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*Lawu is a severely endangered, undocumented Ngwi (Loloish) language spoken in Yunnan, China. This paper presents a preliminary sketch of Lawu phonology based on lexico-phonetic data recorded from two speakers in 2008, with special attention to the tone splits and mergers that distinguish Lawu from other Ngwi languages. All tone categories except Proto-Ngwi Tone *3, a mid level pitch, have split, conditioned by the voicing of the initial segment. In the conditioning and effect of these tone splits, Lawu shows affinity with other Central Ngwi languages such as Lisu and Lahu and is provisionally classified as a Central Ngwi language.*

1. Introduction

This report presents a preliminary phonological sketch of Lawu, an undocumented Ngwi (Loloish) language spoken in Shuitang District, Xiping County, Yuxi Municipality, and Jiuja District, Zhenyuan County, Pu'er Municipality, in Yunnan, China. Comparative phonological data is used to hypothesize Lawu's placement in the Central Ngwi (CN) cluster within the Ngwi sub-branch of Tibeto-Burman. Like other Central Ngwi languages, such as Lolo, Lahu and Lisu, Lawu shows splits in Proto-Ngwi Tones *1, *2, and *L, conditioned by voicing or glottal prefixation of the initial. However, Lawu has diachronically diverged from other CN languages, through the devoicing of Proto-Ngwi voiced stops and affricates, the merger of Proto-Ngwi palatoalveolar affricates and fricatives to alveolar, and the merger of Proto-Ngwi consonant clusters with plain stops, all of which result in a comparatively reduced inventory of initials. Lawu also shows later micro-splits in Tones *2 and *L, conditioned by voicing of the initial and vowel height. There is no linguistic documentation of Lawu, only passing mention of a distinct group in Chinese demographic sources (XPXZ 1993) and Pelkey's (1999) compilation of information on the Yi ethnicity. Although now ethnically categorized as Lahu, Lawu does not belong to the Lahoid language cluster (which includes Black Lahu, Yellow Lahu and Kucong). A distinct ISO 639-3 code for Lawu was applied for in July 2011. Hopefully this preliminary information will open the door for further investigation of this endangered language.

The Lawu data presented here was recorded in Jiuha Village, Shuitang District, Xiping County, Yuxi Municipality. Two native speakers recorded a list of 1,001 lexical items in 2008. These items were compared with Proto-Ngwi and lexical data from other Ngwi languages such as Hani (Southern Ngwi), Lisu (Central Ngwi), Lahu (Central Ngwi) (Sun 1991, Huang & Dai 1992), and Nisu (Southeastern Ngwi, data from author's fieldnotes). Based on shared tonal innovations, I propose that Lawu is a member of the Central Ngwi subgroup, although further documentation and comparative analysis is needed to confirm this hypothesis.

2. Background

Lawu speaker population is difficult to estimate with accuracy. Lawu are now officially classified as members of the Lahu nationality, but were previously classified as Yi (XPDZ 1986; XPXZ 1993). A government official in Jiuha Village reported approximately 300 "Lahu" in the village.

Only the grandparental generation still speaks Lawu in Jiuha, so the Lawu speaker population there is probably 50 or less. There may be additional Lawu speakers in neighboring Zhenyuan County. According to the *Gazetteer of Zhenyuan County* (ZYXZ 1995: 74), there were 6,455 Lawu in Zhedong and Jiujia districts in 1995. However, a more recent demographic website (YSX 2008) identifies the Lahu in Zhedong as speakers of Kucong, a different language. Jiuha villagers reported the presence of Lawu speakers in Jiujia District, but not Zhedong. The Lahu population in Jiujia District, reported online as 3,288 (BDBK 2011) may contain both Kucong and Lawu speakers. Further fieldwork is needed for a more precise estimate of how many ethnic Lawu still speak the language.

Lawu is severely endangered, according to UNESCO's (2003, 2009) criteria for assessing language vitality and endangerment. Village leaders and wordlist participants in Jiuha Village were interviewed about the ethnolinguistic vitality of Lawu. Interview questions dealt with vitality indicators such as domains of language use, proficiency of children in Lawu, language attitudes, and contact with other languages. Only grandparents and older generations still speak the language; two generations ago, parents began speaking Chinese to their children in the hopes of giving them an advantage in school. Members of the current parental generation have some passive understanding of Lawu, but do not speak it to their children. Lawu is rarely spoken in the home domain, being only spoken between elderly spouses or friends. As most speakers are elderly and have trouble with mobility, they have few opportunities to leave their household to speak Lawu with their peers. Lawu speakers' attitudes towards their own language is *laissez-faire*; they do not mind if their grandchildren do not learn to speak Lawu.

There is no orthography for Lawu, and thus no educational materials in Lawu and no use of Lawu in any new print domains such as the Internet. There is no governmental or institutional support for Lawu; though the Chinese constitution gives minorities the right to develop their language, there is no monetary or administrative support for the Lawu to do so. Government encourages assimilation to the dominant language through the use of Mandarin Chