)	cì	ci ⁵⁵	*syam=šam (228)
lifetime (CL)	cí	cí	--	*(t)swar (STEDT)
clean	có	có tè	--	*syaŋ (pp 52-3)
hide (v.)	cù	--	cye ³³	*kway (303)
body	cì pí	cì peí	ce ⁵⁵ pe ³³	?*tši (STEDT)
brightness	cuá	cyá	cya ³³	?*hwa-t (221) not likely, considering Ergong, etc.
bed	ŋ,ì sì qà	--	ne ⁵⁵ ci ³³	

The correspondences of this protosegment are regular, except for Taoping 'die', which is the only occurrence in Taoping of [ʃ] before a vowel other than /i/. If it is not an error (cf. 2.2.3.1), then it follows the expected rule of *c > [ʃ]/__ ɿ (taking the vowel from Mianchi as indicative). PSQ *c comes from PTB *s and *š (STC *ś). 'Body' is a difficult form to etymologize because of the wide variance between Southern and Northern Qiang (Mawo *ku ti*, Yadu *pəə' χua*). The PTB etymology of 'brightness' is called into doubt by Ergong *nshio nshio*, which points to a dental or palatal fricative as far back as Proto-Qiangic.

*z > LX /z/ (Longxi lacks /z/), MC, TP /z/ (about 7 sets). The initial in Mianchi 'paper' is unexplained; the whole set may be a local pronunciation of Mandarin *zhǐ*.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
dwel, live	qé zǐ; zì gó	--	ʒɿ ³³	
exist/be present	--	zì	ʒɿ ³³	
ox (CL)	zà ~ zì	zà	--	
paper ¹³	zì dā	zè dzì	ʒɿ ³¹ ʒɿ ³³	
scold	zì tà	--	zì ³³	

* η > LX. MC, TP {/n/ / _ ə, η elsewhere}(about 8 sets). There is no evidence for ** η ə, so the changes to /n/ are to be expected. PSQ * η appears to correspond to Chang's * η j, as he does not explicitly state what proto-segment he posits for these forms. 'Breast', 'black', 'two', and 'ear' appear in his "Examples to Chart 9," with forms similar to those in the key dialects below.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
breast, milk	η à η á	η à η á	η y ⁵⁵ η y ⁵⁵	*s-nəw-t/n (419, STEDT)
two	nè	nè qó	η i ⁵⁵	*g-ni-s (4)
ear	η ì ká	nè ké	η i ³¹ kie ³³ ,	*r/g-na (453)
black	η í	nè	η i ⁵⁵ η i ³¹	*nak (88)
cat	mà η ù	mè η òu	ma ³¹ η y ⁵⁵	
fist	qù η ú	qù η á	χkue ³¹ η i ³³	

With the exception of 'black', PSQ * η comes from PTB prefixed *n.

3.3.1.5 Velars

Among the three key Southern dialects, Mianchi is most stable, with no changes for any of the initials. Longxi palatalizes before /i/, and Taoping before /e/ (although not before /ie/).¹⁴ The data do not show what happens to Taoping *velar stops before /i/. In general,

¹³ These forms may turn out to be borrowings. I do not know the local pronunciation of Mandarin *zhǐ* 'paper'.

¹⁴ Curiously, although the Taoping data have no occurrence of /ki/ and one occurrence of /ke/ (/ke³¹tce³³/ 'mule' (typo?)), there are fourteen occurrences of /kie/. I surmise that the sequence /ie/ has a different phonetic quality than its letters would indicate. For further discussion of transcription difficulties in the data appearing in QYJZ and ZYC, cf. 2.1.2, 2.2.3.

there are very few instances of *velar plus /i/ (*khi 'owe', and *(χ)gi 'open (door)' are the only instances discovered so far, with no occurrences of **ki or **ŋi), so this must have been a very rare sequence at the PSQ level. There are a number of sets in which it is not possible to determine whether the reconstructed initial should be *k or *q, *kh or *qh, because both a velar and a uvular stop are represented among the reflexes.

*k > LX {/tc/ / _ i, y; /k/ elsewhere}, MC /k/, TP {/tc/ / _ e; /k/ elsewhere}/ (about 17? sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
ear	ŋ.ì ká	nə ké	ŋi ³¹ kie ³³	*kyap (STEDT)
mother's brother	á kù	à kù	--	*kəw (255)
pillow	ŋ.ì kù	nè kò	ko ³³	*kum (482)
well (n.)	tsù kù	tsuè-kù	--	*kor (349)
building	kè	lòu-ké	--	?*k-y(i/u)m (STC 53)
				'home/womb'
knot	kè tá	kè tà tà	--	?*ki:l (373)
drop (of water)	kà tcí	kè kè	--	
go	kà	kiè cì	kə ³³	
hoe	tçyà	kuà	kua ³³	
mule	--	kè tì	ke ³¹ tce ³³	
orphan	ké pù	kè pù tsú	--	
rat. mouse	zì kú	dzé kuè	zɿ ³¹ kuə ³³	
saw	--	kè z.í	kie ³³ z.í ⁵⁵	
tail	suà kà	suà kè	suə ⁵⁵ kie ³³	
weave		tyà	tia ³³	

'Tail' looks like it could be related to PTB *k-lyak (STEDT), which would make it cognate to the following Qiangic forms:

Guiqiong	mi ³³ kue ⁵³
Namuyi	mɛ ³³ qu ⁵⁵
Pumi (Jinghua)	mɛ ¹³ iɛ ⁵⁵

Following are sets which, among the key Southern dialects, are ambiguous between PSQ *k, *q. However, evidence from the Northern dialects indicate that at the time of Proto-Qiang they all had velar initials.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Yadu</u>	<u>Mawo</u>	<u>PTB</u>
inside (room)	kù kù	qò qò	ko ⁵⁵ ko ³³	tçu xü	ku ku	*kuŋ (STEDT)
garden	tsà-kù	tsí qò	tshie ⁵⁵ kie ³³	tse kü	kuz	*kram (Matisoff 1997a)
angry	tà qù tchì	tè kuò tchì	ko ⁵⁵ pho ³³	khur khue	khuə khua	
elder brother	à kò	qó qò	--	ku:	--	

In the sets 'cuckoo', 'horn' (below), Yadu and Mawo indicate PQ *q, although Southern Qiang dialects are ambiguous between *q, *k. 'Cuckoo' is the only instance of the sequence /qi/ in Longxi, and there are no instances in Mianchi. The support from Yadu is inconclusive.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Yadu</u>	<u>Mawo</u>	<u>PTB</u>
horn	jà ká	zè ké	zɑ ³³ qɑ ⁵⁵	ɲəχ	ɲəq	*r-ki (STEDT)
cuckoo	qí pù	koú pù	--	qu ʂput, kuput ~ kupət (RH)	--	

If Yadu and Mawo are indicative of the PQ *initial(s), then the variation *k ~ *q dates back to early Qiangic (cf. Namuyi *qhuə*⁵³, Shixing *qhuə*⁵⁵). In this case, Longxi and Mianchi have maintained the original velar stop, which is otherwise unattested in Qiangic.

*kh > LX, TP {/tch/ _*i (hapax); /kh/ elsewhere} , MC /kh/ (about 8 sets). Note that in Taoping, /kh/ may precede /y/ ('hot'). Taoping 'chin' may reflect both PTB prefixes.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
chin	--	khè	mə ³¹ sɿ ³³ kha ³³	*(m-)ka~(s-)ka (470)
dog	khù	khuè	khuə ⁵⁵	*kwəy (159)
hot	khú khuá	khué khuè	khye ⁵⁵ le ³³	*ka(:)ŋ (330, 331)
mortar	--	khueí khueí	khə ⁵⁵	
span	khà	khá ~ khà	--	
owe	tchá	dè khí ¹⁵	tchi ³³	

In the following sets, it is not possible to distinguish between *kh and *qh:

¹⁵ For this set, the Mianchi initial is more conservative than the NQ cognates; Mawo *tci*, Yadu *tche*.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>STC</u>
smoke, tobacco	mù khú, mú-qhú	mù qhué	mə ³¹ khua ⁵⁵	*kəw (256)
dry, warm by fire	qhuà	khuè	khye ³³	

The variation in Longxi 'smoke' may indicate that the variation posited above existed at the PSQ level. Northern Qiang forms have velars in this position (Yadu *mu xu*, Mawo *mu xu*). Almost all Qiangic data point to Proto-Qiangic *kh-, although Shixing has a uvular initial:

Ergong	mkhu lu	Pumi.Jinghua	skhiu ¹³
Ersu	mɛ ³³ ŋkhe ⁵⁵	Pumi.Taoba	xio ³⁵
Guiqiong	mø ³³ xø ⁵³	Queyu	khu ⁵³
Muya	mũ ³⁵ khw ⁵⁵	rGyalrong	tə khə
Namuyi	mu ⁵⁵ ŋkhu ³³	Shixing	ŋɛ ³³ qhue ⁵⁵

Taken together, the Shixing and Southern Qiang data indicate that 'smoke' has had qh ~ kh alternation at as far back as Proto-Qiangic.

*g > LX, MC, TP /g/, (10 sets). PSQ *g comes from PTB *g and prefixed *k. As mentioned above, there is no evidence for PSQ **gi.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
wear clothes	gù	(tè) gù	gua ³³	*gwa-n ~kwa-n (160)
foot	gò	gòu	--	*r-kaŋ (p70)
turtledove	ý gù xó	guè guè	--	*m-krəw (118)
among, between, center	tcì gó	gó tí	go ³³	?*koŋ/kor (STEDT)
firm, secure	gù	guè	--	
grain, kernel	gù	tʂhì góu ~ tʂhì mé gòu	--	
lamp	mú gú	--	mə ³³ gu ³³	
pair	gù	gú ('team (of cattle)')	gə ²⁴¹	
thunder	mú gú	mù gó	mə ⁵⁵ go ³³	
upside down	dó gó	guì ~ guí	--	

Further evidence for the etymology of 'foot' comes from other Qiangic languages (Daofu

rko, Ergong *zko*). Taoping *dzi*⁵⁵ is cognate with forms in Northern Qiang (Mawo *dza qu*, Yadu *dzu qu*).

*x, *ɣ. *SQD* reconstructs these proto-phonemes, which I maintain are not distinct from *χ, *ʙ. Following is the *SQD* support for PSQ *x (to which I have added Longxi and Mianchi, and missing Taoping cognates).

Gloss	Wasi	Lobuzhai	Taoping	Zeng-tou	Jiuzi-ying	Ruodazhai	Longxi	Mianchi
needle	xe	he	χe ⁵⁵	xe	xe	xe	χé ~ χèi	χè
fragrant			χu ⁵⁵	xu	xu	xu	χó	χou
hunt			χo ⁵⁵ kə ³³	xoxo	xosw	xoxo	qhò	eý χó
wash			χuə ⁵⁵ la ⁵⁵	xola	xwəla	xo	χò là	(kó) χuà là
green	xwe	hwi	χue ³³ χue ³¹	xwe	xu 'vegetable'	xwe	pe í χə χə 'green and glossy'	χué
yellow	xa		χa ⁵⁵ χa ³³	xæ	ʃje	xæ	χá	χá

The above are the principal sets given by Chang to support PSQ *x. It is evident that this proto-segment is the same as the one I have transcribed *χ, based on data that are better transcribed than those Professor Chang had access to.

The following set is problematic, and is discussed further under *fi (3.3.1.7). Unfortunately, the phonetic reality of [h] is not explained in *SQD*, due no doubt to the difficulty of interpreting Wen's "impressionistic and cumbersome phonetic notation" (*SQD* p426). In Lobuzhai, this graph appears to refer to [fi], as the only lexeme given for which *h* occurs is 'ten'; similarly, in Mianchi /fi/ only occurs in 'ten' and its compounds, in the

downward verbal prefix *fià*, and in 'that' and its compounds. This is the same as the distribution of /h/ in Ekou Yadu.

Gloss	Wasi	Lobu-zhai	Tao-ping	Zeng-tou	Jiuzi-ying	Ruoda-zhai	Longxi	Mian-chi
ten		ɬadʒjo	χɑ ³¹ dy ³³	hady	xadu	xady	fià dzó	fià díú (qò)

PSQ *χ can often be traced to PTB *kr- initials:

wash	*kruw=krəw	STC 117
green	*kruŋ	STC 382
needle	*k-rap	JAM 1997a ¹⁶

The complex fate of PTB *kr- is discussed further under PSQ *khr- (3.3.1.8.4).

The sets 'bowl', 'wheat', 'willing', 'five', 'downstairs', 'help', 'stone', and 'shout' are apparently the sets that Chang uses to reconstruct PSQ *γ. I have included these sets below (except for 'downstairs', which does not appear in the data for the key dialects), along with Longxi and Mianchi forms, and my PSQ reconstructions (at least of the initials). For all of these sets, Chang's *γ corresponds perfectly with my PSQ reconstruction *κ-. The forms for 'wheat' and 'stone' point to PSQ (and PQ)*χl-. The initials of Wasi correspond directly with those of Mianchi, and Zengtou with Taoping.

The correspondences may be summarized as follows:

¹⁶ Written Burmese has an odd reflex *?ap*, and Lahu has *gò?* (cf. Matisoff 1997a:21, TSR #191).

Table 3.4 Reflexes of PSQ *ɸ, etc.

PSQ	Wasi	Lobu-zhai	Tao-ping	Zeng-tou	Jiuzi-ying	Ruoda-zhai	Longxi	Mian-chi
*ɸ	ɣ	ɣ	ɸ	ɸ	ɣ	ɣ	ɸ	ɸ
*ɸw	w	(z)w	ɸu	ɸw, ɸu	ɣw	ɣw	ɸw	ɸw
*ɸl	l	ɣ	ɸ	ɸ	ɣ	ɣ	ɸ	l

The following are the supporting forms:

Gloss	Wasi	Lobu-zhai	Tao-ping	Zeng-tou	Jiuzi-ying	Ruoda-zhai	Longxi	Mian-chi	PSQ
bowl	ɣo	ɣu	ɸu ²⁴¹	ɸu	ɣu	ɣwə	ɸú	ɸóu	*ɸu ~ *ɸou
will-ing	ɣu		ɸu	ɸu	ɣu		ɸò ~ ɸó	ɸou zà ~ ɸou zǎ	*ɸ-
five	wa	ɣwe	ɸuə ³³	ɸwa	ɣwa		ɸuè	ɸuà qó	*ɸwa
help	wa	zɣwa	ɸuə ³¹	ɸɸwa	ɣwa		ɸuà	tè ɸuà	*ɸwa
shout			ɸuə ³³ z u ³³	ɸuza	ɣwi	ɣwəza	ɸuǎ tà	ɸuǎ	*ɸwa
wheat	le	ɣə	ɸuə ²⁴¹	ɸwə	ɣə	ɣwə	ɸə	lè	*ɸlə/ɛ
stone	lo	ɣopja	ɸo ²⁴¹	ɸo	ɣo	ɣo	ɸò lû	lò	*ɸlo

Taoping 'willing' is based on Chang's citation *ɸu*. I have not been able to locate this form in either *ZYC* or *QYJZ*. Of the above forms, two have PTB reconstructions in STC: five *l-ŋa (78), 'stone' *r-luŋ (88). The *l-ŋ initial of 'five' became a uvular initial before the division into Northern and Southern dialects (Yadu, Mawo *ɸua*), although the velar nasal had been maintained as late as Proto-Qiangic:

Ergong	wɲue
Ersu	ɲua ³³
Guiqiong	ɲɛ ³⁵
Muya	ɲa ³⁵
Namuyi	ɲa ³³
Queyu	ɲua ⁵⁵ tcā ⁵³
rGyalrong	kə mɲo

Northern Qiang 'wheat' (Yadu, Mawo *ɲlə*), 'stone' (Mawo *ɲlu pi*) further indicate the presence of *ɲl in PQ.

*ɲ > LX, MC, TP /ɲ/ (about 10 sets). For this set there are no changes from proto-initial to extant dialects.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
bovine, cow	ɲò mià	ɲò	zɿ ³¹ ɲu ³³	*ɲwa (215)
cry, weep	ɲú	--	ɲə ⁵⁵	*ɲəw (79)
be/copula	ɲù ¹⁷	ɲuè	ɲuə ³³	
have/exist	ɲó	ɲá	ɲa ³³	
know, be able to	ɲuè	--	ɲue ³³	

3.3.1.6 Uvulars

No changes have occurred in the uvular series, with the possible exception of Taoping reflexes of *qh. It appears that in Taoping *qh > /ɲ/ /_ o, as there are no instances of the sequence /qho/ in the Taoping data.

*q > LX, MC, TP /q/ (about 52 sets, 18 of which have reflexes in all three dialects). PSQ *q- comes from PTB *k-, but it is not clear why certain PTB *k- forms have reflexes in PSQ *q, and others in *qh. It is also unclear how PTB *velars have become both velars and uvulars. The following sets show the clear relationship between PTB *k and PSQ *q. In the case of 'penis' the PTB *final has been syllabified.

¹⁷ As mentioned in 2.2.2.1, n., this Longxi initial is fortis.

Gloss	Longxi	Mianchi	Taoping	PTB
head	qə bá tsì	qà bz á tsì	qə ³³ pə ⁵⁵ tsɿ ³³	*s-kəŋ ≠ s-kok (STEDT)
brain	qə nà	qə nà	qə ³¹ χnə ³³	(*s-nuk (483)) ¹⁸
comb (n.)	qə-cý	qə su í	qə ³¹ suə ³³	(*m-si(y) (466))
hold in mouth	qá	qou	qu ³³	*ku(w) (184)
lid, cover	tà-qó	tshà qù	qu ³¹ qu ³³	*gop ≠ kop (STEDT)
nose	tì bá-qə	nə qé pì	χni ³¹ qə ⁵⁵ pə ³³	*s-na(r) (101)
face	qá qhuá	qà χà	--	(*kwa (STEDT))
fear	qò ¹⁹	kòu	qu ³³	*grák~krák (473)
I, me	qà	--	qə ⁵⁵	*ka (p93)
penis	lià qə	lià qè	--	*r-li-k (STEDT)
rooster	ý qú	ì qóu	yí ³¹ qu ⁵⁵	*s-kyu ('male')
strength	--	dzà qà	dzɿ ²⁴¹ qə ³³	PLB *k-ra ^{2/3} (STEDT)
win	tà qò	qà	tə ³¹ qə ⁵⁵ ; da ³¹ qə ³³	PLB *k-ra ^{2/3} (STEDT)
wrap	qú tá	--	quə ⁵⁵ te ⁵⁵	*klup (479)
tongue	zə qə	zì qé	zɿ ³¹ qə ⁵⁵	
leaf	qə mà	(phò) cà qè	tchə ⁵⁵ qə ³³	

The first morpheme of 'brain', 'comb', and 'head' is apparently 'head'. The etymologies for 'brain', 'comb' are in parentheses, because the root given is not that of the *q-initial syllable. The q- syllables in 'nose', 'tongue', 'leaf' may ultimately be the same morpheme, meaning 'pointed part' (cf. Longxi qə dý, Taoping qə⁵⁵tsie³³ 'pointed'). 'Win' and 'strength' are apparently from the same etymological root, and provide evidence for this etymon outside of Lolo-Burmese.

*qh > LX, MC, TP /qh/ (about 10 sets). Many of these forms, like those under *q, may be traced to PTB *k. At this time it is not possible to discern the conditioning factors that determine whether PTB *k- is reflected by PSQ *q or *qh (e.g., 'bitter' (below) versus 'I' (above)). Note, however, that there are about twice as many PSQ *q sets as *qh sets.

¹⁸ Roots in parentheses are supported by morphemes which are not the subject of the present comparison.

¹⁹ 'fear difficulty'

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB, etc.</u>
bitter, salty	qhà	qhà	qha ⁵⁵	*ka (8)
fox	qhà guà	qhà guà	qha ³³ χguə ³³	cf. Akha k'a 'animal prefix' ²⁰
mountain valley	qhuà cì	qhuá bzà ~ qhuà qó ~ qhuè	--	
noodles	qhà mì	--	qha ³¹ thu ⁵⁵	
wall	qhà tsù	--	qhuə ⁵⁵	

In addition to these two uvular stops, Chang (*SQD*) posits PSQ *G, apparently based on the only two published Taoping forms with this consonant: χGa²⁴ce³³ 'gnaw' and χGa³¹zə⁵⁵qə³³ 'Xishangzhai (place name)', neither of which is cited in his paper. In the other key dialects, this cluster in 'gnaw' corresponds to /k-/:

Mawo	kɑ' ʎa
Yadu	kæ ti
Longxi	kà cǎ
Mianchi	kè ká

As mentioned in section 2.2.3.1, Taoping /G/ only occurs as the second element in clusters; it never occurs as an independent phoneme. Given its tenuous status in Taoping (there are no occurrences of the cluster /χk/, which I maintain is the true underlying form for /χG/), and the fact that there is no unique correspondence that may be established for it, there does not seem to be adequate evidence to posit *G as an independent PSQ phoneme. When investigating Dayang Pumi, Prof. Matisoff initially thought that there was such a sound in qòdǔ 'walnut', "but it proved to be illusory" (Matisoff, p.c.).

*χ > LX, MC, TP /χ/ (about 21 sets, 6 with reflexes in all three dialects). With the exception of 'wither', none of these forms are traceable to PTB.

²⁰ I have Professor Matisoff to thank for pointing this out. The second syllable of 'fox' is from PTB *gwa (STC p34).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
wither	fià χ̂à	—	tə ³¹ χ̂a ⁵⁵	*hwa:y ²¹
fragrant	χó	χòu	χu ⁵⁵	
full of food	tə χeì	χè ~ tət χé	χə ⁵⁵	
needle	χé ~ χèi	χè	χe ⁵⁵	
shoulder	liá χá	ì χé	lɑ ³¹ χɑ ⁵⁵ pi ³³	
wash	χò là	χuá là ²²	χuə ⁵⁵ lɑ ⁵⁵	
yellow	χá	χá	χa ⁵⁵ χa ³³	

In phonetic transcription, Chang uses /h/ where others use /χ/ (Taoping *ho* 'hunt' ZYC has χo⁵⁵kə³³, *hwəla* 'wash', ZYC χuə⁵⁵lɑ⁵⁵). PSQ *χ appears to be the same as Chang's *h; however, because he does not define which sets represent *h, it is not possible to state this correspondence definitely.

*κ > LX, MC, TP /κ/ (about 21 sets, 8 with reflexes in all three dialects). The first four forms indicate that PSQ *κ often comes from PTB *η(w)a.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
five	κuè	κuà qó	κuɑ ³³	*l-ηa (78)
goose ²³	κò	uò	κu ³¹ ; ηan ¹³ κo ³¹	*ηa-n (p99)
older brother's wife	κuá tci	κuè tci	--	*ηwap (p50)
monkey	κuà sà	κuà sà	--	PKN *ηa:w (p192)
bowl	κú	κóu	κu ²⁴¹	
buckwheat	zuà κá	dzuà κá	dzuɑ ³¹ κɑ ³³	cf. Lahu ḡá
cry out, call out	κuǎ tà	κuǎ	κuə ³³ zɑ ³³	
hang (on wall) ²⁴	κué	tè κuá	κue ³³	
help ²⁵	κuà	tè κuà	κuɑ ³¹	
silk, satin	κuè	κuè	κue ³³ χto ³³	

²¹ (JAM-LITB 6.2; GSTC #98)

²² Bound form in 'wash basin'.

²³ The second form is 'wild goose'.

²⁴ These forms look much like Mandarin *guà*, but none of them appear with the suffix usually attached to borrowed verbs.

²⁵ Cf. Jingpho ḡá 'do communal labor', Lahu ga 'help'. My thanks to Jim Matisoff for pointing out these cognates.

As shown under the discussion of *velars above (table 3.4), /ɤ/ in the three key Southern dialects corresponds to /ɣ/ in Wasi, Lobuzhai, Jiuziyang, and Ruodazhai, and to /h/ in Zengtou and Taoping (Chang's transcription). In addition, Ruodazhai /hʒ/ roughly corresponds to Jiuziyang, Zengtou /ʒj/:

<u>Gloss</u>	<u>Ruodazhai</u>	<u>Jiuziyang</u>	<u>Zengtou</u>
delicious	hʒje	ʒje	--
sing	hʒjo	ʒjo	ʒjo
stand	hʒi	ri	ʒi
wait	hʒy	zo	ʒju

Ruodazhai /h/ does not correspond to any segments in the key dialects. Aside from these forms, and the Chang forms cited in the discussion of *x and *ɣ (section 3.3.1.5), there are no regular correspondences that could be used to establish the presence of PSQ *h, although it is asserted in *SQD*.

3.3.1.7 Glottal

The only possibly reconstructible glottal sound is *fi. Although there is correspondence between Longxi and Mianchi; this sound has vanished completely from Taoping. Ronghong Yadu has /fi/ in the downward prefix, but not in 'ten'.

*fi > LX, MC /fi/, TP ?? (2 sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Ronghong</u>
DOWN (pfx)	fià -	fià -	ə'	fià, fià, fiò
ten	fià dzó	fià diú (qò)	χa ³¹ dy ³³	hotcu

Although there are only two cognate /fi/ morphemes in Longxi and Mianchi, they occur with high frequency because of their roles in verb morphology and in the number system. In addition, there are four other morphemes with /fi/ in Longxi or Mianchi. If *fi can be

reconstructed for PSQ, then its reflex in Taoping is either /χ/ ('ten', 'bowl'), /th/ ('s/he'), or retroflexion of the rhyme ('DOWN'). The other occurrences of /fi/ are (probable non-cognates in curly braces):

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
bowl, etc. (CL)	fìò	qó	χgy ³³
that	{thà}	fià	{tha ³³ }
Tibetan	là fiú	{mà sà}	--
liter (liquid)	fiú	{cɛ}	{pu ⁵⁵ }

3.3.1.8 Cluster initials

Among the three key Southern dialects, *clusters are preserved directly in Taoping, and to a very small extent in the other two dialects. All of the auxiliary Southern dialects preserve more clusters than do Longxi and Mianchi. It is my estimation that the near-total loss of clusters in Longxi and Mianchi is not as much a matter of dialect location as it is one of time of sampling. As shown in the dialect maps in the introduction, Mianchi and Longxi are geographically very close to the other SQ dialects. However, there are significant time differences between the times of data sampling: Wen Yu gathered his data in the 1930's and 40's, Sun Hongkai in the 50's, and I transcribed Longxi and Mianchi in the 90's. As early as the decade of the 1950's Sun Hongkai recorded the simplification and loss of initial consonant clusters in Taoping. The following chart shows the differences in pronunciation between older and younger speakers in the 1950's (*QYJZ*, p10). I have included Northern Qiang forms to show that these clusters are shared at the PQ level.

<u>Gloss</u>	<u>Older speakers</u>	<u>Younger speakers</u>	<u>Yadu</u>	<u>Mawo</u>	<u>PSQ</u>
new	khsi ⁵⁵	tshi ⁵⁵	khsə	khsə	*khs-
comb (v.)	khşua ⁵⁵	tşhua ⁵⁵	khue' xə'	kha' la	*khrua
<i>pianniu</i> ²⁶	khci ⁵⁵	tchi ⁵⁵	khşe	--	*khc-
hot (spicy)	gzɿ ²⁴¹	dzɿ ²⁴¹	gzə	--	*gz-
plowshare	gzue ³³	dzue ⁵⁵	--	--	*gr-
light (weight)	gzy ³³	dzy ³³	gu' tse	gzə tsu	*gz-
mountain	qhsua ⁵⁵	tshua ⁵⁵	--	qhsəp	*qhs-

For the purposes of historical comparison, it is unfortunate that Sun only recorded the speech of younger speakers in his lexicon. Some of these forms provide the sole support for certain PSQ *clusters.

Due to the loss of clusters in Longxi and Taoping, data from auxiliary dialects will be used as needed to bolster reconstruction of PSQ *clusters. Mawo and Yadu data will also be used to demonstrate that clusters in Taoping are inherited from an earlier stage and are not innovations.

The three key SQ dialects provide evidence for the following *clusters:

(*pz) *bz
 (*pr) *phr *br
 (*sm) (*sn) (*sl)
 *khs *khr *khc
 (*gz) (*gz) *gr
 (*qhs) *qhr
 *χp *χt *χtʂ (*χtc) *χk *χq
 (*χph)
 *χb *χd *χdz (*χdz) *χg (*χG)
 *χm (*χn) (*χn) (*χŋ)
 *χz (*χz)
 *χl

With the exception of the tentative reconstruction *gr, all PSQ clusters have either a labial or a fricative C₁. The articulation and voicing of *χ- in PSQ *clusters was no doubt affected by the place and voicing of C₂, as in extant dialects with clusters.

²⁶ A cross between a yak and a cow.

Chang (*SQD*) reconstructs many more PSQ clusters than these. Below I have highlighted those clusters that appear to be the same as clusters or plain initials that I have also reconstructed. Note also that some sounds that I have reconstructed as clusters are *plain initials in Chang's system (e.g., my * χ m is the same as Chang's *mh (ḡ)). Following Chang's chart is a table that presents the cluster equivalents in the two systems (R = prefixed fricative, B = prefixed labial, G= prefixed stop):

Table 3.5 PSQ *clusters, according to *SQD* (chart 10)

-j	-r	B-	B-j	B-r	R-	R-j	R-r	G	G-r
pj	pr				Rp				
phj	phr								
bj	br				Rb				
mj					Rm	Rmj			
mhj									
tj		Bt			Rt				
thj									
dj		Bd			Rd				
tsj	tsr	Bts	Btsj	Btsr		Rtsj	Rtsr	Gts	Gtsr
tshj	tshr	Btsh	Btshj	Btshr				Gtsh	Gtshr
dzj	dzr	Bdz	Bdzj	Bdzr		Rdzj	Rdzr	Gdz	Gdzr
sj	sr	Bs	Bsr					Gs	
zj	zr	Bz	Bzr					Gz	
lj									
lj									
nj					Rn	Rnj			
nhj									
kj	kr				Rk	Rkj			
khj	khr								
gj	gr				Rg	Rgj			
xj									
γj					Rγ	Rγj			
					Rη				
qj					Rq				
qhj									
gj									
hj									
bj									

The apparent equivalents are as follows:

<u>Chang (SQD)</u>	<u>Evans</u>
*pr	*pr
*Rp	*χp
*phr	*phr
*br	*br
*Rb	*χb
*mh	*χm
*Rm	*sm, *χm
*Rt	*χt
*Rd	*χd
*nh	*χn
*tsj	*tc
*Rtsj	*χtc
*tshj	*tch
*dzj	*dz
*Rdzj	*χdz
*sj	*c
*zj	*z
*nhj	*χn̥
*tsr	*tʂ
*Rtsr	*χtʂ
*tshr	*tʂh
*dzr	*dz̥
*Rdzr	*χdz̥
*sr	*ʂ
*zr	*z̥
*Bz	*pz, *bz
*Rn	*sn
*Rk	*χk
*gr	*gr
*Rg	*χg
*ŋh	*χŋ
*Rq	*χq

The mapping of equivalents is not entirely one-to-one, as *SQD* *Bz and *Rm each have two corresponding proto-clusters in my system. My reconstructed clusters *χl, *χG have no equivalents in *SQD*. Within each pre-initial series, support for reconstructions within both systems will be discussed.

Among the key SQ dialects Taoping is the main indicator for *clusters, and generally maintains the PSQ initial. However, the data are presented with the above-mentioned caveat that the Taoping data evidently contain both typographic errors and a propensity for over-transcription (as in the case of the alveo-palatal "series").

Support for PSQ *clusters is much scarcer than for *plain initials, with the number of supporting sets ranging from one (*pʒ, *gr) up to eleven (*ɣg). I have placed in parentheses those *clusters whose support consists of two or fewer supporting sets. The poorly supported sets appear with the others in their respective series. However, *br is discussed before other *labial-r clusters, because it gives evidence for the reconstruction of *r over *ʒ as the second element of the clusters in its series.

3.3.1.8.1 Labial pre-initials

With the exception of *pʒ, *bz, *pr, Longxi and Mianchi reflexes of PSQ *labial clusters are highly problematic, and impossible (at this point) to further specify.

*pʒ > LX, MC /p/, TP /pʒ/ (2 sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziying</u>	<u>PTB</u>
intestines	{pù}	--	pʒɿ ³³	ptsɿ	*s-pa-y (STEDT), via meta-thesis? LX from PTB *pu (STEDT)
tiger	piá	pì dá	pʒɿ ³¹ da ³³	pei kda	

Cognates of 'intestines' can be found in Northern Qiang and Qiangic:

Yadu	piə	intestines
Mawo	tʃə pu	large intestine
Guiqiong	pi ³⁵ tʃ ³³	intestines
Jinghua Pumi	pʒi ⁵⁵	intestines
N. rGyalrong	tə̃pu	intestines / bowels

It is not yet clear whether these forms represent two Qiangic roots, or only one. There do not appear to be Qiangic cognates of 'tiger'.

*bz > LX /b/, MC /bz/, TP /bz/ (2 sets).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
cloth	bù miá	bẓù miá	bẓɿ ³¹ me ³³
sunrise	cuá qān bè	--	bzia ³¹

SQD combines *bz, *pz under the reconstruction *Bz. In addition to Taoping and Mianchi, Wen's Zengtou, Jiuziyang and Ruodazhai preserve these two clusters (*SQD* chart 2, changed to Wen's transcription). The initial *cluster of 'thin' is apparently from metathesis of the *r final.

<u>Gloss</u>	<u>Zengtou</u>	<u>Jiuziyang</u>	<u>Ruodazhai</u>	<u>PTB</u>
thin (of paper)	bẓɿ	bẓɿ	bẓɿ	*pe:ɾ (340)
intestines	pẓɿ	ptṣɿ	pẓɿ	
tiger	pẓɿ da	pei ɰda	pẓɿ da	
cloth	bẓɿ me	bə ɲi	bẓɿ me	

It is not apparent why *SQD* blurs the voicing distinction between these two *clusters in reconstructing Proto-Southern Qiang *Bz.

In addition to bilabial clusters that are inherited from PSQ, Jiuziyang, Zengtou, and Ruodazhai all have many secondary bilabial clusters which are similar to those found in Mianchi (2.2.1.1). As in Mianchi (cf. 2.2.1.1), there are two types of secondary bilabial clusters, the first of which occurs under the following conditions:

∅ > [bilabial stop]/ _ [dental/retroflex obstruent] *u

Secondary bilabialization of this type may be seen in the following forms taken from Wen 1950b (Taoping forms are cited for comparison):

<u>Gloss</u>	<u>Jiuziying</u>	<u>Taoping</u>	<u>PTB</u>
water	ptsɿ	tsua ³³	*twiy=twəy (168), *tšu (STEDT)
ignite, kindle	ptsɿ	tsua ³³	
mountain	pts'ɿ	tshua ⁵⁵	
swallow (v.)	bdzɿ	sɿ ³¹ dzuə ³³	
chopsticks	bdɿ	duə ³³	
field	bzɿ	zuə ³³	

All of the Jiuziying words with secondary bilabial cluster initials have transphonologized the lip-rounding of the *vowel to form the labial pre-initial. Bilabialization of obstruents accounts for the data that SQD presents to support the following *clusters, none of which I see a need to reconstruct:

*Bt
 *Bd
 *Bts *Btsj *Btsr
 *Btsh *Btshj *Btshr
 *Bdz *Bdzj *Bdzr
 *Bs *Bsr

Jiuziying also has secondary bilabial clusters that are the result of palatalization of labial initials. Unlike the previous class of clusters, here the bilabial closure is phonemic:

∅ > c/ [voiceless bilabial stop]_ i

<u>Gloss</u>	<u>Jiuziying</u>	<u>Longxi</u>
spittle	pcie ja	piä
plant (v.)	(ə) pc'ie	phiä

As indicated in the above rule, this process only occurs with /p, ph/, and not with /b/. For the Jiuziying forms, the palatalization is barely audible, although Wen mistook it as primary:

When used as the so-called prefixes ["pre-initials" – JPE] /p/ and /b/ are in general much less prominent than the root initials.... But in a few cases, they are rather heavy and make the root initial inaudible. E.g. /pcie ɿa/ (spittle) sounds rather like [pie ɿa] than [cie ɿa],..." (Wen 1950b:19)

While it is clear that these palatals are of secondary origin, it is equally clear that this rule is either irregularly applied in Jiuziying or that the palatalization was not always audible to the researcher, as it does not show up in any of the 'pig' words, nor in borrowed vocabulary:

<u>Gloss</u>	<u>Jiuziying</u>
pig	pie
lard	pi(e) sa
flat (b)	pi pi
slow (b)	p'i t'a

*br > LX /b(ɿ)/, MC /bz̥/, TP /bz̥/ (6 sets). That *br may be traced back to PQ, and even PQic. may be seen by the following sets:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Yadu</u>	<u>Mawo</u>	<u>Qiangic and PTB</u>
rope	beɿ	bz̥è	bz̥e ³³	--	biɿa	Ersu pɿɿ ⁵⁵ Dayang Pumi bz̥ɛN rGyalrong tə brɛ ?PTB *pla (137)
ashes break (v.i. of rope, etc.)	mù-bè --	-- {ɿə phə}	mə ³³ bz̥i ²⁴¹ bz̥e ³³	bu z̥u --	tci ci buz̥ --	Ergong bz̥e Taoba Pumi thə ¹³ pz̥ɛ ¹³ rGyalrong kə mbɾɛt PTB *N-prat (STEDT)
child	tci bí	kè bz̥ì tsì	tɿi ³³ bz̥i ³³	--	--	--
big	bɿà ~ bà	bz̥à	bz̥a ³³	bɿɛ	bɿɿ	--
thin, slender	bé	bz̥í	bz̥i ³³	bə kɛj	bz̥ə tsi ~ bɿɿ tsi	--

In addition to these forms, there are two sets for which the Taoping form is aberrant in not preserving evidence for *r. The first set is 'high': Longxi bó, Mianchi bz̥ú, Taoping bu³³; Yadu buɿ, Mawo bu'. This form may be traced back to Proto-Qiangic, at which time it still preserved the nasal prefix of PTB *m-raŋ (STC p43) (rGyalrong kə mbro, Namuyi da⁵⁵mo³³). Note that in Qiang the /b/ pre-initial has originated either from denasalization of the initial, or has arisen epenthetically between *m-r due to speakers' mis-timing of

articulators (n.b. rGyalrong form) with subsequent loss of *m. Ergong *bzi* indicates that other sub-branches of Qiangic have denasalized the prefix. The second such set is 'smallpox': Taoping *bo*²⁴¹, Jiuziying *buo*, Mawo *bu*'. I reconstruct this etymon as *bro; there is no explanation for the reduction of the cluster in Taoping, except for the general trend of cluster simplification observed in SQ dialects.

Another variation occurs in words for 'stinking', for which there were apparently two forms at the PSQ level, one with initial *br (Taoping, Zengtou, Jiuziying, Ruodazhai), and a two-syllable form with plain *b- initial that can be traced back to PQ (Longxi, Mianchi, Yadu, Mawo):

gloss	Taoping	Zengtou	Jiuziying	Ruoda-zhai	Longxi	Mianchi	Yadu	Mawo
stink-ing	bzɿ ³³	bzu	bru	bzu	bə tsá	bù tʂá	bə χtʂɛ	da bə χtʂi

For this PSQ *cluster, I have reconstructed *br rather than *bzɿ because Longxi maintains the distinction between *r and *zɿ (3.3.1.3), and indicates a reflex of *r in 'big'. However, there is not enough evidence to claim a distinction between *br, *bzɿ in PSQ. My reconstructed *br corresponds directly with the *SQD* sets that Chang apparently uses to support both *br and *Bzr (there is no indication of how he distinguishes these two). With the exception of 'stinky' (above), the sets he gives are as follows (I have filled in some missing Taoping forms):

gloss	Wasi	Lobuzhai	Taoping	Zengtou	Jiuziying	Ruodazhai
thin (in diameter)	bri	bre	bz _i ³³	bzi	bri	bzi
rope	bre	bri	bz _e ³³	bze	bre	bze
large	bra	bra	bz _a ³³	bza	bre	bza
high			bu ³³	bu	bru	bu

For all remaining rhotacized proto-clusters, I reconstruct *r.

*pr > LX /p/, MC /bz/, TP /pz/ (hapax)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziying</u>
thick, wide	pà	bzà	pze ⁵⁵	pts ₁ bui ('large intestines')

The Mianchi and Jiuziying reflexes show voicing assimilation of the pre-initial; all Mianchi clusters (pʂ, bz, (mz)) agree in voicing. Although the Mianchi and Jiuziying forms appear to be cognates of 'big' (cf. *br, above), Longxi and Taoping, combined with Northern Qiang forms indicate that these two words are distinct at the PSQ and PQ levels:

<u>Gloss</u>	<u>Ekou Yadu</u>	<u>Ronghong Yadu</u>	<u>Mawo</u>
big	bɛ	ba	baɪ
thick, wide	--	po	pu

'Thick (in diameter)' is the only set that *SQD* uses to support *pr/*Bzr (Zengtou *pze* . Jiuziying *pe*).

*phr > LX /ph/, MC /pʂ/, TP /phz/ (about 8 sets, with 4 supported by LX, MC). For 'open (eye)', 'tear,rip' Mianchi has apparently transphonologized the *r of the proto-initial into vowel rhotacization:

Gloss	Longxi	Mianchi	Taoping	Yadu	Mawo	Qiangic
white	phé	pʂí	phz̥i ⁵⁵	phuɿ	phi	Ergong <i>phʂu</i> <i>phʂu</i> , Namuyi <i>phu⁵⁵lu⁵⁵</i> , Taoba Pumi <i>phz̥ã⁵⁵</i> <i>mə⁵³</i> , rGyalrong <i>kə pram</i>
letter, news	phù	pʂè	--	phue	zət phi	--
means, way	--	pʂú thè	phz̥ɿ ³³	--	phə'	Pumi.Taoba <i>rə³⁵phz̥ē³⁵</i> , Shixing <i>ri³³pa⁵⁵</i>
wet, moist	phà	--	phz̥e ³¹ phz̥e ⁵⁵	--	phia'q	--
lime	--	--	χo ³³ phz̥i ⁵⁵	--	ka rpu	--
open (eye)	tà phé	phá	phz̥a ⁵⁵	--	--	Ersu <i>pa⁵⁵</i>
tear, rip	phú phú	ʂè phù phə	phz̥i ³³	phu phue	phi' phi'	Ergong <i>pʂi</i> , Namuyi <i>mphʂɿ³⁵</i> , rGyalrong, <i>kə</i> <i>prə</i> , Shixing <i>pa⁵⁵rɛ³³</i>

For 'white', Matisoff reconstructs PQic *pram (Matisoff 1997b), probably related to PTB *plu (STC p41); n.b. Namuyi *phu⁵⁵lu⁵⁵*. 'Tear, rip' is no doubt descended from PTB *mrak-brak (STC #147); however, the devoicing of the initial in the entire Qiangic branch is mysterious. It may reflect the PTB *s- prefix, which marks both causation and increased verb valence.

The following set appears, based on the Taoping and Longxi forms, to reflect PSQ *phr (PTB *pruk (STC 391). However, the Mianchi reflex suggests a different PSQ *initial, as does the Yadu form; there are no supporting forms in Qiangic outside of Qiang.

Gloss	Longxi	Mianchi	Taoping	Yadu
scratch	phà dá	phiá	phz̥ɿ ³¹ phz̥a ⁵⁵	dze φe'

It appears that in PQ there was variation between *phra ~ *phia.

In addition to the abovementioned labial clusters, *SQD* proposes *mj, *mhj, apparently based on the following (Taoping forms in parentheses are not cited in *SQD*):

gloss	Wasi	Lobuzhai	Taoping	Zengtou	Jiuziying	Ruodazhai	Longxi	Mianchi
NEG	mji		(mi ⁵⁵)	mi	mi	mi	mí	mì
eye	mə (mhə)	mjapu	mi ⁵⁵	mi	mi	mi	mí- (in compounds only)	mè tié
smell (v)	mhe		(χmi ⁵⁵)	mhi	mhje			mí
pine tree	mhja	ɣja	(χma ⁵⁵)	mæ	mhje			mià-phó

I reconstruct these as follows:

NEG	*mi	PTB *ma (p96)
eye	*mia	PTB *s-myak ≈ s-mik (402)
smell (v)	*smi	PTB *m/s-nam (464)
pine tree	*smia	

For NEG, I hold that the -j- in Wasi is an over-transcription; there is no evidence from the other dialects to add a medial to this syllable. For 'eye', Lobuzhai provides the only evidence in Southern Qiang for medial *-i- (PTB *s-myak ≈ s-mik, STC 402). However, Mawo *mi* ~ *mja* demonstrates that the PTB alternation *ya ≈ *i has been maintained to the present, with certain dialects reflecting *ya (Lobuzhai, Mianchi(?), Mawo), and the rest reflecting *i. I have reconstructed as diphthongs what *SQD* presents as sequences of *jV. I have chosen this analysis of PSQ for the same reasons that I chose it for Mianchi and Longxi (cf. Chapter 2).

3.3.1.8.2 Dental pre-initials

*sm > LX c / _ i; x _ u; MC /m/, TP /χm/, Jiuziying /ŋ/ (three sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziyang</u>	<u>PTB</u>
body hair	jà-χù	mù	χmə ³³	qy ɱy ²⁷	*s/r-m(u/i)l (pp 15 - 16)
smell, sniff	cí tà	mí	χmi ⁵⁵	(ty) ɱie	PTB *m/s-nam (464)
pine (n.)	--	mià-sé	χmə ⁵⁵	ɱi	

Mianchi and Taoping do not distinguish PSQ *sm- and *χm-. However, Longxi voiceless fricatives and Jiuziyang voiceless nasals provide evidence that these *clusters were separate at the level of PSQ. For 'smell' most Qiangic languages reflect PQic *sn-, as evidenced by the following verbs for 'smell/sniff':

rGyalrong (DQ)	snə no
rGyaNW (SHK)	kæ nam nam
Ergong	snw no
Jinghua Pumi	xə ¹³ piə ⁵⁵
Taoba Pumi	xə ³⁵ ŋō ³⁵
Shixing	by ⁵⁵ po ⁵⁵
Queyu	tə ³⁵ lu ⁵⁵ nũ ⁵⁵
Muya (SHK)	k ^h w ⁵⁵ nw ⁵³
Zhaba (SHK)	tə ³⁵ lu ⁵⁵ nũ ⁵⁵

However, Namuyi *hi³³hi⁵⁵* indicates that a *sm- root for 'smell' must also be reconstructed at the PQic level (cf. *hũ³³* 'feather, hair (of head)').

*sl > LX /s, l/, MC /l, l/, TP /c, ʒ/ (hapax)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
moon	sì cuà ~ lè cuà	tə ~ lə	cy ³³ cya ⁵⁵ , ʂɿ ³³ 28	*s-gla (144)

SQD appears to treat this initial as *ʎ. However, the fact that the PTB *cluster was maintained in PSQ is clear from the alternations in all three dialects. It appears that evidence for this *cluster is disappearing: in Mianchi, only certain speakers pronounce

27 'head hair'

28 PTB *s-la (STC #144).

'moon' as *l̥ə*.

SQD proposes the dental and obstruent clusters *tsj, *tshj, *dzj, *sj, *zj, *nj, *tsr, *tshr, *dzr, *sr, *zr, which I have reconstructed as the palatal and retroflex series *tc, *tch, *dz, *c, *z, *n, *tʂ, *tʂh, *dzʂ, *ʂ, *zʂ. *SQD* also proposes PSQ *lj, but does not provide any support for this cluster. Chang provides two sets that apparently support *lj:

gloss	Wasi	Lobuzhai	Taoping	Zengtou	Jiuziyang	Ruodazhai
come	lju		ly ³³	ly	lu	ly
wide	la		lie ³³			le

'Come' I have reconstructed as PSQ *ly (Longxi *lò*, Mianchi *l̥.ù*). 'Wide' is more complex, as there appear to be two similar roots with similar semantics:

wide, broad	PSQ	*la
	Taoping	la ³³
	Wasi	la
	Longxi	lá
	Mianchi	lá

Without support from Taoping, it is not possible to distinguish between the two proto-vowels. External evidence for *la comes from Yadu *la*.

wide, thick	PSQ	*lie or *lia
	Ruodazhai	le
	Taoping	lie ³³
	Mianchi	lià

External support is lent by Mawo *li*, Yadu *liɛ*.

*sn > LX /c/, MC /n, ti/, TP /c, χt, χn/ (four sets). The cluster *sn- is problematic in Qiang. There is direct evidence for the preservation of PTB *s-n- into Proto-Qiangic, with the strongest evidence coming from rGyalrong and from Ersu, in which the *s- prefix has been syllabified:

<u>Gloss</u>	<u>PTB</u>	<u>Ersu</u>	<u>rGyalrong</u>
heart	*s-niŋ (STC 367)	sɿ ⁵⁵ ni ⁵⁵	tə ɲɛ
seven	*s-nis (STC 5)	ʃɿ ⁵⁵ ni ⁵⁵	kə ɲəs
nose	*s-na(-r) (STC 101)	sɿ ⁵⁵ nbu ⁵⁵	tə ɲna

Thus it is clear that at the level of Proto-Qiangic, the Tibeto-Burman proto-cluster remained *sibilant + nasal. Additional support comes from 'ear of grain' (PTB *s-nam (Matisoff 1997a)), although the etymon is not attested in rGyalrong or Ersu:

Ergong	sno ʒme
Jinghua Pumi	piə ⁵⁵
Taoba Pumi	pi ⁵³
Queyu	ʂa ³⁵ ŋe ⁵³

Within Qiang itself, the situation becomes more complicated. In Northern Qiang, all nasality of the proto-cluster has disappeared: Yadu reflexes have /ctc-/ and Mawo has /st-/. Although there is no direct evidence for *nasality, the reflexes of PTB *s-n- are regular:

<u>Gloss</u>	<u>Yadu</u>	<u>Mawo</u>
heart	ctciɲ miɛ	sti: mi
seven	ctɕ	stə
nose	ctɕyəs	stɿ-q
ear (of grain)	ctɕəχ	stiaq

In Southern Qiang, the reflexes in Mianchi and Taoping are inexplicably irregular, although Longxi is regular:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
heart	cì mì	tié mù	χtie ⁵⁵ mə ⁵⁵
seven	cí	nə qò	ciŋ ³³
ear (of grain)	cà qè	lè tì	χti ⁵⁵ qə ³³
nose	--	nə qé pì	χni ³¹ qo ⁵⁵ pə ³³

Because the Longxi form *tì bá-qè* 'nose' does not appear to be cognate to the other two forms, the key dialects are ambiguous in their support for this *cluster -- their forms could

come from *χn- (cf. xyz). However, the Northern Qiang forms (above), coupled with the auxiliary dialects Wasi and Zengtou unequivocally support *sn-:

Gloss	Wasi	Lobuzhai	Zengtou	Jiuziying	Ruodazhai
heart	ʃtjeme		tjemə	htje	
seven	hne		ʃē	nhe	
nose			ñiqopə	nhəpaqə	nhe

We note that all SQ dialects have denasalized the initial *cluster of 'heart'. For 'seven', 'nose' only Mianchi and Jiuziying have consistent reflexes of the proto-cluster. I have no explanation at this time for this irregularity in Southern Qiang. Nonetheless it is clear from the Jiuziying reflexes of 'seven', 'nose' that as late as the time of PSQ, at least these two forms had preserved PTB *sn- in something like its original shape. It seems especially unusual to me that Taoping, with its relatively great number of initial clusters, has no regular reflex of *sn-. Chang's *Rn- appears to correspond with my PSQ *sn-, and possibly *χn (cf. 3.3.1.8.5).

3.3.1.8.3 Palatal pre-initials

SQD reconstructs *nhj (*ŋ), based apparently on the following:

gloss	Wasi	Lobuzhai	Taoping	Zengtou	Jiuziying	Ruodazhai	Longxi	Mianchi
slippery	nha			nha	ñhja	nha		(zǐ) nà
oil, fat			(χno ⁵⁵)	ño	ñhje	ñhjo	ŋí nà 'oily'	
red			(χni ³¹ ni ³³)	ñi	ñhi	ñhi	ɕí	nə

Again, it is clear that if Chang had had access to the Taoping forms, and to the Longxi

forms, he probably would have reconstructed this initial as a cluster, perhaps our *χn- (3.3.1.8.5). Note that in my reconstruction of *χn, I have omitted 'slippery', because Jiuziying, not a key dialect, is the only variety to show evidence for a palatal *initial. 'Oil, fat' may come from a prefixed PTB root *nam (STEDT). 'Red' is from PTB *(r-)ni (p46).

As an aside, I should point out that Chang's retranscription of Jiuziying in this set truly puzzles me. Wen (1950b) transcribes these words as *ɲia* 'slippery', *ɲio* 'oil', *ɲi* 'red', without the double palatalization that Chang's *ñhj- indicates.

3.3.1.8.4 Velar pre-initials

PSQ *velar clusters are not attested by Taoping's younger speakers. For some clusters there is additional support from auxiliary clusters. I have included data from Taoping's older speakers (OS), where available, alongside data from younger speakers (YS).

*khs >LX {tsh_ e; /tch/ elsewhere}; MC /s/, TP (OS) /khs/, TP (YS) /tsh/ (3 sets). There is a fourth set 'tremble' supported by Mianchi, Jiuziying, and NQ. 'Three' comes from PTB *g-sum (STC 409). Underlined initials in Jiuziying are fortis.

Gloss	Longxi	Mianchi	Taoping OS	Taoping YS	Sanqi-zhai	Jiuzi-ying	Yadu	Mawo
three	tshè	sí qò		tshi ⁵⁵	'qsi	<u>ts</u> 'i	khsə	khsi
new	tchí	sí	khsi ⁵⁵	tshi ⁵⁵	'qsɿ	<u>ts</u> 'i	khsə	khsə
god	à bú tchǝ	à pà-sé		tshie ³³	'qsɿ	<u>ts</u> 'e		khsi
tremble		lè sè sè				<u>ts</u> 'a		khsa' ma

**kr. As mentioned earlier, there is insufficient evidence to reconstruct PSQ *kr-. PTB *kr- has two types of reflexes in Southern Qiang. 'Gall', 'sweat', 'skin' show the pattern

PTB *kr- > PSQ *χ(tʂ)²⁹. 'Satiated', 'needle', 'be born', 'shoulder', 'wash' demonstrate PTB *kr > PSQ *χ. It is not yet clear what conditioning factors favored one PSQ reflex over another.

Gloss	LX	MC	TP	PSQ	Mawo	Yadu	PTB
gall	tsí	tcí	χtʂə ⁵⁵	*χtʂə	xtʂə	xtʂə	*m-kri-t ~ s-kri (412)
sweat	tsù	tʂhù	χtʂuə ⁵⁵	*χtʂu(ə)	xtʂə	xtʂuə	*s-krwal ≠ s- (ŋ)krul (STEDT)
skin		tshé pià	tʂh ³¹ pa ³³	*χtʂi			*m-k-rəy (STEDT)
satiated	tə χeì	χè ~ tə χé	χə ⁵⁵	*χe ~ χə	χə		*kru (STEDT)
needle	χé ~ χèi	χè	χe ⁵⁵	*χe	χe	χe	*k-rap (JAM 1997a)
to be born; live; green	pe í χə̌ χə̌ (‘green and glossy’)	χué (‘green’)	χue ³³ χue ³¹ (‘green’)	*χue	χu (‘give birth’)	χaʂ (‘green’)	*kruŋ (382)
wash	χò là	(κó) χuà là	χuə ⁵⁵ la ⁵⁵	*χuə	χla	xlua	*krəw (117)
shoulder	liá χá	ì χé	la ³¹ χa ⁵⁵ pi ³³	*χa ~ χe	dʒa χu	lu χu patʂ	KMR *k(r)oŋ/k (STEDT)

*khr > LX {c/ y; tsh elsewhere}; MC {tch/ ʂ; tʂh elsewhere}; TP (OS) /khʂ/, TP (YS) /tʂh/ (4 sets). I have reconstructed this as *khr, rather than **khʂ due to the retroflexed vowels

²⁹ cf. Lolo-Burmese:

Gloss	W. Burmese	Lahu	PLB
sweat	khwrê	kī	*ʔgrwəy ²
gall	khre	kī	*ʔgrəy ¹

in Northern Qiang, which indicate PQ medial *r. Longxi and Mianchi 'comb' may not be cognate, which would make the correspondences more regular.

Gloss	Longxi	Mianchi	Taoping	Mawo	Yadu	notes
comb, brush (v.)	(cý)	(qà tó su í)	khşuo ⁵⁵ (OS), tşhua ⁵⁵	kha' la	khue' xə'	cf. PL *ʔb(r)iy ² (STEDT)
eight	tshá	tşhê qó	tşhe ³³	kha'	khe'	SQ initial cluster suggested by Jiuziying <i>tsha</i> . *b-r-gyat (163).
hundred	à tshə̀ì	à tşhì	tşhi ⁵⁵	khi'	(ε) khe'	*r-gya (164). PSQ *vowel supported by Jiuziying <i>tshi</i> . PQ *kr i/e. cf. 'eight'.
rice (un-cooked)	tshə̀ì	tchì				LBZ, JZY <i>khri</i> ; ZT, RDZ <i>qhə</i>

*khe > LX /c, tsh/; MC /s, c/; TP (OS) /khe/; TP (YS) /tch/ (3 sets). More sets are needed in order to sort out the distributions in Longxi, Mianchi, Jiuziying. Further evidence may lead to the division of this *cluster.

Gloss	Longxi	Mianchi	Taoping OS	Taoping YS	Jiuziying	Yadu	Mawo
<i>pianniu</i>	zì cù		khci ⁵⁵	tchi ⁵⁵	c'i	khşe	
musk deer	tshì lə̀	sè lə̀		tchi ³¹ lə ³³	ʔʂ' ʂl.	khşu	khşəz
leaf		(phò) cà qè		tcha ⁵⁵ qə ³³		tşhu khşu	khcaq

*gz > LX (?); MC /z/; TP (OS) /gz/; TP (YS) /dz/ (hapax).

Gloss	Longxi	Mianchi	Taoping OS	Taoping YS	Yadu	Mawo	PTB
hot (spicy)	--	zè	gzɿ ²⁴¹	dzɿ ²⁴¹	gzə	--	*(ts/dz)a-t (62)
official		zè qà		dzɿ ³³	gzə	gzə	

The Longxi form *tci* appears to be related to *tci* 'prick, stab', rather than to this etymon.

*gz > LX /dz/, MC /z/, TP (OS) /gz/, TP (YS) /dz/. (hapax) For 'light (weight)', it is clear by comparison with NQ that the Proto-Qiang form was *gry. Taoping preserves the PQ vowel and Northern Qiang preserves evidence of the *r- component. Because the Longxi and Mianchi reflexes of PSQ *gr are different (below), it is apparent that this *cluster lost its rhotacization before the PSQ dialects split.

Gloss	Longxi	Mianchi	Taoping OS	Taoping YS	Yadu	Mawo	PTB
light (weight)	dzó	zóu	gzy ³³	dzɿ ³³	gu' tse	gzə tsu	?*r-ya:ŋ (328)

*gr > LX /gɿ, dz/. MC /g, dz/, TP (OS) {gz / _ y, gz elsewhere}, TP (YS) {dz _ y, dz elsewhere} (at least 2 sets). Taoping (OS) and Taoping (YS) palatalize this cluster before /y/.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
sole of foot	gò cì, guà cì	gòu pà	--

It is unfortunate that 'sole of foot' is not recorded in Taoping or in the auxiliary dialects; however, the presence of /gr/ in the cluster-impoverished Longxi is a strong indicator for this reconstruction. *SQD* and the older speakers of Taoping provide the following evidence for *gr, which is not supported by Longxi or Mianchi:

gloss	Wasi	Lobu- zhai	TP (OS)	Zengtou	Jiuziying	Ruoda- zhai	Longxi	Mianchi
plow- share	dʒwʊr	grwu	gzue ³³	dʒwu	bdʒu	bdʒu	dzù	dzù

The velar nature of this PSQ *cluster is given additional support by Ronghong Yadu *gu*: ('plowshare' is not recorded for Ekou Yadu or Mawo).

The following sets are suggestive of *gr-, but are not conclusive:

gloss	Longxi	Mianchi	Taoping	Mawo	Yadu	notes
four	zì	zì qó	dʒɿ ³³	gzə	gzə	?STC 410 *b-liy. JZY dzɿ.
give 2	zǐ	zǐ		gzə	gzə	JZY dzɿ.
square (cf. 'four')	(zuè)	dzè dzè	dʒɿ ²⁴¹ χdzo ³¹	gzə ydzu	gzə yɿy	TP m2 is cognate with MW.

SQD reconstructs the *velar stop clusters *kj, *kr, *khj, *khr, *gj, *gr, and the fricative clusters *xj, *ɣj. The only velar-r clusters that occur in Chang's data are Lobuzhai /khr, gr/ and Jiuziying /khr/. /khr/ occurs in 'rice (raw)', which I have reconstructed with initial cluster *qhr (below). /gr/ occurs in the above-cited 'plowshare'. I do not know why Chang posits *kr, unless it is for reasons of symmetry.

There is no evidence that I can find in *SQD* to support the positing of the *palatalized velars. There is one palatalized velar form, Ruodazhai *gjeta* (a place name), but that hardly seems adequate evidence for the suggested proto-cluster. It may be that these *clusters are proposed in order to reconcile some odd correspondences, but without stronger evidence, this appears to be an unnecessary multiplication of entities.

3.3.1.8.5 Uvular Pre-initials

Like the plain *uvulars, the reflexes for this group show little variation, with the most variation appearing in Longxi. *χ- clusters often come from PTB *r-, *s- cluster initials. While Longxi, Mianchi usually provide no direct evidence for PSQ *clusters, it is these two dialects that differentiate *χp, *χph. As mentioned in 2.2.3.1, Taoping /χ/ pre-initial agrees in voicing with the following initial; the same appears to be true of PSQ *χ- (cf. Jiuziyang reflexes of PSQ *χm-). The auxiliary dialects Lobuzhai, Jiuziyang, and Ruodazhai share this assimilation rule, which appears to go back to the level of Proto-Qiang. Because there is no distinction to be made between *χg and *ɛg, e.g., I will reconstruct these as *χg, etc. As in Taoping, *χ- probably assimilated (somewhat) to the place of articulation of the following initial.

*qhs > LX (?), MC /s/, TP (OS) /qhs/, TP (YS) /tsh/. (2)

Gloss	Longxi	Mianchi	Taoping OS	Taoping YS	Yadu	Mawo	PTB
dance, jump	tshó tà (also 'pulse')	soú tà (also 'pulse')		tshu ⁵⁵ ta ⁵⁵	qhsu qhsu	qhsu	
mountain	--	sù	qhsua ⁵⁵	tshua ⁵⁵	--	qhsəp	

*qhr > LX /tsh, qh/, MC /tch, tsh/, TP /qh/ (three forms).

For this PSQ *cluster, Mianchi does not have a regular reflex; the more common Longxi reflex is /tsh/, with /qh/ appearing in 'shoot', an instance of Matisoff's 'prefix preemption' (Matisoff 1972b). PSQ *qhr is best supported by direct evidence from the supplementary dialects, bolstered by support in the key dialects in the following set:

gloss	Wasi	Lobu-zhai	Taoping	Zengtou	Jiuziying	Ruoda-zhai	Longxi	Mianchi
rice (raw)	tʃhuu	khri	qhə ³³	qhə	khri	qhə	tsheì	tchì

That the PSQ pre-initial was *qh and not *kh (as apparently supposed in *SQD*, which does not propose *qhr) is bolstered by the pre-initials in Ruodazhai and Taoping, and further supported by Northern Qiang (Yadu, Mawo *qhə*).

Additional evidence for PSQ *qhr comes from the following sets:

gloss	Taoping	Longxi	Mianchi	Yadu	Mawo
shoot (v)	qhə ³³	qhò	tʃhà	qhu'	qhu'
cut firewood	qhe ³³	{tshuá (cut down tree)}		qhe' qhe'	qhə' qhe'

'Shoot' is apparently unrelated to PTB *ga:p (STC 219), as there is a difference in voicing, place, and in the presence of rhotics in Qiangic (Queyu *kə³⁵rə⁵³*). The Longxi form for 'cut down tree' is ambiguous between PSQ *qhr- and PTB *tʃwar (STC 240), and probably reflects the latter; Taoping *tʃhu⁵⁵*, Mianchi *tʃhù tʃhuá* 'cut vegetable' apparently reflect this latter root. To further complicate matters, Yadu and Mawo have *qhua'* 'cut vegetable', whose rhyme and semantics suggest another *qhr- etymon, but the form is instead probably related to 'cut firewood'.

*χz > LX, MC /z/; TP {z/ ɿ; z elsewhere}; RDZ, JZY /kz, z/ (3 sets). Ruodazhai is the only SQ dialect with direct evidence for this cluster.

gloss	Longxi	Mianchi	Taoping	Ruodazhai	Jiuziying	Yadu	Mawo
near	zì zà	qè zí, ì dzà	kie ³¹ zi ⁵⁵		ɛza ~ za		kə dza
tongue	zè qè	zì qé	zɿ ³¹ qə ⁵⁵		ɛzəqə	zəɣ	zəq
wait	zò	zòu	zy ³³	ɛzy	zo	zu liu	ziu

*ɣz > LX /z/, MC, TP /z/; RDZ /ɛz/ (2 sets). Ruodazhai gives the only direct evidence for this *cluster.

gloss	Longxi	Mianchi	Taoping	Ruodazhai	Yadu	Mawo
delicious	zè nà	zé		ɛze	zɛ	zy
sing			zo ²⁴¹	ɛzo		zɑ' ma tʃə

*ɣl > LX /ɛ, ɛ_ l/, MC /l/, TP /ɛ/ (at least 5 sets). This *cluster is not directly evidenced in Taoping. Longxi 'stone' and 'break/snap' provide the most direct evidence for existence of the *cluster in SQ. Further evidence is provided by Northern Qiang, which shows that this cluster pre-dates PSQ. Moreover, the correspondences of /ɛ/ to /l/ in extant Southern Qiang dialects show that the cluster persisted into Southern Qiang. The reflexes in Jiuziying are /ɛg, γ/, and are probably conditioned by the height or backness of the following vowel, although more data are needed in order to propose a rule. 'Wash, bathe' appears to have syllabified the initial of a PQ *cluster. However, it may also be the case that NQ has reduced the initial syllable of a *disyllabic form. The PSQ form for 'wash, bathe' is reconstructed *ɣuə (L) la (L).

Gloss	Longxi	Mianchi	Taoping	Jiuziyang	Yadu	Mawo
late, tardy	κà	là	κue ³³	κgue	da κla	κla
stone, flying stone	κò lû, κò ló	lò	κo ²⁴¹	γo	κlə φue' (‘flint’)	κlu pi
wheat, barley	κə	lè	κua ²⁴¹	γγ	κlə	κlə
break/snap	κə là	(té) lǔ	κe ³³ (‘break’)	--	da κliə	κe
tears	mə lí qə	mù lé qə	mi ⁵⁵ κo ³³	--	κləχ	κləq
wash, bathe	χò là, κá là (swim)	χuà là	χua ⁵⁵ lo ⁵⁵	xuy la	χlua, κlua (bathe)	χla

Sets such as these demonstrate the advantage and necessity of "peeking" outside the particular family or branch undergoing reconstruction. Without considering Yadu and Mawo it would be impossible to discern which proto-cluster should be reconstructed at the PSQ level to account for the correspondences in the daughter dialects.

I do not fully understand the meaning of 'flying stone', except that the consultant insisted that *κò ló* was a 'fēi shí' ('flying stone'), while *κò lû* was a 'shí tou' (stone, rock). As far as I can tell, 'flying stone' refers to rocks falling or rolling off mountains, cliffs, etc. (PTB *r-luŋ (STC #88), Mawo *κlu pi*).

Longxi 'break/snap' is one of the few words in Southern Qiang that preserves traces of the PTB *s- causative prefix, as seen by the pair:

κə là	break (branch) (v.i.)
(tə) χə là	break (branch) (v.t.)

'Tears' appears to come from PTB *m-p(l)i-k (STEDT). The first syllables of the Southern Qiang forms either descend from 'eye' (PTB *mik ≍ *myak, Taoping *mi⁵⁵*), or the original *m- prefix changed to its current pronunciation through semantic association with 'eye' and folk etymology. The PTB etymon does not suggest an origin of the /κ/

component, which could cast doubt on the association of reflexes to etymon. Nevertheless, four of the dialects do preserve the PTB final *stop, which gives greater credence to the proposed etymology.

*χp > LX, MC /p/, TP /χp/ (about 10 sets).

Gloss	Longxi	Mianchi	Taoping	PTB
bamboo	pò (tí)	pù	χpu ⁵⁵	*g-pwa (44)
fart	--	pè	χpe ⁵⁵	*p/bu-n (STEDT)
kidney	pú lù	pú lò	χpə ³³ lo ⁵⁵	*pil/r ≠ rpul (STEDT)
pus	pù	pù	χpu ⁵⁵	*s-bu (STEDT)
frost	pià thò	pèi thòu	χpa ³¹ thu ³³	*s-pwa(l) (Matisoff 1998b)
patch	pà qó	pè tshì	χpe ³³	*pwa (STC 122, Matisoff 1998b)
thirsty	tsù tà pià	pià	χpa ⁵⁵	
granary	--	pè qè	χpə ³³	
pretty	--	pà sé	χpa ³³ se ³³	
January	--	pè là	χpe ⁵⁵ ɣ ³³	

This cluster cannot be traced to any particular PTB *initial, although all of the PTB roots have *p- or *b- initials.

This proto-cluster apparently corresponds to SQD *Rp. SQD cites 'pus', 'mend', 'shaman', and 'jackal/wolf'. Data in the key dialects do not have labial consonants in 'jackal'; however, the other three sets are supported:

gloss	Wasi	Lobu-zhai	Taoping	Zengtou	Jiuziying	Ruoda-zhai	Longxi	Mianchi
shaman	ɣpjì	ɣpjì				hpi	sì pí ~ spí	pí
pus			(χpu ⁵⁵)	pu	hpu	hpu	pù	pù
mend			χpe ³³ (‘patch’)	pe	hpa	hpe	pà cì	pè

'Mend' is apparently related to *pwa 'patch', cited above.

* χ ph > LX, MC /ph/, TP / χ p/ (about 2 sets). This protocluster is indicated by aspirated stops in Longxi and Mianchi, and by a non-aspirated cluster in Taoping. There is no corresponding *cluster proposed in *SQD*. Northern Qiang cognates have ph- initials (Mawo, Yadu forms mean 'blow with mouth').

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Yadu</u>	<u>Mawo</u>	<u>PTB</u>
blow (of wind)	phú tà	mè mè phú	χ po ³³	phə	phɿ	*pu (STEDT)
urinary bladder	nò phó	biè phò dá	pa ⁵⁵ χ po ⁵⁵			*po(ŋ/k) ≠ bon (STEDT)

If 'blow' is from PTB *pu, then it may have been combined with the *s- causative prefix to produce the PSQ *cluster.

* χ b > LX, MC /b/, TP / χ b/ (about 6 sets). This protocluster corresponds to *SQD* *Rb.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
difficult, tired	bà	bà	χ ba ²³¹	*bal (28)
nest	ỳ (tshá) bù	ì tshè bú	i ³¹ tshie ⁵⁵ χ bu ²⁴¹	*r-bu ≠ pru (STEDT)
dragon	bú	bú	χ bə ²⁴¹	
drum	bò	bù	χ bu ²⁴¹	
rest	bà ì	(bà) diè	χ ba ²⁴¹ n _i ³¹	
think	bà ló	bè dzóú ~ bè dzóú	χ ba ³³ χ dz _u ³³	

In addition to 'dragon', 'drum', and 'fatigue/tired', *SQD* supports this *cluster with 'yak' (Lobuzhai *zbu*, Jiuziyang, Ruodazhai *hbo*, Mianchi *bò*).

* χ m > LX /m/, MC /m/, TP / χ m/, Jiuziyang /*bm*/ (about 7 sets). For the first six sets, Longxi has /m-/ reflexes. Many of these clusters come from PTB and PQ *r- and *s- clusters. PSQ * χ m- corresponds to Mawo *rm-* (except for 'sky').

Gloss	Longxi	Mianchi	Taoping	Jiuziying	Mawo	PTB
dream	mò zè	mò	χmu ⁵⁵	ɤmo	ɾmu ɤe	*ɾ-man (82)
sky	mù tò	mú pià	χmǝ ³³ da ²⁴¹ pǝ ³³		mu tup	*(r-)mǝw (488)
name	zè mú	mè mé; mè	χmǝ ⁵⁵	ɤmɥ	ɾmǝ	*ɾ-min (83)
fertilizer	mì	mù	χmi ⁵⁵		ɾmi	?*s-ban (p21)
corpse	mó	mó	--	ǝ mu	ɾmu	*s-man (STEDT)
forget	dà mù	dè mǔ	χmi ⁵⁵		ɾmǝ	
Qiang (autonym)	mà	mà	χmǝ ³³	ǝ ma	ɾma	

Taoping and Jiuziying initials appear to be unchanged from PSQ *χm-; Jiuziying and Longxi have different reflexes for *χm- and for *sm- (3.3.1.8.2), showing that these clusters were separate in Proto-Southern Qiang³⁰. Taoping is the only Qiang dialect to bear evidence for a cluster in 'sky' (Yadu has the same form as Mawo); which may indicate influence from rGyalrong *te rmu*. Jiuziying has syllabified the pre-initial of 'corpse' and 'Qiang'. PSQ *χm- appears to come from Qiangic *ɾm-:

Gloss	Ergong	rGyalrong
dream	ntshe lma	ta rmo
sky	--	te rmu (STC)
name	lmw	tǝ rme
forget	lmu	--
corpse	--	ɥmǝ (NW rGyalrong (SHK))

*χt > LX. MC /t/, TP /χt/ (about 18 sets). Note that 'pig slop' is literally 'pig-dinner'. My reconstructed *χt corresponds to SQD *Rt. Those clusters that can be traced to PTB come

³⁰ how hyphenate?

from prefixed or plain *t-. 'Ax' is a borrowing from Tibetan, ultimately from PTB *s-ta 'knife' (STC 22). Nevertheless, it follows the established sound laws, which suggests that the word was borrowed before Southern Qiang underwent cluster simplification.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
soak/immerse	tà	fià tǎ ~ fiǎ té tǎ	χtǎ ³³	*(m-)ti-s (p16)
thousand	tú	--	χto ⁵⁵	*s-toŋ (32) ³¹
egg	ì tà	ì té	χtǎ ⁵⁵	*n/s-tow (STEDT)
pull up (weeds)	té	tú tyà; tuè	χtue ³³	*tyak=tək (p52)
ax	tà í	tè zǐ	χta ³¹ zǐ ⁵⁵	WT sta ri
bark (v.)	té tá	tè tá	χte ³³	
pig slop	piè-tì	pià-té	pa ³³ χte ³³	
supper, dinner	jà tí	zǎ té	zǎ ⁵⁵ χte ⁵⁵	
straight	tí	tí	χtǎ ⁵⁵	

SQD support for *Rt consists of the following sets, as well as 'heart' (but cf. 3.3.1.8.2). The set 'cold' includes Taoping *htu* (χtu ?), which does not appear in the published sources H. Sun 1962, *QYJZ*, *ZYC*, which have *mən*³¹ *pe*⁵⁵. The support for 'feed (vt)' in the key dialects are words that mean 'dinner'. 'Blind' shows secondary palatalization and affrication in Lobuzhai, Taoping, Zengtou, Ruodazhai, and Longxi. However, Wasi (whose pronunciation of this form is probably closest to that of PSQ *χtya³²), Jiuziying, and Mianchi preserve the *stop.

³¹ This could also be an ancient borrowing from Tibetan (Written Tibetan *stog*).

³² The pre-initial fricative probably comes from a *uvular stop + vowel (cf. Mawo *qətfa* / *qətfa*). The first syllable appears to be 'eye' (Mawo *qən*). All other extant Qiangic languages have reflexes of PTB *s-mik ~ *s-myak (STC 442), although Xixia has *kəw*¹ (MVS-Grin) or *Gar* (NT-SGK).

gloss	Wasi	Lobu-zhai	Taoping	Zengtou	Jiuziying	Ruoda-zhai	Longxi	Mianchi
fire tongs		šještje		šite	hte		cà-tè	cì-tè ~ cí-tè
straight	šti		(χtə ⁵⁵)		hti		tí	tí
feed (vt)		štji	(zɑ ⁵⁵ χte ⁵⁵)	tje	htje	hte	jà tí	zà té
cold	štu	tho	htu		htu			
pull			(χtue ³³)	twe	htwa	htye	té (pull weeds)	tuè (pull weeds)
blind	štya	štšya	(χtəya ³³)	tšyæ	htwa	hcçyæ	fià tcuà	tuà

*χd > LX /dz/ / _*V[+high], /d/ elsewhere; MC /d/; TP /χd/ (about 8 sets). The reflexes of *χd in Longxi and Mianchi are indistinguishable from those of *d. 'Lip' is the only set that has an identified PTB etymon, although five of the sets have cognates in NQ. This *cluster appears to be identical to *SQD*'s *Rd (apparently supported by 'back', 'cloud', 'ladder', 'mouth/lip', 'thigh'³³).

Gloss	Longxi	Mianchi	Taoping	Yadu	Mawo	PTB
lip	dzuà-kú	dué-zà	χduə ³³	--	ydza: ¹	m/s-d(y)u-l/r/n (STEDT)
cloud	dá mù	dá mò	χde ³³	zdam	zdvm	
ladder	dì ká	dè tcí	χdə ³³ gie ²⁴¹	zə də	zda	
deer	--	dá	χda ³³	zdu	zdu	
back	--	dé	χde ³³ ta ³³	(stə ge)	(sta ka)	
right (hand)	--	dá	χda ²⁴¹			
gun	cà-dzù	--	ci ⁵⁵ χdio ²⁴¹			
give	--	dá	χda ³¹			

³³ 'Thigh' is not a strong set, as Jiuziying *hdyeke* is the only form to lend support for a *cluster, and Wasi *dwake* does not have the expected initial *zd*-cluster (cf. *zde* 'back').

PSQ *χd- corresponds to NQ zd-. Both Longxi and Mawo have palatalized 'lip', which reflects the *y medial of the PTB reconstruction. This suggests a PSQ reconstruction of *χdya.

'Back' is a problematic form, as there is another Taoping form *de*²⁴¹ without the pre-initial. In addition, the apparent NQ cognates differ in voicing, although Wasi has *zde*, with the expected initial cluster. Qiangic probably has multiple 'back' roots with similar initials, as evidenced by the following:

Daofu	dzou	back
Ergong	rə ³³ stot ⁵³ smet ⁵³	lower back
rGyalrong	tə mt ^b ek	small of back
Namuyi	dz u ³³ tse ³³ tse ³³	back

*χn > LX /n/, MC /n/, TP /χn/ (about 2 sets). This protocluster apparently corresponds to SQD *Rn, as does *sn- (cf. 3.3.1.8.2).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>	<u>PTB</u>
twenty	nə sá	nə sá	(χ)nə ³¹ sa ³³	ynə su	*g-ni-s (4)
hatch	--	né	χne ⁵⁵	zdi	

This protocluster is poorly supported in the key dialects, and not at all in the auxiliary dialects. The Mianchi and Taoping forms for 'hatch' could also descend from PSQ *sn-. However, Mawo *zdi* points to a voiced pre-initial; as does the more distant Ergong *zɲa*. Note that /χ/ is optional in Taoping 'twenty', and does not appear at all on *ɲi*⁵⁵ 'two'.

Within Taoping, most of the basic metal terms have an initial (or pre-initial) /χ/:

gold	χqa ³³	silver	χɲu ⁵⁵	copper	χa ⁵⁵
rust	χguə ³³	tin	χtʃɿ ³³		

While this similarity might appear at first to be due to analogical developments, the uvular initials of all five forms are at least as old as PQ. 'Gold', 'silver', 'tin' had *cluster initials in PSQ, as evidenced by the auxiliary dialects.

gloss	Wasi	Lobuzhai	Taoping	Zengtou	Jiuziying	Ruodazhai
gold	hka	ʃko ³¹	χqɑ ³³	qa	hqa	hka
silver		ŋu	χŋu ⁵⁵	ŋu	hŋu	ŋhu
tin	ʃtʃu	ʃtʃu	χtʃl ³³		tʃu	htʃu

Earlier evidence comes from Northern Qiang and Qiangic:

gold	Mawo, Yadu	ʃqu	cf. Tai *kam ³⁴
silver	Ergong	zŋən	PTB *(d-)ŋul
tin	Yadu	xtʃə	

'Rust' and 'copper' are not supported in the auxiliary SQ dialects, but their cognates in NQ show the origins of Taoping /χ/ ('rust' is discussed further under *χg, below):

<u>gloss</u>	<u>Mawo</u>	<u>Yadu</u>	<u>PTB</u>
rust	ɽsa	dzer qua (probably <i>dze rqua</i>)	*(t)sa:y (Matisoff 1985 ³⁵ #108)
copper	χɑ φi	χɑ' xue' ('brass')	

*χtʃ > LX /ts/. MC { tc / _ i, tʃ elsewhere}, TP /χtʃ/ (about 5 sets). With the addition of further data, this set may end up being split into two or more *clusters, given the aspiration of Mianchi 'sweat'. With the exception of 'chew', all instances of PSQ *χtʃ- come from PTB *Cr- initials.

³⁴ My thanks to Professor Matisoff for this observation.

³⁵ Hereafter this is abbreviated *GSTC*.

Gloss	Longxi	Mianchi	Taoping	PTB
chew	tsà tsá	tʂeì tsá	χtʂa ³³	*C-tsat (GSTC #25) ³⁶
louse	tsí	tʂì	χtʂi ³³	*ʂrik (439)
six	tsú	tʂóu qò	χtʂu ³³	*d-ruk (411)
(sixteen)	fiá tsú	fià tʂhòu	χa ³¹ tʂhu ³³)	
gall	tsí	tʂí	χtʂə ⁵⁵	*m-kri-t ~ s-kri (STEDT)
sweat	tsù	tʂhù	χtʂua ⁵⁵	*s-krwal ≠ s-(η)krul (STEDT)

The form 'sixteen' is included to indicate that PSQ, or at least Mianchi and Taoping, had a dissimilation rule which irregularly dropped word-medial *χ- after a cluster with *χ- pre-initial, as in Taoping χdzɿ³³dzɿ³¹ 'smooth' (all examples from Taoping). Repetition of plain *χ-, however, was not affected (χue³³χue³¹ 'green', χo³¹χo³³ 'stone/pit', χa⁵⁵χa³³ 'yellow'), and even among clusters there are counterexamples (χgy³³χgy³³ 'round', χtca³³χtca³³ 'magpie', χba³³χdzu³³ 'think'). Given this rule, the aspiration in the second syllable of 'sixteen' would be compensatory for the loss of initial *χ-. The first column in the following table gives three reduplicated Taoping forms for which one expects χ- as a pre-initial on the second syllable. The second column gives three counterexamples, showing that application of this restriction was not complete, like dissimilations in other language families. The third column shows that plain χ-initial was not subject to any restrictions, no doubt to prevent total loss of syllable onset. Mianchi has lost all *χ-clusters; at this point, only 'sixteen' gives evidence that Mianchi shared the dissimilation with Taoping.

	χCi...Cj		χCi...χCj		χV...χV
red	χni ³¹ ni ³³	round	χgy ³³ χgy ³³	drive away	χa ⁵⁵ χo ³³
right, just	χte ⁵⁵ te ³³	think	χba ³³ χdzu ³³	green	χue ³³ χue ³¹³⁷
smooth	χdzɿ ³³ dzɿ ³¹	magpie	χtca ³³ χtca ³³	stone/pit	χo ³¹ χo ³³
sixteen	χa ³¹ tʂhu ³³			yellow	χa ⁵⁵ χa ³³ 38

³⁶ There is also a PQic reconstruction *N-t(s)a in the STEDT database; this is certainly a daughter form to the given PTB form.

³⁷ Longxi peí χə̌ χə̌, n.í χə̌ χə̌; Mianchi χué χuè tsí 'green and glossy'.

³⁸ Mianchi has χá χà tsí 'bright yellow, golden'.

* χdz > Longxi /z, ts/, MC /dz/, dz/, TP / χdz / (about 4 sets). Mianchi shows variation ('think') in its reflex of this *initial. I have no explanation for the Longxi initial for 'nit'.

Gloss	Longxi	Mianchi	Taoping	PTB
nit	{tsì gú}	dzú	$\chi dz \text{ ə}^{31}$	*s-row (278)
think	--	bè dzou ~ bè dzou	$\chi b \text{ ə}^{33} \chi dz u^{33}$	
dew	zì qé	dzé qè	$\chi dz \text{ ə}^{33} q \text{ ə}^{55}$	
star	zì bà	dzè	$\chi dz e^{33} p e^{55}$	

* χtc > LX {/ts/ /_i; c elsewhere}, MC /tc/, TP / χtc / (3 sets). [tʃ] in Taoping 'tin' is an allophone of /tc/, appearing before /i/ (cf. 2.2.3.1). 'Love' is based in part on Mawo χtci . This set apparently corresponds to *SQD* *Rtsj.

Gloss	Longxi	Mianchi	Taoping
magpie	cà cá	tcà tcá	$\chi tca^{33} \chi tca^{33}$
tin	tsí	tcí	$\chi tʃi^{33}$
love	cì é	--	--

In addition to these forms, *SQD* cites the following evidence from the auxiliary dialects for the *cluster:

gloss	Wasi	Lobu-zhai	Taoping	Zengtou	Jiuziying	Ruoda-zhai	Longxi	Mianchi
money	ʃtʃjī dze		(ci ³³ dzie ²⁴¹)	šidžje	htšidze		sèn dzé	tsèn tse í

While Wasi suggests the presence of PSQ * χtc -, it is almost certain that some of these forms are borrowings from Mandarin *jīn zi* 'gold, coins'.

* χdz > LX /dz/, MC /ʔ/, TP / χdz / ~ [$\chi dʒ$] (about 4 sets). This set is very poorly supported, and reflexes are scarce, even in Taoping. Some additional support for 'rain' comes from Jiuziying, whose initial cluster is almost identical to that of Taoping. * χdz apparently corresponds to Yadu *zdz*-; the NQ forms for 'rain' are not cognate.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziying</u>	<u>Yadu</u>
throw/discard	sì dzuá	--	χdʒi ³¹	--	zdzu
rain (v.)	--	--	χdza ³³	ɛjɛ	--

This protocluster seems to correspond to *SQD* *Rdzj, which is supported by the following three sets. I have classified 'open' under *χg- (Yadu zge, cf. *χg, below).

gloss	Wasi	Lobu-zhai	Taoping	Zengtou	Jiuziying	Ruoda-zhai	Longxi	Mianchi
seal, stamp	dʒja				hdʒje	ʒja		dzà
painful			(ze ²⁴¹)	ʒje	hdʒje			dzí
open		zge	(χgie ²⁴¹)	ge			gà	

The Yadu cognate for 'painful' is *zdzi*, 'ill'. I have divided Chang's 'open' into two sets; in addition to the above, there are the following sets which support PSQ *χdzi: Wasi *zdʒji*, Jiuziying *hdzi*, Mianchi *dzí*.

*χn > LX {/ɔ/ /_i; /n/ elsewhere}, MC {n /_ə; n elsewhere}, TP /χn/ (5 sets). Recall that /n/ does not occur before /ə/ in any key dialect. *χn does not correspond to any protoclusters in *SQD*. The initial in the first syllable of Longxi 'oil' may be due to reduplication of the second syllable.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
brain	qə nà	qè nà	qə ³¹ χnà ³³	*s-nəw-k (STEDT, from STC 483)
red	cí	nó	χni ³¹ ni ³³	*r-ni (pp 46, 91)
yoke, cow collar	--	nè tsù	χnà ³¹ tsuə ³³	?*g-n(y)a (STEDT)
stir-fry	cì cá	{dzì dzá}	χnà ³³	
oil, oily	ní nà	--	χno ⁵⁵	

*χk > LX, MC {/k, q/}, TP {/χq/ /_a; /χk/ elsewhere} (6 sets). The forms for 'bat' mean

"the salt-stealer" ('salt'-'steal'-AGT)³⁹; the variation in the Longxi forms for 'steal', 'bat' show the difficulty in identifying a regular reflex of PSQ *χk. In order to bolster this reconstruction, I have included supporting forms from the key NQ dialects.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>	<u>Yadu</u>
forehead	deú kù	--	da ³¹ χku ³³	zdu ŝku	zdu ŝku
garlic	kà	kè tù	χkə ⁵⁵	tci-ŝk	--
steal	tə kù	kú pù ~ kù	χkə ⁵⁵	ŝkuə	ŝquəχ
bat (animal)	tshí-qù-mù	--	tshɿ ⁵⁵ χkə ³³ mə ³³	--	--
hard	qò cà	koù tca	χku ⁵⁵ tca ³¹	ŝku ŝtei	ŝku ctcu
ugly	khú, tsà qhú	--	--	--	mo ŝku

The NQ forms for 'steal' show that the velar/uvular variation seen in Longxi 'steal', 'bat' predates PSQ. It is not clear why 'hard' has a /q/ initial in Longxi, but this may be an influence from qò 'difficult' (Jiuziying χku 'hard', χqa 'difficult'). PSQ *χk appears to correspond to SQD *Rk.

*χg > LX /g/, MC {/dz/ /_ *i; /g/ elsewhere}, TP /χg/ (7 sets). This cluster does not correspond to any particular PTB *initial.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
fox	qhà guà	qhá guè	qha ³³ χguə ³³	*gwa (p34)
nine	gú	gú qò	χguə ³³	*d-kəw~d-gew (13)
open (door)	gà	dzí	χgie ²⁴¹	*ka (469)
answer	guà	--	χgye ³³	
rust	cà-gù	gu ì	χguə ³³	
left (hand)	--	gu ì	χgy ³³	
retreat	--	gè gú pù	χgə ³¹ kə ³³	

This *cluster corresponds to SQD *Rg, which is based on 'nine', 'Chinese', 'goat', 'round'. 'Chinese' lacks the right correspondences, no doubt due to its xenogeneic origin. 'Goat' is based on an apparently erroneous Taoping form; 'nine', 'round', however, are solid supporting sets:

³⁹ Mianchi has *ièn laò sue ì*, a borrowing from Mandarin meaning "salt mouse."

gloss	Wasi	Lobu- zhai	Taoping	Zengtou	Jiuziying	Ruoda- zhai	Longxi	Mianchi
nine	gwu	zgwu	χguə ³³	gwə	ɣgwe	ɣgwə	gú	gú qò
round			χgy ³³ χgy ³³	gwə	ɣgu	ɣgy		

*χη > LX /ɸ, η/, MC /η/, TP /χη/ (2 sets). Only Mianchi and Taoping have regular reflexes of this *initial. Because these two morphemes are the only ones in Taoping with this initial, and both forms have the same phonetic environment, there is a possibility that χ- is of secondary origin, although its appearance before /η-/ in these words is not predictable from synchronic data (*ηu⁵⁵tcɿ⁵⁵*, 'enclosure').

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
silver	ηú	ηó	χηu ⁵⁵	*(d-)ηul (pp 15, 173))
knee	κò qá	ηò ké	χηu ⁵⁵	

*χq > LX, MC /q/, TP /χq/ (5 sets). The correspondences in this set are completely regular, with the exception of 'under', in which *χq > TP /qh/. *χq- only occurs before PSQ *a. PSQ comes from PTB *Ck- initials.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Yadu</u>	<u>Mawo</u>	<u>PTB</u>
cook/boil	qò	qà	χqɑ ³³	ɣqu	ɣqu	(*glak~klak (124))
difficult	mə qe í; qò	(pù) qà	χqɑ ³³	ɣqu	ɣqu	*kak (TIL #70)
mouth	qà	—	χqɑ ⁵⁵	zde kɥ	ɣqu	*m-ka (468)
gold	qú	qà	χqɑ ³³	ɣqu	ɣqu	
under	qà	qà	qha ³¹ lə ³³	ɣqul	ɣqul	

This set is regular in its correspondence among Southern Qiang dialects, and with Mawo. Taoping has transphonologized the pre-initial *χ- of 'under' into aspiration, although it has

preserved *χ in *dza*³³*χqa*³³ 'underarm'. This cluster corresponds to *Rq in SQD, wherein it is supported by 'gold', 'mouth'.

*χG > LX, MC /ɸ/, TP /χG/ (hapax). Taoping provides the only direct evidence in Qiang for this *cluster. Secondary evidence comes from the correspondence of Jiuziying /ɣ/ to the other dialects' /ɸ/. Namuyi *ηqhε*³³ suggests that some form of this cluster may go back to PQic (this cluster is very rare in Namuyi: the only other instance of it is *ηqha*⁵⁵ 'fat (meat)').

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Jiuziying</u>	<u>Yadu</u>	<u>Mawo</u>
gnaw	kà cà	kè ká	χGɑ ²⁴ ce ³³	ɣɑ	kɑ' la	kæ li

No evidence is given in *SQD* for the proposed PSQ clusters *qj, *qhj, *Gj, *hj (*χj?) *hj (*ɸj?).

3.3.1.9 Fortis initials

Among the Southern Qiang dialects investigated by Wen there are some from Li county (Jiuziying, Jiuzitun, Hou'ergu, Sanqizhai) which distinguish fortis and lenis initial clusters or affricates. In Sanqizhai these occur as ejectives /'q, 'G/, followed by sibilants. Cognates of these forms occur in the other dialects with fortis fricatives in initial position (examples from Jiuzitun, which is very similar to Jiuziying); Northern Qiang cognates have velar/uvular stop pre-initials followed by sibilants.

<u>Gloss</u>	<u>Sanqizhai</u>	<u>Jiuzitun</u>	<u>Mawo</u>
god	'qsɿ	ts'e	khsi
new	'qsɿ	ts'i	khsə
dung	'qsɿ	ts'ɿ (Jiuziying)	qhşə
three	'qsi	ts'i	khsi
iron-calabash	'Gza	dze	xtşəp (Yadu)
bubble up	'qso	tʌ ts'u	
spring up	'qsu	tʌ ts'u	

These fortis initials present corroborative support for the PSQ *clusters which are otherwise only attested among Taoping's older speakers (e.g., *khsi*⁵⁵ 'new' (3.3.1.8)). They also demonstrate just how similar the Southern Qiang language of the 1940's and 50's was to Northern Qiang. It appears that Wen's fortis consonants arose from transphonologization of pre-initial aspiration, followed (in most dialects) by cluster simplification. Therefore there is not adequate evidence to posit glottalization or ejectivity as PSQ phonological traits.

3.3.2 Rhymes

The rhyme correspondences of Southern Qiang are not as clearly evident as those of the initials, due at least in part to irregular vowel harmony and patterns of reduplication that weaken the vowel of the first syllable. Nevertheless, certain patterns of correspondence are clear.

3.3.2.1 Monophthongs

I reconstruct the following monophthongs:

*i, *y	*i	*u
*e	*ə, ə	*o
*a		*ɑ

Chang (1967) proposes a very similar system (note that his *u is equivalent to *i):

*i	*u	*u
*e	*ə	*o
*a		*ɑ

Chang has eliminated /y/ from the phonemic inventory of the dialects he considers, and hence from his reconstruction. Although /y/ is clearly a phoneme of modern dialects (e.g. Longxi *ỳ* 'chicken'), my own reconstruction of PSQ *y is still tentative.

*a > LX, MC, TP /a/, (about 70 sets, 8 sets represented in all three dialects)

Gloss	Longxi	Mianchi	Taoping	PTB
believe	dzà	dzá (zà)	dza ²⁴¹	?*(m-)kyen (223)
brain	qə nà	qè nà	qə ³¹ χna ³³	*s-nuk (483)
hard	qò cà	koù tcà	χku ⁵⁵ tca ³¹	*s-ra (STEDT)
one	à	à qó	a ³¹	*a (JAM-LITB 7.1)
how many	nà ó; nà ná	nà qó (lè)	na ³³ tci ⁵⁵ na ³³	
sneeze (v.)	á tshù-pù	á thiaò-pù	χa ⁵⁵ tshye ³³ pu ³³	
magpie	cà cá	tcà tcá	χtca ³³ χtca ³³	
wide, broad	lá	lá	la ³³ ; lie ³³	

The first two syllables of 'sneeze' probably have an onomatopoeic origin (the third syllable of 'sneeze' is 'do'), as does the word 'magpie' .

*a > LX /a/, MC {/e/ / _ Cu, /a/ elsewhere} TP /a/ (about 57 sets) For this series, Taoping is indicative, as Longxi and Mianchi do not distinguish /a, a/; hence all supporting sets of *a, *a bear Taoping reflexes. Mianchi has predictable vowel harmony ('armpit', 'bracelet', 'hole', 'in back', 'mushroom', 'think'). I have put first the forms which come from PTB *a roots; the remainder are arranged alphabetically.

Gloss	Longxi	Mianchi	Taoping	notes
bitter, salty	qhà	qhà	qha ⁵⁵	*ka (8)
chew	tsà tsá	tseì tşá	χtşa ³³	*C-tsət (GSTC 25)
crow (n.)	--	nə-ŋá	nə ³³ ŋa ⁵⁵	?*ka (STC pp 99-100)
difficult	{mè qeí; qò}	(pù) qà	χqa ³³	*kak (TIL #70)
difficult, tired	bà	bà	χba ²⁴¹	*bal (29)
exchange	lá lá	lè là	tə ⁵⁵ la ³¹	*lay (283)
father	á pà	--	pa ⁵⁵ pa ³³	*pa=pwa (24)
gnaw	κà cà	κè κá	χGa ²⁴¹ ce ³³	*ŋrat ≠ *nyat(STEDT)
hungry	(dà) sù pá	--	su ⁵⁵ pa ⁵⁵	*s-pa(ŋ/k) ('thirsty', STEDT)
I, me 1	qà	--	qa ⁵⁵	*ka (p93)

Gloss	Longxi	Mianchi	Taoping	notes
I, me 2	--	ŋà	ŋa ⁵⁵	*ŋa (406)
laugh	(dá) zá ló	dzà	dzɑ ³³	*rya-t (202)
mother	á mà	á mà	ma ³³ ; ma ⁵⁵ ma ⁵⁵	*ma (487). Taoping indicates variation for PSQ. LX, MC are ambiguous, reflecting either *a, *ɑ.
mouth	qà	qá	χqa ⁵⁵	*m-ka (468)
strength	--	dzà qà	dzɿ ²⁴¹ qa ³³	?*k-ra (STEDT *(k/b)-ra(ŋ/m))
seed	--	zueí-zà	zuə ³¹ za ²⁴¹	First syllable from *dzəy (STEDT)
armpit	zá ká mù	dzà ké	dza ³³ χqa ³³	MC has undergone vowel harmony with subsequent loss of the conditioning syllable, maintained in LX.
ask	(tə) zà zí	{dzɿ dzɿ}	dzɑ ³¹ dzɿ ³³	Two syllable etymon. MC has lost the *ɑ syllable and reduplicated the *ɿ syllable.
bathe, wash	χò là	cì pé-kuà là	ce ⁵⁵ p e ³³ χua ⁵⁵ la ⁵⁵	
bear fruit	--	ʂè dzǎ	sie ⁵⁵ ma ⁵⁵ dzɑ ²⁴¹	
big	bjà ~ bà	bzà	bzɑ ³³	
bracelet	pà-kù	pè kuì	pa ⁵⁵ kie ³³	Vowel harmony in MC
crack (v.)	zǐ zá	--	zɑ ⁵⁵	
cry out, call out	qá jà	--	kuə ³³ zɑ ³³	
cry, weep	zǎ	zà	za ³³	
deer	--	dá	χda ³³	
earring	ŋ.ì mà	nə mà	nə ³¹ ma ³³	
encounter/ meet	tsó pà	--	a ⁵⁵ tsu ³³ pa ³³	
folkdance	tshó tà-zə mù	soú tà	tshu ⁵⁵ ta ⁵⁵	
give	--	dá	χda ³¹	

Gloss	Longxi	Mianchi	Taoping	notes
gold	{qú}	qà	χqa ³³	There appears to be PQ and PSQ variation between *χqa ~ *χqu (Lobuzhai ško ³¹ , Yadu and Mawo šqu).
good	nà	nà	na ³³	
hat	tà bá (χà)	tà bá	ta ³³	
have/exist	{ηó}	ηá	ηa ³³	TP reflects PQ variation (Yadu, Mawo ηuə).
hole	zà pù	zè pù	zα ³³ pu ³³	Vowel harmony in MC. Second syllable from *puη (STEDT)
in back	--	mè tshí	ma ³¹ tʃhɿ ³³	Vowel harmony in MC
lead (cow)	tá	tá	ta ³³	
noodles	qhà mì	--	qha ³¹ thu ⁵⁵	
old (of things)	bá	bá	ba ³³	
plain (n.)	bà tò	dá tshì-bà	ba ³³	
plate	--	tshì bá	χu ³³ ba ³³	
pretty	--	pà sé	χpa ³³ se ³³	
rest	bà ì	(bà) diè	χba ²⁴¹ ɲi ³¹	
return (vt)	--	tù bà	da ³¹ ba ²⁴¹	
ride	tsà	tsà	tɕa ³³	
right (hand)	phà tó qò	dá	χda ²⁴¹	
roll (v)	lè cǎ	--	lɛ ⁵⁵ ca ⁵⁵	
slow	--	phiè thá	phi ³¹ tha ⁵⁵	
soft	mà mà	--	ma ³¹ la ³³	
soft	--	zà là	ma ³¹ la ³³	
step over/across	(dà) kuá (tcà)	--	kuá ³³ tɕa ³³	
supper, dinner	jà tí	zà té	zα ⁵⁵ χte ⁵⁵	
think	bà ló	bè dzou ~ bè dzou	χba ³³ χdzu ³³	Vowel harmony in MC

Gloss	Longxi	Mianchi	Taoping	notes
tie (fire-wood) into a bundle	--	tsò dzá	dzɑ ³³	cf. Ergong <i>mdzo le</i> 'wrap'
vulva	--	thà bá	thɑ ³¹ ba ³³	TP 'buttocks'. Cf. E. rGyalrong <i>ts^han pa</i> .
waist	tà qà	--	χta ³³ sa ³³	

*i > LX, MC, TP /i/ (about 15 sets with support from all three dialects). PTB *-ik > PSQ

*i ('leopard', 'louse'). 'Black' comes from a PTB -ak root.

Gloss	Longxi	Mianchi	Taoping	PTB
black	ɲí	nə	ɲi ⁵⁵ ɲi ³¹	*nak (p88)
smell, sniff	cí tà	mí	χmi ⁵⁵	*m/s-nam (464, STEDT)
child	tcí bí	kè bzì tsì	tʃi ³³ bzi ³³	? *b-ləy (448)
hand	lì pá	ì pá	i ⁵⁵	cf. Yadu <i>jə pa</i>
host	tcè lə pú	tcè lè pú	tcɛ ⁵⁵ lə ⁵⁵ pə ³³	*k-y(i/u)m (STC 53) 'home/womb'
leopard, panther	cì	sì	si ⁵⁵	*zik (61)
louse	tsí	tʃì	χtʃi ³³	*srik (439)
ax	tà í	tè zì	χta ³¹ zi ⁵⁵	WT <i>sta ri</i>
NEG	mí	mì (ɲé)	mi ⁵⁵	?*ma (p96)
bird	ì tshá	ì tshé	i ³¹ tshie ⁵⁵	
new	tchí	sí	tshi ⁵⁵	
niece/nephew	dzì qhuá	dzì	dzi ³¹	
now	pè ì	pè tì	pə ³¹ ti ⁵⁵	
spin (yarn),	lì	lì	li ³³	
thread	sà ɲí	sè lì	siɑ ³³ li ⁵⁵	

The following two sets are good for two dialects, but have /i/ for the third:

Gloss	Longxi	Mianchi	Taoping	PTB
long objects (CL)	zì	dzí	dzɪ ²⁴¹	*s-rin (433)
crow (v.)	cí	tè sǐ	sɿ ⁵⁵	

*e > LX /e, ei/, MC /e, ɛ/, TP /e/ (at least 7 sets with support from all three dialects).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
needle	χé ~ χèi	χè	χe ⁵⁵	*kəp (52)
rope	beì	bzè	bze ³³	? *bi (STEDT)
bark (v.)	té tá	tè tá	χte ³³	
drunk	(ci) tà χeì	gè χè	sɿ ³¹ χe ⁵⁵	
short, low	bā ~ bè	bè	be ³³	
pretty	(tsà) sé	pà sé	χpo ³³ se ³³	
top	qè teì	qé tè	qa ³¹ te ³³	

*i > LX, MC /i/, TP /ɿ/ (at least 9 sets with support from all three dialects). Some instances of this vowel appear to come from PTB *əy ('four', 'heavy'). The last syllable of 'head' is a common noun ending, much like Mandarin *zi* [zɿ³¹], from PTB *za (STC 59).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
four	zì	zì qó	dʒɿ ³³	*b-ləy (410)
heavy	zì	dzì	dzɿ ³³	WT ldzi-ba. (95)
salt	tshí	tshì-bé	tshɿ ³³	*tsa (214)
understand	sì	sì uà	sɿ ⁵⁵	*syey (182)
head	qà bá tsì	qà bzá tsì	qə ³³ po ⁵⁵ tɿ ³³	
spider	tshì tshì	(tshà s̥ì)	tshɿ ⁵⁵ tshɿ ³¹	
tin	tsí	tcí	χtɿ ³³	

*o > LX, MC, TP /o/ (at least 5 sets with support from all three dialects).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
flying stone, stone	kò ló ~kò lú	lò, gò-bzà, lò-bzà	ko ²⁴¹	*r-luŋ (88)
urinary bladder	ŋò phó	biè phò dá	pa ⁵⁵ χpo ⁵⁵	*po(ŋ/k) ʷ boŋ (STEDT)
hunt	qhò	cý χó	χo ⁵⁵ kə ³³	
plow (n)	tò	tò kè	to ³³	
wild goose	ŋa ³⁵ kò	ŋə ³⁵ uò	ŋan ¹³ ko ³¹	

'Goose' has a PTB root *ŋa-n (STC p.99); however, Taoping *ŋan*¹³ is probably a borrowing from Tibetan (WT *ŋaŋ pa*) as final consonants in extant SQ dialects are secondary. Benedict (STC) has observed that final -o, -e in TB languages are usually secondary. At least 16 instances of Southern Qiang /o/ are from PTB *-aŋ (cf. 3.3.2.3).

*u > LX, MC, TP /u/ (at least 5 sets with support from all three dialects). 'Nest', 'pus' reflect PTB *-u. The third syllable of 'sneeze' is 'do' (LX, TP pù).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
nest	ỳ (tshá) bù	ì tshè bú	i ³¹ tshie ⁵⁵ χbu ²⁴¹	*r-bu ≠ pru (STEDT)
pus	pù	pù	χpu ⁵⁵	*s-bu (STEDT)
hungry	(dà) sù pá	sù	su ⁵⁵ pɑ ⁵⁵	? *si, *sok (STEDT)
hole	zà pù	zè pù	zɑ ³³ pu ³³	*puŋ (STEDT)
sneeze (v.)	á tshù-pù	á thiaò-pù	χa ⁵⁵ tshye ³³ pu ³³	

In spite of these correspondences, there are about forty-eight sets in which it is not possible to distinguish between PSQ *u and *o, because both /u, o/ are present in the supporting forms (and sometimes /y/ in Taoping or Longxi). Note the following:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
bamboo	pò (tí)	pù	χpu ⁵⁵	*g-pwa (44)
dream	mò zè	mò	χmu ⁵⁵	*r-man (82)
lid, cover	tà-qó	tshà qù	qu ³¹ qu ³³	*gop ≠ kop (STEDT)
phlegm	tshù	tsù zé	tsho ⁵⁵ qha ³³ χne ³³	*tshu (STEDT)
silver	ŋú	ŋó	χŋu ⁵⁵	*d-ŋul (p15) ⁴⁰

For most of these sets equivocal sets, the protovowel is determined by simple majority, or by peeking at the vowels present in Northern Qiang. This alternation is not unheard of in other branches of TB. Benedict has observed that "the high medial vowels *u and *i of TB are well maintained in Tibetan, Kachin and Lushei, but partial or complete replacement by lower vowels (o ~ e ~ a) is characteristic of Burmese, Garo and many other TB languages." (STC:75) Ronghong Yadu has some variation between /o/ and /u/, as noted by LaPolla: "The functional loads of the /u/ - /o/ contrast and the /i/ - /e/ contrast are not very great: in many cases /o/ and /u/ are interchangeable, and /i/ and /e/ are interchangeable." (LaPolla 1996:10)

*y > LX {o/ [dental] _ , u/ [velar] _ , ?? elsewhere}, MC {ui/ [velar] _ , iu/ l _ , ou/s _ , ?? elsewhere}, TP /y/ (five solid sets). The first three sets are lent additional support by /y/ in Mawo and /(i)u/ in Yadu (*siu does not occur in Yadu). The second syllable of Mianchi

⁴⁰ Auxiliary dialects suggest PSQ *u (Table 3.3)

'flour' demonstrates the vowel harmony mentioned above under *a. Because of the small number of correspondence sets and the restricted range of attested initials, it is not clear what the full extent of Longxi and Mianchi reflexes of *y might be.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>notes</u>
come	lò	--	ly ³³	Mawo <i>ly</i> , Yadu <i>liu</i>
flour	bà lò	lê-bê-liù	ba ³¹ ly ³³	Mawo <i>ly</i> , Yadu <i>liu</i>
learn	só	soú	tə ³¹ sy ⁵⁵	Mawo <i>sy</i> , Yadu <i>su</i>
round	pà-kù	pè kuì	χgy ³³ χgy ³³	LX, MC 'bracelet' ('hand-round')
left (hand)	--	guì	χgy ³³	

For 'sweet' PSQ *y may be traced to PTB *yəw. However, the apparent Longxi reflex is aberrant:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>notes</u>
sweet	tshú	tshú	tchy ³³	PLB *khyəw (p60)

Because the reflexes of PSQ *y in Longxi and Mianchi are elusive. I only propose *y in those sets where it is corroborated by NQ. For the following two sets, Taoping /y/ is a reflex of PSQ *iu, as the sequence /iu/ does not occur in Taoping (cf. *iu, 3.3.2.2):

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>
see	à tco	tiú (cà)	tcy ³³	kuə tiu
ten	fià dzó	fià diú (qò)	χa ³¹ dy ³³	hə diu

*ə > LX, MC, TP /ə/ (about 8 sets)

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
arrow	-	lè	lə ³³	*bla (449)
crow (n.)	--	nə-ŋá	nə ³³ ŋa ⁵⁵	
exchange	lǎ lá	lè là	--	*lay (283)
father's older brother's wife	à ná	kuè ná	--	
head	qà bá tsì	qà bzá tsì	qə ³³ po ⁵⁵ tɕɿ ³³	
musk deer	tshì là	sè là	tchi ³¹ lə ³³	
there	thà gá	--	thə ³¹ χe ⁵⁵	
tomorrow	tə bəí cǐ	tè péi	tə ³¹ pə ³³	

In addition to these instances of *ə, there are also occurrences of /ə/ which may be attributed to reduplication, grammaticalization, or proto-variation. Reduplication accounts for the first syllables of 'exchange' (Longxi *l̥ l̥*, Mianchi *l̥ l̥*) and 'harmonious' (Mianchi *nə nə*; cf. *nà* 'good'). It appears that the vowel of Taoping *nə³³* 'also' has arisen due to the types of phonological processes common to the evolution of functor words (Longxi *ná*, Mianchi *n̥á*).

The Taoping form for 'twenty' (*(χ)nə³¹sa³³*) appears at first to have undergone vowel harmony (*n̥i⁵⁵* 'two'). However, the following chart shows that this process did not affect 'thirty', even though 'three' and 'two' have the same rhyme in Taoping (cf. also *i⁵⁵sa³³* 'arm'). Comparison with NQ forms show that PQ had variation in the vowel of 'two' (Ronghong is similar to Taoping). Dialect-internally, this variation is preserved in the Taoping forms 'two', 'twenty'.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>	<u>Ronghong</u>	<u>PTB</u>
two	<i>nə</i>	<i>nə qó</i>	<i>n̥i⁵⁵</i>	<i>ɣnə</i>	<i>hə-n̥i⁴¹</i>	*g-nis
twenty	<i>nə sá</i>	<i>nə sá</i>	<i>(χ)nə³¹ sa³³</i>	<i>ɣnə su</i>	<i>ju su</i>	
three	<i>tshè</i>	<i>sí qò</i>	<i>tshi⁵⁵</i>	<i>khsi</i>	<i>χsə</i>	*g-sum
thirty	<i>tshè sá</i>	<i>sí sà</i>	<i>tshi³¹sa³³</i>	<i>khsia su</i>	<i>χsu su</i>	

In addition to these clearly cognate sets, however, there are many sets in which it is not possible to tell whether *ə is the proto-vowel, or whether another vowel has neutralized to schwa:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
bean	<i>də piá</i>	<i>deì</i>	<i>də³³</i>
now	<i>pè ì</i>	<i>pè tì</i>	<i>pə³¹ti⁵⁵</i>
vapor	<i>lè</i>	<i>(tchì) lè</i>	--

While /ə/ occurs in Longxi and Mianchi, and /ə/ in Taoping, there is no evidence for PSQ *ə. The sets 'mushroom', 'branch' show that /ə/ is a reflex of *r- or *z-initials; that is, the

⁴¹ The Ronghong form is 'twelve' ('ten-two'). The plain form for 'two' is *je* (cf. 'twenty').

/z-/ initial of the second syllable of Mianchi, Taoping 'mushroom' corresponds to the /ə-/ rhyme of Longxi. Similarly, the /z/ of the first syllable of Taoping 'branch' corresponds to the rhotacization of the second syllable of the Mianchi form (note that the morphemes in the two dialects are in different order). The /ə/ of the next two Mianchi words appears to be related to the /-z/ clusters of Taoping, and so would have its origin in *r- clusters. The origin of Taoping /ə/ (qə³¹ə⁵⁵ 'front', sɿ³¹ə⁵⁵ 'willow', ə³¹- 'down (pfx)', and a few others) is unknown.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>notes</u>
mushroom	mə ə̃	mē zú	mə ³¹ zú ³³	PST *g-run ≠ g-rin (GSR 485c) ⁴²
branch	cì kə mà	phò khə̃	zə ⁵⁵ kha ³¹	*ka(:)k (327) or *kap (338)
hoof	tsú kə	thì khə̃	--	*kwa (Matisoff, 1998b)
open (eye) tear (v.), rip	tə phé phú phá	phə̃ ʂè phù phə̃	phz ə ⁵⁵ phz i ³³	

There are many SQ sets where ə ~ i following sibilants. For these it is not possible to determine whether to reconstruct PSQ *ə or *i. The following three sets demonstrate this problem:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
gall	tsí	tcí	χtʂə ⁵⁵ 43
lie (n.)	ì zì	zè zè	--
tongue 1	zə qə̃	zì qé	zɿ ³¹ qə ⁵⁵ 44

*ə > LX, MC /ə-/; TP ? (two sets).

⁴² The first syllable is from *g-məw (STC #455).

⁴³ Mawo, Yadu have χtʂə, suggesting a reconstruction of *χtʂə for PSQ.

⁴⁴ Mawo, Yadu zəq suggests a PSQ reconstruction of *zə qə.

Gloss	Longxi	Mianchi	Taoping	Yadu
raise (livestock, child)	pə̌ ə̌	ì pé̌ ə̌		pəə́
testicle	bə̌			bəə́

*Voiceless vowels.

The following sets give evidence for *voiceless vowels in PSQ:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
today	pú c̣j̣	pé-ṣɛ̣	—
year, next	dzá ṭɕj̣	diá ṭɕj̣	dɑ ²⁴ tʃh ³³
yesterday	ní c̣j̣	nó ṣɛ̣	nɿ ³¹ sie ³³

The second morpheme of 'today' and 'yesterday' is reconstructed *si̯ɛ̌, and *ṭɕj̣ is one possible reconstruction of PSQ 'year, next'. If voiceless rhymes are truly reconstructible for PSQ, then their distribution is very limited.

3.3.2.2 Diphthongs

*ie, *ia, *io, *iu, *ye, *ya, *uo, *ui, *ue, *uə

At this time, these ten *rhymes are the only reconstructible diphthongs. Note that none of them increase closure over their duration.

*ie > LX {a/ [velar] __, i/ [dental sibilant] __, /i/ elsewhere}; MC {i/ [palatal] __, e/ [dental fricative, velar] __, /ie/ elsewhere}; TP /ie/ (17 sets). This series is reconstructed with the aforementioned caveats about the phonetic nature of Taoping /ie/ (3.3.1.5, note). PSQ *ie comes from PTB *i + nasal rhymes ('heart', 'liver', 'wood', 'fingernail'), from *ik (drop), from *ey ('drink', 'fruit'), and from *əy ('day').

Gloss	Longxi	Mianchi	Taoping	notes
drink	tchí	thié	thie ³³	*they (STEDT). Attested in Qiangic and Northern Naga.
urine	bí	biě	bie ²⁴¹	Qiangic *nbi (Chapter IV), *C-bi (STEDT)
heart	cì mì	tié mù	χtie ⁵⁵ mə ⁵⁵	*s-niŋ (367)
day	cì	sè	sie ³³	*s-nəy (GSTC)
fruit	cì mì	sè mù	sie ⁵⁵ mə ⁵⁵	*sey (57)
god	à bú tchǝ	à pà-sé	tshie ³³	
liver	cí já	sè	sie ⁵⁵	*m-sin (234)
saw	--	kè zǐ	kie ³³ zǐ ⁵⁵	Qiangic root: Ergong kε zε, Yadu khe'
spring, summer	{tca qe í}	tsè-qè	tsie ⁵⁵ qə ³³	
tight	cí ~ tcí	sé	--	
wood, timber	cì tò	sè	sie ³³	*siŋ (233)
drop (of water)	zǐ	{tè}	dzie ³³	*tik Ꞥ dzik Ꞥ n-dzak (STEDT)
finger nail	liè sí qə	ì sè	sie ⁵⁵ qə ⁵⁵	*m-(t)sin = m-tsyen (74)
soul/spirit	tsǐ	--	tshie ³³	
open (door)	gà	dzǐ	χgie ²⁴¹	
tail	suà kà	suà kè	sua ⁵⁵ kie ³³	

In addition to these sets, however, there are many which are clearly cognate, and in which at least one form suggests *ie, but other form(s) do not. E.g.,

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
pot. wok	tshà piá	tshà	tshie ⁵⁵ pa ⁵⁵
garden	tsà-kù	tsǐ qǒ	tshie ⁵⁵ kie ³³

*ia > LX {a / [palatal, s]_, /ia/ elsewhere}, MC {a / [palatal]_, ε/ s _ , /ia/ elsewhere}, TP {a / p, l_, e / m_ ; /ia/ elsewhere} (18 sets). For this set the three dialects are about equally

divergent. PSQ *ia has at least three PTB sources: *ya ('skin', 'shoulder', 'penis'), *Vy ('cheek', 'dig', 'flint'), and *ak ('pig', 'side', 'thirsty'). Note that for this rhyme, the approach taken in Chang 1967 would be to reconstruct initial palatal clusters (Professor Matisoff, p.c.).

Gloss	Longxi	Mianchi	Taoping	PTB
skin (human)	jà piá	zà piá	z a ⁵⁵ pa ⁵⁵	*pya ~ pra (STEDT)
shoulder	liá χá	--	l a ³¹ χ a ⁵⁵ pi ³³	*m-lyan/η (p120)
penis	lià qè	lià qè	--	*b/m-l(y)an (STEDT, cf. GSR 8871)
cheek	tcì piá	tcí pià	tʃɿ ³¹ pa ⁵⁵	*s-bi ≠ s-bay (STEDT)
dig	bù liá	--	qhə ³¹ la ⁵⁵	*la:y (288)
flint, steel (for flint)	tshà mià	tsuè mià	--	*mey (STEDT)
pig	pià	pià	pa ³³	*p-wak (43)
side	piá pú	--	pa ³³ pu ³³	*(s)pa(η/k) (STEDT)
thirsty	tsù tē pià	pià	χpa ⁵⁵	*s-pa(η/k) (STEDT)
female (animal)	mià	mià	--	?*m-na (187), ?*mi (STEDT)
flat	pià qó	piá pià	--	?*pe:r (330)
New Year	dzá	diá dià	dia ²⁴¹	
cloth	bù miá	bzù miá	bzɿ ³¹ me ³³	
plant (wheat)	phià	phià	phia ³³	
shovel	cà piá	cì-piá	--	
thick (of paper)	lià	lià (liù)	--	
thread	sà n̥í	sè lì	sia ³³ li ⁵⁵	
write	--	cà	sia ⁵⁵	

*io > LX {u / [palatal]_ ; o / s_ , ?? elsewhere}, MC {/o/ /s_ ; /io/ elsewhere}, TP {o/[palatal]_ ; /io/ elsewhere} (5 sets). Recall that PSQ *th > Longxi ts/_u. The sequence /sio/ does not occur in Longxi or Mianchi. This diphthong apparently occurred only after dentals (the palatals in Longxi ('door', 'many') and Taoping ('puttee') are phonologically conditioned secondary developments). This diphthong is not yet relatable to any rhyme in PTB.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
door	dzù ~ dzú	diò	dio ²⁴¹
many	dzú	dió	dio ²⁴¹
bucket/barrel	--	thiò	thio ³³
puttee, leg wrap	--	diòŋ dí	dzo ³³ de ²⁴¹
autumn, winter	sò qe í	só qè	sio ³³ ko ³³

*iu > LX /o/, MC /iu/, TP /y/ (3 sets). The reconstruction of this rhyme is further bolstered by Mawo /iu/ in 'ten' and /u/ in 'say' (*iu does not occur in Mawo).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>
ten	fià dzó	fià diú (qò)	χa ³¹ dy ³³	hə diu
see	à tó	tiú (cà)	tey ³³	kuə tiu
say, speak; tell	--	diú; diù	dzi ²⁴¹ ; dy ³³	ɹu

*ye > LX {ue/ #_ , /ua/ elsewhere}; MC /ue/; TP /ye/ (7 sets). /y/ does not occur in the Longxi and Mianchi environments for which we have evidence for *ye. It is not clear which PTB *rhyme(s) gave rise to PSQ *ye. One possibility is given for 'full'.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
full	suà	suè	sye ⁵⁵	?*l-tyam ≠ l-dyam (226)
answer	guà	--	χgye ³³	
dry, warm by fire	qhuà	khuè	khye ³³	
hit target	(dà uà) ⁴⁵	dè uě	da ³¹ ye ³³	
useful	ué	--	ye ¹³	
hot	khú khuá	khué khuè	khye ⁵⁵ le ³³	
turn (body)	(suè)	suè	cye ³³ la ⁵⁵	

⁴⁵ The Longxi form probably reflects a different root, cf. Mawo *də wa*.

'Turn (body)' may be from *sue, with subsequent palatalization(s) in Taoping. However, the remaining Taoping instances could not have arisen via palatalization.

*ya > LX {/ya/, with palatalization of initial}, MC, TP {/ya/ /[palatal]_; /ua/ elsewhere}(4 to 7 sets). There are no PTB etyma that can be related to words with this rhyme.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
blind	fià tcyà	--	χtcya ³³
brightness	cyá	cyá	cya ³³
tread/step on	--	tchyà	tchya ³¹
hoe	tcyà	kuà	kua ³³

For 'blind', 'brightness', 'tread', the PSQ roots are identical to the Taoping forms. For PSQ 'hoe' I reconstruct *kyà. There is one apparent reflex of PTB *ya. Longxi pa³¹χtə⁵⁵ 'stomach' from PTB *l-tya ≠ *l-twa (STEDT).

The following three sets are promising, but inconclusive. 'Ten thousand' and 'tile' are phonetically very similar to their Mandarin counterparts (wàn 'ten thousand', wǎ 'tile'). If 'sprout' comes from a *ya etymon, then it has lost /y/ in Longxi and Mianchi, probably in the process of palatalizing the initial.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
ten thousand	kuá	à uá	χgya ³³
tile	kuà	ià	χgya ³³
sprout (n)	cà qè	cà qè lè kí	χgya ³³ qə ³³

*ya is a problematic rhyme, with many sets (more than ten) where at least one item suggests *ya, but at least one item suggests a different *rhyme. This discrepancy is especially vexing in those sets with good correspondence of *initial (and sometimes *tone). This hints that *ya was not stable, and often palatalized the *initial or assimilated to its place of articulation. The following examples illustrate this kind of difficulty:

Gloss	Longxi	Mianchi	Taoping
broom	tɕyé-là	dz uà	dzya ²⁴¹
Jew's harp	dzyà pú	dzòu	--
lip	dzyà-kú	dué-z à	χduə ³³
sweep	cyè té	sué mè	sya ³³ ma ³³
weave	--	tyà	tia ³³

For 'weave', NQ forms suggest *-ia: Mawo *ti ti*, Yadu *tɕi tɕɛ*.

*uə > LX, MC /ua/, TP /uə/ (11 to 13 sets). The correspondences among the three dialects are very regular, and although two sets can be traced to PTB *a:w, the exact relationship of this PSQ *rhyme to PTB is not yet clear.

Gloss	Longxi	Mianchi	Taoping	notes
tail	suà kà	suà kè	suə ⁵⁵ kie ³³	*swa-p (STEDT: attested in Qiang, Dafang Yi)
mountain valley	qhuà cì	qhuá bz à ~ qhuà qó	--	?*klu:ŋ (127)
monkey	kuà sà	kuà sà	--	PKN *ŋa:w (192). For initial correspondence, cf. 'five' below
buckwheat	zuà ká	dzuà ká	dzuə ³¹ ka ³³	
help	kuà	tè kuà	kuə ³¹	
far	--	z í xuà	χuə ³³	
step over/ across	(dà) kuá (tcà)	--	kuə ³³ tsa ³³	
village	tshuá-kù	tshuá, tshuà qó	--	
thigh	duà qà-pà	duà-bz à	--	
thin (of humans)	χuá	χuá	--	
meal, (CL)	tuá	tuá	--	

The following two sets have correspondences that are slightly defective. However,

evidence from Mawo suggests that *ua is a good PSQ reconstruction for these rhymes.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>	<u>PTB</u>
five	kuè	kuà qó	kuə ³³	kuə	*l-ŋa (78)
cry out, call out	kuǎ tà	kuǎ	kuə ³³ zɑ ³³	ku kua	?*a:w (273)

The following table shows that the reflexes of PTB *wa is not predictable in Southern Qiang. 'Lungs', 'conceal' are set apart because their PTB codas appear to have affected the rhyme ('lungs') or both the rhyme and the initial ('conceal'). 'Face' is an instance of PTB *wa > PSQ *ua (the sequence *qhua does not appear in Taoping).

Table 3.6. Reflexes of PTB *-wa

Gloss	Longxi	Mianchi	Taoping	PTB
bamboo	pò (tí)	pù	χpu ⁵⁵	*g-pwa (44)
cattle	ŋò mià (female)	ŋò	zɿ ³¹ ŋu ³³	*ŋwa (215)
face	qá qhuá	qà χà	qha ³¹ qha ³³	*kwa (STEDT)
fox	qhà guà	qhá guà	qha ³³ χguə ³³	*gwa (p34)
hand span			tu ³³	*m-twa (165)
shine; light	mú χuà χuà (shiny black)			*hwa-t (221)
tail/buttocks	suà kà	suà kè	suə ⁵⁵ kie ³³	*swa-p (STEDT attested in Dafang Yi, Qiang)
tooth	sù	sú-nə (gums 'tooth-red')	suə ⁵⁵	*s-wa ≠ p-wa (437)
rain	meì	m-zì	ma ³¹ zi ⁵⁵	*r-wa (443)
wear, dress	gù	(tè) gù	guə ³³	*gwa-n ~ kwa-n (160)
lungs	tshù	tshòu	tshu ⁵⁵	*tswap (239)
conceal, hide, shun	cù	kò (b?)	cyə ³³	*kway (303)

*ui > LX {/u/ / [velar]_; /ui/ elsewhere}, MC /ui/, TP /uə/ (3 or 4 sets). Taoping does not have the diphthong /ui/. In the post-velar environment, Longxi and Mianchi reflexes of *ui

are indistinguishable from *y; hence, without the Yadu evidence for a *back vowel, 'wrinkle' could be reconstructed with either rhyme. None of these forms can be related to PTB reconstructions.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>Mawo</u>	<u>Yadu</u>
carry with pole	tuì	tuì	qə ⁵⁵ tuə ³³	ty	tuə
rust	cà-gù	guì	χguə ³³	--	dze rqua
swallow (v.i.)	--	zuì	sɿ ³¹ dzue ³³	sə ɛzə	sə ɥzɥ
wrinkle	jà gù	guì	--	--	χɥ

*ue > LX /u, ue/, MC /ue/, TP /ue/ (8 sets). I have no explanation for the variation in Longxi reflexes; however, Mianchi and Taoping are invariable. Recall that Mianchi /e, ɛ/ are not considered distinctive when comparing with other dialects.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
turtledove	ý gù χó	guè guè	--	*m-kɾəw (118)
real, genuine	ɲù	ɲuè	--	
irrigate, water	sù	--	ʂue ⁵⁵	
green, blue	--	χué	χue ³³ χue ³¹	
know, be able to	ɲuè	--	ɲue ³³	
pitiful	mə tshweì	mè tshuè pú zɿ	--	
silk, satin	kuè	kuè	kuè ³³ χto ³³	
pull up (weeds)	--	tuè	χtue ³³	

In addition to the above forms, the following set appears to contain reflexes of PSQ *ue, although the Mianchi form contains the wrong vowel; it may have been influenced by Mandarin *guà* (hang on wall).

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>
hang (on wall)	kué	{tə kuá}	kuè ³³

*uə > LX /u/, MC /ue/, TP /uə/ (6 sets). PSQ *uə comes from PTB *əy, *əw.

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
dog	khù	khuè	khua ⁵⁵	*kway (159)
smoke, tobacco	mù khú, mú-ghú	mù qhué	mə ³¹ khua ⁵⁵	*kəw (256)
water	tsù	tsuè, tsuè	tsua ³³	*m-t(w)i ≠ m-twəy (168)
rat, mouse	zì kú	dzé kuè	zɿ ³¹ kuə ³³	
field	zù	zuè	zuə ³³	
be/copula	ŋù	ŋuè	ŋuə ³³	

3.3.2.3 Final nasals

Although there are nasalized vowels in Longxi and Mianchi, and nasal codas in all three dialects, none of these forms correspond among SQ dialects. Nevertheless, SQ dialects bear direct evidence for the preservation of PTB *-am into PSQ, and suggestive evidence for PTB *-aŋ.

*am > LX {e / pr_ , /a/ elsewhere}; MC {i / ts_ , /i/ elsewhere}; TP /i/ (7 sets). That PTB *-am survived into PSQ is evidenced by the different vowels that reflect this rhyme in the key dialects, indicating that the coda disappeared after the dialects had diverged. To my knowledge, this is the first evidence that has been offered to show that some PTB *codas were preserved as finals as late as PSQ. The Taoping reflex of 'garden' shows vowel harmony with the second syllable. Longxi has added an echo vowel to the *-m of 'iron' which has preserved the PSQ (and PTB) *coda in the form of an initial⁴⁶; the second syllable is optional and does not appear in compounds (e.g., 'rust' cà-ghə̀ ('iron-feces')). In Longxi 'dry' *ram > *ra > ə.

⁴⁶ For more on echo vowels in Qiang, cf. 4.4.3.

Gloss	Longxi	Mianchi	Taoping	PTB, etc.
bear	tɕá	tí	tí ³³	*d/g-wam (461)
ear of grain, spike	cà qə̀	lè tì	χti ⁵⁵ qə̀ ³³	*s-nam
iron	cà (mó)	cì	cí ⁵⁵	*syam (228)
smell, sniff	cí dà	mí	χmi ⁵⁵	*m-nam (*s- pfx?) *m/s-nam (464)
white	phé	pɕí	phzi ⁵⁵	PQic *pram
dry	fiá, tà á	zi	zi ⁵⁵ kua ⁵⁵	rGyalrong kə ram

*aŋ > LX /o.u/; MC /o, u, ou/; TP /u,o/ (17 sets). As noted elsewhere (Wen 1950. C. Huang (p.c.)), /o/ and /u/ distinctions are often fluid in Qiang dialects; the reflexes of PTB *aŋ are no different from other sets where /o/ corresponds to /u/. Because there is not a unique reflex of PTB *-aŋ, it is still not possible to say with certainty whether *aŋ was distinguished in PSQ or whether it had already been lost. However, the fact that *am was retained strongly suggests that PTB *aŋ, a more common rhyme, was also retained in PSQ. The following PTB *aŋ roots are reflected in Southern Qiang, and are arranged by strength of support, with etyma reflected in all three dialects shown first, etc.

Gloss	Longxi	Mianchi	Taoping	PTB
chest	κó qhuà	(tié mù zè)	zu ⁵⁵ dzɿ ³³ qə̀ ³³	*b-raŋ (LaPolla 1985)
deaf	ɲì bō	bù	ɲi ³¹ kie ³³ bu ²⁴¹	*(b/p)a:ŋ (STEDT)
dream	mò (zè)	mò	χmu ⁵⁵	*r-maŋ (82)
high	bó	bzú	bu ³³	*m-raŋ (p43)
horse	κò	zòu	zu ⁵⁵	*s/m-raŋ (145)
blend with water	lú	(fià) ló		*laŋ (STEDT 'water/river/valley')
body/corpse	mó	mó		*s-maŋ (STEDT)

Gloss	Longxi	Mianchi	Taoping	PTB
clear, pure, clean	có	có tè		*(t)syaŋ=syaŋ (pp. 52-3)
fat/omentum		loù	lu ⁵⁵	*l(w)aŋ (STEDT)
heel	gò qá	gòu mù sà		*gwa-ŋ (STEDT)
side	piá pú		pa ³³ pu ³³	*(s)pa(ŋ/k) *(STEDT)
thou		nò	no ⁵⁵	*naŋ (407)
born/birth		şè bǔ		*braŋ (135)
hole/orifice			dzo ³³	*dwa(:)ŋ (169)
lean			dz _o ²⁴¹	*n-džan (STEDT)
roast, toast, burn	(tǎ χú)			*ka:ŋ (330)
back/spine	tsò bò			*g/b-liŋ* *(STEDT. Cf. GSR 76a-c)

Given the fact that there is no direct evidence of the preservation of *-ŋ into any of the documented Qiang dialects, and given the fact that the vowel correspondences cannot be set apart from *o/u alternation, the above forms are reconstructed in Appendix A with the PSQ vowel alternation *o/u, although the PTB etyma are noted.

3.4 Summary of correspondences

In the following tables summarizing Southern Qiang correspondences, the strength of attestation is denoted by the number of supporting sets. Numbers followed by a plus sign generally indicate the number of sets that have reflexes in all three key dialects.

Initials

PSQ	Longxi	Mianchi	Taoping	# of sets
*p	p	p	p	32
*ph	ph	ph	ph	15
*b	b	b	b	19

PSQ	Longxi	Mianchi	Taoping	# of sets
*m	m	m	m	40
*t	/tc/ /_i, *y; /t/ elsewhere	t	/tc/ /_i, *y; /t/ elsewhere	25
*th	/tch/ /_i, /ts, tsh/ _u; /th/ elsewhere	th	/tsh/ /_y; /th/ elsewhere}	11
*d	/dz/ /_i; /d/ elsewhere}	d	/dz/ /_i (hapax); /d/ elsewhere	25
*ts	/tc/ /_i, y (or *i, *y); /ts/ elsewhere	ts	ts	32
*tsh	/tch/ /_i, y; /ts/ elsewhere	tsh	/tch/ /_i, y; /ts/ elsewhere	27
*dz	z (no [z] in LX)	dz	dz	16
*s	/c/ _i, y; /s/ elsewhere	s	s	45
*z	z	z	z	15
*n	/n/ /_i; /n/ elsewhere}	n	/n/ /_i; /n/ elsewhere}	17
*l	/n/ /_i; /l/ elsewhere	/n/ /_i; /l/ elsewhere	l	32
*tʂ	ts	tʂ	/ts/ /_i; /tʂ/ elsewhere	24
*tʂh	/ts/ /_u; /tsh/ elsewhere	tʂh	tʂh	22
*dz _ɿ	/dz/ /_i; /dz, z/ elsewhere	/dz/ /_ɛ; dz _ɿ elsewhere	dz _ɿ	20
*ʂ	s	ʂ	/s/ /_ɿ; /ʂ/ elsewhere	7
*z _ɿ	∅/ _i, /z/ elsewhere	z _ɿ	z _ɿ	6
*i	ɿ, ə	z _ɿ	z _ɿ	7
*tc	tc	/ts/ /_i; /tc/ elsewhere	tc	~ 30
*tch	tsh /_i, *i; /tch/ elsewhere	tch	[tʃh] /_ɿ; /tc/ elsewhere	~ 40
*dz	dz, z /_i; dz elsewhere	dz	[dʒ] /_ɿ; /dz/ elsewhere	~ 20
*c	s /_i; /c/ elsewhere	s /_i; /c/ elsewhere	c	21
*z	/z/ (LX lacks /z/)	z	z	7
*n _ɿ	n /_ ə, n _ɿ elsewhere	n /_ ə, n _ɿ elsewhere	n /_ ə, n _ɿ elsewhere	8
*k	/tc/ /_i, y; /k/ elsewhere	k	/tc/ /_e; /k/ elsewhere	17??

PSQ	Longxi	Mianchi	Taoping	# of sets
*kh	/tch/ _*i (hapax); /kh/ elsewhere	kh	/tch/ _*i (hapax); /kh/ elsewhere	10
*g	g	g	g	10
*ŋ	ŋ	ŋ	ŋ	10
*q	q	q	q	52
*qh	qh	qh	qh	10
*χ	χ	χ	χ	21
*ɸ	ɸ	ɸ	ɸ	21
*fi	fi	fi	??	2
*pz	p	p	pz	2
*bz	b	bz	bz	2
*br	b(ɿ)	bz	bz	2
*pr	p	bz	pz	1
*phr	ph	pɕ	phz	8
*sm	c / _ i; x _ u	m	χm	3
*sl	s, l	l, ʃ	c, ɕ	1
*sn	c	n, ti	c, χt, χn	4
*khs	tsh_e; /tch/ elsewhere	s	(OS) /khs/, (YS) /tsh/	3
*khr	c	s	(OS) /khs/, (YS) /tsh/	1
*khc	c, tsh	s, c	(OS) /khc/, (YS) /tch/	3
*gz	?	z	(OS) /gz/, (YS) /dz/	1
*gz	dz	z	(OS) /gz/, (YS) /dz/	1
*gr	gɿ, dz	g, dz	(OS) {gz / _ y, gz elsewhere}, (YS) {dz _ y, dz elsewhere}	2
*qhs	tsh	s	(OS) /qhs/, (YS) /tsh/	2
*qhr	tsh, qh	tch, tsh	qh	3
*χl	ɸ, ɸ_l	l	ɸ	5
*χp	p	p	χp	10
*χph	ph	ph	χp	2
*χb	b	b	χb	6

PSQ	Longxi	Mianchi	Taoping	# of sets
*χm	m	m	χm	7
*χt	t	t	χt	18
*χd	dz /_*V[+high], /d/ elsewhere	d	χd	8
*χn	n	n	χn	2
*χtɕ	ts	tɕ /_*i, tɕ elsewhere	χtɕ	5
*χdz	z, ts	dz, dz	χdz	4
*χtc	ts /_*i; c elsewhere	tɕ	χtc	2
*χdz	dz	?	χdz	~ 4
*χn	ɕ /_*i; /n/ elsewhere	n /_*ə; n elsewhere	χn	5
*χk	k, q	k, q	χq /_*ɑ; χk elsewhere	6
*χg	g	dz /_*i; g elsewhere}	χg	7
*χŋ	ɕ, ŋ	ŋ	χŋ	2
*χq	q	q	χq	5
*χG	ɕ	ɕ	χG	1

Rhymes

The rhyme *aŋ is given in parentheses to indicate that its existence is surmised, rather than proven.

PSQ	Longxi	Mianchi	Taoping	# of sets
*i	i	i	i	15
*y	o/ [dental] _ , u/ [velar] _ , ?? else- where	ui/ [velar] _ , iu/ l _ , ou/s _ , ?? else- where	y	5
*e	e, ei	e, ε	e	7
*a	a	a	a	70
*i	i	i	ɿ	9+
*ə	ə	ə	ə	7
*u	u	u	u	5+

PSQ	Longxi	Mianchi	Taoping	# of sets
*o	o	o	o	6+
*a	a	/e/ / _ Cu, /a/ elsewhere	a	57
*ie	a/ [velar] _, i/ [dental sibilant] _, /i/ elsewhere	/i/ / [palatal] _, e/ [dental fricative, velar] _, /ie/ elsewhere	ie	17
*ia	a / [palatal, s]_, /ia/ elsewhere	a / [palatal]_, ε/ s _ , /ia/ elsewhere	a /p,l_, e /m_ ; /ia/ elsewhere	18
*io	u / [palatal]_ ; o / s_ , ?? elsewhere	/o/ /s_ ; /io/ elsewhere	o/[palatal]_ ; /io/ elsewhere	5
*iu	o	iu	y	3
*ye	ue/ #_ , /ua/ elsewhere	ue	ye	7
*ya	ya, + palatalization of initial	/ya/ / [palatal]_ ; /ua/ elsewhere	/ya/ / [palatal]_ ; /ua/ elsewhere	4 to 7
*ua	ua	ua	ua	11 to 13
*ui	/u/ / [velar]_ ; /ui/ elsewhere	ui	uə	3 to 4
*ue	u, ue	ue	ue	8
*uə	u	ue	uə	6
*am	e / pr_ , /a/ elsewhere	i / ts_ , /i/ elsewhere	i	7
(*aŋ)	o,u	o, u, ou	u,o	16

Chapter IV. Contact-induced tonogenesis in Southern Qiang

4.1. Introduction

As mentioned previously, the Southern dialects (SQ) exploit tones to make lexical distinctions, while the Northern dialects (NQ) lack tonal phenomena. Attempts have been made (e.g., Liu 1998a) to correlate the tones of Southern Qiang with certain phonetic features of NQ dialects (e.g., consonant cluster initials and vowel quantity/quality/rhotacization). This chapter presents evidence that Southern Qiang was a pitch accent language which has undergone contact-induced tonogenesis; viz., after undergoing phonological simplifications that made SQ dialects tone-prone, lexical borrowings from a tonal language (Sichuanese Mandarin) caused the beginnings of tonal distinctions. Some dialects (Longxi, Taoping) have developed full-blown tonal systems, while others (Mianchi, Heihu) have layers of tonal strata over pitch accent systems. There appear to be phonetic motivations for some accented syllables and for certain minor tones, which are of relatively recent origin.

This chapter consists of six sections. In the following section I introduce the tonal systems of the key SQ dialects. In section 4.3 I present arguments that tone in Southern Qiang is an innovation, and not a retention which was lost in Northern Qiang. In 4.4 I propose a course of development for the genesis of tones in Southern Qiang, and in the fifth section I set forth evidence that the development of the SQ *pitch-accent system was influenced by tonogenetic factors. I close the chapter with some suggestions for further research that would indicate whether SQ dialects are becoming more or less tonal.

The Qiangic branch of Tibeto-Burman consists of languages and dialects with phonemic tone (e.g., Southern Qiang, Pumi, Queyu, Zhaba, Muya, Guiqiong, Shixing, Namuyi), as well as those without it (e.g., Northern Qiang, rGyalrong, Daofu/Ergong). Most, if not all, Qiangic tone systems differ from prototypical syllabic tone systems, such

as those found in Mandarin Chinese or Thai. **Pumi** has been analyzed as having pitch accent, or word tone, in which the entire word is the Tone-Bearing Unit (TBU) (Ding 1998, 1999). Likewise, **Ergong/Daofu** has tones that are non-phonemic (H. Sun, et al. 1991 (henceforth *ZYC*) p218, Dai 1989), and **rGyalrong** appears to have a word-tone or pitch accent system (*ZYC*:209). According to Huang 1991, rGyalrong is a language in which syllables carry "customary pitch" rather than tone: among 3,000 commonly used words she found only one pair of monosyllables distinguished by tone, and ten disyllabic minimal pairs. Nagano (1984), while conceding that "every word has a somewhat fixed pitch pattern," unequivocally claims that "tone is not distinctive at all." J. Sun has observed that

(G)lottalized and non-glottalized syllables are associated with different pitch patterns in rGyalrongic languages, and are often interpreted as involving some kind of tonal contrast by certain linguists. For instance, Lin briefly mentions the tense-marking tonal alternation in the Ergali variety of Guanyinqiao (Lin 1993:749-50) but fails to mention similar phenomena in his lengthy descriptions of Muerzong and Caodeng sound systems (Lin 1993:489-509; 526-604). (J. Sun 1998:7n)

Following J. Sun and the major sources, I regard rGyalrong as non-tonal.¹

Within Southern Qiang, tone serves different functions in different dialects, and not all dialects are tonal to the same extent. Before delving into the origins of SQ tone, I shall first present brief descriptions of the tones in the three SQ dialects that will be examined in this chapter.

4.2 Descriptions and origins of Southern Qiang tones

In this chapter, I consider the tones of the three key dialects. In addition to data on these three dialects, there is some information about tones in other SQ dialects that can be found in Wen 1943a (Wasi), 1945 (Hou'ergu), 1950b (Jiuziying), and Wen and Fu 1943

¹ For an overview of Tibeto-Burman tone systems, cf. Matisoff 1998

(Lobuzhai). However, these sources contain insufficient data for systematic comparison, as only a few forms in each article are marked for tone, and hence are employed to a lesser extent. In this section I review the tonal structures of the three key dialects, and discuss the origins of their secondary tones. In order to facilitate discussion, some tables are repeated from Chapter II.

4.2.1 Taoping

Of all varieties of Southern Qiang, this is the only dialect for which extensive tonal data have been published (e.g., H. Sun 1962, *QYJZ*, *ZYC*, Chang 1967, Liu 1998a, *et al.*). According to Liu 1998b:17 there were 4,900 speakers of Taoping (Li county) in 1990. Taoping has six tones (33, 55, 31, 241, 13, 51), which differ greatly in frequency and distribution. In the Taoping lexicon, they occur with the following frequencies, and with the given restrictions (1754 syllables in 1008 words):

a ³³	764 instances	43.6%	Occurs with all initials
a ⁵⁵	495 instances	28.2%	Occurs with all initials
a ³¹	337 instances	19.2%	Occurs with all initials
a ²⁴¹	94 instances	5.4%	Occurs with voiced initials only
a ¹³	43 instances	2.5%	Occurs in borrowings from Mandarin fourth tone, and in coalescence
a ⁵¹	21 instances	1.2%	Occurs in borrowings from Mandarin third tone

Tones 33, 55, and 31 (the major tones) may all co-occur in any order, with 31-33 as the most common combination. The three minor tones of Taoping (241, 51, 13) occur in just 9% of its lexicon. The 241 tone has a shared origin with Longxi and Mianchi Low-rising tone (cf. 4.4.6).

The remaining two minor tones occur on borrowings from Mandarin. According to Yang 1984:901, Li County Mandarin has the following tones:

Yin-Ping	55
Yang-Ping	31
Shang	53
Qu	25 ~ 35
Ru	44

The 51 tone occurs exclusively in borrowings from Mandarin third tone, or *shang sheng*, (cf. 3.5.3), which in Li County is pronounced 53:

<u>Gloss</u>	<u>Taoping</u>	<u>Mandarin</u>
well	tsiŋ ⁵¹ nǎ ³³	<i>jǐng</i>
friend	phuŋ ³¹ iəu ⁵¹	<i>péng youǐ</i>
wristwatch	ʂəu ⁵⁵ piəu ⁵¹	<i>shouǐ biaǒ</i> (sandhi tones, from <i>shouǐ biaǒ</i>)
chair	i ⁵¹ tsɿ ³¹	<i>yǐ zi</i>
harmonica	khəu ⁵¹ tchin ³¹	<i>koǔ qín</i>
acre	mu ⁵¹	<i>mǔ</i>

The 13 tone occurs on borrowings from Mandarin fourth tone , or *qu sheng* (pronounced 25 locally), with the exception of two dual pronouns, which appear to have coalesced, probably from the addition of *ni⁵⁵* 'two' after the sandhi forms of the personal pronouns *qa⁵⁵* 'I' and *kuə⁵⁵* 'you':

<u>Gloss</u>	<u>Taoping</u>	<u>Mandarin</u>
mole	tʂɿ ¹³	<i>zhì</i>
story/tale	ku ¹³ sɿ ¹³	<i>gù shì</i>
mark	tci ¹³ ʂəu ¹³	<i>qì hào</i>
change/transform	pian ¹³ thə ³³	<i>biàn</i>
clean (v.)	kan ⁵⁵ tsin ¹³ pu ³³	<i>gān jìng</i>
eighth	ti ¹³ pa ³³	<i>dì bā</i>
we (dual)	qaŋ ¹³ tʂɿ ³³	(cf. <i>qa³¹ thya⁵⁵</i> 'we')
you (dual)	kuəŋ ¹³ tʂɿ ³³	(cf. <i>kuə³¹ thya⁵⁵</i> 'you (pl.)')

4.2.2 Longxi

According to my own fieldwork, Longxi (Wenchuan county, 3,300 speakers in 1990 (Liu 1998b:17)) has two major tones (L, H), and three minor tones (R, M, F). 98.9% of Longxi syllables occur with a major tone. The phonetics, frequency, and distribution of Longxi tones are as follows (6150 syllables in 3247 entries):

à	Mid or Low-falling (L) (ma ³³ ~ ma ³¹)	63.61% (3912 instances)	all initials
á	High level tone (H) (ma ⁵⁵)	35.33% (2173 instances)	all initials
ǎ	Low (falling) rising (R) (ma ¹³ ~ ma ²¹³)	0.70% (43 instances)	voiced initials
a ³⁵	Mid-rising tone (M)	0.31% (19 instances)	borrowings, coalesced syllables
â	High-falling tone (F) (ma ⁵¹)	0.05% (3 instances)	coalesced syllables, borrowing, syllabified pre- initial

Longxi major tones have the following distribution in 1452 native disyllables:

Table 4.1. Distribution of major tones in native Longxi disyllables

σ1 \ σ2	L	H
L	620	505
H	176	151

The development of the minor tones in Longxi (and in Mianchi) has been affected by Wenchuan County Mandarin, which has the following tones:

Yin-Ping	55
Yang-Ping	31
Shang	42
Qu	13
Ru	44

The three instances of Longxi High-falling tone have three separate origins, as given below:

alkali	tcêN	borrowing: (Mandarin <i>jiǎn</i> (local tone = 42))
arnpit	kâm	coalescence: (< /ká mǝ/)
stone	kò lû	*RC cluster: (PTB *r-luŋ ² , Mawo <i>klu pi</i>) ³

² All Tibeto-Burman reconstructions are from Benedict (1972), unless marked otherwise. Those marked STEDT are from the Sino-Tibetan Etymological Dictionary and Thesaurus project of James Matisoff. Proto-Qiang (PQ) and Proto-Qiangic (PQic) reconstructions

Taken together, these three lexemes present a picture of an emerging tone. In this case, the tone has come into being through both external and native linguistic influences. Considering the increased rate of borrowing in Southern Qiang, this tone will probably increase in strength and number through the introduction of more Mandarin third tone syllables. This set, along with the other minor tone data, show how readily these languages create new tones, once the feature of pitch has been exploited to distinguish lexical items.

Almost all instances of the Longxi Mid-Rising tone are borrowings from Mandarin. The following words show that this tone cannot be correlated with any particular Mandarin tone, as tones 2, 3, 4 of standard Mandarin are all represented, with fourth tone being the most common (local tones are indicated following the *Hanyu Pinyin*. With the exception of full Sichuanese forms taken from my own field notes, Sichuanese tone marks are based on the analysis of Yang 1984):

<u>gloss</u>	<u>Longxi</u>	<u>Mandarin</u>
deep fry	tsa ³⁵ dà	zhá (42) ⁴
blame someone	kuai ³⁵ -dà	guài (13)
taxes	suei ³⁵	shuì (13)
try, test	kao ³⁵ dà	kaǒ (53)

The above forms show that tone assignment on borrowings is often arbitrary. This may indicate that the forms were borrowed from Chinese before Longxi had developed tone (the hypothesis found in Liu 1998a). Alternatively, it may be a further indication of the instability of SQ tones; that is, that the tones on these borrowed forms have flip-flopped after entering Longxi. A third possibility is that when these forms were borrowed, Longxi

are my own, unless otherwise noted.

³ The origin of the tone on this particular syllable is discussed in section 3.6.

⁴ 'Deep fry' and 'try, test' may reflect the influence of standard *Putonghua*.

speakers assigned them random tones. Longxi Mid-Rising tone cannot be completely correlated with local tones, as local Sichuanese forms with 35 tone may be borrowed into other Longxi tones; e.g., *tshà tshà* 'eraser, rubber' (local Sichuanese *tsha³⁵ tsí²¹*).

Coalescence of syllables is the other demonstrable origin of this tone, as in *mo³⁵* 'disappear', from *mò fió* 'there is not' from *mì + ηó* NEG + EXIST⁵. The tones of the following 'night' words are probably due to coalescence, although I have not been able to discover what the underlying morphemes are (these words also have strange tonal properties in Mianchi, allowing two high tones):

<u>gloss</u>	<u>Longxi</u>	<u>Mianchi</u>
tonight	pei ³⁵ dzì tsí	pè gié tsí
tomorrow night	tà pei ³⁵ dzì tsí	tà péi gié tsí
last night	nei ³⁵ dzì tsí	nè gié tsí

4.2.3 Mianchi

Tones in Mianchi (Wenchuan county, 15,700 speakers in 1990 (Liu 1998b:17)) are added onto a pitch accent system of high and low (-falling) pitch, in which native words may only have one high-pitched, or accented, syllable. Mianchi pitch accent is a simpler type of word tone than is found in Risiangku Tamang, in which there are four tones, each of which is spread over a phonological word (Mazaudon 1973). On the contrary, in Mianchi a phonological word (usually mono- or disyllabic, although longer forms also occur) may be accented or unaccented, and the accent may occur on any syllable, although there are some restrictions; e.g., only verbs with Low-rising tones occur with accented DIR prefixes. While unaccented and accented syllables account for 95% of the vocabulary, there are contour tones on the remaining five percent:

⁵ These morphemes also combine to form *mǒ* 'without'.

à	Unaccented (L) (ma ³¹)	67.3% (4288 instances)	all initials
á	Accented (H) (ma ⁵⁵)	27.9% (1775 instances)	all initials
ǎ	Low (Falling) Rising (R) (ma ¹³ ~ ma ²¹³)	3.5% (226 instances)	all initials
â	High-Falling tone (F) (ma ⁵¹)	1.2% (76 instances)	all initials
a ³⁵	Mid-Rising tone (M) (ma ³⁵)	0.01% (4 instances)	borrowings and coalesced syllables

Major pitches/tones on native disyllables occur with the following distributions (1213 instances):

Table 4.2. Distribution of major tones in native Mianchi disyllables

$\sigma_1 \backslash \sigma_2$	L	H
L	565	416
H	232	0

In accordance with the obligatory contour principle (OCP), only one accented syllable may occur per word. High-Falling and Mid-Rising tones do not co-occur with accented syllables, indicating that they are underlyingly accented (or 'High'). Low-rising may co-occur with accented syllables, indicating that it is unaccented. Following Yip (1995) the tones may be diagrammed as follows. Capitals denote register and lower case denotes pitch within register.

Table 4.3. Autosegmental representation of Mianchi pitch phenomena

Tone abbr's:	L	R	H	F	M
	σ	σ	σ	σ	σ
	L	L	H	H	H
		^		^	^
	l	lh	h	hl	lh
surface pitch:	31	(2)13	55	51	35

This notation captures the above-mentioned phonetic generalizations and restrictions. However, it does not reveal the historic fact that Mianchi is essentially a pitch accent language, nor does it predict the wide discrepancies in the distribution of tones. In order to accurately reflect historic and distributional realities, I will continue to refer to Mianchi L and H syllables as (un-)accented, and the other syllables as tonal.

As would be expected, accent sandhi occurs on compounds involving more than one accented syllable. However, Mianchi accent sandhi is complex and unpredictable, as shown in the following chart (the last instance in the chart shows interplay between accent and tone):

Table 4.4. Accent sandhi in Mianchi compounds

a. Disyllabic combinations

Low + Low:

L + L → L-L	bzà + mù = bzà-mù	adult (big-person)
L + L → L-L	dè + bzà = dè-bzà	expand, inflate (pfx-big)
L + L → L-L	diò + bzà = diò-bzà	front gate, door (door-big)
L + L → L-L	lò + bzà = lò-bzà	stone, boulder (stone-big)
L + L → L-H	là + bzà = là-bzá	long month (calque) (month-big)
L + L → L-H	zì + bzà = zì-bzá	bull ox (bull-big)
L + L → H-L	tshè + mù = tshé-mù	wool (goat ⁶ -fur)

Low + High:

L + H → H-L	sù + ná = sú-nè	gums (tooth-red)
L + H → H-L	lò + pǝí = ló-pǝì	flint (stone-white)

High + Low:

H + L → H-L	lá + bzà = lá-bzà	eagle (eagle-big)
H + L → H-L	mú + khuè = mú-khuè	warm self by fire (fire-put.near.fire)

High + High:

H + H → L-L	tí + pǝí = tì-pǝì	panda (bear-white)
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⁶ It is not clear at this point whether to relate this morpheme to PTB *kye-l (STC 339), or whether it may be cognate to PLB *V-cit (TSR 27).

b. Trisyllabic combinations:

High + High + Low:

H + H + L → H-L-L

H + H + L → H-L-L

nǎ + nǎ + tsì = nǎ-nǎ-tsì

mú + phú + diò = mú-phù-diò

bright red, glowing (red-red-sfx)

tube to blow on fire (fire-blow-door)

Low-High + Low:

LH + L → L-L-H

LH + L → L-L-L

kà mú + phò = kà mù-phó

bè liú + bzà = bè liù-bzà

almond tree (almond-tree)

bachelor (young.man-big)

Low + Low-High:

L + LH → L-L-H

L + LH → L-L-R

phò + zà piá = phò-zà piá

dè + bzù bzí = dè-bzù bzí

bark of tree (tree-skin)

become smaller (pfx-small)

There are a few borrowings from Chinese with more than one accented syllable (*tá pí fán* 'analogize', *tán kueí* 'Chinese angelica'). There is also at least one object-verb close collocation that has two accented syllables: *zá tsí* 'winnow' (grain-winnow); this form is apparently treated by native speakers as two words, otherwise it would be the only native H-H form out of more than 1200 disyllables. Certain kinds of trisyllabic and longer words may have two H syllables, indicating that they contain more than one phonological word:

Chinese borrowings:

tsú cén zèn 'ancestor'
tín tín má 'dragonfly'

Phrasal words:

sú-dòu-pù-mú
 hide?-ghost-do-AGT
 'poison cat (kind of witch)'

qai qá-kì-zuè mé
 before-NOM-speech
 'story, tale'

Conjoined words:

nè-sá-nà-à-qó
 two-ten-and-one-CL
 'twenty-one'

New compounds (calques from Chinese):

zì qé-tsú
tongue-small
'uvula'

In the Lobuzhai dialect (Wenchuan county), the major tones 55 and 31 can sometimes be pronounced 51, 33, but the variation is apparently not predictable (Wen and Fu 1943:24).

Other Qiangic languages are similarly capricious in the behavior of their pitches and tones. E.g., Pumi (Ding 1998, 1999, Matisoff 1997) has more tones that occur on polysyllables than on mono-syllables, and tone sandhi cannot be predicted. Likewise, Huang (1991) notes that in Muya, the high tone can alternate with the rising tone in the second syllable of a disyllabic word. Zhaba 55, 33 tones are often pronounced with 53, 31 tones in monosyllables or in word-final position, with no apparent predictability (Dai, et al. 1992 (henceforth *TBL*), p.644).

The Mianchi Mid-Rising tone can be shown to be purely secondary, occurring only in instances of borrowing and coalescence, as in the following exhaustive list of Mianchi MR lexemes found in the data (local Mandarin tones given in parentheses):

<u>Gloss</u>	<u>Mianchi</u>	<u>Mandarin</u>
freshwater clam	pæŋ ³⁵ -khà	Sichuanese [phæŋ ³⁵ khə ³¹]
spine	pei ³⁵ tci kù	beì (13) jǐ gǔ
wild goose	ŋæ ³⁵ uò	yě (53?) é
afternoon	mze ³⁵ tsà	(see below)

In addition to the above forms, the initial syllable of *íŋ phj* 'earthen jar' is sometimes pronounced [iŋ³⁵]. The development of contour on the first syllable is probably related to the devoicing of the rhyme of the second syllable. However, this is not a regular pattern, hence no rule can be written for this change. 'Freshwater clam', 'spine', and 'wild goose' are all borrowings from Sichuanese Mandarin. The first syllable of 'afternoon' is the only

native Mianchi syllable with Mid-Rising tone; it clearly results from a combination of *mè* ~ *mù* ~ *mú* 'weather morpheme' with something like **zē* (unattested). In fact, the only other instance of /mz-/ in Mianchi is also a case of syllabic coalescence involving this ubiquitous 'weather morpheme'⁷: *mzì* 'rain' (cf. Taoping Qiang *ma³¹zi⁵⁵*). While there is no direct evidence for the reconstructed morpheme **zē* in Mianchi, it has an apparent reflex in Longxi (PSQ⁸ **zē* > Longxi /z/) and possibly in two other Qiangic time words:

Longxi	<i>zà mià</i>	noon
Pumi (Taoba)	<i>ŋɛ³⁵rə⁵⁵</i>	morning
Shixing	<i>ŋi³³ri³⁵</i>	morning

The High-Falling (F) tone in Mianchi is the second-most common minor tone, with 76 instances in the nearly three thousand words that I elicited. F only occurs on the final syllable of a verb or verb phrase; it cannot be followed by another syllable. In many cases F appears on suffixes such as CAUS (*zî* ~ *zì* ~ *zî*):

knock down (wall)	<i>ʂæ dzuà zî</i>
eliminate, die out	<i>tɛ sî zî</i>
cause landslide	<i>fià dzuà zî</i>

It may also occur on BOR (*thâ* ~ *thà* ~ *thá*, a suffix meaning 'do' which is appended to borrowed monosyllabic verbs):

cover (v.t.)	<i>fià lòŋ thâ</i>
live	<i>χò thâ</i>
surround	<i>fià uì thâ</i>

⁷ This morpheme appears as the initial syllable in many words related to the sky and weather:

sky	<i>mú pià</i>	thunder	<i>mù gó</i>
sun	<i>mè sí</i>	rainbow	<i>mè χóú</i>
light, brightness	<i>mè cǎ, mù cǎ</i>	snow	<i>mù pà</i>

⁸ Proto-Southern Qiang.

F also occurs on the first and second person agreement/future tense marker FUT:1,2 (*uâ* ~ *uá* ~ *uà*):

frighten (FUT:1,2)	sì uâ
embrace (FUT:1,2)	mì nà uâ
clear, obvious (FUT:1,2)	sì uâ

In many instances, High-Falling occurs in free variation with the High level tone:

complete, finish	tè cō ~ tè có
tingle	tshù tshû ~ tshù tshú
recall	tè bè dzôú ~ tè bè dzóú cà

'Recall' demonstrates the fate of High-Falling tone in discourse, as High-Falling tone can only occur on the last syllable of a verb phrase. If a syllable with underlying High-Falling tone is followed by another morpheme, it loses its tone and has only accent (or one could say that it loses its contour and has only High register and high pitch). Because of this fragility, out of more than five hundred sentences elicited in Mianchi, only one sentence contains a High-Falling tone:

fià-í	ù-kù	ziê.
3-s	has.just	slept
S/He just slept.		

The exact origin and meaning of this morphological tone are not clear. Nevertheless, it is clearly of recent origin, given that "[h]allmarks of diachronically young tones include *low lexical frequency and involvement in morphological alternations*." (Matisoff 1998:18, emphasis his). The restriction of this tone to the final syllables of verb phrases indicates that it has arisen secondarily, and that it may come from either the suprasegmental remnant of a bygone suffix, or it may have an intonational origin. The Qiangic languages have a great tendency to innovate and re-order their verbal affixes (cf. Evans 1998b), so

there is as yet no principled manner to determine what erstwhile morphological component the Mianchi High-Falling tone may reflect.

4.2.4 Suprasegmentals in other dialects

In addition to Mianchi, there are other SQ dialects in which tone plays a minimal phonological role. Heihu (Mao county), a SQ dialect that is near the NQ area, uses tone only to distinguish Chinese borrowings from native words and from other borrowings (Liu 1998a). According to Wen Yu, Jiuziying is a pitch accent dialect:

The unpredictability of tones is also noticeable. Only when two or more syllables are in juxtaposition is a pitch-accent definitely required, especially for homophones... (Wen 1950: 21)

He cites the following Jiuziying minimal pairs, for which I have included cognates from Taoping, Longxi, and Mianchi. I have changed Wen's postvocalic tone marks to be consistent with those used in the Longxi and Mianchi data. There are apparently no monosyllabic minimal pairs. For the forms cited, there is no apparent regular correspondence among the tones.

Table 4.5. Jiuziying tonal minimal pairs and Southern Qiang cognates

Gloss	Jiuziying	Taoping	Longxi	Mianchi
last year	nʻ pʻ	n _ɿ ³¹ pə ³³	ná pù	né pù
two years	nʻ pʻ			
pheasant	í dzú	i ³¹ dzy ²⁴¹	ỳ-zó	
friend	ì dzù		ì zù ~ ỳ zù	ì dzòu
inside	kò kò	ko ⁵⁵ ko ³³	kù kú	qò qó
elder brother	kó kò		à kò	qó qò
uncle	pà pá	pe ³³ pe ³³ (paternal, elder)	á pà	
father	pá pà	pa ⁵⁵ pa ³³		

Unfortunately, these forms represent the total of the suprasegmental Jiuziying data that are given. Nevertheless, whatever the exact nature of Jiuziying pitch phenomena, it is clear from Wen's remarks that tone is a phonological feature of minimal significance, and that something closer to word tone or pitch accent is at work, rather than the standard syllabic tone of a language like Mandarin.

In Hou'ergu (Li county) tones are variable on monosyllables; e.g., *t'ie* 'eat' occurs with three different tones, depending on the directional prefix: *sɿ*³³ *t'ie*⁵³, *sɿ*³³ *t'ie*²¹, *dæ*⁵ *t'ie*³³). However, tones are stable on polysyllables, pointing to a word tone system in this dialect. Unfortunately, Wen was not able to perform a comprehensive analysis of the tones of Hou'ergu, and wrote that further analysis is needed to distinguish tone and intonation (Wen 1945:134-7).

In contrast to the tonal and semi-tonal systems of Southern Qiang, NQ dialects have lexical stress; Liu has described stress in the Mawo dialect as predominantly occurring on the first syllable of polysyllables (Liu 1998a, 1998b), although there are a few minimal pairs that are distinguished by stress (examples and Mawo data from Liu 1998a:1):

Table 4.6. Comparison of Mawo stressed syllables with Southern Qiang forms

Gloss	Mawo	Taoping	Mianchi	Longxi
ear	'nəku	ŋi ³¹ kie ³³	nə ké	ŋi ká
pillow	nə 'ku	ko ³³	nè kò	ŋi kù
<i>pianniu</i> (yak-cow hybrid)	'khei χu	khei ⁵⁵ (old spkr) tchi ⁵⁵ (young spkr)		zì (possibly not cognate)
paper	khei 'χu			
cover (v.)	'a χu		fià qhué	qhú
a box (CL)	a 'χu		χò	χó

The above table clearly shows that stress in Mawo cannot be correlated in a direct way with any particular tone(s) of SQ dialects.

LaPolla describes the stress of the Yadu dialect of Northern Qiang as predominantly trochaic (LaPolla 1996:19). LaPolla and Liu's descriptions are equivalent for disyllables, which account for most of the polysyllabic lexical items in Qiang. Stress is placed irrespective of the semantics of the given syllable; e.g., prefixes are just as likely to carry stress as are free morphemes. The following examples (from LaPolla 1996: 18-19) show that, despite trochaic tendencies, Yadu tone placement is not predictable (note that in 'short' there are vocalic changes that occur with stress placement):

<i>fi</i>	prefix	+	<i>tsha</i>	'deep'	>	<i>fiátshəz</i>	'cause to be deep'
<i>tə</i>	prefix	+	<i>watsi</i>	'short'	>	<i>təwátsi</i>	'become short'
<i>tca</i>	prefix	+	<i>watsi</i>	'short'	>	<i>tcawətsi</i>	'still short'

Full verb phrases are subject to the same type of stress placement as lexical items:

fiá-mə-tcí-xtsápə-tc
DIR-NEG-yet-dark-GEN
'before it got dark'

fiá-xtsəp-ŋike
DIR-dark-CLP
'after it got dark'

Unlike Yadu stress placement, and the placement of tones in Longxi and Mianchi

directional prefixes (DIR) may only be accented before verbs with Low-rising tone, with the lone exception of *ʂé n̩ù* 'come out':

lose, be defeated	ʂé tǐ
darken	hǎ nǎ
contract illness	té tiě
to be in surplus	dé dzǔ

Before verbs of all other pitches/tones, DIR prefixes in Mianchi are unaccented and toneless.

4.3. Evidence that tone is an innovation in Southern Qiang

As discussed above, each of the key dialects has tones that are clearly of secondary origin. The evidence and arguments in the remainder of this section point to the relatively recent beginnings of SQ tone systems themselves.

It has generally been accepted that the non-tonal NQ dialects more accurately reflect the suprasegmental state of Proto-Qiang, and that phonemic tones in Southern Qiang are an innovation. In this case, the burden of proof is upon those who assert that Northern Qiang did have tones and lost them, rather than on those who do not make this claim. Nevertheless, the following observations are offered to lend further support to the claim that Southern Qiang has introduced tone to an otherwise non-tonal language.

4.3.1. Lack of inherited tone from earlier stages

There is at this point no evidence that proto-Qiangic was a tonal language. On the contrary, as mentioned above, the most phonologically conservative languages and dialects (e.g., rGyalrong, Daofu/Ergong), languages which preserve PTB initials and codas, do not have phonemic tones. rGyalrongic dialects have non-phonemic pitches associated with glottalized or non-glottalized syllables, but no evidence for an established system of

tonemes. Similarly, it is probable that the pitch variations observed in Ergong (e.g. *ZYC:218*) are also secondary effects of a (non-transcribed) glottalic trait.

With no evidence for tones at the time depth of proto-Qiangic, the origin of SQ tones cannot reasonably be claimed to pre-date Proto-Qiang. In fact, like rGyalrong and Ergong, Northern Qiang, the phonologically conservative sister to Southern Qiang, bears no evidence of ever having had tones. In NQ dialects, even borrowings from Mandarin are toneless (e.g., Yadu *jaŋ sə* 'color'). The complete lack of tonal phenomena in Northern Qiang suggests that tones arose after the Northern and Southern dialects had diverged from each other.

4.3.2. Weak role of tone in tonal dialects

As mentioned in section I, SQ dialects that border the NQ area (e.g., Heihu) use tone to distinguish Mandarin Chinese borrowings; they are not used to distinguish native words from each other. This minimal degree of functionality runs contrary to expectations for a longstanding tonal system. Similarly, Wen Yu observed that tones are not required on Jiuziyang monosyllables, hardly a trait of languages with established tonal systems (Wen 1950). Liu (1998a) claims that as one proceeds from North to South across the SQ dialects, the role played by tone in the phonology increases. Nevertheless, even Mianchi, perhaps the southernmost variety of Qiang, and one located far from the influence of the Northern dialects, has essentially a pitch accent system, with true tones occurring on less than five percent of its syllables.

In addition to the dialects in which tones play a minimal role, there is often variation in the tone(s) assigned to a lexeme within dialects that are unequivocally tonal. During at least one elicitation session I recorded the following Longxi 'finger' words:

finger	<i>lià cú</i>	ring finger	<i>liè-ná⁹</i>
index finger	<i>lié cú</i>	little finger	<i>liè-tsá, liè bé</i>
middle finger	<i>liè-sé</i>		

However, during another session the consultant pronounced all five of these forms with high tones on all syllables. These variations indicate that, while tones are phonemic in Longxi, they are much less stable than expected for an established syllabic tone system.

As mentioned above, Lobuzhai tones have variation in their pitch patterns. Wen (1950) cites such examples as *so³¹ ji³¹ ~ so³³ ji³³* 'thread'. However, not all forms participate in this variation (e.g., "among the mid-falling tones are those that can be pronounced mid-level" (p24, translation mine)).

Further evidence for the weak role of tone in SQ dialects comes from the widely diverging frequency of occurrence of tones in each dialect, as given in sections 1.1.1 to 1.1.3. In Longxi and Mianchi, Low tones/pitches are about twice as common as High tones/accented syllables, and minor tones occur on only a few percent of the vocabulary. By contrast, in Lolo-Burmese languages, whose tonality can be traced back to the first millenium, tones *1 and *2 occur with virtually identical frequency (Matisoff 1998:9).

4.3.3. Correlation of tone with phonological simplicity

Liu (1998a) claims that the role of tones in the phonology of a given Qiang dialect is roughly inversely proportional to that dialect's consonantal complexity (e.g., presence and number of CC- initials, presence of codas, etc.). This relationship follows typological expectations, as has been frequently noted (Haudricourt 1954, Matisoff 1972, 1973, 1998, Mazaudon 1977, Thurgood 1997, etc.). Within Qiang, the Northern dialects have the most complex syllable canons, and have no trace of tone systems; that is, they are at one extreme

⁹ Cf. Lahu *lâ?-nɔ=dâ?* 'finger=good'. The second syllable of the Longxi form also means 'good'.

end of Liu's spectrum. Northern Qiang, being in other respects phonologically more conservative than the SQ dialects, has apparently maintained a state that typologically does not give rise to tone systems. The SQ dialects on the other hand, which are phonologically more degenerate and which have simpler syllable canons, possess tones. That is, tonelessness appears to be a conservative trait and tonality an innovative trait within Qiang.

While this observation may hold for many SQ dialects, Taoping, the most oft-cited SQ dialect, does not fit this pattern. It is phonologically more complex than either Longxi or Mianchi, but has been presented by H. Sun as having a clear-cut six tone system. When Liu and H. Sun gathered data in the 1950's, elderly speakers of Taoping still maintained complex initial clusters, which, according to ZYC, they pronounced with the same tones as did the younger speakers. Following are H. Sun's examples (QYJZ:10) of the differences between the speech of older and younger Taoping speakers. I have included data from two NQ dialects to show how similar the complexity of Old Taoping was to Northern Qiang, and data from Longxi and Mianchi to demonstrate the cluster simplification that has occurred in contemporary SQ dialects.

Table 4.7. Fate of initial clusters in Taoping

Gloss	Yadu	Mawo	Older TP speakers	Young TP speakers	Longxi	Mianchi
new	khsə	khsə	khsi ⁵⁵	tshi ⁵⁵	tchí	sí
comb (v.)	khue' xə'	kha' la	khşua ⁵⁵	tşhua ⁵⁵	cý	qà tó su í
<i>pianniu</i>	khşe	--	khci ⁵⁵	tchi ⁵⁵	--	--
hot (spicy)	gzə	--	gzɿ ²⁴¹	dzɿ ²⁴¹	--	zè
plowshare	--	--	gzue ³³	dzue ⁵⁵	dzù	dzù
light (weight)	gu' tse	gzə tsu	gzy ³³	dzy ³³	dzó	zóu
mountain	--	qhsəp	qhsua ⁵⁵	tshua ⁵⁵	--	sù

In accordance with this principle, note that Longxi has merged the PSQ retroflex

the dialects that she recorded in the 1950's, about 30% of the words in the lexica of SQ dialects had been borrowed from Chinese (e.g., H. Sun 1988 claims that in Zengtou (in the Taoping dialect) 30.2% of 3406 vocabulary items were borrowed), while the figure for NQ dialects was about 10%. The 30% figure that Liu cites no doubt played a large role in the acquisition of tones by the phonologically conservative Taoping dialect. In the dialects for which I have personally gathered data, the rate is much lower; e.g., Mianchi has a rate of borrowing of about 16%, and Longxi about 9%, out of over 3,000 lexical items.

Given these arguments for the late origin of tone systems in Southern Qiang, important questions remain regarding the processes by which SQ dialects became tonal. The following section addresses these mechanisms.

4.4. Process of tonogenesis in Southern Qiang

Classic tonogenesis occurs with the loss of segmental information: segmental distinctions (usually in the initial or coda) are lost, and the distinction that these segments carried (e.g., by voicing) are transphonologized onto the pitch of the vowel. However, tones in Southern Qiang cannot be traced to the reduction of any particular contrasts; they do not correspond to contrasts in initial voicing in earlier stages of the language, nor to the presence or absence of voiced or voiceless proto-finals. Rather, tones in Southern Qiang apparently arose through a three-stage process: first the dialects became increasingly "tone-prone" (Matisoff 1998), then became tonal (to varying degrees) through the influence of Mandarin, and then developed native tones.

SQ dialects have apparently undergone the following six stages in developing tones. Not all dialects appear to have progressed through all six stages; e.g., Heihu has not developed its own tones (the final step).

4.4.1. Lexical stress

As discussed above, Proto-Qiang did not inherit a system of tones from Proto-Qiangic. NQ dialects have a system of (mostly) trochaic stress on disyllables (Yadu: LaPolla 1996, Mawo: Liu 1998a, b). Although most disyllabic words are stressed on the first syllable, there are a few minimal pairs distinguished by stress (cf. section D).

Southern Qiang still bears evidence of stressed syllables in the tone patterns of native disyllables. I maintain that the fact that the pattern LH is 1.8 to 2.8 times more common than HL in Longxi and Mianchi implies that Southern Qiang once had stressed syllables, apparently with an iambic pattern in disyllabic forms.¹⁰ Of course, this piece of statistical data is merely suggestive. In spite of the equivocal statistics, given the fact that the phonologically conservative Northern dialects have word stress and lack tone and pitch accent, it appears that SQ dialects would also have had lexical stress at the time that they separated from Northern Qiang. The lone counterexample is a disyllabic word shared by Longxi and Taoping that is high on both syllables in both dialects: Taoping *qua⁵⁵te⁵⁵*, Longxi *qú tá* 'wrap'.

4.4.2. Development of pitch accent

The second phase in SQ supra-segmental development was the change from lexical stress to pitch accent. It is not clear what factors facilitated this shift. Nevertheless, this phase is directly reflected by the prohibition against two accents in a Mianchi word, by the relative scarcity of HH disyllables in Longxi, by Wen's (1950) reference to Jiuziying as a pitch accent language, and possibly by the tones on native forms in Heihu.

In spite of this evidence for a *pitch accent system, establishing exactly which syllables in PSQ were *accented is a non-trivial problem. Within each dialect there is a fair

¹⁰ This stress pattern would not have been as extreme as it is in Jingpho, in which initial syllables are often reduced to *Cə*. SQ initial syllables have all of the tones and vowels that are found in final syllables, with the exception of certain minor tones which only occur finally.

amount of fluidity in the pitches or tones of certain words, as noted above. This fluidity leads to unpredictable changes, such as the fluctuations in Longxi 'finger' terms, and Mianchi accent sandhi. High tone/pitch does not correlate perfectly across dialects, as might be expected for a system of pitch accent turned tone. Dialects of pitch accent languages often differ in their accent rules, as seen by a comparison of the Nagoya and Tokyo dialects of Japanese (Haraguchi 1977:59):

<u>Gloss</u>	<u>Nagoya</u>	<u>Tokyo</u>
bamboo	tàké. tàkè-gá	tà ké(-gá)
cherry	sàkùrá(-gá)	sàkùrá(-gá)
head	àtámá(-gà)	àtámá(-gà)
boots	nàgàgútú(-gá)	nàgàgútú(-gá)
to warm	àtátámérù	àtátámérù

To discern which syllables are in the *accented class I selected sets with cognates of Taoping 55 in all three dialects. There were 139 High syllables in Taoping that had cognates in both Longxi and Mianchi. Of these 139 sets, the following 39 (28%) had High tones/accents in all three dialects (numbers following glosses identify the syllable under comparison):

Table 4.8. PSQ *High syllables

Gloss	Longxi	Mianchi	Taoping	PSQ	PTB (etc.)
bird 2	ì tshá	ì tshé	i ³¹ tshie ⁵⁵	*tshV	Guiqiong tsh ¹ ⁵⁵ tsh ¹ ³³
breast, milk	ɲà ɲá	ɲà ɲá	ɲ.y ⁵⁵ ɲ.y ⁵⁵	*ɲa	*nəw (419)
bury	bé	(fià) bí	be ⁵⁵	*be	*bip ~ pip (376)
buy	pú	dè pó	po ⁵⁵	*pV	*par (p35)
cut (vegetable)	tsù tsuá	tshù tshuá	tshu ⁵⁵	*tshu(a)	*tswar (240)
divide	ɛò ɛó	ʒì ʒóú	ʒu ³³ ʒu ⁵⁵	*Cro	Muya ji ³⁵ ru ³⁵
dry	fiá, tà á	ʒí	ʒi ⁵⁵ kua ⁵⁵	*ram	rGyalrong kə ram

Gloss	Longxi	Mianchi	Taoping	PSQ	PTB (etc.)
flea 1	tsó ŋ̀i	tsoú nà	tsu ⁵⁵ lu ⁵⁵	*tso	Ersu <i>ntsho</i> ⁵⁵ <i>lo</i> ⁵⁵
folkdance 1	tshó tà-zà mù	soú tà	tshu ⁵⁵ ta ⁵⁵	*tsho	Muya <i>tsho</i> ⁵⁵ <i>la</i> ⁵⁵
frog 2	zò piá	dzò-piá	dzu a ³¹ pu ⁵⁵ ma ³³	*dzV	*s-bal (p15)
gall	tsí	tcí	χtɕə ⁵⁵	*χtɕə	*(m-) kri-t (412)
head 2	qə bá tsì	qà bzá tsì	qə ³³ po ⁵⁵ tɕɿ ³³	*pa	?cf. TP <i>bzə</i> ³³ 'big'
horn 2	jà ká	zè ké	zə ³³ qə ⁵⁵	*kə ~ qə	*r-ki (STEDT)
hot 1	khú khuá	khué khuè	khye ⁵⁵ le ³³	*khye	
house, home 1	tcé kù	tcí	tcí ⁵⁵ ko ³³	*tci	*k-y(i/u)m (53)
ice 2	tsù pá	tsuè pá	tsua ³¹ pe ⁵⁵	*pa ~ pe	Queyu <i>pi</i> ⁵⁵ <i>pā</i> ³³
language, speech 2	zə mú	zuè mé	zɿ ³¹ mə ⁵⁵	*mV	
lay (egg)	fià tshí	tshí	tshi ⁵⁵	*tshɿ	
learn, teach	só	soú	tə ³¹ sy ⁵⁵	*sy	Mawo <i>sy</i> , Ersu <i>so</i> ⁵⁵ <i>so</i> ⁵⁵
name	zə mú	mè mé	χmə ⁵⁵	*χmV	*r-minɿ (83)
new	tchí	sí	tshi ⁵⁵	*khsi	Mawo <i>khsə</i>
open (eye)	tà phé	phá	phzə ⁵⁵	*phrV	Ersu <i>pa</i> ⁵⁵
rooster	ý qú	ì qóu	yi ³¹ qu ⁵⁵	*qu	rGyalrong <i>pkəi ko</i>
rot, spoil	tcý qá	tsuè qá	tsua ⁵⁵ qa ⁵⁵	*qa	Mawo <i>tsə qa</i>
shoulder 2	liá chá	ì χé	la ³¹ χə ⁵⁵ pi ³³	*χə	KMR *k(r)ɔŋ/k (STEDT)
silver	ŋú	ŋó	χŋu ⁵⁵	*χŋu	*(d-)ŋul (p15)
skin (human) 2	jà piá	zà piá	zə ⁵⁵ pa ⁵⁵	*p(i)a	*pya ~ pra (STEDT)
smell, sniff	cí tà	mí	χmi ⁵⁵	*smi	Jinghua Pumi <i>xə</i> ¹³ <i>piə</i> ⁵⁵
smoke, tobacco 2	mù khú, mú- qhú	mù qhué	mə ³¹ khuə ⁵⁵	*qhuə, *khuə	*kəw (256)
sneeze (v.)	á tshù-pù	á thiaò-pù	χə ⁵⁵ tshye ³³ pu ³³	*χə	E. rGy. <i>xə tshiau</i>

Gloss	Longxi	Mianchi	Taoping	PSQ	PTB (etc.)
straight	tí	tí	χtə ⁵⁵	*χtɪ	Ergong <i>lthø thu</i>
sun	mù cí	mè sí	ma ³³ sɿ ⁵⁵	*si	? *s-nəy (Matisoff 1985)
supper, dinner 2	ɹà tí	zà té	zɑ ⁵⁵ χte ⁵⁵	*χte	
weigh	tchì tchí	tché	tche ⁵⁵	*tche	*ki:n (369), Lahu chì
what	nə̀ ì	ní lè	na ⁵⁵	*nV	Mawo <i>ɲi ka</i>
white	phé	pɕí	phzɿ ⁵⁵	*phram	PQic *pram (Matisoff 1997a)
who	sí	ɕí lè	sɿ ⁵⁵	*ɕi	Ergong <i>su</i>
wild pig 2	pià χó	pià χá	pa ³³ χa ⁵⁵	*χa	Yadu <i>pie χu</i>
yellow	χá	χá, χá χà tsɿ	χa ⁵⁵ χa ³³	*χa	? rGy <i>ksər po</i> < WT <i>ser po</i>

Such a low percentage of correlation does not present obvious evidence for a shared *accent feature; it must be compared with the likelihood of chance correspondence of High/accents. 35.3% of Longxi syllables and 27.9% of Mianchi syllables are High/accented. Thus, the likelihood of High pitch occurring by chance on both Longxi and Mianchi cognates of a Taoping High syllable are 9.8% ($0.35 \times 0.28 = .098$). The correspondence in the above chart is 28%, or 2.9 times the expected frequency from chance. Given the fact that the correspondence of High tones is about three times better than chance correspondence, it can be inferred that most of these sets reflect a PSQ *High. Nevertheless, for a given member of this set it is remotely possible that it had a *Low pitch in Proto-Southern Qiang, but then subsequently developed Highs in each dialect.

4.4.3. Phonological reduction of syllable canons and segmental inventories

Even a casual perusal of wordlists from NQ and SQ dialects reveals that contemporary Southern Qiang has a much simpler syllable canon than does Northern (e.g., Table 7).

The Yadu and Mawo syllable canons are as follows:

Yadu (plain vowels):	(C) (C _i) V (V) (C) (C _f)
Yadu (long vowels):	(C _i) (V) V:
Yadu (rhotacized vowels):	(C) (C _i) (V) (V) V' (C) (C _f)
Yadu (long rhotacized vowels):	(C) (C _i) (V) V:' (C _f) ¹¹
Ronghong Yadu:	(C) (C _i) (V) V (V) (C) (C _f) [fric] [glide] [glide][fric]
Mawo (short vowels):	(C) (C _i) V (V) (') (C) (C _f)
Mawo (long vowels):	(C) C _i (V) V: (/q ¹²)
Mandarin borrowings in Yadu and Mawo:	(C _i) V (V) (V) (N)

Yadu and Mawo syllables with rhotacized vowels all have initial consonants; this is due to the fact that NQ vowel rhotacization comes from PQ *r-cluster initials, as seen in the following comparison of Mawo rhotacized syllables with cognates in other dialects (Mawo -ɹ, -' are allographs of the same phoneme, as are Yadu -ɹ, -' (Evans 1999, chapter 2)):

Table 4.9. Cognates of Mawo rhotacized syllables

Gloss	Mawo	Yadu (Ekou)	Taoping	Mianchi	Longxi
brother (elder)	tə ba'		tu ⁵⁵ bzɑ ³¹		
big	bɑɹ	bʌɛ	bzɑ ³³	bzà	bʌà
dragon	bə'k	zɹbə	χbə ²⁴¹		
high/tall	bu'	bɹɿ		bzú	

¹¹ According to Dai 1992:636 (henceforth *TBL*), Yadu has native rhotacized triphthongs with long vowels /iæ:ə', iɑ:ə', yɑ:ə', uæ:ə'/; however, these are not attested in the data.

¹² There is one instance of a coda following a Mawo long vowel: *ti:q* 'top'.

In contrast to NQ syllables with both initial and final clusters, and long and rhotacized vowels, the syllables of Southern Qiang are much simpler. Not only do SQ dialects lack all but nasal codas (which are of secondary origin), they have a significantly reduced inventory of initial clusters, and, aside from Heihu, make no distinctions of vowel quantity. While Mawo has 71 initial clusters and Yadu has 50; Taoping has 24. Mianchi has three, and Longxi has only two:

Taoping (native):
$$(C) (C_i) \overset{T}{V} (V)$$

Taoping (borrowed):
$$(C_i) \overset{T}{V} (V) (V) (N)$$

Mianchi:
$$(C) (R) \overset{T/P}{(V_i)} V (V_f / N)$$

T = tone

P = pitch

R = /ʂ, ʐ/

V_i = /i, y, u/

V can be nasalized or voiceless

V_f = /i, u/ in native words, and /a, æ, e, ε/ in borrowings.

N = /n, ŋ/

Longxi:
$$(C) (R) \overset{T}{(V_i)} V (V_f / N)$$

R = /ʃ/

V_i = /i, u/

V_f = /a, i, u, e, o/

N = /n, (ŋ)/

All Qiang codas are of secondary origins. NQ final consonants come from initials of succeeding syllables whose rhymes have been devoiced (Mawo *pa'* xə, Yadu *pa* χə' 'claw') and then lost (Mawo a 'one', ʂə 'month', aʂ 'January'). SQ nasalized vowels and final nasals come in some cases from Chinese borrowings (e.g., Taoping *phian*⁵⁵*tha*³³ 'cheat, swindle', Mandarin *pian*). Origins of other nasals are unclear; however, no final nasals are traceable to PSQ. In the history of Qiang, original PTB *codas were lost, as seen in the

following cognate sets:

Gloss	PTB	Mawo	Yadu	Taoping	Longxi	Mianchi
pig	*pwak	pi	piɛ	pa ³³	pià	pià
eye	*s-mik ~ *s-myak	--	mij	mi ⁵⁵	ŋí má toù	mù tié ~ mè tié
stone	*rluŋ	κlu pi	dzua-κl (millstone)	κo ²⁴¹	κò lú	lò
horse	*s-raŋ ~ *m-raŋ	ɹu	ɹu	zɹu ⁵⁵	κò	zòu
dream	*r-maŋ	ɹmu κe	ku zɹmu	χmu ⁵⁵	mò zè	mò
high/tall	*m-raŋ	bu'	βɿ, tɿ w.ɿ	bu ³³	bó	bzú

At least two PTB finals were syllabified by the addition of a succeeding vowel before historic codas disappeared (Mawo, Yadu, Longxi 'iron'; Yadu 'black'). In Northern Qiang, these final syllables could be reduced to codas again (Mawo 'black'):

Gloss	PTB	Mawo	Yadu	Taoping	Longxi	Mianchi
iron	*śam	su' mu	su:' mu	ci ⁵⁵	cà mó	ci
black	*nak	ŋiq	ŋχ, ŋ xə'	ŋi ⁵⁵ ŋi ³¹	ŋí	nè

The preservation of PTB *finals through the addition of echo vowels is sporadic: the two sets above are the only instances discovered so far.

Aside from reattached historic codas, NQ codas are of a completely secondary origin, arising from the devoicing and loss of word-final rhymes, which are often still visible in Southern Qiang. The following table shows that NQ sonorant and obstruent finals alike have this origin. The range of vowels corresponding to Mawo final -tɕ ('head', 'bedbug', 'bone', 'calf') shows that it is Northern Qiang that has lost rhymes, and not Southern Qiang that has acquired them. In 'July', the final morphemes ɟ/ɟɿ³³/lɛ/lə are all reflexes of PTB *s-la 'moon':

Table 4.10. Secondary origins of Mawo syllable finals

Gloss	NO: Mawo	SO: Taoping	Longxi	Mianchi
head	qə patʂ	qə ³³ po ⁵⁵ tʂɿ ³³	qə bá tsɿ	qà bzá tsɿ
bedbug	dzuxtʂ	dzu ²⁴¹ χtʂi ³¹	--	--
bone	ɹə pəts	--	ɹà ká pà tsɿ	
calf	dzi ʂputʂ	--	mà lià tsú	ɲò bò tsú
horn	ɹəq	zə ³³ qə ⁵⁵	ɹà ká	zè ké
July	stəʂ	ciŋ ³¹ ʂɿ ³³	cí ló	ná lə
meat	pis	--	pià-tʂɿ	pià-tʂhè
flea	tsun	tsu ⁵⁵ lu ⁵⁵	tsó ŋì	tsoú nə

This reattachment of codas in Northern Qiang is the third phase in Benedict's syllabicity cycle (Benedict 1983.113). Looking at cognate sets like those in Table 4.10, Benedict observes that the general trend of TB/ST has been to go from PTB/PST *disyllabic (or perhaps "sesquisyllabic") to monosyllabic (e.g., PTB *g-sum = *gəsum 'three' > Taoping *tʂi*⁵⁵), and then from monosyllabic to disyllabic again (e.g., Mianchi *sí qò* 'three' — all single-digit numbers in Mianchi must be followed by classifiers, making them disyllabic). Northern Qiang, due to its trochaic stress pattern, has proceeded to monosyllabicity again via loss of rhymes in final syllables. Thus, it is fairly evident that early in the history of Qiang, the loss of coda position in the syllable led to the addition of echo vowels, turning (some) codas into second-syllable initials. At a later time, Northern Qiang trochaic stress patterns led to the devoicing and apocope of final vowels, re-introducing codas.

Aside from some nasals, *codas were never attached in Southern Qiang, greatly reducing the number of possible syllables. This shrinkage of the syllable canon has made Southern Qiang susceptible to the introduction of tones. In addition to the loss of finals, the inventory of initials has also been reduced. This reduction makes finding cognates and establishing sound laws difficult, and may in part account for the low rates of cognacy observed between Qiangic languages (cf. Table 4.12 below).

A further indication of how much the SQ dialects have changed since the 1930's and 40's is Wen Yu's statement that "[f]rom the forms of some words, the Ch'iang seems to

be older than the Classical Tibetan." (Wen 1941:71)

Considering the complex initial clusters of Taoping's older speakers and of Wen's Lobuzhai and Hou'ergu data (all of which have tones), it appears that the loss of codas, rather than simplification of initials, has played a greater role in making these dialects tone-prone. In SQ dialects there is no hard-and-fast correlation between simplicity of initials and the role of tones.

4.4.4. Increased borrowing from Chinese

According to Qiang oral tradition, their ancestors migrated to the current Qiang areas about 2,000 years ago. During the Shu-Han period (221-263 A.D.) there was a Han Chinese garrison led by General Jiang Wei in Weizhou (modern Wenchuan), indicating that there has been contact between these two groups for at least 1700 to 2000 years.

As transportation has improved, and as the influence of Han Chinese culture has increased, more and more borrowings from Sichuanese Mandarin have been introduced into the Qiang language. A major force for change is that beginning in the early years of primary school, all classroom instruction is in Mandarin. This influence often leads to lexical replacement; in the village of Mianchi, my consultant would quiz others on their knowledge of certain native words such as *tuà liò* 'hammer'. There were no speakers who had the native form in their active lexicon, they could only produce the borrowed form *tshuèi tshuèi*. Similarly, my consultants' children used Mandarin numerals even when they were speaking Qiang.

In addition to full borrowings, there are words that are half-borrowed and half-native. Borrowed disyllabic verbs are suffixed by *pù* (Mianchi, Longxi), *pu*³³ (Taoping); morphemes meaning 'do'. Monosyllabic borrowed verbs are suffixed by *thà ~ thá* (Mianchi), *dà ~ dá* (Longxi), or *tha*³³ (Taoping), a morpheme of unclear semantics. I have labeled these suffixes that are used to mark borrowed verbs 'BOR', 'b' indicates morphemes

borrowed from Chinese.¹³

Longxi	<i>gù-dá</i> b-BOR 'estimate'	Mianchi	<i>tɕuà-thá</i> b-BOR 'dip into water'
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Borrowings can take native affixes (note the introduction into Mianchi of a word with two high/accented syllables):

Mianchi	<i>kóŋ sǐ-qà</i> b-LOC 'store, shop'
---------	--

or be compounded with native lexemes:

Longxi	<i>qá-χò là-phàn tsì</i> face-wash-b 'wash-basin'	Mianchi	<i>ka ì-phá tsì</i> front-b 'apron'
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as well as being borrowed as full independent lexemes (cf section I, *et passim*).

4.4.5. Use of Chinese tones on borrowings

The apparent next step in SQ tonogenesis was the use of Chinese tones to distinguish borrowings. According to Liu's (1998a) description, Heihu is currently at this stage of tonogenesis. She presents the following examples in which tones distinguish Mandarin borrowings from each other:

<i>cæŋ⁵⁵</i>	township	<i>cæŋ³⁵</i>	elephant
<i>xo³¹xo⁵⁵</i>	box	<i>xo⁵⁵xo⁵⁵</i>	cover
<i>cæŋ⁵⁵tʃan⁵³</i>	township mayor	<i>cæŋ³⁵tʃan⁵³</i>	county mayor
<i>min³¹tsɿ⁵⁵</i>	name	<i>min⁵⁵tsɿ⁵⁵</i>	plastering trowel

¹³ In addition to *t'a* affixed to borrowed verbs, Hou'ergu appends *nə⁵* to borrowed nouns (*a²¹ wts'ə⁵ nə⁵* 'one inch', Mandarin *cùn*), and *ɲi* to borrowed adjectives (*p'i⁵³ ɲi³³* 'flat', Mandarin *píng*). (Wen 1945:137-8)

Liu claims that tones also distinguish Mandarin borrowings from native vocabulary. From her examples it appears that the native "tones" are actually accented (High) and unaccented (Low) syllables, as in Mianchi, or that there is a two-tone system, as in Longxi. However, more data than the four native forms included in her paper are needed to establish with certainty whether Heihu has pitch accent on native vocabulary:

<u>native</u>	<u>gloss</u>	<u>borrowed</u>	<u>gloss</u>
<i>xui</i> ⁵⁵	above	<i>xui</i> ³⁵	meeting
<i>tshu</i> ⁵⁵	cough	<i>tshu</i> ³⁵	vinegar
<i>tchi</i> ⁵⁵	narrow	<i>tchi</i> ³¹	chess
<i>pa</i> ³¹ <i>pa</i> ⁵⁵	old person	<i>pa</i> ³¹ <i>pa</i> ³⁵	handle

The use of tones to distinguish borrowings from each other and from native vocabulary is common among SQ dialects. The following sets of examples from Longxi and Mianchi show that the reflection of original Mandarin tones in SQ borrowings is not predictable.¹⁴ Although many cases behave like Liu's Heihu examples, where the phonetics of the tone in Qiang approximate the local variety of Mandarin, there are numerous examples in which the SQ phonetics differ from that of the donor language. In the first set of examples below, some tones are those which would be expected, given the local Mandarin tones. A notable exception is the pair 'milk' and 'crowd in', which are the same word in Mandarin. Note that in the pair 'rescue'/'wring' a tonal distinction is also made on the native BOR suffix:

Longxi	take notes	tcèi dà	jì (24)	milk (v)	tcí (dà)	jǐ (42)
Longxi	rescue, save	tcòu dà	jiù (24)	wring (kerchief)	tcòu dá	jiū (31)
Mianchi	crowd in	ì tcèi thá	jǐ (42)	deposit, check	ì tcí thà	jì (13)

¹⁴ Likewise, Wen and Fu observe that in Lobuzhai the borrowed word *yo*³¹ 'goose' can be pronounced on any tone (Wen and Fu 1943:24)

In the following pair, Mandarin tonal distinctions are lost by Longxi:

Longxi	pear	lì tsí	lí zi (55)	plum	lì tsí	lǐ zi (42)
--------	------	--------	------------	------	--------	------------

For the following two pairs tones are used to make a distinction not made in Mandarin, as the initial syllables of 'make analogy' and 'compete' are the same Mandarin morpheme, as are 'remember' and 'take notes'.

Longxi	make analogy	pì dà	dǎ bǐ (42) fāng	compete	pì dá	bǐ (42) sà
Longxi	remember	tcí dà	jì (42)	take notes	tcì dà	jì (42)

Another verb with the same pronunciation and tone in Mandarin as 'remember' which Longxi has borrowed is *tcí dà*, 'avoid as taboo'. Note that the tone on the borrowing is different from that of 'take notes'.

In the following Mianchi pair, tone alone is used to distinguish a minimal pair that is both tonally and segmentally distinguished in Mandarin:

Mianchi	monk	χò càN	hé shang (24)	fennel, anise	χò cáN	huí xiāng (55)
---------	------	--------	------------------	------------------	--------	-------------------

Liu (1998a) presents borrowings in Taoping that differ in tone from their corresponding Mandarin words (Some forms differ from the way they are transcribed in ZYC. For these words both forms are given; Liu's form appearing first. It appears that in the printing of Liu 1998a all instances of *σ* were transcribed *a*.) Tones are taken from Yang 1984:

<u>Gloss</u>	<u>Taoping</u>	<u>Putonghua</u>	<u>local tones</u>
cupboard	guə ³³	guì zi	(24)
character	dzɿ ²⁴¹ dzɿ ²⁴¹ , dzɿ ³³ dzɿ ²⁴¹	zì	(24)
wolf	la ³³ , la ⁵⁵	láng	(31) ¹⁵
bean (kind)	də ³³	dòu zi	(24)
chisel	dzo ²⁴¹	záo zi	(44)

For these forms the tones are completely different from those of local Mandarin. To account for this discrepancy, Liu suggests that they were borrowed from Mandarin before Southern Qiang acquired tone. It is also possible that there were tones in Taoping at the time the words were borrowed, but that the tones have since shifted, as Liu (1998a:7) claims that "Qiang tones are in the midst of change."

4.4.6. Development of "home-grown" tones.

As the syllable canon continued to simplify, and as the number of Mandarin borrowings increased, the role of tones in SQ dialects increased in significance. In Longxi and Taoping, the high pitch became a high tone, with multiple highs allowed in a single word (although still less common than other combinations). In addition, phonological changes led to the development of new minor tones, aside from those that already existed on borrowings. Taoping 241 tone only occurs with voiced initials, and Longxi Low-rising only occurs with voiced or Ø-initials on native words.¹⁶ This restriction no doubt reflects the factors that conditioned the genesis of these two tones; hence, their origins must be relatively recent, and they may have arisen via similar processes. The fact that Taoping 241

¹⁵ Note the loss of nasal final in borrowings. Borrowed lexemes that preserve nasal codas or have nasalized vowels are presumed to be recent; e.g., Longxi *tshuāN* 'string (of pearls)'.

¹⁶ Out of 27 native Longxi words with this tone, there are three exceptions to the voiced-initial rule: *lə qhuā* 'honeycomb (incomplete)' (probably from PTB *kway 'bee' (STC 157)), *piā* 'saliva', *qeī* 'first'. The tone on 'first' is clearly the result of coalescence (cf. Taoping *qə³³ə⁵⁵*). 'Saliva' was pre-nasalized in Proto-Qiangic (cf. Ersu *nphsɿ⁵⁵*. Namuyi *mp^hɿ³³* 'spit (v.)'), one of the sources of Low-rising tone (see below). The origin of the tone on 'honeycomb' is not clear.

must occur with voiced initial consonants (more than 90 instances, no borrowings) strongly suggests that the genesis of this tone involved voiced initials. Given the fact that SQ tones are unstable ("in the midst of change" (Liu 1998a:7)) and often unpredictable, it would be expected that if the 241/Low-Rising tone had a phonetic basis, that evidence for this origin would be imperfectly preserved. It appears that TP 241 and Mianchi and Longxi Low-Rising tones share a common origin (for the sake of convenience, I term this the *Contour tone). Although the data are equivocal, they do suggest that these tones come from *Low-toned or *unaccented syllables with initial sonorant clusters. As these clusters simplified, their (hitherto segmental) distinction was maintained by a new contour tone. *Low/*unaccented syllables without sonorant pre-initials remained low/unaccented. The hypothesis may be written as follows ('R' represents sonorants):

PSQ *R C_i V → C_i V Contour tone rule (CTR)
 [- accent] [+ contour]

Because application of the rule has removed direct evidence for these *clusters from SQ dialects, support is taken from Northern Qiang, Qiangic, and PTB. Due to the inherent instability of tones in Southern Qiang, there are no examples of this tone that occur in all three dialects. Cross-linguistic comparison with tonogenetic processes in other language families shows that these clusters sometimes function differently than other voiced initials with regard to tonogenesis. Thurgood has observed:

The literature on registers and tones is full of examples in which voiced obstruents have a different tonal effect than do voiced sonorants. Among the Chamic register languages, both the voiced obstruents and the voiced sonorants result in breathy voice in Western Cham, but in Haroi only the voiced obstruents lead to breathy voice — the voiced sonorants retain a clear voice quality; among the Chamic tone systems Phan Rang Cham and Tsat, the voiced obstruents consistently produce a low tone (mediated through a breathy voice stage), while the voiced sonorants consistently have a higher-toned reflex.... In another part of the world, Maddieson (1984:13) notes that in several Chadic languages, the voiced obstruents have different tonal effects than do the voiced sonorants: Podoko (Anderson and Swackhamer 1981), Kera (Ebert 1977), and Lame. (Thurgood 1997:20)

The similarities between the tonal developments in Chamic and Qiang are striking: not only do both Qiang and Cham have dialects with and without tone, but, like Qiang, tonal Cham dialects have acquired tone under heavy linguistic pressure. The following parallels may be drawn (cf. Matisoff 1998:26):

Table 4.11. Parallels between Cham and Qiang

Western Cham	Hainan Chamic (Tsat)	Northern Qiang	Southern Qiang
sesquisyllabic	mono-syllabic	rich in consonant codas	no native codas (some nasal codas)
phonational	tonal	syllabic stress	tonal (& semi-tonal)
Influenced by sesquisyllabic, phonational Mon-Khmer languages.	Influenced by mono-syllabic, tonal languages (Chinese, Hlai, etc.)	Influenced by coda-rich, toneless rGyalrong, Tibetan	Influenced by tonal Chinese (nasals codas only)

Similarly, it appears that there may be a diffusional relationship between the tone systems of Karenic and Lolo-Burmese (Matisoff 1998:23, 1973:81).

The effect of sonorant pre-initial clusters on tones has also been observed in three Hmong-Mien languages (Zongdi, Liangzi, Lanjin), where prenasalized obstruent initials have produced complex pitch contours in B1 toned words (Wang and Mao 1995, cited in Ratliff 1999). In the Hmong-Mien complex contour tones Wang and Mao describe, the contour and the prenasalization that has provoked it still coexist. As in the Hmong-Mien data, most of the *sonorants involved in the genesis of *Low-Rising tone were nasals, and the reflexes of this tone are the only complex contour tones in all three dialects.

PSQ *RC clusters may be further broken down into two types of clusters. *NC, with a nasal pre-initial followed by an obstruent, and *RN, with an oral sonorant followed by a nasal. In addition to these *RC clusters, it appears that some Mianchi *CR clusters

may have undergone a similar tonogenetic process by phonetic analogy with the CTR. Establishing the existence of PSQ *RC clusters is not simple, because in most cases direct evidence for the PSQ *cluster must come from other Qiangic languages. Rates of cognacy between Qiangic languages tend to be in the teens, as shown in the following table from Huang 1991, based on the comparison of 1500 lexical items:

Table 4.12. Rates of cognacy among Qiangic languages

	<u>Qiang</u>	<u>rGyalrong</u>	<u>Queyu</u>
Queyu (Xinlong)	16	15	--
Muya	14	15	19
Zhaba	12	14	18
rGyalrong	12	--	15
Pumi (Jiulong)	16	15	22
Daofu	13	13	17
Ersu (Jiulong)	17	14	18
Guiqiong	10	10	12

These rates are so low that for many SQ *low-rising sets, there are no outside supporting forms. In this chapter, only those forms are given where outside support is attested.

*NC- initials

PSQ *NC- is the most common *RC cluster, supported by 'bark/yell', 'bear fruit', 'call/cry', 'urine', 'dragon', 'break', 'smallpox', 'saliva', 'pile up (earth)', and 'collapse'.

'bark, yell, grunt', etc. Taoping lacks the expected tone on 'cry, weep'.

Longxi	zǎ	bark, bleat, etc.
Mianchi	zě	bark, bleat, etc.
Taoping	zɑ ³³	cry, weep
Mawo	ɛdzɿ	bark (v.)
rGyalrong	kə ɲɛ ndzok	bark (v.)
Namuyi	ndzɔ ⁵⁵	cry out/yell
PQic	*nzVk	
PTB	*zuk	(STEDT)

'bear fruit'	
Mianchi	ʂɛ̃ dzǎ
Taoping	sie ⁵⁵ mə ⁵⁵ dzɔ ²⁴¹
Longxi	á zó
Muya	ndzɛ ⁵⁵ bu ⁵³
rGyalrong	wu ʃi kə ndzok

The Longxi form may not be cognate: although Longxi /z/ comes from PSQ *dz, *et al.*, but the tone and vowel do not correspond to the Mianchi and Taoping forms. If it is cognate, its High tone has prevented application of the CTR. Regardless of the status of Longxi, the Mianchi and Taoping forms are adequate to establish correspondence.

'cry out, call'		
Longxi	kuǎ	also 'cluck'
Mianchi	kuǎ	
Taoping	kuə ³³ zɔ ³³	
Mawo	ku kua	
Ergong	ŋɛde	
Muya	ŋGɛ ³⁵	cry / weep
Namuyi	ŋgu ⁵⁵ dzu ⁵⁵	cry / weep
NW rGyalrong	ka°ŋa mbri	cry / weep

Although the Qiangic correspondences for this set appear unusual, they are not without support: Ergong *ŋɛ cin*, Taoping *kuə³³*, 'go through (a hole)'; rGyalrong *mbro*, Longxi *kò*, PTB *m-ran, 'horse'. There is no explanation for the tone change in Taoping, although Longxi and Mianchi are consistent with the CTR.

In 'urine' Mianchi and Taoping have undergone the Contour Tone Rule; Longxi, because of its High tone, has not. Comparison with other Qiangic languages shows that Proto-Qiangic had an initial cluster, probably *nb, with place assimilation of the pre-initial in Namuyi and Northern rGyalrong, and denasalization in Ergong:

'urine'		
Mianchi	biě	
Taoping	bie ²⁴¹	
Longxi	bí	
Ergong	lbi	
Ersu	nba ⁵⁵	
Namuyi	mbe ³³	
N rGyalrong	tə°rə°mbi	
PQic	*nbi	(STEDT *C-bi)

'Dragon' had an initial three-consonant cluster, as evidenced by Written Tibetan and Ergong. It is probable that this is an ancient borrowing from Tibetan. Written Tibetan /fi/ in ZYC represents 'a-chung', a Tibetan consonant which probably contained both nasal and glottal components, perhaps /ŋ̥-/ or /ŋ̥̥-/ (Matisoff 1972:16n). In this case, it was the loss of the nasal component that initiated the Contour tone rule in Taoping, while the rest of the cluster was maintained. High tone/pitch in Longxi and Mianchi blocked the application of the rule in those dialects:

'dragon' ¹⁷	
Longxi	bú
Mianchi	bú
Taoping	χbə ²⁴¹
Mawo	bə'k
Ergong	mbz u
Ersu	ɾ ³³ dzɛ ⁵⁵
Guiqiong	ndz u ³⁵
Muya	ndz u ³⁵
Namuyi	ə ⁵⁵ dz a ³³
Taoba Pumi	bz o ⁵⁵
Queyu	ndz u ⁵³
Shixing	mɛ ³³ dʒue ⁵⁵
rGyalrong	ta rmok
Written Tibetan	fibrug

'Break' is from PTB *N-prat (STEDT project; attested in Burmish, Qiangish, Geman). The difference in voicing between Mianchi and Longxi /ph/ and Taoping /b/ is further evidence that the PTB *nasal prefix and voiceless initial were maintained into PSQ.

¹⁷ This may be related to 'snake', below.

causing voicing of the initial in Taoping (as in Ergong, Muya, Taoba Pumi, rGyalrong), but not in Longxi or Mianchi (as in Namuyi, Jinghua Pumi).

'break (v.i. of rope, etc.)'		
Mianchi	ʂə phə	
Longxi	phú phá	
Taoping	bze ³³	
Ergong	bze	
Muya	ndzue ⁵³	
Namuyi	mphi ³⁵ ŋe ³³	
Jinghua Pumi	thə ¹³ pze ¹³	
Taoba Pumi	tə ³⁵ bze ³⁵	
rGyalrong	kə mbret	
PTB	*N-prat	(STEDT)

'Smallpox' appears to be a borrowing from Tibetan that entered Southern Qiang before application of the CTR. All three Qiangic cognates support the reconstruction of an initial *nasal and an *r of some sort, rGyalrong is almost identical to the WT form.

'smallpox'	
Taoping	bo ²⁴¹
Mawo	bu'
Guiqiong	sɿ ⁵⁵ npɔ ⁵³
Pumi (Jinghua)	bzə ¹³
rGyalrong	tə mbrem
WT	lha fibrum

'get, have'. This set is reflected in Mianchi, and in other Qiangic languages.

Mianchi	té tiă	get, obtain
rGyalrong	ndo	have
Ergong	ntcho	"
Muya	ndzə ³⁵	"
PQic	*nto	

'spit, saliva'		
Longxi	piă	saliva
Ersu	nphsɿ ⁵⁵	spit (v.)
Namuyi	mphi ³³	"
Pumi (Jinghua)	k ^{hə} ¹³ phɿ ^{3u} ¹³	"
Written Tibetan	dbjugs	"
PQic	*nphiu	

Mianchi and Taoping do not have cognates for this root. These forms appear to be

reflexes of PTB *N-pat 'vomit', although some may be reflexes of PTB *m-ts(y)il (STC 231) or *m-twa (STC p58), with the labial and dental positions metathesizing between the initial and the prefix, while the features of [nasal], [obstruent] remain unmoved. Aside from *lǎ qhuǎ* 'honeycomb (not yet completed)', 'saliva' is the only Longxi native monomorphemic syllable with voiceless initial and Low-rising tone. Given the prenasalized cognates, this anomaly lends further support to the argument that the Low-rising tone emanates from the loss of a sonorant pre-initial.

'pile up (earth)' Proto-Qiangic *nbu. SQ evidence comes only from Taoping.

Taoping	bo ²⁴¹
Longxi	bù
Mianchi	bò
Guiqiong	nbu ³⁵
Shixing	bū ⁵⁵

*RN- initials

PSQ 'forget' and 'lend' both had *sonorant-nasal cluster initials. For the set 'forget', Taoping has preserved the conditioning environment, and has not undergone CTR, because of its High tone. It is not clear why Longxi lacks Low-rising tone for this form. It may have had a High tone (like Taoping) at the time of cluster simplification, and thus would have been impervious to the tone change.

'forget'	
Mianchi	dè mǔ
Longxi	dà mù
Taoping	χmi ⁵⁵
Ergong	lmu
Jinghua Pumi	thə ¹³ ɲə ¹³
rGyalrong	kə jməs

There are two other cognate sets in which Ergong /lm/ corresponds to Taoping /χm/: both Taoping forms have high tones, and are thus prevented from undergoing CTR (note that 'name' has High cognates:

<u>Gloss</u>	<u>Ergong</u>	<u>Taoping</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>PTB</u>
dream	ntshe lma	χmu ⁵⁵	mò zè	mò	*r-maŋ (STC 82)
name	lmw	χmə ⁵⁵	zè mú	mè mé	*r-miŋ (STC 83) ¹⁸

In Taoping 'lend', which may be a borrowing from Tibetan, the contour tone has shifted to the directional prefix. For reasons not yet clear, Longxi lacks the contour tone.

'lend'		
Taoping	da ²⁴¹ ŋi ³³	
Mianchi	dē ŋě	
Longxi	nì cá	
Ergong	zŋi	
PTB	*r-ŋya	(STC 190)

For borrowings from Tibetan that occurred after application of the CTR, *RN clusters are maintained, and tones are unchanged, as in 'stir-fry' and 'sunny' (Mianchi 'stir-fry' is of questionable cognacy):

<u>Gloss</u>	<u>Tibetan</u>	<u>Taoping</u>	<u>Longxi</u>	<u>Mianchi</u>
stir-fry	rŋod (WT)	χŋa ³³	cì cá	(dzì dzá)
sunny	ŋnam taŋ (Amdo)	χŋa ³³		

*RC- initials

'Stone', 'open (door)', 'wheat/barley', 'sing', and 'collapse' are the only instances discovered thus far of the Contour Tone Rule applying to forms with *r- pre-initial. The Longxi form for 'stone' has an unusual tone. As presented in Section I, Longxi High-falling is extremely rare, with only three instances on lexemes. For reasons not yet clear, the application of the CTR produced a High-falling tone in this instance. This is one of few Longxi forms I have come across to date in which the PSQ *prefix has syllabified (cf. zè mú 'name' (Yadu zmə, Mawo rmə, PTB *r-miŋ). It is not clear why the Contour tone rule did not apply to Mianchi, or if it did, why the tone has subsequently changed. Note the

¹⁸ Longxi has syllabified the pre-initial.

occurrence of the rare rising tone on the Lobuzhai form.

'stone'		
Taoping	ɛo ²⁴¹	
Longxi	ɛò lù	
Mianchi	lò	
Lobuzhai	ɣo ¹⁵ piɑ ⁵⁵	
Mawo	ɛlu pi	
PTB	*r-luŋ	(STC 88)

For 'open (door)' the CTR has applied in Taoping, even though the PSQ *cluster has been retained. For Longxi, either the rule did not apply, or its tone has since changed.

'open (door)'		
Taoping	ɣgie ²⁴¹	
Longxi	gã	
Yadu	zge	
Mawo	rga	
PQ	*rga ~ rge	

'Wheat, barley' (Proto-Qiangic *rIV) may be related to Written Tibetan *gro*. The differing initials of Taoping and Longxi versus Mianchi are additional indicators of the presence of *rl- in the PSQ form. The Written Tibetan form may be a metathesis of PTB *r-ga (James A. Matisoff, p.c.; cf. Lahu *gã* 'buckwheat').

'wheat, barley'		
Taoping	ɛuə ²⁴¹	wheat
Longxi	ɛə	wheat, barley
Mianchi	lè	wheat, barley
Mawo	ɛlə	wheat
Ergong	lau	wheat
Queyu	lai ⁵⁵	barley

Among the key dialects 'sing' is supported only by Taoping. However, Ruodazhai has preserved the PSQ *cluster initial (note that PSQ *ɣ- > *ɛ- /_C [+voice]):

'sing'	
Taoping	zo ²⁴¹
Ruodazhai	hʒjo
Mawo	zɑ ¹ ma tʃə
PSQ	*χzo

In 'break/snap' Longxi has syllabified the initial, as in 'stone' (above). Yadu preserves the PQ *cluster:

'break/snap'	
Longxi	κə lɑ
Mianchi	(tɛ) lǔ
Taoping	κe ³³
Mawo	κe
Yadu	da κliə
Guiqiong	lɛ ³⁵
PSQ	*χlV

The set 'collapse' is an application of the CTR with direct support from Mawo, and additional support from rGyalrong; Longxi has not undergone CTR, or has since reverted to Low tone.

'collapse'	
Mianchi	fiə dzuǎ
Longxi	(à) dzà
Mawo	κdza
rGyalrong	kə mtʃət
PSQ	κdza
Proto-Qiangic	*mtʃwat

In addition to the foregoing applications of the Contour Tone Rule, there are at least two instances of contour tone generation on a SQ word with *CR- initial ('snake', 'ashes'). Because these forms have retained their *r coloring, I posit that this rule was applied by analogy with *RC clusters, as there is no loss of conditioning factors to condition the tone.

'snake'		
Mianchi	bz̥ě	
Jinghua Pumi	bɛ ¹³ z̥ɑ ⁵⁵	
Taoba Pumi	bɛ ³⁵ rɛ ⁵³	
Shixing	bɑ ³³ rɔ ⁵⁵	
rGyalrong	kha brɛ	
Ergong	mph̥ʂi	
PTB	*b-ru:l	(STC 447)

It appears that in Southern Qiang, the semantics of 'snake' may have been extended to include 'rope', given the similarity of the forms:

<u>Gloss</u>	<u>Longxi</u>	<u>Mianchi</u>	<u>Taoping</u>	<u>PTB</u>
snake	bù tshì	bz̥ě	bə ³¹ guə ²⁴¹	*b-ru:l (447)
rope	beì	bz̥è	bz̥e ³³	

'ashes'	
Taoping	mə ³³ bz̥i ²⁴¹ .
Mawo	tci ci buz̥
Yadu	tɕu xu bu z̥ɸ

Onto the original stock of *Low-Rising forms, Southern Qiang has grafted tones directly from Chinese words, and has added those that have arisen from native words through coalescence, disambiguation strategies, and in Taoping, tone sandhi. It appears that in Mianchi, intonation has also played a role in the expansion of this tone. The degrees to which these three sources of Low-rising tones have exerted influence vary by dialect. In the following discussion, I present these secondary origins for (Low-) Rising forms in Mianchi, Longxi, and Taoping, roughly in decreasing order of impact.

Chinese borrowings.

Out of all 228 instances of Low-Rising in the Mianchi data, at least 62 (27.2%) are borrowings or probable borrowings. In most cases of borrowing, the source syllable is in the Mandarin fourth tone, which in Standard Mandarin (*Putonghua*) is High-Falling [a⁵¹], but in local Sichuanese has a low-rising contour [a¹³].

<u>Gloss</u>	<u>Mianchi</u>	<u>Mandarin</u>
frame	tɕã tsɿ	jià zi
song (CL)	twǎn	duàn
again	tsaǐ	zài
file (tool)	tshǒ	cuò

The tones on these borrowings are stable and are not in variation with major tones, even within utterances. Continued contact with Chinese reinforces the pitch of borrowings, keeping them from being absorbed into other tones.

In Longxi, 13 out of forty syllables (33%) with Low-rising tone are borrowings from Sichuanese fourth tone words:

<u>Gloss</u>	<u>Longxi</u>	<u>Mandarin</u>
chisel	tshǒ tsɿ	cuò zi
mole, wart	tsɿ	zhì
vinegar	tshǔ	cù
weld	hǎn dà	hàn

Among the Taoping forms with 241 tone, unlike all other Taoping tones (major and minor), and unlike the Low-Rising tone classes in Longxi and Mianchi, there are no borrowings from Mandarin. This lack is no doubt due to the fact that the phonetic shape of this tone is so different from any found in Sichuanese (or standard *Putonghua*). However, in the Taoping 13 tone 39 out of 41 instances are borrowings from Chinese (95%), indicating that this tone is a borrowed tone (examples given in 1.1.1).

Coalescence of syllables.

The following two Mianchi lexical items show the emergence of Low-Rising tone due to coalescence, which in the second case involved haplology (with the pitch contour changing from H-L to Low-rising). In the case of 'ancient times' the reduction of a full syllable to a mora parallels the apocope of vowels in NQ dialects (cf. 4.4.3)

ancient times	qé ì sì sì ~ qaǐ sì sì
soak, immerse	fià tǎ ~ fiǎ tǎ tǎ

In the following Mianchi sentence, the tone on *qǎ* 'already' is clearly secondary, resulting from the coalescence of the two syllables *qé ì* into one; these two syllables appear in free variation with *qǎ* [~ *qaǐ*] in the phrase *qé ì sì sì ~ qaǐ sì sì* 'ancient times'.

ù kì	qè-brì-tsì	tà	bzà	qǎ	mè?
2s POSS	child	UP	big	already	Q
Has your child grown up (already)?					

In Longxi, there are also a few instances of Low-Rising that have resulted from the coalescence of two syllables:

without (v.i.)	<i>mǒ</i> (< <i>mò fió</i> 'there is not' < <i>mì + fió</i> NEG + EXIST)
speak, tell	<i>ǎ</i> (< <i>qá ǎ</i>)

Coalescence has not been observed in Taoping as a source of 241. This may be due to a lack of recording of variant forms.

Disambiguation strategies.

Another function of LR and 241 tones is the disambiguation of native vocabulary. I have observed this process in Longxi and Taoping, and it may be present in Mianchi also. For the following Longxi verbs (an exhaustive list), the DOWN prefix /fià/ is pronounced with Low-Rising tone to disambiguate the Low-toned verbs to which it is attached from homophonous verbs which take the same directional prefix. This is surprising because directive prefixes are often chosen for their disambiguating properties; *viz.*, homophonous verbs often require different orientational prefixes from each other (Evans 1998b, *et al.*). It appears that in the case of the following pairs of Low-toned Longxi verbs, speakers sense that their semantics require all of them to take the DOWN prefix, which causes a shift in

disambiguating function from prefix *selection* to prefix *tone*. These are the only instances in the SQ data of a directive prefix occurring in a minor tone. In fact, the High tone on the prefix of 'penetrate' is also marked, as DIR almost always take the Low tone. It appears that Longxi speakers are employing both Low-Rising and High tones in this disambiguating function. The verbs are listed with their homophones, which in some cases (penetrate/sink, ripe/aged) appear to be cognate.

complete	fiǎ tǔ	reduce	fià tǔ tú
penetrate	fiǎ tǐ ~ (fiá) tǐ tǐ	sink (v)	fià tǐ
reduce (swelling)	fiǎ gù	fall into trap	fià gù
ripe	fiǎ peì	aged, elderly	(fià) peì

In Taoping, the following pairs of words are disambiguated by the opposition of 241 and a major tone whose register is also Low. As in the Longxi cases, the words in each pair are in the same syntactic class.

back of body	de ²⁴¹	hoop	de ³³
bowl	ku ²⁴¹	goose	ku ³¹
rest	χba ²⁴¹ ni ³¹	think	χba ³³ χdz u ³³
right (side)	χda ²⁴¹	deer; fat/oil	χda ³³
turbid/muddy	kuə ²⁴¹	late	kuə ³³

Tone sandhi

Another source of 241 tone syllables in Taoping, not seen in the other dialects (and not discussed in Liu 1998), is tone sandhi. Taoping, like Mianchi and Longxi, has irregular and unpredictable tone sandhi. However, only Taoping makes regular use of a minor tone as a sandhi tone, as in the following names for months (the final syllable in each form means 'month', and is unchanged from its citation form):

kuə ³³	'five'	+	ɣ ³³	'month'	=	kuə ²⁴¹ ɣ ³³	May
χguə ³³	'nine'	+	ɣ ³³	'month'	=	χguə ²⁴¹ ɣ ³³	September
χa ³¹ dy ³³	'ten'	+	ɣ ³³	'month'	=	χa ³¹ dy ²⁴¹ ɣ ³³	October

Like the tone sandhi phenomena observed in Mianchi, Taoping sandhi is far from regular, as Taoping has many instances of 33 toned syllables in sequence:

mi ³³ tsie ³³	blunt (< mi ³³ 'not' + tsie ³³ 'sharp')
χgy ³³ χgy ³³	round
zɑ ³³ pu ³³	cave, hole
χde ³³ le ³³	fog

Intonation patterns

In Mianchi declarative sentences, final unaccented syllables are sometimes pronounced with Low-Rising tone. However, most unaccented morphemes do not have Low-Rising allomorphs, and among those that do there is no way to predict whether a particular sentence will have a Low or Low-Rising final syllable:

fià-ŋá à-zí djù qè.
 3-p 1-POST speak already.
 They already spoke to me.

fià-jí fià tcí-thà qě.
 3-s DOWN memorize-BOR already
 S/he memorized (it).

Because this phenomenon is restricted to sentence-final position, I have termed it an intonation pattern, although further study is needed to discern the exact nature of this pitch behavior.

4.5. Some possible tonogenetic influences on PSQ *pitch accent

In Table 4.8 I have presented evidence for a PSQ category of *High (or *accented) which developed into Longxi and Taoping High tones, and which remained accented in Mianchi. Having thus correlated these Highs/accents with each other, the question remains whether there is some phonetic motivation for the SQ High category. As has been widely noted, in cases where tonogenesis is conditioned by changes in initials, voiceless initials

almost invariably yield higher tones than do voiced (Haudricourt 1954, Mazaudon 1977, Hombert, Ohala, Ewan 1979, Matisoff 1998, etc.). The present data suggest a similar relationship in the development of the PSQ *accented or *high category, although it is not the same as syllabic tone. Table 4.8 demonstrates that there is a statistically significant occurrence of voiceless initials on PSQ *high words. Setting aside PSQ clusters *phr ('open', 'white'), *χm ('name'), *sm ('smell'), and *χŋ ('silver'), where there may be a mix of voicing (the voicing status of PSQ pre-initial *χ is not yet clear), there are 27 *voiceless and 7 *voiced initials in the set. This ratio of 3.9:1 is a much greater spread than is found in samples of the major tones of the extant dialects (note that even if the instances of the four excluded clusters are all counted as voiced, the resulting ratio is 27 to 12 or 2.3:1). The following chart, based on a sampling of each dialect, gives relative frequencies of voiced and voiceless initials for the major tones. For each tone in each dialect syllables were counted until there were 100 instances of a voicing type. For each major tone, voiceless initials significantly outnumber voiced initials:

Table 4.13. Southern Qiang major tones and voicing of initials

TP 55 tone	TP 31 tone	TP 33 tone	LX High tone	LX Low tone	MC High tone	MC Low tone
vl - 100 vd - 51	vl - 100 vd - 95	vl - 100 vd - 83	vl - 100 vd - 66	vl - 100 vd - 78	vl - 100 vd - 76	vl - 100 vd - 85

The above table shows that for each of the three dialects, voiceless initials are more common than voiced in major tones. The rule does not apply to Longxi Low-Rising and Taoping 241, minor tones that only occur with voiced initials. In each dialect the greatest discrepancy between voiced and voiceless initials occurs in the high tone. Taoping has the greatest difference, with voiceless initials about twice as common as voiced on high-toned syllables. Nevertheless, even this discrepancy is smaller than the ratios of 2.3:1 or 3.9:1

observed in the PSQ *High series. Thus it appears that at the time of PSQ, *High syllables occurred with voiceless initials with at least as great a frequency as they do in modern Taoping, although voicing cannot be used to predict pitch.

Superficially, this distribution could be used to argue that PSQ developed a phonemic high tone, conditioned by voiceless initials. However, there are at least four arguments against this position. First, Southern Qiang would have undergone a shift away from tone and toward pitch accent in Mianchi and Jiuziyang, and a complete disappearance of phonemic tone from native vocabulary in Heihu – all under the tonogenetic conditions of simplification of the syllable canon and increased borrowing from Mandarin. Second, the proposed SQ *High tone would have been very unstable; e.g., 71.2% of high tone syllables in Taoping do not have highs on both cognates in the other two key dialects. This type of capricious tone change is highly uncharacteristic of syllabic tone systems. Third, there was no systematic loss of syllabic information from Proto-Qiangic that would have conditioned the evolution of this tone. That is, PSQ *High does not correspond to any particular feature of Proto-Qiangic syllables. rGyalrong cognates of SQ *High forms cited above are presented in table 4.14 to substantiate this claim. Note that cognate rGyalrong initials may contain sonorants or voiceless obstruents, single consonants or clusters, and that syllables may be open or checked:

Table 4.14. rGyalrong cognates of PSQ *High syllables

Gloss	Longxi	Mianchi	Taoping	rGyalrong
breast, milk	ɳà ɳá	ɳà ɳá	ɳy ⁵⁵ ɳy ⁵⁵	tə nu
cut (vegetable)	tsù tsuá	tʂhù tʂhuá	tʂhu ⁵⁵	ka ra ntsik
divide	ɓò ɓó	zì zóu	zu ³³ zu ⁵⁵	ka kro
dry	fiá	zì	zi ⁵⁵ kua ⁵⁵	kə ram
frog 2	zò piá	dzò-piá	dzua ³ ¹ pu ⁵⁵ ma ³³	kha ʃpa
gall	tsí	tɕí	χtʂə ⁵⁵	tə mdzə kri
house, home 1	tɕé kù	tɕí	tɕi ⁵⁵ ko ³³	tə tʃəm
name	zə mú	mè mé	χmə ⁵⁵	tə rme
rooster	ỳ qú	ì qóu	yi ³¹ qu ⁵⁵	pkəi ko
silver	ɳú	ɳó	χɳu ⁵⁵	pə ɳi
smoke, tobacco 2	mù khú, mú- qhú	mù qhué	mə ³¹ khuə ⁵⁵	tə khə
straight	tí	tí	χtə ⁵⁵	ka sto

That there is no correlation between these consonant types in rGyalrong and the evolution of PSQ *High is evidenced by the many cases of rGyalrong sonorants and voiceless obstruents that correspond to PSQ *Low, as in the following representative sets:

Gloss	Longxi	Mianchi	Taoping	rGyalrong
be/copula	ɳù	ɳuè	ɳuə ³³	ɳos
drum	ɓò	bù	χbu ²⁴¹	tə rbo

Fourth, given the fact that voiceless initials are also the most common phonation type of Low pitch syllables, voicelessness cannot be considered a determining feature for *High. Nevertheless, it does seem that PSQ syllables with voiceless initials had a greater *tendency* toward High pitch than did those with voiced initials. The development of *pitch accent in Southern Qiang was apparently influenced by the phonetic properties of tonogenesis.

4.6. Suggestions for further research

The next step in understanding the genesis of tones in Southern Qiang would be to re-survey the SQ villages where data were collected in the 1930's, 40's and 50's, and to discover how these dialects have fared under increased linguistic pressure from Mandarin. It is very likely that semi-tonal dialects (e.g., Jiuziying, Heihu) have reduced their inventories of initial clusters in the past few decades as a result of this influence and have moved much closer to developing syllabic tone. Furthermore, in pitch accent dialects like Mianchi, where the speech of younger generations includes an increased number of lexical replacements from Chinese, it would be insightful to survey older, middle-aged, and younger speakers to discover whether younger speakers have begun to allow two high pitches on native words, which would indicate a shift toward syllabic tone. No doubt there are many unexpected results that would come out of such research. Huang Bufan reported at the Workshop on Qiangic Languages and Linguistics (Academia Sinica, Taipei, November 6 - 7, 1999) that the tones of Taoping are much different now than the way that they were reported in 1950's. At that same meeting it was reported that while 70% of the Taoping speakers spoke Qiang in the 1950's, only 30% do so now.

Chapter V. Conclusions and further directions

5.1 Conclusions

The data and analysis presented in this dissertation lead to several conclusions. First, it is clear that the traditional generalization that NQ dialects are more conservative than SQ bears revising. It is true that NQ dialects preserve many archaic features, such as complex cluster initials; nevertheless, *r- initials and clusters are often better preserved in SQ dialects, as evidenced by the following sets, taken from the appendix (cf. Table 2.15):

Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	notes
ax	tà í	tè zì	χta ³¹ zi ⁵⁵	sta L zi H	sta:'	stej	< WT <i>sta ri</i> , from STC 22 *s-ta 'knife'
tall, high	bó	bzú	bu ³³	br o/u (H)	bu'	b.ɪ, tɪ w.ɪ	JZY <i>bru.</i> *m-raŋ (146).

For 'tall, high' note that Yadu, considered to be less conservative than Mawo, has preserved the initial cluster, while Mawo has transphonologized *br to bV'.

As shown in chapters II and III, Longxi tends to be the least conservative of the SQ dialects. Nevertheless, in the case of 'iron', it reflects the PTB form more closely than does Mawo, often considered the most conservative NQ dialect: LX *cà* (*mó*), MW *su' mu*, PTB *syam (228). There are many instances in which NQ has innovated final /-ʔ/ (also transcribed -ɿ, 2.1.1.1). For the following sets, it is not clear what phonetic motivation may be offered to explain the occurrence of NQ final rhotics:

Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	notes
house, home	té kù, qò, ké	téi ~ tèi qó	téi ⁵⁵ ko ³³	té e/i H k/q o (L)	téi, qu:'	téi	*k-y(i/u)m (53).
strength	qú			qu -	gə' qu'	qu	Cf. PLB *k- ra ² (WB ?á, LH gô (‘strength’, CL for person).

That these forms lacked rhotics in Proto-Qiang is suggested by their Qiangic cognates:

'home'
Muya tce⁵⁵khu⁵³
Namuyi jy⁵⁵qo³³
Queyu je⁵⁵ku⁵⁵

'strength'
Pumi (Jinghua) qa¹³
Pumi (Taoba) ka³⁵

Not surprisingly, it is much more common that NQ forms retain evidence for a medial *rhotic that has been lost in the SQ data:

Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	notes
blue	phú			phu -	phiə'wa		Jinghua Pumi pʒa ⁵⁵
man (male adult)	biè phà	bè liú	ba ³³ phe ⁵⁵	bE L ph a/e -	bə' φu		Ergong bzɯ.
shave	khuá			khua -	khua'	khue'	Muya yui ⁵³ , Pumi (Jinghua) zi ⁵⁵

The data in these two tables show that *ɹ* in Northern Qiang corresponding to \emptyset in Southern Qiang is ambiguous. Reconstruction of Proto-Qiang will require case-by-case peeking at outside Qiangic data in order to resolve this ambiguity.

Another conclusion that should be drawn from the data and discussion in this dissertation is that a second model of tonogenesis is needed. In this model (applicable only to certain languages), external linguistic pressure from a tonal language combines with existing prosodic features and a tone-prone syllable canon to bring about the existence of syllabic tone. While other accounts of the origin of East Asian tone systems do take into consideration the influence of languages such as Chinese, the discussion presented here is the first documented case of which I am aware in which tonogenesis has occurred without any concomitant loss of segmental information.

5.2 Suggestions for further research.

The present work is a significant first step toward reconstructing Proto-Qiang. The reconstruction of Proto-Qiang will present a more unified and ancient basis for comparison with other Qiangic languages. It will also make clear what sound changes occurred between PTB and PQ. In order to accurately reconstruct Proto-Qiang phonology and lexicon, extensive data from more dialects are needed. Ideally, lists of 3,000+ words in five to seven SQ dialects and four to five NQ dialects would provide a solid basis for reconstructing PQ etyma, and for teasing out the influences of Mandarin, Tibetan, and rGyalrong. This reconstruction of Proto-Qiang would play a crucial role in determining which other languages should be considered Qiang's nearest relatives.

The great discrepancies in the phonologies of H. Sun's and Wen's data on the one hand, and the much simpler Mianchi and Longxi data on the other suggest that SQ dialects are rapidly losing initial consonants and clusters, and perhaps becoming more tonal. In order to resolve this question, I would like to suggest a re-surveying of the dialect locations that were investigated in the 1930's and 50's. A comparison of these two bodies of data should compare phonological features, including tones and clusters, as well as the degree of lexical replacement. Ideally, the samples would include the speech of older, middle-aged,

and younger people, in order to most accurately ascertain the rate of lexical replacement and phonological change. As an example, a survey of Mianchi would show that *f* ('moon') is preserved in the speech of older speakers and middle-aged women, but not in the speech of middle-aged men or young speakers. It would also show that young speakers often use the Chinese numeral terms. It is hoped that by compiling the characteristics of the speech of three generations in a village, and by comparing it with the speech of forty to sixty years ago, we will gain some insight into the rate of phonological and lexical change. As mentioned previously, Qiang seems to possess the distinction of increasing in number of speakers at the same time that the language is dying. A longitudinal study like that recommended here would help quantify the rate at which Qiang is disappearing as a language.

The third project that I would like to suggest would be to perform a morphological survey of Northern and Southern dialects, similar to that done by Wen Yu for pronouns (Wen 1941) and by Evans for verbs (Evans 1998b), but on a larger scale. A comparison and reconstruction of PQ morphology could be combined with a lexical and phonological comparison to determine how Qiang should best be divided into dialects and sub-dialects.

Appendix A

Qiang cognate sets with Proto-Southern Qiang reconstructions

Introduction

PSQ reconstructions are given with spaces between the *initials and *rhymes in those cases that have multiple possibilities for one of those elements. Reconstructions that are unambiguous are written without spaces. *Tones are always preceded by a space, to prevent the interpretation of 'L', 'H' as finals. For a summary of PSQ correspondences, cf 3.4. No attempt is made in this present work to systematically relate NQ cognates, either to each other, or to SQ forms. There are some sets ('ant', etc.), which only have NQ support, and for which no PSQ reconstruction is suggested. There are also some sets ('height', etc.) for which the reconstructions are semantic, rather than phonological. For these sets, reconstructions are of the form 'high'-'low', etc. There are also sets with just one SQ form and a PTB reconstruction ('burn 2'). *Pitches/tones are only reconstructed in cases where there are at least two dialects showing a tone/pitch, and no counterexamples. If there is one counterexample the tone/pitch is reconstructed in parentheses: '(L)' or '(H)'. If the data are equivocal, the PSQ pitch is represented by a hyphen "-."

Reconstructions in the 'notes' field are PTB roots from STC; set numbers and page numbers refer to that work, except as noted. Reconstruction of *vowels is often a non-trivial task. There are many sets which are clearly cognate, but in which it is not possible to tell whether to reconstruct *i or *ĩ, e.g. In equivocal cases, the *vowel is reconstructed *i/ĩ. In other cases, the cognates suggest that some type of non-back non-low vowel should be reconstructed, but it is not possible at this time to further refine the vowel to be reconstructed; here I have proposed *I. Similar situations occur for other places of articulation. In instances where it is not at all possible to refine the *vowel, I merely reconstruct *V. There are also sets with strong support for variation, where more than one

vowel is well supported, but in which the forms are so similar that it seems inappropriate to separate them into separate cognates; e.g.,

Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu
carry with pole	tuì	tuì	qə ⁵⁵ tuə ³³	tui ~ tuə L	ty	tuə

Naturally, some sets that are missing data from a key dialect are ambiguous -- Taoping is the only SQ dialect to preserve the **a/*ɑ* distinction; if support only exists in Longxi and Mianchi, then **a* is reconstructed. Where applicable, NQ forms are used to disambiguate PSQ **vowels*. For many **clusters*, Jiuziying fortis initials are the only evidence for retention of those clusters into PSQ. **Clusters* are only reconstructed in those cases with direct evidence for them in SQ, usually from Jiuziying or Taoping.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1	a time (CL)	dù	doú		d u/ou -			
2	ache		dzí		dzi -		zdzi	
3	add (salt)	(tsh+) ká	(tsh) ké		k a/e H			m l = 'salt'
4	adult	mù bà	bzà mù		'big person'			Both mean 'big person', although the morpheme order is different
5	again	thó dà ɕɿ		ɕi ³³ ; ɕy ³³	ɕ i/y -	ji		
6	age	pù sù	ʂù		pu - ʂu L	pə	ʂuəs	
7	ago, before	qè í	dè qè		qe L		qəə' qəə' ta ('in ancient times')	
8	agree	kò	koù		ko L		ku	
9	AGT suffix	mù	mù ~mú	mə ³³	mu (L)			probably from 'person'.
10	alive	sè	ʂà		ʂ e/a L	ha qhsi	qhsuə	PSQ *ʂ may come from PQ *qhs.
11	alone		à-qó-tsì		q o/u -		stu xɥ tʃu	Yadu [x] is allophone of /q/

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
12	also, and 1	ná	nà	nə ³³	na (L)			TP appears to have undergone sound changes that are common to functors, changing *a to /ə/. 'Also' is the only form in which /n/ in Mianchi corresponds to /n/ in Longxi and Taoping. At present I have no explanation for this apparent palatalization, other than the unpredictability of phonological developments in functors.
13	also, and 2		lè		le -	l	lə (RH)	
14	among, between	tɕì gó	gó tì	go ³³ go ³³	ti L go H	tiu yu	ɛ gʊ	also 'middle' *s-tay (299)
15	angry	tə̀ qù tchì	tè kuò tchì	ko ⁵⁵ pho ³³	k u/o (L) tchi L	khua khua	tə̀ khue (RH)	Both NQ and SQ use UP prefix with this verb.
16	animal pack's worth	kuà	ku í		k uV -			
17	ankle	(pà qà)	lò sí kuè		kue -		lo sə kuæi	
18	answer, reply	guà		ɣgye ³³	ɣgye L	huja	he quez guə	
19	ant					tiu ku	tɕu khu'	SQ forms borrowed from Chinese

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
20	anus	tshó qá-(zà pù)	tchè zò-zè pú		'feces' 'hole'	qhşo zu	qhşə zɥ	SQ buttocks-hole. MC has undergone a tone change in ml
21	appear	sì tçy	şè tçĩ		tç i/y L			
22	appearance, shape	qà bí	bú		bu H			
23	apply (ointment, etc.)	mú má	mà		ma -		mə ma	*rhyme is based on NQ
24	arm 1	liè mì			l V -		lo pu	?*lak (86). ?*mu·k (394)
25	arm 2		í dzè		dze -	dʒa pu, dʒu pu		
26	arm 3					dʒapu, dʒu pu	lo pu	NQ *pu
27	arm 4 (remove?)	(liè mì)	í dzè	i ⁵⁵ sa ³³	i H		ja pa 'hand'	JZY ji.
28	armpit	zá ká mù	dza ké	dza ³³ χqa ³³	χqa (H)	dʒæ βlæ şqul	zdzi xqa	?*g-li ~ *k(a)li (265). ?*mu·k (394)
29	arrange, put in order	sì			sl -		şe	
30	arrive	pà gó	((dè) phě)		p a/e L		kɛ pɛ	
31	arrow	-	lə	lə ³³	lə L	ɣdʒa (<WT?)	je	*bla (449)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
32	ashes	mù-bè	tciè-bè zì	mə ³³ bzɿ ²⁴¹	br i/e L	tci ci buz	tcu xu bu zɿ	LX, TP m1 = 'fire'
33	ask	(tə) zà zí	dzɿ dzɿ	dzɑ ³¹ dzɿ ³³	dzɑ L dzɿ (H)	dzɑ	(kɛ rɛ)	Two syllable etymon. MC has lost the *ɑ syllable and reduplicated the *i syllable.
34	askew, slanting	dà qhuá		(tchye ⁵⁵ qɑ ⁵⁵)	qhua H	qhua	dɑ qhua	
35	autumn, winter	sò qeí	só qè	sio ³³ ko ³³	s (i)o (L) qe (L)	mu ɣu	suəɣ 'winter'	cold-m ('season?')
36	awl	ŋò			ŋo -		ɛɛ ŋɛ	
37	ax	tà í	tè zì	χta ³¹ zɿ ⁵⁵	sta L zɿ H	sta:'	stɛj	< WT sta ri, from STC 22 *sta 'knife'
38	back basket	gú			gu -		guə', (ɑ) zɿgɿ (a basket- ful)	
39	back of body 1		dé	de ²⁴¹	de -			
40	back of body 2	tsò bò			bo -		tsup (poss- ibly cognate with m1)	m2 < *g/b-liŋɣg/b-lyɑŋ
41	back, behind		dè làN tà	χde ³³ ta ³³	χde L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
42	backstrap	bià dzí	bà dī		b ia/a L di -			m2 = 'belt'
43	bad					mɑ'	mɛj	
44	bamboo	pò (tí)	pù	χpu ⁵⁵	χpu (L)	ʃpu	ʃpu	*g-p(w)a (44)
45	bark (n.)	cì (phù) jà piá	sè zà piá, phò-zà piá		'tree-skin'			
46	bark (v.)	té tá	tè tá	χte ³³	χte (L) t a/a (H)		te	MC tone changes with 'dog': khwè té tà.
47	bat (animal)	tshí-qù-mù	(iàen laò sue i)	tshɿ ⁵⁵ χkə ³³ mə ³³	'salt-stealAGT'	-(piʃ pə)		cf. 'steal', MW? MC has borrowing ("salt mouse")
48	be/copula	ŋù	ŋuè	ŋuə ³³	ŋuə L	ŋuə	ŋuə	cf. 'existential/locative'
49	beam	qhò tá	tà		ta -	rɸɸɸl		
50	bean	də piá	deì	də ³³	də L	(b)	--	could be an ancient borrowing. Mandarin dòu.
51	bear (n.)	tɕá	tí	tɿ ³³	tiam (H)	ti	tɕi	*d/g-wam (461)
52	bear fruit	á zó	ʃè dzǎ	sie ⁵⁵ mə ⁵⁵ dzɑ ²⁴¹	dzɑ	si' mi dzɸ		*contour tone
53	beat (drum)	tè, fiá tá	tuà tɕá		t e/a (H)		dze te	also other pfxs with LX tá. MC [pt]. cf. 'hammer', STC 317 *tow, ?*tuk (387)
54	bed 1	ŋì sì qà	nè bà	ne ⁵⁵ ci ³³	ne (L) s i/i L			
55	bed 2		nè bà		ba -	bu ta	tʃhuon bu	PNQ has *bu

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
56	bedbug 1	bè tchá-bè lò	bù tšá		b ə/u L			
57	bedbug 2	bè tchá-bè lò	bù tšá	dzu ²⁴¹ χʰʂi ³¹	χʰʂ i/a (H)			
58	bedbug 3			dzu ²⁴¹ χʰʂi ³¹	dzu -	dzuxtš		
59	beg	cà	tchò cí mù		ç a/i -			
60	begin			da ²⁴¹ ye ³³	ye -	da wa		m l is DIR
61	beginning	là tó (of month)			tco -		tcoχ	
62	believe	džá	džá (žà)	džá ²⁴¹	džá (L)	sti ʔæʔ	ɕæ	?*(m)-kyen (223)
63	belly	pù	tchè-pè toú	pu ³³	pu L		pu	LX 'intestines'; MC VH, *kwa ?
64	belt	dzi	dì		dì -		dzij dze	?*du-t ~ *tu-t (421)
65	bend 1	kú kuá zì			kuá -	dʒɔ kuá' sɔ (elbow)	lɔ kuá' sɔ (elbow)	
66	bend 2					ʂquáʈʃ	džæq quə, nu qu' (bend at the waist)	?*koy or STC *kuj·jm (307)
67	bend over	ì kú	fià kò, ì mò kò		k u/o -		qu' kə' (bent)	monophthongs

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
68	big	bjà ~ bà	bzà	bzɑ ³³	bra L	bɑɿ	bɛ	
69	billy goat (male sfx)	tchà dò	tshè dzè		'goat' - dV L			MC has dzú for male dog. (?) TP 'goat'
70	bird 1	ì tshá	ì tshé	i ³¹ tshie ⁵⁵	i L tshV H			TP 'sparrow'
71	bird 2			dze ²⁴ ye ⁵⁵ mə ³³	ye -	wə	wu tse	*(b)wa (99)
72	bite 1	zé			dz/zV -	dzi dzi	kə dza (of mosqui- to)	?*wa (424)
73	bite 2		κà					*wa (424)
74	bitter	qhà	qhà	qha ⁵⁵	qha (L)	qha	qhɑχ	LX 'bitter, salty'. PTB *ka (8)
75	black	ŋí	nə	ŋi ⁵⁵ ŋi ³¹	ŋi -	ŋiq	ŋɿχ, ŋɿ χʔ	*prefixed? *nak (p88)
76	blade of grass (CL)	ə					(ɑ) ra	
77	blame	phià	(mè) phí		phi(a) -			
78	blanket	tshà ì	tshà k í		tsha L		tʃan	
79	bleat, bray, grunt, etc	zǎ	zě		Cz a/e L		zij	PQic *nzVk (cf. Chapter IV)
80	blend with water	lú	(fià) ló		l o/u H			*laŋ (STEDT 'water/river/valley')

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
81	blind	fià teyà	mí tiù, tuà	χtɕya ³³	χtɕya L	qətfa	khəp	YD 'blind person'. WS ştɕya, LBZ ştšya, JZY htwa.
82	block up/plug	tsì tsì 'stop up'	tè tɕuà ké, tɕì 'stop up'		χtɕV L	xtɕə	χtɕə	STC 422 *tsuw
83	blood	sà	sà	sa ³³	sa L	sa	sa	*s-hwiɣ (222)
84	blow (of wind, etc.)	phú	phú	χpo ³³ , phə ³³	χphu (H)	phɣ	phə	PTB *pu (JAM)
85	blue	phú			phu -	phia'wa		Jinghua Pumi pɕa ⁵⁵ suggests PQic *pr.
86	board, plank	bú	--	bu ^{33ə} ³³	bu -	bu	bu	
87	body	ɕì pí	ɕì peí	ce ⁵⁵ pe ³³	ɕ i (L) p i/e (H)		(pə' şən, pəə' χua)	
88	body dirt		tò z í					*(k)ri(y) (459, 460).
89	body hair, fur, feather	ɹà-χù	mù	χmə ³³	smu L	huŋ pa, hu pə ('feather')	-xu pə	*s-mul (pp 15 - 16)
90	boil (n.), sore	qò lò	qà	qu ³¹ lu ⁵⁵	qu L lu -	qu lu	tshuoi mi	
91	boil (porridge)	qò	qà		q o/a L		şqu	YD tu χsu 'be boiling (water)'.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
92	boil (v)	tshú	--	tshu ³³	tshu -			*tsyow (275).
93	bold, dare to	tchò		tchy ³³	tch y/o L	khçu	khşu	WT sdo-ba (STC 267)
94	bolt/lock door 1	quà	diò-quà	qɑ ⁵⁵ suo ³¹ (s2 is b)	qua L	qu sa	quə sa: ku	
95	bone	jà ká	zə̀e koù	zɑ ³¹ kie ³³	ra L kV -	ɹə̀ pætʂ, ɹə̀pætʂ	zək pætʂ, ə̀ pætʂ	n.b. not in zyc data from STEDT questionnaire
96	book	dzì tsà ì	dzì tshà		ts/tsh a L	zət phi	lə̀yz	m1 is probably 'paper', borrowed from Mandarin zhǐ.
97	bom/birth		şè bü		bu -			*braŋ (135)
98	bottom	qà tò	qà tà		q a/a L t a/o L	şqul; qə̀ li		MW 'underneath (n.)'
99	bovine, cow 1	ηò mià (female)	ηò	zɿ ³¹ ηu ³³	η o/u L	ηuə	ηuə, zə̀, su ku	*ηwa (215)
100	bovine, cow 2	sì			sə̀ -	sə̀ ku	su ku tʂɑ: ¹	YD shed (cow)/fence (ox)
101	bow					sə̀ spiʒ	sə̀	*d-liy (462). or = 'arrow'
102	bowl	ku	ku	ku ²⁴¹	k u/o (H)	ku tʂɑ	kuə tʂɑ	
103	bowl, etc. (CL)	fiò	(qó)	χgy ³³	χg y/o (L)			
104	bracelet 1	pà-kù	pè kuì	pɑ ⁵⁵ kie ³³	pɑ (L) kui (L)			VH in MC

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
105	bracelet 2					dʒo di	ji de	
106	braid	kà	kè piá	kie ³³	kie L	xlia pi	qə xlie pie, khlie pie (v.)	
107	brain	qè nà	qè nà	qə ³¹ χnə ³³	qə L χnə L	qi nǚ	qəoni	'head-brain', *s-nuk (483)
108	bran 1			pə ³¹ tsɿ ³³	pə -	pə	klə φəs	MW husk = bran. *Vowel based on YD, TP.
109	bran 2	zuà-jà	(lè)-fù-zá		'wheat-(bran) (b)-skin'			
110	branch	ɛ̄ kə mà	phò khò	ʒe ⁵⁵ kha ³¹	kh ə/ə/a L		raji (RH)	*ka-k (327)
111	brand, iron	piá	piá		piá -			
112	break	qà tshí	tè tshě		tsh i/e -			?STC 185 *tsat
113	break	dà kè	sè kè (break open')	ke ³³	ke L	ke	de ke, da klia, χliə (v.t.)	
114	break (rope, etc.) 1	(dà) bà (v.i.)		bze ³³	br e L		de bue	
115	break (rope, etc.) 2	phú phá (v.t.)	sò phě ʔæ?		phre L		phu phue	May simply be *bre with *s- prefix. STC 254 *be ~ *pe. LX shows *s- CAUS

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
116	break/snap	κə là	(té) lǔ	κe ³³ ('break')	χIV L	κe	də ɳliə	
117	breast, milk 1	ɳà ɳá	ɳà ɳá	ɳy ⁵⁵ ɳy ⁵⁵	ɳa (L) ɳa (H) ~ ɳy ɳy			STC 419 *nuw. JZY ɳy ɳy.
118	breast, milk 2					pə pə	pə pə	
119	breath	mú sú					məs	STC 485 *sak
120	bridge	tshá (tò)	(lò) tshá	t shie ³³ də ²⁴¹	tsham (H)	tshi	tshua	*dzam
121	bright (ness)	cyá	cyá, mù cà	cya ³³	cyá -	pəz ʔæ?	te ʂue	
122	broken	dà bà	tè bé bè		b a/e L			STC 254 *be ~ *pe.
123	broom		dzua	dzya ²⁴¹	dzya L	dza		
124	brother (elder) 1	à kò	qó qò		ko -		ku:	*Initial based on LX, YD. *kuw (255)
125	brother (elder) 2	tú bà		tu ⁵⁵ bza ³¹	tu H - 'big'	tə ba'	stuəm (brothers)	cf. 'big'. Yadu mə = 'younger bro, addr. by sister'
126	brother (younger)	tú-tsù	tòu tsú	tu ⁵⁵ tsua ³¹	tu H tsua L	təxtʂə		brother-small
127	bucket/ barrel	tsù tì ʔæ?	thiò	thio ³³	thio L	tsəp; thu		LX ml = 'water'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
128	buckwheat	zuà ká	dzuà ká	dzuó ³¹ ká ³³	dzuó L ká (H)	dza	dzuó ká	TP, MW = "sweet buckwheat", ?STC 150 *mruw
129	buff leather	bà lò zuà	bè liù tshì		ba L liu L			
130	bug, insect, worm	bù lò	bò lò	bə ³¹ dza ³¹	b u/o L lo (L)	bu lu	bəl	PTB *baw (27)
131	build 1	tshù	tshú		tshu -			
132	build 2	qhù	qhúé		qhue -		khlie	
133	building	kè, lò kè	lòu-ké		lo L ke -			MC 'multistorey building'.
134	bull	zì	zì-(bzá)		zi L	(?)		
135	bundle (of things)	què, qú tá ('wrap')	quà	quə ⁵⁵ te ⁵⁵ ('wrap')	q ua/ue (L)	quə'que' 'wrap'	qu que 'wrap'	STC 479 *klup, MC qhuà 'bundle wrapped in cloth', khuè 'bundle of rags'
136	bundle, bunch (of vegetables)	tsuà	tshuà		tshua L			
137	burn 1	dà uà			uo -		də wɿ	
138	burn 2	à tsú			*tsu -			STC 275 *tsyow.
139	bury	bé	(fia) bí	be ⁵⁵	b e/i H			STC 376 *bip ~ *pip.
140	butterfly					khcam tchi	khşon pie	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
141	buttocks		thà bá (‘vulva’)	thə ³¹ bə ³³	thə L bə -	stə sə, stə ^ə bə, stə ^ə pə	stə stə, stə piə	× ‘feces’. multiple MW sources
142	buy	pú	dè pó	pə ⁵⁵	p o/u H	pu	pə	?STC 293 *b-rey
143	calf of leg	duà qà-tsá	duà-bzù bzí		‘leg-small’			
144	cane, vine	zə bə lí	lè bzè		br ə/e L			other sylls cognate? cf. ‘rope’
145	carpenter	çì zì-pù- mù		sie ⁵⁵ dzɿ ³³	‘wood’- dzɿ L	ʂəŋ dzu		LX m3,4 = ‘do’-AGT
146	carry in lap	què	tà quà		q ue/ua L			
147	carry on back	bià	bià	bə ³³	biə L	bi	biə	STC 26 *ba
148	carry on back (of animal)	qá	ké					This is a probable set, but more data are needed before positing a reconstruction.
149	carry with pole	tuì	tuì	qə ⁵⁵ tuə ³³	tui ~ tuə L	tɿ	tuə	
150	cast, cast aside		dè tʂhù	tʂhi ³³	tʂh u/i L			
151	cat	mà nù	mè nòu	ma ³¹ nɿ ⁵⁵	ma L nɿ (L)		pu nɿ	This root appears to be onomatopoeic. There is no published PTB root, but cf. Lahu mé-ni.
152	catch	tsé		kuə ⁵⁵ tsi ³³	tse ~ tsi -	kuə tsi	kə tse	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
153	catch on fire	uà	dè uě		ua/ue L			
154	catty (half kg.)	téi	ké	tce ³³	ke (H)	tə		b?
155	causative sfx	-zì	-zì		-zì (pitch varies with stem)		-zə̌ (RH)	
156	center	tèi gó		gò ³³	gò -			
157	centipede	də̌					də̌	
158	chaff 1	zuà pú	dzuè pú		dz ua/ue L		dzə̌ pə̌ χə̌ (of high-land barley)	m1=food? STC#170 *pwa.y
159	chaff 2	zuà pú	dzuè pú	pə̌ ³¹ bzə̌ ³³	pu (H)	pə̌	kle pə̌ χə̌ (wheat), dzə̌ pə̌	MW 'husk'
160	charcoal	mú dzí	mè dzí		m u/i (H) dzi H		mu dzə̌χ	m1 = 'fire'
161	chase after	χù χù		tə̌ ⁵⁵ χə̌ ³³	χ u/o L	ʔə̌? tshi		TP χə̌ ⁵⁵ χə̌ ³³ 'drive away', ?STC 354 *s-nuŋ
162	cheap			mi ⁵⁵ phə̌ ⁵⁵ ly ⁵⁵	phə̌ - liu -	pha ma la	mo xliu	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
163	cheek	tcì piá	tcí pià	tʃɿ ³¹ pa ⁵⁵	tcì L pia (H)	(kə tʃə)		m2 = 'skin'. *(t)si (STEDT), *s-bi ≠ *s-bay (STEDT)
164	chest	kó qhuà		zɿ ⁵⁵ dzɿ ³³ qə ³³	Cr o/u H qhua -	ɿu qhua	jə qhua	*b-raŋ (LaPolla 1985)
165	chew	tsà tsá	tʃeì tʃá	χtʃə ³³	χtʃə L χtʃə H	tʃəq tʃəq dza	tʃuəχ tʃuəχ dza	*C-tsat (GSTC 25)
166	chick	ỳ tsuá tsù	ì tsà tsú		'chicken' - ts ua/u - DIM	-	tcuy ʃu	
167	chicken	ỳ	ì	yi ³¹	yi L	tcì wə (b?)	tcuy	cf. LX bird
168	child	tcí bí	kè bzì tsì	tʃi ³³ bzì ³³	tcì - bri (L)	tcì: mi	tʃuj mi	
169	chin		khè	mə ³¹ sɿ ³³ kha ³³	kh a/e L	dʒa':	dzo	J. Sun for MW, *(m/s-)ka (470). TP may reflect both PTB prefixes.
170	Chinese	kèi		kə ³³	kə L	kə'	kəi	
171	chisel (n.)		zò				ɛzuə, dzua ɛzu (v.)	All other SQ forms for 'chisel' are borrowings from Mandarin.
172	chopsticks	bə tɕá	dù	duə ³³	duə L	was	wes	LX has transphonologized the *u to form a labialized initial. Cf. discussion under *bz (3.3.1.8.1)
173	city I	qə cì	qə tá		q ə/e L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
174	city 2			241	kie -	kuai', kua: (city wall)		
175	claw					pa'xə'	pa' xə'	
176	clean, clear, pure	có	có tè		có H	cú tiu	ken tse (b?)	*t(s)yan (p53)
177	clear (water)					gə'teu	qə' gə'	
178	clear up	tò, tí						*t(s)yan (p53)
179	cliff		zà (l6)	ze ³³	ra L	ji		*ɸ-kaɸ·ɸm (329). Jiuziying has .aa. MC. shows effect of *s-
180	close (book, door, umbrella)	quà	quà, ì khuí (close up!)		qua L			
181	close (eyes) I	tà				tci		*ts(y)j·p (370)
182	close (eyes) I		fà sé	sie ³³	sie -			
183	cloth	bù miá	bzù miá	bzɿ ³¹ me ³³	bz u/i L mia (H)	bi:mi	bɛ:	ZT, RDZ bzɿ me.
184	clothes	phò	phù	phu ⁵⁵	ph u/o (L)	phu βa	phuə	cf. 'tree', 'boil'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
185	clothes (CL)	là	lè	la ³³	IV L			Vowel may have been affected by VH.
186	cloud	dá mỳ	dá mò	χde ³³	χd a/e (H)	zɔvm	zdam	
187	cold			χtu	χtu -			TP cited in SQD. WS ʃtu, JZY htu.
188	collapse	(à) dzà; ɤò kuá	fià dzuǎ	χgy ³³	ɤdza L	ɤdza		JZY kua.
189	comb (n.)	qə-ɕý	qè suí	qə ³¹ suə ³³	s ye(?) (H)	qə si	qu su	*m-si(y) (466)
190	comb, brush (v.)	(ɕý)	(qà tó suí)	khʃuo ⁵⁵ (older speakers), tʃhua ⁵⁵	khrua H	kha' la	khue' xə'	cf. PL *ʔb(r)iy ² (STEDT)
191	come	lò	ɲù	ly ³³	ly (L)	ly	liu	The PSQ *vowel is based on TP, MW, and on the palatalization in MC.
192	cook/boil	qò	qà	χqə ³³	χq ə L	ʃqu	ʃqu	*glak ~ klak (124)
193	cooked/ripe	(fià) mù	(fià) mù	mi ³³	mu L	ʔæ? nə		*s-min (432). STC form is reconstructed with same semantics.
194	cool (of water)	tó	toú		to H			
195	copper, brass	χá		χa ⁵⁵	χa H	χa phi	χa' xue', bzəŋ (ɾ?)	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
196	corpse	mó	mó		m o/u H	rmu	zu mu	*s-maŋ (STEDT)
197	cough	tshú tá	tshò xuá					STC 423 *su(w)
198	crack (v.)	zǐ zá		zɑ ⁵⁵	zɑ H			
199	cradle, bassinet	qhò pí	tshà piá		p i/ia H			
200	crow (n.)		nə-ŋá	nə ³³ ŋɑ ⁵⁵	nə L ŋɑ H	ŋɑ ku	nu ku	?*ka (STC pp 99-100)
201	crow (v.)	ɕí	tè sǐ	sɿ ⁵⁵	si (H)	si	sɛ	
202	cry out, call (out) 1	kuǎ (tà)	kuǎ	kuə ³³ zɑ ³³	kuɑ L	ku kua	?	*contour tone? does TP have kua? STC 79 *ŋuw
203	cry out, call out 2	qá ɹà		kuə ³³ zɑ ³³	ra L			
204	cry, weep 1	ŋú		ŋə ⁵⁵	ŋ u/ə H			*ŋəw (79)
205	cry, weep 2	zǎ	zà	zɑ ³³	zɑ L	zy ɹy	zei	
206	cuckoo	qí pù	koú pù		q/k i/ou H pu L		qu ʂput, kuput ~ kupət (RH)	For discussion of *initial, cf. 3.3.1.5.
207	cup		tshà tsí	tshə ³³	tʂ a/e L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
208	cut 1 (firewood, vegetable)	qhù qhuá		qhe ³³	qhr ə/ua (L)	qhə' qhe' (fir- ewood), qhua' (veget- able)	qhe' qhe' (fir- ewood), qhua' (veget- able)	
209	cut 2a, chop	tshuá, tsù tsuá	tshù tshuá	tshu ⁵⁵ (cut vegetable)	χtʂua H	xtʂi (tree)	xtʂe (chop/ hew, cut meat, sever)	*tsywar (240). Proof that the *cluster was preserved into PSQ is given by the fortis initial in JZY tʂ'o.
210	cut 2b	tshuá	tshuá (cut bone, tree),	tshua ⁵⁵	tshua H	tsha ti		LX ambiguous btwn 2a, b. JZY [tshua].
211	cut 2c (unasp)	tsoù (cut/gouge out), tsú (cut w/ scissors)					tʂu tʂu (cut/rip open)	This set is less definite.
212	cut 3	khù khuá			khu(ɑ) -	khu	khə'	
213	cut 4	kó	sì kú	ku ⁵⁵	ku H			LX, MC 'mow grass'
214	cut 4	sì tchà	tshóu tià	tshua ⁵⁵ te ⁵⁵	H tia (L)	tsha ti		JZY tie 'cut down'.
215	cut 6		zǎ qà					*ra (458)
216	cut/gouge out		liá					*lep (351)
217	cypress	zú má			zu - ma -		zu ma	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
218	dark 1	mú	mò	mu ³³	mu (L)	muŋi		*mu·k (357), *mu·ŋ (362)
219	dark 2					xtcap	xtfop	
220	date (time)		zì tsé				zət	
221	daughter	tçà	tçè	tçj ³³	tç a/e/i L	tsi	tsi	*krwiy (244)
222	daughter-inlaw	-tçá zò	tçè zó	tsy ³³ dzy ³³	tç/ts V (L) dz o/y (L)	tsi gziu	tsu gzu	JZY ci dzu. PSQ *initial may have been *gz .
223	day	çì	sè	sie ³³	sie L	si	çu xlu	*s-nəy (GSTC)
224	daytime 1		nó nà	nə ³¹ χua ⁵⁵	nə -			
225	daytime 2			nə ³¹ χua ⁵⁵		stia χlu	çu xlu	It is not clear whether there was a cluster initial in PSQ.
226	deaf	ŋi-bò	bù	ŋi-bò	'ear' - b o/u L	nə ku-bu	ŋə ky-bu	*(b/p)a:ŋ (STEDT)
227	deep	tshí			tshV -	tsha	tsha	
228	deep fry	qó						*kaŋ (331)
229	deer		dá	χda ³³	χda -	zdu	zdu	cf. 'cloud'
230	delicious, tasty	zè nà	zé		ze -	zy	zɛ	LX does not have /z/.
231	dew	zì qá	dzé qè	χdzə ³³ qə ⁵⁵	χdzə (H)	(ʂqa rəq)	dzəχ	*Vowel based on TP, YD.
232	die	à cà	{té sǐ}	ʃe ⁵⁵	ç a/e (L)	çi	ʂe, məs me·çi, de ʂe	2d YD form = 'breathe one's last' STC 232 *siy
233	difficult	mə qeí; qò	(pù) qà	χqa ³³	χqa (L)	ʂqu	ʂqu	*kak (TIL 70)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
234	difficult, tired	bà	bà	χba ²⁴¹	χba L	rba		STC 29 *bal
235	dig	bù liá		qhə ³¹ la ⁵⁵	lia H	ʔæ? phi phi		STC 288 *la·y
236	diminutive suffix (example is 'calf')	mà lià tsú	hò bò tsú	tu ⁵⁵ tsuə ³¹	ts u/uə (pitch varies with compound)	dzi ʂputʂ, dʒəhputʂ		TP 'brother (younger)', 2 MW sources
237	dip pen	sú	sú		su H			
238	dirt	bú zì	bè zì		b u/e - zi L			
239	dirty	à ɲì						*s-n(y)ek (235)
240	disappear	mo ³⁵					mez	*ma-t (425)
241	dissolve, melt	dà zù	dzú	dzyi ³¹	dzyi (L)	dzi	ɔ dzə	
242	ditch		tsuè χoù	tsuə ³³ χu ³³	'water'- χu L		χuʂ (valley)	*Vowel based on TP, YD.
243	divide	κò κó	zì zóu	zu ³³ zu ⁵⁵	Craŋ	ɽy ɽy	ju ju	? *bra (132)
244	do	pù	pù	pu ³³	pu L	tʃə; bəl	bəl	
245	dog	khù	khuè	khuə ⁵⁵	khuə (L)	khuə	khuə	STC 159 *kwiγ
246	don't 1		tɕì		tɕi -	tɕi		
247	don't 1	tsì		tsɿ ⁵⁵	tsi -			
248	donkey			dza ³¹ ba ⁵⁵	dza - ba -	dza βa	dze we'	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
249	door	dzù ~ dzú	diò	dio ²⁴¹	dio L	diu	dzuo	
250	dote on (child)	qà tcí	quà		q a/uò L			
251	dove	ý gù	guè guè		gue L	gu' gu'	gu' gy'	MW 'pigeon', *kuw (495), *m-kraw (118)
252	downward (pfx)	fià -	fià -	(ə ³¹)	fià L		fià (RH)	cf. comments at 'upward'.
253	dragon	bú	bú	χbə ²⁴¹	χbə (H)	bə'k	zbə (year of the dragon)	cf. 'bug', animal pfx? YD 'dragon' is b.
254	dream	mò zè	mò	χmu ⁵⁵	χm o/u (L)	rmu ke	ku mu, ku zmu (v)	*r-man (82)
255	drink 1	tchí	thié ~ thyé thyé (smoke cig.)	thie ³³	thie -	thi	tcha, tšhe (smoke cig.)	*they (STEDT). JZY (ie).
256	drink 2	qú	qó		q u/o H			
257	drip	zí		dzie ²⁴¹	dzi -			
258	drop (of oil)	tsì			tšj -		(a) tš	
259	drop (of water) 1	kà tcí	kè kè		k a/e -			LX m2 may be palatalized cognate.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
260	drop (of water) 2	zǐ	{tè}	dzie ³³	dzie -			
261	drop (of water) 3					tshə	(a) tɕ	
262	drum	bò	bù	χbu ²⁴¹	χbu L	rbu	z bu	
263	drunk	(cì) tà χeì	ɕè χè	sɿ ³¹ χe ⁵⁵	χe (L)	xiaq səqe	ceχ tə qa	
264	dry	fiá, (zè)	zǐ	zǐ ⁵⁵ kua ⁵⁵	ri H	ɹə tci	ʔæʔji tɕye	STC 268 *raw
265	dry in the sun 1		ɕè dzǐ	dzǐ ³³	(C)dzǐ -			JZY dzǐ. Fortis initial suggests *cluster initial.
266	dry in the sun 2		phù dzǐ		phV -	pha	pha (RH)	
267	dry measure		pú	pu ⁵⁵	pu H	pu	pu (RH 'pint')	MC 'decaliter', TP 'liter'.
268	dry, warm by fire	qhuà, khuà	khuè, múkhuè ('fireroast')	--khye ³³	khye L	ɕkua	ɕkue	MC y/k ʔ, ʔSTC 331 *kaŋ
269	dust	phú tù tù (covered with dust)	χueí phù phù (dusty, covered with dust)		phu -		ɕpe ɕpe	MC is labeled 'b'
270	dwelt, live 1	qó zǐ; zǐ gó	fiǎ zǐ	ɕɿ ³³	zǐ L	dzu		

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
271	dwelt, live 2			dzo ³³	dzo -	dzu		
272	dye	ɕì		sɿ ³³	sɿ -	sy		
273	each (one), respective	iò mó (sò)	à qó mò qà		mo -			
274	eagle	χò	lá (bzà)	χuo ⁵⁵	χlanj (H)	χlu	qhlu, χlu	*k/g-lanj (333, p72 n.). *Rhyme is based on Longxi, NQ, PTB.
275	ear	ŋì ká	nè ké	ŋj ³¹ kie ³³	ŋ/n i/ə L kie (H)	nə ku	ŋə kɿ	*g-na (453), *kyap (STEDT)
276	ear of grain	cà qè	lè tì	χti ⁵⁵ qə ³³	snam (L) qə L	stioq	ɕtɕəχ	*s-nam
277	early	zì		dzɿ ²⁴¹	dzɿ L	dzɔ	dzɔ dzə	
278	earring	ŋì mà	nè mà	nə ³¹ mɑ ³³	ŋ/n i/ə L mɑ L	nəku pa la	ŋə kɿ paɿ	mɿ = 'ear'
279	earth, ground 1	zù	zuè (pè)	zua ³¹ pə ³³	zuə L	zəp	zəp	LX is ambig. btw both roots, also 'place'
280	earth, ground 2 (includes 'field')	(zù)		dzu ⁵⁵	dzu -	dzu		
281	earthworm	zuà-bù ló	(bè diá)	dzu ²⁴¹ bə ³¹ dza ³¹	'earth'-'bug'			LX 'earth-bug', TP just 'earth'- 'bug'?
282	easy		(pù) zè	zie ³¹	zie L	za	zɛ	MC mɿ='do'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
283	eat	zì	dzè	dʒɿ ³³	dzi L	dzə	dzə	LX also has the forms tiè 'eat!' and tchí, which may have been influenced by the *s- causative. STC *dza
284	egg	ì tò	ì té	χtə ⁵⁵	χtə (H)	tci wə ^o st	wə ^o s	*n/s-tow (STEDT)
285	eight	tshá	tshè qó	tʃhe ³³	kh r e/a (L)	kha'	khe'	SQ initial cluster suggested by Jiuziying tsha. *b-r-gyat (163). For NQ velar corresponding to SQ retroflex, cf. 'hundred'. Rhotacization of NQ forms indicates PQ *kr a/e.
286	eleven	fià tci	fià tí	χn ³¹ tʃɿ ³³	fiə L tci (H)	he tci	he tʃɛ	*t(y)ik=g-)tyik (p84). TP and MW have m2 as free morphemes meaning 'one'.
287	emperor		mé tsì		χm ə/e -		zme tʃɛ	JZY ɤmɿ tsɿ.
288	empty		qhò		qh o/u -		ɤə χɸ	n.b. NQ stress rules, vl. vowel
289	enclose (sheep)	tchý		ŋu ⁵⁵ tci ⁵⁵	tɛ/tɛh y/i H			MW, TP 'enclosure'
290	encounter/meet	tsó pà	(tí tà)	a ⁵⁵ tsu ³³ pa ³³	ts o/u - pa L	e tci ti pi ʔɤʔ		
291	enough, be	zì	dzì				γdzə	
292	escape, flee	dà phó	dè phû	phu ⁵⁵	phu H	phu	phu	*plɔŋ (140)
293	estimate, measure	zò zò	zé	dzie ²⁴¹	χdzie (L)	ɤdzə ɤdzi	ɤzɛ ɤzɛ	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
294	every day	á cí má qè	à sè mó qà		'one'- 'day'mV H- q a/e L	-		
295	evil spirit, witch	dù mià	dòu miá		d o/u L mia -			ghost-female
296	exchange	lá lá	là là	tə ⁵⁵ la ³¹	lə (H) la (L)	lə la	lə la	*lay (283), reduplicated, no doubt to indicate reciprocity.
297	exist/be present		zì	ʒɿ ³³	z i/i L			
298	existen- tial/LOC (animate referent)	ì	zì	ʒɿ ³³	ji L	zi	zɿ (RH)	
299	existen- tial/LOC (contained referent)	lià	lè	lie ³³	lie L		le (RH)	
300	existen- tial/LOC (immo- vable referent)	kuà	uè	ye ³³			we (RH)	
301	existen- tial/LOC (transitory, portable referent)	ŋó	ŋá	ŋa ³³	ŋa (H)			JZY ŋa.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
302	expensive	phú lú	phé liù	phə ³¹ ly ⁵⁵	ph u/e/ə L ly H	phə la	phu liu	cf. 'price'.
303	experience	bú jà	phú bzà		b/ph u L bzə L			
304	extinguish, die out (fire)	mià	mè		mV L		dəj mie	STC 374 *mit
305	eye	ŋí má toù, mì-sè	mè tié, mù tié	mi ⁵⁵	mia (H)	(qən)	mi:	*vowel is problematic, MW sl = head? *myak (402).
306	face	qá qhuá	qà xà	qha ³¹ qha ²¹	qa (L) qhua (L)	qɤŋ	qwa' xə'	*kwa (STEDT). Taoping does not have the sequence *qhua.
307	fall 1, drop	fià tshò,	fià tshoù	tshyi ⁵⁵	tsh o/y (L)	tshy		STC 353 *tsyuk
308	fall 2	fià gù	ʂé guǐ		gui L		ɤ ku (trap, n.) 'ʂ?	
309	family of people (CL)	qò	qà		q o/a L			
310	far		z í xuà	xua ³³	xua L	guə' xɛ		
311	fart		pè	xpe ⁵⁵	xpe -			JZY xpe.
312	fast	dù lì		dua ³³ dua ²⁴¹	dua L	də tyn	fu fu	
313	fat 1		loù	lu ⁵⁵	l o/u -			*l(w)aŋ (STEDT)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
314	fat 2	tshì			tshì -	tshy, tsha'wa	tsha:' wε	
315	fat, oil 1	sò í, sé		sa ³³ ie ³³	s o/a L ie -		mer pie sε	STC 272 sa·w
316	fat, oil 2			χda ³³ , (χno ⁵⁵)	χda -	zda	zdueə'	
317	father (direct)	á ì (grandf- ather)	-á ià	i ³¹ ie ⁵⁵ (grandf- ather)	-	e ji		*pa=pwa (24)
318	father 1	á pà	à pà (grandf- ather)	pa ⁵⁵ pa ³³	a - pa L	a pa (fatheri n-law, grandfa- ther)	-ba:, a pa (grandf- ather)	MW 'father-in-law' STC *pwa
319	father 2	pì qú (stepf- ather)	-kuè pú (father- inlaw, f's y brother)	-pi ⁵⁵	pi ~ pu -		o pu (stepf- ather)	
320	father's brother			pe ³³ pe ³³	pV -	ə pu		JZY pa ³¹ pa ⁵⁵
321	father's older brother's wife	à ná	kuè ná		nə H	e ni	ε mie, ε tçε	MW paternal aunt

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
322	father's older brother's wife	à nǎ	kuè nǎ		nə H			*ni(y) (316)
323	father's sister (- inlaw)	-á nǎ (f's sister)	nǎ nǎ (f's sister or older brother's wife)		ŋ a/o L			STC 271 *na·w
324	father- inlaw	-pó kù	á pù (father's brother)		p o/u -	a pa		MW also in 'father'
325	fathom, arm spread			zi ²⁴¹		zy	(ɛ) zɛ	
326	favor, kindness	qú lià	qóu què		q o/u L			
327	fear	qò	kòu, qòu zà (<i>'afraid'</i>)	qu ³³	q o/u L	qu	qu, do qus we	LX <i>'fear difficulty'</i> , ? STC *(g/k)rak STC 473 *grok ~ *krok
328	feces, dung	tshà	tché	tʃh ³³	qʂə (L)	qhʂə	qhʂə	JZY tʂʅ
329	feed (v.)			dzə ²⁴¹	dzə -	dzə		
330	felt	ió sù	sù thié		su L			
331	female (animal)	mià	mià		mia L		ɹu mie (<i>'mare'</i>)	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
332	female (human)	tà	tsè (tsù tsù)		tə a/e L	tsam		cf. 'wife'
333	ferment	tí	mù		stə			
334	fertilizer	mì	mù	χmi ⁵⁵	χmi (L)	mí	ji mie	
335	fetus	tsù zú qò	ì dzòu		dz w/o			
336	few 1	tchá	pé tchê		tch a/e -			
337	few 2	tá	à tsí qò		tci H	ke tci	ke tci	
338	few 3			pə ³¹ tʂhe ⁵⁵	tʂh e/i -			JZY pr tʂi.
339	fight 1	té té		də ³³ də ²⁴¹	χd e/ə -			
340	fight 2, go to war	qù quá	dz, ué quá		quo H	quo quo	quo quo	
341	fill 1 (barrel)	tsì tsì	ì tʂì		tʂi L			?STC *(d/t)yam
342	fill 2	tchí tchì (eyes with tears)			tchV -		tʂə tchú	
343	find out	à tci	tiě		tie L			
344	fine, small 1	tsá		pə ³¹ tʂhe ⁵⁵	χtʂə H	χtʂə	χtʂə	PSQ *χ- became aspiration in TP.
345	fine, small 2	dza	dì		dia L			
346	finger 1		í nà qè	nə ³¹ ne ³³	n ə/e L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
347	finger 2	lià cú, lià só			su -	dʒa su	ju su χʏ	
348	finger ring	lỳ suè ~ lỳ cỳ	ì sé		sye -	dzi sa	ji-sa (RH)	
349	finger nail	liè sí qə	ì sè	sie ⁵⁵ qə ⁵⁵	sie (H) qə -	γdʒə si	γrəs	*m-(t)sin = m-tsyen (74)
350	fir	là (phù)		lu ⁵⁵	l ə/u -	lv	luə	
351	fire	mú	mú	mi ³³	m u/i (H)	mə	mə	*mey (290)
352	fire tongs	cà-tè	cì-tè ~ cì-tè		χte -			JZY hte. LX, MC m1 = 'iron'.
353	fireplace	(mù guá kì)		mi ⁵⁵ ko ³¹	'fire' - gua -	mu γuə	mu γʏ (RH)	
354	firm, secure, solid	gù	guè		gue -		zγuə	
355	first	qeĩ	dé dè qèi	qə ³¹ ə ⁵⁵	qe L	tiaq		
356	fish	kà	tsuè-dzè	dzɿ ³³	kdzə -	kdzə	(kzə) χtʂe	JZY ʁʏ.
357	fishy smelling		bù tʂá		χtʂ a/e -		bə χtʂe	b. ?STC 405 *sun. many other forms in MC
358	fist	qù ɳú	qù ɳá	χkue ³¹ ɳi ³³	χku L ɳV (H)	zən thu, dzəɾpək u	juʂpul	2d MW form is from JS
359	five	kuè	kuà qó	kuə ³³	kuə L	kuə	kuə	STC 78 */b-ŋa

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
360	flail			tu ³³	t u/a -	ta tsa		
361	flat	pià qó	piá pià		pia -	(ylian qua)	piæn piaχ	YD is b? STC 138 *pleŋ ?STC 212 *lyap ?STC 340 *pe-r
362	flea	tsó ŋ,ì	tsoú nà	tsu ⁵⁵ lu ⁵⁵	ts o/u H nV (L)	tsun	tsun	n.b. sl deaspirated from "dance, jump"
363	flint, steel (for flint)	tshà mià	tsuè mià		tsh a/ue L mia L		χtʂe ji mie	m2 = 'mother'. MC does not have 'flint' meaning
364	float 1	qè tà					tə χta	
365	float 2		ì lâ		la -	da la		
366	flour	bà lò	lê-bè-liù	ba ³¹ ly ³³	ba L ly L		klə bu liu	MC bè shows evidence of vowel harmony
367	flow	sú						*sywar (241)
368	flower	pá tsù	pè (bloom)	pa ³¹ tʂua ⁵⁵	pa (L) tʂue -	pa (bloom)	lan pa	STC 260 *bu ~ *pu
369	flute					ʂpu yli	ʂpu-l	m1='bamboo'
370	fly (n.)			bə ³¹ χu ³³	'bug'- χ u/a -		bij χa	
371	fly (v.)	dzuà jà ('wing')	zé	dze ²⁴¹	gze (L)	gzi	gzij pa ('wing')	cf. 'hot (spicy)'. SQ mV = 'person'
372	fool	kuè mù	mè kuà		kuè L		kuè'	
373	foot (measure)					tʃhəs	tʃhəs ('ruler')	
374	foot 1	gò	gòu		go L			?STC *g-la, ?*k-raŋ

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
375	foot 2			dzi ⁵⁵	dʒV -	dʒa qu	dzu qu	
376	force, compel		kù tɕú		k u/e -		kɛ xiɛ	
377	forehead	deú kù	dà pú	da ³¹ χku ³³	da (L) χku L	zdu ʂku	zdu xkui	LX, NQ m1 show vowel harmony.
378	forest	phù-quá	phò-quà		'tree'-qua -			
379	forget	dà mù	dè mǔ	χmi ⁵⁵	χmu (L)	mə	da:'m	cf. fertilizer
380	four	zì	zì qó	dʒi ³³	grə L	gʒə	gʒə	?STC 410 *b-liy
381	fox 1	qhà guà	qhá guè	qha ³³ χguə ³³	qha (L)			cf. Akha k'a, 'animal prefix'. *kwa (STEDT)
382	fox 2	qhà guà	qhá guè	qha ³³ χguə ³³	χg ua/ue L	rgua	zgue	*gwa (p34). Rhotacization in MC may indicate that PSQ cluster was *rg-.
383	fragrant	χó	χoù	χu ⁵⁵	χ o/u (H)	(bə χtʂi na)	xu	
384	freeze	tó	toú		to H		təg	
385	friend	ì zù ~ ý zù	ì dzòu		i L dzu L	(ta χu)		Rounding harmony in LX. JZY i ³¹ dzu ³¹ .
386	frog	zò piá	dzò-piá	dzua ³¹ pu ⁵⁵ ma ³³	dzo L pia H	dzu pi	dzu piɛ	VH in TP m-crawl (or STC *s- bal?) (or STC p41 *u p(h)rok 'toad?')
387	frost 1	pià thò	peì thoù	χpa ³¹ thu ³³	χpia L tho L			*s-pwa(l) (Matisoff 1998b)
388	frost 2					mə xə'	mə xə'	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
389	fruit	èi mì	sè mù	sie ⁵⁵ ma ⁵⁵	sie (L) m i/u (L)	sə' mi	sij mie	*sey (57) + *m-lum(?) (STEDT, STC 143). Cf. 'heart'
390	full 1	suà	suè	syè ⁵⁵	syè L			
391	full 2					khə'p	khə'p	
392	full of food	tə xèi	xè ~ tà xé	xə ⁵⁵	xè -	xə		*kru (STEDT)
393	gall	tsí	təí	x(ɬə) ⁵⁵	*x(ɬə) H	x(ɬə)	x(ɬə)	YD 'gall bladder' *(m-)kri-t (412).
394	garden	tsà-kù	tsí qò	tshie ⁵⁵ 'kie ³³	tse (H) kV L	kuz	tse ky	/ku/ = vegetable
395	garlic	kə	kè tù	xkə ⁵⁵	xkə (L)	tcɿk	tcɿc	
396	gather	zú zú	tè dzué		dzue H			
397	general classifier for countable objects	fiò, nò	qó					
398	get	à tsé; à tsì	dè tèè	tsə ³³	tse ~ tso (L)	tsy	da tso	
399	ghost, demon 1	dù	dù	du ³³	du L		du-gù-mi (RH)	
400	ghost, demon 2					xluɿ		STC 475 *(m-)hla,
401	give 1	fià dá (give orders)	dá	xda ¹¹	xda (H)			TP 'give out, distribute'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
402	give 2	zǐ	zǐ		grə H	gʒə	gʒə	
403	give birth 1	i	zì		i L			MC initial is deemed to be secondary.
404	give birth 2					χu	χu	
405	give birth 3 (of animal)		gē bū					*brəŋ (135)
406	give/ receive injection	(xé) tè	χè tuá		'needle'- (V)			
407	glue (v.)	piá	piá	pa ³³	piá (H)			
408	glue 1	mà tsà	pà mà		ma L		ma ha	
409	glue 2		pà mà	pa ³³	pa L			
410	glue 3					tsi tsi	xtsə	
411	gnaw	ká cà	kè ká	χGə ²⁴¹ ce ³³	χGə (L)	kə' fa	kə ti (Moyu)	*ŋrat ≠ *nyat(STEDT)
412	go	kə	sè kè, kiè cì, kè cì	ka ³³	kə (L)	kə		
413	go against, violate	dà tshà	tè tshě		tshe L		də tshen	
414	go and return	suè ('return to a place')	sù		su(e) L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
415	go upstairs	tə qé			q e/a -		tə qa	
416	goat	tchà	tshè	tshie ⁵⁵	tsh a/ie (L)	tša	tshè	STC 339 *kye·l, or PLB *V-cit (TSR 27)
417	god	à bú tchǽ	à pà-sé	tshie ³³	khsie (L)	khsi		SQ grandfather-god. STC *(m)hla?
418	gold	qú	qà	χqa ³³	χq a/u (L)	ʂqu	ʂqu	LBZ ʂko ³¹
419	gong		lò ló	lo ³¹	lo -			
420	good 1	nà	nà	na ³³	na L	na	na ('right')	YD sense also occurs in MW
421	good 2		ʂé	ʂe ³³	ʂe -			
422	goose	κò	uò	ku ³¹ ; ŋan ¹³ ko ³¹ 'wild goose'	ko L	ku:	kuɣ	b?
423	grain, foodstuff	jà qə			ra - qə -		ɾaχ	
424	grain, kernel	gù	tshì góu ~ tshì mé gòu		g u/o -			
425	granary		pè qè	χpə ³³	χpə L	ʂpə	ʂpə (RH)	*V based on TP, MW.
426	grandchild	zǐ tsù	zé tsù	zǐ ³¹ tsua ³³	zǐ (H) tsua L	zətʃ	zə ʂy	grandchild-small. TP 'grandson'
427	grass 1			dzə ²⁴¹	dzə o/u -	dzə		

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
428	grass 2					khşəp	khşəp	
429	gray	phú (tỳ tỳ)			phu -		phic: qu	
430	green, blue	peí xə Xə ('green and glossy')	xué	xue ³³ xue ³¹	xue -	zən ku		*kruŋ (382)
431	grind 1			tʃhi ⁵⁵				*krit (119)
432	grind 2					dʒa	dzue	
433	grip/hold		ù tsì; biétsì	-kuə ⁵⁵ tsi ³¹	tsi L	dzə tʃhi		MC 'grab/seize'; hold a urinating child
434	grow	çì	té xüé		xsu L		tə xsu	
435	guest	mə dzí			dzi -	ydzi	dzu	
436	gun	cà-dzù		çi ⁵⁵ χdio ²⁴¹	χd iu/ɔ L		(soqhu (RH))	cf. 'rod, stick 2'
437	gunnysack	sò qò	tshà qà		s/tsh V L q V L			Vowel harmony.
438	hail					zu	zu	cf. seed?
439	hair of head	qə tó	qə tóu		q ə/e L to H	qə tɕu	qəu	
440	half	təhá		təhá ⁵⁵	təha H	khəu qhəu		
441	hammer (n.)	tuà liú	tuà liò		tuə L			STC 317 *tow. m1 = 'beat'; e.g., MC tuá. m2 = shape

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
442	hammer (v.)					ɹə	ki ɹɛ	
443	hand	lì pá	ì pá	i ⁵⁵	l/Ø i (L) pa H	dʒə pa	ja pa	cf. 'arm', *p/ba (STEDT)
444	hand span 1	khà	khá ~ khà		kh a/ɑ (L)			measured from tip of thumb to tip of middle finger.
445	hand span 2			tu ³³ (?)	tu -	tɻ	(ɑ) tɻ	*twa (165)
446	hang (on wall)	kué	tàe kuá	kué ³³	kué (H)	kué'	ɛ kué'	
447	hang down	tchí là	tché là		tch e/i H la L		ɑ la (from *coda?)	STC 242 *dzywal
448	hard	qò cà	koù tɕà	χku ⁵⁵ tɕa ³¹	χk o/u (L) tɕa L	ʂku ʂtɕi	ʂku tɕtɕu	? *χk > LX q. MW has perseveratory assim. ?pref preempt
449	harvest, reap		kú ~ kù		ku -		ku	
450	hat	tà bá (χà)	tà bá	tɑ ³³	tɑ L ba H	ta βɑ	ta wa	vowel in s2 based on NQ.
451	hatch		né	χne ⁵⁵	χne (H)	?ʂ? zdi		
452	hate	qhú	qhoú		qh u/o H			
453	he/she		fià lí	tha ⁵⁵ lǎ ⁵⁵	l i/ə H			cf. 'that'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
454	head	qà bá tsì	qà bʒá tsì	qə ³³ pə ⁵⁵ tʂɿ ³³	qə L b/p a H tʂi L	qə patʂ, qə ^o pa ^o tʂ. ə	qə pə ^o tʂ	*s-kəŋ ≠ s-kok (STEDT). Tones/pitches correspond better than vowels. cf. 'hair of head'
455	hear	à nò	nò cá		no L			
456	heart	ɕì mì	tié mù	χtie ⁵⁵ mə ⁵⁵	snie (H) m i/u (L)	sti: mi, si ^o 'mi	ɕci ^o mi	*s-niŋ ('heart' 367) + *mlu(m/ŋ)(?) ('round', STEDT, STC 143). Note that the *s- prefix of 'heart' (367) became an initial, while the *s- of 'round' (143) was lost at the time of PQ, if not earlier. The second morpheme is apparently 'round object', cf. 'fruit'. The second MW form is from J. Sun.
457	heavy	zì	dzì	dzɿ ³³	dzi L	dzi	dzə	WT ldzi-ba. (95)
458	heel	gò qó	gòu mù sà		go L			*gwa-ŋ (STEDT). For an alternate analysis, cf. 'sole of foot'.
459	height	bó bè	bʒú bè		'high-low'			
460	help	kuà	tè kuà	kuə ³¹	kuə L	kuə'	kuə'	
461	hemp	sò	sà phié		s o/u L		su	
462	herd animals (vt)	khù-pià- cùmù	-khuè- piàtiù-mú ~ khuè- piàtiú-mù	--	'dog- pigherd- AGT'	-		

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
463	here	tcà-tshá (‘this- place’)	tcǎ lè, tcì qà	tsɿ ³¹ χe ⁵⁵	tch L ~ tsV L	tçu	tsu, tso	2 roots(?)
464	hiccup, belch	qà pù tshè	qè pú ~ qè pù		q a/e L pu (L)		qhue’p tə lə	
465	hide (object)	cù		cye ³³	ɕ y/ye L	(pə tʃə)	stuə	
466	hide (self)	(à) pià			piə -		pie	STC 46 *pwak
467	hide (v.)	cù	kò (?)	cye ³³	k o/ye L	ʔæ? pə tʃə		*kway (303)
468	hill, mountain	κó	κυò ɕ		κo -		κυə’ pu	
469	hire, employ	κυà cà	mè κυà		κυa L		κυa’	
470	hit target	dà uà	dè uě	da ³¹ ye ³³	ye, wa L	də wa	də wə	
471	hoe	tɕyà	κυà	κυa ³³	kya L	ste:’tci	tɕye	Although this appears to be two roots, MC, TP *ya > ua/ [velar] _
472	hold in arms	tà tò	toù	χtu ³³	χt o/u L	ɹə χuə		MC ‘tù’, conceal, hold back
473	hold in mouth 1	zé	zé		ze H	ɣdzɿ		
474	hold in mouth 1	qá	qou	qu ³³	q o/u -			*ku(w) (184)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
475	hold meeting		mè tsò		ts o/u -	rmu tsu		
476	hole 1	zà pù	zè pù	zɑ ³³ pu ³³	zɑ L pu L	ɾɛf 'cave'	ju z u, ɹu pu 'cave'	MC has undergone vowel harmony. *puŋ (STEDT)
477	hole 2			dzo ³³	dzo -	dzu		*dwa(:)ŋ (169)
478	honestly	ì (sò m) tsó	teí tì tsì		tsV -			
479	honeybee	bù iù	bù zóu	bə ³¹ dzy ³³	'bug' - dzy -	bə	bə	
480	hoof 1	tsú kə	thì khə		k/kh ə/ə L		tʃuəχ, tʃuəχ (Moyu)	
481	hoof 2			z u ⁵⁵ dzi ⁵⁵		ɿdzɿ ku		
482	hook (v) 1	kú			ku -		ɛ que	
483	hook (v) 2	kué	kuá		ɿ uə/ue H			
484	hoop, band			de ³³	de -	zə di	zue de	
485	hope	bà ló	bè dzóu		b ə/e L			
486	horn	jà ká	zè ké	zɑ ³³ qə ⁵⁵ ɿ	ɹɑ L k/q ə H	ɾəq	ɾəχ	*CC-? cf. 'bone'? PSQ *cluster is based on the correspondence of LX /s/ with /z/ in the other two key dialects. This correspondence is also found in 'divide', 'near'. *s/mraŋ (145)
487	horse	kò	zòu	z u ⁵⁵	Cr o/u (L)	ɾəq, ɾəqə	ɹu	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
488	host	tɕè lə́ pú	tɕè lè́ pú	t tɕi ⁵⁵ lǎ ⁵⁵ pə ³³	tɕi (L) lə́ (L) pu (H)	tɕil pə	tɕip	'home-m-do'. LX tɕè affected by VH.
489	hot (spicy)		zè	dzɿ ²⁴¹ , gzɿ ²⁴¹ (older speakers)	gz e/i L	tsə sti	gzə	
490	hot 1	dá	duè		due -	dʒɿ: dʒe		
491	hot 2	khú khuá	khué khuè	khye ⁵⁵ le ³³	khye H			
492	house, home	tɕé kù, qò, ké	tɕí ~ tɕì qó	tɕi ⁵⁵ ko ³³	tɕ e/i H k/q o	tɕi, qu:'	tɕi	*k-y(i/u)m (53). cf. 'building'.
493	how	nà gà	ɳà kí (lè)		ɳ a/ə H		ɳɛ gɛ lax	
494	how many/ much	nà ó; nà ná	ɳà qó (lè); ɳà ɳó (lè)	na ³³ tɕi ⁵⁵ na ³³	n/ɳ, a L	ɳa bal		
495	hundred	à tshə̀i	à tʃhì	tʃhi ⁵⁵	tʃhi (L)	khi'	(ɛ) khe'	*r-gya (164). PSQ *vowel supported by Jiuziyang tʃhi. PQ *kr i/e. cf. 'eight'.
496	hungry	(dà) sù pá	sù	su ⁵⁵ pə ⁵⁵	su (L) pə H	ɕipi	fiɛ ʃue	*s-pa(ɳ/k) ('thirsty', STEDT)
497	hunt	qhò	ɕy ɣó	ɣo ⁵⁵ kə ³³	qh/ɣ o (H)	qhu' kə	phu khʃu qhu'	*ɣ is probably secondary, due to stress patterns.
498	I, me 1	qà		qa ⁵⁵	qa -	qa	qa	*ka (p93)
499	I, me 2		ɳà	ɳa ⁵⁵	ɳa -			*ɳa (406)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
500	ice	tsù pá	tsuè pá	tsuə ³¹ pe ⁵⁵	'water'-pa H	tsə pi	tsə pə	sl = 'water'
501	ill, sick, pain		dzi	ze ²⁴¹	dzi -	rdzi	zdzi	
502	in (the sky)	(mù tó) χèì	lià χà		χ a/e L		mə-χ	LX mù = 'sky'.
503	in back		mè tshí	ma ³¹ tʃh ³³	ma L tch/tshi -			TP 'from now on'
504	in front	qè í	dè qè		qe L	tiaq	qəə' ta ('front')	
505	incense	χò tì	χòu té		'fragrant'- t e/i -			
506	incorrect	(dà) tshà	kè tshòu		tsh a/o L			
507	inlay (v)	piá	cəN piè		p ia/ie -			
508	insane	dà kó			k o/u -	ku kun (insane person)	ku ku	
509	inside (of room)	kù kú	qò qó	ko ⁵⁵ ko ³³	k u/o (L) k u/o (H)	ku ku	tcu xü	MC 'inside'. *Initial determined by comparison with NQ.
510	interest, usury			qə ³¹ dz ³³	qə -	pə-q	piεχ	make sure meanings align
511	intestines			pz ³³	pzi L		piə, pə (RH)	ZT, RDZ pz ³³ , JZY pts ³³ . *s-pa-y (STEDT), via meta-thesis? LX from PTB *pu (STEDT)
512	into (pfx)	ì -	ì -		i L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
513	iron	cà (mó)	cì	ci ⁵⁵	cam (L)	su' mu	ʃom, su: mu	STC 228 *syam
514	irrigate 1, pour water on	sù		ʃue ⁵⁵	ʃue -	svi	tʂə-ʃue (‘water’ ir-rigate’)	-
515	irrigate 2	lù	tsuè lè		l e/u L			
516	itch	zè zè	dzɿ dzà	dzɿ ³¹ zə ²⁴¹ , dzə ³¹	dzi L dza L	dzvi	ɛ dze	reduplication, ?STC 465 *m-sak
517	jab, poke, stab 1		tshóu, tshó tià		tsho -	tshy (insert)	tshua (insert)	
518	jab, poke, stab 2	tsí, tǎí					tǎ	
519	January		pè là	χpe ⁵⁵ ɿ ³³	χpe - 'month'			
520	Jew's harp	dzyà pú	dzòu		dz ya/ou L	kdz u		
521	join, link	á dí dí	ì deǐ		d i/e -			?STC 421 *du-t ~ *tu-t
522	joint	kù sà, sà ká, sá (joint of bamboo)	zǎe kǒu- zǎe sà ~ zǎe kǒu- zǎe sá, sà (joint of bamboo)		sa (L)	saq	sax	
523	jump, dance	tshó tà (also 'pulse')	soú tà (also 'pulse')	tshu ⁵⁵ tə ⁵⁵	qhs u/o H ta L	qhsu	qhsu qhsu	MC, TP 'dance (n)'. MC, LX also 'stomp feet'. JZY ts'u gives evidence for PSQ 'cluster'.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
524	key	dzù uà		dio ²⁴¹ kue ²⁴¹	'door'-kuo L	diu kuod'		m l = door
525	kick	tshù ~ tshú tá	tshù	tchye ³³	tshu (L)	poxtshu ko	pu xsu tshue	TP reflex is palatalized.
526	kidney	pú lù	pú lò	xpə ³³ lo ⁵⁵	xpu (H) l o/u (L)	şpu lu	şpul	*pil/r x rpul (STEDT)
527	kill	tsò tsó	tsì tsá	tʃ ³³	tsV L tsV H	tʃə	tʃə	*g-sat (58)
528	kindle	tsú	tsú		tsu H		mə tsə	
529	kinship pfx	à	á ~ à		a -	e, a		
530	kiss		tsù tsú (pù)					-*dzo-p (p69)
531	knee	xò qó	ŋò ké	xŋu ⁵⁵	xŋ o/u (L)	kuə' xqe'	RH zde tshue-pə ('lips- mdo') z,quəq, (əj pəx)	
532	kneel	(kò) tshú	ŋó tshò	xŋu ⁵⁵ tshu ⁵⁵	'knee'- tshu (H)	ku'ŋ bə'k tshu		m l = 'knee'
533	knife	tə piá	(tsè kǐ 'knife edge')	tca ³¹ dzo ³³	tea L -	dʒatʃ	dze tʃue	
534	knife edge	tə qó	tsè kǐ		'knife'- kV -	zi ka		

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
535	knock down, topple	dà dzù zí	ḡè dz uà z í		dz u(ə) L			
536	knot	kè tá	kè tà tà		ke L ta -			
537	know, be able to 1	ḡuè	ḡuè	ḡuè ³³	ḡue L			
538	know, be able to 2					ḡzə	ḡzə	
539	know, recognize	sì (à), sí sí	sì z á, ḡà sí	sɿ ⁵⁵	sɿ -	sə	sə (' recog- nize')	
540	kowtow	kò tsú			ɤV -		kuə' tshuə	
541	ladder	dì ká	dè tci	ɣdɛ ³³ gie ²⁴¹	ɣd i/e/ə L	zda	zə də	
542	ladle	ká			ɤV -		ɣs ku	
543	lamb	ió mù tsù			'sheep'-mV- -small'	-	pɛj miɛ	
544	lame 1	qhuá	qhuá		qhuo H	(khə lo)	(tchəɣ piɛ)	
545	lame 2			tche ³³ lɑ ³³	tch e/ə -		(tchəɣ piɛ)	
546	lame 3			tche ³³ lɑ ³³	lɑ -	khə lɑ		
547	lamp	mú ḡú	mè-cà	mə ³³ ḡu ³³	mu (L) ḡu -			fire-lamp

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
548	language, speech	zè mú	zuè mé	zɿ ³¹ mə ⁵⁵	zue L muə H	zə'mə (song), dʒə βə	zə wa, zəm (‘song’)	The *rhymes are not perfect correspondences.
549	late, tardy	κà	là	κue ³³	χla L	κla	da κla	LX tend to take first element of CC (knee)
550	laugh	(dá) zá ló	dzà	dzə ³³	dzə (L)	dzə, dzə	dzə çes (‘joke’)	*rya-t (202)
551	lay (egg)	fià tshí	tshí	tshí ⁵⁵	tshí H	khə'	həx	
552	lazy	qeí	ké		χqe H	ʂqe	ʂqə	*Cluster inferred by NQ, different initials in SQ.
553	lead (cow)	tá	tá	tə ³³	tə (H)	ʂə ʂkua		
554	lead the way	só			s o/u -		su	
555	leaf	qə mà	(phò) cà qè	tchə ⁵⁵ qə ³³	kəə - qə L	khəəq	tshu khşu	MC ml = ‘tree’
556	leak	zì	zuè	bzia ³³	bzV L	zɿ	zə	
557	lean (meat) 1	tshì bú	tshàì tshàì		tsh i/ai L			
558	lean (meat) 2			dzə ²⁴¹	dzə -	κe		*n-džəŋ (STEDT)
559	learn, study, teach	só	soú	tə ³¹ sy ⁵⁵	s o/y H	sy	su	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
560	left (hand) 1	dó gó (‘upside down, inverted’)	guì	xy ³³	xy L			MC also ‘inverted, upside down’
561	left (hand) 2	lí zǐ kuá			kuo -	dʒə pa kua, xi	kuo	
562	lend 1	dà n,ì	dè nǚ	da ²⁴¹ n,ì ³³	nje L	nə sa	nje se	STC 190 *r-ŋya -STC 312 *kroy
563	lend 2, borrow	nì cá	nè cí		ɕ a/i H	nə sa	nje se	
564	leopard, panther	èì	sì	sí ³⁵	si (L)	sə	sə	
565	letter, mail	phù	psè		phre	zət phi	phue (mes- sage)	-

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
566	lick	ŋá tá	ŋè tá	na ³³	ŋ a/e (L) ta H	ŋi ta, ni tæ	ŋe te	In this form, it is odd to see /n/ correspond to /ŋ/ before non-high front vowels. This may point to a nasal *CC- in PSQ, likely coming from PTB *m-lyak (STC 211). Although there is no direct evidence within Qiang itself, other Qiangic languages show an initial CC, with a nasal for Ci, and Pumi has an affricate which appears cognate: rGyalrong ka nə ntsok, Muya, thi ⁵³ ndzye ⁵⁵ le ³³ , Ergong ŋ.ɣia la, Pumi dzɛ ³⁵ .
567	lid, cover	tà-qó	tshà qù	qu ³¹ qu ³³	qu (L)	qe kuə, qhuy	quətɕ	STC 479 *klup, *gop ɤ kop (STEDT)
568	lie (n.)	ì zì	zè zè		z i/ə (L)			sI makes these look like verb forms, however, verb form is followed by pù 'do'.
569	lie down		né		n e/ə -		ɔ nə	
570	lifespan	só	soú dzè		so H			RH suə 'life'.
571	lifetime (CL)	ɕí	ɕí		ɕi H			
572	light (candle)					zə	zue	
573	light (fire)	phú	mú phù		phu -			STC 220 *pwar~*bwar

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
574	lightning			χde ³³ la ³³	χde -	şa zda		*e is reconstructed, because of the resistance of the TP form to vowel harmony.
575	lightning	qè tiè	cỳ qé		q e/ə -			
576	lightweight	dzó	zóu	dzy ³³ , gzy ³³ (older speakers)	gz o/u (H)		gu' tse	?*r-ya:ŋ (328). TP vowel is aberrant
577	limestone			χo ³³ phzi ⁵⁵	phri H	ʔæ? ka rpu		
578	limit, end	dzí tò	dzì ló		dzi -			
579	line up	dà kə ká	gəe ká					?STC 346 *ren
580	lip	dzyà-kú	dué-zà	χduə ³³	χd ya/uə (L)	γdza: ¹ , γdzæ (a?) ¹	zde•ky	
581	liquor, alcoholic beverage 1		tchà	tcha ⁵⁵	tcha -			
582	liquor, alcoholic beverage 2	çì			çi -	çi	çì	
583	listen	tshó çì	soú nà	tchy ⁵⁵ n,y ⁵⁵	khcy H	khçust	khşu ççu	
584	liver	çí já	sè	sie ⁵⁵	sin (H)	si	sa•xa	*m-sin (234). cf. 'leopard'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
585	long objects (CL)	zì	dz í	dzi ²⁴¹	dzi (L)	fə		
586	look at	tsà	(kè tʂè)	tsia ³³	tsia L	tsi	tse, tse (watch)	For MC /tʂ/ corresponding to /ts/, cf. 'pick up'.
587	loom			tia ³³ tia ⁵⁵ tʂɿ ³¹	tia -	titis	tɕes-pa na	
588	louse	tsí	tʂì	χtʂi ³³	χtʂi (L)	xtʂə	xtʂə	STC 439 śrik
589	love 1		má	ma ³³	ma -			
590	love 2	ɕì ʂ			χtɕi -	χtɕi		?PLB *m-dza-k (167)
591	lower (head)	ɕú	fià kó		ɕ u/o H		qəp ɛ ɕue' (‘nod’)	
592	lower seat (not honored)	jà lì	z í lè		l i/e L			
593	lung	tshù	tshòu	tshu ⁵⁵	tsh o/u (L)	tshuŋ pa	tshuə	PQic *C-tsos (STEDT), PTB *tsywap (239)
594	magpie	ɕà ɕá	tɕà tɕá	χtɕa ³³ χtɕa ³³	χtɕa -	(qɑ'qɑ')	ɕtɕa ɕtɕaχ	*ɕtɕà ɕtɕá
595	mail (a letter)	(phə) ɲ.ì tà	(pʂè) tà		(χ)tɑ L		stɑ	
596	man (male adult) 1	biè phà	bè liú	ba ³³ phe ⁵⁵	bE L ph a/e	bə' ɸu		TP 'young man'. Ergong bzu.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
597	man (male adult) 2	tcì	tsì	tʃɿ ³³	tcɛ L	tcim	tʃɿ	*s-kyu (STEDT)
598	manger, trough	kò tshòu	piá tshòu		tsho L			mà tshaò is b. is this?
599	many 1	dzú	dió	dio ²⁴¹	dio H			cf. 'door'
600	many 2					quə ɣli	qu liu	
601	marry (of a woman)			də ³³	də -	dək	(stsem) də	
602	matter, affair	zì	dzɿ	dzɿ ³³	dzɿ L	dzə	zə	
603	meal (CL)	tuá	tuá ~ tá pà		tuo H			
604	means, way		pşú thè	phzɿ ³³	phr u/i -	phə'		
605	measure for grain 1 (decaliter)	kú tù	pù tòu	que ⁵⁵ te ⁵⁵	te ~ t o/u (L)	quat		JZY te. final morpheme may be from more than one root, cf. MC zè tè 'ruler (measure)'
606	measure for grain 2 (decaliter)	kú tù			ku -		(o) ku	
607	meat	pià tshì	pià-tshè	tʃhɿ ⁵⁵	tshɿ (L)	pi-s	piɛ-s	pig-flesh *sya (181) or *tsil (p16)
608	medicine	sí ká		sɿ ³³	sɿ -	səpə	sɛ pɛ	
609	meet, welcome	(à) dí	dí		di H		də	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
610	mildew, mould (v)	tɕý qá	à tsuè qâ		q a/ɑ H			LX has alternation tɕ sù ~ tɕ çý.
611	milk (v)	çì çí					sue	Probable cognate set.
612	mill	zuà ò (millstone)	dzò lò-qá	tsuə ³¹ dze ⁵⁵	dz/dz o/uə (L)	dʒa ɤlu	dzua-ɤl	VH? ɤlu = 'stone'
613	mistake	dà tshà	kè tshòu		tsh a/ou L			
614	mistaken, wrong	dà tsà	té tshě; kè tshù	tə ³¹ tshie ³³	tshie L	da tsha	dɛ tshe	
615	mix up (mortar)	tsì qá	tsà		ts i/a L			
616	money	dzí gù	kó	ɣgy ³³	ɣg u/y (H)	dzi ku	dzə kɥ	
617	monkey	ɤuà sà	ɤuà sà		ɤua L sa L	ɤua si	ɤua sa	
618	month; moon	lè; sì çyà ~ lè çyà	lè; lè ~ lè	ʂɿ ³³ , çy ³³ çya ⁵⁵ (‘moon’)	slə L	ʂə, tʃhə ʂa (‘moon’)	çu saɣ	LX ‘moon’ is calque? Yadu ‘moon’. STC 144 *s-gla
619	mortar		khueí khueí	khə ⁵⁵	kh ue H		tshə kɥ tuəʂ	
620	mosquito	bù bù		bə ²⁴¹ bə ³¹	‘bug-bug’	bəp qə zi	bəm qə zə	just ‘bug’morpheme?
621	mother	á mà	á mà	ma ³³ ; ma ⁵⁵ ma ⁵⁵	ma L ~ ma -	a ma	ma:	*ma (487). Taoping indicates variation for PSQ. LX, MC are ambiguous, reflecting either *a, *ɑ.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
622	mother's brother	á kù	à kù		a - ku L	ə ku		*kuw (255)
623	mountain		sù	tshuə ⁵⁵ , qhsuə ⁵⁵ (older speakers)	qhs u/ua -	qhsəp		note reflex of *cluster in SQ
624	mountain valley	qhuà cì, kó qhuà	qhuá bzà ~ qhuà qó ~ qhuè, qhò ǎ (ditch)		qhua -			?*klu·ŋ
625	mouth 1	qà	qè, qá (mouthful)	χqa ⁵⁵	χqa -	ʂqu	ʂqu	MC 'mouthful', *m-ka (468)
626	mouth 2					dzə kuə	zde ky	Note metathesis.
627	move	qá tà	(pàn té) qà		qa -		(me xlie)	
628	mud					buz	bu ɿy	
629	mule		kè tì	ke ³¹ tce ³³	ke L ti L	tʂə	ke tʂe	
630	muscle	dzì	dzè	dzɿ ²⁴¹	dz/dz i L	ɲæm, gə' (also 'tendon, sinew')	gə	NQ forms indicate PQ *grə. Perhaps from *graw (STEDT)
631	mushroom	mə ǎ	mò tsú ~ mè zú	mə ³¹ zu ³³	mV L zu -	tɕin tsə	muy	*g-məw (455) variation in m l vowel are from VH.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
632	musk deer	tshì là	sè là	tchi ³¹ lǎ ³³	khʃi L ǎ L	khʃəz	khʃu	MW , TP 'roe buck', YD 'river deer', MC 'female musk deer' lè mià (VH). JZY ts'ɿ ʒɿ.
633	mute					kuɛ'	kuɛ'	
634	name	(zə mú)	mè mé; mè	χmǎ ⁵⁵	χm ə/e (H)	mǎ	zǎ	MC 'given name'; 'surname'. *r-min (83). LX sɿ may be a syllabification of the PQ pre-initial *r (although /ɿ/ would be the expected reflex). This would be evidence for preservation into PSQ of *r- separate from *χ-. However, LX 'name' is identical to 'language, speech', suggesting that 'name' may come from the sense 'called', and thus would not be cognate with the other forms. Cf. French (s')appeler.
635	narrow	tchá		tche ³³	tch a/e -		tshe	?*tʃi:p ('shut, close', #370)
636	navel, umbilical cord	pú tsì qà	pè tsì tsí		pu - tsì L	pʌʊʃə, puʊʃ	puʊʃu Moyu, pu ʃu	VH. cf. 'belly'; Mawo forms from ZYC, J. Sun.
637	near 1	zì zà	qè zí, ì dzà	kie ³¹ zì ⁵⁵	q/k e L χz i/a H		kə dzə	JZY ɳza ~ za.
638	near 2					guǎ'n	guɛ' nɛ	
639	neck	mù kà	qè mò	ʃɿ ³¹ kie ³³	mu L kie L	tʃə ka, tʃə kə	mu ku	cf. 'chin', zyc/mwQ

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
640	needle	χé ~ χèi	χè	χé ⁵⁵	χé -	χé	χε	*k-rap (JAM 1997a)
641	NEG	mí	mì	mí ⁵⁵	mi (H)	ma		Tone varies with verb, PTB *ma (p96)
642	NEG IMP	tsì-	tèi-	tsí ⁵⁵ -	tsi (L)			
643	nest	ỳ (tshá)-bù	ì tshè-bú	i ³¹ tshie ⁵⁵ - χbu ²⁴¹	'bird' χbu (L)	wuk na: bu, wurb		SQ 'bird-nest'
644	net	zà	dzà		dz a L			
645	new	tchí	sí	tshí ⁵⁵ khsi ⁵⁵ (older speakers)	khsi H	khsə	khsə	
646	New Year	dzá tchí	dià sí	diá ²⁴¹ (celebrate New Year)	dia (L)	di (cel- ebrate New Year)	dze khsə	
647	niece/ nephew	dzi qhuá	dzi	dzi ³¹	dzi L	dzi (tsi)	dzi	TP 'nephew', MW (niece)
648	night (CL)	jà	zà		ra L			STC 203 *ryak
649	night, evening	dzi tsí	giè tsí		gie L		gəs (RH)	
650	nine	gú	gú qò	χguə ³³	χguə	rguə	zguə	
651	nit	(tsì) gú	dzú	χdzə ³¹	χdz u -	xtsiu- ydz	xtsu z,ʃ	?*s-row (278). *Vowel based on MC, YD.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
652	NOM	kì	kì		ki L			
653	noodles 1	qhà mì		qha ³ 'thu ⁵⁵	qha L	pa ³ aq		
654	noodles 2	qhà mì	(tshì mè)		m i/e L			
655	nose	tì bá-qè	nà qé pì	χn ³¹ qo ⁵⁵ pə ³³	sni L qV (H) pi/ə L	stɿq, stə ⁰ qə	ɕtɕy ⁰ ts	*s-na(r) (101)
656	now	pè ì	pè tí	pə ³¹ 'tj ⁵⁵	pe L tí (L)	pə tí		
657	numb 1	bò bò	zè bù		b o/u L	gza	gza	
658	numb 2					gza	gza	
659	numbing pepper (seed of Chinese prickly ash)	tshà í	tshè-ná		tsh ə/e L		tshij	
660	obtain, reap	qó pú	tè qà pú		pu H			may be 'do'.
661	ocean/lake	có ~ cý	bú zì sì	ɕye ³³	ɕ o/ye -	ci	ɕu	MC 'ocean'
662	official		zé qà	dzɿ ³³	gzi -	gza	gza	
663	oil, oily		n.í nà	χno ⁵⁵	χn. ə/o	zda		Mawo has denasalized *ŋ,
664	old (of people)	(fià) peì	(à) peì	pə ³³	p ə/ə L	py	da-p	cf. 'age'.
665	old (of things)	bá	bá	bə ³³	bə (H)	bə	bə	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
666	old man	mù pèi	mù péi		'person'-'old'			Note the difference in MC tones from 'old (of person)'. cf. AGT sfx
667	older brother's wife	kuá tci	kuè tci		kuá - tci -			The *rhyme is based on MC having undergone vowel harmony.
668	older female relative 1	à nǎ (mother's b's wife)	kuè nǎ (m's sister, m-in-law)	-	nǎ H			?*na·w (271)
669	older female relative 2	á nǎ (m's sister)	nǎ nǎ (m's sister, m-in-law)	-	nǎ L			?*na·w (271)
670	on (the table)	qè teì	qé tè		q ə/e - te L		qu ta	
671	one	à	à qó	a ³¹	a L	a		tones for the numbers vary with the CL used. Cf. 'eleven'
672	onion (green)					du tsha	zdu tsha	
673	open (door) 1	gà		χgie ²⁴¹	χgie L	rga	zge, sɛ qɛ' gɛ	LBZ zge. PTB *ka (469).
674	open (door) 2		dzí		χdzi -			WS zdžji, JZY hdzi.
675	open (eye)	tə phé	phǎ	phz a ⁵⁵	phr e/a H	tə tʂa	datʂa	
676	open (mouth)	tə qà	qá		qa -		a qa	STC 469 *ka

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
677	orphan	ké pù	kè pù tsú		ke - pu L		kap	MC m3 = 'small'
678	otter					ɣdzɿ	ɣdzəə'	
679	outside 1	kuà là (of room)	kuà zà		kuə L la L		kuə la	PSQ m2 is based on LX, YD.
680	outside 2	là lì (of thing)		zɑ ⁵⁵ lɿ ⁵⁵	ra - li/ə -		kuə la	MC 'outside (of room)'
681	outward (pfx)	sì -	ʂè -	ʂɿ ³¹ -	ʂi L			PSQ *ʂ > TP s/_ɿ
682	overflow, spill					χla	dɛ χlɛ	
683	overtake	dè	dzoú dè		dɛ L			
684	owe	tchá	dè khí	tchi ³³	khi (H)	tci	tche	MC initial is more conservative than NQ.
685	owl	ỳ khù	ku) tòn khò		k/kh u/o L			The initials do not correspond well in this set. *gu~ku (494)
686	ox (CL)	zà ~ zì	zà		za L			zì is weakened form
687	pad (v.t.)	tshà	tshà		tsha L			
688	pain, suffering	iá tsà						
689	paint (painting)	ɛì			tsa -			*tsiy (p55)
690	paint (v)	mú má	mà		ma -			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
691	pair, team	gù, guà	gú	gə ²⁴¹	gu ~ gua (L)	guə	(o) ɿgu	JZY guy.
692	pants	tò qó			qo -	diu qu	du qu	
693	past, in the	dà qe í	qé ì sì sì, qǎi qá	qə ^{31ə} ⁵⁵	qe (H)	nə pə thə	qəə' tə	
694	patch, mend, repair	pà qó, pà cì	pè	χpe ³³	χp a/e L	ʂpa	ʂpe te	*p ^w a (Matisoff, STC 122). *s- verb pfx?
695	patient		dzí mù		dzi - 'person'		zdzim	
696	peck at	tshuá (tà)	tshuà tiá		tshua -		tshue te	
697	penis	lià qə	lià qə		lia L q ə/e L	liq	læq, liəχ	JS. other forms also. YDQ, YDTBL
698	person	mù	mè, bzà mù	mə ³³	m u/e L	(nə)	miə	*r-mi(y) (p127). Vowels are different in 'wife', perhaps due to the phonetic processes that often affect suffixes.
699	person (CL)	dzè		tʃɿ ³³	dz/tɕ e/i L	ri; ʂə	(a) tʂ	The *initial is unclear. No doubt this classifier has undergone phonetic changes common to functors.
700	pestle	tshí pù kò lù, kò liú	sá dè kù lò, pià tchè ló	ko ²⁴¹ lə ³³	ko L IV (H)			cf. 'stone'
701	pheasant					wə ri	wu ru	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
702	phlegm	tshù	tsù zɛ́	t sho ⁵⁵ qha ³³ χne ³³	ts/tsh u (L)	ts ^{hə} ɸə ta', ta'		MC 'phlegm/saliva'
703	pianniu 1 (cross of bull-yak)			khei ⁵⁵ (older speakers), tchi ⁵⁵ (younger)	khei -		khɕe (male), khse mie (female)	JZY c'i [tchi].
704	pianniu 2 (cross of bull-yak)		bó (zì) ~ bò zǐ (male), mià bó (female)				z bə (yak (male))	STC 136 *bron.
705	pick up	tsé	(tè) tɕè	tsi ³³	ts e/i (L)	tə tsi	(stɛ)	*rhyme variation based on both NQ, SQ forms. MC, YD 'pick up with chopsticks'. elsewhere MC has tɕ corresponding to /ts/.
706	pickle, cure	ká	z uá					More cognates needed to further refine this set.
707	piece of land	thò	thò		tho L			
708	pig	pià	pià	pa ³³	pia L	pi	pie	*pwak (STC 43)
709	pig slop	piè-tì	pià-té	pa ³³ χte ³³	'pig' χt i/e (L)	pi sti	pie stə	cf. 'supper, dinner'.
710	pig trough	pié tshòu	piá tshòu		tsho L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
711	pile up 1	bù	bò	bò ²⁴¹	b u/o L	bu		
712	pile up 2, stack up	thú thuá	thuà		thuò L		thuə thuə	
713	pillow	ŋ,ì kù	nè kò	ko ³³	'ear' - ku L	nə ku	nə kɿ	*kum (482)
714	pinch	zì tsuà	(tē) tɕuà		tɕuo L		tɕhe tɕhe	STC 188 *tɕyur
715	pine tree	piá cǐ phù	mù-cà- phó, mià- sé	χmɑ ⁵⁵	smia	ɛdzu si		
716	pitiful	mè tshueì	mè tshuè pú zì		m e/ə L tshue L			
717	plain (n)	bà tò	dá tɕhì-bà	bɑ ³³	bə L	bɑ		b? MC'dam, embankment'
718	plant (sign into ground)	tshuè	(fià) tɕhuè		tɕhue L			
719	plant (v.)	phià	phià	phia ³³	phia L	(tʃha)	phiə, piə	TP reflex should be */pha/
720	plate		tshì bá	χu ³³ bɑ ³³	bɑ -	be		
721	plead, make excuse	mì í	mì kóu		mi L			
722	plow (n)	tò	tò kè	to ³³	to L	tu	tuəχ	
723	plowshare	dzù	dzù	dz ue ³³ , gz ue ³³ (older speakers)	grue L		gu: (RH)	L BZ grwu, JZY bɔzɿ.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
724	pluck (flower)	tshó	tshóu		tsho H		tshu tshu	
725	pointed	qè dý		qè ⁵⁵ tsie ³³	qe -	tse	tsex, qu dzu ('point')	cf. 'head'
726	pole			tsu ⁵⁵ kie ³³		tsəŋ ka		
727	poor (of soil)	xuá	xuá		xuo H			
728	poor 1		tè	x'ʂe ³³	x'ʂe			
729	poor 2	xá				by	bə xə	
730	porcupine	teà qù	tì kù		'bear' - k/q u L			
731	pot, wok	tshà piá	tshà	tshie ⁵⁵ pa ⁵⁵	tsh a/ie (L) pia H		qap (pot, jar)	cf. 'pig'
732	pouch	kà	ká		ka -	(xeyz.)		
733	press, push down	fià tshá	tchá		tshia H		tshə tshə	STC 353 *tsyuk
734	pretty	(tsà) sé	pà sé	xpa ³³ ʂe ³³	xpa L ʂe (H)			
735	price	phù	phè	phə ³³	ph u/e/a L	pha		PTB *paw (STC 41)
736	priest (Qiang)	sì pí	pí		xpi H			WS, LBZ ʂpi. Cf. Akha phí ma.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
737	prison		khue-tci		'dog-house/room'	-	khue-tci	
738	privileged seat	tèhì gó	ì qó		g/q o H			
739	protect, safeguard	quà	quà		quo L			
740	pull up (weeds)	té	tuè; tú tyà	χtue ³³	χtue L	sto	stu stue	*tyak=tək (p52)
741	pull, lead	qù qú			χku -		škua škɥ, a sə' ky, sə' xy	YD forms are all same morpheme
742	puppy	khù bù lá	khua là tsú		la -			MC VH, cf. 'dog'
743	purse lips	pí pià	(duè)-pià pià		pià -			
744	pus	pù	pù	χpu ⁵⁵	χpu (L)	spə ^o sa, rpə ^o sa, spə sa	spə sa	
745	put, place			kua ³¹ , χty ⁵⁵	kua -	kuəxɿ		
746	puttee, legging	zù deí	diòn dí	dzo ³³ -de ²⁴¹	dio L d ie (H)	gu'di		cf. TP dzi ³³ -so ³³ 'leg'
747	Qiang (people)	mà	mà	χma ³³	χmo L	ma	z _{me} (RH)	
748	quarrel	qò quá	kuà pú		k/q uo -			?STC *g-ral

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
749	quilt	sù thiá ~ sù tchá	qhué thiò		th ia/io -			
750	rabbit			zi ²⁴¹	zi L	ɛdʒə	zə ʂɑ piə	Other SQ forms are borrowings.
751	rain 1	meì	mzì	ma ³¹ zi ⁵⁵	'sky' - zi -	mə ke'	məə'	*r-wa (433).
752	rain 2			χdza ³³	χdzV -			JZY ɲjie.
753	rainbow	mù kuè			'sky' - 'bend'		tʂəqtʂə kuə/ tʂəqtʂə we (RH)	
754	raise	tchú	tchó		tch u/o H			
755	raise (livestock, child)	pé ə	ì pé ə		pe H ə L		pəə'	
756	raise head	κà	(tə) κà		κa L			
757	ramie			sa ³¹ la ⁵⁵	s u/a -	su		
758	rat, mouse	zì kú	dzé kuè	zɿ ³¹ kuə ³³	z/dz i/e (L) kuə (L)	zə ʂkuə		
759	raw					χu tʂəq	χə	
760	reach out (hand)			sɿ ³¹ tʂhi ⁵⁵	tʂh i/u -	tʂhu		
761	read			χdy ³³ (also 'recite')	χdy -	zdy	zdə	May be a borrowing from Tibetan ndon (Amdo dialect, ZYC).

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
762	real, genuine	ηù	ηuè		ηue L			MC 'correct, right'
763	red	ɕí	nó	χη ³¹ η ³³	χη ³¹ (H)	ci zi	cy pu	*r-ni (pp 46, 91)
764	reduce, decrease	tchì tchá	(fià) pé tchê		tchV -		fià-χtʂa (RH)	
765	relatives	qà zè	kè dzè	kie ³¹ dz ³³	ke L dzɛ L	ka mi	kəŋ	MW mi = 'person'
766	remember			tci ⁵⁵ to ³³	tci -	de tci qua	tʃɛ qua	
767	report on so.	lá	lé		l a/e H			
768	resin	piá zù, pié zù			zu -		luə-z, lu-z (RH)	RH m l = China fir tree
769	rest 1	bà ì	(bà) diè	χba ²⁴¹ η ³¹	χba L			
770	rest 2					zdi	zdzə, ?ə zdzi (MY)	
771	retreat		gè gú pù	χgə ³¹ kə ³³	χg ə/u -	rgə ʂaz	hɛ que	Precise reconstruction of the *vowel may be impossible, due to subsequent vowel harmony.
772	return (vt)		tù bà	da ³¹ ba ²⁴¹	ba L	hə wa		
773	return to a place	(zì) gó	gú		g o/u H			
774	rib	χá jà			χa - ja L		χa:'	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
775	rice (cooked) 1	mà má	mà má	me ³³	ma L ma H			reduplication at PSQ level. *may (p65)
776	rice (cooked) 2					stə	stua ɣa	
777	rice (paddy) 1	tshì	tshì		tshl L			cf. Akha tshé.
778	rice (paddy) 2			ko ³³ tsɿ ³¹		ku tsə		
779	rice (uncooked)	tsheɪ	tchì	qhə ³³	qhra -	qhə'	qhə' ('paddy rice')	LBZ, JZY khri; ZT, RDZ qha
780	rich			ʒj ⁵⁵	ri -	ji		JZY æ py.
781	ride, straddle	tsà	tsà	tsə ³³	tsə L	tsə	qɛ tʃɛ	?*dzyon (72)
782	right (hand)	(phà tó qò)	dá	ɣda ²⁴¹	ɣda -	(dʒə pa næɣi)	(næ xʂe)	
783	rise	tə là			UP + la -		tə lo	
784	river	tsò qhà			qha -	qhuo:; tsə		
785	road 1		(zɪ)	ko ³³ dze ³³	dze -	gu'fo		JZY i dze.
786	road 2						gu'	
787	roast, toast, burn	tə ɣú			qu -			*ka:ŋ (330). *q > ɣ after stressed syllable.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
788	rob	bú bá			bu - bə -	bə βa		
789	rod, stick 1	kuà lí			kuə - li -		wə li̯	For YD w ~ ɤ, cf. 'rainbow'.
790	rod, stick 2			ua ³¹ diə ²⁴¹	ua - dio -	wa di		
791	roll (v) 1	qò liú, qò lí, lí lí	quà lió		qV L IV H	ɤlut		
792	roll (v) 2	lè cà		lə ⁵⁵ ca ⁵⁵	l ə/e - ca -		səl lə (‘roll up’)	
793	rooster	ỳ qú	ì qóu	yi ³¹ qu ⁵⁵	q o/u H	tɕi wə tɕi		
794	root	kà pú	(phò) kè kè	kie ³³	kie L	kapa	kɛ, ku pu	STC 238 *kywiɣ
795	rope	beì	bzè	bzɛ ³³	bɾe L	biɣa, biɣ		WS, LBZ bre; LBZ bri; ZT, RDZ bze.
796	rot, spoil	tɕý qá	tsuè qá	tsuə ⁵⁵ qa ⁵⁵	tsuə (H) qa H	tsə qa	a squa	This is the lone form that indicates two *High syllables in a single PSQ word.
797	round	pà-kù	pè kuì	ɣɣy ³³ ɣɣy ³³	ɣɣy -			LX, MC 'bracelet' ('hand-round'). ZT gwə, JZY hɣu, RDZ hɣy.
798	row of grain (CL)	lú ~ lǔ	lú		lu (H)			
799	ruin	ɤlà	qhà là		ɤla L			
800	run	tshì tshì		tʃhi ⁵⁵ tʃhi ⁵⁵	tʃhi - tʃhi -		tʃhə	
801	rust (n.)	cà-gù	guì	ɣguə ³³	ɣgui L	(ɣsa)		MC vowel is aberrant.
802	rust (v.)	zì zú	dè dzô		dz u/o H			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
803	saliva, spittle		tsù zɛ́	(phe ³³)	phe - r e/a -	tsə sɑ', ɹɑ	tsə-s, ɹu	MC water-m. JZY pcie ɹɑ. Cf. 'vomit'.
804	salt	tshí	tshì	tshɿ ³³	tsh i (L)	tshə	tshə	*tsa (214)
805	salty		dzú		dzu -		dzə	
806	saw		kè zǐ	kie ³³ zǐ ⁵⁵	kie L ɹi H	səqɑ', təkha't	khe', sə qa'	s- init. forms from T? Initial on m2 is based on Jiuziying ka ɹə. Qiangic cognates include Ergong kɛ zɛ, Yadu khe'.
807	say, speak; tell	qà tɛ́	diú; diù	dzi ²⁴¹ ; dy ³³	diu (L)	ɹu	dzɛ	
808	scald, burn	thò	ʂè thè thoũ		tho L			
809	scatter	dà phó	dè phù phù		ph o/u (H)			?STC 140 *ploŋ
810	scold	zǎ tà		zi ³³	z i/i L	wu wa		
811	scratch	phà dá, phà sè (dig out, scratch)	phiá, phù ʂà (dig out, scratch)	phzɿ ³¹ phzɑ ⁵⁵	phra -	pha'sta		?STC 391 *pruk, ?STC 230 *hyak
812	seal, stamp		dzà					WS džja, JZY ɸdžje, RDZ žja.
813	season of year	- qe í	-qè	(-ko ³³)	-qe -			cf. 'autumn,' 'spring'
814	section (of road, journey)	zuè			(d)zue -		(ɛ) dzue	cf. MC 'road'
815	see	à tɔ́	tiú (cà)	tɛy ³³	tiu (H)	kuə tiu	ku tɔu	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
816	seed	dzuei	zueí-zà (seed- food)	zuə ³¹ zə ²⁴¹	zuə (L) zə L	tʃhaz	zuə	
817	seed, stone, pit		zuì		zui -		zuə	PTB *dzəy (also 'testicle'), cf. 'bullet' fix seed words. JZY bzɿ may be cognate.
818	seek	mú lià	mú lià		mu H lia L			
819	select	cí qá	sè qá	(sɿ ⁵⁵ la ⁵⁵)	se (H) qa (H)		sɛ qa	
820	self		uí nà (‘yourself’)			ɲu ɲu	ɲy teu	
821	sell					ɣua	ɣua	
822	send	piá	piá		pia H	ʂpu		
823	sentence (CL)	qú	qú					
824	separate	tá qá tshé	(kiè ká)		qa -		qa rə	
825	set (of sun) 1	dà	fià dà		da L			
826	set (of sun) 2					a qe	a qa	
827	seven	cí	nó qò	ciŋ ³³	sni (H)	sə	ɕə	*s-nis (5). cf. MC 'two'. TP initial is problematic

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
828	sew	jà i	z.ì		ra - ri -		jej (RH)	JZY (ty) ja ji. ?*krwi (pp41, 56). ?STC 456 *d-rup, STC p41 *k(h)rwi. aspiration is for Kuki-Naga. ?STC 456 *d-rup.
829	shallow	tchá			tcha -	mo tsha	(bi tse)	
830	sharp	tà	tshè	tsie ³³	tsie ~ tsa L	tse	tse	
831	sharpen	tà-iù-sù suà	sù	suà ⁵⁵	su -	sə	su (RH)	?STC 180 *(s(y)wiy
832	shave 1	khuá			khuo -	khuá'	khue'	Muya yui ³³ , Pumi (Jinghua)zj ⁵⁵ suggest PQic kr-.
833	shave 2	tchì	((mù) tshuá)	tche ³³	tch i/e L			JZY t'i (b?).
834	sheath	cà tshuei	táo cà tsi		ca L			cf. 'stick knife into'
835	sheep 1	ió	ióu	(xgy ³³)	io H			JZY u.
836	sheep 2					ɲu	ɲu	
837	sheepskin vest	phà ja	phà dzà		pha L dza L			?clothes-skin.
838	shine; light	mú xuà xuà (shiny black)						*hwa-t (221)
839	shoe					tʃə ʃa	tʃu wa	how many sets?
840	shoot	qhò	tshà	qha ³³	qhr o/o L	qhu'	qhu'	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
841	short 1, low	bè, bà	bè	be ³³	ba ~ be L	ba	bɪ tse (shal-low)	-The presence of two forms in Longxi, coupled with the -a form in Mawo show that variation in the proto-vowel goes back to PSQ and PQ.
842	short 2				ɲua -	ɲuə tsi	ɲue tse	JZY ɲua.
843	shoulder	liá ㄒㄚˊ	ì ㄒㄣˊ	lɑ ³¹ χɑ ⁵⁵ pi ³³	lia (L) ㄒɑ H	dʒɑ χu (ZYC), dʒæ χu (MWQ), dʒɑ°bla (J. Sun n.d.)	lu χu patʂ	cf 'arm'. KMR *k(r)ɔŋ/k (STEDT).
844	shout	cí cí					(ɑ) ʂ (CL)	
845	shovel	cà piá	cì-piá		'iron' - pia H			
846	shy	zá qhú	dzá khù		dʒɑ H qhu -	dʒu χu		?*kyeŋ (162)
847	sickle	cà teí	cì dé	ci ³³ də ²⁴¹	'iron'- de (H)	sad	set	'iron-knife'. old compound. JZY çì de.
848	side 1	piá pú		pa ³³ pu ³³	pia - pu -	(zi ka)	pie na	*(s)pa(ŋ/k) (STEDT)
849	sieve			sia ³¹ χgy ³³	sia - χgu -	sa rgu	qə' gʏ	
850	sift (v)	sé lá	tchì sé là ~ tchì sè lá	sie ³³ lɑ ³³	s/ʂ ie (H) lɑ (L)		sɛ (sifter)	
851	silk, satin	kuè	kuè	kuè ³³ χto ³³	kuè L		kuè' su lʏ	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
852	silver	ηú	ηó	χηυ ⁵⁵	χηυ H	ηυə zi	ηυə	*(d-)ηul (pp 15, 173)). For the PSQ vowel, cf. Table 3.3
853	sing 1	tshuá			tshua -		tshua	
854	sing 2			zo ²⁴¹	χzo L	zɑ' ma tʃə		Additional support from RDZ hʒjo, JZY žjo, ZT žjo. L tone is indicated by contour and *cluster
855	sister (elder) 1	sá bà		sa ⁵⁵ bzɑ ³¹	sa H -'big'	saba'		sister-big. LX is 3d person
856	sister (elder) 2	á tseì			tse -		tsij	
857	sister (elder) 3		á tœ		tœ -		ε tœ (wife of elder brother)	semantics of Yadu suggests that this is not a borrowing from Mandarin jiě 'elder sister'.
858	sisters	sà ηì	sà nə		'sister-two'			STC 271 *na·w, or sister-two?
859	sit	fià zú	dzó	dzo ³³	dz u/o H	dzu	dzuə	
860	six	tsú	tʃóu qò	χtʃu ³³	χtʃu (H)	χtʃə	χtʃuə	STC 411 *d-ruk
861	sixteen	fiá tsú	fià tʃhòu	χɑ ³¹ tʃhu ³³	tʃhu (L)	hatʃ	ha tʃhuə	*χ- pre-initial in PQ 'six' becomes aspiration in 'sixteen'.
862	size	bà-tsá	bzà-bz í		'big'-'small'			semantic cognates
863	skin (human) 1	à piá	zà piá	zɑ ⁵⁵ pa ⁵⁵	ra (L) pia H	nə ɹə pi	ɹuɛ piɛ,	*p(w)ak (Matisoff). TP, MC, YD 'skin, hide,' cf. 'hole' 1. For *rhyme correspondences, cf. 'pig'

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
864	skin (human) 2		tshé pià	tʃh ³¹ pa ³³	*χtʃi			'flesh-skin'?
865	skin, flay, peel	jà qá	z'á qà	qe ³³	qe - qa -	qə qa	dɛ' qɛ, ɛɛ qɛ	STC 342 *r-kwak. LX also has qhuá, which may reflect *s-prefix.
866	sky	mù tó	mú pià	χmə ³³ da ²⁴¹ pə ³³	χmu (L)	mu tup	mu tup	*r-muw (488)
867	slander	phià	mè phí		phia -			
868	sleep 1	(fià) mà zè	ú zè		z/z e L		ɛm dze	
869	sleep 2			ne ⁵⁵	nə -	ny	nə	JZY nə.
870	sleeve 1	phà lì	phè ì		pha L			JZY pha ji. VH in MC.
871	sleeve 2	(phà lì)	phè ì	i ⁵⁵ χdio ³³	i -			JZY pha ji.
872	sleeve 3					la qu	ju qu	
873	slice	liá						?STC 351 *lep
874	slowly 1	à tchá tchà		tcha ⁵⁵ tcha ⁵⁵	tcha H			
875	slowly 2		à khà tsí		kha -	a kha kha		JZY k'o k'o.
876	smallpox			bo ²⁴¹	bro -	bu'		JZY buo.
877	smear, rub	phà sè	phù sà		ph a/u L § e/a L			
878	smell, sniff	cí tà, cí dà	mí	χmi ⁵⁵	χmam H	xcust	cete	*m/s-nam (464)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
879	smoke, tobacco	mù khú, mú-qhú	mù qhué, mù khué, qhou (‘smoke meat’)	mə ³¹ khuə ⁵⁵	mu L kh/qh uə H	mu xu	mu xü	fire-smoke STC 256 *kuw. For uvular initial, cf. Shixing ɲɛ ³³ qhue ⁵⁵ .
880	smooth					la la	la: la	
881	snake	bù tshì	bzě	bə ³¹ guə ²⁴¹	br u/e L	bəs	bɛ ɡɛ, bəs	YD ‘year of the snake’, STC 27? ?STC 447*b-ru-l
882	sneeze (v.)	á tshù-pù	á thiaò-pù	χa ⁵⁵ tshye ³³ pu ³³	a H thiV L pu L	sətɕʰi (sə tũ lũ)		irregular vowels due to onomatopoeia. s3 ‘do’
883	snore	mà zè- qhuà	mè zè- qhuá-pù	-	‘sleep’- qhua - (‘do’) -			sleep-snore(-do)
884	snot	tí	nè	χɲi ⁵⁵ tsua ³³	χɲi (H)	stɻ xu’	stɻ°xu’	STC 101 *s-na. TP ‘snot-water’
885	snow	peì	mù pà	mə ³¹ pa ⁵⁵	p e/a (L)	tɕi qə’ ɸu	pie	*p-wal (JAM-LITB 8.0)
886	soak/ immerse	tə	tè	χtə ³³	χtə L	stɻ	stə	
887	soft 1	mà mà		ma ³¹ la ³³	ma L	mə tɕa	ma tɕa	
888	soft 2		zà là	ma ³¹ la ³³	la L			
889	soldier 1		dzyè	dzue ²⁴¹	dzye L			TP ‘soldier, army’.
890	soldier 2	guà-(χá)			gua L	gua’	gue’	
891	sole of foot	gò cì, guà cì	gòu pà		gro L			For an alternate reconstruction, cf. ‘heel’.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
892	son	tçi	(tsì)	tʃɿ ³³	tçi L	tci	tʃɿ	cf. "male", STC 59 *za
893	son-in-law	tçi mià	tsì mià	tʃɿ ⁵⁵ ma ³¹	'son' - mia L		tʃɿ mie	*ma·k (324)
894	song (CL)	sá	sà		sa -			
895	soul/spirit 1	só		su ⁵⁵	s o/u H	zy zy		*tsu (Matisoff 1974, #36)
896	soul/spirit 2 (cf. 'god')	tsí		tshie ³³	khsie -	khsi	xsə (RH)	JZY ts'e.
897	sound, report (CL)	qú	qú		qu H			
898	soup	thó		thu ⁵⁵	th o/u H	dʒa thu		Could be an old borrowing from Mandarin tāng.
899	sour	tsuà	tsuí		tsuV	tʃaɕe		
900	spider	tshì tshì	(tshà ʃì)	tshɿ ⁵⁵ tshɿ ³¹	tshì (L) tshì L	tshəʃ	tshəʃ	PQic *kr- (Ergong, gʒɔ gʒɔ, Ersu, ka ³³ ra ⁵⁵ , Muya, ji ³⁵ mə ³⁵ qa ⁵⁵ zɑ ³⁵ , Queyu bu ³⁵ ka ⁵⁵ ra ³³)
901	spin (yarn), twist (rope)	lì	lì	li ³³	li L		liə	May be a borrowing from Mandarin niǎn.
902	splash, sprinkle 1	sé	phù sè		se -		tsə se (RH)	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
903	splash, sprinkle 2	phà	(tsuè) phè, phù sè		phV L			
904	spleen	phà ʒà	pá		p(h)a -	(χaʂ)		
905	split 1	qè tshí					khʂi khʂe	Before offering an etymon, data are needed from a dialect(s) that preserve evidence of *clusters.
906	split 2	dà (zà) zà	ʂè dzì dzá		dzɑ -		da dzɑ	
907	spoon, scoop	zà	ɕì-zà ('iron-spoon')	-	za L	zəza	za	*za
908	spread (manure)	κà	mú κè		κ a/e L			
909	spread, unfold	tshà	tʂhà		tʂha L			
910	spring of water					κɿʂits	κɿʂis	
911	spring, summer	tcà qeí	tsè-qè	tsie ⁵⁵ qə ³³	tsie (L) qe H	mə tsa	tseχ	
912	sprout (n)	cà qè, sà qè-tè cì (v.)	-cà qè lè kí	χgya ³³ qə ³³	qə L	nəpəʂ	ʂəχ	cf. 'head'.
913	square (cf. 'four')	(zuè)	dzè dzè	dʒɿ ²⁴¹ χdzo ³¹	gr e/i L	gzə ɣdzu	gzə ɣɿ	TP m2 is cognate with MW.
914	squirrel	zì kú tsù	tshù lié		tshu L		je tɕye	?*sre[ŋ] (p171)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
915	stand	tà ì	(tè) zì, tè ə	zi ⁵⁵	zi L			*g-ryap (246)
916	star	zì bà	dzè	χdz e ³³ pe ⁵⁵	χdze L	ɛdzə	ɛdzə, ɛrə	
917	start	à tsè	dé tsì		tse L		ke tse	
918	steal	tà kù	kú pù ~ kù, qù (thief)	χkə ⁵⁵	χku -	ɣkuə	ɣquəχ	cf. 'bat'
919	steam (v.) 1	(sò) qó					ɣqu	
920	steam (v.) 2	(fià) tci	tœ		tœ L		tʃet (steamer for food)	JZY cie.
921	steel			qu ⁵⁵	qu -			JZY qu,
922	stem/stalk			χqə ³³	χqə -	ɣqə'		
923	step over/ across	(dà) kuá (tca)	(dé) tca	kuə ³³ tca ³³	kuə - tɕ/ts ə L	kuə tsa	(ə) kuə	disyllabic
924	stick out (one's head)	sì tshí	ɣè tshí		tshí H		tshu (RH)	
925	sticky	zà	pià dzà		dza L			
926	still, yet	tca (nó)	tci nà		tɕ a/i H - 'have'			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
927	sting (wasp)	qhò			qho -		ku qhu'	
928	stinking	bè tsá	bù tsá	bzɿ ³³	bri L tsa H	da bə χtʂi	bə χtʂe	ZT, RDZ bzu, JZY brw. Based on NQ, m2 may be *χtʂa.
929	stir-fry 1	cì cá	dzì dzá tʂɿ	χna ³³	χnɿ L χna H			
930	stir-fry 2					tʂhu tʂhu	tʂhui tʂhue	
931	stirrup	gò tshú	gòu tchua bá		'foot' - tsh/teh uə -			
932	stomach			pə ³¹ χtə ⁵⁵	χtə -	stə qhuə:	(qhʂəs qə)	?*kwa
933	stone 1	kò ló ~kò lú	lò, gò-bzà, lò-bzà	kə ²⁴¹	χlo L	klu pi	(ja kuə)	For more evidence for this cluster in PSQ, cf. 'pestle'.
934	stone 2	kò piá			piə -	klu pi	ju pu	
935	story (of a bldg)	sà			sə -		(ə) sə	
936	stove	tsò zò	tsì qò		tsV L		tsur	LX VH.
937	straight	tí	tí, tètì	χtə ⁵⁵	χt i/ə H	stəʂ	*	b?
938	straight, upright		teì teì	χte ⁵⁵ te ³³ , χtə ³¹ te ⁵⁵	χte -	e thiʂ, qəst		TP 'right, just'
939	strength 1	dzì ~ zì	dzà qà	dzɿ ²⁴¹ qə ³³	dzɿ L qə L			VH in MC. m1 = sinew.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
940	strength 2	qú			qu -	gə' qu'	qu	Cf. PLB *k-ra ² (WB ?ô, LH gô 'strength', CL for person).
941	stretch out (hand, arm)	tshí	tshì ~ tshí		tsh i/i H		tho tshu, tu tshu	
942	strike (iron)			ei ⁵⁵ dio ³³	dio -	dy		
943	stroll (v.)	suè lá	suè lù		sue L IV L			
944	stuck by thorn (ʔæʔ)	tshá, tshuè, tshà	tê tsí					?STC 276 *tsow
945	stutterer	qù dzý			(ɣ)qu -		ɣqu tshu	
946	suck (milk)	kú	qou ~ qou		k/q o/u (H)			
947	sun 1	mù cí	mè sí	ma ³³ sɿ ⁵⁵	'sky' + si H		mu juɣ	m1 'fire'. (LX) mù n,ɿ-kuè 'rainbow' sun-bent.shape.
948	sun 2		mè nà		'sky' + nə -	mun		m1 'fire'. (LX) mù n,ɿ-kuè 'rainbow' sun-bent.shape
949	sunbathe	qhuà	khuè		qh/kh ua/ue L		mə tshɔɣ ɣkue	LX mə eí-qhuà 'shine upon (of sun)'. TP 'rise (of sun)'
950	sunrise	eyá qàn bè, s1		bzia ³¹	bz e/ia L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
951	supper, dinner	jà tí	zà té	zɑ ⁵⁵ χte ⁵⁵	rɑ (L) χt i/e H	pi sti (pig feed), stə (graze)	pie stə (pig feed)	cf. 'pig slop'
952	support 1, prop up	tə̀ tí	ì tí		ti L		te ctɛɛ	
953	support 2, raise	tə̀ kù					te qɛ	
954	swallow (v.i.)	(qò tcỳ)	gè zuì	ʂ ³¹ dzua ³³	dz/z ui L	sə ɛzə	sə ɣzɿ	
955	sweat	tsù	tshù	χtʂua ⁵⁵	*χtʂu(ə) (L)	xtʂə, xtʂwə	xtʂuə	MW zyc, js. *s-krwal ɹ s-(ŋ)krul (STEDT)
956	sweep 1	cyè té	sué mè	sya ³³ ma ³³	s ya/ye (L)			
957	sweep 2					dzɿ dzɑ	dzɿ dzɿ	
958	sweet	tshú	tshú	tchy ³³	tsh u/y (H)		tshəχ	PLB *khyəw (p60)
959	swell up	phú, phú phá (swelling)	tè phó	tə ⁵⁵ pho ³³	ph u/o (H)	ph ^h ph ^h ɑ	təph pha	*s-bwam (172) n.b. redup. 1st syll is primary?
960	swing (tail)	kuà jà			r a/e -		ɿ ɿɛ	
961	tael, liang	zò	dzòu	dzɿ ³¹	dzɿ L	riu	(o) ru	Vowel based on TP and NQ.
962	tail	suà kà	suà kè	suɑ ⁵⁵ kie ³³	suɑ (L) kie L	su ka, su kuə	si kue	m1 *swa-p (STEDT, attested in Dafang Yi, Qiang). m2 from PTB *k-lyak (STEDT)? 2d MW form from J. Sun.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
963	take off (clothing)	χú		χu ³³	χu -			
964	take out (from above or from in between)	tɕé			tɕ/tɕ e -		χtɕɛ	
965	tall, high	bó	bzú	bu ³³	br o/u (H)	bu'	bu, ti wɿ (shows infl. of stress)	JZY bru. *m-raŋ (146).
966	tear (v.), rip	phú phá	ɕè phù phə	phz i ³³	phri (L)	phi' phi'	phu phue	Ergong pɕi, Namuyi mphɕɿ ³⁵ , rGyalrong, kə prə, Shixing pɕ ³⁵ re ³³
967	tear down	zà zí	dzɿ dzí		dzV dz i H			cf. 'ask'. Reduplicated root.
968	tears	mè lí qə	mù lé qə	(mi ⁵⁵ ɕo ³³)	'eye' + *χlV H q ə/e L	kləq	kləχ	Vowel in MC s2 (PST *k/m-ləy) may be from vowel harmony.
969	ten	fià dzó	fià diú (qò)	χɔ ³¹ dy ³³	fiə L diu (H)	hə diu	ho dzu	PSQ *iu > TP /y/.
970	ten thousand	kuá (b?)	à uá	χgya ³³	χgya -	kuən (b?)		Cannot reconstruct PSQ tone, because LX may be a borrowing.
971	testicle	bə			bə -		bəə'	
972	that	thà		tha ³³	tha L	tha:	the:	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
973	there	thè gá	fià í qà	thə ³¹ χe ⁵⁵	thə L q a/e (H)	thə χe	thə	
974	they			tha ⁵⁵ χuo ⁵⁵	thə - χuo -	tha χlo	thəm lie	JZY tsɿ ŋa.
975	they two			tha-n ⁵¹ ʃɿ ⁵⁵	'they'-two'-m	tha ndzɿ		JZY tsɿ ŋa p tɿ 'they'-two'-m
976	thick (of paper)	lià	lià (liù), tshù là	la ³³	lia L	li	lie	
977	thick, wide	pà	bzà	pzə ⁵⁵	pray (L)	pu		?STC 172 *bwam (cf. round)
978	thigh	duà qà-pà	duà-bzà		duo L	də, də kə	duo kə	leg-m
979	thin (of humans)	χuá	χuá		χuo H	tsha'ke	tsʰə me we, qhə'	
980	thin (of paper)	bù	bù		bu L	?		STC 138? *pleŋ 'flat', etc.
981	thin, slender	bé	bzɿ	bzɿ ³³ , bzɿ ³³	bzi - ~ bri -	beu tsi, bzə tsi	bi tsi, bə kəj	*peɿ (340), WS, JZY bri; LBZ bre; ZT, RDZ bzi.
982	thing	pà nà	pà nà	pə ³¹ ne ³³	pə L nə L	pə nɿ	pə nə	
983	think	bà ló	bè dzou × bè dzou	χbo ³³ χdz u ³³	χb ə/e L χdz ə/u -	χʃə	z, be tɕu	m l *e may be due to vowel harmony.
984	thirsty	tsù tɛ pià	pià	χpa ⁵⁵	χpia (L)	spi	ɕpie	
985	this 1	tɛà	tɛà qó	tsa ³³	tɛ/ts ə L	tɛa:	tsoχ (('these'))	MC 'this one (DEM + CL)'
986	thorn	tchí	tshí	tshɿ ³¹	tshɿ (H)	tshəp	tshə mə	*tsow (276)

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
987	thou 1		nò	no ⁵⁵	no -			*naŋ (407)
988	thou 2	ù	ù ò (DO)		u L		ʔü (RH)	
989	thou 3			kuə ⁵⁵	kuə -	kuə	kə	
990	thousand	tú	((à) tshè)	χto ⁵⁵	χt u/o H	stuŋ tsu	(a) stɿ	This could be a borrowing from Tibetan ston, especially given the MW form. It may also be the case that the SQ form is retained from PTB, and that the NQ form is borrowed.
991	thread	sà ŋí	sè lì	sia ³³ li ⁵⁵	sia L li (H)	suz	bu suəl	LX, MC also 'snare'
992	three	tshè	sí qò	tshi ⁵⁵	khsi -	khsi		*g-sum (409)
993	threshold	dzù khù			khu(e) -		khue' ʂue	
994	throat 1	qù mù			qu -	ʂqu ma, tshu ʂqu ma ti		
995	throat 2	qù mù		lu ⁵⁵ ma ⁵⁵ da ²⁴¹	mu -		mu wu (RH)	
996	throw, toss	kuà jà			kuə -	kuə'	tha kɿɿ'	
997	throw/ discard	sì dzyá		χdʒi ³¹	χdzya -	kuə'	zdzu	*Rhyme is based in part on NQ vowels. YD 'pour/throw out water'
998	thrush	tshà kuəN	thò kò		κ uə/o L			LX m1 = 'bird'.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
999	thunder	mú gú	mù gó	mə ⁵⁵ go ³³	mu H g u/o H	mə rgu	mə zguə	
1000	Tibetan barley	zí	dzí		dzi H	(sə βa)		
1001	tie (belt)	dzì	dì		di L			LX, YD apparently have palatalized.
1002	tie (firewood) into a bundle		tsò dzá	dzə ³³	dzə -	dzu dzu	zdzy (RH)	
1003	tie up (cattle)	tsù	tsò		ts u/o L			?STC 421 *du-t ~ *tu-t
1004	tiger	piá	pì dá	pzɿ ³¹ da ³³	pzi (L) da -	(b)	(b)	ZT, RDZ pzɿ da.
1005	tight 1	ci	sé		sie H			n.b. LX ci 'loose', STC 370 *ts(y)i·p
1006	tight 2	tci ~ tci tci	tci		tci i/i H			
1007	tile	(ɬuà) (b?)	ià, ià guí mù (tile maker)	ɣgya ³³	ɣgya -	wa (b)		b?
1008	time (hit one) (CL)	tshù	tshù		tshu L		(n) tɕy	MC 'time (kick one) (CL)', YD no asp. w/ vl. V.?
1009	tin	tsí	tci	ɣtɿ ³³	ɣtci (H)	za ŋi	xtɕə	
1010	tinder	pú			pu -		puə'	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1011	tired	dà qò			χqo	ʂqu		JZY q'uɿ. Aspiration in JZY is evidence for *cluster in PSQ.
1012	today	pú cǝ	pé-sɛ̃	pə ³¹ siə ³³	p u/ə (H) sin L	pə si	pəs	evidence for *vl vowels
1013	toilet, cesspit	tshè kù	tchè-qù		k/q u L			feces-pit
1014	tomb	mú pú	mé pù	mə ³¹ pə ⁵⁵	m u/e - p u/ə H		məɸ	
1015	tomorrow (day after)	sò dzí cǝ	sòu dì	sy ⁵⁵ dy ³¹	s o/y (L) d i/y (L)	syt	su dzu	
1016	tomorrow 1	tà bəí cǝ	tè péi	tə ³¹ pə ³³	tə L pə (H)			
1017	tomorrow 2					asqu	o squa	
1018	tongue	zè qə	zì qé	zɿ ³¹ qə ⁵⁵	zə L qə (H)	zəq, zə ^o qə	zəχ, zə ^o q	Mawo forms from ZYC, J. Sun. JZY ɿzəqe.
1019	tonight	peí ³⁵ dzì tsí	pè gié tsí		pe - gie - tsí H		pej miæ χa:'	LX has palatalized the initial of m2.
1020	tooth	sù	sú-nə (‘gums’ (tooth- red))	suə ⁵⁵	suə (H)	ʂə	ʂuə	*s-wa (437) MC has monophthongized.
1021	top 1	qə teì	qé tè	qa ³¹ te ³³	qV (L) te L	ti:q; qutu		

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1022	tread/step on	tchya (n.í)	tchya	tchya ³¹	tchya L	tcha nǐ	tʃhuen	
1023	tree	phù	phò	pho ⁵⁵	pho	phaq	səp	JZY p'o.
1024	tree (CL)		kòu	kò ²⁴¹	kò L			
1025	tremble	tshà té			khsa -	khsa' ma		JZY ts'a,
1026	turban	dé		tɔ ³¹ dze ²⁴¹	dze -	qə di:βa	qe de	
1027	turn 1 (turn body)	suè	suè	eye ³¹ ɔ ⁵⁵	sye L		eye	LX rhyme is aberrant.
1028	turn 2 (turn around, over)		fià lià	eye ³¹ ɔ ⁵⁵	lia H		tho ɣli	
1029	twig fence	tsà pià	tsà kǐ, à tsà ~ á tsǎ		tsa L		tse epie	
1030	twist together, spin		dzù dzuà		dzuo -	dʒar tʃə, dʒa-rdʒə	dʒədʒ	?*tsyur (188)
1031	two	nè	nè qó	nǐ ⁵⁵ , (X)nə ³¹ sə ³³ (‘twenty’)	(X)nə (L)	ɣnə	ji, ha nə (twelve)	*g-ni-s (4). JZY nɿ.
1032	two years ago	dzí pù ~ zí pù	dzé pù		dz i/e H pu L			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1033	ugly	khú, tsà qhú			χku -		mo šku	
1034	under	qà tò	qà tà	qha ³¹ lǎ ³³	χqa L	ʂqul; qə li	qəl	
1035	understand	sì	sì uà	sɿ ⁵⁵	sì (L)	(qhsa)		MC s2 is sfx. *syey (182)
1036	unit of weight equal to 5 kilos	tchí	tché		tch i/e H			*ki·n (369)
1037	untie	dà phà .à		zɑ ³¹	pha - ra L	pha ka	ε phe	
1038	upside down	dó gó	guì ~ guí		g o/ui (H)			
1039	upward (pfx)	tà - ~ tà	tè -	tə ³¹	tə L		tə (RH)	RH has variant forms, according to the rhyme of the following stem; tə appears to be the basic form.
1040	urge, hasten	kuǎ			kuɑ -		ŋu kuɑ ¹	JZY ɤu ɣua.
1041	urinary bladder	ŋò phó	biè phò dá, biè tà pó	pa ⁵⁵ χpo ⁵⁵	χpho H	?ʂ? tʂhəʂ		*po(ŋ/k) ʂ boŋ
1042	urine	bí	biě	bie ²⁴¹	bie (L)	bi	bi, bɿ	PQic *nbi (cf. Chapter IV).
1043	use (n)	pò sǎ ~ pò ì	iò sǎ ǰá		sǎ L			It is not clear whether the first syllables are cognate.
1044	useful	ué		ye ¹³	ye -			

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1045	vapor	lè	(tchì) lè		lə L		le	
1046	vegetable	kù tsù	pià-tì kú (wild vegetable)	χu ³³ ba ²⁴¹	ku (L)	ku-z (vegetable garden)	ku ʂy	cf. 'garden'
1047	village 1	tshuá-kù	tshuá, tshuà qó		tshuo H k/q u/o -		mi tshuo	
1048	village 2			mə ³¹ zo ³³	zo -	gzu		JZY zo.
1049	vomit	rà qú	ze ³³		rə L	ɔ		JZY (u) ra.
1050	vulva					phaʂ	p ^h oʂ (RH)	
1051	waist	tà qà		χtə ³³ so ³³	χtə L	tha su, t ^h ə cu / t ^h a su, dzə ^o zdi ^o g.u	ʂəq	zyc, mwq, js
1052	wait	zò	zòu	zy ³³	ziu L	ziu	thu su	PSQ *iu yields LX /o/, TP /y/.
1053	wall 1	qhà tsù		qhuə ⁵⁵	qh a/uə	qhə:	qhə's	
1054	wall 2		lò zù	ko ³³ zuə ³³	z u/uə L			m1 = 'stone'
1055	want	tchá	(khí)	tchi ⁵⁵	tchi H	tchi	tche, c ^h ə xy liu,	
1056	warm 1	lé			le -	ʂtə lə, mali	de sle	?STC 381 *lum
1057	warm 2			ʂɿ ³³ ʂɿ ³¹	s i/i -	ʂtə lə		JZY si.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1058	warm 2 (of water)	dá	duè		dua -			
1059	warm self by fire	(mù) lé			'fire-warm'	meli	mu liu	
1060	wash, bathe	χò là, kó là (swim)	χuà là	χuə ⁵¹ lɑ ⁵⁵	χuə (L) lɑ (L)	χlɑ	χluə, κluə (bathe)	SQ has syllabified the PQ *initial. JZY xuy la.
1061	water	tsù	tsuè, tsuè	tsuə ³³	tsuə L	tsə	tsə	cf. 'well' *twəy (168), *tšu (STEDT).
1062	watery, dilute	zò	zá	zə ³³ zə ³³	zV (L)			
1063	we (dual)			qɑŋ ¹³ tʃŋ ³³	qa - 'two' - tɿ -			JZY qa ŋ tv.
1064	we (inclusive)				tsuə ³¹ thya ⁵⁵	tsV -		
1065	we 1	qà lià (excl), ú lià (incl)	qá lé, á lé, tɔ̀ lé (dual)		'I - lia L		tɕi lie	
1066	we 2			qɑ ³¹ thya ⁵⁵ , qɑŋ ¹³ tʃŋ ³³ (dual)	'I - thya	tɕyn (dual)	tɕi, tɕiŋs (dual), ɛ tɕɛ (we all), tɕi lie	

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1067	wear (bracelet, turban)	dé			de -		dɛ	
1068	wear (shoes)	tsù	tè tsù		tsu L			
1069	wear clothes	gù	(tè) gù	guə ³³	guə L	guə	guə (RH)	*gwa-n ~ kwa-n (160)
1070	weasel	tɕà qó, tɕhý lí qà					tʃu qu, khuə tʃoqu (ses) (RH)	Sichuanese diao ling zi. cf. squirrel. More SQ cognates are needed for reconstruction.
1071	wedge	ɕý	(sé) cò	(sie ³³ tɕhy ³³)	ɕ u/o -	sa sə'	qɛ sɛ	MC, TP s1 = wood
1072	week	bà ì	bà-diè		bə			
1073	weigh	tɕhì tɕhí	tɕhé	tɕhe ⁵⁵	tɕhe H	tʃhə tʃhə	tʃhə tʃhə	LX vowel is aberrant
1074	well (n.)	tsù kù	tsuè-kù		tsuə L ku L	tsə kuə	tsə kɥ	water-pit
1075	wet, moist 1	phà		phzɛ ³¹ phzɛ ⁵⁵	phray L	phia'q		
1076	wet, moist 2	fià tì (zì) 'moisten'	tè tè		t i/e L			*ti(y) (55)
1077	what	ná ì	ní lè	na ⁵⁵	n ə/i H	ɲi ka	ɲɛ ɣɛ	The vowel correspondences are unusual. TP may have been influenced by the vowel of tha ³³ 'that'.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1078	wheat, barley	κə̀	lè	κua ²⁴¹	χlə L	κlə	κlə	cf. 'stone', ?STC 150 *mruw
1079	wheel					khu-rlu	lu tʂy	
1080	where 1		à tá (lè)		ta -	ta nu	tea:	
1081	where 2			α ⁵⁵ ηi ³¹	α - nə -	ta nu		JZY a ny ko.
1082	which 1		ní lè (which one)		ni -	ηi ka		
1083	which 2			na ⁵⁵ ti ³³	ti -			JZY sa ti.
1084	while (CL)	tuá	tuá ~ tá pà		tua H			
1085	whip	κuà-bə̀i (‘whip- rope’)	-κuà tsì		κua L			
1086	white	phé	pʂi	phz ⁱ⁵⁵	phram H	phi	phuɣ	
1087	who	sí	ʂi lè	sɿ ⁵⁵	ʂi H	sə	sə	cf. 'outward (pfx)'
1088	wide, broad	lá	lá	la ³³	la (H)		la	
1089	wife	tə̀e m̀i	tə̀e (ts̀i) m̀eì	tə̀i ⁵⁵ me ³¹	tə̀ a/e L m i/e		ʂe tsem, ʂtsem	'female-person', with VH on first syllable. Second syllable from *r-mi(y) (p127).
1090	wild goose	ηa ³⁵ κò	ηæ ³⁵ uò	ηan ¹³ ko ³¹	ηa - ko L	khu' khu'		m1 from Tibetan WT ηaη pa, m2 may be from PTB *ηa-n (STC p.99).

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1091	wild pig	pià χó	pià χά	pa ³³ χa ⁵⁵	'pig' - χa H	piɑ χu	pie χu	
1092	willing	κò ~ κό	κòu ẓà ~ κòu ẓǎ	ku	κ u/o -			TP based on Chang's citation ɦu.
1093	win	tə qò	qà	tə ³¹ qɑ ⁵⁵ ; da ³¹ qe ³³	q ɑ/o (L)	da qe; təqu		
1094	wind (n.) 1	mù κό	(mé mè)	mɑ ³³ ku ⁵⁵	'sky' - ku H	mu ku		LX, TP VH.
1095	wing 1	dzuà ɹà	zà kè	dze ²⁴¹ qe ³³	dzya L k/q e L	gzi gua'	gzij pɑ	PQ *gzi. JZY ji .u. *g-(t)s(y)əw-k (STEDT)
1096	wither	fià χà		tə ³¹ χa ⁵⁵	χa -	de ɹə tci	tsɿ	
1097	woman	tcá tù	tœ liú mù	tci ³³ , tshə ³¹ ma ⁵⁵ (young woman)	tci (L)	tsəm, tsə βɑ' (young woman)		JZY ci mie.
1098	wood, timber 1	cì tò	sè	sie ³³ (firewood')	sie L	si	sə	JZY se. *siŋ (233)
1099	wood, timber 2	cì tò		te ³³	t o/e L			
1100	work (v.)	dzì pù	dzì pú		dz i/i L - 'do'		dzə bəl	
1101	worship	kuà cà			kuɑ -		kuə' tshuə	
1102	wrap	qú tá		qua ⁵⁵ te ⁵⁵	q u/uɑ H t a/e H			This is the only form with two High syllables in more than one dialect.

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1103	wrinkle	jà gù, tci tú	*guì, tsì qò		gui L	phu	zdu' xy, tuə tuə	which are cog?
1104	write 1	jà	ca	sia ⁵⁵	ra - sia -	ja	je	STC 429 *riy
1105	write 2							May be a borrowing from Mandarin xiē.
1106	yawn	hà há pù	χà pù		χa - 'do'			
1107	year	pù	(à) pù	pə ³³	pu L	pə		JZY px.
1108	year after next 1		χòu pù			hop		
1109	year after next 2	dzà dzá tɕj			dz a/e -		dzɛp	
1110	year before last	dzí pù ~ zí pu	dzé pù	dzɿ ²⁴¹ pa ³³ pə ³³	dz/dz i (H) pu L	dzɛp	dzɛp	
1111	year, last	nə pù	né pù	ŋj ³¹ pə ³³	nə (H) pu L	nəp	nəp	
1112	year, next	dzá tɕj	diá tɕj	dɔ ²⁴¹ tʃhɿ ³³	dia H tchi L	e xɛ	ɛ ji	*vI vowel?
1113	year, this	tsé pù	tsé pù	tsɿ ³¹ pə ³³	tse H pu L	(pəŋk)	(tsə xə')	
1114	yellow	χá, χá tshì tshì (bright yellow)	χá, χá χà tsì (bright yellow)	χa ⁵⁵ χa ³³	χa H χa L	χɔ	stʃɔ χɔ	cf 'brass'
1115	yesterday	ní cɿ	nə sɛ	ŋj ³¹ siə ³³	ni (H) sin L	ŋj si	nəs	m2 = 'day'. cf. 'year, last', ?STC 368 *niŋ

Set	Gloss	Longxi	Mianchi	Taoping	PSQ	Mawo	Yadu	Notes
1116	yesterday (day before)	zí cǐ	dzé sè	dzɿ ³¹ si ³³ sie ³³	dzɿ (H) - 'day'	dzə si	dzəs	
1117	yoke, cow collar		nè tsü	χŋa ³¹ tsue ³³	χŋ e/a L tsue L	ciɸ	ciɸu sɸ	
1118	you (pl.)	ù lià	ú lè		'you' - lia L	(kuə ŋj χŋ)	ke lie	
1119	young	pù sù tsá	şü-tsà tsá		'age' - tsa H	şə si ma la	şues me le	LX ml = 'year'.
1120	yuán (Chinese dollar)	piá			piá -		(ɛ) piɛ	

Appendix B: Longxi and Mianchi Lexicon

- 1st earthly branch (rat) (LX) *zì kú* calque 1104.
 1st earthly branch (rat) (MC) *dzé kuè ~ dzè kuè* calque 1104.
 2d earthly branch (cow) (LX) *mà í* calque 1105.
 2d earthly branch (cow) (LX) *sì* calque 1105.
 2d earthly branch (cow) (MC) *ηò* calque 1105.
 3d earthly branch (tiger) (LX) *piá* calque 1106.
 3d earthly branch (tiger) (LX) *tcá* 'bear' 1106.
 3d earthly branch (tiger) (MC) *pì dá* calque 1106.
 4th earthly branch (rabbit) (LX) *zú [zù]* once 1107.
 4th earthly branch (rabbit) (MC) *dí* 1107.
 5th earthly branch (dragon) (LX) *cò* 1108.
 5th earthly branch (dragon) (MC) *bú* calque 1108.
 6th earthly branch (snake) (LX) *bù (tsè)* calque 1109.
 6th earthly branch (snake) (MC) *bzě* calque 1109.
 7th earthly branch (horse) (LX) *è* calque 1110.
 7th earthly branch (horse) (MC) *zòu* calque 1110.
 8th earthly branch (sheep) (LX) *tchà* calque 1111.
 8th earthly branch (sheep) (MC) *tshè* calque 1111.
 9th earthly branch (monkey) (LX) *kuà sà* calque 1112.
 9th earthly branch (monkey) (MC) *kuà sà* calque 1112.
 10th earthly branch (chicken) (LX) *ý* calque 1113.
 10th earthly branch (chicken) (MC) *ì* calque 1113.
 11th earthly branch (dog) (LX) *khù* calque 1114.
 11th earthly branch (dog) (MC) *khùè* calque 1114.
 12 earthly branches (LX) *dzý* b 1116.
 12 earthly branches (MC) *ná ì dzù* b 1116.
 12th earthly branch (pig) (LX) *piá* calque 1115.
 12th earthly branch (pig) (MC) *pià* calque 1115.
 a few (CL) (LX) *à xeí* 1353.
 a few (CL) (MC) *cá* 1353.
 a few years ago (LX) *qài à tci pú* 1144.
 a little (CL) (LX) *ná* 1352.
 a little (CL) (MC) *diè b?* cf. part 1352.
 a time (CL) (MC) *doú* 1345.
 abacus (MC) *suàN phàn* b 794.
 abandon (LX) *dà cì* 1883.
 abdomen (LX) *cí bá* 122.
 abdomen (MC) *pè tòu* 122.
 able (LX) *qà* 2195.
 able (MC) *kè zà* 2195.
 abundant (LX) *dzú* 1540.
 abundant (MC) *dió* 1540.
 abundant (methods) (LX) *que í ~ qué* 1540.
 accord with (LX) *tuè* 1889.
 accumulate (LX) *dà tshú* 2016.
 accumulate (MC) *fià tshèn thá b?* 2016.
 accurate (measure) (LX) *zì* 1442.
 accustomed (LX) *à tsò* 2458.
 accustomed (MC) *ù tsù qě* 2458.
 ache (head) (LX) *suè* 2391.
 ache (head) (LX) *íá* 2391.
 ache (head) (MC) *dzí* tone change after DO 2391.
 across the way, opposite (LX) *dà ú sì* 1058.
 across the way, opposite (LX) *dà dzí sì* 1058.
 across the way, opposite (MC) *dè tí* 1058.
 add (LX) *fià lú* 2556.
 add (LX) *tè pì* 2556.
 add (MC) *tè sǎ* 2556.
 add (salt) (LX) (*tshí*) *ká* STC 214 *tsa 1881.
 add (salt) (MC) (*tshí*) *ké* STC 214 *tsa 1881.
 add up to (amt of money) (LX) *tsì* 1965.
 add up to (amt of money) (MC) *ná ñó-ñù* how.much-add.up.to 1965.
 adjacent (MC) *qè zì* "next to" 1417.
 admire, envy (LX) *iæn³⁵ tchj* b? 2484.
 admire, envy (MC) *ià tchí* 2484.
 admit (LX) *tè lí* 1720.
 admit (LX) *tè liá* 1720.
 admit (MC) *tè tai pǔ* 1720.
 adult (LX) *mù bà* 209.
 adult (MC) *bzà mù* 209.
 advance, move forward (MC) *ì ñù* should this be glossed 'enter'? 1661.
 afraid (LX) *qò ?* STC *(g/k)rak 1958.
 afraid (MC) *qòu zà* 1958.
 after (LX) *suà xá* 1153.
 after (MC) *mè tshí qà* 1153.
 after, henceforth (MC) *mè tshí sòu dì* 1153.
 afternoon (LX) *má ñ, ì xuá* 1100.
 afternoon (MC) *mze³⁵ tsà* 1100.

- again, once more (LX) *tcá* 2634.
again, once more (LX) *thó dà cí* 2634.
again, once more (MC) *tsaĩ b* 2634.
age (LX) *pù sù* 1000.
age (MC) *şù* 1000.
aged, elderly (LX) (*fià*) *peì* 1510.
aged, elderly (MC) *à peĩ* 1510.
aged, elderly (MC) *şù lè qě* 1510.
agent/subject suffix (LX) *lè* follows subject, if DO is fronted 2645.
agitated, confused (LX) *χó tá* 1565.
agitated, confused (MC) *χuàn-tcà m1=b m2?=b* 1565.
ago, before (LX) *qè í* 1152.
ago, before (LX) *dà qeí* 1152.
ago, before (MC) *dè qè* 1152.
ago, before (MC) *fià-doú* 1152.
agree on, arrange (LX) *tsú* 2547.
agree on, arrange (LX) *ió dà b?* 2547.
agree on, arrange (LX) *tsò* 2547.
agree on, arrange (MC) *fià tĩj thà sè p,b,s,s (agr?)* 2547.
agree, consent (LX) *κò* 2114.
agree, consent (MC) *κòu* 2114.
agree, permit (LX) *dà ì b?* 2551.
agree, permit (MC) *tè κou* 2551.
air out (clothes) (LX) *phà* 2147.
air out (clothes) (MC) *dzí* 2147.
alarm, frighten (LX) *mè cà* 2078.
alarm, frighten (MC) *sì uâ* 2078.
alarm, frighten (MC) *sì zĩ* 2078.
alert (LX) *tsù í* b 1574.
alive (LX) *sè* 1501.
alive (LX) *χó dà b?* 1546.
alive (MC) *şà* 1501.
alive (MC) *χò-thá-kì-lè b-m-BOR-NOM-m* 1546.
alkali (LX) *tcêN* b. 72.
alkali (MC) *tcie* b 72.
all (LX) *à ná meì* 2630.
all (MC) *qè nà* STC #397 *(m-)kul 2630.
almond (LX) *χán tsí cì mì* 498.
almond (MC) *κà mú* 498.
almond tree (LX) *χán tsì-phù* b? 481.
almond tree (MC) *κà mù-phó* 481.
alone (LX) *ìò mó sò* b? 1594.
alone (MC) *à-qó-tsì 1-CL-m* 1594.
also (LX) *nà* 2633.
also (MC) *lè* 2633.
alter, change (v.t.) (LX) *thú nù* 1670.
alter, change (v.t.) (MC) *dè goù* 1670.
amble out and back (MC) *sù* 2274.
among, between (LX) *tcì gó* 1042.
among, between (MC) *gó tì* 1042.
amount to, add up to (LX) *à só* 1956.
amount to, add up to (LX) *à ná mì* 1956.
amount to, add up to (MC) *kè nà à iú* 1956.
analogize (MC) *tá pí fǎj b* 1780.
analogize (MC) *tà pí* b 1780.
ancestor (LX) *mè-kà* person-root 272.
ancestor (MC) *tsú cén zèn b* 272.
ancestor (MC) *tcí qù sè* 272.
ancient times (LX) *dà qeí dà qeí* 1148.
ancient times (MC) *qé ì sì sì ~ qaĩ sì sì* 1148.
and (LX) *nà* 2643.
and (MC) *ηà* 2643.
anger (someone) (LX) *qù tchì* 2244.
anger (someone) (MC) *mè-kuò tchí-zì* person-b?-CAUS 2244.
anger (someone) (MC) *kuò tchì b?* 2244.
angry (LX) *tchì tchá* 2245.
angry (LX) *tè qù tchì fià...* "make him angry" 2245.
angry (MC) *tè kuò tchì* 2245.
animal herder (LX) *khù pià cù mù s2* can be [pjə] 235.
animal herder (MC) *khùè-pià-tiù-mú ~ khùè-pià-tiù-mù* dog-pig-v-AGT 235.
animal pack (LX) *zà qó* 831.
animal pack (MC) *tuó tsì* b 831.
animal pack's worth (LX) *kuà* 1293.
animal pack's worth (MC) *kuí* 1293.
animal pack's worth (MC) *tò* b 1293.
animal shed (MC) *kuà lé* 696.
ankle (LX) *pà qè* 130.
ankle (MC) *lò sí kuè* 130.
anklet (LX) *duà-kù* leg-round 666.
answer (LX) *dà ì* b 1761.
answer (MC) *taì pù* tone var. w/ tense 1761.
answer, reply (MC) *taì pù* 1993.
answer, reply (v) (LX) *guà* 1993.
ant (LX) *mà nù* b 451.
ant (MC) *mà ì tsì* b 451.
antimony (MC) *thí thiè* b 67.
antimony (MC) *thí thì* b 67.
anus (LX) *tshé qá-(zà pù)* buttocks-hole 143.
anus (LX) *qhè-iú* feces-m 143.
anus (MC) *tchè zò-zè pú* buttocks-hole. tone change in m1 143.
appear (LX) *fià tcý* 1738.
appear (LX) (*sì*) *zí lò* 1738.
appear (LX) *fià là* 1738.
appear (LX) *sì tcý* 1738.
appear (MC) *şè tcĩ* 1738.
appearance, shape (LX) *qè bú* 1027.

- appearance, shape (MC) *bú* 1027.
 apple (LX) *ká mì* 501.
 apple (MC) *phìη gò* b 501.
 apply a coat (LX) *mú má* 1898.
 apply a coat (MC) *mà* 1898.
 apply suction cup (Ch medicine) (LX) *tshú* 1632.
 apply suction cup (Ch medicine) (MC) *tsá tòη tsì-tù tyá DO* (b) -V 1632.
 appoint (LX) *nè gá* 2280.
 appreciate (LX) *kú phé* 1911.
 appreciate, be thankful (MC) *là uí sòu* m1.2=b? exact gloss? 1911.
 April (LX) *zà là calque* 1126.
 April (MC) *zì là calque* 1126.
 apron (MC) *kai-phá tsì* front-b 646.
 area (LX) *kuà quá* 1034.
 area (MC) *zuè pè-nè-nó-bzà* place-have-how-big 1034.
 argue, debate (LX) *cì cí* 1671.
 argue, debate (LX) *phú phá* 1671.
 argue, debate (MC) *quà pú* 1671.
 arise (of sun) (LX) *uà* 1735.
 arise (of sun) (LX) *sì* ?STC 295 *m-sow 1735.
 arise (of sun) (MC) *gé tiõ [tõ]* 1735.
 arise (of sun) (MC) *gé tcí* 1735.
 arm (LX) *liè mì* ?STC 86 *lak. ?STC 394 *mu·k 131.
 arm (MC) *í dzè* 131.
 arm spread (MC) *phài* 1320.
 armpit (LX) *zá ká mù* also [kâm]. ?STC 265 *g-li ~ *k(a)li. ?STC 394 *mu·k 119.
 armpit (MC) *í dzè* 119.
 armpit (MC) *dzà ké* ?STC 265 *g-li ~ *k(a)li 119.
 around, about (LX) *thàn tsuán* b? 1054.
 around, about (MC) *qè zí* 1054.
 arrange (LX) *sì* 1636.
 arrange (MC) *ì paì thá* b 1636.
 arrange (MC) *ì tì* 1636.
 arrive, get to (LX) *pà gá* 1806.
 arrive, get to (MC) (*dê*) *phě* 1806.
 arrogant (LX) *qè á* [qə³⁵] head-dry 1577.
 arrogant (MC) *khuà có* 1577.
 arrow (MC) *là* STC 449 *bla 903.
 ask (LX) (*tà*) *zà zí* 2451.
 ask (MC) *dzì dzí* 2451.
 ask for, demand (LX) *à tsì* 2371.
 ask for, demand (MC) *mè kì khiû* 2371.
 ask for, demand (MC) *lou thà* 2371.
 askew, awry (LX) *dà qhuá* 2449.
 askew, awry (MC) *tè phián thà* b 2449.
 asparagus lettuce (LX) *κό sòn* b 543.
 asparagus lettuce (MC) *uó sìn* b 543.
 assemble (a team) (LX) *zú zú* 2008.
 assemble (a team) (MC) *gê-ká-cì uà* p-team-arrange 2008.
 assemble, rally (MC) *mè-bzà-tsó* person-big-m 2017.
 assemble, rally (MC) *mè-tsó* person-m 2017.
 astringent, puckery (LX) *sí* b 1532.
 astringent, puckery (LX) *ná* 1532.
 astringent, puckery (LX) *ñí* 1532.
 astringent, puckery (MC) *qè cà* 1532.
 at ease, assured (LX) *cì tò* 1887.
 at ease, assured (LX) *cì mì-à sì* heart-m 1887.
 at ease, assured (MC) *tiè dè lê* m1=heart 1887.
 at that time (LX) *thà dá qè* 1148.
 August (LX) *tshá lé* calque 1130.
 August (MC) *tchè là* calque 1130.
 autumn, winter (LX) *sò qeí* cold-m 1168.
 autumn, winter (MC) *só qè* cold-m 1168.
 avoid as taboo (LX) *tcí dà* b 2023.
 avoid certain food (LX) *qà tché* 2024.
 awl (LX) *ñò* 814.
 awl (MC) *tshuè tshuè* b? 814.
 awn of wheat (LX) *kè xó* 525.
 awn of wheat (LX) *kè xé* 525.
 awn of wheat (MC) *lè mià* 525.
 ax (LX) *tà í* < WT *sta ri* from STC 22 *s-ta 'knife' 850.
 ax (MC) *tè zì* < WT *sta ri* from STC 22 *s-ta 'knife' 850.
 baby (LX) *mà à tsú* 211.
 baby (LX) *má á kú tsù* 211.
 baby (MC) *cè qù zí kì (kè bzí)* 211.
 bachelor (LX) *cì só (mù)* 312.
 bachelor (MC) *bè liù-bzà* young.man-big 312.
 bachelor (MC) *à qó tsì* 312.
 back (of body) (LX) *tsò bò* 118.
 back (of body) (MC) *dé* 118.
 back basket (LX) *gú* 875.
 back basket (MC) *dzó* 875.
 back of knife blade (LX) *tcà piá tsò* 763.
 backbasket-full (LX) *quà* 1286.
 backbasket-full (LX) *gú* 1286.
 backbasket-full (MC) *dzó* 1286.
 backstrap (LX) *bià dzí* 793.
 backstrap (MC) *bà dī* 793.
 bacon (MC) *pià-khuè* pig-smoke(?) 584.2.
 bad (LX) *ke* ruined 1505.
 bad (MC) *dè (bá)* 1505.

- bad (of character) (LX) *mì iá* note semantics of s2 (1521, et al) 1505.
 bald, bare (LX) *qə pù* tones vary 1436.
 bald, bare (MC) *qè dzà* 1436.
 ball (LX) *phì tchòu* b 944.
 ball (MC) *maõ tàn* b 944.
 bamboo (LX) *pò (tí)* bamboo-straight. STC 44 *g-p(w)a. 491.
 bamboo (MC) *pù* STC 44 *g-p(w)a. 491.
 bamboo hat (LX) *tsò sà* 681.
 bamboo hat (LX) *tà bó* 681.
 bamboo hat (MC) *toù phòh* b? 681.
 bamboo shoot (LX) *pò tí tsí* 492.
 bamboo shoot (MC) *pù lè* 492.
 bamboo sieve (LX) *zuà phà sǐ sà* ?steamer 886.
 bamboo sieve (MC) *lò tí* 886.
 bamboo steamer (LX) *lòN-dzuéN* b-m 760.
 bamboo steamer (MC) *lòh tşuǎh* b 760.
 bamboo steamer (MC) *tsè* 760.
 bark (LX) *cì (phù)* *jà piá* 469.
 bark (v) (LX) *té tá* 2048.
 bark (v) (LX) *cí* 2048.
 bark (v) (MC) *tè tá* tone changes with 'dog': *khwè té tà* 2048.
 bark of firewood (MC) *sè zà piá* 469.
 bark of tree (MC) *phò-zà piá* tree-skin 469.
 barnyard grass (LX) *tsəi ts* 563.
 barnyard grass (LX) *pú* 563.
 barnyard grass (MC) *pǎi tsǐ* b? also refers to sth useless, like naughty kid 563.
 barrel (bamboo) (MC) *pù-thòh thónh* bamboo-b 789.
 barrel (of water) (LX) *zǐ* 1258.
 barrel (of water) (MC) *thiò* 1258.
 basic, fundamental (LX) *kà pú* 1014.
 basis, grounds (LX) *tcà xé* 1015.
 basket (MC) *toù tù* 790.
 basket (flat) (LX) *tchì toú tsǐ* 790.
 basket (large) (LX) *tò qó* 790.
 basket (of vegetables) (LX) *toú* b? 1285.
 basket (of vegetables) (LX) *khuán* b 1285.
 basket (of vegetables) (MC) *lò khuán* b 1285.
 basket (of vegetables) (MC) *dzó* =one backbasket-full 1285.
 bat (animal) (LX) *tshǐ-qù-mù* salt-steal?-AGT 416.
 bat (animal) (MC) *iàn laò sue* ì b ("salt mouse") 416.
 batch (of matters) (MC) *tchì* 1270.
 batch (of matters) (MC) *mè* STC 280 *mow 1270.
 batch (of things) (LX) *xé í xé?* 1274.
 batch (of things) (MC) *bò* 1274.
 bathe (LX) *xò là* 2461.
 bathe (MC) *cì pé-kuà là* body-bathe 2461.
 be (LX) *hù* 2329.
 be (MC) *huè* 2329.
 be at a place (LX) *ì* 2554.
 be at a place (MC) *zì* 2554.
 beam (LX) *qhò tá* 715.
 beam (MC) *tà* 715.
 bean, soybean (LX) *dà piá* STC 253 *be 552.
 bean, soybean (MC) *de* ì 552.
 bear (LX) *tcá* 384.
 bear (MC) *tí* 384.
 beard (MC) *khè-mù* chin-hair 112.
 beat (drum) (LX) *fió tá* 1938.
 beat (drum) (LX) *tè* ?STC 387 *tuk 1938.
 beat (drum) (LX) *fiò* tone varies 1938.
 beat (drum) (MC) *bù* 1938.
 beat, pound (LX) *sú tá* caus? b? 1750.
 beat, pound (LX) *zà tá* simp 1750.
 beat, pound (MC) *tuà tcá* [pt]. cf. 'hammer', STC 317 *tow 1750.
 beat, thump (MC) *tè gié* ?STC 387 *tuk 1623.
 become bigger (LX) *tà jú* 1672.
 become smaller (LX) *fià tsá* 1673.
 become smaller (MC) *dè bz ù bz ĩ* 1673.
 become someone's turn (LX) *xò à tsǐ* 2159.
 become someone's turn (LX) *à tsǐ* 2159.
 become someone's turn (MC) *fià phè qè* 2159.
 become someone's turn (MC) *ù kì pà qè* 2159.
 become visible (LX) *sǐ zǐ lò fià-* 2485.
 become visible, rise (sun) (MC) *qá zà-sè-tcǒ* also *ì tò* 2485.
 become, turn into (MC) *tè pǎ e > æ* 1716.
 bed (LX) *nì sǐ qà* 725.
 bed (MC) *tşhuà* 725.
 bed (MC) *nè bà* 725.
 bedbug (LX) *bò tchá-bè lò* m-bug 438.
 bedbug (MC) *bù tşá* 438.
 bedbug (MC) *tchóu tchòh* b 438.
 bee barrel/hive (LX) *bù iù-tchú quà* bee-barrel.shape 455.
 beef (LX) *sǐ piá tshǐ* 585.
 beef (LX) *mà í piá tshǐ* 585.
 beef (MC) *hò tshè* 585.
 beeswax (LX) *lé tshǐ* 455.
 beg for food (LX) *cà* 2388.
 beg for food (MC) *tchò cí mù* 2388.
 beg for food (MC) *tchò xuà mù* 2388.
 beg, request (LX) *kuà cà* 2258.
 beg, request (MC) *mè khí uà* 2258.
 beggar (LX) *khà cà mù* 249.

- beggar (MC) *tshò xuà mù* 249.
 beginning of month (LX) *lò qé* 1136.
 beginning of month (LX) *lò tóó* 1136.
 behind (LX) (*tsò*) *tà tò* 1060.
 behind (MC) *dè læN tà* 1060.
 behind (MC) (*dé*) *mè tsì* 1060.
 believe (LX) *dzà* 2496.
 believe (MC) *dzá (zà)* 2496.
 bell (MC) *khè-nìN nì neck?-b* 955.
 bell (MC) *tşou* 948.
 bell (any kind) (LX) *khè líN neck-b* 955.
 belly (LX) *tshè-tè qhuá feces-stomach *kwa* 185.
 belly (MC) *tchè-pè toú feces-stomach* 185.
 belly bend (LX) *kò dzí horse-belt* 828.
 below (LX) *qà tò xeì* 1075.
 belt (LX) *dzí ?STC 421 *du-t ~ *tu-t* 649.
 belt (MC) *dì ?STC 421 *du-t ~ *tu-t* 649.
 bend over (LX) *kù STC 307 *koy or STC *ku[-]m* 1901.
 bend over (LX) *ì kú takes fià-* 2438.
 bend over (MC) *ì mò kò* 2438.
 bend over (MC) *fià kò* 2438.
 bend over (in place) (MC) *phà thá b?* 1901.
 bend over (while walking) (MC) *ù tsì* 1901.
 bend, curve (v) (MC) *tè uán thà zì p,b,s,s* 2439.
 bend, curve (v) (MC) *tè khuè lià zì ?STC *ku[-]m* 2439.
 bend, curve (vt) (LX) *kú kuá zì* 2439.
 benefit, advantage (LX) *nà sì* 1030.
 benefit, advantage (LX) *nà ì ?s2=b* 1030.
 benefit, advantage (MC) *gé kì* 1030.
 bet (LX) *qhó* 1776.
 bet (MC) *tà tù pù s1,2=b* 1776.
 big (LX) *bà* 1404.
 big (LX) *bjà* 1404.
 big (MC) *bzà* 1404.
 big enough (LX) (*fià ká*) *gó* 2607.
 big enough (MC) *fià kuì kè* 2607.
 big enough to hold (LX) *gó* 1719.
 big enough to hold (MC) *fià kuì qè* 1719.
 billy goat (LX) *tchá cý* 345.
 billy goat (LX) *tchá dò "b?"* 345.
 billy goat (MC) *tshè dzè* 345.
 bind, hoop (v) (LX) *cì cí* 1937.
 bind, hoop (v) (MC) *xué* 1937.
 bind, hoop, make barrel (MC) *fià khú thà b* 1937.
 bind, hoop, make barrel (MC) *thiò-khù shape-b* 1937.
 bird (LX) *ì tshá* 404.
 bird (MC) *ì tshé* 404.
 bird (CL) (LX) *zà* 1239.
 bird (CL) (LX) *fiò* 1239.
 bird (CL) (LX) *zì* 1239.
 bird (CL) (MC) *qó* 1239.
 birthday (LX) *ì mù* 996.
 birthday (LX) *dà-tsé-mù m-birth-day* 996.
 birthday (LX) *dà-ì-mù m-birth-day* 996.
 birthday (MC) *gè zì* 996.
 bit (horse) (LX) *kò qú* 830.
 bit (horse) (MC) *zòu-dué horse-mouth?* 830.
 bite (MC) *kà ?STC 424 *wa* 2521.
 bite into (MC) *fià kà ?STC 424 *wa* (but cf. 'chew cud' in LX) 2522.
 bite, bite into (LX) *zé bite into takes fià, dà* 2521.
 bitten (LX) *fià zé (zì)* 2520.
 bitten (MC) *gè kà* 2520.
 bitter (MC) *qhà STC *ka* 1527.
 bitter, salty (LX) *qhà STC *ka* 1527.
 black (LX) *ñí STC *nak* 1452.
 black (MC) *nè STC *nak* 1452.
 black pepper (MC) *fù tcao b* 599.
 black soybean (LX) *dà pié ñí STC 253 *be.* V. harmony 554.
 black soybean (MC) *de-ì-nè-kí bean-black-NOM* 554.
 blacksmith (LX) *cà-dzù-mù iron-beat-AGT* 237.
 blacksmith (MC) *thè dzà* 237.
 blacksmith (MC) *cì diò mú* 237.
 blade of grass (CL) (LX) *è* 1243.
 blade of grass (CL) (LX) *zì* 1243.
 blade of grass (CL) (LX) *zué* 1243.
 blade of grass (CL) (MC) *dzí* 1243.
 blame someone (LX) *phià* 1944.
 blame someone (LX) *kuai³⁵-dà b-s* 1944.
 blame someone (MC) (*mè*) *phí* 1944.
 bland (LX) *tchá* 1531.
 bland (MC) *tshì-mí-dzù salt-NEG-enough(?)* 1531.
 blanket (LX) *tshà ì* 672.
 blanket (MC) *tshà kí s1=s* spread 672.
 bleat (LX) *zǎ* 2050.
 bleat (MC) *zè* 2050.
 blend (CAUS) (MC) *tàe xǒ thà zí ~ tàe xǒ thà zì b* 2000.
 blend with water (LX) *lú* 1698.
 blend with water (LX) *tsù lú* 1698.
 blend with water (MC) (*fià*) *ló* 1698.
 blind (LX) *fià tcuà* 2465.
 blind (MC) *mí tiù can't see* 2465.
 blind (MC) *tuà* 2465.
 blind person (LX) *mì tcuà mù* 259.

- blind person (MC) *mù tié-mí-tiù-mù* eyes-not-see-AGT 259.
 blind person (MC) *mè tié-mí-tiù-mù* eyes-not-see-AGT 259.
 blink (LX) (*fià*) *tcà ~ tcá tá* can redup., but tones? 2563.
 blink (MC) *tshù tshuá* 2563.
 block (wind) (LX) *què* 1801.
 block (wind) (LX) *qà cù ~ qà cý* 1801.
 block (wind) (MC) *liù* 1801.
 block up (v.i.) (LX) *khà dà* b 2090.
 block up (v.i.) (MC) *tàe tshuá* 2090.
 block up (v.t.) (LX) *sì khà dá (zì)* b? 2091.
 block up (v.t.) (MC) *tè tshuá ké* 2091.
 blood (LX) *sà* STC 222 *s-hwiý 160.
 blood (MC) *sà* STC 222 *s-hwiý 160.
 blow (dust) (LX) *dà phú* 1749.
 blow (dust) (LX) *phá tè* 1749.
 blow (dust) (MC) *phú* 1749.
 blow (instrument) (LX) *phú* 1748.
 blow (instrument) (MC) *phú* 1748.
 blow (of wind) (LX) *dà uà* 1941.
 blow (of wind) (LX) *phú tà* 1941.
 blow (of wind) (MC) *mè mè phú* 1941.
 blow (of wind) (MC) *mè mè-tàe-bzǎ* m-p-V 1941.
 blow (of wind) (MC) *mè mè-tè-ǎ* m-p-V 1941.
 blow nose (LX) *tí tshó* snot-m 2497.
 blow nose (MC) *tǎ* 2497.
 blow up (LX) *qà tshí* 2564.
 blow up (LX) *qà tiè* 2564.
 blow up, explode (vt) (MC) *tǎ* b 2564.
 blow up, explode (vt) (MC) *phó lè* 2564.
 blue (LX) *phú* 1457.
 blue (MC) *χué* 1457.
 boar (LX) *pià cý* 355.
 boar (LX) *pià dò* 355.
 boar (MC) *pià ké* 355.
 body (LX) *cì pí* cf. 'female'? 97.
 body (MC) *cì pe í* 97.
 body dirt (LX) *tshà qhuá* 196.
 body dirt (MC) *tò z í* STC 459 *ri(y) (?460 *kriy) 196.
 body hair (LX) *jà-χù* skin-hair 152.
 body hair (MC) *mù* 152.
 body hair (MC) *khù-maò tsì* sweat-b('body hair'). calque 152.
 boil (LX) *qò* 2596.
 boil (MC) *qà* 2596.
 boil (porridge) (LX) *qò* 1630.
 boil (porridge) (MC) *ñaò-thà* b-s 1630.
 boil (porridge) (MC) *qà* 1630.
 boil (v.i.) (LX) *tshó* STC 275 *tsyow 2093.
 boil (v.i.) (MC) *qà* 2093.
 boil, decoct (medicine) (LX) *tshú* STC 275 *tsyow 1629.
 boil, decoct (medicine) (MC) *yè-ñaò-thá* medicine-b-s 1629.
 boil, decoct (medicine) (MC) *gà z í ~ gà z ì* 1629.
 boil, decoct (small amounts) (MC) *zó* ?STC 275 *tsyow 1629.
 boiled water (LX) *tà-tshó-tsù* DIR-boil-water 609.
 boiled water (MC) *tchá* 609.
 bold, dare to (LX) *kò* 1916.
 bold, dare to (LX) *tchò* 1916.
 bold, dare to (MC) *cò (z á)* WT sdo-ba (STC 267) 1916.
 bone (LX) *jà ká* 165.
 bone (LX) *jà ká pà tsì* cf. horn 165.
 bone (MC) *zǎe kòu* 165.
 book (LX) *sú pèn* b 921.
 book (LX) *dzì tsà ì* 921.
 book (MC) *dzì tshà* older form 921.
 book (MC) *gù* b 921.
 book (CL) (LX) *poú* 1249.
 book (CL) (MC) *pè* b? 1249.
 boot (LX) *cué tsì* b 654.
 boot (MC) *bè tsì* 654.
 bore (hole) (LX) *tcí* 2618.
 bore (hole) (LX) *tsí* 2618.
 bore (hole) (MC) *dz uá* 2618.
 bore with drill (LX) *tsí* 2619.
 bore with drill (LX) *tcí* 2619.
 bore with drill (MC) *thè* 2619.
 bore with needle (LX) *tsí* 1744.
 bore with needle (MC) *dè tsí* 1744.
 bore with pile driver (LX) *tshà* 2618.
 borrow (LX) *z ì ñ ì cá* STC 190 *r-nya - STC 312 *kroy 2071.
 borrow (MC) (*tè*) *ñè cí* STC 190 *r-nya - STC 312 *kroy 2071.
 borrow, lend (money) (LX) *ni cá* STC 190 *r-nya - STC 312 *kroy 2068.
 borrow, lend (money) (MC) *ñè cí* STC 190 *r-nya - STC 312 *kroy 2068.
 borrow, lend (tool) (LX) *ni cá* STC 190 *r-nya - STC 312 *kroy 2069.
 borrow, lend (tool) (MC) *ñè cí* STC 190 *r-nya - STC 312 *kroy 2069.
 bottle (LX) *ph ñ tsì* b 775.
 bottle (MC) *ph ñ tsì* b 775.
 bottle of (CL) (LX) *ph ñ* b 1306.
 bottle of (CL) (MC) *ph ñ* b 1306.

- bottom (LX) *qà tò* 1062.
 bottom (MC) *z í lè* 1062.
 bottom (MC) *qà tà* 1062.
 bouquet (of flowers) (LX) *tsì* 1265.
 bouquet (of flowers) (MC) *tù* 1265.
 bouquet (of flowers) (MC) *tşuà* 1265.
 bow (n) (MC) *là* STC 462 *d-liy. or = 'arrow' 902.
 bowl (LX) *bú* 771.
 bowl (MC) *kóu* also "teacup" 771.
 bowl (CL) (LX) *fiò* 1231.
 bowl (CL) (MC) *qó* 1231.
 bowl (of noodles) (LX) *bú* 1262.
 bowl (of noodles) (MC) *kóu* =bowl 1262.
 bowl (of rice) (LX) *bú* cf. 'bowl' 1259.
 bowl (of rice) (MC) *kóu* 1259.
 box (LX) *cá cá* b 729.
 box (MC) *çò çò* b 729.
 box (MC) *cà cà* b 729.
 box (of medicine) (LX) *çó* 1307.
 box (of medicine) (MC) *çò* b 1307.
 bracelet (LX) *pà-kù* hand-round 665.
 bracelet (MC) *pè kuì* 665.
 brag about, show off (MC) *tà çuá* 2121.
 braid (LX) *qá-ñú* hair-silver (refers to decorations in braid) 101.
 braid (MC) *qè touí* (*şè qè piá*) 101.
 braid (MC) *şè qè piá* 101.
 braid (hair) (LX) *kà* 1667.
 braid (hair) (MC) *kè piá* 1667.
 brain (LX) *qè ñà* 164.
 brain (MC) *qè ñà* 164.
 bran (wheat) (LX) *zuà-à* wheat-skin 615.
 bran (wheat) (MC) (*lè*)-*fù-zá* wheat-bran (b)-skin 615.
 branch (LX) *cì kè mà* STC 327 *ka·k 467.
 branch (MC) *phò khà* STC 327 *ka·k 467.
 brand, iron (LX) *piá* 2133.
 brand, iron (LX) *ká* 2133.
 brand, iron (LX) *qó* 2133.
 brand, iron (MC) *piá* cook, as pancake 2133.
 brandish, wave (LX) *lì lá* cf. 1985 1994.
 brandish, wave (MC) *taì iaò thá* m2=b n.b VH 1994.
 brandish, wave (MC) *z aó thá* b? 1994.
 brandish, wave (MC) *tà dú dà* 1994.
 brass (LX) *çá* 61.
 brass (MC) *doú* 61.
 brave (MC) *tàn tsì-bzà* b(gall bladder)-'big' (calque) 1579.
 brave (a little) (LX) *tchè* 1579.
 brave (extreme, as in battle) (LX) *tcì tcá* 1579.
 bray (donkey) (LX) *ñú* STC 261 *u 2045.
 bray (donkey) (MC) *zě* 2045.
 break (bowl) (CAUS) (MC) *şè tşhè* (*tşhá*) ?STC 185 *tşat 2233.
 break (bowl) (CAUS.) (LX) *dà kè* 2233.
 break (bowl) (CAUS.) (LX) *qà tşí* STC 185 *tşat 2233.
 break (bowl) (SIMP) (MC) *koú şè tşhè* STC 185 *tşat 2232.
 break (bowl) (SIMP) (MC) *qhà là* 2232.
 break (bowl) (SIMP.) (LX) *dà kè* 2232.
 break (branch) (v.i.) (LX) *kò là* takes *dà* pfx 1849.
 break (branch) (v.i.) (MC) *tè lù liã* 1849.
 break (branch) (v.i.) (MC) *té lù* 1849.
 break (branch) (v.t.) (LX) (*tè*) *çà là* 1850.
 break (branch) (v.t.) (MC) *tè lù liã zî* 1850.
 break (thread) (v.i.) (LX) (*dà*) *bà* STC 254 *be ~ *pe 1847.
 break (thread) (v.i.) (MC) *şè phã* STC 254 *be ~ *pe 1847.
 break (thread) (v.t.) (LX) *phú phá* STC 254 *be ~ *pe 1848.
 break (thread) (v.t.) (MC) *şè phà zî* STC 254 *be ~ *pe 1848.
 break by poking (LX) *dà tcí* p-v 1754.
 break by poking (LX) *dà biá* p-v. STC 254 *be ~ *pe 1754.
 break by poking (MC) *cè liá phj* 1754.
 break by poking (MC) *tşou-ñà-şè-qhà-lã* m-m-p-break-ASP 1754.
 break law (LX) *dà tsà* ?STC 185 *tşat 1876.
 break law (MC) *dz ì tè tşhè* ?STC 185 *tşat 1876.
 break open (LX) *qà* 1635.
 break open (LX) *qó tchá* 1635.
 break open (MC) *şà pán thá* b 1635.
 break open (MC) *tè tşhè* STC 185 *tşat 1635.
 break open (MC) *şè kè* 1635.
 break out (with pox) (LX) (*tè*) *cì* diff from "treat illness" only in pfx 1733.
 break out (with pox) (MC) *deì tşou* ?< Ch. doù 1733.
 break out (with pox) (MC) *deì tşou şè* 1733.
 break out (with pox) (MC) *şé tió* 1733.
 break to bits (LX) *dà kè* 2367.
 break to bits (LX) *qà tşí* STC 185 *tşat 2367.
 break to bits (LX) *à bà dzý* STC 254 *be ~ *pe 2367.
 break to bits (MC) *fià tchá-ñà-tè bé bè* break-and-broken to bits 2367.
 break to bits (MC) *fià tchá-ñà-şà qà là* break-and-damage 2367.

- break up (meeting) (LX) *dà sǎn dà* b 2292.
 break up (meeting) (MC) *dè phù phù* simplex 2292.
 break up (meeting) (MC) *dè lè qè* 2292.
 breakfast (LX) *tshá* 576.
 breakfast (MC) *tsuà tchó* 576.
 breast (LX) *nà ná* STC 419 *nuw 121.
 breast (MC) *nà ná* STC 419 *nuw 121.
 breath (LX) *mú sú* STC 485 *sak 189.
 breath (MC) *tchì-thè* b-breathe 199.
 breed, reproduce (LX) *dà íà* 1875.
 breed, reproduce (LX) *dà ì fià lú* notes 1875.
 breed, reproduce (MC) *tè sǎ* 1875.
 breeding yak, stud (LX) *tchà tchà mí dò* 321.
 breeding yak, stud (MC) *zì-sà* bull-breed 321.
 brick (LX) *tsuán* b 701.
 brick (MC) *tshuán* b 701.
 bridge (LX) *tshá* (tò) 94.
 bridge (MC) (lò) *tshá s1=stone* 94.
 bridge (CL) (LX) *cá* 1253.
 bridge (CL) (MC) *tó* 1253.
 bright (LX) *cuá* 1551.
 bright (LX) *cuá* 1460.
 bright (MC) *cyá* 1460.
 bright (MC) (*kè kè*) *cyá m1,2=emphatic* 1551.
 bright (sky) (LX) *mú cuá* 2398.
 bright (sky) (MC) *fià cyà (qě)* 2398.
 bright red, glowing (LX) *cí tsì tsì* vd/vl 1603.
 bright red, glowing (MC) *ná nà tsì* 1603.
 bright yellow, golden (LX) *chá tshì tshì* 1604.
 bright yellow, golden (LX) *chá bò bò* 1604.
 bright yellow, golden (MC) *chá chà tsì* 1604.
 brightness (LX) *cuá* 3.
 broad bean (LX) *fù toú ~ fù toũ* b 555.
 broken (MC) *sè qà là (zí)* 2161.
 broken (bamboo) (LX) *dà kè* 2231.
 broken (bamboo) (LX) *dà qà tshí* 2231.
 broken (bamboo) (LX) *dà bà* STC 254 *be ~ *pe 2231.
 broken (bamboo) (LX) *dà tchà* 2231.
 broken (bamboo) (MC) *sè pě* STC 254 *be ~ *pe 2231.
 broken (bamboo) (MC) *qhà là* 2231.
 broken (bamboo) (MC) (*pù*) *sè dzì* 2231.
 broken to bits (LX) *dzý dzý* 2366.
 broken to bits (LX) *fià dzà* 2366.
 broken to bits (LX) *fià dzuè dzý* 2366.
 broken to bits (MC) *tè bé bè* STC 254 *be ~ *pe 2366.
 bronze (LX) *chá-cí* brass-red 62.
 bronze (MC) *doú* 62.
 broom (LX) *tcuè-là* m-wash(?) 735.
 broom (MC) *dz uà* 735.
 broom (CL) (LX) *cá* 1245.
 broom (CL) (MC) *dz à* 1245.
 broom (CL) (MC) *pà* b 1245.
 broom (CL) (MC) *qó* 1245.
 brothers (LX) *tù n, i* preferred form. STC 271 *na·w 292.
 brothers (LX) *tú tsù =yo.* bro 292.
 brothers (MC) *pí mù* said by sis 292.
 brothers (MC) *tòu tsú* said by bro 292.
 brush (LX) *suà tsì* b 734.
 brush (MC) *suà tsì* b 734.
 brush teeth (LX) *qá-çò là* face-wash 2348.
 brush teeth (MC) *qè çuà là* 2348.
 brush, comb (v) (LX) *cý* STC 466 *m-si(y) (could be borrr) 2339.
 brush, comb (v) (MC) *qà tò suí* STC 466 *m-si(y) 2339.
 bucket, barrel (LX) *tsù tì* 782.
 bucket, barrel (MC) *thiò* 782.
 buckwheat (LX) *zuà ká*? STC 150 *mruw 523.
 buckwheat (MC) *dzuà ká* gloss? ?STC 150 *mruw 523.
 bud (LX) *pá tsù (qò) tcy ~ pá tsì* 477.
 bud (MC) *tià tiá* 477.
 buff leather (LX) *bà lò zuà* 2188.
 buff leather (MC) *bè liù tshì* 2188.
 bug (LX) *bù lò* 437.
 bug (MC) *bò lò* 437.
 build (frame) (LX) *liá* 1760.
 build (frame) (MC) *tshú* 1760.
 build (house) (LX) *qeì* 1906.
 build (house) (LX) *qhù* 1906.
 build (house) (LX) *tshù* 1906.
 build (house) (MC) *qhué* 1906.
 building (LX) *lò kè* 692.
 building (LX) *kè* multi-story 692.
 building (MC) *loù fān* b 692.
 building (multi-story) (MC) *lòu-ké* b-pillar(?) 692.
 bulb of fritillary (LX) *qò pú* 572.
 bulb of fritillary (MC) *peí mù* b 572.
 bull (LX) *mà í dò* 326.
 bull (LX) *mà í zì* 326.
 bull (MC) *zì* 326.
 bullet (LX) *tsí* b? 899.
 bullet (MC) *zui* PTB *dzəy. cf. pit/stone, testicles 899.
 bully (v.t.) (LX) *qè tcí* 2237.
 bully (v.t.) (MC) *tchí thà* b? 2237.
 bundle (of rags) (LX) *zò* 1287.

- bundle (of rags) (LX) *tchòu* 1287.
 bundle (of rags) (MC) *khuè* 1287.
 bundle (of things) (LX) *què* 1305.
 bundle (of things) (MC) *tà pò* 1305.
 bundle (of things) (MC) *quà* 1305.
 bundle wrapped in cloth (LX) *cì zì* 845.
 bundle wrapped in cloth (MC) *qhuà* STC 479 *klup 845.
 bundle, bunch (of vegetables) (LX) *tsuà* 1254.
 bundle, bunch (of vegetables) (MC) *tʃuà b?*,
 ?ʃ? handspan 1254.
 burn (LX) *à tsú* STC 275 *tsyow 2575.
 burn (LX) *pù cá bù* for older speakers 2575.
 burn (LX) *dà uà* 2575.
 burn (LX) *tà xú* 2575.
 burn (MC) *tè tǐ* 2575.
 burn (MC) (*mú*) *dè uě* 2575.
 burn (n.) (MC) *ʃè thè thoǔ* 154.
 burn grass in field (LX) *zù mù cù* 2310.
 burn grass in field (MC) *sè lí pù tià* 2310.
 burn grass in field (MC) *sè lí lè* 2310.
 bury (LX) *bé* STC 376 *bip ~ *pip 2172.
 bury (MC) (*fià*) *bí* STC 376 *bip ~ *pip 2172.
 businessman (LX) *tà cí-pù-mù* m-do-AGT 224.
 businessman (MC) *pà nà-pò-mú* thing-sell-AGT 224.
 busy (LX) *tchá* 1537.
 busy (MC) *bà* 1537.
 busy (MC) *dz í kou* 1537.
 butter (MC) *sú ioù* b 594.
 butter lamp (MC) *təŋ-tʂà* b-m 738.
 butterfly (MC) *tshè bì bì* 459.
 buttocks (LX) *tshí-qá* feces-m 125.
 buttocks (MC) *tshè-zó* feces-m 125.
 button (LX) *ŋù tsì* b 634.
 button (MC) *liù tsì* b 634.
 button (v) (LX) *khoù-dà* b-s 2117.
 button (v) (MC) *khoù-thà* b-s 2117.
 buttonhole (LX) *ŋù phàn tsì* b? 635.
 buttonhole (LX) *ŋù mià* b-mother? 635.
 buttonhole (MC) *liù tsì* b 635.
 Buwa village (on hill above Wenchuan) (LX) *bù bá*.
 buy (LX) *pú* ?STC 293 *b-rey 2173.
 buy (MC) *dè pò* ?STC 293 *b-rey 2173.
 cadre (MC) *qé qè* 225.
 calf (LX) *mà lià tsú* 325.
 calf (MC) *ŋò bò tsú* 325.
 calf of leg (LX) *duà qà-tsá* leg-small 128.
 calf of leg (LX) *duà qà bé* 128.
 calf of leg (MC) *duà bʒù bʒ í* 128.
 call (person) (LX) *kuǎ* 1960.
 call (person) (MC) *kuǎ* 1960.
 call (person) (MC) (*mè*) *kuá* 1960.
 call dog (LX) *kuǎ* 1986.
 call dog (MC) *kuǎ à* [kwǎ] 1986.
 call to mind, recollect (LX) *bà ló* 1992.
 call to mind, recollect (MC) *bè dz óu* 1992.
 called (name) (LX) *kuǎ* 1960, 1986 2054.
 called (name) (MC) *kuǎ* 2054.
 candle (LX) *là tsò* b 743.
 candle (MC) *lé tʃuè* 743.
 cane, vine (LX) *zà bà lí* 493.
 cane, vine (MC) *lè bʒ è* 493.
 cannon (MC) *phó* b? 901.
 canter, trot (LX) *tsà* 2215.
 canter, trot (LX) *tshì tshì* 2215.
 canter, trot (MC) *ʃè dz í* 2215.
 cape, cloak (LX) *lià kù* 648.
 cape, cloak (MC) *tshaò mú tsì* m1=b? 648.
 care for orphan (MC) *lé xuè* 2123.
 careful (LX) *cì mǐ-tcí* heart-small (semantic b) 2493.
 careful (LX) *cì mǐ-tsá* heart-small (semantic b) 2493.
 careful (MC) *à qhà tsí* "slowly" 2493.
 careful (MC) *təN cì* b "dan xin" 2493.
 careful, attentive (LX) *pà cí* 1574.
 careless, slipshod (LX) *xù lì xú tá* 1613.
 careless, slipshod (MC) *tié-qè-mǐ-tè* heart-m-not-put 1613.
 carpenter (LX) *cì zì-pù-mù* wood-do-AGT 236.
 carpenter (MC) *mè dzà* 236.
 carry (MC) *tshò* 1658.
 carry (books) on back (LX) *só* 1658.
 carry (books) on back (MC) *bià* STC 26 *ba 1658.
 carry (child) on back (LX) *bià* STC 26 *ba 1656.
 carry (child) on back (MC) *bià* STC 26 *ba 1656.
 carry (money) (LX) *lé* 1793.
 carry (money) (LX) *téy* 1793.
 carry (money) (LX) *dá* 1793.
 carry (money) (LX) *tshou* 1793.
 carry (money) (MC) *zyá* 1793.
 carry in lap (LX) *què* 1840.
 carry in lap (MC) *tà quà* 1840.
 carry off (LX) *tà thè qà* 2377.
 carry off (MC) *tè tuì qè* 2377.
 carry on back (of animal) (LX) *qá* 2435.
 carry on back (of animal) (MC) *ké* 2435.
 carry on shoulder (LX) *thè* 2376.

- carry on shoulder (MC) *tuì* 2376.
 carry with pole (LX) *tuì* 2403.
 carry with pole (MC) *tuì* 2403.
 carve (LX) *khé dà* b 2113.
 carve (MC) *thiò* 2113.
 cast aside, skim off (LX) *sá* takes *zì*, *dà* 2224.
 cast aside, skim off (MC) *dê tshù* 2224.
 cast aside, skim off (MC) *dê níŋ tò* b 2224.
 castrate (LX) *kaì dà* b 2509.
 castrate (MC) *ì sán thà* b? 2509.
 castrate (MC) *khu í* 2509.
 cat (LX) *mà nù* 363.
 cat (MC) *mè nòu* 363.
 catch cold (LX) *tà liàn dá* b 2577.
 catch cold (LX) *thò cì* 2577.
 catch cold (LX) *thò cì* 1910.
 catch cold (MC) *tè toú* 2577.
 catch cold (MC) *tè toú* 1910.
 catch hold of (LX) *tsé* 2600.
 catch hold of (MC) *zì tà* also steal? 2600.
 catch on fire (LX) *uà* 1816.
 catch on fire (LX) *χύ* *tà* 1816.
 catch on fire (MC) *dê uě* 1816.
 caterpillar (LX) *dà* 460.
 caterpillar (MC) *bò lò* "bug" 460.
 catty (500 grams) (MC) *ké* 1309.
 catty (of meat) (LX) *tcí* 1294.
 catty (of meat) (MC) *ké* 1294.
 catty and a half (LX) *à tcí kuè zò* 1312.
 catty and a half (MC) *à ké nà kuà dzòu* 1312.
 catty, half-kilo (LX) *tcí* b? 1309.
 CAUS (LX) *zí* 2330.
 CAUS (MC) -*zɿ* tone varies 2330.
 cause landslide (LX) *kù lí* 1660.
 cause landslide (LX) *bò kuá* 1660.
 cause landslide (MC) *fià dzuà zí* 1660.
 celebrate (new year) (LX) *dzá* 1953.
 celebrate (new year) (MC) *diá dià* 1953.
 center, hub (LX) *tcì gó*?STC 299 *s-tay. 1043.
 center, hub (MC) *tié tì* STC 299 *s-tay (ml = 'heart') 1043.
 center, hub (MC) *tié qá* STC 299 *s-tay 1043.
 centipede (LX) *dâ* or *dâ à/* 446.
 centipede (MC) *lue-ì-kón tshòŋ* b ("lightning-bug") 446.
 chaff, bran (LX) *zuà pú* STC#170 *pwa-y 614.
 chaff, bran (MC) *lè pú pù* wheat-bran-bran STC #170 *pwa-y 614.
 chaff, bran (MC) *í mè-pù pù* ~ *í mè-pú pù* b (maize)-m 614.
 chaff, bran (MC) *dzuè pú* STC#170 *pwa-y 614.
 chain (LX) *cà tsù* 821.
 chain (MC) *ŋèn tsì* b 821.
 chair (LX) *bè dé* 723.
 chair (LX) *bà dé* 723.
 chair (MC) *ì tsé* 723.
 change into (LX) *tà zù* 1979.
 chapter (CL) (LX) *zuè* 1237.
 chapter (CL) (MC) *tshí* 1237.
 charcoal (LX) *mú dzí* 69.
 charcoal (MC) *mè dzí* 69.
 chase after (LX) *χύ χύ* STC 354 *s-nun 2608.
 chase after (LX) *χύ nù* STC 354 *s-nun 2608.
 chase after (MC) *tshí tshè* 2608.
 chat (LX) (*mù*) *tó zà mù* 2148.
 chat (MC) *dá tsj* 2148.
 check account (LX) *tshá dá* tones? b? 1692.
 check account (LX) *tsà* 1692.
 cheek (LX) *tcí piá* 109.
 cheek (LX) *qá tché* 109.
 cheek (MC) *dué pià* 109.
 cheek (MC) *tcí pià* preferred form 109.
 chess (LX) *tchì tchí* b 945.
 chess (LX) *tchì tsì* b 945.
 chest (LX) *bó qhuà* 120.
 chest (MC) *tié mù zè* 120.
 chest (MC) *sé qè bàN bà* 120.
 chew cud (LX) *tshì tà qhuá-jà qú* stomach-return 1874.
 chew cud (LX) *ì jà qú* 1874.
 chew, munch (LX) *tsà tsá* 2041.
 chew, munch (MC) *tse í tsá* 2041.
 chi (1/3 meter) (LX) *tshí* 1321.
 chi (1/3 meter) (MC) *tshé* 1321.
 chick (LX) *ý mià qhuá zý* = iy 368.
 chick (LX) *ý-tsuá tsù* chicken-m-small 368.
 chick (MC) *ì tsà tsú* 368.
 chicken (LX) *ý* 365.
 chicken (MC) *ì* 365.
 chicken shed (LX) *ý kù* 700.
 chicken shed (LX) *ý iuà kù* 700.
 chicken shed (LX) *ý tcí* 700.
 chicken shed (MC) *ì bú s2=nest* 700.
 child (LX) *tcí bí* 210.
 child (MC) *kè bz* *ì tsì* sometimes *qà* 210.
 chili pepper (LX) *χò tshó* b? 539.
 chili pepper (MC) *χài tchò* b ("sea(=foreign) pepper") 539.
 chin (LX) *tcí piá* 114.
 chin (MC) *khè* STC 470 *(m/s-)ka 114.
 china fir (LX) *lè (phù)* 484.

- china fir (MC) *pè sé phò* fir? 484.
 Chinese angelica (MC) *tán kue í* b 570.
 Chinese caterpillar fungus (LX) *χà qá bò* lò 571.
 Chinese caterpillar fungus (MC) *tchón tshaò* b tone varies on l. 571.
 Chinese chestnut (MC) *páN n̄* b variation. 504.
 Chinese chives (LX) *kà tci* 534.
 Chinese New Year (MC) *diá* 1141.
 Chinese toon, tree of heaven (LX) *tchuán ià tsì* (*phù*) 489.
 Chinese toon, tree of heaven (MC) *bù sè phò* 489.
 Chinese toon, tree of heaven (MC) *bù sé phò* 489.
 chisel (LX) *tshō tsì* b 852.
 chisel (MC) *zò* b? 852.
 chisel (v) (LX) *tsí* 2558.
 chisel (v) (LX) *tshà* 2558.
 chisel (v) (MC) *zò* 2558.
 chop meat (LX) *tshuá dà* STC 240 *tsywar 1856.
 chop meat (MC) *liá* 1856.
 chopsticks (LX) *bè tcá* 774.
 chopsticks (MC) *dù* 774.
 cicada (MC) *tshè cý cý* 450.
 circle, linger (LX) *su ì qò* ?STC *349 *kor 2212.
 circle, linger (MC) *zì zé* 2212.
 cistern (LX) *tsù tshóu* water-b? 880.
 cistern (LX) *tsú-tí* water-m 880.
 cistern (MC) *tsuè tshóu* 880.
 city (LX) *qè cì* 77.
 city (MC) *qè tá* 77.
 claw (LX) *cà qú* s2=pointy 380.
 claw (MC) *ì-gòu-gú* bird-foot-m 380.
 clay idol (LX) *bú z̄-à bú tchj* mud-god 970.
 clay idol (LX) *χè bù* 970.
 clay idol (MC) *à pà sé* "god" 970.
 clay wine warmer (MC) *tshú-kuà* liquor-mud/clay 761.
 clean (LX) *có* cf 1544. STC p53 *t(s)yan 1541.
 clean (MC) *có tè* STC p53 *t(s)yan 1541.
 clear (LX) *có* STC p53 *t(s)yan 1470.
 clear (MC) *tshì* 1470.
 clear (sky) (LX) *mú qá* 2397.
 clear (sky) (MC) *mú gè* sky-good? 2397.
 clear up (LX) *tì* 1721.
 clear up (LX) *tò* 1721.
 clear up (MC) *fià tshǐ* 1721.
 clear, distinct (LX) *pà tci* cf. speech 1552.
 clear, distinct (MC) *uá* look at again 1552.
 clear, obvious (LX) *sì* 2184.
 clear, obvious (LX) *tshà tshà* 2184.
 clear, obvious (LX) *qé dú* 2184.
 clear, obvious (MC) *sì uá* he knows (perf?) 2184.
 clear, obvious (MC) *sì zá* 2184.
 clear, obvious (MC) *χuè* 2184.
 clever (LX) *tshà tshà* 1571.
 clever (MC) *tsé χà* 1571.
 cliff (MC) *zà (lò)* ?STC 329 *r-ka[-]m 28.
 climb (hill) (LX) *pá cà* 2207.
 climb (hill) (MC) *tsì qá* 2207.
 climb (tree) (LX) *pá cà* 2208.
 climb (tree) (MC) *tsì qá* 2208.
 close (book) (LX) *queì* 1968.
 close (book) (LX) *zì quà* 1968.
 close (book) (MC) *quà* 1968.
 close (door) (LX) *quà* 1945.
 close (door) (MC) *sè quà* 1945.
 close (eyes) (MC) *fià sé* 1665.
 close (mouth) (LX) *tcuà* 1665.
 close (mouth) (LX) *qú* 1665.
 close (mouth) (MC) *fià piá* 1665.
 close eye (LX) *tcà* 2179.
 close eyes (MC) *sé* cf. cover 2179.
 close to (LX) *zì zà* 1622.
 close to (LX) *à zí zá* 1622.
 close to (MC) *ì dzà* 1622.
 close up (v) (LX) *tchý* takes à, ì 1947.
 close up (v) (LX) *qù cù* 1947.
 close up (v) (LX) *quà* (?related to qù) 1947.
 close up! (MC) *ì khu í* 1947.
 close, near (LX) *pié pù* 1417.
 close, near (LX) *sè* 1417.
 close, near (MC) *z í-zè* road-close 1417.
 cloth (LX) *bù miá* 620.
 cloth (MC) *bz ù miá* 620.
 clothing (LX) *phò* 625.
 clothing (LX) *gu í s̄* [guis] STC 160 *gwa ~ *kwa 625.
 clothing (MC) *phù* 625.
 clothing (CL) (LX) *pè* 1268.
 clothing (CL) (LX) *lè* 1268.
 clothing (CL) (MC) *lè* 1268.
 cloud (LX) *dá mù* sometimes [dam^{s1}] 7.
 cloud (MC) *dá mò* 7.
 cluck (chicken) (LX) *kuǎ* 2043.
 cluck (chicken) (MC) *zè* 2043.
 clump of trees (CL) (MC) *tsuàN tsuáN* 1250.
 clutch, grasp (LX) *tsé* = 2600 2609.
 clutch, grasp (MC) *zò pà* 2609.
 coal (LX) *χè-n, í* earth-black. ?STC *r-ka

- 'earth' 68.
 coal (MC) *mei thǎN* b 68.
 cockscomb (LX) *ý zò* 369.
 cockscomb (MC) *tcí kuán tsì* b 369.
 coffin (LX) *suò bó* 682.
 cogongrass (for bedding) (LX) *χò* 564.
 cogongrass (for bedding) (LX) *χà qá* 564.
 cogongrass (for bedding) (MC) *mào tshào* b 564.
 coil up (snake) (LX) *kù lì* 2213.
 coil up (snake) (MC) *fià tchuán thà* b 2213.
 coil up (snake) (MC) *sù* 2213.
 collapse, landslide (LX) *kò kuá* 1659.
 collapse, landslide (LX) (*à*) *dzà* 1659.
 collapse, landslide (MC) *fià dzuǎ* 1659.
 collar (LX) *mò qà* 626.
 collar (MC) *nìŋ* b 626.
 collect capital (LX) *tshú* 2015.
 collect capital (MC) *tshèn thá* b 2015.
 collect capital (MC) *fià tsuǎ* 2015.
 collide (LX) *tshí tshá tǎ-* 2220.
 collide (MC) *ì χò* 2220.
 collide (MC) *tè phòŋ thà* b 2220.
 color (LX) *jí quí* really /q/? 1032.1.
 color (MC) *iǎN sè* b 1032.1.
 colorful (LX) *pá tsý* =flower 1567.
 colorful (MC) *tià tiá* 1567.
 colorful cloth worn on head (LX) *phà tsì* b. 642.
 colt, foal (LX) *kò mù tsú* 336.
 colt, foal (MC) *zòu bò tsú* 336.
 comb (n) (LX) *qà-cý* hair-comb(v). STC 466 *m-si(y) 655.
 comb (n) (MC) *qè suí e ~ ε*. STC 466 *m-si(y) 655.
 come (LX) *lò* 2130.
 come (LX) *tcý* 2130.
 come (MC) *ŋù* used for rain 2130.
 come out (LX) *sì lò* 1736.
 come out (MC) *šé ŋù* 1736.
 come to, wake up (MC) *sì* ?STC 275 *m-sow 2498.
 come to, wake up (v.i.) (LX) *tà mà zè* add -zǐ for CAUS 2498.
 come to, wake up (v.t.) (LX) *tà mà zè zǐ* 2498.
 comfort (LX) *ió* 1972.
 comfort, console (LX) *ióN* 1627.
 comfort, console (LX) *tchà* 1627.
 comfort, console (MC) *sù dzá* 1627.
 comfort, console (MC) *tchuán thà* b 1627.
 comfortable (LX) *nà* 1591.
 comfortable (MC) *zì-nà* life-good 1591.
 commit crime (LX) *zue í-dà-tsa* b-s-m 1877.
 commit crime (MC) *dzuì uè* 1877.
 commoner (LX) *tshuá qù mù* 221.
 commoner (MC) *pè se í* b? 221.
 companion (LX) *ý zù* 271.
 companion (MC) *ì dzòu* 271.
 compensate (LX) *phé (zì)* b? 2217.
 compensate (MC) *bà* 2217.
 compete (LX) *pì dá* b 1663.
 complete (LX) *tè pè à* 1716.
 complete (LX) *tchì dá* b? 2269.
 complete (LX) *fiǎ tù* 2269.
 complete (MC) *qá nǎ m2=sfx?* 2269.
 complete (MC) *dzí qě* 2269.
 complete, all (LX) *à só* 1403.
 complete, all (MC) *qè nǎ* 1403.
 complete, finish (LX) *dà ì* 1717.
 complete, finish (LX) *sà qò* b. 1717.
 complete, finish (MC) *tè šà qǒ* b? 1717.
 complete, finish (MC) *tè có ~ tè cò* 1717.
 conceal, hold back (LX) *à lià* 2529.
 conceal, hold back (MC) *tù* 2529.
 conceal, hold back (MC) *mǎn thá* b 2529.
 conceal, hold back, keep secret (LX) *mà cá* 2529.
 conditions (LX) *thiào tǎn* b 1008.
 confused (LX) *qà là qà tchuà* tones vary? 1615.
 confused (MC) *tè qé tè kuà* 1615.
 connect, join (MC) *ì khou* 2060.
 conquer (LX) *dà ià* 2613.
 conquer (LX) *dà ì* 2613.
 conquer (MC) *fià z uá* 2613.
 construct (dam) (LX) *iú* 2598.
 construct (dam) (MC) *tshú* cf. repair. calque? 2598.
 construct a wall (LX) *dzí* 1778.
 construct a wall (LX) *zà tá* 1778.
 construct a wall (MC) *lò zù-tchú* stone.wall-m 1778.
 construct a wall (MC) *bè zì-tşò thá* dirt-b?-s 1778.
 contend for (LX) *bú bá* 2586.
 contend for (MC) *zì tà* 2586.
 contented, satisfied (LX) *à pà* 2169.
 contented, satisfied (LX) *zǐ bè* 2169.
 contented, satisfied (LX) *tà suà* 2169.
 contented, satisfied (MC) *dzí qè* 2169.
 contented, satisfied (MC) *dzí zì* CAUS? 2169.
 continue (MC) *ioú ŋù cì* 2026.
 contract illness (LX) (*à*) *tò* 1747.
 contract illness (LX) *tsá* 1747.

- contract illness (MC) *té tiě* 1747.
 convene (LX) (*dà*) *kuá tà* 2578.
 convene (MC) *kuè* 2578.
 convince (LX) *ió* 2531.
 convince (LX) *dà só* also à 2531.
 convince (LX) *dà só sà* 2531.
 convince (MC) *sù dzá* 2531.
 convince (MC) *mê-tou-thà* person-b-s 2531.
 convince, deceive (MC) *gě gě* 2531.
 cook (n.) (LX) *mà má-pù-mù* food-do-AGT 241.
 cook (n.) (LX) *tè qhuá-pù-mù* food-do-AGT 241.
 cook (n.) (MC) *tchò tì-pù-mù* ~ *tchòu tì-pù-mù* vegetable-do-AGT. According to consultant, monophthong is archaic. 241.
 cooked (LX) (*fià*) *mù* STC 432 *s-min 2344.
 cooked (MC) (*fià*) *mù* STC 432 *s-min 2344.
 cooking spatula (LX) *cè pí* 767.
 cooking spatula (MC) *tshuàn tsì* b 767.
 cool (LX) (*fià*) *tó* 1519.
 cool (MC) *liàn khué* b 1519.
 cool (of water) (LX) *tó* 1516.
 cool (of water) (MC) *toú* 1516.
 cool (of weather) (LX) *mù pá* 1515.
 cool (of weather) (MC) *toú* 1515.
 cool (v.) (LX) *tó* various pfxs 2145.
 cool (v.) (MC) *fià toú zì* 2145.
 cooled off (rice) (LX) *tó* 2144.
 cooled off (rice) (MC) (*tchò*) *fià toú* verb=s3 2144.
 copulate (LX) *qhé* 1624.
 coral (MC) *suáN fù* b? 661.
 coriander, cilantro (LX) *χò-qò tsù* fragrant-m. calque? 535.
 corn, maize (LX) *í mà* b 526.
 corn, maize (MC) *í mè* b 526.
 corner (LX) *kú kó* 1051.
 corner (MC) *dzò dzó* 1051.
 corpse (LX) *mó* 202.
 corpse (MC) *mó* 202.
 correct, right (LX) *nà* 'good' 1497.
 correct, right (LX) *xe* ì also ?=good 1497.
 correct, right (LX) *ià* 1497.
 correct, right (MC) *tàe pǎ* m1=px 1497.
 correct, right (MC) *nuè* 1497.
 corridor (LX) *hàN háN* 689.
 cotton (MC) *miàN xuà* b 528.
 cotton overcoat (LX) *no tsì* 630.
 cotton overcoat (LX) *miàN-no* b-? 630.
 cotton overcoat (MC) *no tsì* b? 630.
 cotton wadding (LX) *qè* ì 673.
 cotton wadding (LX) *miàN xuá* b 673.
 cotton wadding (MC) *miàN xuà-(phù ké)* b(cotton)-fabric(?) 673.
 cotton-padded mattress (LX) *tshà ì* 674.
 cotton-padded mattress (MC) *zò tsì* b 674.
 cough (LX) *tshú tá* ? STC 423 *su(w) 2111.
 cough (MC) *tshò xuá* ? STC 423 *su(w) 2111.
 count (v) (LX) *sú* b 2347.
 count (v) (LX) *sù-dá* takes *dà*. b-s 2347.
 count (v) (MC) *sú suà* b? 2347.
 country, nation (MC) *zé qà* 76.
 courtyard (LX) *iuàN bá* b 688.
 courtyard (MC) *qhó* 688.
 courtyard (MC) *yǎn tsì-qà* b-m 688.
 courtyard (MC) *yàN pá* b 688.
 cover (LX) *tà qhó* u x o. STC 479 *klup 916.
 cover (LX) *qhù tá* STC 479 *klup 916.
 cover (n.) (MC) *tshà qù* for pot. STC 479 *klup 916.
 cover (n.) (MC) *qà qù* for cup. STC 479 *klup 916.
 cover (v.t.) (LX) *qhú* STC 479 *klup 2178.
 cover (v.t.) (LX) *que* ì STC 479 *klup 2178.
 cover (v.t.) (MC) *fià tshué* 2178.
 cover (v.t.) (MC) *fià qhué* STC 479 *klup 2178.
 cover (v.t.) (MC) *fià lòn thá* p,b,s 2178.
 cover (with blanket) (LX) *qe* ì STC 479 *klup 1905.
 cover (with blanket) (LX) *qhù* STC 479 *klup 1905.
 cover (with blanket) (MC) *qhué* STC 479 *klup 1905.
 cover (with earth) (LX) *bé* 1904.
 cover (with earth) (LX) *qhú* STC 479 *klup 1904.
 cover (with earth) (MC) *qhué* cf. quilt. STC 479 *klup 1904.
 cover up, shade (LX) *qhú* STC 479 *klup 2584.
 cover up, shade (LX) *qù cù* STC 479 *klup 2584.
 cover up, shade (LX) *qú tá* 2584.
 cover up, shade (MC) *quà* STC 479 *klup 2584.
 cover, muffle (MC) *duè tsì* 2454.
 cover, muffle (MC) *duè mòng thá* b 2454.
 cover, muffle (with hand) (LX) *qú* STC 479 *klup 2454.
 cover, muffle (with sth.) (LX) *qhú* STC 479 *klup 2454.
 covered (with dust) (LX) *dà lià* 2168.

- covered (with dust) (MC) *fià suè zì* 2168.
 covet, desire (food) (LX) *dè dé* 1701.
 covet, desire (food) (MC) *kè mià* 1701.
 cow (female) (LX) *mà í mià* 327.
 cow (female) (LX) *hò mià* STC 215 **hwa*,
 STC **ma* (female sfx) 327.
 cow (female) (MC) *hò mià* STC 215 **hwa*,
 STC **ma* (female sfx) 327.
 cow milk (LX) *mà í nà ná* 328.
 cow milk (MC) *hò nà ná* STC 215 **hwa*
 328.
 cow shed (LX) *sì-iuà kù* m-b(tone changes
 in compounds with "shed") 696.
 cow shed (MC) *hò zé* 696.
 cow, bovine (LX) *sì* 316.
 cow, bovine (LX) *mà í* 316.
 cow, bovine (MC) *hò* STC 215 **hwa* 316.
 cowherd (MC) *hò tiù mú-kè bz ì* cowherd-
 child 235.
 cowhide rope (LX) *zà bì* 841.
 cowhide rope (MC) (*hò*) *zà piá bz è* 841.
 cradle, bassinet (LX) *qhò pí* 791.
 cradle, bassinet (MC) *tshà piá* 791.
 crafty (LX) *qè tshí* 1573.
 crafty (MC) *zè uè* 1573.
 crafty (MC) *teaò xuà b* 1573.
 crawl (human) (LX) *pá cà* 2204.
 crawl (human) (MC) *ì pà thà b* 2204.
 crawl (human) (MC) *tsì qá* 2204.
 crawl (insect) (LX) *pá cà* 2205.
 crawl (insect) (MC) *té phà thá b*. tones odd
 2205.
 crawl (insect) (MC) *tsì qá* 2205.
 crazy (LX) *dà bó* 1897.
 crazy (MC) *fù thà b* 1897.
 create (LX) *tshaō-dà* b-s 2590.
 create (MC) *pù* also 'do'? 2590.
 crevice, crack (LX) (*dà*) *tchà* verb? 1022.
 crevice, crack (LX) *zí zá* verb? 1022.
 crevice, crack (MC) *fiã dz ì* verb? rise in s2
 from missing syll? 1022.
 crevice, crack (MC) *fiã dz ì dzá* verb? 1022.
 cricket (LX) *tchà tshó* 450.
 crime, sin (LX) *zuè* b 978.
 crime, sin (MC) *dzuì* b 978.
 criticize, accuse (LX) *qè cí* 2559.
 criticize, accuse (MC) *tè dǐ* 2559.
 crops (LX) *jà qè* 510.
 crops (MC) *tsuàn tea* b 510.
 cross (bridge) (LX) *kè* 1954.
 cross (bridge) (LX) *kuá* 1954.
 cross (bridge) (LX) *kè* 1954.
 cross (bridge) (MC) (*tshá*) *tshuè* 1954.
 cross (bridge) (MC) *tshá-kè-gú* bridge-go-
 return(?) 1954.
 cross (river) (LX) *dà cí* 1844.
 cross (river) (LX) *dà fiú* 1844.
 cross (river) (MC) *tsuè tshuè* 1844.
 cross feet (LX) *kù lì* 1917.
 cross feet (MC) *gòu tsì tea* 1917.
 cross legs (MC) *gòu tuì* 1917.
 cross, surmount (LX) *dà kuá* 2548.
 cross, surmount (LX) *dà qhuà* 2548.
 cross, surmount (MC) *dè là* 2548.
 crotch of pants (LX) *tea qó* 639.
 crotch of pants (MC) *zè tí-qhuà tá* pants-
 crotch 639.
 crow (LX) *là bó* 418.
 crow (MC) *nè-ná* black-m 418.
 crow (rooster) (LX) *cí* 2042.
 crow (rooster) (MC) *ì sí* at midnight 2042.
 crow (rooster) (MC) *tè sí* 2042.
 crowd in (LX) *cì cí* 2012.
 crowd in (MC) *ì tei thá b* 2012.
 crowd in (MC) *ì tsì thá* 2012.
 crowded (LX) *tei tei* 2011.
 crowded (MC) *qè qè tei thá b* 2011.
 crowded (MC) *tí* 2011.
 cry (bird) (LX) *zǎ* 2180.
 cry (bird) (LX) *cí* 2180.
 cry (bird) (MC) *zè* 2180.
 cry out (LX) *kuá tà* 1961.
 cry out (LX) *qá jà* 1961.
 cry out (MC) *kuá* 1961.
 cry, weep (LX) *hú* STC 79 **huw* 2118.
 cry, weep (LX) *zǎ* 2118.
 cry, weep (MC) *zà* 2118.
 cubit (LX) *lí kù* 1327.
 cuckoo (LX) *qí pù* 424.
 cuckoo (MC) *koú pù b?* 424.
 cucumber (LX) *xuàn kuá b* 550.
 cucumber (MC) *xuàn kuà b* 550.
 cup (LX) *peí tsì* b 779.
 cup (LX) *peí peí* b 779.
 cup (MC) *tsà tsí* 779.
 cupboard (LX) *tshá* 728.
 cupboard (LX) *xó kè* 728.
 cupboard (MC) *guì* b 728.
 curious (LX) *sé-tá pò* good-like. calque?
 2463.1.
 curious (MC) *cǐ-tchì* b 2463.1.
 curved, crooked (LX) *vuè* 1451.
 curved, crooked (LX) *vuà* 2437.
 curved, crooked (MC) *khuè lià* STC 307
 **koy* or STC **ku[-]m* 2437.
 curved, crooked (MC) *khuè lià* STC 307

- *koy or STC *ku[·]m 1451.
 custom, habit (LX) *tsò* 999.
 custom, habit (MC) *cì kuàn b* 999.
 custom, habit (MC) *má zà* 999.
 cut (bone) (LX) *zuè* 2100.
 cut (bone) (LX) *tshuá* STC 240 *tsywar 2100.
 cut (bone) (MC) *tshuà tiá* STC 240 *tsywar 2100.
 cut (rope) (LX) *cá* 1922.
 cut (rope) (MC) *liá* ?STC 351 *lep 1922.
 cut (with scissors) (LX) *tsú* gloss as 'clip'? 2033.
 cut (with scissors) (MC) (*fià*) *pe í* 2033.
 cut down (tree) (LX) *tshuá* STC 240 *tsywar 2099.
 cut down (tree) (MC) *tshuá* STC 240 *tsywar 2099.
 cut into parts (LX) *phià* 1685.
 cut into parts (MC) (*sè*) *tshé* 1685.
 cut off (meat) (LX) *khù khuá* redup 1921.
 cut off (meat) (LX) *fià cá* 1921.
 cut open (LX) *sì tchà* 2234.
 cut open (MC) *zá qà* STC 458 *ra 2234.
 cut, slice (vegetable) (LX) *tsù tsuá* redup (asp?) STC 240 *tsywar 2255.
 cut, slice (vegetable) (LX) *qhù qhuá* redup 2255.
 cut, slice (vegetable) (MC) *tshù tshuá* redup STC 240 *tsywar 2255.
 cut/gouge out (LX) *tsoù* 2442.
 cut/gouge out (MC) *liá* ?STC 351 *lep 2442.
 cymbals (LX) *máN láN láN* nasal'n spreads over /l/ 950.
 cymbals (MC) *càN tchì* 950.
 cypress (LX) *zú má* 486.
 cypress (MC) *χòù phó* 486.
 cùn (3.3 cm) (MC) *tshu í* 1330.
 dam, embankment (LX) *bá b?* 40.
 dam, embankment (MC) *dá tshì-sì* 40.
 dam, embankment (MC) *dá tshì-bà* m-b 40.
 damage (v) (LX) *dà kè* 2370.
 damage (v) (MC) *sà qà là zì* 2370.
 dance (LX) *tshó tà* 2405.
 dance (MC) *soú tà* 2405.
 dance (n) (MC) *soú tà* 941.
 danger (LX) *mò qò* cf. 'fear'. STC 473 *grok ~ *krok 1009.
 danger (MC) *cyàN thá b,s* 1009.
 danger (MC) *cyn thá b,s* 1009.
 dark (LX) *mú* STC 357 *mu·k 1461.
 dark (MC) *mò* STC 357 *mu·k 1461.
 dark (sky) (LX) *mú mòu* 2399.
 dark (sky) (LX) *fià mú mú* 2399.
 dark (sky) (LX) *fià mù* 2399.
 dark (sky) (MC) *fià mò* 2399.
 dark sugar (LX) *χuañ tháN b*. "yellow sugar" 603.
 dark sugar (MC) *χuañ tháN b N ~ η* 603.
 darken (LX) *fià ñì* 1674.
 darken (LX) *fià mà só* 1674.
 darken (MC) *fiá ñě p*, black 1674.
 date (LX) *mò ñì* cf. sun 1117.
 date (MC) *zì tsé* 1117.
 daughter (LX) *tcà* ?STC 244 *krwiy 279.
 daughter (MC) *tcè* 279.
 daughter-in-law (LX) *tcá zò* 278.
 daughter-in-law (MC) *tcè zó* 278.
 day (CL) (LX) *cì* 1337.
 day (CL) (MC) *sè* 1337.
 day (of traveling) (LX) *cì* 1277.
 day (of traveling) (MC) *sè* cf. 'clear' 1277.
 day after tomorrow (LX) *sò dzí cǝ* 1090.
 day after tomorrow (MC) *sòu dī* 1090.
 day and night (CL) (LX) *jà* STC 203 *ryak 1339.
 day and night (CL) (MC) *à sè ná à zà* 1339.
 day before yesterday (LX) *zì cǝ* 1087.
 day before yesterday (MC) *dzé sè* 1087.
 daytime (LX) *cuá-χè* bright-m 1095.
 daytime (MC) *no ná* 1095.
 dead (LX) *cà* 1547.
 dead (MC) *tè sǝ kǝ lè* 1547.
 deaf (LX) *ñì bò* 2160.
 deaf (MC) *bù* 2160.
 deaf person (LX) *ñì-bò* ear-deaf 261.
 deaf person (MC) *mí nò-mù* 261.
 deaf person (MC) *nè kiè bú* ear-deaf 261.
 death (LX) *cà* 202.1.
 debt (LX) *sàn dzé* 809.
 debt (MC) *tù* 809.
 decaliter (dry measure) (LX) *kò* 1316.
 decaliter (dry measure) (MC) *pú* 1316.
 deceive (LX) (*mò*) *ió* 2238.
 deceive (MC) *gè gè* 1972.
 December (LX) *fià nó là* calque 1134.
 December (MC) *fià nó là* calque 1134.
 decide (LX) *tcuè tíN b* 2089.
 decide (MC) *suà khí* 2089.
 deep (LX) *tshí* ?STC 356 *tu·k 1424.
 deep (MC) *na* 1424.
 deep fry (LX) *qó* takes all pfx? STC 331 *kañ 2560.
 deep fry (LX) *tsa³⁵ dà b* 2560.
 deep fry (MC) *tshà thá b* 2560.
 deer (LX) *lò tsí* 386.

- deer (MC) *dá* 386.
 defeated (LX) *fià dzí* 2326.
 defeated (LX) *tà tsá* 2326.
 defeated (MC) *gè tĩ* 2326.
 defecate (LX) *qhà cà pà* 2127.
 defecate (MC) *duá* 2127.
 degree of fatness (LX) *χuá tshì* 1618.
 degree of fatness (LX) *tshì χuá* 1618.
 delay (v) (LX) *fià cì* 1799.
 delay (v) (LX) (*fià*) *tán gò b* 2431.
 delay (v) (LX) *fià sì* 1799.
 delay (v) (MC) *qà toú* 1799.
 delay (v) (MC) *qà toú* 2431.
 den (LX) *bù* 403.
 den (MC) *z è pù* 403.
 dense (of fabric) (LX) *tcí* 1482.
 dense (of fabric) (MC) *liá* 1482.
 deposit, check (LX) *à sì* 2020.
 deposit, check (MC) *ì tcí thà b* 2020.
 deposit, check (MC) *sù sué* 2020.
 descend (LX) *fià lò m2?*=come 2466.
 descend (MC) *fià tcoũ* 2466.
 destiny, fate, fortune, luck (MC) *mì sú* 976.
 destroyed (of a house) (LX) *bù kuá* 1696.
 destroyed (of a house) (LX) (*à*) *tshò* 1696.
 destroyed (of a house) (MC) *fià dz uá* 1696.
 detailed (LX) *à gá tchì tchì* 1549.
 detailed (LX) *à gá tchà tchà* 1549.
 develop (a sore) (LX) (*tà*) *cì* natural
 developmt 2319.
 develop (a sore) (LX) *à tò* from injury, other
 person 2319.
 develop (a sore) (MC) *gè χuě ~ gè χué* 2319.
 develop (v.i.) (LX) *tà dzú* 1861.
 develop (v.t.) (LX) *fià lú* 1862.
 dew (LX) *meì qè* 17.
 dew (LX) *tsù-qè* water-dew 17.
 dew (LX) *z í qé* 17.
 dew (MC) (*mià*) *dzè qè ~ dzé qè* 17.
 dew (v) (LX) *uá* 17.
 dice (LX) *cò* 946.
 dice (MC) *sé tsì* 946.
 die (LX) (*dà*) *bà* 1846.
 die (LX) (*à*) *ì* 1846.
 die (LX) *à cà* no other pfx. STC 232 *siy
 2363.
 die (MC) *tchì-mì-nú-uà b*(breath)-NEG-m-
 m 1846.
 die (MC) *té sǎ* STC 232 *siy 2363.
 difference (LX) *mì kuá* 1011.
 difference (LX) *qá tshé* 1011.
 difference (MC) *kiè ká* 1011.
 difficult (LX) *mà qeí* 1520.
 difficult (LX) *bà* 1563.
 difficult (LX) *qò* 1563.
 difficult (MC) *bà* =tired. gloss? 1563.
 difficult (MC) (*pù*)-*qà* do-hard 1520.
 dig out, scratch (LX) *phà sè* ?STC 391 *pruk
 2116.
 dig out, scratch (MC) *phù gá* ?STC 391
 *pruk 2116.
 dig well (LX) *bù liá* STC 288 *la·y 2088.
 dig well (MC) *dz ì dz á* 2088.
 digest (LX) *sì nú* ?STC p54 *zya·w. Kuki-
 Naga *su 2486.
 digest (MC) *caó χuà b* 2486.
 dike, embankment (LX) *qhà tsù* 39.
 dike, embankment (across a ditch) (MC) *lò*
zù tè tchú stone.wall-constructed 39.
 dike, embankment (along fields) (MC) *dz ì ló*
 39.
 diligent (LX) *tè tsì tcá* 1585.
 dip into water (LX) *cì* 2356.
 dip into water (MC) *tsuà-thá b-s* 2356.
 dip into water (MC) *tchuá* 2356.
 dip pen (LX) *sú* 2570.
 dip pen (MC) *tsǎn-thà b-s* 2570.
 dip pen (MC) *sú* 2570.
 dipper (LX) *quà lí* 785.
 dipper (MC) *quà ló* 785.
 direction (LX) *biá qhuà* 1035.
 direction (LX) *bù* 1035.
 direction (MC) *tshuè sù* 1035.
 dirt (MC) *bè zì* 51.
 dirty (LX) *à nì* STC #235 *s-n(y)ek 1542.
 dirty (LX) *mà só* cf. poison 1542.
 dirty (MC) *tsán b* 1542.
 dirty (MC) *loù sú* 1542.
 disappear (LX) *dà* 2487.
 disappear (LX) (*fià*) *sì* 2487.
 disappear (LX) *mo³⁵* ?STC 425 *ma-t 2487.
 disappear (MC) *tàe χuà* 2487.
 discuss (LX) *z í zú* 2305.
 discuss (LX) *pa ì dà b* 2035.
 discuss (LX) *dè dà* 2305.
 discuss (MC) *cà lyà* 2305.
 discuss, tell (story) (MC) *diù* 2035.
 discuss, tell (story) (MC) *ba ì thá b?* 2035.
 dislocate (joint) (LX) *kù* 2434.
 dislocate (joint) (LX) *tsoú b?* 2434.
 dislocate (joint) (MC) *gè dz uè* 2434.
 dislocate (joint) (MC) *gá qhá* 2434.
 disordered, confused (LX) *mì á* 1496.
 disordered, confused (LX) *phà lá* 1496.
 disordered, confused (MC) *lè tà* 1496.
 dispatch someone (LX) *mà cì m1*=person

2211.
 dispatch someone. (MC) *mè phé mè sè phé* = CMD 2211.
 disposition, temperament (LX) *phì tchí* b 992.
 disposition, temperament (MC) *dè bá* 992.
 dissolve (v.i.) (LX) *zú zú* 2282.
 dissolve (v.i.) (LX) *dà zù* 2282.
 dissolve (v.i.) (MC) *dzú* 2282.
 dissolve (v.t.) (LX) *té zú zú (zì)* also takes *dá*. tone on pfx?? 2283.
 dissolve (v.t.) (MC) *sè dzú zì* 2283.
 disturb, trouble (LX) *kuà lí* 1781.
 disturb, trouble (MC) *sí zò* 1781.
 disturb, trouble (MC) *tà teou* 1781.
 ditch (LX) *qhuà* 36.
 ditch (MC) *qhò á* [qho¹³] 36.
 ditch (MC) *tsuè xou* 36.
 ditch (large) (MC) *qhuà tsué* 36.
 divide (grain) (LX) *kò kó* 1892.
 divide (grain) (MC) *zì zóu m1?* †? 1892.
 divide family (LX) (*kè*) *kò kó* 1893.
 divide family (MC) *zì zóu* 1893.
 dizzy (LX) *qè (pá tsì)-suè (qò)* head-dizzy 2550.
 dizzy (MC) *qè gù* 2550.
 do (LX) *pù* 2622.
 do (MC) *pù* 2622.
 do business (LX) *tè cí* *pù* 2623.
 do business (MC) *tè sé* *pù* 2623.
 do not (+V) (LX) *tsì* 2640.
 do not (+V) (MC) *tcì (dzè)* 2640.
 do one's best (LX) *qú tà tchá* 1838.
 doctor (LX) *íá tsà mù* 228.
 doctor (MC) *dzí sè mù* 228.
 dog (MC) *khuè* STC 159 *kwiý 358.
 dog (female) (LX) *khù mià* STC 159 *kwiý 360.
 dog (female) (MC) *khuè mià* 360.
 dog (male) (LX) *khù cý* also HH 359.
 dog (male) (LX) *khù dò* 359.
 dog (male) (MC) *khuè dzú* 359.
 dog, hound (LX) *khù* 358.
 donkey (LX) *lý lý á* b 352.
 door (MC) *diò* 709.
 door bolt (LX) *dzù-tshuà* door-catch (b?) 711.
 door bolt (MC) *diò phiè tsì* 711.
 door bolt (MC) *diò phiè phié* 711.
 door, doorframe (LX) *dzù ~ dzú* 709.
 doorframe (MC) *diò bú* 710.
 dose (of medicine) (LX) *fú* b 1280.
 dose (of medicine) (MC) *fú* b 1280.
 dote on (child) (LX) *cì mì-íá* heart-ache (calque?) 2392.
 dote on (child) (LX) *qà tcí* 2392.
 dote on (child) (MC) *quà* 2392.
 dote on (child) (MC) *gè* 2392.
 double-edged fine-tooth comb (LX) *pí tsì* b 656.
 double-edged fine-toothed comb (MC) *dzù suì* STC 466 *m-si(y) 656.
 doubt (LX) *hàn dà* b? 1982.
 doubt (MC) *hàn-thá-zà* b-s-m 1982.
 dove, pigeon (LX) *ý gù* bird-b/STC 495 *kuw 374.
 dove, pigeon (MC) *kò tsì* b 374.
 downward (pfx) (LX) *fià* - 1081.
 downward (pfx) (MC) *fià* - 1081.
 dragon (LX) *bú* 379.
 dragon (MC) *bú* 379.
 Dragon King (LX) *cù dò* 964.
 Dragon King (LX) *cù pì* 964.
 Dragon King (MC) *bú-zè* dragon-king. *claque* 964.
 dragonfly (LX) *bù lá* 458.
 dragonfly (MC) *tín tín mǎ* b (but de-aspirated) 458.
 draw out (LX) *phì phiá* cf. redup with /u/wa 2386.
 draw out (LX) *tchì tchá* 2386.
 draw out (MC) *thé thè* 2386.
 drawer (LX) *tshóu tshóu* b 727.
 drawer (MC) *tchoú tchoú* b 727.
 dream (n) (LX) *mò zè* STC 82 (s/r)-ma((η/k)) (revised) 1029.
 dream (n) (MC) *mò* STC 82 (s/r)-ma((η/k)) (revised) 1029.
 dream (v) (LX) *mò (zè)* STC 82 (s/r)-ma((η/k)) (revised) 2171.
 dream (v) (MC) *mò* STC 82 (s/r)-ma((η/k)) (revised) 2171.
 dredge up (LX) *sá* 2131.
 dredge up (MC) *laó thà* b 2131.
 dredge up (MC) *zá* 2131.
 dregs, sediment (LX) *tsá tsì* b 1025.
 dregs, sediment (MC) *bà bà* 1025.
 dregs, sediment, trash (MC) *tsà tsà* b 1025.
 dress up (LX) *ká* 2606.
 dress up (MC) *kuì* 2606.
 dress up, beautify (LX) *tshó tchí* 1779.
 dress up, beautify (MC) *tá pàn* b 1779.
 dried sticky rice "ba ba" (LX) *qhà liú* 581.
 dried sticky rice "ba ba" (MC) *tsì bà* 581.
 drill, auger (LX) *ñò* 854.
 drill, auger (MC) *tsuǎN tsì* b 854.
 drink (LX) *tchí* 1964.

- drink (LX) *qú* U 1964.
 drink (LX) *qó* 1964.
 drink, suck, smoke (tobacco) (MC) *thié ~ thiè* 1964.
 drip (LX) *tsù-pú pú* water-do(?) 1811.
 drip (LX) *pú* 1811.
 drip (LX) *zǐ* 1811.
 drip (MC) *tsuè tè* 1811.
 drip, drench (LX) *fià qò thò* or strain, filter (diff tone) 2150.
 drive (animal) (LX) *kù kuá* 2264.
 drive (animal) (MC) (*sè*) *tshǐ tshè* 2264.
 drive (screw) (LX) *tcòu dá* b 2190.
 drive (screw) (MC) *dzù dzuá* 2190.
 drive a nail (MC) *tù* 2619.
 drive animal (LX) (*kù*) *kuá* 1913.
 drive animal (MC) *tshè* 1913.
 drop (CAUS) (MC) *fià tshòu zǐ* 2037.
 drop (of oil) (LX) *zǐ* 1300.
 drop (of oil) (LX) *tsǐ* 1300.
 drop (of oil) (LX) *tiàN* b 1300.
 drop (of oil) (MC) *tè* 1300.
 drop (of water) (LX) *kà tcí* 1056.
 drop (of water) (MC) *kè kè* 1056.
 drop down (LX) *tshò* STC 353 *tsyuk 1822.
 drop down (MC) *fià tshòu* STC 353 *tsyuk 1822.
 drop, descend, land (LX) *fià sǐ* 2036.
 drop, descend, land (MC) *fià tshòu* 2036.
 drum (LX) *bò* 947.
 drum (MC) *bù* 947.
 drunk (LX) (*cì*) *tà xei* 2620.
 drunk (MC) *sè xè* 2620.
 dry (LX) *fiǎ* STC 268 *raw 1476.
 dry (MC) *zǐ* STC 268 *raw 1476.
 dry (of weather) (LX) *ǎ tǎ*- 1963.
 dry (of weather) (LX) *qá tǎ*-. ?STC 331 *kaŋ 1963.
 dry (of weather) (MC) *zǐ* 1963.
 dry (of weather) (MC) *mú zǐ* 1963.
 dry (v.i.) (LX) *tǎ ǎ* 1907.
 dry (v.i.) (MC) *zǐ* 1907.
 dry (v.t.) (grain) (MC) *sè dzǐ* 1657.
 dry (v.t.) (grain) (MC) *khǎn thǎ* b 1657.
 dry field (LX) *zù ǎ* field-dry 46.
 dry field (MC) *sù-zuè* mountain-field 46.
 dry field (MC) *zuè zǐ* 'field' + 'dry' 46.
 dry in sun (LX) *zé* 1908.
 dry in sun (LX) *zé* 2300.
 dry in sun (LX) *tǎ ǎ* zǐ 1908.
 dry in sun (MC) *tè zǐ* 1908.
 dry in sun (MC) *phù dzǐ* 2300.
 dry in sun (MC) *sè dzǐ* 1908.
 dry, vt (grain) (LX) *tshò* 1657.
 dry, warm by fire (LX) *qhuà* ?STC 331 *kaŋ 1971.
 dry, warm by fire (MC) *khuè* ?STC 331 *kaŋ 1971.
 dry, bake over fire (LX) *cì cá* 1657.
 duck (LX) *ià tsǐ* b 372.
 duck (MC) *iá tsǐ ~ ià tsǐ* b 372.
 dull (LX) *gú* 1469.
 dull (MC) *mì tsé* 1469.
 dusk (LX) *mú xá ià* 1101.
 dusk (MC) *dè-mò-uá ~ fià mò uá* p-darken-ASP 1101.
 dust (LX) *pà pá* 49.
 dust (MC) *mè có* 49.
 dustcloth (LX) *tà qó* 736.
 dustcloth (MC) *tshuè-tsǐ* table-m 736.
 dustcloth (MC) *tshà dzǎ* à *nè* pot(?) -m 736.
 dustcloth (MC) *tshǐ thǎ-kì-phǎ tsǐ* cover-ptcl-b(towel) 736.
 dusty, covered with dust (LX) *phù tù tù* 1601.
 dusty, covered with dust (MC) *xueí phù phù* b 1601.
 dusty, covered with dust (MC) *bè zǐ qé liú* 1601.
 dye (v) (LX) *cì* 2271.
 dye (v) (MC) *dè mà* 2271.
 each one (LX) *à dzǐ mǐ* 1356.
 each one (MC) *à qó mò qǎ* 1356.
 each, respective (LX) *iò mó (sò)* 1401.
 each, respective (MC) *ké zǐ* 1401.
 eagle, vulture (LX) *χò* cf. TP 408.
 eagle, vulture (MC) *là bzǎ* à *kí* STC 333 *laŋ 408.
 eagle, vulture (MC) *lá (bzǎ)* STC 333 *laŋ 408.
 ear (LX) *nǐ ká* STC 453 *g-na 107.
 ear (MC) *nè ké* STC 453 *g-na 107.
 ear lobe (LX) *nǐ mà* 107 107.1.
 ear of grain, spike (LX) *cà qǎ* 516.
 ear of grain, spike (MC) *lè tǐ* 516.
 ear wax (LX) *nǐ-qhú* 193.1.
 earlier generation (LX) *qé cǐ* 314 314.
 early (MC) *tcì tó* 1466.
 early (MC) *tsué* 1466.
 early (MC) *tsué* 1466.
 early (in the day) (LX) *tsuà* 1466.
 early morning (LX) *tà tsuà* some VH. 1096.
 early, on time (LX) *zǐ* 1466.
 earring (LX) *nǐ mà* m l = ear 662.
 earring (MC) *nè mà* 662.
 earth, ground (LX) *zù* 24.
 earth, ground, place (MC) *zuè (pè)* 24.

- earthen jar (LX) *qhà* 778.
 earthen jar (MC) *ín phj̄ ín ~ in³⁵* 778.
 earthen wall (LX) *bú zì-qhà tsù* mud-wall. 703.
 earthen wall (LX) *χə̀ bù-qhà tsù* mud-wall 703.
 earthen wall (MC) *bè zì-lò zù* powder/dirt-wall 703.
 earthen wall (MC) *thù tchán* b. tone varies 703.
 earthquake (v) (LX) *dà ká* 1810.
 earthquake (v) (MC) *mù dzé* 1810.
 earthquake (v) (MC) *dè mǒ* cf 'fire'? 1810.
 earthworm (LX) *zuà-bù ló* earth-bug 448.
 earthworm (MC) *bè díá* 448.
 east (LX) *mù n̄í-thà-kù* sun-that-direction 1036.
 east (LX) *mù cí-thà kù* sun-that-direction 1036.
 east (MC) *mè sí-n̄ù-sì* sun-emerge-LOC 1036.
 easy (LX) (*à*) *taù* cf. 'good' 1521.
 easy (LX) *ià* cf. 'good' 1521.
 easy (MC) (*pù*) *zè* 1521.
 eat (LX) *tchí* suppletive form 1722.
 eat (LX) *zì* I eat... STC *dza 1722.
 eat (MC) *dzè* STC *dza 1722.
 eat! (LX) *tiè* 1722.
 eaves (LX) *tsù-c̄y* water-? 686.
 eaves (MC) *fān iàn* b 686.
 echo (LX) *tchì sá qhuà tchì* 1019.
 eclipse of moon (MC) *à-là-mó* m-moon-dark 2549.
 eclipse of moon (MC) *khuè-là-dzè* dog-moon-eat 2549.
 eclipse of sun (LX) *mà n̄i kuè* 2275.
 eclipse of sun (MC) *khuè-mè nà-dzè* dog-sun-eat 2275.
 eclipse of sun (MC) *khuè-mè sí-dzè* dog-sun-eat 2275.
 edge, side (LX) *guà (qì)* m1=edge 1053.
 edge, side (MC) *tshuè tshuè* 1053.
 eel (MC) *χuàn sèn* b 434.
 egg (LX) *ì tò Ø-* init? 604.
 egg (MC) *ì té* 604.
 egg (CL) (LX) *fiò* 1238.
 egg (CL) (MC) *qó* 1238.
 eggplant (LX) *tchè tsí* b 538.
 eggplant (MC) *tchè tsì* b 538.
 eight (LX) *tshá* STC 163 *b-r-gyat 1181.
 eight (MC) *tshè qó* STC 163 *b-r-gyat 1181.
 eighteen (LX) *fiá tshá* 1191.
 eighteen (MC) *fià tshè* 1191.
 eighth (LX) *tshá á χeì* 1226.
 eighty (LX) *tshá sá* 1205.
 eighty (MC) *tchè sá* 1205.
 eighty-one (LX) *tshá sá à* 1206.
 eighty-one (MC) *tchè sá nà à qó* 1206.
 elbow (MC) *í dzè* 132.
 elbow (inside) (LX) *lì qù* m-pull 132.
 elbow (outside) (LX) *lì tsò* 132.
 elder brother (LX) *tú bà* 3d person 283.
 elder brother (MC) *qó qò* STC 255 *kuw 283.
 elder brother (MC) *kuè pó* ?STC 205 *ryan 283.
 elder brother (direct) (LX) *à kò* STC 255 *kuw 283.1.
 elder sister (LX) *sá bà* 3d person 284.
 elder sister (MC) *kuè-tcè* m2 looks like borrowing, but cf. Yadu *ε tcè* 'wife of elder brother'. 284.
 elder sister (direct) (LX) *á tseì* 284.1.
 elder sister (direct) (MC) *á tcè* b? 284.1.
 eleven (LX) *fià tcí* 1184.
 eleven (MC) *fià tí* 1184.
 eleventh (LX) *fià tcí χeì* 1229.
 eliminate, wipe out (LX) *sì qà tiè* also die out, etc. 2489.
 eliminate, wipe out, die out (MC) *tè sì zì* 2489.
 eliminate, wipe out, die out (MC) *tè χó* 2489.
 elongate (LX) *sì dzì* ?STC 433 *sriŋ 2315.
 elongate (MC) *șè dzè* ?STC 433 *sriŋ 2315.
 embark (LX) *à tsè* tone pair 1839.
 embark (LX) *fià fiù* 1839.
 embark (MC) *dzà kà thé thé ~ thě* 1839.
 embrace (LX) *tò pò qà* 2535.
 embrace (MC) *mì nà uà* 2535.
 embrace (MC) *tà có zì* 2535.
 embroider (LX) *phiá* 2502.
 embroider (MC) (*tià tiá*) *thiò* 2502.
 emit (smoke) (MC) *tè toò* 2175.
 emit, appear (smoke) (LX) *tshà* 2175.
 emperor, king (MC) *mé tsì* 254.
 emperor, king (MC) *zè-bz̄* à king-big 254.
 empty (LX) *só* 1427.
 empty (MC) *qhò* 1427.
 enclose (sheep) (LX) *tchý* 1946.
 enclose (sheep) (MC) *khuí* 1946.
 end of month (LX) *là-suà* month-end 1138.
 end of month (LX) *là tshò* 1138.
 enlarge (LX) *tà-bà* 1672.
 enlarge (MC) *dà bz̄* 1672.
 enough (LX) *zì (bè)* 2615.
 enough (MC) *dzí (qè)* 2615.

- enough (age) (LX) *lià* 1929.
 enough (age) (LX) *zǐ bè m,s?* 1929.
 enough (age) (LX) *zǐ* 1929.
 enough (age) (MC) *dzǐ* 1929.
 enough (in number) (LX) *zǐ* 1928.
 enough (in number) (MC) *dzǐ* 1928.
 enough (length) (LX) *zǐ* 1927.
 enough (length) (LX) *pà* 1927.
 enough (length) (MC) *dzǐ* 1927.
 enter (LX) *ì lò p-come* 1661.
 enter room (LX) *kè-ì-lò room-p-come* 2072.
 enter room (MC) *ì tǎo* 2072.
 enter room (MC) *tcì kó-ì-nù home/room-p-come* 2072.
 entrust (LX) *dà zǐ* 2445.
 entrust (MC) *kuè cí* 2445.
 envy (v) (LX) *iàN tchì b?* 2022.
 envy, despise (MC) *ù sù-mí-qè z à sù ~ sǐ, qè z à ~ qè. look-NEG-a.little* 2022.
 envy, despise (MC) *mè-qhóu-zè n à person-despise-* 2022.
 envy, despise (MC) *qè qè qhóu z à* 2022.
 eraser, rubber (LX) *tshà tshà b. Sichuanese: tsha³⁵ tsɿ* 928.
 eraser, rubber (MC) *tcaó phǐ b* 928.
 eraser, rubber (MC) *tshà tsǐ b* 928.
 estimate (LX) *gù-dá b-s* 1935.
 estimate (LX) *nàn-dá b?-s* 1935.
 estimate (MC) *nàn thá b* 1935.
 estimate, measure (LX) *zò zò* 2146.
 estimate, measure (MC) *zé* 2146.
 euphonious (LX) *tshuá cǐ-nà listen-good* 1558.
 euphonious (MC) *pà-sé m-clear?* 1558.
 evening, night (LX) *dzǐ tsǐ* 1102.
 evening, night (MC) *giè tsǐ* 1102.
 every day (LX) *á cí má qè* 1355.
 every day (LX) *à cǐ mí* 1355.
 every day (MC) *à sè mó qà phrasal* 1355.
 every(thing), all (LX) *à n á (mei)* 1402.
 every(thing), all (MC) *qè nà* 1402.
 everyone (LX) *à dzè meí* 1371.
 everyone (MC) *kè nà* 1371.
 evil spirit, demon (LX) *bù* 963.
 evil spirit, demon (LX) *dù mià ghost-female* 963.
 evil spirit, demon (LX) *kuà sà* 963.
 evil spirit, demon (MC) *dòu-miá ghost-female* 963.
 evil spirit, demon (MC) *iaó tcín b?* 963.
 ewe (LX) *ìò mià* 343.
 ewe (MC) *ioù-miá sheep-female* 343.
 excavate, scoop (LX) *bù liá* 2436.
 excavate, scoop (MC) *dzǐ dzǎ* 2436.
 exchange (LX) *lǎ lá ə ~ t. STC 283 *lay* 1985.
 exchange (MC) *là là* STC 283 *lay 1985.
 exercise patience (LX) *qú tchà tchà ~ tchá* 2277.
 exercise patience (MC) *laǐ fēn b* 2277.
 exercise patience (MC) *z àn thá b* 2277.
 expand, inflate (LX) *tà kò* 2221.
 expand, inflate (LX) *tà dzý* 2221.
 expand, inflate (LX) *tà pì* 2221.
 expand, inflate (MC) *dē bz à* 2221.
 expand, swell (LX) *tsaŋ³⁵-dà b-s* 2574.
 expand, swell (MC) *(tè) sué suè* 2574.
 expensive (LX) *phú lú* 1506.
 expensive (MC) *phé liù* 1506.
 experience (LX) *bú jà* 989.
 experience (MC) *phú bz à* 989.
 explain, interpret (LX) *dà dá redup?* 2065.
 explain, interpret (LX) *ǎ* 2065.
 explain, interpret (MC) *phò khé* 2065.
 explain, interpret (MC) *nà n á-diú-uà well-say-s* 2065.
 extend (leg) (LX) *tshú tá* 2014.
 extend (leg) (LX) *tshù tshù LL tone pattern in redup* 2014.
 extend (leg) (MC) *tsuà* 2014.
 extinguish (LX) *mià* STC 374 *mit 2182.
 extinguish (LX) *à mià* STC 374 *mit 2457.
 extinguish (LX) *à pà* 2457.
 extinguish (MC) *mè* STC 374 *mit 2182.
 extinguish (MC) *fià mè* STC 374 *mit 2457.
 extinguish (MC) *mú mè* STC 374 *mit 2457.
 extinguish (CAUS) (MC) *tè kè bz è zǐ* 1998.
 extinguish, exterminate (LX) *mià* STC 374 *mit 1997.
 extinguish, exterminate (LX) *kè* 1997.
 extinguish, exterminate (LX) *tshǐ* 1997.
 extinguish, exterminate (MC) *tè kè bz è bz è ~ bèɿ* 1997.
 eye (LX) *n í má toù ?* STC 402 *myak 104.
 eye (MC) *mù tié* STC 402 *myak 104.
 eye (MC) *mè tié* STC 402 *myak. VH 104.
 eye sand (LX) *m í-qhú* STC 402 *myak 193.2.
 eye sand (MC) *mù-tché eye-feces* 193.2.
 eyebrow, eyelash (LX) *m í-xú eye-fur* 103.
 eyebrow, eyelash (MC) *mù-mú eye-fur* 103.
 face (LX) *qá* 108.
 face (LX) *qá qhuá* 108.
 face (MC) *qà x à* 108.
 face-washing basin (LX) *qá-xò là-phàn tsǐ*
 face-wash-b("basin") 730.

- face-washing basin (MC) *qà chà-χuá là-kì-phàn tsì* face-wash-NOM-(b)basin 730.
 fade (LX) *fià thue í* b 2428.
 fade (LX) *dà zà* 2428.
 fade (LX) *fià sè* 2428.
 fade (LX) (*fià*) *guè* 2428.
 fade (MC) *pa í sè (pù)* b 2428.
 fade (MC) *fià tsoũ* 2428.
 fade, shrivel (LX) *sù liè* 2196.
 fade, shrivel (MC) (*fià*) *lià sì* 2196.
 fake, counterfeit (LX) *mì-iá* NEG-good 1500.
 fake, counterfeit (MC) *mì gué* 1500.
 fall (of hair) (LX) *tshò tshò* 2433.
 fall (of hair) (LX) *χù χù* 2433.
 fall (of hair) (MC) *thù thu ì* 2433.
 fall (of hair) (MC) *sè tshoũ* 2433.
 fall into trap (LX) *fià sè* 2476.
 fall into trap (LX) *fià gù* 2476.
 fall into trap (MC) *fià tshoũ* 2476.
 fall over (especially person) (LX) *dà dzù* 2351.
 fall over (especially person) (LX) (*sì*) *pà tchá* 2351.
 fall over (especially person) (MC) *sé guĩ* 2351.
 fall over (especially person) (MC) *sè qè dzò* 2351.
 fall, drop (LX) *fià tshò* 2129.
 fall, drop (MC) *tshoũ* 2129.
 fall, tumble (LX) *qà tchá* 1826.
 fall, tumble (LX) *pà tchá* 1826.
 fall, tumble (MC) *sè qà dzò* 1826.
 falsely incriminate (MC) *mè phi í* 2455.
 falsely incriminate (self) (LX) *phià* 2455.
 falsely incriminate (so. else) (LX) *phiá* 2455.
 family of people (LX) *qò* 1279.
 family of people (MC) *qà* 1279.
 fan (LX) *sán tsì* b 792.
 fan (MC) *sán tsì* b 792.
 fan (v) (LX) *sè* 2302.
 fan (v) (MC) *sán thà* b 2302.
 far, distant (LX) *zá* 1416.
 far, distant (MC) *z í-χuà* road-m 1416.
 fart (LX) *tshè* 189.
 fart (MC) *pè* 189.
 fast (LX) *dù lì* 1464.
 fast (MC) *khué thà* b 1464.
 fat (of animals) (LX) *tshì* 1473.
 fat (of animals) (MC) *loù* 1473.
 fat (of humans) (LX) *tshì* 1472.
 fat (of humans) (MC) *loù* 1472.
 father (LX) *á pà* STC *pwa 275.
 father (MC) *kuè iá* 275.
 father (direct) (MC) *á ià* 275.1.
 father's older brother (LX) *à pá (sà)* 287.
 father's older brother (MC) *kuè pù* indirect form 287.
 father's older brother (direct) (MC) *á tì* 287.1.
 father's older brother (direct) (MC) *á pù* 287.1.
 father's older brother's wife (LX) *à má (sà)* 288.
 father's older brother's wife (LX) *à nó* STC 316 *ni(y) 288.
 father's older brother's wife (MC) *ná ná* indirect form 288.
 father's older brother's wife (MC) *kuè nó* indirect form, STC 316 *ni(y) 288.
 father's older brother's wife (direct) (MC) *á tì* 288.1.
 father's sister (LX) *á ná* STC 271 *na·w 302.
 father's sister (MC) *kuè nó* 3d person STC 316 *ni(y) 302.
 father's sister (MC) *ná ná* 3d person STC 271 *na·w 302.
 father's sister (MC) *ná bzà* 3d person STC 271 *na·w 302.
 father's sister's husband (LX) *kú ié* b 301.
 father's sister's husband (MC) *kú í* b 301.
 father's younger brother (LX) *pió sú* b 289.
 father's younger brother (MC) *kuè pù* generally indicated by numbering 'first,' etc. 289.
 father's younger brother (direct) (MC) *á pù* 289.1.
 father's younger brother (direct) (MC) *á tì* ?STC 309 *d/toy 289.1.
 father's younger brother's wife (LX) *á ná* STC 271 *na·w 290.
 father's younger brother's wife (LX) *à nó* STC 316 *ni(y) 290.
 father's younger brother's wife (MC) *cèN* *cèN* indirect form 290.
 father's younger brother's wife (MC) *ná-bzà* STC 271 *na·w. mother/aunt-big 290.
 father's younger brother's wife (direct) (MC) *á tì* ?STC 309 *d/toy 290.1.
 father-in-law (LX) *pó kù* 304.
 father-in-law (MC) *kuè pù* 3d person 304.
 father-in-law (direct) (MC) *á tì* 304.1.
 father-in-law (direct) (MC) *á pù* 304.1.
 fathom (of) (LX) *pé* 1320.
 fathom (of) (LX) *khà* 1320.
 fatty meat (LX) *khuà pià tshì* 588.
 fatty meat (LX) *pià tshì khuà* 588.
 fatty meat (MC) *loù k í* 588.

- favor, kindness (LX) *qú lià* 983.
 favor, kindness (MC) *qóu què* 983.
 fear (MC) *kòu* STC 473 *grok ~ *krok 2447.
 fear difficulty (LX) *qò tchá tchá* STC 473 *grok ~ *krok 2447.
 fear difficulty (LX) *qò* STC 473 *grok ~ *krok 2447.
 feather (LX) *ý xù* 371.
 feather (MC) (*i*) *mù* 371.
 February (LX) *nà là* calque 1124.
 February (MC) *nà là* calque 1124.
 feces (LX) *qhà jà* 187.
 feces (LX) *tshè* 187.
 feces (MC) *tché* 187.
 feel (MC) *mó thà* b 2185.
 felt (LX) *ió sù* 675.
 felt (MC) *sù thié* 675.
 female (LX) *tcà* 220.
 female (adj) (MC) *tcè (tsù tsú)* 220.
 female pubic hair (LX) *phì xù* ?STC #171 *pwi(y) 146.1.
 fennel, anise (LX) *χò cáN* b 596.
 fennel, anise (MC) *χò cáN* b 596.
 ferment (LX) *tí* 1865.
 ferment (MC) *gè né* 1865.
 ferment (MC) *tè ǎ* 1865.
 fertilizer (LX) *mì* 877.
 fertilizer (MC) *mù* 877.
 festival (LX) *tcé mù* 1172.
 festival (LX) *nà mù* 1172.
 festival (LX) *tcè tchí* b 1172.
 festival (MC) *tcè tchí* b 1172.
 fetus (LX) *tsù zú qò* 147.
 fetus (MC) *ì dzòu* 147.
 fever (LX) *qhú qhuá* p. 8. 1678.
 few (LX) *tchá* 1430.
 few (LX) *tcá* 1430.
 few (MC) *pé tchê* 1430.
 field (LX) *zù* 44.
 field (MC) *zuè* 44.
 fifteen (LX) *fià buè* 1188.
 fifteen (MC) *fià nà* 1188.
 fifth (LX) *buè ǎ xe í* 1223.
 fifty (LX) *buè sá* 1199.
 fifty (MC) *buà sá* 1199.
 fifty-one (LX) *buè sá à* 1200.
 fifty-one (MC) *buà sá nà à qó* 1200.
 fight (LX) *té té* 1769.
 fight (MC) *tshì tshì* 1769.
 figure (v) (LX) *sù suà* redup. b? 2369.
 figure (v) (MC) *sú suà* = 2347 2369.
 file (n) (LX) *tsho³⁵ (tsì)* b 855.
 file (n) (MC) *tshǒ* b 855.
 file down (LX) *tsǒ dà* b 1758.
 file down (MC) *tshǒ* b 1758.
 fill (eyes with tears) (LX) *pó pò* 2382.
 fill (eyes with tears) (LX) *tchí tchì* 2382.
 fill (eyes with tears) (MC) *nù* 2382.
 fill in (barrel) (LX) *tsì tsì* ?STC *(d/t)yam 2289.
 fill in (barrel) (MC) *ì tǎ* ?STC *(d/t)yam 2289.
 fill in (bottle) (LX) *ì tsì tsì* 2290.
 fill in (bottle) (MC) *fià tsoù thà* m2?=b 2290.
 fill in (bottle) (MC) *ì sè* 2290.
 fill in (pit) (LX) *tsí tsí* 2400.
 fill in (pit) (LX) *thièn dà* b 2400.
 fill in (pit) (MC) *ì thièn thá* b? 2400.
 fill ladle/bowl (MC) *tè zá* 1718.
 fill ladle/bowl (from empty) (LX) *ká* put rice in (was empty to start w/) 1718.
 fill to bursting (LX) *phà* 1713.
 fill to bursting (LX) *qà* 1713.
 fill to bursting (MC) *gè tcá* 1713.
 fill, top off ladle/bowl (LX) *lú* add rice 1718.
 filter (v) (LX) *tsá* 2155.
 filter (v) (MC) *tǎ* 2155.
 final, last (LX) *dà suà chá* 1156.
 final, last (MC) *dé mè tsǎ* 1156.
 find out (LX) *à tǎ* 2580.
 find out (MC) *tiě* 2580.
 fine (v.t.) (LX) *phé* 1870.
 fine (v.t.) (MC) *dzui fià zì* 1870.
 fine, small (of rice grains) (LX) *dzà* ??? 1489.
 fine, small (of rice grains) (MC) *dì* 1489.
 finger (LX) *lià só* 135.
 finger (LX) *lià cú* tones on LX 'finger' words not stable 135.
 finger (MC) *ì nà qè* 135.
 finger (MC) *í nà qè* 135.
 finger ring (LX) *lý cý* VH 664.
 finger ring (LX) *lý suè* 664.
 finger ring (MC) *ì sé* 664.
 finger-length (LX) *lì* 1325.
 finger-width (MC) *dz í* 1325.
 finish, complete (LX) *dà* 2440.
 finish, complete (LX) *dà* 2441.
 finish, complete (MC) *mì nà uà* = use up? 2440.
 finish, complete (MC) *tè có (qè)* 2441.
 finish, complete (MC) *có* 2440.
 finish, complete (MC) *tè gá qò* 2441.
 finish, complete (MC) *tè cò zì* 2441.
 fire (LX) *mú* STC 290 *mey 20.
 fire (MC) *mú* STC 290 *mey 20.

- fire gun (LX) *qhò* 1766.
 fire gun (MC) *tshóu lè* 1766.
 fire shovel (small) (MC) *cí-piá* iron-m 858.
 fire tongs (LX) *cà-tè* iron-pinch. also 'tweezers' 787.
 fire tongs (MC) *cí-tè ~ cí-tè* iron-pinch 787.
 firecrackers (LX) *χò paò tsì* b 957.
 firecrackers (MC) *phò tchá* 957.
 firefly, glowworm (MC) *tcæn khà* 453.
 fireplace (LX) *mù guá kì* 693.
 fireplace, firepit (MC) *mù bó* 693.
 firewood (LX) *cì* 744.
 firewood (MC) *ηò sé* 744.
 firewood knife (LX) (*cì*) *cà té* 893.
 firewood knife (MC) *dò bò* 893.
 firm, secure (LX) *gù* 1494.
 firm, secure (MC) *guè* 1494.
 first (LX) *à à χέ* one-CL-NOM 1219.
 first (LX) *qeĩ* tone? < 2syll? 2625.
 first (LX) *tà qeí* 1219.
 first (MC) *dé dè qèi* 1219.
 first (adv) (MC) *dè* 2625.
 first of month (LX) *tcì tcó* 1118.
 first of month (MC) *tí tiù* 1118.
 first-rate (LX) *dà χeì* 1555.
 fish (LX) *kà* 432.
 fish (MC) *tsuè-dzè* water-fish 432.
 fish (CL) (LX) *zà* 1234.
 fish (CL) (LX) *à* 1234.
 fish (CL) (MC) *dz í* 1234.
 fish (v.t.) (LX) *kué* 1825.
 fish (v.t.) (MC) *lè* 1825.
 fishnet (LX) *kà zá* 913.
 fishy smelling (LX) *sù* b? ?STC 405 **suŋ* 1533.
 fishy smelling (LX) *cỳ* b. ?STC 405 **suŋ* 1533.
 fishy smelling (MC) *qè tsò* 1533.
 fishy smelling (MC) (*dè*) *sì* 1533.
 fishy smelling (MC) *qè sè* 1533.
 fishy smelling (MC) *bù tsá* 1533.
 fist (LX) *qù ηú* 142.
 fist (MC) *qù ηá* 142.
 fist + thumb (a square measure) (LX) *à tshàn* 1326.
 fist + thumb (a square measure) (LX) *à tshù ~ à tshòu* 1326.
 fitting (LX) *χò s í* b 1578.
 fitting (MC) *χò s í* b 1578.
 five (LX) *kué* STC 78 **l/b-ηa* 1178.
 five (MC) *kuà qó* STC 78 **l/b-ηa* 1178.
 flag (LX) *tchì tchí* b 958.
 flag (MC) *tchì tsì* b 958.
 flag (CL) (LX) *tshè* 1301.
 flat (LX) *khuè (tà bà)* 1437.
 flat (LX) *pià qó* ?STC 340 **pe-r* 1434.
 flat (LX) *bò lí* STC 138 **plen* ?STC 212 **lyap* 1437.
 flat (MC) *pià pià* ?STC 340 **pe-r* 1434.
 flat (MC) *yé* 1437.
 flat (MC) *phìη thá (sì)* b 1437.
 flat field (MC) *pià tá* field + m. calque from *píng ba tsi*? 46.
 flatlands (MC) *dá tshì s ì* 42.
 flatten (v.i.) (LX) *hià pià qó* 1676.
 flatten (v.i.) (MC) *hià pià pià* 1676.
 flatten (v.t.) (LX) *hià pià qó z ì* 1677.
 flatten (v.t.) (MC) *tè pié pià z ì* 1677.
 flea (LX) *tsó η.ì* b? *æJUMP?* 439.
 flea (MC) *tsouí nà* b? 439.
 flee (LX) *dà phó* STC 140 **plon* 2385.
 flee (MC) *dè phù* STC 140 **plon* 2385.
 flesh (MC) *mé tshè* 159.
 flint, stone for fire (LX) *tshà mú tsì* 746.
 flint, stone for fire (MC) *lò-pşì* stone-white 746.
 flint, stone/steel for fire (LX) *tshà mià* 746.
 float (LX) *qè tà* 2225.
 float (MC) *ì lá* 2225.
 flock (of goats) (LX) *qhuà* 1273.
 flock (of goats) (LX) *bó* 1273.
 flock (of goats) (MC) *phè* 1273.
 flood (LX) *pà cá* 2573.
 flood (LX) *sà bà ə ~ ì* 2573.
 flood (MC) *sè bz á* 2573.
 flour (LX) *bà lò* 582.
 flour (MC) *lè-bè-liù* wheat-pwdr-m 582.
 flour mill (LX) *zuà ù-tcí* v-house 694.
 flour mill (*mo fang*) (MC) *dzò lò-tcí* millstone-house 694.
 flow (LX) *sú* STC 241 **sywar* 2151.
 flow (MC) *sè tcò* 2151.
 flow (MC) *tsuè-ηù* water-flow ?STC 210 **lwi(y)* 2151.
 flower (LX) *pá tsù* STC 260 **bu ~ *pu* 472.
 flower (MC) *tià tiá* 472.
 flower (CL) (LX) *tchá* 1264.
 flower (CL) (MC) *tsuà* 1264.
 flower (CL) (MC) *tù* 1264.
 fluff, tease (cotton) (LX) *thàn dà* b 2380.
 fluff, tease (cotton) (MC) *tshà* 2380.
 flush, rinse (LX) *qò tò* 1726.
 flush, rinse (MC) *gu í* 1726.
 flush, rinse (MC) *tshuá* 1726.
 flustered, confused (LX) *χù lì χú tá* b. asp on 4? 1612.

- flustered, confused (MC) *qè qè xuàn tcǎ* 1612.
 flustered, confused (MC) *qé zì-mì-nà* reason-not-have 1612.
 flute (MC) *tí tsì b* 951.
 flute, vertical flute, Qiang flute (LX) *pó lè* 951.
 flute, vertical flute, Qiang flute (LX) *tí tsì b* 951.
 flutter (LX) *là dà b?* 2226.
 flutter (MC) (*mè tá*) *zì zé* 2226.
 fly (n) (LX) *bù n,ì s2?*=black 442.
 fly (n) (MC) *tshán íj tsì b* 442.
 fly (v) (LX) *dá lá* 1891.
 fly (v) (MC) *zé* 1891.
 flying stone (LX) *bò ló* STC 88 *r-luŋ 47.
 foam (LX) *pà mò b* 54.
 foam (MC) *tsuè-phaó tsì* water-b 54.
 fog (LX) *dá mù* sometimes [dam⁵¹] 18.
 fog (MC) *dá mò* 18.
 fold umbrella (LX) *zì tsó* 2336.
 fold umbrella (LX) *fià quà* 2336.
 fold umbrella (MC) *quà* cf. close 2336.
 folkdance (MC) *tàN pè--sou* m-jump 942.
 folkdance (MC) *tàN pè--zó* m-jump 942.
 folkdance (?) (LX) *là sà-(tshó tà)* song-dance 942.
 folkdance (?) (LX) *tshó tà-zè mù* dance-speech 942.
 follow (LX) *dè* 1931.
 follow (MC) *mè tshí-nù* behind-exist 1931.
 follow (MC) *mè tshí-zì* behind-exist 1931.
 follow! (MC) *í* *dè* 1931.
 fond of good food (LX) *dzuè cý* 1700.
 fond of good food (LX) *kà tsì* 1700.
 fond of good food (MC) *kè mià* 1700.
 fontanel (LX) *qè (nà)-tshó* brain-jump 102.1.
 fontanel (MC) *qè nà-tié* brain-heart 102.1.
 food steamer (LX) *tsón tsì b* 761.
 food steamer (MC) *kuàN kuáN* 761.
 foodstuff (LX) *jà qè* 511.
 foodstuff (LX) *gù* 511.
 foodstuff (MC) *zá* STC 66 *dza 511.
 fool (LX) *kuè mù* 264.
 fool (MC) *mè kuà* 264.
 foot (LX) *gò* ?STC *g-la, ?*k-raŋ 129.
 foot (MC) *goù* ?STC *g-la, ?*k-raŋ 129.
 foothills (LX) *bó tsò* 26.
 foothills (MC) *kuò á* 26.
 footprint (LX) *pà tchuà* foot-step.on(?) 1032.
 footprint (MC) *gò mì mí* 1032.
 for how long (LX) *né gá-tuá* which-time 1394.
 for how long (MC) *nà tiè* 1394.
 forbid (LX) *tchà* 2077.
 forbid (LX) *qò cý* 2077.
 forbid (MC) *mì-pú-zì* NEG-do-CAUS 2077.
 force, compel (LX) *tchá* 1662.
 force, compel (MC) *kù tcú* 1662.
 forehead (LX) *deú kù* 102.
 forehead (MC) *dà pú* 102.
 forenoon (LX) *zà mià qe í* 1098.
 forest (LX) *phù-quá* tree-forest 57.
 forest (MC) *phò-quà* tree-forest 57.
 forget (LX) *dà mù* 2444.
 forget (MC) *dè mǔ* 2444.
 forgive (MC) (*dè*) *zǎn thà p,b,s* 2123.
 fork, pitchfork (MC) *iàŋ tshá b* 871.
 fortunate (LX) *ì-nà* life-good 1589.
 fortune, luck (LX) *ýn tchj* b 977.
 fortune, luck (MC) *ýN tchì* b 977.
 forty (LX) *zì sá* 1197.
 forty (MC) *zì sá* 1197.
 forty-one (LX) *zì sá à* 1198.
 forty-one (MC) *zì sá nà à qó* 1198.
 foul-tasting (LX) *mí ià* 'not good' 1554.
 foul-tasting (MC) *mí zè* 1554.
 foul-tasting (MC) *dzè qà* 1554.
 foundation (LX) *lò ká ~ là kà* 687.
 foundation (LX) *là kù* 687.
 foundation (MC) *tí tci* b 687.
 foundation (MC) *tcí (tshù)* bà 687.
 four (LX) *zì* ?STC 410 *b-liy 1177.
 four (MC) *zì qó* ?STC 410 *b-liy 1177.
 fourteen (LX) *fià zì* 1187.
 fourteen (MC) *fià zì* 1187.
 fourth (LX) *zì à xe í* 1222.
 fox (LX) *qhà guà* 402.
 fox (MC) *qhà guà* 402.
 fragile, crisp (LX) *bò tshú* 1493.
 fragile, crisp (MC) *tshuèi* b 1493.
 fragrant (LX) *χó* 1522.
 fragrant (MC) *χòu* 1522.
 frame (LX) *kù (mì)* 873.
 frame (MC) *tcǎ tsì b* 873.
 free animals (LX) *dà cì* 1879.
 free animals (MC) *dè lě* 1879.
 freeze (ground) (LX) *thò* 1835.
 freeze (ground) (MC) *tshǔ* 1835.
 freeze (hands) (LX) *thò* 1834.
 freeze (hands) (LX) *tó* 1834.
 freeze (hands) (MC) *toú* also for boiled water, etc 1834.
 freeze (meat) (LX) *thò* 1833.
 freeze, ice up (LX) *tò* 2063.
 freeze, ice up (LX) *thò* 2063.

- freeze, ice up (MC) *tsuè pà-dê-tshǔ* ice-p-verb 2063.
 fresh (LX) *tchí* STC #71 *dz(y)im 1545.
 fresh (MC) *cìN cìN* b? 1545.
 fresh and juicy (LX) *phà tí tì* 1607.
 fresh and juicy (MC) *tsuè pù qé liù* 1607.
 fresh and juicy (MC) *tsuè pù qè lí* 1607.
 freshwater clam (MC) *pæŋ³⁵-khà* b-m STC 311 *kroy 462.
 friend (LX) *ì zù ~ ÿ zù* rounding harmony? 258.
 friend (MC) *ì dzòu* 258.
 frighten (LX) *qò quà* ?redup 2475.
 frighten (MC) *qòu* low-rising tone w/ pfx 2475.
 frog (LX) *zò-piá* m-crawl (or STC *s-bal?) 430.
 frog (MC) *dzò-piá* m-crawl (or STC p41 *u-p(h)rok 'toad'? STC *s-bal?) 430.
 from A to B (LX) *A leí B à pà ló* ?is last syll a verb? 2641.
 from A to B (MC) *A ì B dè phè kí* A.from,B.to 2641.
 from ego, clockwise (pfx) (LX) *dà* - 1076.
 front of Chinese jacket (LX) *phù-suà* clothes-tail. u~o 627.
 front of Chinese jacket (LX) *phù què* u ~ o 627.
 front of Chinese jacket (MC) *caó tcín* b 627.
 front side (LX) *kù lá qhà* 1059.
 front side (LX) *ì dzí sǎ* 1059.
 front side, in front, ahead (MC) *dè qè* 1059.
 frost (LX) *pià thò* 16.
 frost (MC) *peì-thòu* m-cold 16.
 frost (v) (LX) *qà teì* 2470.
 frost (v) (LX) *sǎ cà* 2470.
 frost (v) (LX) *dà sǎ* 2470.
 frost (v) (MC) *lè* 2470.
 fruit (LX) *cì mǎ* STC 57 *sey 474.
 fruit (MC) *sè mù* STC 57 *sey 474.
 fry (pancake) (MC) *piá* 2560.
 full (LX) *suà* 1426.
 full (LX) *tà suà* 2167.
 full (MC) *suè* 2167.
 full (MC) *suè* 1426.
 full of food (LX) *tà xeì* cf. "good" 1652.
 full of food (MC) *xe ~ tà xé* 1652.
 full of, brimming with (LX) *tà suà* 1723.
 full of, brimming with (LX) *fià phù* 1723.
 funeral (LX) *lè í (pù)* 682.
 funny (LX) *sé zà lò* 1561.
 funny (LX) *zá ló sé* 1561.
 funny (MC) *mè-dzà-zí* person-laugh-CAUS 1561.
 funny, amusing (LX) *χuá dà ~ χuà dá* b? 1978.
 funny, amusing (LX) *qó tshí* 1978.
 funny, amusing (MC) *tchý thà* b? 1978.
 fur, hair (LX) *χù* 332.
 fur, hair (MC) *mù* 332.
 future (LX) *tà beí* 1151.
 future (MC) *tè pé qà* 1151.
 gall (LX) *tsí* STC 412 *(m-)kri-t 183.
 gall (MC) *tcí* STC 412 *(m-)kri-t 183.
 gamble (MC) *tcín tsé-qà* money-v 1843.
 gap, interval (LX) *só* 1021.
 gap, interval (MC) *fón fón* b 1021.
 gap, interval (MC) *zè pù* hole, hollow 1021.
 garden (LX) *tsà-kù* m-field 720.
 garden (MC) *tsí qǒ* 720.
 garlic (LX) *kè* 541.
 garlic (MC) *kè tù* 541.
 gasp (LX) (*dzý*) *dzý* 1752.
 gasp (MC) *tchì χà* b,m. ?STC *hanj 1752.
 gasp (MC) *tchì thè* b,m 1752.
 gate, front door (LX) *dzù-bà* door-big (calque?) 713.
 gate, front door (MC) *diò-bzà* door-big (calque?) 713.
 gather together (LX) *à tù* 2085.
 gather together (LX) *fiù fiù* 2085.
 gather together (LX) *zú zú* 2085.
 gather together (MC) *tè dzué* 2085.
 gather, coil (MC) *sè tsí dzà zǎ* 2162.
 gathered, assembled (LX) *zú zú* n.b. tone pattern. also no vowel change in redup 2007.
 gathered, assembled (MC) *dè kuě* 2007.
 gathered, coiled (MC) *tsí dzà* 2162.
 general directed motion (pfx) (MC) *dè* - 1076.
 generation (CL) (LX) *pe í* b 1344.
 generation (CL) (LX) *cí* 1344.
 generation (CL) (MC) *pe í* b? 1344.
 gentle, kind (LX) *tuè* 1575.
 gentle, kind (MC) *χò tchì* b 1575.
 get firewood (LX) *cì-fiù* wood-get 1775.
 get firewood (LX) *tù tuà* 1775.
 get firewood (MC) *sè tshuá s2=*cut wood 1775.
 get scared (LX) *tè tshó* 2079.
 get scared (LX) *à qò tè tshó* 2079.
 get scared (LX) *dà qò* 2079.
 get scared (MC) *à tshuè tè sou* 2079.
 get scared (MC) *tè goǔ* 2079.
 get water (LX) *tsù-tshí* water-pick.up 1773.
 get water (MC) *tsuè zǎ ké* 1773.

- get, acquire (LX) à *tsé* 2193.
 get, acquire (MC) *dê tcè* 2193.
 get, obtain (LX) à *tsî* 1808.
 get, obtain (MC) *té tiã* 1808.
 ghost (LX) *dù* 962.
 ghost (MC) *dù* 962.
 gift (LX) *qê cý* 997.
 gift (LX) *cì zè* 997.
 ginger (MC) *kòŋ xuà* 542.
 give (LX) *zî* 1926.
 give (LX) (*dà*) *zî* 2056.
 give (MC) *dá* 1926.
 give (MC) *zî* 1926.
 give (MC) *tcò té* 2056.
 give as present (LX) (*dà*) *zî* 2557.
 give as present (MC) *dê zî* 2557.
 give birth (LX) *tsé* 2320.
 give birth (LX) *ì* cf. 996, 1875 2320.
 give birth (MC) *zì* 2320.
 give birth (animal) (LX) *fià zù* best one 2467.
 give birth (animal) (LX) *dà tsé* 2467.
 give birth (animal) (LX) *dà ì* 2467.
 give birth (animal) (MC) *şè bũ* STC *bran 2467.
 give change (LX) *pù dà b?* 2579.
 give change (LX) *sì pú ? = 'do'* 2579.
 give change (MC) *mú mià* 2579.
 give change (MC) *lê là* STC 283 *lay 2579.
 give change (MC) *mú lià ?* STC 283 *lay 2579.
 give change (MC) *tşào thã b,s* 2579.
 give change (MC) *qà pú* 2579.
 give orders (LX) *fià dá* 2473.
 give/receive injection (LX) *şé qhò* 1774.
 give/receive injection (LX) (*şé*) *tè* 1774.
 give/receive injection (LX) *şé tsí* 1774.
 give/receive injection (MC) *şê tuá* 1774.
 given name (MC) *mê mé* STC 83 *r-min 1002.
 glass (LX) *pó li* b 733.
 glass (MC) *pó li ~ pó nì* b 733.
 glittering (LX) *cuá-zì zì* bright-m 1598.
 glittering (LX) *cuá-quà quà* bright-m 1598.
 glittering (MC) *cyá-cyá-tsî* bright-bright-m 1598.
 glue (LX) *mà tsà* 930.
 glue (MC) *tcàN tsî* b how diff from 859? 930.
 glue (MC) *pà mà* 930.
 glue (MC) *tcáo* b 859.
 gnaw (LX) *şà cà* 2115.
 gnaw (MC) *şè şá* 2115.
 go (LX) *kè* 2263.
 go (MC) *dã* 2263.
 go (MC) *kiè cì* 2263.
 go against, violate (LX) *dà tshà* 2446.
 go against, violate (MC) *tè tshê* 2446.
 go against, violate (MC) *tòu tú (pù)* 2446.
 go and return (MC) *sù* 2274.
 go back, walk backwards (LX) *fià thuí* b 2263.
 go out (LX) *sì kà* outward-go 1734.
 go out (MC) *şè kè* 1734.
 go to market (LX) *kè* 1912.
 go to market (MC) *şà sú kè (cì)* final ?= agr 1912.
 go to war (LX) *qù quá* 1768.
 go to war (MC) *dz uè quá* 1768.
 go to war (MC) *dz ué quá* 1768.
 go upstairs (LX) *tà kè* 2307.
 go upstairs (LX) *tà qé* 2307.
 go upstairs (MC) *tè tà* 2307.
 goat (LX) *tchà* STC 339 *kye·l, or PLB *V-cit (TSR 27) 344.
 goat (MC) *tshè* STC 339 *kye·l 344.
 god (LX) à *bú tchj* 961.
 god (MC) à *pà-sé* grandfather-god. STC *(m-)hla 961.
 gold (LX) *qú* 59.
 gold (MC) *qà* 59.
 gong (LX) *şá* 949.
 gong (MC) *lò ló* 949.
 good (LX) *ià* 1504.
 good (LX) *şè* 1504.
 good (LX) *nà* 1504.
 good (MC) *şé* 1504.
 good (MC) *nà* 1504.
 good luck (LX) *qú* 980.
 good luck (MC) *fê tchí* b? 980.
 goose (LX) *şò* b? 373.
 goose (MC) *uò* b 373.
 government official (LX) *qé bá* 255.
 government official (MC) *tcioù lòngh* *khoù* b? 255.
 gown (long) (LX) *phò thá* 631.
 gown (long) (MC) *phù-dzé* clothes-long 631.
 gown (short) (LX) *phò nà* 631.
 grab, seize (MC) *ù tsí* 2599.
 grab, seize (item) (LX) *zì tsuà* grab 2599.
 grab, seize (person) (LX) à *tsé* arrest 2599.
 grace, favor (LX) *qhà bú* 984.
 grade, rank (LX) *şuá şwà = 'help (vt.)'* 1012.
 grain measure (1 dl) (LX) *bú tú* 796.
 grain measure (1 dl) (MC) *pù tòu* s1 ?=bamboo 796.
 grain mill (MC) *dzò lò-qá* millstone-place

694.
 grain, kernel (LX) *gù b?* 518.
 grain, kernel (MC) *tshì mé gòu* 518.
 grain, kernel (MC) *tshì gòu* 518.
 grain-spreading rake (MC) *phà b?* 862.
 gram (LX) *ku* 1295.
 granddaughter (LX) *zì tsù* 282.
 granddaughter (MC) *zé tsù (toè)* 282.
 grandfather (LX) *á ì* 273.
 grandfather (MC) *kuè pà* 273.
 grandfather (direct) (MC) *à pà* 273.1.
 grandmother (LX) *á lè* 274.
 grandmother (MC) *kuè dá* 274.
 grandmother (direct) (MC) *á dà* 274.1.
 grandson (LX) *zì tsù* 281.
 grandson (MC) *zé tsù* 281.
 grant reward (LX) (*tè*) *zì* 2306.
 grant reward (MC) *dè zì* 2306.
 grape (LX) *kè peì qé tà* 502.
 grape (MC) *phù thá ~ phù thà b* 502.
 grasp (pen) (LX) *tsé* 2452.
 grasp (pen) (MC) *piè zó pà m l = b* 2452.
 grass (LX) *chá qé* 562.
 grass (MC) *sì* 562.
 grassland (MC) *χòu-bá m-b* 43.
 grassland (MC) *sì-ué sì grass-
 place.for.growing* 43.
 grassland (MC) *sì-phìη phìη grass-b('flat')*
 43.
 grassy plain (LX) *chá qé bà tò* 43.
 gray (LX) *phú (tù tỳ)* 1459.
 gray (LX) *χue í-phù phù b-?* 1459.
 greedy (LX) *cì m ì-zì heart-?* 2378.
 greedy (MC) *tié-bz à heart-big* 2378.
 green (LX) *pe í* 1456.
 green (MC) *χue* 1456.
 green and glossy (LX) *η í χè χè* 1602.
 green and glossy (LX) *pe í χè χè* shwa can
 be voiced 1602.
 green and glossy (MC) *χue χue tsì* 1602.
 grind (Ch med.) (LX) *iæn dá b* 2512.
 grind (Ch med.) (LX) *tuá* 2512.
 grind (Chinese med.) (MC) *sù* 2512.
 groan, humph (LX) *tsì zì* 1970.
 groan, humph (MC) *tshón xuà* 1970.
 grove (MC) *quá-sé forest-firewood* 57.
 grow up (LX) *tà bà* 2572.
 grow up (MC) *tè bz á* 2572.
 grow up (LX) *tà iú* 2572.
 grow, grow up (LX) *iú* 2317.
 grow, grow up (LX) *cì* 2317.
 grow, grow up (MC) *té χuě* 2317.
 grunt (pig) (LX) *zǎ* 2049.
 grunt (pig) (MC) *zě* 2049.
 guard, defend (LX) *zì* 2338.
 guard, defend (LX) *zì* 1878.
 guard, defend (LX) *tsà* 2338.
 guard, defend (MC) *dz ù* 2338.
 guard, defend (MC) *dz ù* 1878.
 guess (LX) *tshá í-dà b-s* 1683.
 guess (MC) *tshé* 1683.
 guess accurately (LX) *tà pà* 1684.
 guess accurately (MC) *sè tshé* 1684.
 guest (LX) *mà dz í* 270.
 guest (MC) *tè phì* 270.
 gums (LX) *sù kà* 171.
 gums (LX) *sù kù* 171.
 gums (LX) *sù kè* STC 437 *s-wa 171.
 gums (LX) *sù kà pú* 171.
 gums (MC) *sú-nà tooth(?)*-red. STC 437 *s-
 wa 171.
 gun (LX) *cà-dzù iron-m* 898.
 gun (MC) *tshóu* 898.
 gunnysack (LX) *sò qò* 869.
 gunnysack (MC) *tshà qà* 869.
 gunpowder (LX) *sá ká ?= medicine* 909.
 gunpowder (LX) *mú dz í* 909.
 gunpowder (MC) *χò iò b* 909.
 hackey-sack (LX) *tcen³⁵ tsì b.* 944.1.
 hail (LX) *pe ì-gù snow-kernel* 15.
 hail (n) (MC) *mz ì-z í* rain-dry 15.
 hail (n) (MC) *bú-pşì* diff't speaker. m-
 white(?) 15.
 hail (v) (LX) *qè tiè* 2472.
 hail (v) (MC) *sè toè p, v* 2472.
 hair of head (LX) *qè tó* 100.
 hair of head (MC) *qè toú* 100.
 half (LX) *tchá* 1289.
 half (MC) *dzuá* 1289.
 half (MC) *à-lá-a-diè* one-whole-one-part
 1289.
 half catty (LX) *kuè-zò 5-liang* 1311.
 half catty (MC) *kuà-dz òu 5-liang* 1311.
 half-new half-old (LX) *tchí tchá bá tchá* 1616.
 halter (LX) *kò-tsoù-sà η ì* horse-m-string
 827.
 halter (MC) *z òu tá bz è* 827.
 halter, bridle (LX) *kò-lòη thòu* horse-b 826.
 halter, bridle (MC) *z òu-dué-lòη tsì* horse-
 mouth-b 826.
 hammer (LX) *tuà liú* STC 317 *tow. 2d syll
 refers to shape. 851.
 hammer (LX) *tshue ì tshue í b* 851.
 hammer (MC) *tuà liò* STC 317 *tow. cf. 'hit
 with object' 851.
 hammer (MC) *tshuè ì tshuè ì b* 851.

- Han Chinese (LX) *bèi* 204.
 Han Chinese (MC) *dzì* 204.
 hand (MC) *ì pá* ?STC 355 *(m-)yuj. but LX has l-. STC 418 *pwa 133.
 hand span (LX) *khà* ?STC 165 *twa 1324.
 hand span (MC) *khá ~ khà* ?STC 165 *twa 1324.
 handful (of rice) (LX) *tsuà b?* Mandarin *zhuā* 'seize'. 1255.
 handful (of rice) (MC) *tʂuà b?* 1255.
 handkerchief (LX) *phà tsì b* 668.
 handkerchief (MC) (*ʂóu*) *phà tsì b* 668.
 handle (of knife) (LX) *ì* 765.
 handle (of knife) (MC) *kuì* 765.
 handle (of mug) (LX) *ì* 766.
 handle (of mug) (MC) *Bòu* 766.
 handle (of mug) (MC) *kuì* 766.
 hang (MC) *tàe kuá* 1824.
 hang (on wall) (LX) *kué* 1942.
 hang (on wall) (LX) *tchí là* ?STC 242 *dzywal 1942.
 hang (on wall) (MC) *tàe kuá* 1942.
 hang down (LX) *kué* 1824.
 hang down (LX) *tchí là* ?STC 242 *dzywal 1824.
 hang down (MC) *tché là* ?STC 242 *dzywal 1824.
 hang down, fall (LX) *fià tchí là* ?STC 242 *dzywal, STC *g/k-la 2474.
 hang down, fall (MC) *à tché là* ?STC 242 *dzywal, STC *g/k-la 2474.
 happen, occur (LX) *dà sî* 1860.
 happen, occur (LX) *fià lò* 1860.
 happen, occur (MC) *gè thê* 1860.
 happy (LX) *cì-nà* heart-good 1588.
 happy (MC) *tiè nà* heart-good 1588.
 hard (LX) *qò cà* 1484.
 hard (MC) *kòu tà* 1484.
 hard snot (LX) *tí-ghú* 193.4.
 hardworking (LX) *tchí tchà* 1582.
 hardworking (MC) *tchìŋ khué* 1582.
 harmonious (LX) *tuè* 1576.
 harmonious (MC) *chò mò b* 1576.
 harmonious (MC) *nè nà* 1576.
 harness (v) (LX) *à tsù* 2390.
 harness (v) (MC) *ì thaõ thà b?* 2390.
 harvest (LX) *cý qá b?*, m 2333.
 harvest (MC) *kú ~ kù* 2333.
 harvest (v) (LX) *cù b?* 2333.
 hasten (LX) *chú nú* 2259.
 hasten (LX) *chù chù* 2259.
 hasten (LX) *zà* 2259.
 hasten (MC) *zì kàn thà m,b,s* 2259.
 hasten, urge (LX) *kuá* 1756.
 hasten, urge (MC) *tè kàn dzì* 1756.
 hat (LX) *tà bá (chà)* 644.
 hat (MC) *tà bá* 644.
 hatch, brood (LX) *íá* 1899.
 hatch, brood (MC) *né* 1899.
 hate (LX) *qhú* 1969.
 hate (MC) *qhou* 1969.
 have (benefit) (LX) *hó* 2544.
 have (benefit) (MC) *hà* 2544.
 have (something in bowl) (LX) *lià* 2541.
 have (something in bowl) (MC) *lê* 2541.
 have (something in milk) (LX) *lià* 2542.
 have (something in milk) (MC) *hà* 2542.
 have (something in milk) (MC) *lê* 2542.
 have (use) (LX) *uè* 2545.
 have (use) (LX) *hó* 2545.
 have (use) (MC) *hà* 2545.
 have (wealth) (LX) *tsé* 2537.
 have (wealth) (MC) *hà* 2537.
 have a dry throat (LX) *qò tcù* ?STC 331 *kan 1909.
 have a dry throat (MC) *gè zuì ~ gè zuǐ* 1909.
 have bitter taste in mouth (LX) *dà qhà* 1869.
 have bitter taste in mouth (MC) *qhà* "bitter" 1869.
 have caught (LX) *à tsé* 2610.
 have caught (MC) *ù tsǐ* 2610.
 have caught (MC) *ù tʂuà* 2610.
 have diarrhea (LX) *cà pò* = "urinate" 2495.
 have diarrhea (MC) *tshè tì* 2495.
 have dim eyesight (LX) *mì tshò m* = eye 1975.
 have dim eyesight (LX) *mì dà b?* 1975.
 have dim eyesight (LX) *mì suè* 1975.
 have dim eyesight (MC) *mù qé-dà mò* eye-cloud 1975.
 have dim eyesight (MC) *mù tí-gè-chuà-thà* eye-p-b-s 1975.
 have fever (LX) *qhú qhuá* 1866.
 have fever (MC) *thó thòu* = 'hot' 1866.
 have frost (MC) *peì thòu-ná* frost-exist 2470.
 have given (LX) (*dà*) *zǐ gè sà* 2057.
 have given (MC) *dè dá cà* 2057.
 have given (MC) *ì tcò té (cà)* 2057.
 have not (+V-ed) (LX) *mì* 2639.
 have not (+V-ed) (LX) *mò hio* 2639.
 have not (+V-ed) (MC) *mì dzǐ* 2639.
 have not (+V-ed) (MC) *mì nà ?* drop? 2639.
 have time off work (LX) *bà ì (dà) cì* 1886.
 have time off work (MC) *dé lě* 1886.
 head (LX) *qà* 99.
 head (LX) *qà bá tsǐ ?* is 'b' really voiced? 99.

- head (MC) *qà bzá tsì* 99.
 head of village (MC) *qé qè* 230.
 headman (MC) *qé qè* 229.
 hear (LX) *à nò* 2410.
 hear (LX) *á nó tci* 2410.
 hear (MC) *nò cá* 2410.
 heart (LX) *cì mì* STC 367 *s-nin 179.
 heart (MC) *tié mù* STC 367 *s-nin 179.
 heat (rice) (LX) *dá ~ dà* 2276.
 heat (rice) (MC) *duè zì* 2276.
 heat (rice) (MC) *lì* ?STC 381 *lum 2276.
 heaven (MC) *mà tá-kuè qò* heaven-yamen 971.
 heavy (LX) *zì* WT ldzi-ba. STC 95 1462.
 heavy (MC) *dzì* WT ldzi-ba. STC 95 1462.
 heavy (of color) (LX) *ŋ.í ~ ŋ.ì* = black 1478.
 heavy (of color) (MC) *nĩŋ tò* 1478.
 heavy (of color) (MC) *kè* 1478.
 hedgehog (LX) *tchí-pià* thorn-pig 395.
 hedgehog (MC) *tsì tsú tsì b* 395.
 heel (LX) *gò qá* 129.1.
 heel (LX) *pà tchá* 129.1.
 heel (LX) *pà qà tchá* 129.1.
 heel (MC) *gouù mù sà* 129.1.
 height (LX) *bè bó* low-high 1620.
 height (LX) *bó bè* high-low 1620.
 height (MC) *bzú bè* high-low 1620.
 hell (MC) *ín tcién qà b?* 972.
 hell (MC) *sí pù bzà* 972.
 helmet (MC) *dzuè tà bá* m-hat 905.
 help by the arm (LX) *(tè) thè* 1697.
 help by the arm (LX) *(à) tsé* 1697.
 help by the arm (LX) *à kù* 1697.
 help by the arm (MC) *ù tsì ~ ù tsĩ* 1697.
 help, assist (LX) *kuà* 1642.
 help, assist (MC) *tè kuà* 1642.
 hemp (LX) *sò* 529.
 hemp (MC) *sà phié* 529.
 hen (LX) *ý mià* 367.
 hen (MC) *ì mià* 367.
 henceforth (LX) *tà beí* 1154.
 her-/himself (LX) *ió ì* 1375.
 her-/himself (MC) *fià í ý í lè* 1375.
 here (LX) *tcà-tshá* this-place 1380.
 here (MC) *tcì qà* 1380.
 here (MC) *tcã lè* 1380.
 hero (LX) *tchì tchá mù* 257.
 hibernate (LX) *sù* 1836.
 hiccup (MC) *qè pù ~ qè pù* 1786.
 hiccup, belch (LX) *qà pù tshè?* 1786.
 hide self (LX) *(à) pià* STC 46 *pwak 1854.
 hide self (MC) *kuò* 1854.
 hide, conceal (v.t.) (LX) *à lià* 1688.
 hide, conceal (v.t.) (LX) *cù* 1688.
 hide, conceal (v.t.) (MC) *sù sué* 1688.
 hide, conceal (v.t.) (MC) *kò* 1688.
 him, her (D.O.) (MC) *fià zò* (no change for plurals) 1366.2.
 hinder, obstruct (LX) *kú tsé* 2194.
 hinder, obstruct (LX) *phà sè* 2194.
 hinder, obstruct (MC) *dzì dzà* 2194.
 hire (LX) *kuà cá* 1939.
 hire (MC) *mè kuà* 1939.
 his, her (MC) *fià í kì* 1366.1.
 hit (LX) *qè tiè* ?STC *tsuk. ?STC 387 *tuk ?STC 399 *d/t u/i p 1762.
 hit (MC) *tuá* ?STC p53 *tsuk. ?STC 387 *tuk 1762.
 hit target (LX) *dà uà* 1767.
 hit target (MC) *dè ué p,v* 1767.
 hit with object (MC) *tuà tcá* cf. 'hammer'. ?STC 387 *tuk 1623.
 hoe (LX) *tcuà* 866.
 hoe (MC) *kuà* 866.
 hoe (v) (LX) *haó dà b?* 1739.
 hoe (v) (MC) *kuà* 1739.
 hold (a urinating child) (LX) *cì* 1633.
 hold (a urinating child) (MC) *bié-tsì* urine-hold/support 1633.
 hold (in arms) (LX) *tà tò tà tó* = braid(vt.) 1653.
 hold (in arms) (MC) *toù* 1653.
 hold closely (LX) *tò* 2156.
 hold closely (MC) *taĩ* 2156.
 hold closely (MC) *fià tòu* 2156.
 hold in mouth (LX) *tchý* 1959.
 hold in mouth (LX) *zé* cf. 'chew' 1820.
 hold in mouth (LX) *zì* 1820.
 hold in mouth (LX) *qá* STC 491 *gam 1820.
 hold in mouth (MC) *duè diò mì ué* mistranslated as blabber(not know word?) 1820.
 hold in mouth (MC) *qouú* 1959.
 hold in mouth (MC) *zé* 1820.
 hold meeting (LX) *pù* 2098.
 hold meeting (MC) *mè tsò* 2098.
 hold with both hands (LX) *què* 2219.
 hold with both hands (MC) *phòŋ thá b* 2219.
 hole (LX) *zà pù* ?STC 169 *dwa:ŋ. ?STC 345 *pop 29.
 hole (MC) *zè pù* ?STC 345 *pop 29.
 holiday (LX) *mà dzá (mù)* 1173.
 hollow (LX) *zà pù* 30.
 hollow (MC) *zè pù* 30.
 home (LX) *ké* 80.
 home (LX) *qò* 80.

- home (MC) *tcí* 80.
 hometown (LX) *tcè kú* 81.
 hometown (MC) *á lè zì sl,2* = 'we' 81.
 honest (LX) *laò sî* b 1572.
 honest (MC) *laò sî* b 1572.
 honest (MC) *tí* 1572.
 honestly, conscientiously (LX) *ì tsó mì tsó* 1610.
 honestly, conscientiously (MC) *pén fèn* b 1610.
 honestly, conscientiously (MC) *teí tì tsì* 1610.
 honey (LX) *bù-tshí* bug-sweet 464.
 honey (LX) *bù tshí* 605.
 honey (MC) *bè* ì 605.
 honeybee (LX) *bù-iù* bug-bee STC 492 **yaŋ* = *(s-)breŋ 455.
 honeybee (MC) *bù-zoú* bug-bee STC 492 **yaŋ* = *(s-)breŋ 455.
 honeycomb (completed) (LX) *xuàn lá* 606.
 honeycomb (not yet completed) (LX) *lá qhuá* 606.
 hoof (LX) *tsú kà* 330.
 hoof (MC) *thì khà* b 330.
 hook (MC) *koú koú* b 917.
 hook (v.t.) (LX) *kué* 1930.
 hook (v.t.) (LX) *kú* 1930.
 hook (vt) (MC) *kuá* 1930.
 hoop, band (LX) *kù* 784.
 hoop, band (MC) *ì quá* 784.
 hoop, band (MC) *khú khú* b? (strange tone) 784.
 hope (LX) *bà ló* 1004.
 hope (MC) *bè dzóu* 1004.
 hope (v) (LX) *cì é* 2464.
 hope (v) (MC) *bè dzóu* (*zà*) m3?=s 2464.
 horizontal (LX) *tí* 1447.
 horizontal (MC) *xuàn tci* b? 1447.
 horn (LX) *jà ká*?STC 85 **ruŋ*, ?bone **rus* 329.
 horn (MC) *zè ké*?STC 85 **ruŋ*, ?bone **rus* 329.
 horse (LX) *bò* STC 145 **m-raŋ* 335.
 horse (MC) *zòu* STC 145 **m-raŋ* 335.
 horse fodder (LX) *bò zù* 617.
 horse fodder (LX) *bò tì* 617.
 horse fodder (MC) *zòu sí* 617.
 horse shed (LX) *bò-iuà kù* ~ *bó-iuá kù* horse-b 698.
 horse shed (MC) *zòu zé* 698.
 horse shed (MC) *zòu-khue í-bà* horse-v-m 698.
 horse shoe (LX) *bò gò tchuà* 832.
 horse shoe (MC) *tshàn tsì* b? 832.
 horse's mane (LX) *bó ká xú* horse-POSS(?) body.hair 339.
 horse's mane (MC) *tsón káN mào* b 339.
 host (LX) *tcè là pú* 269.
 host (MC) *tcì lè pú* 269.
 hot (LX) *dá* of food 1514.
 hot (LX) *khú khuá* u~ua in redup, as in Mianchi 1514.
 hot (LX) *lé*?STC 381 **lum* 1514.
 hot (MC) *khué khuè* 1514.
 hot (MC) *thá thòu* cf. 'cold' 1514.
 hot (MC) *duè* 1514.
 hot (spicy) (LX) *là tcì* 1529.
 hot (spicy) (LX) *tcì* 2128.
 hot (spicy) (MC) *zè* 2128.
 hot, of soup, e.g. (temp) (LX) (*mò*) *thò* fire-b 2128.
 hound (MC) *xó-khuè* hunt-dog 362.
 hour (CL) (LX) *tièN* b 1335.
 house (LX) *ké* 683.
 house (LX) *tcé kù* STC 53 **kim* 683.
 house (LX) *kè ké* 683.
 house (MC) *tcí* ~ *tcì qó* 683.
 how (LX) *nà gà* 1395.
 how (MC) *nà kí (lè)* 1395.
 how many? (< 10) (LX) *nà ó* 1397.
 how many? (<10) (MC) *nà qó (lè)* 1397.
 how much (> 10) (LX) *nà ná* 1396.
 how much (> 10) (MC) *nà nò (lè)* 1396.
 howl (wolf) (LX) *zǎ* 2053.
 howl (wolf) (MC) *zě* 2053.
 howl, roar (lion) (LX) *qá jà* also "speak" 2053.
huangniu bull (LX) *zì* 317.
huangniu bull (MC) *zì nǎ kì* 317.
huangniu bull (MC) *zì-(bzǎ)* bull-big 317.
huangniu cow (LX) *sì mià* 318.
huangniu cow (MC) *nò-mià-nǎ-kì* cow-female-red-NOM 318.
 Hui nationality (LX) *uè tsì* b? 207.
 Hui nationality (MC) *xuì xuí* b 207.
 hulu gourd (MC) *fū lù* b 551.
 hum a tune (MC) *ŋé* [ŋge] 1704.
 hunchback (LX) *tsò qhuà* 263.
 hunchback (MC) *thò pe í-tsì* b-s 263.
 hundred (one) (LX) *à tshəi* STC 164 **r-gya* 1209.
 hundred (one) (MC) *à tshì* STC 164 **r-gya* 1209.
 hundred million (LX) *kuà kuá* 1218.
 hundred thousand (LX) *fià dzó-kuá* ten-thousand 1215.

- hundred thousand (MC) *fià diù-uá* ten-ten.thousand. tone change in ml. 1215.
 hung (passive) (LX) *fià kué* 1943.
 hung (passive) (MC) *şà kuâ* 1943.
 hungry (LX) (*dâ*) *sù pá* 1858.
 hungry (MC) *sù* 1858.
 hunt (LX) *qhò* 1765.
 hunt (MC) *cý xó* 1765.
 hunt down (MC) (*sù*) *soú thà* mountain-b-s 2365.
 hunt down, track (LX) *mú lià* 2365.
 hunter (LX) *khù-cí-mù* dog-fang-AGT 243.
 hunter (MC) *cý xó-mù* hunt-AGT 243.
 hunter (MC) *khùè-xó-mù* dog-hunt-AGT 243.
 hurried (LX) *xò lì xó tá b?* 1566.
 hurried (LX) *xó tá b?* 1566.
 hurried (MC) *nè kóu* 1566.
 husband (LX) *zò tci* 306.
 husband (MC) *bè liú* 306.
 husk rice (LX) *tuá* 1727.
 husk rice (MC) (*tshì*) *xuà là* 1727.
 I (nominative) (MC) *ñà* STC 285 **ñay* 1359.
 I, me (LX) *qà* STC **ka* 1359.
 ice (LX) *tsù pá* 19.
 ice (MC) *tsuè pá* 19.
 idea, opinion (LX) *bà ló* 985.
 idea, opinion (MC) *bè dzóu* 985.
 idle (LX) *só* 1536.
 idle (LX) *dà só* 2124.
 idle (MC) *dè* 2124.
 idle (MC) *dz ì m ñ á* 2124.
 immediately (LX) *à cí* lè 2624.
 immediately (MC) *má şàN* b 2624.
 in (the sky) (LX) (*mù tó*) *xeì* 1069.
 in (the sky) (MC) *lià xà* 1069.
 in (the sky) (MC) *qé tè* 1069.
 in (the sky) (MC) *mè tá* 1069.
 in a great rush (LX) *xó tá* 1987.
 in a great rush (MC) *xuàn tca* b 1987.
 in a mess (LX) *phó sí phá* là ml: ə~i 1609.
 in a mess (MC) *luàn tchì pá tsaò* b 1609.
 in back (LX) *suà qá* ml=tail end 1048.
 in back (MC) *mè tshí* cf. follow, after, etc 1048.
 in disorder (LX) *phù lá* 2161.
 in disorder (MC) *lè tà* 2161.
 in front (LX) *qè í* 1047.
 in front (MC) *dè qè* 1047.
 in the past, formerly (LX) *dà qe í* 1147.
 in the past, formerly (MC) *qé ì sì sì* 1147.
 in the past, formerly (MC) *qǎi qá* strange tone pattern 1147.
 incense (LX) *xò tì* 751.
 incense (LX) *xò tì* 974.
 incense (MC) *xòu té s2~téi* 974.
 include (LX) *lià* 1646.
 include (MC) *fià ñá lè ñuè* 1646.
 incorrect (LX) (*dâ*) *tshâ* 1498.
 incorrect (MC) *kè tshòu* 1498.
 index finger (LX) *lié cú* VH? 137.
 inexpensive (LX) (*phù*) *tchá* sl=price 1507.
 infect, be contagious (LX) (*à*) *tò* 1746.
 infect, be contagious (MC) (*mè*) *z ì thá b?* 1746.
 inhale (LX) *kú* 2456.
 inhale (MC) *thè* 2456.
 inhale (MC) *thié* 2456.
 injure (LX) *à qù* 2304.
 injure (LX) *à tsù* 2304.
 injure (MC) *ñè* 2304.
 injure (MC) *şè liâ* 2304.
 ink (liquid) (LX) *mè sue í* b 926.
 ink (liquid) (MC) *mè (tşè)* 926.
 ink box (LX) *xó tsì* b 927.
 ink box (LX) *xó xó ~ mé xò xò* b 927.
 ink stick (LX) *tsù 'water'* 925.
 ink stick (LX) *mé* b 925.
 ink stick (MC) *mè* b 925.
 inlay (v) (LX) *piá* 2248.
 inlay (v) (LX) *ká* 2248.
 inlay (v) (MC) *càN piè* 2248.
 insane person (LX) *kó mù* 265.
 insane person (MC) *fù thà* b 265.
 inside (of room) (LX) *kù kú* 1050.
 inside (of room) (MC) *qò qó* 1050.
 inside (of thing) (LX) *kù lì* 1050.1.
 inside (of thing) (MC) *tiè-qá* heart-m 1050.1.
 inside, upstream (MC) *ì piá* 1050.
 install, erect (LX) *liá* 1626.
 install, erect (MC) *ì tsò* 1626.
 install, erect (MC) *tè kuì* 1626.
 instep (MC) *gòu pá tié* foot-LOC?-heart 129.
 instigate (LX) *thiáó pò-pù* b-'do' 2404.
 instigate (MC) *quà tè ǎ zì* 2404.
 intelligent (LX) *qè tchí (tchá)* 1568.
 intelligent (MC) *tsé xà* 1568.
 intentioned (LX) *á tó ná* 1936.
 intentioned (MC) *nì pá nè* 1936.
 interest, usury (LX) *lú phù* cf. 'price' 806.
 intestines (LX) *pù* 184.
 intestines (MC) *qò lò* 184.
 intimate, affectionate (LX) *iá* 1593.
 intimate, affectionate (LX) *tue ì* 1593.
 intimate, affectionate (MC) *nè nà* 1593.
 into, in front of, upstream (pfx) (LX) *ì -*

1078.
 into, upstream (pfx) (MC) *ì* - 1078.
 iron (LX) *cà* (*mó*) STC 228 *syam. second syllable from PTB final 63.
 iron (MC) *cì* STC 228 *syam 63.
 iron (MC) *cì* STC 228 *syam 63.
 iron pot, wok (LX) *cà mó-tshà piá* iron-pot 756.
 iron pot, wok (MC) *mà-tá* First syllable reputedly "heavens" (from shape of bottom) 756.
 irrigate (LX) *sù* 1950.
 irrigate (LX) *lù* 1950.
 irrigate (LX) *ká* 1950.
 irrigate (MC) *tsuè lè* 1950.
 irritatingly slow (LX) *à tchá tchá* 1597.
 irritatingly slow (MC) *à qhà qhà tsí* 1597.
 is closed (mouth) (LX) *tchý* 1664.
 is closed (mouth) (LX) *qú* 1664.
 is closed (mouth) (MC) *fià piá* 1664.
 itch, tickle (LX) *zè zè* ?STC 465 *m-sak 2515.
 itch, tickle (MC) *dzì dzà* ?STC 465 *m-sak 2515.
 itch, tickle (MC) *ká* 2515.
 jab, poke (LX) *tsí* 1753.
 jab, poke (LX) *tcí* 1753.
 jab, poke (MC) *tshóu* 1753.
 jackal (LX) *bà tsì* 400.
 jackal (MC) *sè* (*khué*) 400.
 jade (LX) *y sî* b 659.
 jade (MC) *y sî* b 659.
 January (LX) *dzá lè* 1123.
 January (MC) *pè lè* 1123.
 Jew's harp (LX) *dzuà pú* 954.
 Jew's harp (MC) *dzòu* 954.
 jiǎo (10 Chinese cents) (LX) *tcó* b 1333.
 jiǎo (10 Chinese cents) (MC) *tshù* 1333.
 join (sections of bridge) (LX) *qhú* u 1967.
 join (sections of bridge) (LX) *què* 1967.
 join (sections of bridge) (LX) *quà* 1967.
 join (sections of bridge) (MC) *à iú tè pù* m1.2=together, m3=p, m4='do' 1967.
 join, link (LX) *á dí dí* ?STC 421 *du-t ~ *tu-t 2138.
 join, link (MC) *ì deĩ* ?STC 421 *du-t ~ *tu-t 2138.
 joint (LX) *kù sà* 169.
 joint (LX) *jà sà* ?STC p55 *tsik 169.
 joint (LX) *sà ká* 169.
 joint (LX) *jà ká sá* 169.
 joint (MC) *zè kóu-zè sà ~ zè kóu-zè sá* ε~æ. bone-joint. 169.
 joke (LX) *zà-zà mú* laugh-speech 935.
 joke (LX) *dzà-zà mú* smile/laugh-speech 935.
 joke (LX) *zá-ló-zè mú* laugh-come-speech 935.
 joke (MC) *mè-dzà-zí* person-laugh-CAUS 935.
 joke (MC) *dzà thé* laugh-m 935.
 July (LX) *cí ló* calque 1129.
 July (MC) *ná lè* calque 1129.
 jump (LX) *tshó* (*tà*) b? 2406.
 jump (MC) *soú* 2406.
 June (LX) *tsú ló* calque 1128.
 June (MC) *tshòu ló* calque 1128.
 just opened eyes (LX) *mí mí-tà-phài* eyes-pfx-v 104.1.
 kala-azar patient (LX) *dù kù mí* 962.
 keep secret (MC) *qà-nè zeí-tchì diú* NEG-other.person-tell 1650.
 kerchief, neck scarf (MC) *χàn tcín* b 645.
 kernel of grain (CL) (LX) *fiò* 1244.
 kernel of grain (CL) (MC) *qó* 1244.
 key (LX) *dzù uà* 820.
 key (MC) *suà-zí* lock-child 820.
 kick (LX) *tshù ~ tshú tá* 2393.
 kick (MC) *tshù* 2393.
 kid (LX) *tchá mù tsú* 349.
 kid (MC) *tshè-pì-tsu* goat-m-small 349.
 kidney (LX) *pú lù* 181.
 kidney (MC) *pú lò* 181.
 kidney bean (MC) *pìN tá* b 557.
 kill (chicken) (LX) *tsò tsó* STC 58? *g-sat 2298.
 kill (chicken) (MC) *tsì tcá* tonal flip flop w/ DO 2298.
 kill (person) (LX) *qà tiè* only for humans 2297.
 kill (person) (LX) *tsò tsó* 2297.
 kill (person) (MC) *tsì tcá* 2297.
 kindle (LX) *dzuà* 1815.
 kindle (LX) *tsú* 1815.
 kindle (MC) *mú-tsu* fire-ignite 1815.
 kindle (MC) *ì tsú* 1815.
 kiss (v) (LX) *tá pò* 2256.
 kiss (v) (LX) *ná* 2256.
 kiss (v) (LX) *ná tá* 2256.
 kiss (v) (MC) *tsù tsú* (*pù*) STC p69 *dzo·p 2256.
 kitchen (LX) *mà má ké* 691.
 kitchen (LX) *tsò zò tcí* 691.
 kitchen (MC) *tchò pù sí* 691.
 kite, hawk (LX) *χò* STC 333 *lan? 406.
 kite, hawk (MC) *là* STC 333 *lan? 406.
 knead (LX) *iò qò tcý* 2284.

- knead (LX) *zuà dá* b 2284.
 knead (MC) *z uà (tiá)* b 2284.
 knee (LX) *bò qó* 127.
 knee (MC) *hò ké* 127.
 kneecap (MC) *hò ké pù tci* 127.
 kneel (LX) (*bò*) *tshú* 1951.
 kneel (MC) *hó tshò* 1951.
 knife (LX) *tcè ù* 762.
 knife (LX) *tcà piá* 762.
 knife (MC) *cì dé* 762.
 knife (CL) (LX) *cá* 1246.
 knife (CL) (MC) *pà* b 1246.
 knife edge (LX) *tcà (piá) qó* 764.
 knife edge (LX) *tcà qó* 764.
 knife edge (MC) *tsê sí* 764.
 knife edge (MC) *dê* 764.
 knife edge (MC) *lâ = arrow?* 764.
 knife edge (MC) *tsê kí* sharp-edge 764.
 knit, weave (LX) *tcà* STC 17 *trak 2589.
 knit, weave (MC) *tià* 2589.
 knit, weave (MC) *kè piá* 2589.
 knock (LX) *â tá* 2251.
 knock (LX) *sú tá* 2251.
 knock (MC) *khaó thà* b,s 2251.
 knock down (wall) (LX) *dà dzù zí* 1803.
 knock down (wall) (LX) *dà kù buá* 1803.
 knock down (wall) (MC) *sè dz uà z í* VH 1803.
 knock down (wall) (MC) *sè guì z í* 1803.
 knock over (LX) *tó qó* 1804.
 knock over (LX) *dà dzý* 1772.
 knock over (MC) *sé guì z í* 1772.
 knock over (MC) *sé guí* 1772.
 knock over (MC) *dê guí* 1804.
 knot (LX) *kè tá* 1023.
 knot (MC) *kè tà tà* 1023.
 know (LX) *sì (à)* STC 182 *syey. mng of sfx? AGR? 2588.
 know (MC) *sì z á* STC 182 *syey 2588.
 know how to (LX) *bú jà* 1995.
 know how to (MC) *hùè* 1995.
 know well (LX) *sì ~ sí sí* STC 182 *syey 2343.
 kowtow (LX) *bò tsú* 2110.
 kowtow (MC) *zà pú* 2110.
 laba instrument (LX) *sá lá tsì* 956.
 laba instrument (LX) *tshue í tshue í* b ('blow') 956.
 laba instrument (MC) *tcì lé* 956.
 lack, be short (one person) (LX) *tchá* b 2267.
 lack, be short (one person) (LX) *bià* 2267.
 lack, be short (one person) (MC) *tchuè tchuè-à-tió-uè* lack-one-CL-exist. b? 2267.
 lack, be short (one person) (MC) *z è pù dè uě* 2267.
 ladder (LX) *dì ká* 718.
 ladder (LX) *bú tì* 718.
 ladder (MC) *dè tci* 718.
 lake (LX) *có* 33.
 lake (LX) *cý* 33.
 lake (MC) *tsuè qhò* 33.
 lamb (LX) *ió mù tsù* 348.
 lamb (MC) *ioù-lù-tsú* sheep-soft-small 348.
 lame (LX) *qhuá* 2268.
 lame (MC) *qhuá* 2268.
 lame person (LX) *guà-qhuá-(mù)* foot-lame-AGT (VH) 260.
 lame person (MC) *gou-khuá* foot-lame 260.
 lamp (LX) *mú gú* 737.
 lamp (MC) *mè-cà* fire-bright(?) 737.
 lamp shade (LX) *tsao tsì* b 741.
 lan ding cao plant (MC) *sí-xue i* m-color 565.
 landslide (v) (LX) *fià tshò* 2374.
 landslide (v) (LX) *kù buá* 2374.
 landslide (v) (MC) *fià dz uà* 2374.
 language, speech (LX) *zè mú* 932.
 language, speech (MC) *zuè mé* 932.
 lantern (LX) *tán lòn* b 742.
 lantern (MC) *te i lú* b 742.
 large basket (LX) *lò toú* b? 870.
 large basket (LX) *lò khuàN* b 870.
 large basket (LX) *pá kù* ?STC 393 *kuk 870.
 large basket (MC) *lò khuáN* b 870.
 large clump of trees (CL) (LX) *quá* 1250.
 large rooms (CL) (LX) *qò* 1304.
 large shovel, scoop (MC) *tchuàn tsì* b 865.
 larynx (LX) *qù mù tcy* 177.
 larynx (LX) *mù kà tcy* cf. 173 177.
 larynx (MC) *tshò xou thòu* 177.
 last night (LX) *nei³⁵ dzi tsí* weird tone 1094.
 last night (MC) *nè gié tsí* (words with two high tone sylls are very rare in MC) 1094.
 last year (LX) *ná pù* ?STC 368 *niñ. cf. yesterday 1143.
 last year (MC) *né pù* ?STC 368 *niñ 1143.
 late, tardy (LX) *bà* 1467.
 late, tardy (MC) *là* 1467.
 latter generation (LX) *mù-suà* person-m 314.
 latter generation (LX) *m i-suà* person-m 314.
 latter generation (MC) *mè tsí k i* 314.
 laugh (LX) (*dá*) *zá ló* tone var. ?STC 202 *rya-t 2492.
 laugh (MC) *dz à* ?STC 202 *rya-t 2492.
 lay bricks, stones (LX) *cà* 2239.
 lay bricks, stones (LX) *iú* 2239.

- lay bricks, stones (MC) *lò zù-tshú*
stone.wall-construct 2239.
- lay egg (LX) *fià tshí* 2468.
- lay egg (MC) *tshí* 2468.
- layer (in a stack) (LX) *tshè* 1291.
- layer (of clothing) (LX) *lè* 1291.
- layer (of clothing) (LX) *pè* 1291.
- layer, storey (MC) *tshàn* b 1291.
- layer, storey (multiple) (LX) *sá* 1291.
- layer, storey (one) (LX) *tshì* 1291.
- lazy (LX) *qéí* 1583.
- lazy (MC) *ké* 1583.
- lead (cow) (LX) *sí* 2246.
- lead (cow) (LX) *tá* 2246.
- lead (cow) (MC) *tá* 2246.
- lead the way (LX) *tá* 1794.
- lead the way (LX) *só* 1794.
- lead the way (LX) *só* 2533.
- lead the way (LX) *tá* 2533.
- lead the way (MC) *zì tá* 2533.
- lead the way (MC) *tá* 1794.
- leaf (LX) *tshò lò* STC 321 *lap 471.
- leaf (LX) *qè mà* 471.
- leaf (MC) (*phò*) *cà qè* cf. TP 471.
- leaf (CL) (LX) *phià* b 1263.
- leaf (CL) (LX) *tshè* 1263.
- leaf (CL) (LX) *mà* 1263.
- leaf (CL) (MC) *phiè* b 1263.
- leak (rain) (LX) *zì* 2157.
- leak (rain) (MC) *zuè* 2157.
- lean meat (LX) *tshì bú* 589.
- lean meat (MC) *tshài tshài* 589.
- lean on (LX) *có* 2109.
- lean on (LX) *kù* 2109.
- lean on (LX) *tì* 2595.
- lean on (LX) *tshú ~ tshù dá* b? 2595.
- lean on (MC) *tshù tié* 2595.
- lean on (MC) *khó* 2109.
- leaning (MC) *qè tshué* 1443.
- leaning, crooked (LX) *qhuá* 1443.
- leap month (LX) *tóé là* 1135.
- leather clothing (MC) *zà piá-phù* skin-clothes 632.
- leather jacket (LX) *jà piá-phò* skin-clothes 632.
- leather jacket (Qiang vest) (MC) *zà piá-phà dzà* skin-vest 647.
- left (hand) (LX) *lí zí kuá zí ~ zá* (vh?) 1045.
- left (hand) (MC) *guì* 1045.
- leftward (MC) *guè fià cá qhuà ~ gué fià cà qhuà* gue~ gui 1045.
- legging, puttee (LX) *zù de í* STC p110 *(r-tul 650.
- legging, puttee (MC) *diòñ dí* STC p110 *(r-tul 650.
- lend (LX) *dà ñ, ì* STC 190 *r-nya 2070.
- lend (MC) *dè ñě* STC 190 *r-nya also takes *şè* 2070.
- length (LX) *thá-ñà* long-short 1617.
- length (LX) *ñà-thá* short-long 1617.
- leopard, panther (LX) *cì* STC 61 *zik 383.
- leopard, panther (MC) *sì* STC 61 *zik 383.
- letter, mail, news (LX) *phù* 919.
- letter, mail, news (MC) *pşè* 919.
- letters (CL) (LX) *fóN* b 1303.
- letters (CL) (MC) *fú* b? 1303.
- li (half kilometer) (MC) *lú* 1319.
- lick (LX) *ñá tá* also *ñé* STC 211 *m/s-lyak 2401.
- lick (MC) *ñè tá* STC 211 *m/s-lyak 2401.
- lid, cover (LX) *tà-qó* m-verb. STC 479 *klup 759.
- lid, cover (MC) *tshà qù* STC 479 *klup 759.
- lid, cover (of cup) (MC) *qà qù* STC 479 *klup 759.
- lie (n.) (LX) *ì zì* cf. 'speech'. 1018.
- lie (n.) (MC) *zè zè* 1018.
- lie down (LX) (*fià*)-*ñ, í* 2357.
- lie down (MC) *né* 2357.
- lie face down (LX) (*ià*) *qù* 2203.
- lie face down (MC) *pià mià* 2203.
- lie face down (MC) *ì pá thà* p,b,s 2203.
- life (LX) *dzú mù* 995.
- life (LX) *tsí* 200.
- life (LX) *mà ñ, ì* 'thread' 995.
- life (MC) *soú* b? 200.
- life (MC) *cè gú* ?look up meaning of parts 995.
- lifespan (LX) *só* 201.
- lifespan (MC) *soú dzè e ~ ε* 201.
- lifetime (CL) (LX) *cí* 1343.
- lifetime (CL) (MC) *cí* 1343.
- light (in color) (LX) *tchá* 1479.
- light a fire (LX) *phú* STC 220 *pwar~*bwar (or is this just 'blow?') 2309.
- light a fire (LX) *cù* 2309.
- light a fire (MC) *mú phù* STC 220 *pwar~*bwar 2309.
- light, brightness (MC) *mè cà mè ~ mè* 3.
- light, brightness (MC) *cyá* 3.
- light, brightness (MC) *mù cà* 3.
- light, buoyant (LX) *dzó uà uà* STC 328 *r-ya·ñ 1606.
- light, buoyant (LX) *dzó xuà xuà* STC 328 *r-ya·ñ 1606.
- light, buoyant (MC) *tchín phiaó phiaó* b

1606.
 light, buoyant (MC) *zú zù tsì m1=light* 1606.
 lightning (n.) (LX) *qè tiè* 10.
 lightning (n.) (MC) *cý qé* 10.
 lightning (v) (LX) *tsh í* 1790.
 lightning (v) (MC) *cý qé cyà* 1790.
 lightning (v.) (MC) *cý qé cyà* 10.
 lightweight (LX) *dzó* STC 328 *r-ya-ŋ 1463.
 lightweight (MC) *zóu* STC 328 *r-ya-ŋ 1463.
 like (MC) *má (zà) ?STC *67 *m-dza* 2463.
 like (to do something) (LX) *má ?STC *67 *m-dza* 1625.
 like (to do something) (MC) (*dzè*) *má m1=eat. ?STC *67 *m-dza* 1625.
 like that (LX) *thò zó* 1389.
 like that (MC) *fià mé* 1389.
 like this, so (LX) *tsò zó (bù)* 1382.
 like this, so (MC) *tcà mé* 1382.
 limbs (LX) *zì-duà* four-limb/leg 98.
 limbs (MC) *zì-zà* four-m 98.
 limbs (MC) *gòu-ŋá-ì pà* foot-and-hand 98.
 limestone (LX) *χè-be ì* mud-powder 74.
 limestone (MC) *șè χu ì* b 74.
 limit, end (LX) *dzi tò dzí~ dzì* 1057.
 limit, end (MC) *dz ì ló* 1057.
 line up (LX) *dà kè ká ?STC 346 *ren* 2210.
 line up (LX) *dà zì zí* redup or caus? 2210.
 line up (MC) *șè ká ?STC 346 *ren* 2210.
 lip (LX) *dzuà-kú* mouth-m 111.
 lip (MC) *dué-zà* mouth-skin 111.
 liquor, wine (LX) *cì* 607.
 liquor, wine (MC) *tchà* 607.
 listen (LX) *tshó cì* 2409.
 listen (MC) *soú nè* 2409.
 liter (liquid) (LX) *fiú* 1317.
 liter (liquid) (MC) *cé b?* 1317.
 liter measure (n.) (LX) *kú tù* 797.
 liter measure (n.) (MC) *cé* 797.
 little finger (LX) *liè-tsá* m-thin 140.
 little finger (LX) *liè bé* 140.
 little finger (MC) *í nà qè-bz ù bz í* finger-little 140.
 little plate (LX) *tié tsì b* 773.
 little plate (MC) *χai tçò-bá b*(hot.pepper)-dish 773.
 live (LX) *zì gó* 2003.
 live (LX) *qá gó m1 ?=pfx.* 2003.
 live (LX) *sú* 2003.
 live (LX) *qá zí* 2003.
 live (MC) *χò thá b* 2003.
 live (a life) (LX) *ŋ.ú* 1845.
 live (a life) (MC) *à-cí-pā* one-life/generation-m 1845.
 live coal (LX) *mò qhò* 745.
 live coal (MC) *mù ké* 745.
 liver (LX) *cí já* STC 234 *m-sin 180.
 liver (MC) *sè* STC 234 *m-sin (cf. tree, wood) 180.
 livestock (LX) *khú-piá ~ khù-pià* dog-pig 315.
 lizard (LX) *kòŋ dzí b?* 429.
 lizard (MC) *koù gòu-tsú* m-small 429.
 loan (n) (LX) *tchá* 805.
 lock (LX) *tshuá tshuá* 819.
 lock (MC) *șuà b?* 819.
 lock (door) (LX) *fià-suà* p-b. cf. 2354 2372.
 lock (door) (MC) *șuà b?* 2372.
 lock door (LX) *quà* 2354.
 lock door (LX) *suà* 2354.
 lock door (MC) *diò-quà* door-m 2354.
 lock door (MC) *diò-phiè thá* door-m 2354.
 lock door (MC) *diò-șè șuà* door-p-lock 2354.
 locust (LX) *bù tcà* 456.
 locust, praying mantis (MC) *bò lò* "bug" 456.
 long (LX) *thá* 1413.
 long (MC) *dzé* 1413.
 long (of time) (LX) *thá* 1414.
 long (of time) (MC) *dzé* 1414.
 long month (MC) *lè bz á* calque 2636.
 longwinded (LX) *phì dá b?* 1586.
 longwinded (MC) *duè-diò-mì-ué-mù* mouth-door-NEG-have-m 1586.
 longwinded (MC) *duè-diò-miá* mouth-door-NEG.have 1586.
 look after (child) (LX) *zì* 1795.
 look after (child) (MC) *sì* 1795.
 look at (LX) *tsà* 2101.
 look at (MC) *kè tșè* 2101.
 look at (CAUS) (MC) *kè tșè zí* 2102.
 look! (MC) *ù kè tșè* 2102.
 looks like (*hao xiang*) (MC) *bú tà* 2635.1.
 loom (LX) *sò tòu* 890.
 loose (LX) *só* 1492.
 loose (LX) *cì* open sth (?) 1492.
 loose (MC) (*dè*) *sóŋ thà b m1=pfx* 1492.
 loose (MC) (*dè*) *thou* 1492.
 loose, loosen (clothes) (LX) *kò* 1492.
 lose heart (LX) *cì tshò* STC 367 *s-niŋ 1988.
 lose heart (MC) *χue ì cìn b* 1988.
 lose item (LX) *dzuá* 1830.
 lose item (MC) *șè loú* 1830.
 lose something. (LX) *dà fiò* 2325.
 lose something. (LX) *dà tsò tsò* 2325.
 lose something. (MC) *șè loú* 2325.
 lose, be defeated (LX) *fià dzí* 1638.
 lose, be defeated (LX) *tà tsá* VH 1638.

- lose, be defeated (MC) *šé tĩ* 1638.
 louse (LX) *tsí* STC 439 *šrik* 440.
 louse (MC) *tsì* STC 439 *šrik* 440.
 love (MC) *má* ?STC *67 *m-dza 1624.
 love (for older generation) (LX) *cì š* 1624.
 love, like (LX) *tá pò* 1624.
 low (LX) *bà* 1409.
 low (LX) *bè* 1409.
 low (MC) *bè* 1409.
 lower (head) (LX) *ku* takes *ì*, *fià* 1812.
 lower (head) (MC) *fià kó* 1812.
 lower half of body (LX) *duà* 1083.
 lower half of body (LX) *qà tò* 1083.
 lower half of body (MC) *cì pe í qà tà* 1083.
 lower seat (not honored) (LX) *jà lì* 1064.
 lower seat (not honored) (MC) *z í lè* 1064.
 lucky day (LX) *mè n, ì-χe ì* m-good 1173.
 lucky day (LX) *mè n, ì-nà* m-good 1173.
 lucky day (MC) *zì tsé sè* 1173.
 lunch (LX) *zà mià* 577.
 lunch (MC) *ná tchò* 577.
 lung (LX) *tshù* STC 239 *tsywap 178.
 lung (MC) *tshòu* STC 239 *tsywap 178.
 lure (LX) *tché* 2532.
 lure (MC) *kai tà b?* 2532.
 mǔ (measure of land) (LX) *mouN* b 1334.
 mǔ (measure of land) (MC) *χue í* 1334.
 maggot (LX) *bù ló* 443.
 maggot (MC) *bò lò* "bug" 443.
 magic (MC) *ηà mú làN* *tcà* 977.1.
 magpie (LX) *cà cá* 417.
 magpie (MC) *tcà tcá* 417.
 mail letter (LX) (*phə*) *n, ì* *tà* 2021.
 mail letter (LX) *phù-tà* letter-V 2021.
 mail letter (MC) *pšè tà* DO + V 2021.
 make analogy (LX) *pì dà* b 1780.
 make blend (LX) *té tcí qá zì* 2000.
 make crooked (LX) *dà qhá (zì)* 2200.
 make crooked (LX) *dà phiá (zì)* 2200.
 make crooked (MC) *tè phián thà zì*
 p, b, s, CAUS 2200.
 make crooked (MC) (*tè*) *qè tshué zì* 2200.
 make drop (LX) *fià sì z í* 2037.
 make extinguish (LX) *dà kè z í* 1998.
 make extinguish (LX) *à mià z í* STC 374 *mit
 1998.
 make friends (LX) *cì* 2058.
 make friends (LX) *pù* 2058.
 make friends (MC) *pù* 2058.
 make look at (LX) *tsá tá* 2102.
 make look at (LX) *tsà z í* 2102.
 make messy (LX) *tə phù lá* vowels? 2162.
 make noise (LX) *dà sá* 2477.
 make noise (MC) *zà* 2477.
 make noise (MC) *zù* 2477.
 make ride (horse) (LX) *tə tsà z í* 2241.
 make stand up (LX) *tə ì z í* 2243.
 make stand up (LX) *toù z í* 2243.
 make use of (LX) *pò* 2331.
 make use of (MC) *iò* 2331.
 make way for someone (LX) *phiá* 2273.
 make way for someone (LX) *zá* 2273.
 make way for someone (MC) (*mè*) *z áη thà* b
 2273.
 male (adj) (LX) *tcì* 219.
 male (adj) (MC) *tsì* 219.
 male pubic hair (LX) *lià χù* STC 262 *li
 144.1.
 man (male person) (LX) *biè phà* STC *-pa
 (masc. sfx.) 215.
 man (male person) (MC) *bè liú* 215.
 manage (household) (LX) *quá tá* 1948.
 manage (household) (MC) *qù thà* 1948.
 manger (LX) *kò tshòu* 833.
 manger (MC) *mà tshàò* b 833.
 manure (LX) *mì* 333.
 manure (MC) *tché* 333.
 many (LX) *dzú* 1429.
 many (LX) *mí tsà* ?STC *mra 1399.
 many (MC) *dió* 1429.
 many (MC) *mí pè tché* 1399.
 March (LX) *tshə lə* calque 1125.
 March (MC) *séi lə* calque. ei ~ i 1125.
 mare (LX) *kò mià* 338.
 mare (MC) *zòu miá* 338.
 mark, sign (MC) *pià tcì* 994.
 mark, sign, trace, spot, stain (LX) *mà tcì* b
 994.
 mark, trace (MC) *pià tcì* 1024.
 mark, trace (MC) *mì mí* 1024.
 mark, trace (MC) *ìN càη* b 1024.
 market (LX) *qə cì* 78.
 market (MC) *pàn nà pò s í ~ pàn là pò s í*
 influence from Chinese phon. 78.
 marrow (LX) *cý* 166.
 marry (LX) *cì pù* 2064.
 marry (MC) *š í tché (pù)* also *tché* 2064.
 marry (of a woman) (LX) (*fià*) *cì* 1732.
 marry (of a woman) (MC) *š è lè* may be used
 of a woman or of her parents 1732.
 marry (of a woman) (MC) *š é z oũ* 1732.
 marry (of man) (LX) *kú* already married
 2262.
 marry (of man) (LX) *cì* not yet married 2262.
 marry (of man) (MC) *kuè* 2262.
 marry (of man) (MC) *dè dz í dz í* 2262.

- marry off daughter (LX) (*tcà*) *cì* b? 2030.
 marry off daughter (MC) *șè zòu* 2030.
 marry off daughter (MC) *tcè lé* 2030.
 masses, the people (MC) *tshuà pú* 208.1.
 mat (LX) *cè tsì* b 678.
 mat (MC) *cé tsì* b 678.
 match (clothes) (LX) *thao*³⁵ *dà* b 2389.
 match (clothes) (LX) *sí* 2389.
 match (clothes) (MC) *phù thaõ thà* b 2389.
 matches (LX) *iàN xó* b ("foreign fire") 749.
 matches (MC) *iàN xò* b 749.
 matter, affair (LX) *zì* 986.
 matter, affair (MC) *dzì* b? 986.
 matter, affair (CL) (LX) *zì* 1269.
 matter, affair (CL) (three or fewer) (MC) *mè*
 STC 280 *mow 1269.
 May (LX) *kuè là* calque 1127.
 May (MC) *kuà là* calque 1127.
 me (D.O.) (MC) *à ò* 1359.2.
 me (oblique) (MC) *à* also for 1359.
 meal (CL) (LX) *tuá* 1347.
 meal (CL) (MC) *tuá* 1347.
 measles (LX) *ý cì* 156.
 measles (MC) *fù tsé-tsoù* m-v 156.
 measles scar (MC) *ì sè* 156.
 meat (LX) *pià-tshì* pig-flesh STC 181 *sya
 'meat' 584.
 meat (MC) *pià-tshè* pig-flesh STC 181 *sya
 'meat' 584.
 medicine (LX) *sí ká* 613.
 medicine (MC) *yè* b? 613.
 meet, run into (LX) *tsó pà* 2546.
 meet, run into (MC) *tí tà í* 2546.
 meet, welcome (LX) (*à*) *dí* 2530.
 meet, welcome (MC) *dí* tone change – ì dĩ
 2530.
 melon, squash (LX) *paí kuá* b 547.
 melon, squash (MC) *pài kuà* b 547.
 menstruate (LX) *mà só lò* m-blood-come
 146.2.
 menstruate (LX) *phì sà lò* vulva-blood-come
 146.2.
 merit, be worth (LX) *phù quà* 2591.
 merit, be worth (LX) *phù lò* 2591.
 merit, be worth (MC) *nù* 2591.
 messy (CAUS) (MC) *tè là tà zî* 2162.
 Mianchi (village) (MC) *xà-sú* .
 miao (cat) (LX) *nú* STC 261 *u (but some
 forms have velar component) 2044.
 miao (cat) (MC) *zě* 2044.
 middle finger (LX) *liè-sé* m-beautiful. tone
 on 1 varies 138.
 middle finger (MC) *í nà qè-gó tì-(kì)* finger-
 between-NOM 138.
 middle of month (LX) *là ká* 1137.
 midnight (LX) *dzì tsí-à-à* night-one-CL
 (gloss match?) 1103.
 midnight (MC) *ì séi tà* Ch. (dà bàn yè) 1103.
 midnight (MC) *giè tsí-bz* á night-big 1103.
 mildew (v) (LX) *má má -tè - cì* mildew
 (n.)-p-v 2177.
 mildew (v) (LX) *má má - zì-zú* mildew
 (n.)-p-v 2177.
 mildew (v) (MC) *à tsuè qá* 2177.
 milk (LX) *nà nà* = breast, STC 419 *nuw
 161.
 milk (MC) *nà nà* = breast, STC 419 *nuw
 161.
 milk (v) (LX) *cì cí* 2013.
 milk (v) (LX) *tcí (dà)* b 2013.
 milk (v) (MC) *tsà* b? 2013.
 millet (LX) *tsheì* 527.
 millet (MC) *má* 527.
 million (LX) *á tshe í-kuá* hundred-
 ten.thousand. tonal variation. 1216.
 million (MC) *á tshì-uà* tone change in ml.
 1216.
 millstone (LX) *zuà ò* 888.
 millstone (MC) *dzò lò* 888.
 millstone (MC) *tshì* 888.
 mince, chop (MC) *tshóu tià* ?STC 240
 *tsywar 1856.
 mine (MC) *cò* 58.
 mine (MC) *khuǎŋ* b 58.
 mirror (LX) *mè tsà ì* 732.
 mirror (MC) *tcin tsì* b 732.
 mischievous (LX) *qè tshó* 2387.
 mischievous (LX) (*mù*) *qá tshí* ml=person
 2387.
 mischievous (MC) *thaõ tchì* b 2387.
 missing,short (LX) *tchá* 1693.
 missing,short (MC) *dè khí ~ dè khĩ* 1693.
 mistake (LX) *dà tshà* 1007.
 mistake (MC) *kè tshòu* 1007.
 mix up (mortar) (LX) *tshè* 2006.
 mix up (mortar) (LX) *tcà qá* 2006.
 mix up (mortar) (LX) *tsì qá* 2006.
 mix up (mortar) (MC) *xò lié* b 2006.
 mix with water (LX) *tchý* 2009.
 mix with water (MC) *tsá* 2009.
 mix, blend (LX) *tcí qá* 1999.
 mix, blend (LX) *tcà qá* 1999.
 mix, blend (MC) *tè xǒ thà* p,b,s 1999.
 mixed with water (LX) *tchý* 2010.
 mixed with water (LX) *què* 2010.
 mixed with water (MC) *dè lě* 2010.

- moist (MC) *z uè* 1477.
 moist (MC) *tè tè* 1477.
 moist, humid (LX) *phà (sù)* 1477.
 moisten (LX) *fià pà (zì)* 2201.
 moisten (LX) *fià tì (zì)* STC 55 *ti(y) 2201.
 moisten (MC) *fià tè tè zì* 2201.
 moisten, soak (MC) *fià tè tẽ* 2420.
 mole, wart (LX) *tsĩ b* 153.
 mole, wart (MC) *tsĩ b* (dictionary says mole, Ch. dialect says wart) 153.
 money (LX) *dzí gù* older form 799.
 money (LX) *sàn dzé* 799.
 money (MC) *tcìn-tse í* b-m 799.
 money (MC) *tsèn tse í* b? 799.
 Mongolian gazelle (LX) *kò-ió* horse-sheep 387.
 Mongolian gazelle (MC) *sè* 387.
 monk (LX) *χò càN* b. 244.
 monk (MC) *χò càN* b 244.
 monkey (LX) *kuà sà* ?STC 314 *woy 381.
 monkey (MC) *kuà sà* ?STC 314 *woy 381.
 month (LX) *lè* 1122.
 month (MC) *lè* 1122.
 month (CL) (LX) *à lè* 1340.
 month (CL) (MC) *lè* 1340.
 moo (v) (LX) *zǎ* =2046. 2047.
 moo (v) (LX) *ηú* 2047.
 moo (v) (MC) *zě* 2047.
 moon (LX) *sì cuà* STC 144 *s-gla calque? 4.
 moon (LX) *lè cuà* reported as an older form. calque? STC 144 *s-gla 4.
 moon (MC) *lè* some speakers. STC 144 *s-gla 4.
 moon (MC) *lè* STC 144 *s-gla 4.
 morning (MC) *ná nà* 1098.
 morning (after breakfast) (MC) *tsuà tchó-dè* là lá breakfast-after 1098.
 morning (early) (MC) *tchá lèi* 1096.
 morning (early) (MC) *tchá lù* 1096.
 mortar (LX) *tshĩ pù* 883.
 mortar (MC) *khue í khue í* odd tones. 883.
 mosquito (LX) *bù bù* 444.
 mosquito (MC) *uèn tsì* b 444.
 moss (LX) *cuà* sometimes *cwá* 569.
 moss (MC) *tcíη tòi* b 569.
 moss (MC) *lò-guì* stone-rust 569.
 moth (LX) *bè lú tsù* 454.
 moth (MC) *tshè bì bì* 454.
 mother (LX) *á mà* STC 487 *ma 276.
 mother (MC) *kuè miá* 276.
 mother (direct) (MC) *á nà* STC *(m-)na 276.1.
 mother (direct) (MC) *á mà* STC 487 *ma 276.1.
 mother's brother (LX) *á kù* STC 255 *kuw 297.
 mother's brother (MC) *kuè kù* STC 255 *kuw 297.
 mother's brother (direct) (MC) *à kù* STC 255 *kuw 297.1.
 mother's brother's wife (LX) *à nǎ* 298.
 mother's brother's wife (MC) *tcǔu mà* b 298.
 mother's sister (LX) *á nǎ* 300.
 mother's sister (MC) *nǎ bz* à 300.
 mother's sister (MC) *nǎ nǎ* 300.
 mother's sister (MC) *kuè nǎ* STC 271 *na·w 300.
 mother's sister's husband (LX) *kú ié* b. 299.
 mother's sister's husband (MC) *kú í* b 299.
 mother-in-law (LX) *pó mì* 305.
 mother-in-law (MC) *kuè nǎ* STC 316 *ni(y) 305.
 mother-in-law (MC) *nǎ bz* à 305.
 mother-in-law (MC) *nǎ nǎ* STC 271 *na·w 305.
 mother-in-law (MC) *kuè nǎ* STC 271 *na·w 305.
 mother-in-law (direct) (MC) *á tì* less close term 305.1.
 mould, mildew (v) (LX) *tcý qá* 2177.
 mould, mildew (v) (LX) *mà jà-zú* DO-V 2177.
 mould, mildew (v) (LX) *tè cý* 2177.
 mould, mildew (v) (LX) *tè sù* 2177.
 mould, mildew (v) (MC) *à tsuè qá* 2177.
 mountain (LX) *βó* 25.
 mountain (MC) *sù* 25.
 mountain peak (MC) *sù tìN pò* 26.
 mountain valley (LX) *βó qhuà* ?STC *klu·η 27.
 mountain valley (LX) *qhuà cì* ?STC *klu·η 27.
 mountain valley (MC) *qhuá bz* à ?STC *klu·η 27.
 mountain valley (MC) *qhuè* ?STC *klu·η 27.
 mountain valley (MC) *qhuà qó* ?STC *klu·η 27.
 mournful, grieved (LX) *kù tchì* b? 1592.
 mournful, grieved (MC) *kò tchì* b? 1592.
 mournful, grieved (MC) *tiè tshòu* 1592.
 mournful, grieved (MC) *sàn cì* b 1592.
 mouth (LX) *qà* STC 468 *m-ka 110.
 mouth (LX) *dzua* ?*twaη 110.
 mouth (MC) *duè* ?*twaη 110.
 mouth (MC) *qè* STC 468 *m-ka 110.
 mouthful (CL) (LX) *qà* STC 468 *m-ka 1351.

- mouthful (CL) (MC) *qá* STC 468 *m-ka 1351.
 move (a chair) (LX) *qá tà* 1641.
 move (a chair) (MC) (*pàn té*) *qà* 1641.
 move (a chair) (MC) *tsé* 1641.
 move (home) (MC) *tsé tsè* with D.O. 1640.
 move (home) (MC) *qá* 1640.
 move (v.i.) (LX) *mà cà* 1837.
 move (v.i.) (MC) *doù dà* 1837.
 move home (LX) *tsuè tsué* 1640.
 move object (LX) *mà cà* 2585.
 move object (MC) *dè dà* 2585.
 mow grass (LX) *kó* 1924.
 mow grass (LX) *cá* 1924.
 mow grass (MC) *sì kú* 1924.
 mud (MC) *tshú* 50.
 mud, dirt (LX) *χὰ bù* 50.
 mud, dirt (LX) *bú zì* 50.
 muddled, confused (LX) *qà-dzuá* m-lose 1974.
 muddled, confused (MC) *fù thù* b 1974.
 muddled, confused (MC) *qé kuà* head-stupid(?) 1974.
 muddy, turbid (LX) *tchá* 1471.
 muddy, turbid (MC) *χui (là)* 1471.
 mule (LX) *lò tsí* b 351.
 mule (MC) *kè tí* 351.
 mule foal (MC) *kè tí-tsù* mule-small 351.
 multiples (CL) (LX) *tchá* 1357.
 muscle (MC) *dzè* may also be tendon, sinew 162.
 muscle, pulse (LX) *dzì* may also be tendon, sinew 162.
 mushroom (LX) *à tsì* 566.
 mushroom (LX) *mà à* STC 455 *g-muw 566.
 mushroom (MC) *mè zú* STC 455 *g-muw 566.
 mushroom (MC) *mò tsú* b? ?STC 455 *g-muw 566.
 musk (LX) *lò tchò* 390.
 musk (MC) *lè cò* 390.
 musk deer (LX) *tshì là* 389.
 musk deer (MC) *sè là* 389.
 musk deer (female) (LX) (*tshì*) *là mià* 388.
 musk deer (female) (MC) *lè mià* 388.
 must, have to (MC) *ηà kí-mì-ηuè* what-not-be 1666.
 mute (LX) (*fià*) *tshè* 2508.
 mute (MC) *mì zé uà* 2508.
 mute (MC) *mì-lán-pà* NEG-speak-s 2508.
 mute person (LX) *tchì sè mù* 267.
 mute person (MC) *mì lán bà mù* 267.
 mutton (LX) *tchá piá tshì* 586.
 mutton (MC) *tshé tshè* 586.
 my (MC) *à kì* 1359.1.
 myself (LX) *qé* i 1373.
 myself (MC) *ηà kí zà* meaning? 1373.
 nail (LX) *tín tsì* b 815.
 nail (MC) *tín tsì* b 815.
 nail (finger, toe) (LX) *liè sí qà* STC 74? *m-tsin 141.
 nail (finger, toe) (MC) *ì sè* 141.
 nail (v) (LX) *tù* 1829.
 nail (v) (LX) *tè* 1829.
 nail (v) (MC) *tù* 1829.
 name (LX) *zè mú* STC 83 1001.
 nanny goat (LX) *tchá mià* 346.
 nanny goat (MC) *tshè mià* 346.
 nap (LX) *có* 677.1.
 nape of neck (MC) *χού-dz uà dz uà* m-fold, dip 116.
 narrow (LX) *tchá* 1419.
 narrow (MC) *zò* 1419.
 narrow, cramped (LX) *tchá tsé* 1421.
 narrow, cramped (MC) *zò* 1421.
 nauseous (LX) *jà qú* 1859.
 nauseous (MC) *tshuà* 2495.
 nauseous (MC) *tí mì-(tè)-zù lià* heart-p-uncomfortable 1859.
 navel (LX) *pú tsì qà* 123.
 navel (MC) *pè tshì tsí* 123.
 nearby, neighboring (LX) *piá pù* 1055.
 nearby, neighboring (MC) *qè zí* noun? 1055.
 neck (LX) *mù kà* STC 251 *ke 115.
 neck (MC) *qè mò* STC 251 *ke 115.
 necklace (LX) *mò qà mà* STC 251 *ke 663.
 necklace (LX) *kú lí* ?STC 251 *ke 663.
 necklace (MC) *sì dzouè-sè lí* spirit-thread. charm on child's neck 663.
 necklace (MC) *qè mò-sè lí* neck-thread 663.
 necklace (MC) *χǎ ηà ~ χà ηǎ* b? 663.
 needle (LX) *χέ ~ χèi* STC 52 812.
 needle (MC) *χè* 812.
 NEG (LX) *mí* STC *ma 2637.
 NEG (+ be) (MC) *mì (ηuè)* 2637.
 NEG (+ eat) (MC) *mì (dzé)* 2638.
 NEG (+ V) (LX) *mí* STC *ma 2638.
 neigh (v) (LX) *ηú* STC 261 *u 2046.
 neigh (v) (LX) *zǎ* 2046.
 neigh (v) (LX) *qà jà* "speak" 2046.
 neigh (v) (MC) *zě* 2046.
 neighbor (MC) *tcí-tshè pù* home-neighbor(?) 82.
 nest (LX) *ỳ (tshá) bù* 405.
 nest (MC) *ì tshè bú* 405.

- net (LX) *zà* 912.
net (MC) *dzà* 912.
neuter, sterilize (LX) *tè* 2303.
neuter, sterilize (LX) *fià tè pè* 2303.
neuter, sterilize (MC) *bè qè* diff in meaning? 2303.
neuter, sterilize (MC) *phiòn nù b?* 2303.
new (LX) *tchí* STC #71 *dz(y)im 1502.
new (MC) *sí* 1502.
New Year (LX) *dzá tchí* 1171.
New Year (LX) *dzá tò gá* 1171.
New Year (MC) *pù-sí* year-new 1171.
New Year (MC) *dià sí* 1171.
New Year's Eve (LX) *tshè sá* 1170.
New Year's Eve (MC) *dià bzá*
celebrate.New.year-big (calque?) 1170.
niece/nephew (LX) *dzi qhuá* 291.
niece/nephew (MC) *dzi* 291.
night (CL) (LX) *à* STC 203 *ryak 1338.
night (CL) (MC) *zà* STC 203 *ryak 1338.
nine (LX) *gú* STC 13 *d-kuw 1182.
nine (MC) *gú qò* STC 13 *d-kuw 1182.
nineteen (LX) *fiá gú* 1192.
nineteen (MC) *fiá gù* 1192.
ninety (LX) *gú sá* 1207.
ninety (MC) *gú sà* 1207.
ninety-one (LX) *gú sá à* 1208.
ninety-one (MC) *gú sà nà à qó* 1208.
ninth (LX) *gú á xe* 1227.
nit (LX) *tsì gú ?* STC 278 *row 441.
nit (MC) *dzú ?* STC 278 *row 441.
nod (LX) *tshuá* takes *tà*, *fià* 1814.
nod (LX) (*tè*) *zí* 1814.
nod (LX) *tshú* 1814.
nod (LX) (*tè*) *ú* 1814.
nod (MC) (*qà bzá tsì*) *ko* =1812 1814.
nod off (LX) (*mà zè*) *qè tá* 1783.
nod off (MC) *mè zè-qè tuá* sleep-m 1783.
noisy (LX) *sá* 1562.
noisy (MC) *zà* 1562.
noodles (LX) *qhà mì* 580.
noodles (MC) *tshì mè* 580.
noon (LX) *zà mià* 1099.
noon (MC) *ná nà* 1099.
nose (LX) *tì bá-qè* m-point 106.
nose (MC) *nè qé pì* STC *s-na(r) 106.
not have (something in bowl) (LX) *mì liá* 2541.
not have (something in bowl) (MC) *mì lé* 2541.
not have (something in milk) (LX) *mì liá* 2542.
not have (something in milk) (MC) *mì nà* 2542.
not have (something in milk) (MC) *mì lé* 2542.
not have (use) (LX) *mè ué* 2545.
not have (use) (LX) *mò fió* 2545.
not have (use) (MC) *mì nà* 2545.
not have (wealth) (LX) *mí tsè* 2537.
not have (wealth) (MC) *mì nà* 2537.
not have benefit (MC) *mì nà* 2544.
notebook (LX) *pàn tsì b* 922.
notebook (MC) *pàn tsì b* 922.
notify (LX) *kuá* 2414.
notify (LX) *ǎ* 2414.
notify (MC) *pşè pşé* 2414.
November (LX) *fià tcí lè* calque 1133.
November (MC) *fià tí lè* calque 1133.
now (LX) *pè ì* 1149.
now (MC) *pè tí* 1149.
now (adv.) (MC) *tsù tá* .
numb (LX) *bò bò* 2165.
numb (MC) *zè bù* cf. deaf 2165.
numb (MC) *tshù tshú* 2165.
number (LX) *sú tsì b* 1033.
number (MC) *phò* 1033.
numbing pepper (LX) *tshè í* 600.
numbing pepper (flower of prickly ash tree) (MC) *tshè-né* mutton(?)=red (one kind tastes like mutton) 600.
nurse (v) (LX) *cí* 2448.
nurse (v) (MC) *tié* 2448.
nurse (v) (MC) *qè tshué* 2448.
o brother's wife (LX) *pú kù* 296.
o brother's wife (LX) *kuá tcí ?* STC 205 *ryan 296.
oath, pledge (MC) *suà cì nó* 979.
obtain, reap (LX) *qó pú* 2005.
obtain, reap (MC) *tæ qà pù* 2005.
obtain, reap (MC) *tè cou* 2005.
occupy, take up (MC) *qà tou* 2569.
ocean (LX) *cý* 34.
ocean (LX) *có* 34.
ocean (MC) *bú zì sì* 34.
October (LX) *fià dzó lè* calque 1132.
October (MC) *fià diú lè* calque 1132.
often (LX) *tshàn bù cì* tones? 2626.
often (MC) *tcá qà* 2626.
often (MC) *tsá qà* 2626.
oil (LX) *sò í* [swò] STC 272 sa-w 590.
oil (MC) *má* 590.
oil (from meat) (LX) *sé* STC 272 sa-w 591.
oil (from meat) (MC) *má* 591.
oil (vegetable) (LX) *sò í* 592.
oil (vegetable) (MC) *tshì iú b?* 592.

- oily (LX) *ŋ í ŋ à b?* 1535.
 old (of people) (LX) (*fià*) *peì* 1508.
 old (of people) (MC) (*à*) *peì* (perf. asp.) 1508.
 old (of person) (LX) *peì peí* = bruise (n/v?) 2132.
 old (of person) (MC) *peì* 2132.
 old (of things) (LX) *bá* cf. 'big' 1503.
 old (of things) (MC) *bá* 1503.
 old man (LX) *mù pèi* 213.
 old man (MC) *mù-peí* person-age(v.) 213.
 old man 1 *mù pèi* .
 old person (LX) *mù bǎ* 212.
 old woman (LX) *mù bǎ bǎ* 214.
 old woman (MC) *mià-peí* female-age(v.) 214.
 older brother's wife (MC) *kuè tǎi* 296.
 older brother's wife (direct) (MC) *à tǎi* 296.1.
 older siblings (LX) *sà ŋ ò* 294.
 older siblings (MC) *mè tiè* 294.
 on (the table) (LX) *qà teì* 1065.
 on (the table) (MC) *qé tè* 1065.
 on (the table) (MC) *lià xà* 1065.
 on (the top) (LX) *qà teì* 1072.
 on (the top) (MC) (*tiN pò*) *qé tè* 1072.
 on (the wall) (LX) *xé i* 1071.
 on (the wall) (MC) (*lò zù*)-*qà* wall-on 1071.
 on top of (LX) *qǎ tǎ xéi* 1074.
 on top of (a building) (LX) *qà teì* 1067.
 on top of (a building) (MC) *z í lè* 'under?' 1067.
 on top of (a building) (MC) (*lòu*) *qé* 1067.
 one (LX) *à* 1174.
 one (MC) *à qó s2=CL* 1174.
 one hundred one (LX) *à tshǎi nǎ à nǎ* = and 1211.
 one hundred one (MC) *à tshì nǎ à qó* 1211.
 one hundred+CL (MC) *á tshì qò* 1209.
 one third (LX) *tshe í qú xé i à qù* 3-part-middle-1-part 1358.
 one-eyed person (LX) *mì tǎuà mù* = blind person 268.
 one-eyed person (MC) *mù tí-à-zà-mì-ué-mù* eye-one-CL-NEG-have-person 268.
 onion (LX) *dò-(tshó)* m-b 540.
 onion (MC) *tshón* (*tsì*) b 540.
 onion (wild) (MC) *kǎ bǎ í* 540.
 only, alone (MC) *tǎi tó tsì tsì* 1596.
 only, alone (MC) *tsaó tsaò* 1596.
 only, alone (rep phrase) (LX) *z í z í tsù* 1596.
 open (door) (LX) *gà* STC 469 *ka 2092.
 open (door) (MC) *dzí* 2092.
 open (eye) (LX) *tà phé* 2583.
 open (eye) (LX) *tà tǎ* 2583.
 open (eye) (MC) *phǎ* 2583.
 open (flower) (LX) (*tà*) *pá* STC 260 *bu ~ *pu 2094.
 open (flower) (LX) *dà pà* STC 260 *bu ~ *pu 2094.
 open (flower) (LX) (*tà*) *pá* STC 260 *bu ~ *pu 2094.
 open (flower) (MC) *pè* STC 260 *bu ~ *pu 2094.
 open (mouth) (LX) *tà qà* STC 469 *ka 2571.
 open (mouth) (MC) *qǎ* STC 469 *ka 2571.
 open (of shoes) (LX) *bià* 2067.
 open (of shoes) (LX) *bú bú* 2067.
 open (of shoes) (MC) *ǎ qhà lǎ* 2067.
 open (umbrella) (LX) *dà qà* STC 469 *ka 1714.
 open (umbrella) (MC) *sè dzí* 1714.
 open (v.t.) (LX) *dà qà* STC 469 *ka 1788.
 open (v.t.) (LX) *dà phà* 1788.
 open (v.t.) (LX) *dà gǎ* STC 469 *ka 1788.
 open (v.t.) (MC) *sè dzí* 1788.
 open, unobstructed (LX) *thón dà* b 2413.
 open, unobstructed (MC) *dè kiè qǎi* 2413.
 operate (vehicle) (LX) *gà* 2095.
 operate (vehicle) (MC) *ŋ ó* 2095.
 opium (LX) *ià phièn iá* b 612.
 opium (MC) *ià phièn ián* b 612.
 oppose (LX) *miè kó* 1873.
 opposite, inside out (LX) *fià li* 1440.
 opposite, inside out (MC) *toù tú* 1440.
 ormosia, red bean (MC) *pá sǎn tsǎ* b ("mtn climber") 558.
 orphan (LX) *ké pù* 313.
 orphan (MC) *kè pù tsú* 313.
 other (LX) *thú ŋ ù* 1400.
 other (MC) *qà qǎ* 1400.
 other person (LX) *mè i* 87.
 other person (LX) *mè i* 1376.
 other person (MC) *mǎ qǎ* 87.
 other person (MC) *mě lě* 1376.
 otter (LX) *tsù-piá* water-carnivore 392.
 otter (MC) *tsuè-dzè-dzè-mú* water-fish-eat-AGT 392.
 otter (MC) *suèi maò tsǎ* b ("water cat") 392.
 ought (LX) *z í tó* 2534.
 ought (MC) *fià toù* ~ 2534.
 ought to (go) (MC) (*kiè*) *kai tà* 1903.
 ought to go (LX) *kǎ tché* 1903.
 our (MC) *á lè kǎ* 1361.1.
 our (MC) *tǎ lè kǎ* 1361.1.
 ourselves (LX) *qé lià* 1373.
 outside (of room) (LX) *kuà là* 1049.
 outside (of room) (MC) *kuà zǎ* 1049.

- outside (of thing) (LX) *jà lì* 1049.1.
 outside, downstream (MC) *gê pià* 1049.
 outside, outer face (of thing) (MC) *qá zà* 1049.1.
 outward, downstream (pfx) (LX) *sî* - 1079.
 outward, downstream (pfx) (MC) *gê* - 1079.
 overcast (LX) *mó zí ~ mú zí* VH 2396.
 overcast (MC) *mú dòu* 2396.
 overly talkative (LX) *lò lò só só* b 1614.
 overly talkative (MC) *duê-diò-mì-lé* mouth-door-not-have 1614.
 overtake (LX) *dè* 1914.
 overtake (MC) *dzoú dè* 1914.
 overtake (MC) *tè kàn thá p, b, s* 1914.
 owe (money) (LX) *tchá* 2247.
 owe (money) (MC) *dè khí* 2247.
 owl (LX) *ỳ khù* STC p164 *gu ~ *ku. also #494 410.
 owl (MC) *kuì tòñ khò* STC p164 *gu ~ *ku 410.
 ox (CL) (LX) *zà* 1241.
 ox (CL) (LX) *zì* 1241.
 ox (CL) (MC) *zà* 1241.
 pack rack (LX) *thuá ú* 838.
 pad (v.t.) (LX) *tshà* 1817.
 pad (v.t.) (MC) *tshà* 1817.
 pad, cushion (LX) *dién tsì* b 679.
 pad, cushion (MC) *tshà kí* 679.
 paddy rice (LX) *tshì* 512.
 paddy rice (MC) *tshì* 512.
 page of book (CL) (LX) *tshè* 1236.
 page of book (CL) (LX) *phièN* b 1236.
 page of book (CL) (MC) *phié* b 1236.
 pain, suffering (LX) *íá tsá* STC *tsa 1005.
 pain, suffering (MC) *tsáo nì* b? ?STC *tsa. Sichuanese *tsao³⁵ nã³¹* = 'misfortune' 1005.
 paint (a painting) (MC) *bì-pù* picture-do 1980.
 paint (a painting) (MC) *bì khuí* also = 'take photograph' 1980.
 paint (painting) (LX) *zà* 1980.
 paint (painting) (LX) *cì* STC p55 *tsiy 1980.
 paint (painting) (LX) *jà* STC 429 *riy 1980.
 paint (v) (LX) *mú má* 2422.
 paint (v) (LX) *cì* STC p55 *tsiy (cf. 'urinate') 2422.
 paint (v) (MC) *mà* 2422.
 paint (vt.) (LX) *cì* STC p55 *tsiy 753.
 paint, lacquer (LX) *tsù* ?STC p55 *tsiy 753.
 paint, lacquer (MC) *tchì* b? 753.
 paint, lacquer, dye (MC) *pà mà* 753.
 pair (of rabbits) (LX) *tuè* or people 1272.
 pair (of rabbits) (MC) *tuí* 1272.
 pair (of shoes) (LX) *gù* 1271.
 pair (of shoes) (MC) *tuí* 1271.
 palate (LX) *qà qhù* once with HH tones 174.
 palate (MC) *thián thàn* b 174.
 pancake (LX) *tsà piá* 618.
 pancake (buckwheat) (MC) *tsèn pí* b 618.
 pancake (cooked in fire) (MC) *qhà liú* (can add grain name in front) 618.
 panda (LX) *phà tá (tcá)* 387.1.
 panda (LX) *pià thá* 387.1.
 panda (LX) *tcà-dá* bear-m 387.1.
 panda (LX) *pià tsú* 387.1.
 panda (MC) *tì-pşì* bear-white. 387.1.
 pant leg (MC) *zê tì-gù gú* pants-leg 638.
 pants, trousers (LX) *khù tsì* b 637.
 pants, trousers (LX) *tò qó* 637.
 pants, trousers (MC) *zê tí* 637.
 paper (LX) *zì dâ* 923.
 paper (MC) *zê dzì* 923.
 parrot (LX) *ngê ngê* [ngê] 421.
 parrot (MC) *ngín ká* b? 421.
 part (LX) *çù* 1290.
 part (MC) *(à) diè* b? 1290.
 part, portion (LX) *çù* 1013.
 part, portion (MC) *à-mé diò* one-same.amount 1013.
 part, portion (MC) *à là diè* 1013.
 pass along (LX) *(dâ) zí fià* is pfx if request 1745.
 pass along (LX) *dá dà* 1745.
 pass along (LX) *dà zí dà* 1745.
 pass along (MC) *dè zí ~ zì* 1745.
 pass along (MC) *fià tà* 1745.
 pass gas (LX) *qhà jà-cì* feces-m 1885.
 pass gas (LX) *tshì cì* 1885.
 pass gas (MC) *pè lé* tone of m2 changes w/ emphasis 1885.
 pass through (LX) *dzá* 2075.
 pass through (MC) *dè dǎ* 2075.
 paste (v) (LX) *piá* 2408.
 paste (v) (MC) *piá* 2408.
 patch (n) (LX) *pà qó* STC *pa 636.
 patch (n) (MC) *pè tshì* STC *pa 636.
 patient (LX) *íá mù* also ìn 252.
 patient (MC) *dzí mù* 252.
 pay attention to (LX) *qá zí* 2136.
 pay attention to (MC) *tcán şì* b? 2136.
 pay attention to (MC) *ù sî* 2136.
 pea (MC) *uán tòu tsì* b 556.
 peaceful (LX) *nà* good 1590.
 peaceful (life) (MC) *nà ná (zì)* 1590.
 peach (wild) (LX) *tshuá là-cì mì* m-fruit 495.
 peach (wild) (MC) *lò tsì* 495.

- peach tree (LX) *thaò tsí-phù* b-tree 478.
 peach tree (wild) (LX) *tshuá là* 478.
 peach tree (wild) (MC) *lò tsí-phò* 478.
 peanut (MC) *là xuà sí* 560.
 pear (LX) *lì tsí* b 496.
 pear (MC) *pià sè mú* 496.
 pear tree (LX) *lì tsí-phù* b-tree 480.
 pear tree (MC) *pià sè mú-phò* 480.
 pearl (MC) *tşén tşú-mà laõ* b(pearl)-treasure 658.
 peasant (LX) *dze-ì-bù lú-mù* m-work-AGT 222.
 peasant (MC) (*zuè*)-*dz-ì pú-mù* field-do-AGT 222.
 pebble (MC) *gò-bz-ì tsú* stone-small 47.
 peck at (LX) *tshuá (tà)* 2612.
 peck at (MC) *tshuà tiá* 2612.
 peel (peanut) (LX) *jà qá* 1647.
 peel (peanut) (MC) *zà qà* 1647.
 peel off, flake off (LX) (*dà*) *qà* 1649.
 peel off, flake off (MC) *tchè liá* 1649.
 peel with knife (LX) *cué dà* b 2491.
 peel with knife (MC) *cyè thá* b 2491.
 pen (LX) *pié* b? 924.
 pen (MC) *piè* b? 924.
 pen (CL) (LX) *z-ì* 1256.
 pen (CL) (LX) *ə* 1256.
 pen (CL) (MC) *dz-í* 1256.
 penetrate (LX) *fiá tí ~ (fiá) tí tí* 2420.
 penetrate (MC) (*fiá*) *thou thà* b? 2420.
 penis (LX) *lià qè* STC 262 *li 144.
 penis (MC) *lià qè* STC 262 *li 144.
 performance, drama (LX) *là lá* cf. song 943.
 performance, drama (MC) *tchèN cí æ~ε* 943.
 perhaps, possibly (LX) *qò tché* 2635.
 perhaps, possibly (MC) *tán cí* b tones vary 2635.
 persimmon (LX) *sí ts-ì-cì m-ì* b-fruit 500.
 persimmon (MC) *ş-í ts-ì* b 500.
 person (LX) *mù* 208.
 person (MC) *mè* 208.
 person (CL) (LX) *dz-è* 1230.
 person (CL) (LX) *ə* 1230.
 person (CL) (MC) *qó* 1230.
 person with pockmarked face (LX) *jà zò* 262.
 person with pockmarked face (MC) *de-ì miá* 262.
 personal enemy (LX) *mù tí mù* 253.
 pestle (LX) *tshí pù kò lù* 884.
 pestle (MC) *pià tchè ló* 884.
 pestle (MC) *pià tchè ló* 884.
 pestle (MC) *phù-xuà là-k-í-pàN páN* clothes-wash-NOM-stick 884.
 pestle (MC) *sá dè kù lò* stick for washing/beating hemp clothes 884.
 pestle (stone) (LX) *kò líú* 884.
 pheasant (LX) *ý-zó* 413.
 pheasant (LX) *kó-ý* 413.
 pheasant (MC) *kà-ì* wild-chicken 413.
 pheasant (female) (LX) *ý m-ì* 419.
 pheasant (female) (MC) *uà uà tcí* 419.
 pheasant (male) (LX) *ý c-ì* 420.
 pheasant (male) (MC) *ì qóu* 420.
 pheasant (male) (MC) *tcín tcí* b 420.
 pheasant (small sp.) (MC) *ì pú-tcà tcà* chicken-ONOMAT.) "mountain chicken" 413.
 phlegm (LX) *tshù* 191.
 phlegm (MC) *tsù z-é* 191.
 pianniu (female) (LX) *z-ì miá* + is /ə/ 324.
 pianniu (male) (LX) *z-ì dò* [zdò] 323.
 pianniu (male) (LX) *z-ì cù* pianniu is a hybrid of a yak and a domesticated cow. 323.
 pianniu (male) (MC) *phià* 323.
 pick up with chopsticks (LX) *tè kué* 2028.
 pick up with chopsticks (MC) (*tè*) *tşè* 2028.
 pick up, carry (basket) (LX) *tsé* 2394.
 pick up, carry (basket) (MC) *zyá* 2394.
 pick up, carry (basket) (MC) *tiá thà* 2394.
 pick up, carry (with two people) (LX) *kù* carried by 2 people 2394.
 pick up, collect (LX) (*tà*) *tú tuá* cf. 2026 2031.
 pick up, collect (MC) *c-ì bà* 2031.
 pickax (MC) *phaò tshù* b? 864.
 pickle (LX) *iãN-tshe-í pù tsù* b(salt)-m 530.1.
 pickle (LX) *kù-tsuá* veg-acidic 530.1.
 pickle (MC) *tchou-ì-à té-k-ì* vegetable-pickle(v)-NOM 530.1.
 pickle vegetables (LX) *iãN tshe-í* b 2216.
 pickle vegetables (MC) *tè* 2216.
 pickle, cure (LX) *ká* 2510.
 pickle, cure (MC) *z-úá* 2510.
 pickle, cure (MC) *tchá* 2510.
 picture (LX) *phiá* 920.
 picture (LX) *zà* 920.
 picture (MC) *b-ì* 920.
 piece (of land) (LX) *zá* 1260.
 piece (of land) (LX) *kò* 1260.
 piece (of land) (LX) *zuè* 1260.
 piece (of land) (LX) *thò* 1260.
 piece (of land) (MC) *thò* 1260.
 piece (of land) (MC) *lié* 1260.
 pig (LX) *piá* STC 43 *pwak 354.
 pig (MC) *piá* 354.
 pig (CL) (LX) *z-ì* 1240.
 pig (CL) (LX) *zà* 1240.

- pig (CL) (MC) *dz í* 1240.
 pig shed (LX) *piá-iuá kù pig-b* 697.
 pig shed (MC) *piá zé* 697.
 pig slop, hogwash (LX) *piè-tì pig-dinner* 616.
 pig slop, hogwash (MC) *piá-té pig-dinner* 616.
 pig trough (LX) *pié tshòu b?* 843.
 pig trough (MC) *piá tshòu b?* 843.
 piglet (LX) *piàN zú* (or final -n) 357.
 piglet (MC) *piá là tsú* 357.
 pigskin (LX) *piá xá* 331.
 pile (of manure) (LX) *piá* 1257.
 pile (of manure) (LX) *bù ?STC *s-ban 'dung'* 1257.
 pile (of manure) (MC) *bò ?STC *s-ban 'dung'* 1257.
 pile up (grass) (LX) *bù* 1851.
 pile up (grass) (LX) *piá* 1851.
 pile up (grass) (MC) *bò* 1851.
 pile up, fold (LX) *què* 1827.
 pile up, fold (MC) *tè ~ tè* STC 493 *tap 1827.
 pillar (LX) *tsu³⁵ thòu b* 708.
 pillar (MC) *tsù ké s2=STC p20?* 708.
 pillow (LX) *ŋì kù ear + STC 482*kum* 677.
 pillow (MC) *nè kò ear + STC 482*kum* 677.
 pincers, tongs (LX) *cà tè iron-m* 857.
 pincers, tongs (MC) *tchèn tsì b* 857.
 pinch (LX) *zì tsuà* STC 188 *tsyur 2197.
 pinch (MC) *(tè) tsuà* STC 188 *tsyur 2197.
 pinch and twist (MC) *dzù dzuà* STC 188 *tsyur 2080.
 pinch, nip (LX) *qú tsé* 2249.
 pinch, nip (MC) *sè sá* 2249.
 pine (wood) (MC) *miá-sé pine-firewood* 485.
 pine torch (LX) *piè-cuá-qà mà m-bright-m* 488.
 pine torch (MC) *miá-mù-cà pine-fire-bright* 488.
 pine torch (MC) *mè cà* 488.
 pine tree (LX) *piá cí phù* 485.
 pine tree (MC) *mù-cà-phó fire-resin-tree* 485.
 pine tree (MC) *miá-phó* 485.
 pit (LX) *zà pù 'hole'* 38.
 pit (MC) *zè pù 'hole'* 38.
 pit, stone (LX) *mì* 475.
 pit, stone (LX) *mì mì* 475.
 pit, stone (LX) *tsì tsì* 475.
 pit, stone (LX) *dzý* 475.
 pit, stone (MC) *zui* PTB *dzøy (also 'testicle') 475.
 pitch dark (LX) *ní-tshì tshì black-m* 1600.
 pitch dark (MC) *mú dzò qè lì* 1600.
 pitiful (LX) *mè tshueì* 1587.
 pitiful (MC) *tsaó nè b* 1587.
 pitiful (MC) *mè-tshuè pú-zì person-pity-CAUS* 1587.
 pity (MC) *tshuè-pú stuck.by.thorn?-do* 1587.
 place (n) (LX) *zù qà* 75.
 place (n) (LX) *zù qe í* 75.
 place (n) (MC) *zuè pè* 75.
 place (n) (MC) *tcà qó bà qà* 75.
 place in between, clamp (LX) *zá qá mù* 2027.
 place in between, clamp (MC) *dzà ké* 2027.
 plain (LX) *bà tò* 42.
 plane (tool) (LX) *thue í pò b?* 856.
 plane (tool) (MC) *thue ì paó b?* 856.
 plane down (LX) *thý* 1655.
 plane down (MC) *thue ì* 1655.
 plank (LX) *bú* STC 138? *plen 'flat', etc. 706.
 plank (MC) *pàn tsì b* 706.
 plank (thin) (MC) *bù (zà) thin-skin(?)* STC 138? *plen 'flat', etc. 706.
 plant (sign into ground) (LX) *tshuè* 1690.
 plant (sign into ground) (MC) *(fià) tshuè* 1690.
 plant (tree) (LX) *phià* 2553.
 plant (tree) (MC) *liè* 2553.
 plant (wheat) (LX) *phià* 2593.
 plant (wheat) (LX) *sé* 2593.
 plant (wheat) (MC) *phià* 2593.
 plant ash (LX) *mù-bè mud-powder* 73.
 plant ash (MC) *tcìè-bè zì b(alkali)-powder* 73.
 plant seedlings (LX) *phià* 1691.
 plant seedlings (MC) *liè* 1691.
 plate (LX) *phãN tsì b* 772.
 plate (MC) *phàn tsì b* 772.
 plate (MC) *tshì bá* 772.
 play (LX) *bé là* 2443.
 play (MC) *dá tshj = 'chat'. ?STC 289 *(r-)tsya-y* 2443.
 play finger-guessing game (LX) *qù nú tí* 1977.
 play finger-guessing game (MC) *χuá tshuãN-pù b-do* 1977.
 plead, offer excuse (LX) *dà mì ì* 2425.
 plead, offer excuse (LX) *mì í* 2425.
 plead, offer excuse (MC) *tshóu thà b?* 2425.
 plead, offer excuse (MC) *mì kóu* 2425.
 please, request marker (LX) *má* 2258.
 pleased, satisfied (LX) *cì (mì)-qà heart-go* 2170.
 pleased, satisfied (LX) *cì-qà-qà heart-go-go* 2170.
 pleased, satisfied (MC) *tiè nà* 2170.

- pledge, swear (MC) *suà uá* 979.
 plow (n) (LX) *tò* 860.
 plow (n) (MC) *tò kè* 860.
 plow (v) (LX) *lí* b 1932.
 plow (v) (MC) *zuè lié* field-plow (b) 1932.
 plowshare (LX) *dzù* 861.
 plowshare (LX) *χuà thóu* b 861.
 plowshare (MC) *dzù* 861.
 pluck (flowers) (LX) *tshó* 2566.
 pluck (flowers) (MC) *tshóu* 2566.
 plum (LX) *lì tsí* b 497.
 plum (MC) *tshù mù* 497.
 plum blossom (LX) *χèn tsì-pá tsù* m-flower 479.1.
 plum tree (LX) *lì tsí-phù* b-tree 479.
 plum tree (MC) *tshù mù phó* 479.
 pocket (LX) *jà qó* 629.
 pocket (MC) *phù tá pò ~ phù tà pò* 629.
 pocket (MC) *phù tsà qá* 629.
 pod (LX) *dè piá-jà piá* bean-skin 559.
 pod (bean) (MC) *dèi-tì* bean-squeeze.together (or 'straight') 559.
 point (v) (LX) *tsì-dá* b-s 2592.
 point (v) (LX) *pò* 2592.
 point (v) (MC) *tcé* 2592.
 pointed (LX) *qè dý* 1435.
 pointed (MC) *tcìn tcè* b? 1435.
 pointed (MC) *tcìn tcìn* b? 1435.
 poison (LX) *dù* STC 473 *duk ~ *tuk, or borrowing 911.
 poison cat (kind of witch) (LX) *dú má nù* 962.1.
 poison cat (kind of witch) (LX) *dú pú mỳ* 962.1.
 poison cat (kind of witch) (LX) *dù-phù-mí* ghost-do-female 962.1.
 poison cat (kind of witch) (MC) *sú-dòu-phù-mú* hide?-ghost-do-agt. 962.1.
 poison cat (kind of witch) (MC) *dòu miá* also "evil spirit". STC 473 *duk ~ *tuk 962.1.
 poke (LX) *tsí* 2415.
 poke (MC) *tshó tià* 2415.
 pole (boat) (LX) *iaò dá* b 1715.
 polite, ceremonious (LX) *khè tcí* b 1580.
 polite, ceremonious (MC) *tè phì-pù* guest-do 1580.
 pool (LX) *tsò qhà* was *tsò qhwà* 35.
 pool (MC) *tsuè-tàn tán* -an ~ -N. water-b 35.
 poor (LX) *χá* 1539.
 poor (MC) *tcè* 1539.
 poor (of soil) (LX) *χuá* 1475.
 poor (of soil) (LX) *sè* 1475.
 poor (of soil) (MC) *χuá* 1475.
 poor person (MC) *mé tcè* 233.
 poplar tree (LX) *là pà* 483.
 poplar tree (MC) *gò phò* 483.
 poplar tree (wild) (LX) *βó là pà* ?cf. SHK 483.
 porcupine (LX) *tcà qù* "earth pig" (do they have porcupines?) 393.
 porcupine (MC) *tì kù* 393.
 pork (LX) *piá piá tshì* 587.
 pork (MC) *pià tshè* 587.
 portion, fraction (CL) (LX) *fá* b 1331.
 portion, fraction (CL) (MC) *feì* b? 1331.
 POSS (LX) *-i* 2644.
 POSS (MC) *kì* also nominalizer 2644.
 pot, jar (LX) *kuàN kuáN* b? 777.
 pot, jar (MC) *kuàN kuáN* b 777.
 potato (LX) *iàN ý* b 544.
 potato (MC) *iàN ÿ* b 544.
 pouch (of tobacco) (LX) *kà* 1296.
 pouch (of tobacco) (MC) *ká* 1296.
 pour (some) out (LX) (*sà*) *qò tó* 1805.
 pour liquid on, irrigate (LX) *sú* STC 241 *sywar 2038.
 pour liquid on, irrigate (MC) *tsuè ké* water-m 2038.
 pour liquid on, irrigate (MC) *tsuè lè* cf. moisten 2038.
 pour liquid on, irrigate (MC) *tsuè phè* 2038.
 pour out (MC) *sè guí* 1805.
 pour/throw out (LX) (*sà*) *ý* 1805.
 practice, drill (LX) *lién dà* b,s 2139.
 practice, drill (MC) *soú* 2139.
 praise (MC) *tshóu* *χò* b 2120.
 praise (MC) *χà tè pù* 2120.
 praise (v) (LX) *ia ò* 1711.
 praise (v) (LX) *nà ò* 1711.
 praise (v) (LX) *χè ò* 1711.
 precipitous (LX) *χuè* 1595.
 precipitous (MC) *tòu thá* b 1595.
 precipitous (MC) *cyèn thá* b? *cyèn ~ cýn* 1595.
 precipitous (MC) *tshuè tshuè* 1595.
 pregnant (LX) *dà lià* 1981.
 pregnant (MC) *cè tà ná* 1981.
 pregnant (MC) *cè pé nà* 1981.
 prepare (LX) *bú dzì* 2611.
 prepare (MC) *tsùn pì* b 2611.
 present (v) (LX) *dà zí* 2483.
 present (v) (MC) *dè zí* 2483.
 press (LX) *fià tshá* 2507.
 press (MC) *tchá* tone can change to HF if pfx. 2507.

- press (oil) (LX) *lì* 2565.
 press (oil) (LX) *tshá b?* 2565.
 press (oil) (MC) *tshà b* 2565.
 pretend, feign (LX) *á tó ná* 2029.
 pretend, feign (MC) *pá pù* 2029.
 pretty (LX) *sé* 1512.
 pretty (LX) (*tsà*) *sé* look+pretty 1559.
 pretty (MC) *pà sé* 1559.
 pretty (MC) *pà lió* 1512.
 previous generation (MC) (*dè*) *qè kí* 314.
 price (LX) *phù* 803.
 price (MC) *phè* 803.
 prick, stab (LX) *tsí* 1687.
 prick, stab (LX) *tchí* 1687.
 prick, stab (LX) *tcí* 1687.
 prick, stab (MC) *tsí tshí=* thorn 1687.
 principle, reason (LX) *qè cý* 987.
 principle, reason (MC) *z i-ué* road-exist (calque) 987.
 prison (MC) *khuè-tcí* dog-home/room 88.
 privileged seat (LX) *tchì gó* 1063.
 privileged seat (MC) *ì qó* 1063.
 probably (LX) *qò tché* 2636.
 probably (MC) *tǎN cì* 2636.
 probably (MC) *tǎ khè b (?)* 2636.
 produce (v) (LX) *tshó dà b?* 1731.
 produce (v) (MC) *tshò thá b?* 1731.
 produce fruit (LX) *á zó* 2062.
 produce fruit (MC) *sè dzǎ* 2062.
 prop up, support (LX) *tè tì* 1712.
 prop up, support (MC) *ì tì* 1712.
 prop up, support (MC) *ì tshèn dà b* 1712.
 protect, safeguard (LX) *quà* 1651.
 protect, safeguard (LX) *zì* 1651.
 protect, safeguard (MC) *quà* 1651.
 protruding sharply, convex (LX) *tchù* tone? 1410.
 protruding, convex (LX) *què* 1410.
 protruding, convex (MC) *kòŋ thá b* 1410.
 protruding, convex (MC) *bòN bó* e.g., mountain on plain, or belly of pregnant woman 1410.
 protruding, convex (lumpy) (LX) *tshù* tone? 1410.
 pry (LX) *gà* 2253.
 pry (LX) *gǎo dà b. vcg?* cf. *gǎo 'do'* (in chin.) 2253.
 pry (LX) *qà* 2253.
 pry (MC) *ňǎo thà b?* 2253.
 puberty (LX) *mì bà* person-big 2317.
 pubic hair (MC) *mù* 144.1.
 puddle or pool of something (LX) *pià* 1308.
 puddle or pool of something (LX) *kuá* 1308.
 puddle or pool of something (MC) *bò* 1308.
 pull (LX) *kù kù* typo!? 2126.
 pull (MC) *sí là* 2126.
 pull out (LX) *tcá* 1728.
 pull up (weeds) (LX) *té* 1631.
 pull up (weeds) (MC) *tú tyà* 1631.
 pull up (weeds) (MC) *tuè* takes *sì* 1631.
 pull, drag (LX) *qù qú* 2430.
 pull, drag (LX) *sí* 2430.
 pull, drag (MC) *sí là* 2430.
 pulse (MC) *mè b?* 163.
 pulse (v) (LX) *tshó tà* 2407.
 pulse, beat (of heart) (MC) *soú tà* 2407.
 pumpkin (LX) *làn kuá b* 549.
 pumpkin (MC) *lǎN kuá b* 549.
 pupil of eye (LX) *mì-sè* 104.2.
 pupil of eye (LX) *mì-cuà* eye-bright. some speakers 104.2.
 pupil of eye (LX) *mè tshà ì* 104.2.
 pupil of eye (MC) *mù tié màN pé* 104.2.
 puppy (LX) *khù bù lá* 361.
 puppy (MC) *khuà là tsú* vowel harmony 361.
 purple (LX) *ŋí (çə çə)* 1458.
 purse lips (LX) *pí piá* 2183.
 purse lips (MC) *duè-(sè)-zó* mouth-p-v 2183.
 purse lips (MC) (*duè*)-*piá piá* mouth-v 2183.
 pus (LX) *pù* 195.
 pus (MC) *pù* 195.
 push (LX) *cá* 2423.
 push (MC) *tshóu thà b?* 2423.
 push (MC) *tí* 2423.
 push (car, not door) (LX) *ŋú* 2423.
 push down (LX) *tshá* STC 353 *tsyuk 1628.
 push down (MC) *fià tchà* STC 353 *tsyuk 1628.
 push down (MC) *iá b?* 1628.
 push down (MC) *tchá* STC 353 *tsyuk 1628.
 push forward, promote (LX) *tè mè cá* 2424.
 push forward, promote (LX) *dà cá* 2424.
 push forward, promote (MC) *fià tsoŋ* 2424.
 push forward, promote (MC) *sè doù dà zí* 2424.
 push forward, promote (MC) *tshóu thà b?* 2424.
 put into agreement (LX) *tuè zí* 1890.
 put on clothes (LX) *phù-(dì)-tè-gù* clothes-POST-p-V 1740.
 put on clothes (LX) *zè xé* 1740.
 put to bed (LX) *fià-ŋí-zì* DOWN-bed-CAUS 2358.
 put to bed (MC) *fià-né-zì* DOWN-bed-CAUS 2358.
 put to pasture (LX) *cù* 1882.

- put to pasture (MC) *khuè-pià-tiú* dog-pig-m 1882.
- Qiang nationality (LX) *mà* 203.
- Qiang nationality (MC) *mà* 203.
- Qiang priest, shaman (LX) *sì pí* ~ [spí] 247.
- Qiang priest, shaman (MC) *pí* 247.
- Qiang watch tower (LX) *ké kù* 96.
- Qiang watch tower (LX) *tcé kù* 96.
- quarrel (LX) *qò quá* ?STC *g-ral 1706.
- quarrel (LX) *dé dé* 1706.
- quarrel (LX) *cí cí* 1706.
- quarrel (MC) *kuá pú* 1706.
- quiet (LX) *có* cf. 'clean' 1544.
- quiet (MC) *ì-mí-sì-nà-qhuè-mì-té* chicken-not-cluck-and-dog-not-bark 1544.
- quilt (LX) *sù thiá* ~ *sù tchá* 671.
- quilt (MC) *qhué thiò* cover-m 671.
- rabbit (MC) *thà á* [thǎ] b? 364.
- rack over fire (MC) *qhò* 786.
- radish (LX) *lò pú* b 536.
- radish (MC) *lò pú* b 536.
- raft (LX) *phà tsì* b? 848.
- raft (MC) *phà tsì* b? 848.
- rafter (LX) *tchà* 716.
- rafter (MC) *tán phj* b? 716.
- rain (n) (LX) *meì* STC 443 *r-wa 12.
- rain (n) (MC) *mz ì* < mu (weather) + z ì. STC 443 *r-wa. Jiuziying my ri. 12.
- rain (v) (LX) *dà zì* 2469.
- rain (v) (LX) *phá sè* 2469.
- rain (v) (LX) *uà* 2469.
- rain (v) (MC) *mz ì-gè-tcò* rain-p-come 2469.
- rainbow (LX) *mù n, ì-kuè* sun-bent.shape 13.
- rainbow (LX) *mù kuè* 13.
- rainbow (MC) *mè xóu* 13.
- raise (LX) *tchú* 2252.
- raise (LX) *tcáó dà* b 2252.
- raise (MC) *zó* 2252.
- raise (MC) *tchó* 2252.
- raise (child) (LX) *pá á* 2517.
- raise (child) (MC) *mù* 2517.
- raise (hand) (LX) *tchéí* 2084.
- raise (hand) (MC) *zyá* 2084.
- raise (livestock) (LX) *íá* 2516.
- raise (livestock) (LX) *pá á* ~ [pá:⁵¹] 2516.
- raise (livestock) (MC) *ì pé á* ~ [pé:^z] 2516.
- raise head (LX) *bà* n.b. senses of pfxs 2514.
- raise head (MC) (*tâ*) *bà* 2514.
- raise with hook (LX) *kué* 1934.
- raise with hook (LX) *tchí lá* 1934.
- raise with hook (MC) *kuá ì kwâ* 1934.
- raise with hook (MC) *koú koú* b 1934.
- raise with hook (MC) *koú thà* b 1934.
- raise, feed (LX) *mì* 2004.
- raise, feed (MC) *tè mù ná zì* 2004.
- rake (MC) *sì tsào phà sì* ~ *sǎ* 863.
- rake (v) (LX) *tshí* 1634.
- rake (v) (MC) *phé thà b* 1634.
- ram (LX) *ìò dò* 342.
- ram (MC) *ioù dzé* 342.
- rat, mouse (LX) *zì kú* 397.
- rat, mouse (MC) *dzé kuè* 397.
- read (LX) *só* cf "teach" 1841.
- read (MC) *soú* 1841.
- real, genuine (LX) *hù* n.b. silver is *hú* 1499.
- real, genuine (MC) *pè pé* 1499.
- really (LX) *xeí xuá s1*=good 2629.
- really (MC) *pè pé* 2629.
- reason, purpose (LX) *qà pú* 988.
- reason, purpose (MC) *ná gè lè* 988.
- reason, purpose (MC) *kè kè* ? 988.
- reason, purpose (MC) *ná gí-tsí lè* what-matter 988.
- recall (LX) *tà bà ló* 2479.
- recall (MC) *tè bè dzóu* ~ *tè bè dzóu cà* 2479.
- receive (LX) *à tsé* 2060.
- receive, get (LX) *zì cú* ~ *zì cù* 2335.
- receive, get (MC) *tè coú* 2335.
- recent days (MC) *tcà-ná-sè* these-two-days 1088.
- recent days (MC) *tsà-tcí-sè* these-few-days 1088.
- recently (LX) *tcà guà* 1150.
- recently (MC) *tcà-tcí-pú* these-few-years 1150.
- recently (MC) *tcà-tcí-sè* these-few-days 1150.
- recently (MC) *tcà nà pù* these-two-years. VH on s2? 1150.
- reclaim wasteland (LX) (*zù bá*) *gà* 2097.
- reclaim wasteland (MC) *zuè dzí* 2097.
- recline (LX) *à có* also *dà-* 2383.
- recline (MC) *né* 2383.
- recognize (MC) *chá sì* 2343.
- recognize (person) (LX) *sí sí* 2279.
- recognize (person) (MC) *chá sì* 2279.
- recognize (word) (LX) *sì* ~ *sí sí* 2278.
- recognize (word) (LX) *só* 2278.
- recognize (word) (MC) *zě* 2278.
- recognize (word) (MC) *tsí kè tchè* m1?=Ch zì 2278.
- recover (from illness) (LX) *à xeì* 2265.
- recover (from illness) (MC) *ù-nà-(qě)* p-good-s 2265.
- recover (from injury) (LX) *à xeì* 2266.
- recover (from injury) (MC) *ù-nà-(qě)* p-good-s 2266.

- red (LX) *cí* STC *(r-)ni. or ?STC n.452 *tya 1454.
 red (MC) *nó* STC *(r-)ni 1454.
 redder (LX) (*fià*) *cí* diff't pfxs change sense 1675.
 redder (MC) *tè-nô* p-red 1675.
 redeem, ransom (LX) (*sĭ*) *tchĭ tchá* 2341.
 redeem, ransom (MC) *dê cou cá* 2341.
 reduce (LX) *fiá gú gú* 2352.
 reduce (LX) *fià tù tú* 2352.
 reduce (MC) *mí qè uà* 2352.
 reduce (swelling) (LX) (*fià*) *pià (qó)* 2488.
 reduce (swelling) (LX) *fiá gú* 2488.
 reduce (swelling) (MC) *fià cà* 2488.
 reduce, decrease (LX) *fià tsá* 2032.
 reduce, decrease (LX) *tchì tchá* 2032.
 reduce, decrease (MC) (*fià*) *pé tchĕ* 2032.
 refine (milk) (LX) *tsá* 2141.
 refine (milk) (MC) *qà zĭ* 2141.
 refine (milk) (MC) (*tshĕ*) *ŋàò thá m-b(boil)-s* 2141.
 refine (oil) (LX) *tsá* 2142.
 refine (oil) (MC) (*tshĕ*) *ŋàò thá m-b(boil)-s* 2142.
 refine (oil) (MC) *qà zĭ* 2142.
 regret, repent (LX) *χò χue í* b 1973.
 regret, repent (MC) *šé χuì* b 1973.
 rein in, coerce (MC) *tcí* also tie/strap tightly (diff't meaning) STC 484 *kik 2134.
 reins (LX) *kò-bài* horse-rope 836.
 reins (MC) *zòu tá bzĕ* 836.
 relationship (MC) *dzĕ dzĕ* 1017.
 relatives (LX) *qà zĕ* 303.
 relatives (MC) *kĕ dzĕ* 3d person 303.
 relatives (MC) *ù tshì (mú)* 303.
 release, set free (LX) *dà-cì* p-v 2327.
 release, set free (LX) *sĭ-cì* p-v 2327.
 release, set free (MC) *dĕ lĕ* 2327.
 religion (MC) *sé-dzà* god-believe 960.
 reluctant (to part) (LX) *miè kó* 2311.
 reluctant (to part) (MC) *tšó* 2311.
 reluctant (to part) (MC) *šì pù tè* 2311.
 rely on (LX) *kuà lí* 2527.
 rely on (LX) *khao³⁵-dà* b-s 2527.
 rely on (MC) *khó* 2527.
 remember (LX) *cì qó lò* 2019.
 remember (LX) *cì qó* 2019.
 remember (LX) *tcí dà* b 2019.
 remember (MC) *tè-tcí-thà-cà* p-b-s-s 2019.
 remember (MC) *tcí-thà-zà* b-s-s 2019.
 rent (LX) *zù phù* b,do 808.
 rent (field) (LX) *tsè dá* b? 2616.
 rent (field) (MC) *tăn thà* b 2616.
 rent (house) (LX) *tsè dá* b? 2617.
 rent (house) (MC) (*tcí*) *tàn thà* house-b-s 2617.
 repair (clothing) (LX) *pà cì* 1679.
 repair (clothing) (MC) *pĕ* 1679.
 repair (machine) (LX) *cou dà* b 2500.
 repair (machine) (LX) *pà cì* 2500.
 repair (machine) (LX) *pó pó* 2500.
 repair (machine) (LX) *pù* b 2500.
 repair (machine) (MC) *pù* b 2500.
 repair (machine) (MC) *phe ì tšĭ* 2500.
 repair (pot) (LX) *pà cì* 1680.
 repair (pot) (MC) *pĕ* 1680.
 repair (shoes) (LX) *pà cì* 2501.
 repair (shoes) (MC) *pĕ* 2501.
 repay (LX) *phé* 1703.
 repay (MC) *dĕ bǎ* 1703.
 replace, substitute for (LX) *χù kà* 1792.
 replace, substitute for (MC) *là tshĭ* 1792.
 report on someone (LX) *lá* 1919.
 report on someone (MC) (*šĕ*) *diú* 1919.
 report on someone (MC) *lé* 1919.
 report on someone (in writing) (MC) *nè (pù)* 1919.
 reputation (LX) *qè tshuè* 1003.
 reputation (MC) *mĕ sĕ* 1003.
 rescue, save (LX) *tcou dà* b 2081.
 rescue, save (MC) (*tĕ*) *tcou* 2081.
 resemble (LX) *kuǎ* 2482.
 resemble (MC) *bú tà* 2482.
 reserve (seed for planting) (LX) *dzuá* 2154.
 reserve (seed for planting) (LX) *tshú* notes 2154.
 reserve (seed for planting) (MC) *tĭ =/ə/* 2154.
 reside, dwell (LX) *ì* 2082.
 reside, dwell (MC) *fiá zĭ* 2082.
 resin (LX) *pié zù* 487.
 resin (LX) *piá zù* 487.
 resin (MC) *miá-mà* pine-oil 487.
 resist (LX) *phé* 1813.
 resist (LX) *à quá* 1813.
 resist (LX) *qù cù* =1801 1813.
 rest (LX) *bà ì* 2499.
 rest (LX) *kó là* 2499.
 rest (MC) (*bà*) *diè* 2499.
 retreat (LX) (*fià*) *thue í* 2426.
 retreat (MC) *gĕ gú pù* 2426.
 return (MC) *gú* 1989.
 return (CAUS) (LX) *zĭ gó zĭ* 1990.
 return (CAUS) (MC) *gú zĭ* 1990.
 return (curtain) (LX) *phé* 1983.
 return (curtain) (MC) *tù bà* 1983.
 return (fountain pen) (LX) *zĭ* 1984.

- return (fountain pen) (MC) *piè bà* 1984.
 return item (MC) *tù bà* 1984.
 return purchase (LX) (*fià*) *thueí* b. also takes sî-, dà- 2427.
 return purchase (MC) *dè thuì* b. tone varies w/ tense, agr 2427.
 return to a place (LX) *suè* 1989.
 return to a place (LX) (*à*) *lò* 1989.
 return to a place (LX) (*zì*) *gó* 1989.
 revolve (LX) *suè b?* 2503.
 reward (LX) *phé* 1654.
 reward (MC) *là tsì pù* 1654.
 rib (LX) *χά τὰ* 168.
 rib (MC) *lè pá* 168.
 rice (cooked) (LX) *tò qhuá* 575.
 rice (cooked) (LX) *mà má* 575.
 rice (cooked) (MC) *mà má* 575.
 rice (cooked) (MC) *tchò* 575.
 rice (uncooked) (LX) *tsheì* 574.
 rice (uncooked) (MC) *tchì* 574.
 rice gruel (LX) *zò tí* 579.
 rice gruel (LX) (*mà má*) *zò b?* 579.
 rice gruel (MC) *dzè dzé* 579.
 rice plant (LX) *qè mà* 515.
 rice straw (LX) *tshì pù* 517.
 rich person (MC) *ηά mù* 234.
 rich, wealthy (LX) *έ pù* 1538.
 rich, wealthy (MC) *ηά mù* 1538.
 riddle (LX) *tshè mì tsì* b 936.
 riddle (MC) *tshè mí tsì* b 936.
 ride (horse) (CAUS) (MC) *tsà zì* 2241.
 ride, straddle (LX) *tsà* STC 72? *dzyon 2240.
 ride, straddle (MC) *tsà* STC 72? *dzyon 2240.
 ridge of land (CL) (LX) *thò* 1247.
 ridge of land (CL) (MC) *sú* =mountain 1247.
 ridge of land (CL) (MC) *lié* 1247.
 right (hand) (LX) *phà tó qò* 1046.
 right (hand) (MC) *dá* STC p34 *g-ya ~ *g-ra 1046.
 rightward (MC) *dá fià cá qhuà* 1046.1.
 ring finger (LX) *liè-ná* m-good 139.
 ring for cow nose (LX) *sì-tí kù* m-round 840.
 rip (v) (LX) *phú phú* 2362.
 rip (v) (LX) *phú phá* 2362.
 rip (v) (MC) *şè phù phè* 2362.
 ripe (LX) (*fià*) *mù* STC 432 *s-min 2345.
 ripe (LX) *fiă peì* cf. "old" 2345.
 ripe (MC) (*fià*) *mù* STC 432 *s-min 2345.
 rise (LX) *tè sî* 2324.
 rise (LX) *tè là* 2324.
 rise (MC) *tè tèo* "come up" 2324.
 river (LX) *tsò qhà* 31.
 river (MC) *sé-tsue* m-water 31.
 river (CL) (LX) *zá* 1232.
 river (CL) (MC) *tó* 1232.
 riverbank (LX) *qhuà cì*? STC *klu·ŋ 32.
 riverbank (MC) *dè pià* 32.
 riverbank (MC) *fià zì* 32.
 riverbank (MC) *dè tí* 32.
 road (LX) *ý tò* 41.
 road (MC) *zì* 41.
 roar (lion) (LX) *cí* 2052.
 roar (lion) (LX) *ηú* STC 261 *u 2052.
 roar (lion) (LX) *qà τὰ* "speak" 2052.
 roar (lion) (LX) *té tá* 2052.
 roar (lion) (MC) *zě* 2052.
 roar (tiger) (LX) *té tá* 2051.
 roar (tiger) (MC) *zě* 2051.
 rob (LX) *bú bá* 2250.
 rob (LX) (*dà*) *quà có* 2250.
 rob (MC) *zì tà* 2250.
 robber (LX) *bú bá mù* 251.
 robber (MC) *mè zì tá mò* 251.
 rock (LX) *kò piá* 28.
 rock (CL) (LX) *kò*? other forms? 1261.
 rock (CL) (LX) *fiò* 1261.
 rock (CL) (MC) *qó* 1261.
 rock, boulder (MC) *zà bžà* 28.
 rock, sway (LX) *mè cà* 2518.
 rock, sway (LX) *lì lá* 2518.
 rock, sway (MC) *iaò thá* b,s 2518.
 rock, sway (MC) *pè lá* 2518.
 rod, stick (LX) *kuà lí* 822.
 rod, stick (MC) *pàN pán* m~N 822.
 roll (of fabric) (LX) *kù* 1282.
 roll (of fabric) (MC) *qhuè* 1282.
 roll (v) (LX) *lè cà* 1952.
 roll (v) (LX) *qò liú* 1952.
 roll (v) (MC) *guìn* b 1952.
 roll around, writhe (LX) *qò lý*? STC *349 *kor 1784.
 roll around, writhe (MC) *tàn kuì* 1784.
 roll around, writhe (e.g., tantrum) (MC) *bì pù* 1784.
 roll over (body) (LX) *dò gò* 1872.
 roll over (body) (MC) *tè là cà* 1872.
 roll up (fabric) (LX) *lý lý* 2086.
 roll up (fabric) (MC) *quà lió* 2086.
 roll up, curl up (as cat) (LX) *tù tú* 2087.
 roll up, curl up (as cat) (MC) *ì-qǒ* 2087.
 roller for mill (LX) *zuà kù* 889.
 roller for mill (MC) *η.ίη tsì* b 889.
 roller for mill (MC) *η.ǎN tsì* b 889.
 roof (LX) *íá tò* 684.

- roof (MC) *tcí-tìN pò* house-tip 684.
 roof (flat) (MC) *tcí zǎ (qà)* 684.
 rooms (CL) (MC) *qà* =home 1304.
 rooster (LX) *ỳ qú* 366.
 rooster (MC) *ì qóu* 366.
 root (LX) *kà pú* STC 238 *kywiy 470.
 root (MC) (*phò*) *kè kè* STC 238 *kywiy 470.
 root (v) (LX) *dó gó* 1933.
 root (v) (LX) *tchú* 1933.
 root (v) (MC) *bí* 1933.
 rope (LX) *beì* 868.
 rope (CL) (LX) *à ~ á* 1233.
 rope (CL) (MC) *dz í* 1233.
 rope, string (MC) *bzè* 868.
 rotten (LX) *tcý qá* 1902.
 rotten (MC) *tsuè qá* 1902.
 rough (MC) *tshù là b?* 1488.
 rough (flour) (LX) *tshù b?* 1488.
 rough (food) (LX) *tchà* 1488.
 round, circular, spherical (LX) *bà dí* STC #172 *bwam 1432.
 round, circular, spherical (MC) *ỳn thá ~ yàen thá b* 1432.
 row (boat) (LX) *χuà dà b* 1976.
 row (boat) (LX) *tsh í* 1976.
 row (boat) (MC) *tshuàn dzó b, s2=?sit* 1976.
 row (of houses) (LX) *uá* 1298.
 row (of houses) (LX) *thuà* 1298.
 row (of houses) (MC) *lú* 1298.
 row (of houses) (MC) *phè* 1298.
 row of grain (CL) (LX) *lú ~ lǔ* 1252.
 row of grain (CL) (MC) *lú* 1252.
 rowdy (LX) *laó zè b* 1543.
 rowdy (MC) *laǒ zèN b* 1543.
 rub, abrade (LX) *tsh í tsh í b?* 2187.
 rub, abrade (MC) *tè mô b?* 2187.
 rub, abrade (MC) *tè tsh í thà b* 2187.
 ruin, fail (of wheat) (LX) *κlà* 2199.
 ruin, mess up (LX) *tè phè lá* 2199.
 ruin, mess up (MC) *tè là tà z í í ~ [í]* 2199.
 ruined (clothes) (LX) *dà bià* 2229.
 ruined (clothes) (MC) *qhà là* 2229.
 ruined (clothes) (MC) *qhà là* 2229.
 ruined (clothes) (MC) (*phù*)-(sè)-*phù phà* clothes-px-ruin 2229.
 ruined (house) (LX) *fià bià* 2230.
 ruined (house) (MC) (*tcí sà*) *qhà là* 2230.
 ruined (house) (MC) *sè dz uà* 2230.
 rule, custom (LX) *kuèi tcý b* 998.
 rule, custom (MC) *kué í tcý b* 998.
 ruler (LX) *tsh í ts í b* 811.
 ruler (measure) (MC) *zè tè* 811.
 run (LX) *tsh ì tsh ì* 2214.
 run (MC) *sè dz í* 2214.
 run away, duck (LX) *dà phó* 1855.
 run away, duck (LX) *dà à à pià* 1855.
 run away, duck (MC) *kuò* 1855.
 rush, dash (LX) *qe í tché* 1725.
 rush, dash (MC) *kàn s í b* 1725.
 rust (LX) *cà-gù* iron-v (cf. 'wrinkle') 64.
 rust (LX) *cà ts í* 64.
 rust (LX) *cà-qhà* iron-feces 64.
 rust (MC) *guì* 64.
 rust (v) (LX) *zà ñ, ì* 2318.
 rust (v) (LX) *z ì zú* VH? 2318.
 rust (v) (MC) *dè dzô* 2318.
 rust (v) (MC) *guì-dè-à* rust-p-v 2318.
 s/he (LX) *ts í* 1366.
 s/he (MC) *fià lí* 1366.
 s/he (MC) *fià qó* 1366.
 s/he (MC) *fià í* 1366.
 sad (LX) *kù tch í b?* 1588.1.
 saddle (LX) *kò zú* 825.
 saddle (LX) *ñán ts í b* 825.
 saddle (MC) *ñáN ts í b* 825.
 salary, wages (LX) *dz í gù* =money 804.
 salary, wages (MC) *dz á qà phé* 804.
 saliva (LX) *piǎ* 192.
 saliva (MC) *tsù-zé* water-m 192.
 salt (LX) *tsh í* sometimes appears to have a High-Falling tone. STC 214 *tsa 71.
 salt (granulated) (MC) *tsh ì-bé* salt-powder 71.
 salt (lump) (MC) *tsh ì* STC 214 *tsa 71.
 salty (MC) *tsh ì-qhá* salt-bitter 1530.
 salty (enough) (MC) *dzú ?* STC 245 *g-ryum 1530.
 sand (MC) *sà-bé z ì b*-powder 48.
 sausage (LX) *ni pù* 584.1.
 sausage (LX) *tsh ì pù* 584.1.
 save (money) (LX) *tshú* 2321.
 saw (LX) *cà qhò* 853.
 saw (MC) *kè z í* 853.
 saw (v) (LX) *qhò* 2083.
 saw (v) (MC) *tshù tshuá* 2083.
 scald, burn (LX) *thò* 2384.
 scald, burn (MC) *sè thè thou* 2384.
 scar (MC) *tsà-pà m-b(?)* 155.
 scatter, break up (LX) *dà phó* STC 254 *be ~ *pe 1770.
 scatter, break up (MC) *dè phù phù* 1770.
 scatter, break up (MC) *tè sǎn thà m2=b* 1770.
 scattered (pearls) (LX) *dà phà à* STC *bra 2291.
 scattered (pearls) (LX) *dà kò ?* STC *bra 2291.

- scattered (pearls) (MC) *gè phù se ì* 2291.
 scent (LX) *lâ* 22.
 scent (MC) *χòu* 22.
 school (MC) *dzi só bà* 83.
 scissors (LX) *cà pò* 816.
 scissors (MC) *tcìn tò b* 816.
 scold, abuse (LX) *zì tà* 2166.
 scold, abuse (MC) *dí* 2166.
 scoop (LX) *tchà qù* 876.
 scoop (MC) *tshuè-tci* water-m 876.
 scoop (water) (LX) (*tsù*)-*zá* water-scoop 2523.
 scoop (water) (MC) *zá* 2523.
 scorpion (MC) *mè tsì-bò lò* m-bug STC 56 *(s-)di·k 447.
 scrappy, fragmentary (LX) *qà lí phà tsà* 1611.
 scrappy, fragmentary (LX) *qà lí qà tchà* 1611.
 scrappy, fragmentary (MC) *tcà mé à diè* 1611.
 scrappy, fragmentary (MC) *fià mé à diè* 1611.
 scratch (in dirt) (LX) *phà dá b* 2206.
 scratch (in dirt) (LX) *phà lá* ?STC 230 *hyak 2206.
 scratch (in dirt) (MC) *phiá* ?STC 230 *hyak 2206.
 scratch (in dirt) (MC) (*bè zì*)-*χá-thà* dirt-b-s 2206.
 scrotum (LX) *bà* 145.1.
 scrotum (MC) *tà pò* 145.1.
 sculpt (LX) *βί* 1819.
 sculpt (MC) *thiò* 1819.
 season (LX) *suà* 1165.
 season (LX) *cuà* 1165.
 second (LX) *nè ð· χέ* 1220.
 second of month (LX) *nè tcoó* 1119.
 second of month (MC) *nè tiù* 1119.
 secret (n.) (LX) *mà cuá* 1006.
 section (of bamboo) (LX) *zuè* 1276.
 section (of bamboo) (LX) *sá* 1276.
 section (of bamboo) (MC) *sà* 1276.
 section (of bamboo) (MC) *tsuá* 1276.
 section (of road) (LX) *sá* 1275.
 section (of road) (LX) *zá* 1275.
 section (of road) (LX) *zuè* cf. MC 'road' 1275.
 section (of road) (MC) *sà* 1275.
 sedan chair (LX) *χuà qhâ* b? 844.
 sedan chair (MC) *χuà khâ* b? 844.
 sedan chair (MC) *τσào tsì* b 844.
 see (LX) *à tcoó* 2103.
 see (MC) *tiú (cà)* 2103.
 see patient (LX) *iá tsà* 2105.
 see patient (MC) *dzí sî (kì)* 2105.
 see patient (MC) *dzí qè tcoè* 2105.
 seed (LX) *dzueì* 514.
 seed (MC) (*zá*)-*zueì* food-seed 514.
 seed (MC) *zueì-zà* seed-food 514.
 seek (LX) *mú lià* 2506.
 seek (MC) *mú lià* 2506.
 seek (MC) *mú mià* 2506.
 seep into (LX) *tcà qá* 2364.
 seep into (MC) *fià thóu thà b?* 2364.
 select (LX) *cí qá* 2402.
 select (MC) *sè qá* 2402.
 self (LX) *iò mó* 1372.
 self (MC) *ké zì b?* 1372.
 sell (LX) *cuà* 2174.
 sell (MC) *tè pò* 2174.
 send (letter) (LX) *piá* 2567.
 send (letter) (LX) *zà* 2567.
 send (letter) (MC) *piá* 2567.
 send (letter) (MC) *pà mà* 2567.
 send someone off (LX) *cì* takes all pfxs 2373.
 send someone off (MC) *lè (kì)* 2373.
 sentence (CL) (LX) *qú* ? STC *ka 'word' 1266.
 sentence (CL) (MC) *qú* ? STC *ka 'word' 1266.
 separate, part (CAUS) (LX) *tá qá tshé fià*. tone on p. varies `´. 1895.
 separate, part (CAUS) (MC) *gè zì zóu zì* 1895.
 separate, sever (LX) *qá tshé* STC 229 *dzya·l. cf. 'ride' 1894.
 separate, sever (MC) *kiè ká* 1894.
 separated (by a river) (LX) *tchá* ?STC 229 *dzya·l 1925.
 separated (by a river) (MC) (*tsuè*) *à-qù-fià-liú* one-CL-p-cross(?) 1925.
 separated from, scattered (LX) *tò dzuá* 1771.
 September (LX) *gú ló* calque 1131.
 September (MC) *gù ló* calque 1131.
 servant (MC) *mè kuà mú* 231.
 serve as (LX) *tañ dà b* 1724.
 serve as (LX) *suá* 1724.
 serve as (MC) *qè zá* 1724.
 serve as (soldier) (LX) *pù 'do'* 1800.
 serve as (soldier) (LX) *tàn dà b* 1800.
 serve as (soldier) (LX) (*guà*) *kà* 1800.
 serve as (soldier) (MC) *dzýé-kè* soldier-go 1800.
 sesame (MC) *tsí mà* b 561.
 sesame oil (LX) *sò í-χó* oil-fragrant 593.
 sesame oil (LX) *χó-sò í* fragrant-oil 593.
 sesame oil (MC) *tsí mà-má* b-oil 593.
 set (sun) (LX) *tshò* 2164.
 set (sun) (LX) *dà* 2164.
 set (sun) (LX) *sì* 2164.

- set (sun) (MC) *fià dà* 2164.
 set of steps (LX) *kò tì (kà) b?* 717.
 set of steps (MC) *lò thì b* 717.
 set on fire (LX) *zè mḡ cì* 1884.
 set on fire (MC) *tsú* 1884.
 seven (LX) *cí* STC *s-nis 1180.
 seven (MC) *ná qò* STC *s-nis 1180.
 seventeen (LX) *fiá cí* 1190.
 seventeen (MC) *fià nò* tone change from 'seven' 1190.
 seventh (LX) *cí š xe ì* 1225.
 seventy (LX) *cí sá* 1203.
 seventy (MC) *ní sà /nə/?* 1203.
 seventy-one (LX) *cí sá à* 1204.
 seventy-one (MC) *ní sà nà à qó* 1204.
 sever, cut off (LX) *dà bà* 1923.
 sever, cut off (MC) *ḡē-phǎ* p-v 1923.
 sever, cut off (MC) *ḡē-liá* p-v ?STC 351 *lep 1923.
 sever, cut off (MC) *ḡè-tshou* p-v. ?STC 240 *tsywar 1923.
 sew (LX) *jà í* ?STC p41, 56 *krwi. ?STC 456 *d-rup 1896.
 sew (MC) *zì* STC p41 *k(h)rwi. aspiration is for Kuki-Naga. ?STC 456 *d-rup 1896.
 shadow (LX) *cuá qá* cf. 'bright' 1028.
 shadow (MC) *bì* =picture 1028.
 shake (head) (LX) *lì lá* 2519.
 shake (head) (MC) *pe í tià* 2519.
 shake hands (LX) *tsé* 2453.
 shake hands (MC) *ì pá-zò pà* hand-m 2453.
 shake out (dust) (LX) *phá tè* 1831.
 shake out (dust) (MC) *thou thá b?* 1831.
 shallow (LX) *tchá* 1425.
 shallow (MC) *mì ná* 1425.
 sharp (LX) *tcà* 1468.
 sharp (MC) *tsè tsè* (younger speaker). *ɛ/e* not a stable distinction 1468.
 sharpen (LX) *tcà-iù-sù suà* knife-m-sharpen 2186.
 sharpen (MC) *sù* ?STC 180 *s(y)wiy 2186.
 shave (LX) *khuá* 1940.
 shave (LX) *tchì b* 2395.
 shave (MC) (*mù*) *tshuá* hair-shave 1940.
 shave (MC) *thí b* 2395.
 shave (MC) *kuá b* 1940.
 sheath (LX) *cà tshue* 894.
 sheath (MC) *táo-cà tsǎ* knife (b) - m 894.
 shed (MC) *phòḡ tsǎ* b 93.
 shed (skin) (LX) (*jà*) *qhú* STC 342 *r-kwak 2429.
 shed (skin) (LX) *jà* 2429.
 shed (skin) (LX) *qhú* STC 342 *r-kwak 2429.
 shed (skin) (MC) *kè* 2429.
 shed (tears) (LX) *cì* 1823.
 shed (tears) (LX) *lò* 1823.
 shed (tears) (MC) *ḡé nù* = 'come out' 1823.
 shed (tears) (MC) *ḡé tcó* 'come' 1823.
 sheep (LX) *ió* 341.
 sheep (MC) *ioú* 341.
 sheep shed (LX) *tchá-iuá kù* sheep-b 699.
 sheep shed (MC) *tshè zé* 699.
 sheepskin vest (LX) *phà jà* 647.
 sheepskin vest (MC) *tshé-zà-phà dzà* sheep-skin-vest 647.
 sheet of paper (CL) (LX) *tshè* 1235.
 sheet of paper (CL) (MC) *tshí b?* 1235.
 shepherd (MC) *tshè tiù mú-kà* *bz ì* shepherd-child 235.
 shin (MC) *tchòN kàN kàN* 128.
 shine upon (of sun) (LX) *mà cí zé* 2581.
 shine upon (of sun) (LX) *mà cí qhuà* 2581.
 shine upon (of sun) (MC) *dz í* ?STC 187 *tsar 2581.
 shiny black (LX) *mú xuà xuà* 1599.
 shiny black (MC) *mú dzò qè lì* 1599.
 shiny blue (LX) *phú tù tù* 1605.
 shiny blue (LX) *pe í tsǎ tsǎ* 1605.
 shoe (LX) *tsuá xa* 652.
 shoe (MC) *bè tsǎ* 652.
 shoe (CL) (LX) *zì* 1278.
 shoe (CL) (MC) *zà* 1278.
 shoes made of grass (LX) *tshàò-xé* b-shoe 653.
 shoes made of grass (MC) *tshò-xé* b-shoe 653.
 shoot (v) (LX) *qhò* 2312.
 shoot (v) (MC) *lè tshà* 2312.
 shoot target (LX) *dà uà* 2313.
 shoot target (MC) *dè uè* 2313.
 shop, store (MC) *diän tsǎ-qà* b-place 84.
 shop, store (MC) *kón sǎ-qà* b-place 84.
 short (of length) (LX) *nà* 1415.
 short (of length) (MC) *dzuà dzuà* 1415.
 short (of stature) (LX) *bè* 1412.
 short (of stature) (MC) *bè* 1412.
 short month (MC) *lè-tsú* month-small 2637.
 short pants (MC) *iaò khù* m-b 641.
 shorts (LX) *ìò khú b?* 641.
 shoulder (LX) *liá xa* 117.
 shoulder (MC) *ì* *xé* 117.
 shoulder (v) (MC) *tue ì* 2106.
 shoulder (vt.) (LX) *tuè* 2106.
 shoulder pole (MC) *pièn táN* b 867.
 shout, yell (LX) *cí cí* 2272.

- shout, yell (MC) *zè* 2272.
 shout, yell (MC) *qā* 2272.
 shovel (LX) *cà piá* 858.
 shovel (MC) *tchuàn tsì* b 858.
 shrink (LX) *nuè* 2334.
 shrink (LX) *tù tú* STC p49 *twan 2334.
 shrink (MC) *ì qǒ* 2334.
 shrink (MC) *dè bz ù bz í* 2334.
 shriveled, shrunken (LX) *pià qó* flat? 1428.
 shriveled, shrunken (MC) *z í kuà* 1428.
 shuttle (LX) *sò kò* 891.
 shy (LX) *zá qhú* ?STC *śrak, ?STC 162
 *kyeŋ 1957.
 shy (MC) *dzá khù* ?STC *śrak, ?STC 162
 *kyeŋ 1957.
 sick, ill (LX) *tə íá* 1678.
 sick, ill (MC) *dzí* also, "pain" ?STC *tsa
 1678.
 sickle (LX) *cà-te í* iron-m 878.
 sickle (MC) *cì-dé* knife, iron-m 878.
 sickle (MC) *cì-dé-tsú* knife-small 878.
 side, beside (LX) *piá pú* 1044.
 side, beside (MC) *liè zì* 1044.
 sieve (LX) *sà tshè* b? 885.
 sieve (MC) *gàì tsí* b 885.
 sift (LX) *sé lá* 2299.
 sift (LX) *tchà* 2299.
 sift (MC) *tchì sé là ~ tchì gè lá* 2299.
 silk thread (MC) *kuè sè lì* 621.
 silk, satin (LX) *kuè* 622.
 silk, satin (MC) *kuè* 622.
 silver (LX) *nú* 60.
 silver (MC) *ńó* 60.
 silver coin (LX) *ńú (sèn dzé)* 800.
 silver coin (MC) *ńó-tcìn tsè* silver-money
 800.
 similar (LX) *à ká* 1550.
 similar (MC) *à mé kì lè* 1550.
 simmer (LX) *qó ~ qò* 1853.
 simmer (LX) *tshú* 1853.
 simmer (MC) *tǎn-thà* b-s 1853.
 simmer (MC) *qà* 1853.
 sing (LX) *tshuá* 1704.
 sing (MC) *tǎN-thà* b-s. m1 also *tǎN* 1704.
 singe, scorch (LX) *cí qhá* 2039.
 singe, scorch (MC) *té tcí* 2039.
 sink (v) (LX) *fià tí* ?STC 375 *lip 1709.
 sink (v) (LX) *fià tsì* 1709.
 sink (v) (MC) *fià cǎ* 1709.
 sisters (LX) *sà tsù* 293.
 sisters (LX) *sà ñì* preferred form. ?STC 271
 *na·w 293.
 sisters (MC) *sà nà* STC 271 *na·w 293.
 sit (LX) *fià zú à-zù* = "please sit" 2621.
 sit (MC) *dzó* 2621.
 six (LX) *tsú* STC 411 *d-ruk 1179.
 six (MC) *tşóu qò* STC 411 *d-ruk 1179.
 sixteen (LX) *fiá tsú* 1189.
 sixteen (MC) *fià tşhòu* aspirated (!) 1189.
 sixth (LX) *tsú š xeì* 1224.
 sixty (LX) *tsú sá* 1201.
 sixty (MC) *tşóu sà* 1201.
 sixty-one (LX) *tsú sá à* 1202.
 sixty-one (MC) *tşóu sà ñà à qó* 1202.
 size (LX) *tsá-bà* small-big 1619.
 size (MC) *bz à-bz í* big-small 1619.
 size (LX) *bà-tsá* big-small 1619.
 skill (LX) *cì zì* 1016.
 skill (MC) *mè-kuá* person-help 1016.
 skill, technique (LX) *tshà tshà* 1020.
 skill, technique (MC) *ì pá-bz ú* hand-
 high/small 1020.
 skilled, proficient (LX) *bú jà* 2342.
 skilled, proficient (MC) *nuè* cf. 'know' 2342.
 skillful (LX) *çò s í* b 1584.
 skillful (MC) *ì pá bz ú* hand-high/small 1584.
 skin (human) (LX) *jà piá* 150.
 skin (human) (MC) *tshé pià* 150.
 skin (v.) (LX) *qhuá* STC 342 *r-kwak 1648.
 skin (v.) (LX) *jà qá* STC 342 *r-kwak 1648.
 skin (v.) (MC) *z á qà* STC 342 *r-kwak 1648.
 skin, hide (LX) *jà pià* 331.
 skin, hide (MC) *z à piá* 331.
 skirt (MC) *tcýn tsì* b 640.
 sky (LX) *mù tó* STC 488 *r-muw 1.
 sky (MC) *mú pià* STC 488 *r-muw 1.
 slander (LX) *phià* 1996.
 slander (LX) *qà tsò* 1996.
 slander (MC) *mè phí* 1996.
 slander (MC) *mè yáN uàn* b? 1996.
 slanting, tilted (LX) *qhuá* tones? 1450.
 slanting, tilted (MC) *qè tshué* 1450.
 slaughter (LX) *tsò tsó* 2254.
 slaughter (MC) *tsì tcá* tone change with DO
 2254.
 slave (LX) *ká pù* 232.
 slave (LX) *ké pù* 232.
 slave (MC) *mè kuà mú* 232.
 sleep (v) (LX) *(fià) mà zè* also takes à-
 ?STC 197 *myel 2359.
 sleep (v) (MC) *ú zè* CMD-sleep 2359.
 sleepy (LX) *fià kò* 2125.
 sleepy (LX) *zù zuá* redup! 2125.
 sleepy (MC) *qè tuá* re-check 2125.
 sleeve (LX) *phà lì* 628.
 sleeve (MC) *phè ì* 628.

- slice (meat) (LX) *qhó* 1920.
 slice (meat) (LX) *cá* 1920.
 slice (meat) (LX) *tshó* 1920.
 slice (meat) (MC) *liá* ?STC 351 *lep 1920.
 slippery (MC) *liú thà b* 1490.
 slippery (MC) (*zǐ*) *nà* 1490.
 slotted spoon (LX) *zǐ zà* 768.
 slotted spoon (MC) *loù phiaò b* 768.
 slow (LX) *à tchá tchá* 1465.
 slow (MC) *tó tuì* 1465.
 slow (MC) *phiè thá b*. ~ *phì* 1465.
 slow! (MC) *à khà tsí* some speakers 1465.
 slow! (MC) *à qhà tsí* 1465.
 slowly (LX) *à tchá tchá* 2627.
 slowly (MC) *à qà tsí* 2627.
 small (LX) *tcí* 1405.
 small (LX) *tsá* 1405.
 small (MC) *bzù bzí* 1405.
 small clump of trees (CL) (LX) *lòN* 1250.
 small rooms (CL) (LX) *sá* 1304.
 smallpox (LX) *jà zò* 157.
 smallpox (MC) *deì mià* 157.
 smash to bits (LX) *dzí* 1807.
 smash to bits (MC) *tè bé bè (zì)* 1807.
 smash to fine bits (LX) *dzà* 1807.
 smear, rub (LX) *phà sè* 1689.
 smear, rub (MC) *phù sà* 1689.
 smell, sniff (LX) *uèn dá b,s* 2450.
 smell, sniff (LX) *cí dà b* 2450.
 smell, sniff (MC) *mí* 2450.
 smelling of urine (LX) *tshù* 1534.
 smelt (LX) *bá* 2143.
 smelt (LX) *dzù* 2143.
 smelt (MC) *cì-guì* iron-m VH? 2143.
 smoke (LX) *mù khú* STC 256 *kuw 21.
 smoke (MC) *dá* 21.
 smoke (a cigarette) (LX) *tchí* "drink" 1729.
 smoke (a cigarette) (LX) *qú (tà)* pucker/suck 1729.
 smoke (a cigarette) (MC) *thyé* 1729.
 smoke meat (LX) *khú khú* STC 256 *kuw 2505.
 smoke meat (LX) *tchú dà b?* 2505.
 smoke meat (MC) *qhòu* preferred form? STC 256 *kuw? 2505.
 smoke meat (MC) *tchó thà b?* 2505.
 smooth, slippery (LX) *χà* 1487.
 smooth, slippery (MC) *yé* 1487.
 snail (LX) *bù-lià* bug-bark(?) 464.
 snail (MC) *á pù khè nì nì* 464.
 snake (LX) *bù tshì* STC 27? ?STC 447*b-ru·l 428.
 snake (MC) *bzě* STC 447 *b-ru·l 428.
 snare (n) (LX) *sà n,ì* 'thread' 907.
 snare (n) (MC) *sè lì* 'thread' 907.
 sneeze (LX) *á tshù-pù* sneeze (onomat!)-do 1782.
 sneeze (MC) *á thiaò-pù m-do* 1782.
 snore (LX) *mà zè-qhuá* sleep-snore 1787.
 snore (MC) *mê-zê-qhuá-pù* sleep-sleep-snore-do 1787.
 snot (LX) *tí* STC 101 *s-na 193.3.
 snot (MC) *nè* STC 101 *s-na 193.3.
 snow (LX) *peì* 14.
 snow (MC) *mù pà* 14.
 snow (v) (LX) *dà zì* (can be used for hail, too) 2471.
 snow (v) (MC) *sè tcò* 2471.
 snow pig (LX) *pè pià* 394.
 soak into (LX) *tì* 2257.
 soak into (LX) *pà* 2257.
 soak into (MC) *tè* 2257.
 soak into (MC) *thou, fià thòu thà b* 2257.
 soak, immerse (LX) *tà* 2076.
 soak, immerse (MC) *fià tẽ ~ fiã té tè* 2076.
 soap (LX) *ì tsì* 731.
 soap (MC) *iãN tcè b* ("foreign alkali") 731.
 sock (LX) *kuà tsì b* 651.
 sock (MC) *uá tsì b* 651.
 soft (LX) *mà mà* 1485.
 soft (MC) *zà là* 1485.
 soft (MC) *zòη χò b* 1485.
 soldier (LX) *guà-(χá)* soldier-green 223.
 soldier (MC) *dzyè* 223.
 sole of foot (LX) *gò cì* 129.2.
 sole of foot (LX) *guà cì* 129.2.
 sole of foot (MC) *gòu pà* STC 418 *pwa 129.2.
 solid, durable (LX) *gù* 1495.
 solid, durable (MC) *sé* 1495.
 solidify (LX) *tò* 2191.
 solidify (MC) *dè tshù* also *tshũ* 2191.
 solidify (MC) *tè kè* 2191.
 solidify (MC) *dè nǐη tò s2=b?* 2191.
 some, a few (LX) *nà dzé* people 1354.
 some, a few (LX) *nà fió* 1354.
 some, a few (MC) *nà qó* 1354.
 some, a few (MC) *à tcí qò* 1354.
 some, a few (long things) (LX) *nà š* 1354.
 son (LX) *tcì* STC 59 *za 277.
 son (MC) *tsì* 277.
 son-in-law (LX) *tcì mià* STC 324 *ma·k 280.
 son-in-law (MC) *tsì mià* 280.
 song (LX) *zà mú* cf. "speech" 939.
 song (LX) *là sà* 939.
 song (CL) (LX) *sá* 1267.

- song (CL) (MC) *tuǎn b.* 1267.
 song (CL) (MC) *qú* 1267.
 song (CL) (MC) *sà* 1267.
 sore (to get a) (MC) *mù-sè xué* 154.
 sore, wound (n.) (LX) *qò lò* 154.
 sore, wound, scar (n.) (LX) *qò mì* ?STC 446
 *r-ma-t 154.
 sound, report (CL) (LX) *qú* 1348.
 sound, report (CL) (MC) *qú* 1348.
 soup (LX) *thó b* 606.
 soup (MC) *z é* 606.
 sour (LX) *tsuà* ?STC *su-r, ?STC 413
 *kri(y) 1525.
 sour (MC) *tsuí* ?STC *su-r, ?STC 413
 *kri(y) 1525.
 sow (LX) *pià mià* 356.
 sow (n) (MC) *pià miá* 356.
 sow broadcast (LX) *phà* 2288.
 sow broadcast (LX) *sé* 2288.
 sow broadcast (MC) *zuí suí* 2288.
 spacious (LX) *qhuè tà* 1420.
 spacious (MC) *khuán tshò b* 1420.
 spark (LX) *mú dzí* cf. charcoal 488.
 spark (MC) *mú tí* 488.
 sparrow (LX) *ì tshá* =404. ?STC 403 *s-rik
 ~ *s-ryak. m1 ?=STC *wa 415.
 sparrow (MC) *ì tshé* "bird". ?STC 403 *s-
 rik ~ *s-ryak 415.
 sparrow hawk (MC) *á tshì là* STC 333 *lan
 407.
 speak (LX) *qà tci* 2361.
 speak (LX) *dè dá* 2361.
 speak (MC) *diú* 2361.
 speak, roar, howl (LX) *qá jà* 2361.
 speak, tell (LX) *ǎ* 2361.
 spear (not thrown) (LX) *tchè iù* 897.
 spear (not thrown) (MC) *dè pike?* 897.
 spear (thrown) (LX) *miaò kàn tsì b?* 896.
 speech (LX) *zè mú* 188.
 speech (MC) *zuè mé* 198.
 spend (time) (LX) *qhuà* takes dà as pfx 1955.
 spend (time) (MC) *pà* 1955.
 spice, perfume (MC) *χòu kí* = flavor, smell
 595.
 spider (LX) *tshì tshì* 445.
 spider (MC) *tshà s̄* 445.
 spiderweb (MC) *tshà s̄ bú s3* = nest 445.
 spill out (LX) *tè tshà* 2526.
 spill out (LX) *tè suà* 2526.
 spill out (MC) *phù* ?STC 248 *pro 2526.
 spin (thread) (LX) *lì* 1888.
 spin (thread) (MC) *lì* 1888.
 spine (LX) *tsù bò-jà ká* m-bone 167.
 spine (MC) *lòn kò η* ~ N 167.
 spine (MC) *pei³⁵ tci kù b* 167.
 spirit (LX) *só* ?STC (m-)hla 975.
 spirit (LX) *tsí* 975.
 spirit (MC) *χùn-phê b-m* 975.
 spit (v) (LX) *tui* STC 168 *twiy, but also
 *m-thok, p58. 2421.
 spit (v) (MC) *tsù z é* or m2 = *ǎ*. ?STC 231
 *m=ts(y)il 2421.
 splash, sprinkle (LX) *qhò tò* 2227.
 splash, sprinkle (LX) *phà* 2285.
 splash, sprinkle (LX) *sé* 2285.
 splash, sprinkle (LX) *sé* 2227.
 splash, sprinkle (MC) *phù sè* 2227.
 splash, sprinkle (MC) (*tsuè*) *phê* 2227.
 splash, sprinkle (MC) *phù sè* 2285.
 splash, sprinkle (MC) *sè guí* cf. 'blow' 2285.
 spleen (LX) *ièn thí b* 182.
 spleen (LX) *phà jà* also HH tone. passive
 vocab 182.
 spleen (MC) *nàen thì b* 182.
 spleen (MC) *pá* 182.
 split (firewood) (LX) *qè tshí* 2223.
 split (firewood) (MC) *lù lià* 2223.
 split (firewood) (MC) *sè cà* 2223.
 split apart (LX) *qè tshí* 2228.
 split apart (MC) *pù cà* 2228.
 split apart (MC) *qhà là* 2228.
 split open, rend (LX) *dà (zè) zà* 2149.
 split open, rend (LX) *dà kè keí* 2149.
 split open, rend (LX) *dà qè qà* STC 469 *ka
 2149.
 split open, rend (LX) *dà kei* 2149.
 split open, rend (MC) *sè dz ì dz á* 2149.
 spoon for eating (LX) *thiào kǎ b* 770.
 spoon for eating (MC) *thiào kǎ b* 770.
 spoon, scoop (LX) *zà* 769.
 spoon, scoop (MC) *ci zà* 769.
 spot, stain (LX) *jà zò* 1026.
 spot, stain (LX) *zò* 1026.
 spot, stain (MC) *tsà pà* 1026.
 spread (news) (LX) (*dà*) *qá jà* also takes s̄.
 STC 469 *ka 1751.
 spread (news) (MC) *sè diú* 1751.
 spread fertilizer (LX) *phà* 2308.
 spread fertilizer (LX) *sú* 2308.
 spread fertilizer (LX) *kà* 2308.
 spread fertilizer (MC) *mú kè* 2308.
 spread out, unfold (LX) *sì phà* 2379.
 spread out, unfold (LX) *dà phà* 2379.
 spread out, unfold (MC) *zá dz ì* 2379.
 spread out/apart (LX) *dà kò* 2294.
 spread out/apart (MC) *sè z à* 2294.

- spread, circulate (LX) *dá* 2153.
 spread, circulate (LX) *dzuá (tà)* 2153.
 spread, circulate (LX) *tó* 2153.
 spread, circulate (MC) *fià-kiè-ńá-fià-dá*
 down-go-and-down-give 2153.
 spread, unfold (LX) *tshà* 2236.
 spread, unfold (MC) *tshà* 2236.
 spring of water (LX) *dò-tsù* m-water 56.
 spring of water (MC) *tsuè-qù* water-hole 56.
 spring of water (MC) *zà-tsué* rock-water 56.
 spring, summer (LX) *tcà qeí* warm-m 1166.
 spring, summer (MC) *tsè-qè* warm-m 1166.
 sprout (LX) *cà qà* 476.
 sprout (LX) *qà mà* 519.
 sprout (MC) *cà qè lè kí* 476.
 sprout (MC) *sí xuèi* 519.
 sprout (v) (LX) *sà qà-tà cì* sprout (var)-grow
 1868.
 sprout (v) (MC) *tcò qě* 1868.
 sprout (v) (MC) *xuei qě* 1868.
 square (n) (MC) *dzè dzè* 1431.
 square (of fabric) (LX) *zuè* 1284.
 square (of fabric) (LX) *thò* 1284.
 square (of fabric) (MC) *phiè* 1284.
 squat (LX) *qù* 1852.
 squat (MC) *khù tò* 1852.
 squirrel (LX) *zì kù tsù* 398.
 squirrel (LX) *zì kù mí* 398.
 squirrel (MC) *tshù lié* ?STC p171 *sre[ŋ]
 398.
 squirrel (MC) *má tiaó nì* b 398.
 stack up (LX) *thú thuá* 2163.
 stack up (MC) *thuá* 2163.
 stake (LX) *tcá zá* 874.
 stake (MC) *tsuàN tsuàN* b 874.
 stallion (LX) *bò dō* 337.
 stallion (MC) *zòu qóu* 337.
 stamen, pistil (LX) *pá tsù-tsí* flower-DIM
 473.
 stamen, pistil (MC) *tià tiá-tiè* m-heart 473.
 stamp, chop (LX) *tsáN* b 929.
 stamp, chop (MC) *dzà* 929.
 stand (LX) *tè ì* ?STC 246 *g-ryap 2568.
 stand (MC) *(tè) zì ì* ?STC 246 *g-ryap 2568.
 stand something up (LX) *kú* 1728.
 stand up (LX) *toù* 2242.
 stand up (LX) *(tù) tshú* 2349.
 stand up (LX) *tè ì* 2242.
 stand up (MC) *zò* 2349.
 stand up (MC) *tè ì* ?STC 246 *g-ryap 2242.
 stand up (CAUS) (MC) *tè ì zí* 2243.
 standard, accurate (hit) (LX) *kuà* 1441.
 standard, accurate (hit/measure) (MC) *tsuè*
 1441.
 star (LX) *zì bà* 5.
 star (MC) *dzè* 5.
 stark naked (LX) *kuán tòn tòn b?* 1608.
 stark naked (MC) *pú tchìn tchìn* 1608.
 start (LX) *à tsè* 1155.
 start (LX) *à tsè* 2096.
 start (LX) *à fiù* 2096.
 start (MC) *dé tsì* 2096.
 start (v) (MC) *dé tsì* 1155.
 steal (LX) *tà kù* STC 33 *r-kaw 2417.
 steal (MC) *kú pù ~ kù* 2417.
 steam (bread) (LX) *(sò) qó* 2587.
 steam (rice) (LX) *(fià) tcí* 2587.
 steam (v) (MC) *tcè* 2587.
 steel (for flint) (MC) *tsuè mià e/e* 748.
 steelyard (LX) *tchí* 795.
 steelyard (MC) *tché* 795.
 stele (MC) *peì* b 92.
 step (CL) (LX) *kuá* 1328.
 step (CL) (MC) *tcà* 1328.
 step on (LX) *fià kù kuá* takes tà- cf.
 "landslide" 2375.
 step on (MC) *tchya* 2375.
 step, cut across (LX) *(dà) kuá (tcà)* 2122.
 step, cut across (MC) *(dé) tcà* 2122.
 step-father (LX) *pì qú* 309.
 step-father (direct) (MC) *á ià* 309.1.
 step-father (direct) (MC) *á pù* 309.1.
 step-mother (LX) *mià gú* 308.
 step-mother (MC) *ńá ńà* 308.
 step-mother (MC) *ńá bzà* 308.
 step-mother (direct) (MC) *á ńà* 308.1.
 stick (CL) (LX) *è* 1242.
 stick (CL) (LX) *zuè* 1242.
 stick (CL) (LX) *zì b?* 1242.
 stick (CL) (MC) *dzí* b 1242.
 stick (knife) into (LX) *cá* 2561.
 stick (knife) into (MC) *tshuá* 2561.
 stick out (one's head) (LX) *sì tshí* 2316.
 stick out (one's head) (MC) *gè tcò* SIMP.
 2316.
 stick out (one's head) (MC) *gè tshí* CAUS
 2316.
 sticky (LX) *zà* 1486.
 sticky (MC) *pià dzà* 1486.
 sticky rice (LX) *pá* 513.
 sticky rice (MC) *tcòu mì* b 513.
 stiff (LX) *dà tó* 2034.
 stiff (MC) *gù guá* =frozen 2034.
 still, yet (LX) *tcá (ńó)* 2632.
 still, yet (MC) *tcí ńà* still have 2632.
 still, yet (MC) *mò dzá* 2632.

- sting (insect) (LX) zè 1828.
 sting (insect) (MC) tæ kǎ ~ kǎ 1828.
 sting (wasp) (LX) qhò 2582.
 sting (wasp) (MC) lǎ ?cf. arrow 2582.
 stingy (LX) qú tci also qù 1581.
 stingy (MC) diò-bzǎ m-big 1581.
 stingy (MC) caò tchì b 1581.
 stinking (LX) bē tsá 1523.
 stinking (MC) bù tsǎ 1523.
 stir up (LX) kuà tè also HH, LH 2002.
 stir up (LX) bú là 2002.
 stir up (MC) tè xuei là zǐ 2002.
 stir, mix (LX) kuà lí STC 90? *wa-y 2059.
 stir, mix (LX) bú là 2059.
 stir, mix (MC) xǒ thà b? 2059.
 stir, mix (MC) xò lié b 2059.
 stir-fry pot (LX) gè dzì 758.
 stir-fry pot (LX) tshà piá 758.
 stir-fry pot (MC) tshà 758.
 stir-fry, saute (LX) cì cá 1707.
 stir-fry, saute (LX) tshò 1707.
 stir-fry, saute (MC) dzì dzá 1707.
 stirrup (LX) kò tshú 829.
 stirrup (LX) gò tshú m1=foot 829.
 stirrup (LX) kò kú tcà hoof? 829.
 stirrup (MC) gòu tchuà bá 829.
 stomp feet (LX) tshù tshú 1857.
 stomp feet (LX) tshú 1857.
 stomp feet (LX) tshó dà b? 1857.
 stomp feet (LX) tchuá tá 1857.
 stomp feet (MC) só tà 1857.
 stone (LX) kò lú STC 88 *r-lun 47.
 stone (LX) kò piá 47.
 stone (small) (MC) lò STC 88 *r-lun 47.
 stone wall (LX) qhà tsù 704.
 stone wall (MC) lò zù 704.
 stone, boulder (MC) gò-bzǎ à stone-big 47.
 stone, boulder (MC) lò-bzǎ à stone-big 47.
 stonemason (LX) qhà tsù-cà-mù wall-V-agt 238.
 stonemason (MC) lò dzé mù 238.
 stonemason (MC) lò tshà mú 238.
 stool, bench (LX) bē dé b? 724.
 stool, bench (LX) bà dé b? 724.
 stool, bench (MC) pàn tǎn b 724.
 stool, bench (MC) dzò lè more of a pad 724.
 stool, bench (MC) pàn té s2<Q? 724.
 stop up (MC) tsǐ STC 422 *tsuw 1842.
 stop up (entry) (LX) qú cú 1842.
 stop up (leak) (LX) tsǐ tsǐ STC 422 *tsuw 1842.
 stop, cease (LX) à (bà) ì 2411.
 stop, cease (MC) ù diè 2411.
 stopper, cork (LX) tsoù tsoú b? STC 422 *tsuw? 915.
 stopper, cork (MC) tsòu tsóu b? STC 422 *tsuw? 915.
 storehouse, granary (LX) xó (kè) 695.
 storehouse, granary (MC) pè qè 695.
 storeys tall (CL) (LX) tsǐ 1302.
 storeys tall (CL) (LX) sà 1302.
 storeys tall (CL) (MC) tshǎn b 1302.
 story (LX) (dà) qe í zè mù 933.
 story, tale (MC) qaǐ sǐ sè sl is fused 933.
 story, tale (MC) qaì qá-kì-zuè mé before-NOM-speech 933.
 story, tale (MC) qé ì se ì sè kǐ dzǐ 933.
 stove (LX) tsò zò 755.
 stove (MC) tsǐ qò 755.
 straight (LX) tí ?STC 227 *dyam 1449.
 straight (MC) tí ?STC 227 *dyam 1449.
 straight, erect (LX) tshú 2412.
 straight, erect (LX) bú ?STC 352 *b/pleŋ 2412.
 straight, erect (MC) tè tì 2412.
 straight, smooth (LX) só 1445.
 straight, upright (LX) qù lá qè ?STC 352 *b/pleŋ 1439.
 straight, upright (MC) te ì te í 1439.
 straighten (LX) sǐ tí (zǐ) m3=CAUS 2198.
 straighten (MC) sè zǐ 2198.
 strange, odd (LX) sé 1548.
 strange, odd (LX) kuai³⁵ dà b 1548.
 strange, odd (MC) tchì kuai b 1548.
 strap, suspender (LX) bià dzǐ ia ~ ie (VH) 669.
 strap, suspender (MC) tà pò 669.
 straw rain cape (MC) só í b 680.
 strength (LX) zǐ ~ dzǐ 982.
 strength (LX) qú 982.
 strength (MC) dzǎ qà 982.
 stretch out (hand) (LX) tsǐ horizontally. ?STC 433 *sriŋ 2314.
 stretch out (hand) (LX) tshǐ vertically. ?STC 433 *sriŋ 2314.
 stretch out (hand) (MC) tshǐ ~ tshǐ diff in tense. ?STC 433 *sriŋ 2314.
 strike table (LX) sú tá 2209.
 strike table (LX) phé dà b 2209.
 strike table (MC) tuá 2209.
 string (of pearls) (LX) kù (lǐ) 1299.
 string (of pearls) (LX) tshuǎn b 1299.
 string (of pearls) (MC) tshuàn tshuán b 1299.
 string, thread (LX) sà nǐ 868.1.
 stroke, touch (MC) mù liá 2185.
 stroke, touch, feel (LX) mù-cà m-touch 2185.

- strum (LX) *thàn dà* b 2381.
 strum (MC) *tshà* 2381.
 stuck (by thorn) (LX) *tshuè* STC 276 *tsow 2562.
 stuck (by thorn) (LX) *tshá* STC 276 *tsow 2562.
 stuck (by thorn) (LX) *tshà* STC 276 *tsow 2562.
 stuck (by thorn) (MC) *tè tsí* ?STC 276 *tsow 2562.
 student (LX) *dzì sú mù*
 character+study+agentive mrkr(?) 226.
 student (MC) *dzì-só-mù* book-study-AGT 226.
 study, teach (LX) *só* 2504.
 study, teach (MC) *soú* 2504.
 stupid, foolish (LX) *kuè* 1569.
 stupid, foolish (MC) *kuà* 1570.
 stutterer (LX) *qù dzý* 266.
 stutterer (LX) *qà dzý* 266.
 stutterer (MC) *tcè tsì* b? 266.
 subject to discipline (LX) *quá tá* 1949.
 subject to discipline (LX) *quà* 1949.
 subject to discipline (MC) *qù thà* b? 1949.
 suck (milk) (LX) *kú* 2360.
 suck (milk) (LX) (*tà*) *tsú tsuà* ?STC p69 *dzo·p 2360.
 suck (milk) (LX) *tshí* 2360.
 suck (milk) (MC) *qou* ~ *qou* 2360.
 suffering (adj) (LX) *mà qe í* 1528.
 suffering, calamity (LX) *dzí tsá* 981.
 suffering, calamity (MC) *tsé ué* 981.
 sugar (LX) *mà-thá* yellow-b(sugar) 601.
 sugar (MC) *tshú-kì* sweet-NOM 601.
 sugar (MC) *mà-thà* yellow-b(sugar) 601.
 sugar (white) (MC) *pè sá thàn* b 602.
 sugar cane (MC) *kán tsài* b 506.
 suitable, appropriate (LX) *χò sì* b 1966.
 suitable, appropriate (MC) *χò s̄í* b 1966.
 sulfur (MC) *liou χuàn* b 70.
 sun (LX) *mù cí* 2.
 sun (MC) *mè sí mè* ~ *mè* 2.
 sun (MC) *mè nà* STC 81 *nøy 2.
 sun and rain (mixed) (LX) *sà phe* ì 12.
 sunbathe (LX) *lé* 2301.
 sunbathe (LX) *qhuà* 2301.
 sunbathe (LX) *zé* 2301.
 sunbathe (MC) *khuè* 2301.
 Sunday (LX) *βó là mù* 1164.
 Sunday (LX) *bà ì mù* 1164.
 sunken, concave (MC) *uó tàn tàn* b 1411.
 sunken, concave (MC) *uó thà* b 1411.
 sunken, concave (natural) (LX) *guè* 1411.
 sunken, concave (result of process) (LX) (*fià*) *gù* 1411.
 sunrise (LX) *cuá qàn bè* 1097.
 sunrise (LX) *mú pù sù* ?STC 332 *praŋ 1097.
 sunrise (MC) *qà qù-dē-dzà* cover-p-v 1097.
 sunrise (MC) *dē cyà sá* FUT/DIR-bright-PERF 1097.
 supper, dinner (LX) *jà tí* 578.
 supper, dinner (MC) *zà té* 578.
 support with hand (LX) *tò* 1900.
 support with hand (LX) *tà kù* 1900.
 support with hand (MC) *ù tsì* 1900.
 surname (LX) *mò kuà* STC 83? 1001.1.
 surname (MC) *mè* STC 83 1001.1.
 surplus (LX) *fià ì* 2322.
 surplus (MC) *dé dzǔ* verb? 2322.
 surrender (LX) *thou cèn* b 2419.
 surrender (MC) *thou càn* b 2419.
 surround (LX) *tchý* ?STC 313 *kroy 1645.
 surround (MC) *fià kué* 1645.
 surround (MC) *fià uì thà* 1645.
 surrounding wall (LX) *qhà tsù-kú lí kú lí ~ kù lì* 705.
 sustain business loss (LX) *fiá sí* 2218.
 sustain business loss (MC) *tæ-bà* p-v 2218.
 sustain business loss (MC) *ξè-pèn-ξè-pù* p-v-p-v 2218.
 swallow (n) (LX) *phá tcá tcá* ONOMAT 411.
 swallow (n) (MC) *iæn tsì* b 411.
 swallow (v) (LX) (*sì*) *qò tcù* 2416.
 swallow (v) (LX) *sè qò tcý* on pfx 2511.
 swallow (v) (LX) *qò tcý* 2511.
 swallow (v) (MC) *ξè zuì* 2416.
 swallow (v) (MC) *zuì* 2511.
 sweat (LX) *tsù* 190.
 sweat (MC) *tshù* 190.
 sweep (LX) *cuè té* 2296.
 sweep (MC) *sué mè* 2296.
 sweet (LX) *tshú* STC 166 *twi(y) 1526.
 sweet (MC) *tshú* STC 166 *twi(y) 1526.
 sweet potato (LX) *χòη saò* b 545.
 sweet potato (MC) *χòη sào* b 545.
 swell (LX) *phú tà phù* 2594.
 swell (MC) *phò* 2594.
 swell (bump on head) (MC) *tè phó* 1410.
 swelling (ankle) (LX) *phú phá* 2594 2574.
 swim (LX) *βó là* 2536.
 swim (LX) *fiú (tà)* 2536.
 swim (MC) *tsuè tcí tshj* 2536.
 swing (tail) (LX) *kuà jà* 2353.
 swing (tail) (LX) *lì lá* 2353.
 swing (tail) (MC) *tuà* 2353.
 swing, sway (MC) *iaò-thá* b-s 1637.

- swing, sway (MC) *dou dà* 1637.
 swing, sway (baby) (LX) *mò cà* 1637.
 swing, sway (tree) (LX) *lì lá* 1637.
 sword (MC) *dē xé* 900.
 table (LX) *bá* 722.
 table (MC) *tšue tsì b?* 722.
 tadpole (LX) *zò piá-tsù* frog-small 431.
 tadpole (MC) *laī kè paò b?* 431.
 tael, liang (LX) *zò* 1310.
 tael, liang (MC) *dzòu* 1310.
 tail (LX) *suà kà* 334.
 tail (MC) *suà kè* 334.
 tailor (LX) *phò-jà í-mù* clothing-m-mrkr 239.
 tailor (MC) *phù-z í-mú* clothes-sew-agt 239.
 take a beating (LX) *dzí* 1623.1.
 take a beating (LX) *tsá* 1623.1.
 take a name (LX) *tshò* 2261.
 take a name (MC) *thè* 2261.
 take aim (LX) *dà tí* 2181.
 take aim (LX) *pì dá b?* 2181.
 take aim (MC) *zé* 2181.
 take detour (LX) *gó* 2274.
 take detour (LX) *suè* 2274.
 take detour (MC) *z í kué* 2274.
 take notes (LX) *jà* 2018.
 take notes (LX) *tcì dà b* 2018.
 take notes (MC) *fià cà* 2018.
 take out (LX) *tchì tchá* has minimal tone pair 1737.
 take out (MC) *gé thè* tone var. 1737.
 take out (from above) (LX) *tcé* 1728.
 take out (from between) (LX) *té* 1728.
 take out (from between) (MC) *gè sí là* 1728.
 take stroll (LX) *suè lá* 2293.
 take stroll (MC) *dá tshj-kì* play-go 2293.
 take stroll (MC) *suè lù* 2293.
 take turns (LX) *á dzé dzè* 2158.
 take turns (MC) *à là dou s1=?1* 2158.
 take, fetch (LX) *tchì tchá* 2260.
 take, fetch (MC) *thè* 2260.
 take, fetch (MC) *gè thě* 2260.
 take, fetch (MC) (*gè*) *thé thè* 2260.
 take, grasp (LX) *tsé* takes à, zì 2192.
 take, grasp (MC) *zyá* 2192.
 tall, high (LX) *bó* STC 146 *m-raŋ 1408.
 tall, high (MC) *bzú* STC 146 *m-raŋ (cf. 'horse') 1408.
 tan (hide) (LX) *qhuá* 2490.
 tan (hide) (LX) *ná* 2490.
 tan (hide) (MC) *z uà* 2490.
 tangerine (MC) *kán tsì b?* 499.
 target (LX) *zuè* 904.
 target (MC) *bì* 904.
 tassel (LX) *qà tshuè* 670.
 tassel (MC) *qè toú tsò kì* 670.
 taste, flavor (LX) *sù* 1010.
 taste, flavor (MC) *tè mí* 1010.
 taste, try (LX) *sàN (dá) b,s* 1702.
 taste, try (MC) *şán thà b* 1702.
 tasty (LX) *zà-nà* eat-good 1553.
 tasty (LX) *íá* 'good' 1553.
 tasty (LX) *tiè-nà* eat-good 1553.
 tasty (LX) *sù qà* 1524.
 tasty (MC) *çou* 1524.
 tasty (MC) *zé* 1553.
 taxes (LX) *suei³⁵ b* 807.
 tea (LX) *tsù là qà* STC 486 *la 610.
 tea (MC) *cà qè* (leaves) 610.
 teach (LX) *só* 2040.
 teach, study (MC) *soú* 2040.
 teacher (LX) *qá bá s2=old* 227.
 teacher (MC) *cìN sì* 227.
 team (of cattle) (LX) *guà* 1329.
 team (of horses, men) (LX) *bó* 1297.
 team (of horses, men) (MC) *phè* 1297.
 team of oxen (MC) *gú* 1329.
 teapot (MC) *tshà fù b* 780.
 teapot(?) (LX) *tshà çù b. çù ~ fù* (once) 780.
 tear down (house) (LX) *zà zí* 1695.
 tear down (house) (MC) *dz í dz í* 1695.
 tears (LX) *mè lí qè* 194.
 tears (MC) *mù lé qè* ε ~ e 194.
 tell (LX) *qá jà* 1918.
 tell (LX) *hí* 1918.
 tell (MC) *diú* 1918.
 tell fortune (MC) *kuà duà* 1764.
 tell fortune (MC) *suàn míŋ-pù b-do* 1764.
 tell fortune, divine (LX) *suà* 1764.
 tell lie (LX) *ì zì (pù)* 2287.
 tell lie (MC) *zè zè pù* 2287.
 temple (LX) *tchí dzà* 90.
 temple (MC) *sé-tcì* god-room/home 90.
 ten (LX) *fià dzó* ?STC *gip 1183.
 ten (MC) *fià diú (qò)* ?STC *gip 1183.
 ten million (LX) *à tó-kuá* thousand-thousand 1217.
 ten million (MC) *à tshè uá* 1217.
 ten thousand (LX) *kuá b?* 1214.
 ten thousand (MC) *à uá* 1214.
 tender, delicate (LX) *tsí* 1509.
 tender, delicate (MC) *lè* 1509.
 tenth (LX) *fià dzó (ə) çè* 1228.
 tenth of month (LX) *fià dzó* 1121.
 tenth of month (LX) 2340.
fià dzó 1121.

- tenth of month (MC) *fià diú* 1121.
 test, examine (LX) *khaò dá b* 2107.
 test, examine (MC) *khò kǐ* 2107.
 testicles (LX) *bǎ* poss = *bà à* or *bà jà* 145.
 testicles (MC) *zui zui* PTB *dzøy. cf. 'pit, stone' 145.
 than (comparative mrkr) (LX) *sí* 2642.
 than (larger ~, etc.) (MC) (*lá*) *sò (bzà)* 2642.
 that (MC) *fià* 1384.
 that (less distant) (LX) *thà* 1384.
 that (more distant) (LX) *thá* 1384.1.
 that one (MC) *fià qó* 1385.
 that one (less distant) (LX) *thò* 1385.
 that one (more distant) (LX) *thó* 1385.1.
 that one, it, that person (MC) *fià í fià jí* 1385.
 that side, there (LX) *thà tchí qhuà* 1388.
 that side, there (LX) *thà piá qhuà* 1388.
 that side, there (MC) *fià zì* 1388.
 the, DEM (LX) *dì* 2645.
 their (MC) *fià nǎ kǐ* 1368.1.
 themselves (LX) *ió lià* 1375.
 themselves (dual) (LX) *ió nì* 1375.
 there (LX) *thà gá* 1387.
 there (MC) *fià í qà* 1387.
 there is (a matter) (LX) *hó* 2540.
 there is (a matter) (MC) *nǎ* 2540.
 there is (person) (LX) *ì* STC 264 *s-ri 2538.
 there is (person) (MC) *zì* STC 264 *s-ri 2538.
 there is (something on table) (LX) *sì* 2543.
 there is (something on table) (MC) *tǐ* 2543.
 there is (tree) (LX) *kuà* 2539.
 there is (tree) (MC) *nǎ* 2539.
 there is (tree) (MC) *uè* 2539.
 there is not (a matter) (LX) *mò fió*
 rhinoglottophilia, v. harmony 2540.
 there is not (a matter) (MC) *mì nǎ* 2540.
 there is not (person) (LX) *mì í* 2538.
 there is not (person) (MC) *mì zì* 2538.
 there is not (something on table) (LX) *mì sí*.
 .
 2543.
 there is not (something on table) (MC) *mì tǐ*
 2543.
 there is not (tree) (LX) *mì kuá* 2539.
 there is not (tree) (MC) *mì nǎ* 2539.
 there is not (tree) (MC) *mì ué* 2539.
 these (LX) *tcà xé* 1379.
 these (MC) *tcà nǎ* 1379.
 they two (LX) *tsǐ nǐ* 1367.
 they two (MC) *fià nǎ-nǎ-qó* they-two-CL
 1367.
 they, them (LX) *tsǐ lià* 1368.
 they, them, those people (MC) *fià nǎ* 1368.
 thick (of paper) (LX) *lià* 1422.
 thick (of paper) (MC) *lià (liù)* 1422.
 thick (of porridge) (LX) *tcì* 1480.
 thick (of porridge) (LX) *fiá* 'dry' 1480.
 thick (of porridge) (MC) *lià* 1480.
 thick, wide (LX) *pá* ?STC 172 *bwam (cf. round) 1406.
 thick, wide (MC) *tshù là* ?STC 356 *tu-k 1406.
 thick, wide (MC) *bzà* 1404.
 thickness (thick-thin) (LX) *pà-bé* thick-thin 1621.
 thickness (thick-thin) (LX) *bé-pà* thin-thick 1621.
 thief (LX) *mù kù mù* 250.
 thief (MC) *qù* 250.
 thigh (LX) *duà qà-pà* leg-thick 126.
 thigh (MC) *duà-bzà* leg-big (calque?). cf. STEDT *b(r)la 'thigh' 126.
 thin (of fabric) (LX) *qá* 1483.
 thin (of fabric) (LX) *tchá* 1483.
 thin (of fabric) (MC) *zà* 1483.
 thin (of humans) (LX) *xuá* 1474.
 thin (of humans) (MC) *xuá* 1474.
 thin (of paper) (LX) *bù* STC 138? *plen 'flat', etc. 1423.
 thin (of paper) (MC) *bù* STC 138? *plen 'flat', etc. 1423.
 thin (of person) (LX) *xuá* takes *sà* pfx 2346.
 thin (of person) (MC) *xuá* takes *ǎe* pfx 2346.
 thin, slender (LX) *bé* 1407.
 thin, slender (MC) *dì* 1407.
 thin, slender (MC) *bzǐ* 1407.
 thing, tool, gift (MC) *pà nà* 721.
 thing, tool, gift, property (LX) *pà nà* 721.
 think (LX) *bà ló* 2478.
 think (MC) *bè dzoú* affricate? 2478.
 think (about) (MC) *bè dzóu* 2137.
 think (of V-ing) (LX) *bà ló* 2480.
 think (of V-ing) (MC) *bè dzóu* sl has ϵ ? 2480.
 third (LX) *tshè á xè* 1221.
 third day of month (MC) *sèi tiú* 1120.
 third of month (LX) *tshé tcò* 1120.
 thirsty (LX) *á* 2112.
 thirsty (LX) *qà tà á* 2112.
 thirsty (LX) *tshù tà pià* 2112.
 thirsty (MC) *pià* 2112.
 thirteen (LX) *fià sé* 1186.
 thirteen (LX) *fià tshé* 1186.
 thirteen (MC) *fià sí* 1186.
 thirty (LX) *tshè sá* 1195.

- thirty (MC) *sí sà i ~ əi* 1195.
 thirty-one (LX) *tshè sá à* 1196.
 thirty-one (MC) *sí sà nà à qó* 1196.
 this (dem. noun) (LX) *tcà* 1377.
 this (demonstrative noun) (MC) *tcí* 1377.
 this one (LX) *tcò* 1378.
 this one (DEM + CL) (MC) *tcà qó* 1378.
 this person (MC) *tcà íí* 1378.
 this side, here (LX) *tcà piá qhuà* 1381.
 this side, here (LX) *tsò gá* 1381.
 this side, here (LX) *tsò* 1381.
 this side, here (MC) *tcà zì* 1381.
 thorn (LX) *tchí* ?STC 276 *tsow 494.
 thorn (MC) *tshí b?* 494.
 those (LX) *thà xe í* 1386.
 those (MC) *fià nà* 1386.
 thou, you (sg) (LX) *ù* 1362.
 thou, you (sg) (MC) *nò* 1362.
 thou, you (sg) (D.O.) (MC) *ù ò [wò]* 1362.2.
 thousand (LX) *tú* ? < WT ston. STC 32
 *ston 1212.
 thousand (MC) (*à*) *tshè b?* ?STC 32 *ston
 1212.
 thrash, whip (LX) *qà teì* 1730.
 thrash, whip (MC) *tuá* 1730.
 thread (LX) *sà n, í* 619.
 thread (MC) *sè lì* 619.
 thread (needle) (LX) *sí* 1742.
 thread (needle) (MC) *gè sí* 1742.
 three (LX) *tshè* STC 409 *g-sum 1176.
 three (MC) *sí qò* STC 409 *g-sum 1176.
 three days ago (LX) *zì zí cǝ* 1088.
 three days ago (MC) *dzè dzè sé* 1088.
 three days from now (LX) *dzì só cǝ* 1091.
 three days from now (MC) *dì sóu* 1091.
 three thousand fifty (LX) *tshé tò (nà) kuè sá*
 n.b. vowel in s2. VH 1213.
 three thousand fifty (MC) *sì tshé nà kuà sá*
 1213.
 thresh grain (LX) *sú tá* 1777.
 thresh grain (LX) *tuè tuè* 1777.
 thresh grain (LX) *zà tá* 1777.
 threshold (LX) *dzù khù* 712.
 threshold (MC) *diò tè* 712.
 throat (eating) (LX) *qù mù* 175.
 throat (eating) (MC) *χòη nòN-quà b-m*
 η=N? 175.
 throat (speech) (MC) *χòη nòN b* 176.
 throat, voice (LX) *tchì* 176.
 throw (at target) (LX) *cí* 2418.
 throw (at target) (LX) *kuà jà* 2418.
 throw (at target) (MC) *tuà* 2418.
 throw away (LX) *kuà jà* 2281.
 throw away (LX) *sì dzuá* 2281.
 throw away (MC) *guè* 2281.
 throw away (MC) (*gè*) *tuà* 2281.
 throw on (garment) (LX) (*zì*) *χéi* 2222.
 throw on (garment) (MC) *bià* 2222.
 thrush (LX) *tshà kuèN* 425.
 thrush (MC) *thò kò* 425.
 thumb (LX) *lià só-pà* finger-thick 136.
 thumb (LX) *pàN bá qè* m-big-front 136.
 thumb (LX) *lià só-mià* finger-mother 136.
 thumb (MC) *í nà qè-bzà-(kí)* finger-big-
 NOM 136.
 thunder (LX) *mú gú* 8.
 thunder (MC) *mù gó* 8.
 thunder (v) (LX) *mú gú (gú)* 1791.
 thunderbolt (LX) *gú* 9.
 thunderbolt (MC) *mù gó* 9.
 thunderbolt (MC) *mù dè gó* 9.
 thunderbolt (v) (LX) *mú gú qà tè* 1789.
 thunderbolt (v) (LX) *mú gú dà gú* 1789.
 thunderbolt (v) (MC) *mù dè gó* 1789.
 Tibetan (LX) *là fiú* 206.
 Tibetan (MC) *mà gá* 206.
 Tibetan barley (LX) *zí* 522.
 Tibetan barley (MC) *dzí* 522.
 tidy up (LX) *có tshe* 2337.
 tidy up (MC) *sù sué* 2337.
 tidy up (MC) *gà thiè* 2337.
 tie (belt) (LX) *dé* ?STC 421 *du-t ~ *tu-t
 2025.
 tie (belt) (LX) *cì cí* ?STC 484 *kik 2025.
 tie (belt) (LX) *dzì dzí* = belt 2025.
 tie (belt) (LX) *zù zuà* 2025.
 tie (belt) (MC) *dì* takes cognate obj. ?STC
 421 *du-t ~ *tu-t 2025.
 tie (knot) (LX) (*dà*) *phà jà* 2066.
 tie (knot) (MC) *zà gú* 2066.
 tie up (MC) *tsò dzá* 1643.
 tie up (MC) *dì* ?STC 421 *du-t ~ *tu-t 1643.
 tie up (cattle) (LX) *tsù* ?STC 421 *du-t ~
 *tu-t 2355.
 tie up (cattle) (MC) *tsò* ?STC 421 *du-t ~
 *tu-t 2355.
 tie up (foot, e.g.) (LX) *dé* ?STC 421 *du-t ~
 *tu-t 1643.
 tie up (person, thing) (LX) *zù zuá* 1643.
 tie up loosely, gather (LX) *kò* 1643.
 tie up strongly (LX) *bù lì* 1643.
 tiger (LX) *piá* 377.
 tiger (MC) *pì dá* s2 in wild animal names
 377.
 tight (LX) *cí* 1491.
 tight (LX) *tcí* 1491.

- tight (MC) *sé* 1491.
 tight (belt) (LX) *cì cí* 1491.
 tight, close (LX) *zà cì cí* 2073.
 tight, close (MC) *tè sé* 2073.
 tight, crowded (LX) *tcì tcí* 1491.
 tighten, close up (LX) *à tcìn dá b?* 2074.
 tighten, close up (LX) (*zì*) *cì cí* STC 370
 *ts(y)i·p 2074.
 tighten, close up (MC) *tcí* STC 370 *ts(y)i·p
 2074.
 tighten, close up (MC) *dè sé zì* 2074.
 tile (roof, e.g.) (LX) *kuà b?* 702.
 tile (roof, e.g.) (MC) *ià* 702.
 tile maker (MC) *ià pù tiá mù* 240.
 tile maker (MC) *ià guí mù* 240.
 time (LX) *bá* 1084.
 time (LX) *tuá* 1084.
 time (MC) *zì tsé* 1084.
 time (go one) (CL) (LX) *dù* also "(come one)
 time" 1345.
 time (hit one) (CL) (LX) *tshù* also "(kick
 one) time" 1349.
 time (hit one) (CL) (LX) *cí* 1349.
 time (hit one) (CL) (MC) *té pì* 1349.
 time (kick one) (CL) (MC) *tshù* 1350.
 tin (LX) *tsí* 65.
 tin (MC) *tcí* 65.
 tinder (LX) *pú* 747.
 tinder (MC) *χò tshaò b* 747.
 tinea, skin fungus (LX) *cuàN b* 158.
 tinea, skin fungus (MC) *cyàN b* 158.
 tingle (LX) *bò bò* 2368.
 tingle (MC) *tshù tshù ~ tshù tshú* 2368.
 tip (LX) *jà qè tcý* 1052.
 tip (MC) *tcìn tcìn b* 1052.
 tip (MC) *tìN pò* occurs in words for mtn top,
 roof, etc 1052.
 tip over (LX) *dzù* 1805.
 tired (LX) *dà qò* 2135.
 tired (LX) *dà bà* STC 29 *bal 2135.
 tired (MC) *bà* STC 29 *bal 2135.
 to (speak ~) (LX) *zí gá* POST 2641.
 to dry (grain) (MC) *ì khuǎ* 1657.
 tobacco (LX) *mú-qhú* smoke-m 568.
 tobacco (LX) *iá b* 568.
 tobacco (LX) *ià b?* 611.
 tobacco (MC) *mù qhué* calque 'smoke'. STC
 256 *kuw 568.
 tobacco (MC) *mù khué* calque 'smoke'. STC
 256 *kuw 611.
 tobacco pipe (LX) *iǎN-kán b-m* 568.1.
 tobacco pipe (LX) *ià pú-là* m-stick.up 568.1.
 today (LX) *pú cǐ* LX "day" terms either have
 the pattern HL (two syllables), or LHL
 (three syllables) 1085.
 today (MC) *pé-sè* ?= sky-bright 1085.
 tofu (LX) *dà ì* 597.
 tofu (MC) *de ì dzi* 597.
 together (LX) *à só* 2631.
 together (MC) *à ioú* 2631.
 toilet, cesspit (LX) *tshè kù* 690.
 toilet, cesspit (MC) *tchê-qù* feces-pit 690.
 tomb (LX) *mú pú* 95.
 tomb (MC) *mé pù* 95.
 tomorrow (LX) *tà bǎi cǐ* 1089.
 tomorrow (MC) *tè péi* 1089.
 tomorrow night (LX) *tà pei³⁵ dzi tsí* weird
 tone 1093.
 tomorrow night (MC) *tà péi giè tsí* 1093.
 tongue (LX) *zà qà* 172.
 tongue (MC) *zì qé* 172.
 tonight (LX) *pei³⁵ dzi tsí* weird tone (from
 syllable conflation?) 1092.
 tonight (MC) *pè giè tsí* 1092.
 tooth (LX) *sù* STC 437 *s-wa 170.
 tooth (MC) *dzè kè* 170.
 top (LX) *qà te ì* 1061.
 top (MC) *lià χà* 1061.
 top, above (MC) *qé tè* 1061.
 topple (v.i.) (LX) *dà dzù* 1802.
 topple (v.i.) (LX) *bù kuá* 1802.
 topple (v.i.) (MC) *sè dz uǎ* VH? 1802.
 topple (v.i.) (MC) *sè guǐ* 1802.
 torch (LX) *mú-gú* fire-m 750.
 torch (MC) *mè cà dzà* 750.
 tortoise (MC) *ú khuéi b* 427.
 touch (LX) *tshà tshá* in cmds 2185.
 touch (LX) *phà cá* 2185.
 touch (MC) *ì dzǎ* 2185.
 toward, counter-clockwise ego (pfx) (LX) *zì*
 - 1077.
 towel (LX) (*qà-χó là-*) *phà tsì* face-wash-
 towel (b.) 667.
 towel (MC) *phà tsì b* 667.
 tower (LX) *pà thà* m-b(tower) 96.
 tower (MC) *ló dz ì* stone(?)-m 96.
 trample, step on (LX) *tchuà (ŋí)* 1686.
 trample, step on (MC) (*fià*) *tchuà* 1686.
 transcribe (LX) *thàn dá* 1705.
 transcribe (LX) *jà* 1705.
 transcribe (MC) *cà* 1705.
 transfer possession (LX) *dà zí* 2603.
 transfer possession (MC) *dè zí* 2603.
 transport (LX) *sú-dà* b-s 2340.
 trap (n) (LX) *y kù* bird-basket 908.
 trap (n) (MC) *cý χó-z è pù* hunt-hole 908.

- trash, refuse (LX) *mà số* 752.
 trash, refuse (MC) *tṣà tṣà* 752.
 traveling expenses (LX) *ỳ phù* 801.
 traveling expenses (MC) *phàn tchè* 801.
 treasure (MC) *ng-ṇà-kà* silver-and-gold 657.
 treasured object (MC) *paó pe ì* b 657.
 treat, cure (LX) *pò jḗ* 2525.
 treat, cure (LX) *i³⁵ dà* b 2525.
 treat, cure (MC) *ĩ thà* b 2525.
 treat, cure (MC) *dz í sḥ* 2525.
 tree (LX) (*gì*) *phù* 465.
 tree (MC) *phò* 465.
 tree (CL) (LX) *zuè* 1251.
 tree (CL) (LX) *phù* tree 1248.
 tree (CL) (MC) *phò* 1248.
 tree (CL) (MC) *bòu* 1248.
 tree (CL) (MC) *phò* 1251.
 tree trunk (LX) *cì-tò* m-firewood 466.
 tree trunk (MC) *phò z í* 466.
 treetop (MC) *phò tìN pò* 468.
 tremble, shiver (LX) *tshà té* 1864.
 tremble, shiver (MC) *lè lè-pú* m-do 1864.
 tremble, shiver (MC) *lè sè sè* 1864.
 trip-hammer (MC) *tchì-ḡuà lá-kì-thiò* rice-wash-NOM-m 881.
 trip-hammer (MC) *thiò* ?STC 317 *tow 881.
 tripod (LX) *cè-mì* iron-m. VH? 786.
 tripod (MC) *mú bò sè* 786.
 trunk, box (LX) *cán tsì* b 726.
 trunk, box (MC) *sou* 726.
 try, test (LX) *kao³⁵ dà* b. 2328.
 try, test (MC) *kaõ thà* b 2328.
 tube for blowing on fire (LX) *mù phú liù* fire-light/blow-? 788.
 tube for blowing on fire (MC) *mú-phù-diò* fire-light/blow-door 788.
 tuber of elevated gastrodia (LX) *tién mà* b 573.
 tuber of elevated gastrodia (LX) *dzuá qà* 573.
 tuber of elevated gastrodia (MC) *thién mà* b 573.
 tug (LX) *kú tsé* 2080.
 tug (LX) *kú tsá* 2080.
 tug (MC) *sè sá* 2080.
 tumble down (LX) *fià qà tsá* 2350.
 tumble down (LX) *fià qà liú* 2350.
 tumble down (MC) *fià tshòu* 2350.
 tumble down (MC) *fià tuà* 2350.
 turban (LX) *dé* 643.
 turban, head scarf (MC) *còṇ tḡì* 643.
 turn (body) (LX) *suè* takes zì 2601.
 turn (body) (MC) *suè* 2601.
 turn around (self) (LX) *zì* 1821.
 turn around (self) (LX) *suè* 1821.
 turn around (self) (MC) *bó* 1821.
 turn around (self) (MC) *fià liá* 1921.
 turn around (self) (MC) *dè suè* tone var's 1821.
 turn around (self) (MC) *dè* 1821.
 turn corner (LX) *sḥ gó* 2602.
 turn corner (LX) *suè* 2602.
 turn corner (MC) *gou* 2602.
 turn head, repent (LX) *suà xá* 1991.
 turn head, repent (MC) *dàe bà* 1991.
 turn head, repent (MC) *dè suè* 1991.
 turn head, repent (MC) *dàe bó* 1991.
 turn inside out (LX) *dò gò* 1871.
 turn inside out (MC) *sè qè tòu* 1871.
 turn on water (LX) *tsù cì* 1880.
 turn on water (MC) *tsuè lè* 1880.
 turn water wheel (LX) *tsh í* 1708.
 turn water wheel (LX) *kú* 1708.
 turn, move (CAUS) (MC) *tè sèN gou* zì 2604.
 turn, move (CAUS.) (LX) *suè z í* best pfx. is dà 2604.
 turn, move (SIMP) (MC) *tè sèN gou* 2605.
 turn, move (SIMP.) (LX) *suè kò s2=?* 2605.
 turtledove (LX) *ỳ gù xó* 422.
 turtledove (MC) *guè guè* 422.
 tweezers (LX) *cà-tè* iron-pinch 817.
 tweezers (MC) (*tcón*)-*tcà tsì* m-b 817.
 twelve (LX) *fià nè* sometimes ná 1185.
 twelve (MC) *fià né* tone change from 'two' 1185.
 twenty (LX) *nè sá* 1193.
 twenty (MC) *nè sá* 1193.
 twenty-one (LX) *nè sá à* 1194.
 twenty-one (MC) *nè sè t í* 1194.
 twenty-one (MC) *nè sá nà à qó* 1194.
 twig fence (LX) *tsà pià* 719.
 twig fence (MC) *à tsà ~ á tsá* 719.
 twig fence (MC) *tsà kí* 719.
 twist rope (LX) *lì* tone notes 1759.
 twist rope (MC) *lì* 1759.
 two (LX) *nè* STC 4 *g-nis 1175.
 two (MC) *nè qó* STC 4 *g-nis 1175.
 two (liters) (LX) *nò bú* 1318.
 two (liters) (MC) *cé* 1318.
 two cupped hands-full (LX) *phòN* b. 1288.
 two cupped hands-full (LX) *bú* 1288.
 two cupped hands-full (MC) *phòṇ phòṇ* b 1288.
 two dollars (coins) (LX) *nè-tchàeN* two-b 1314.
 two dollars (coins) (MC) *nè dzé* 1314.

- two taels of liquor (LX) *cì nà zò* ??? 1313.
two taels of liquor (MC) *nà dzòu* 1313.
two years ago (LX) *dzí pù ~ zí pù* 1144.
two years ago (MC) *dzé pù* cf. two days ago 1144.
two years from now (LX) *dzà dzá tcj* 1146.
two years from now (MC) *χòu pú* 1146.
ugly (LX) *khú* 1513.
ugly (LX) *mí sè* 1560.
ugly (LX) *tsà qhú* 1560.
ugly (MC) *mì tá* 1513.
ugly (MC) *mì pá sè* 1560.
ugly (MC) *mí-pà s̄ m-b* 1513.
ugly (MC) *mì tá* 1560.
umbilical cord (LX) *pú ts̄ suà pù* 148.
umbilical cord (MC) *pè ts̄ ts̄ f̄* 148.
umbrella (LX) *tsò sà* 818.
umbrella (MC) *s̄N b* 818.
unclear (LX) *fià nì* 2001.
unclear (MC) *χuèi là s1=b?* 2001.
uncover, take off (lid) (LX) *qà ?STC 479* *klup 2061.
uncover, take off (lid) (MC) *sè dzí* 2061.
under (a building) (LX) *qà tò* 1068.
under (a building) (MC) *qà tà* 1068.
under (a building) (MC) *(lòu) qà tá* 1068.
under (a mountain) (LX) *qà tò* 1073.
under (a mountain) (MC) *sù qà tà* 1073.
under (the table) (LX) *qà tò* 1066.
under (the table) (MC) *qà tà* 1066.
underground (LX) *qà tò* 1070.
underground (LX) *qà tcí* 1070.
underground (MC) *zué pè-qà tà* field-under 1070.
understand, comprehend (LX) *tò tshà* 2137.
understand, comprehend (LX) *tshà tshà* 2137.
understand, comprehend (MC) *s̄ uà* 2137.
understand, know (LX) *s̄* STC 182 *syey 1832.
understand, know (LX) *tshà* 1832.
understand, know (MC) *s̄ uá cà* STC 182 *syey 1832.
understand, know (MC) *s̄ (z̄ á)* STC 182 *syey 1832.
understand, know (MC) *tè χuè cá* 1832.
undress (LX) *bò* takes *dà-* 2432.
undress (LX) *χú* takes *dà-* 2432.
undress (MC) *loú* 2432.
unit of weight equal to 5 kilos (LX) *tchí* STC 369 *ki·n 1315.
unit of weight equal to 5 kilos (MC) *tché* STC 369 *ki·n 1315.
unravel (clothes) (LX) *zà zí* 1694.
unravel (clothes) (MC) *dz̄ dz̄ í* 1694.
untied, undone (LX) *s̄ χú* 2295.
untied, undone (LX) *dà phá ià* 2295.
untied, undone (MC) *s̄ z̄ à gū* 2295.
upper half of body (LX) *kó qhuà* chest-part 1082.
upper half of body (MC) *cì peí qè tè* 1082.
upper millstone (LX) *kò kù* 882.
upper millstone (MC) *η̄N ts̄ b?* 882.
upside down, inverted (LX) *dó gó* 1446.
upside down, inverted (MC) *guì ~ guí* = left (hand) 1446.
upward (pfx) (LX) *tà* - 1080.
upward (pfx) (MC) *tè* - 1080.
urge, advise (LX) *qà cí* 2270.
urge, advise (MC) *mè souí* 2270.
urinary bladder (LX) *bí-sò qò* urine-pocket 186.
urinary bladder (LX) *η̄ phó* 186.
urinary bladder (MC) *biè tà pó* 186.
urinary bladder (MC) *biè phò dá* 186.
urinate (LX) *cà pò ?STC 77* *ts(y)i 2286.
urinate (LX) *(dā) bí* 2286.
urinate (MC) *bié biè* 2286.
urine (LX) *bí* 188.
urine (MC) *biě* 188.
use (n) (LX) *pò ì* 1031.
use (n) (LX) *pò s̄* 1031.
use (n) (MC) *iò s̄ η̄ á* 1031.
use, employ (LX) *mí-fāη pièn* m-b gloss?? or is s1=person 2332.
use, employ (LX) *kuá³⁵ tà* tone var's 2332.
use, employ (MC) *kuà ð ~ [kwāz]* 2332.
uterus (LX) *phì cì* 149.
uvula (LX) *zè qà tcý s̄* cf. tip. bud, appear(?) 173.
uvula (LX) *zè qà-tsá* tongue-small 173.
uvula (MC) *z̄ qé-tsú* tongue-small 173.
vapor (LX) *lè* 23.
vapor, steam (MC) *(tchì) lè* 23.
vary, change (v.i.) (LX) *miè uá* 1669.
vary, change (v.i.) (MC) *tè lǎ* STC 283 *lay 1669.
vat, jar (LX) *qhà* 781.
vat, jar (MC) *tsuè-tshóu* water-m 781.
vegetable (LX) *kù tsù* 530.
vegetable (MC) *tchòu tì* includes cabbage, celery, rapeseed, chives, etc 530.
vegetable (wild, sp.) (MC) *pià tì kú* Sichuanese /tser³¹ gen⁵⁵/ 530.
vegetable dish (LX) *kù tsù* 583.
vegetable dish (MC) *tchò tì* 583.
vegetable oil lamp (LX) *sò í-mú-gú*

- vegetable.oil-fire-m 739.
vegetable oil lamp (MC) *tǎŋ-tǝà* b-m 739.
vertical flute, Qiang flute (MC) *cǎo* b (Qiang flute not used in Mianchi) 952.
vertical, upright (LX) *tshú* 1448.
vertical, upright (MC) *zǒ* 1448.
very (heavy) (LX) (*zì*) *χuà* (how to gloss this?) 2628.
very (heavy) (MC) *qè qè* (*dzì*) 2628.
vest (LX) *khá ná tsì* b? 633.
vest (MC) *khàn tcín tsì* made of fabric. b? 633.
vest (MC) *phà dzà* 633.
village (LX) *tshuá-kù* village-place ?STC *tyal 79.
village (MC) *tshuá* ?STC *tyal 79.
village (MC) *tshuá-(bzà)* village-big. ?STC *tyal 79.
village (MC) *tshuà qó* village-this. ?STC *tyal 79.
vinegar (LX) *tshǔ* b 598.
vinegar (MC) *tshǔ* b 598.
violin (LX) *fū tchìn* b 953.
violin (MC) *fū tchìn tsì* b 953.
visit doctor (LX) *íá tsà* m1=sick 2104.
visit doctor (MC) *dzí sì (kì)* m3?= 'de' ptcl 2104.
voice (MC) *tchì* b? 197.
vomit (LX) *jà qú* 2202.
vomit (MC) *ì è* other forms 2202.
vow, pledge (v) (LX) *fà sǐ* b. tones vary 1863.
vulva (LX) *phí tsì* 146.
vulva (MC) *thà bá* 146.
wad, pile, pack (LX) *thuà* 1281.
wad, pile, pack (MC) *lò ló* 1281.
wad, pile, pack (MC) *tiè* 1281.
wad, pile, pack (MC) *dzòu* 1281.
waist (LX) *tà qà* 124.
waist (MC) *dì dǐ-sì* m-place 124.
wait (LX) *zò* 1809.
wait (MC) *zòu* 1809.
walk (LX) *kà* 2614.
walk (MC) *kè gú* cf. 'go', 'foot' 2614.
walk (MC) *kè cǐ* 2614.
walnut (LX) *bù dù jà qhú* s3=separated 508.
walnut (MC) *kò lò* 508.
want (LX) *cǎ* 2524.
want (LX) *tchá* 2524.
want (MC) *khí* 2524.
warm (LX) *lé* ?STC 381 *lum 1518.
warm (MC) *duè* 1518.
warm (water) (LX) *dǎ* 1517.
warm (water) (MC) *duè* 1517.
warm self by fire (LX) *khuà* 2108.
warm self by fire (LX) (*mù*) *lé* ?STC 381 *lum 2108.
warm self by fire (MC) *mú-khuè* fire-roast 2108.
wash (bowl) (LX) *χò là* ?STC 493 *(m-)syi/al. or, more likely, syll. breaking from NQ. 2459.
wash (bowl) (MC) (*bó*) *χuà là* ?STC 493 *(m-)syi/al 2459.
wash (clothes) (LX) *χò là* ?STC 493 *(m-)syi/al 2460.
wash (clothes) (MC) (*phù*) *χuà là* ?STC 493 *(m-)syi/al 2460.
wash (face) (LX) *χò là* ?STC 493 *(m-)syi/al 2462.
wash (face) (MC) *kuà là* 2462.
wasp (MC) *bià-bù* wild-bug 455.
waste (MC) *mì lá pù* 2555.
waste (MC) *cí tchǐ* 2555.
waste (grain) (LX) *phù sé* e.g., wasted by people(check exact meaning?) 2555.
waste (grain) (LX) *kuà lí* 2555.
waste (grain) (LX) *phù lá* e.g., eaten by animals 2555.
water (LX) *tsù* *twiy STC 168 52.
water (MC) *tsuè* *twiy STC 168 52.
water drop (LX) *tsù-cù qè* water-m 55.
water drop (MC) *tsuè-tè* water-m 55.
watery, dilute (LX) *zò* 1481.
watery, dilute (MC) *zǎ* 1481.
wave (n.) (LX) *tsù qè* 53.
wave (n.) (MC) *tsuè bù* 53.
wave hand (LX) *lì tchí* 1763.
wave hand (MC) *tcáo thà* b? 1763.
way, means (LX) *thiào tshàn* or HH. b? 990.
way, means (MC) *pǝú thè* 990.
we (MC) *á lè* 1361.
we (MC) *qá lè* 1361.
we (excl) (LX) *qà lià* 1361.
we (inclusive) (LX) *ú lià* w/v variation 1369.
we two (MC) *ŋà-lè-(nà-qó)* I-he-two-CL 1360.
we two (MC) *tcó lè* 1360.
we two (exclusive) (LX) *qà nǐ* 1360.
we two (inclusive) (LX) *ú nǐ* 1370.
wear (bracelet) (LX) *tsè* 1798.
wear (bracelet) (MC) *tsì* 1798.
wear (clothes) (LX) *gù* 1740.
wear (clothes) (MC) (*tè*) *gù* STC 160 *gwa ~ *kwa 1740.
wear (hat) (LX) *tà* 1797.

- wear (hat) (MC) *tà b?* 1797.
 wear (head cloth) (LX) *dé* 1796.
 wear (head cloth) (MC) *tà* 1796.
 wear (jewelry) (LX) *kué* 2235.
 wear (jewelry) (MC) *tà* 2235.
 wear (jewelry) (MC) *tsì* 2235.
 wear (shoes) (LX) *tsù* 1741.
 wear (shoes) (MC) *tè tsù* 1741.
 wear a hole into (LX) (*dà*) *bià* 1743.
 wear a hole into (MC) (*z è pù*) *gè tǎ* 1743.
 wear clothes (MC) *phù gù* STC 160 *gwa ~ *kwa 2222.
 weasel (?) (LX) *tchỳ lí qà* Sichuanese *diao ling zi*. cf. squirrel 398.
 weather (LX) *mú* 6.
 weather (MC) *mú pià* 6.
 weave (basket) (LX) *kà* 1668.
 weave (basket) (MC) *tyà* STC p21 *tak 1668.
 wedge (LX) *cý* 872.
 wedge (MC) (*sé*) *cò* 872.
 week (LX) *bà ì* 1157.
 week (MC) *bà-diè* rest(?) -m 1157.
 weigh (grain) (LX) *tchì tchí* STC 369 *ki·n 1710.
 weigh (grain) (MC) *tché* STC 369 *ki·n 1710.
 weld (LX) *hǎn dà* b 1962.
 weld (MC) *ǎn thà* b -n ~ -Ø 1962.
 weld (MC) *dzú* 1962.
 weld (MC) *deì* 1962.
 well (n.) (LX) *tsù-kù* water-pit 37.
 well (n.) (MC) *tsuè-kù* water-pit 37.
 Wenchuan (name of county and county seat) *qhó-tsà*.
 west (LX) *mù n, í-dà kù* sun-opposite-direction 1038.
 west (MC) *mè sí-fià-dà-sì* sun-down-go-place 1038.
 west (MC) *mè nà-fià-dá-sì* sun-down-go-place 1038.
 wet field (LX) *tsù-zù* water-field 45.
 what (LX) *nó ì* cf. '-self' words 1391.
 what (MC) *ní lè* 1391.
 wheat, barley, etc (LX) *kò* STC 150 *mruw 524.
 wheat, barley, etc (MC) *lè* ?STC 150 *mruw 524.
 wheel (MC) *kuiN kuiN* 824.
 wheel (MC) *kuiN kuǎ* new form (?) 824.
 where (LX) *nó gá-tshá* which-place 1393.
 where (MC) *à tá (lè)* 1393.
 which one (LX) *nó gá-ó* which-CL 1392.
 which one (MC) *gí lè* of people 1392.
 which one (MC) *ní lè* of things 1392.
 while (CL) (LX) *tuá* 1336.
 while (CL) (MC) *tá pà* 1336.
 while (CL) (MC) *tuá* 1336.
 whimper in pain (MC) *dzì sǐ sǐ* 1970.
 whip (LX) *kuà-bài* m-rope 837.
 whip (MC) *kuà tsì* 837.
 white (LX) *phé* 1453.
 white (MC) *psí* 1453.
 white cabbage (LX) *phà tseì* b 531.
 who (LX) *sí* 1390.
 who (MC) *gí lè* 1390.
 why (LX) *nè gá* 1398.
 why (MC) *nà kí lè nì* 1398.
 wick (LX) *mù lí qà* gloss? 740.
 wick (LX) *χò tshaò* 740.
 wick (MC) *mè cǎ-tié* m-heart 740.
 wick (MC) *tǎn tshaò* b 740.
 wide, broad (LX) *lá* 1418.
 wide, broad (MC) *lá* 1418.
 widow (LX) *kuà mè tsì* b 310.
 widow (MC) *kuà mù tsì* b in past could re-marry relative(?) 310.
 widower (LX) *kuà kòñ tsì* b 311.
 widower (MC) *kuà kón tsì* b in past could re-marry relative(?) 311.
 wife (LX) *tcè mì* ?STC 297 *mow 307.
 wife (MC) *tcé (tsì) mèi* ?STC 297 *mow 307.
 wild carnivore (LX) *pià-χó* tiger(?) -wild 375.
 wild carnivore (MC) *cý* 375.
 wild goose (LX) *ηα³⁵ kò* b? 412.
 wild goose (MC) *ηæ³⁵ uò* b? 412.
 wild herbivore (LX) *iò χó* 376.
 wild herbivore (MC) *cý* 376.
 wild pig (LX) *pià χó* 385.
 wild pig (MC) *pià χá* 385.
 wild radish (LX) *zuà mù* "mountain radish" 573.
 willing (LX) *kò ~ kó* 2552.
 willing (MC) *koù z à ~ koù z ǎ* 2552.
 willow tree (LX) *iǎN liú-phù* b-tree 482.
 willow tree (MC) *íá liú-phò* b-tree 482.
 willow tree (wild) (LX) *sá ǎ ǎ ~ rǎ* 482.
 win, beat (LX) *tà qò* 2528.
 win, beat (MC) *qà* 2528.
 win, triumph (LX) *tà qò* 2323.
 win, triumph (MC) *té qǎ* VH 2323.
 wind (LX) *mù kó* u / o in first syll 11.
 wind (MC) *mè mè* 11.
 wind (MC) *mé mè* 11.
 wind (thread), tangle (LX) *kò lì* 1699.
 wind (thread), tangle (MC) *dzà* 1699.
 window (LX) *tshán dzì* b 714.

- window (MC) *tshán tsì* pronunciation varies. b 714.
 wing (LX) *dzuà jà* 370.
 wing (MC) *zà kè* 370.
 winnow (LX) *kà kò* 2513.
 winnow (LX) *sú tá* 2513.
 winnow (MC) *zá tsí* grain + winnow (?).
 This is a verb phrase and not a single word,
 as evidenced by the tones 2513.
 winnowing fan (LX) *pù tci* b 887.
 winnowing fan (MC) *pò tci* b 887.
 winnowing fan (MC) *tòu tchà* big one 887.
 winter melon (MC) *tón kuá* b 548.
 wipe (table) (LX) *má dà* b? 1681.
 wipe (table) (LX) *tshá dà* b,s 1681.
 wipe (table) (MC) *tshà* b 1681.
 wipe (table) (MC) *sué mè* 1681.
 wipe (table) (MC) *mà tchè* 1681.
 wipe away, erase (LX) *tshà tshí* 1682.
 wipe away, erase (MC) *cé tshòu zí* 1682.
 witch (LX) *sì pí mià* 248.
 wither (LX) *fià chà* 2119.
 wither (MC) *à lià sǎ* 2119.
 wither and fall (LX) *sò* 1818.
 wither and fall (LX) *sè sì* 1818.
 wither and fall (LX) *phià* 1818.
 without (v.i.) (LX) *mǒ* 2176.
 without (v.i.) (MC) *mì nà* et al 2176.
 without benefit (LX) *mò fió* 2544.
 wok (LX) *tshà piá* 756.
 wok (MC) *tshà* 756.
 wolf (MC) *sèi ~ sè* 401.
 woman (LX) *tcá tù* 216.
 woman (MC) *tcè liú mù* 216.
 wood ear fungus (LX) *ǎ tsí* tone variations,
 incl. LL 567.
 wood ear fungus (MC) *à dà-nà ké*
 grandmother-ear 567.
 wood, timber (LX) *cì tò* STC 233 *sij 707.
 wood, timber, firewood (MC) *sè* STC 233
 *sij 707.
 wood-chopper (LX) *kuà teí* 879.
 wood-chopper (MC) *cì dé m l=iron* 879.
 wooden tray (LX) *bú-phàn tsì* [dzì] board-b
 783.
 wooden tray (LX) *bú-phàn phán* board-b.
 vowel in borrowed syllables is unstable 783.
 wooden tray (MC) *phàn phàn* b 783.
 wooden tray (MC) *sè phàn phàn -n~-N* 783.
 woodpecker (MC) *tchuà mù nòu* b nòu ~
 nàò 423.
 wool (LX) *tchà xù* also HL tone combo 350.
 wool (MC) *tshé-mù* goat-hair 350.
 wool cloth (LX) *nì tsì* b 624.
 wool cloth (MC) *nì tsì* b 624.
 work on a job (LX) *dzì pù* 1915.
 work on a job (LX) *dzì bó lí* 1915.
 work on a job (MC) *dzì pù kè* 1915.
 work on a job (MC) *dzì pù kì* 1915.
 work song (MC) *gàN kǎ* b 940.
 worry (LX) *cì ǎ* heart-dry 2576.
 worry (LX) *χó tá* 2576.
 worry (MC) *tè tcaò tchè (zǐ)* b 2576.
 worry (MC) *qé lè* best form 2576.
 worry, be anxious (LX) *cì-ǎ* heart-dry 1867.
 worry, be anxious (LX) *kù tchì* 1867.
 worry, be anxious (MC) *ì qè tshòu* 1867.
 worry, be anxious (MC) *tè tcaó thà* b 1867.
 worship (LX) *kuà cà* 1639.
 worship (MC) *zà pù m-do* 1639.
 wrap (medicine) (LX) *qú tá*?STC p110 *(r-
)tul 1644.
 wrap (medicine) (MC) *(yè) quà lió* 1644.
 wrap (medicine) (MC) *(yè) mà* 1644.
 wring (kerchief) (LX) *tcòu dá* b 2189.
 wring (kerchief) (MC) *dzù dzuá* cf. pinch
 2189.
 wrinkle (LX) *jà gù* 151.
 wrinkle (n) (MC) *tsì qò* 151.
 wrinkle (v) (MC) *tsì kò* 1438.
 wrinkly (LX) *tcì tú* adj? 1438.
 wrist (LX) *lì qù* 134.
 write (LX) *jà* STC 429 *riy 2494.
 write (MC) *cà* 2494.
 written character (LX) *dzì* b? 918.
 written character (MC) *dzì* b 918.
 wrong, mistaken (LX) *dà tsà* asp? 1757.
 wrong, mistaken (MC) *kè tshù* 1757.
 wrong, mistaken (MC) *té tshě* 1757.
 yak (female) (LX) *tchà tchà mí mià* 322.
 yak (male) (LX) *tchà tchà mí* 320.
 yak, *pianniu* (female) (MC) *mià bó* STC 136
 *brɔŋ 322.
 yak, *pianniu* (male) (MC) *bó (zì) ~ bò zí*
 STC 136 *brɔŋ 320.
 Yama, King of Hell (MC) *sí pù bzà* 965.
 Yama, King of Hell (MC) *nǎn uàn láo iè* b
 965.
 yamen, government (MC) *zé qà* 89.
 yawn (LX) *hà há pù* onomat 1785.
 yawn (MC) *chà pù* b?-do 1785.
 year (LX) *pù* 1141.
 year (MC) *(à) pù* 1141.
 year (calendar/age) (CL) (LX) *pù* 1341.
 year (calendar/age) (CL) (MC) *pù* 1341.
 year (of animal's age) (LX) *pù* 1292.

year (of animal's age) (MC) *pù* 1292.
 year, next (LX) *dzá tçj* 1145.
 year, next (MC) *diá tchj* 1145.
 year, this (LX) *tsé pù* 1142.
 year, this (MC) *tsé pù pu ~ pù* 1142.
 yellow (LX) *chá* 1455.
 yellow (MC) *chá* 1455.
 yellow weasel (LX) *tcà qó* 399.
 yellow weasel (MC) *çuàn suèi lã* b 399.
 yesterday (LX) *ní çj* ?STC 368 *niŋ 1086.
 yesterday (MC) *ná sç* ?STC 368 *niŋ 1086.
 Yi nationality (LX) *lò ló* 205.
 Yi nationality (MC) *mà sà* 205.
 yield, surrender (LX) *fià sì* 2481.
 yield, surrender (MC) *tè çó ε/æ?* 2481.
 yoke (LX) *tò lì* 839.
 yoke (MC) *nè tsù* 839.
 yonder, way over there (MC) *fiã lè* 1383.
 yonder, way over there (furthest) (LX) *thà gá*
 1383.
 you (pl) (LX) *ù lià* 1365.
 you (pl) (MC) *ú lè* 1365.
 you two (LX) *ù ñ, í* 1364.
 you two (MC) *ú lè nà qó* 1364.
 young (of person) (LX) *pù-sù tsá* year-age-
 young 1511.
 young (of person) (MC) *çù-tsà tsá* age-small
 1511.
 young man (LX) *biè phà* 217.
 young man (MC) *bè liù tsú* 217.
 young man (MC) *mã mà* 217.
 young woman (LX) *tcá* 218.
 young woman (MC) *tcè tsù tsú* 218.
 younger brother (LX) *tú-tsù* 3d pers. m-
 small. STC 309 *d/toy 285.
 younger brother (MC) *pí mù* said by elder
 sis 285.
 younger brother (MC) *tòu tsú* said by elder
 bro 285.
 younger brother (direct) (LX) *á còN* 285.1.
 younger siblings (LX) *sà ñ, ì* 295.
 younger siblings (MC) *mè tiè* ?STC 309
 *d/toy 295.
 younger sister (LX) *sá tsù* 3d person 286.
 younger sister (MC) *liù* said by bro/sis 286.
 younger sister (direct) (LX) *á mì* 286.1.
 your (pl) (MC) *ú lè kì* 1365.1.
 your (sg) (MC) *ù kì* 1362.1.
 yourself (LX) *ué ì /Ø/* -> [β] /_u cf. 1362
 1374.
 yourself (MC) *uí nà* 1374.
 yourselves (LX) *veí lià ~ ví lià* 1374.
 yuán (Chinese dollar) (LX) *piá* 1332.

yuán (Chinese dollar) (MC) *kó* 1332.
 zero (MC) *mì-ñà* NEG-have 1210.
 zhàng (3 1/3 meters) (LX) *zá b?* some tone
 var. 1322.
 zhàng (3 1/3 meters) (MC) *dzá b* 1322

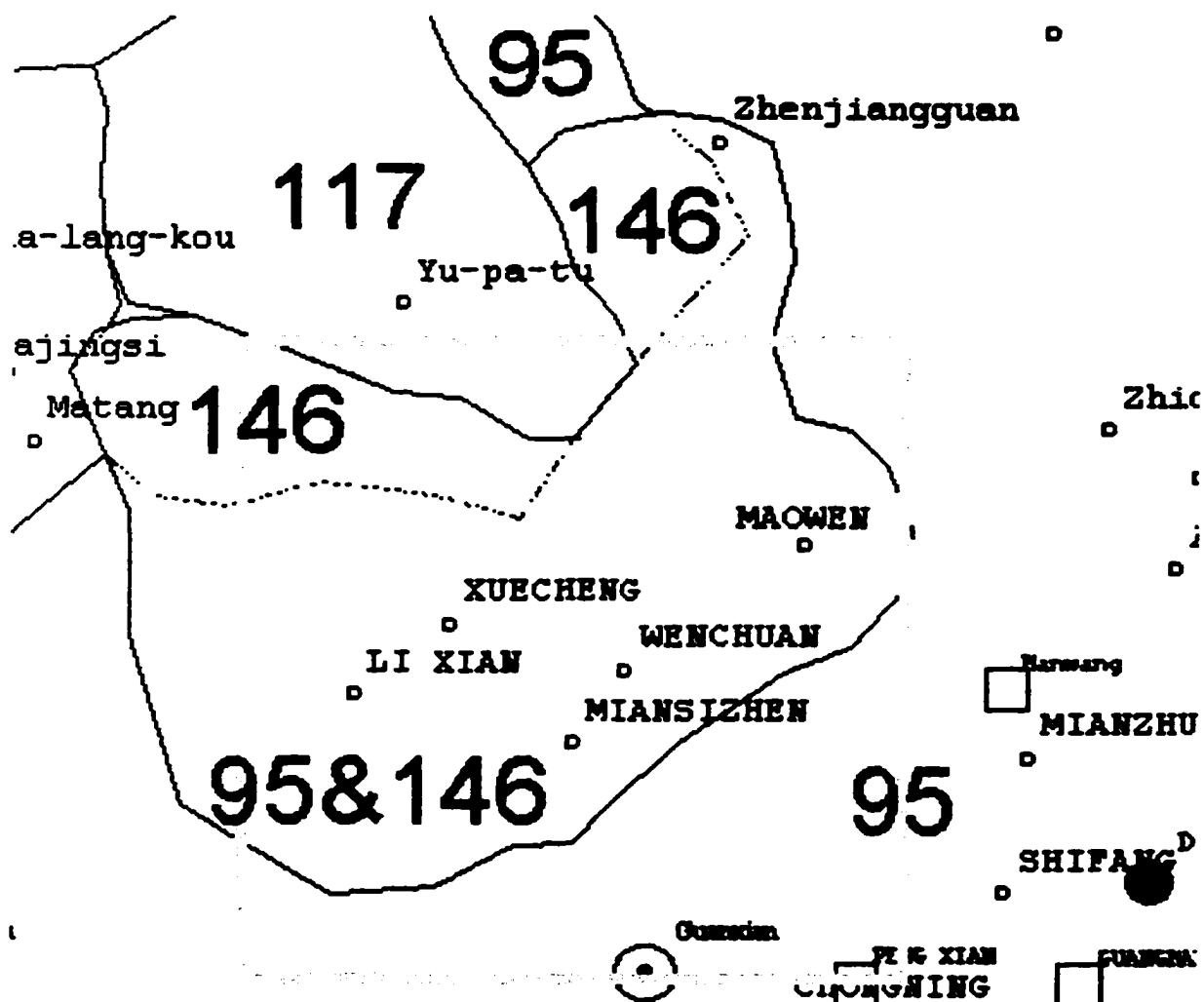
Appendix C: Maps and Charts

This appendix consists of the following maps and charts:

1. Map of the Qiang area (SIL).
2. Dialect names, locations and map from QYJZ:177-179.
3. Dialect names, population figures from LIU 1998b:16-18, corresponding to tables 1.2 - 1.4.



Below is a map of the Qiang-speaking area (cross-hatched and labeled "95 & 146"), provided by Barbara Grimes, editor of the *Ethnologue* (Summer Institute of Linguistics). Note that the area called "MAOWEN" is also called *Maoxian* or "Mao county." Chengdu is south of the area included in this map.



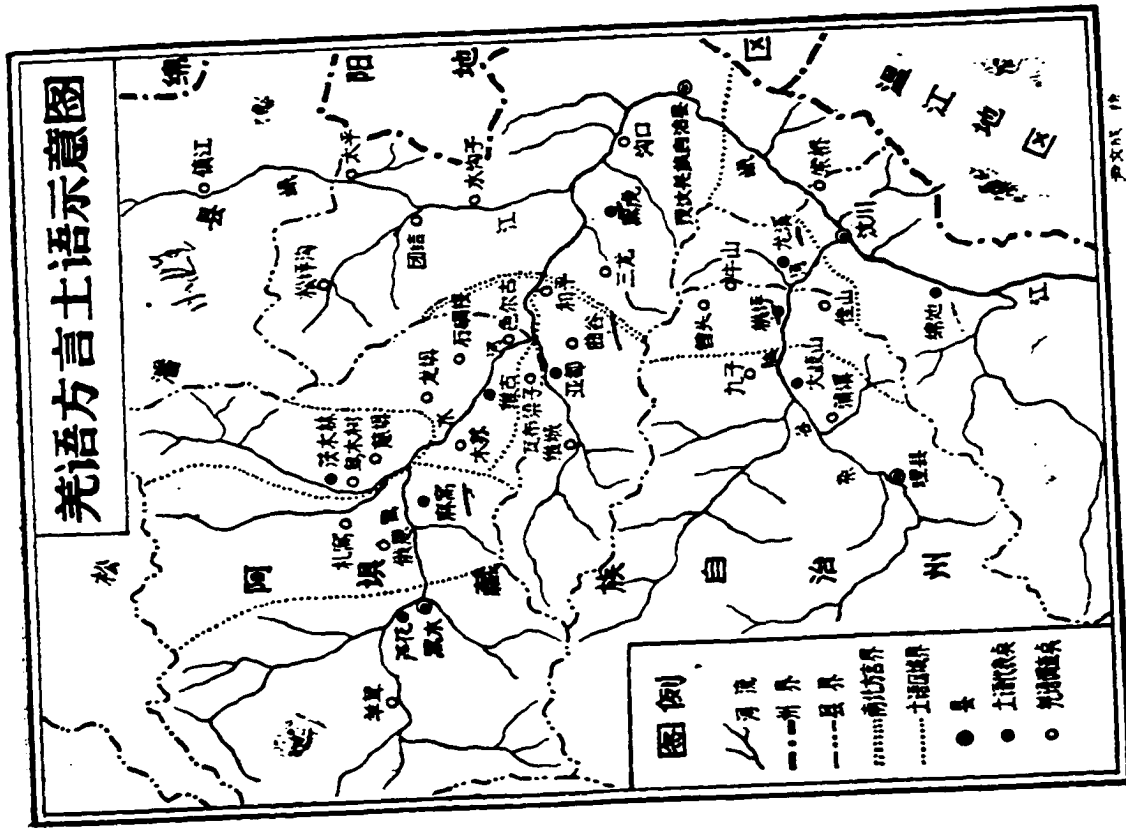
The following lists of dialect names and locations, and the dialect map are taken from QYJZ: 177-179.

方 言

羌语可以划分为南部和北部两个方言。南部方言主要分布在茂汶羌族自治县的大部分地区、汶川县的大部分地区、理县的南部地区，约有六万人。北部方言主要分布在自治县北部的赤不苏地区以及黑水县的大部分地区，约有七万人。南、北两个方言各分五个土语，其分布情况大致如下。

南部方言

1. 大歧山土语：主要分布在理县南部薛城一带的薛城、上孟、下孟、兴隆、甘堡、列列、九子、木卡、扑头、蒲溪等地，约有八千人。
2. 桃坪土语：主要分布在理县南部桃坪一带的桃坪、佳山、甘溪、三岔、曾头、牛山、西山、通化、古城等地，约有四千人。
3. 龙溪土语：主要分布在汶川县北部龙溪一带的龙溪、布兰、巴夺、下庄、木上等地，约有三千人。
4. 绵池土语：主要分布在汶川县威州区的克枯、布瓦、雁门、索桥、萝卜、七盘沟，绵池区的绵池、玉龙、白土坎、克约、草坡以及茂汶羌族自治县的南新、别立一带，约有一万四千人。
5. 黑虎土语：主要分布在茂汶羌族自治县中部和南部的凤仪、土门、沙坝、校场等区，包括白溪、三龙、回龙、繁荣、幸福、太平、渭门、沟口、黑虎等地以及红光、丰收等公社，共有三万多人。



北部方言

1. 芦花土语，主要分布在黑水芦花一带的三打古、沙石多、羊茸、泽盖、二古鲁、上阴山、上阳山等地，约有一万二千人。
2. 麻窝土语，主要分布在黑水县的麻窝一带，包括扎窝、俄恩、红岩、西尔、双溜索、下阴山、下阳山等地，约有一万五千人。
3. 茨木林土语^①，主要分布在小黑水区的茨木林一带，包括二木林、热窝、乌木树、青朝沟等地，约有一万九千人。
4. 维古土语，主要分布在黑水县南部维古区的维古一带，包括木苏、上龙坝、下龙坝、石喇楼、色耳古等地，约有一万五千人。
5. 亚都土语，主要分布在黑水县的南部瓦不梁子一带以及茂汶羌族自治县北部的赤不苏一带，包括曲谷、和平、围城等地，约有一万多人。

附羌语方言土语分布示意图（见第179页）

此外，在本州松潘县镇江关一带，尚有少数羌族居住，他们的话属羌语南部方言。这一地区的羌语和茂汶羌族自治县较场区的水沟子、松平沟、团结、太平等地的羌语也许可划为一个土语。因尚未作详细调查，暂不作定论。

羌语南、北两个方言的差别比较大，在语音、词汇、语法等方面都各有自己的特点，这是划分羌语方言土语的主要根据。下面分别进行介绍。

一、语音方面

南、北两个方言的语音特点，在语音部分的音系举例中，已经作了较详细的介绍，桃坪话音系基本上可以代表南部方言的主

The following table corresponds to Table 1.2 in this dissertation (Liu 1998b:16).

县	民族	人口(1990)	操羌语者	占本县羌族或藏族比例
茂县	羌	89000	72000	80.9%
理县	羌	16000	9700	60.6%
汶川	羌	29000	18000	62.1%
松潘	羌	2300	1700	73.9%
北川	羌	48000	100	0.02%
丹巴	羌	1200	0	0
黑水	藏	58000	49600	85.5%

The following table corresponds to Tables 1.3 and 1.4, although the dialects are arranged in a different order, with SQ dialects coming first (Liu 1998b: 17-18).

方言	土语	分布地区	使用人口
南部方言	大岐山	理县的薛城、上孟、下孟、兴龙、甘堡、列列、九子、木卡、朴头、蒲溪等	7400
南部方言	桃坪	理县的桃坪、佳山、甘溪、三叉、曾头、牛山、西商、通化、古城等	4900
南部方言	龙溪	汶川县的龙溪、布兰、巴夺、下庄、木上等	3300
南部方言	绵池	汶川县除了龙溪土语以外的其他地区	15700
南部方言	黑虎	茂县的黑虎、苏加坪、飞虹、沟口、渭门、椒园坪等	16000
南部方言	三龙	茂县的风仪、三龙、沙坝、回龙、白溪、洼底、雅珠寨等	15000
南部方言	较场	茂县的较场、石大关、太平、松坪沟等地和松潘县镇江关的西侧地区以及北川县的个别地区	19000
北部方言	雅都	茂县的赤不苏、雅都、曲谷、维城以及黑水县的瓦钵梁子、色尔古等	23000

北部方言	维古	黑水县的维古、木苏、龙坝、洛多、石碉楼等	11000
北部方言	麻窝	黑水县麻窝、扎窝、双溜索、西尔、红岩、俄恩等	12000
北部方言	茨木林	黑水县的茨木林、格窝、乌木树、热窝、晴朗沟等	9800
北部方言	芦花	黑水县的芦花、沙石多、羊群、泽盖、二古鲁、卓格都等	14000

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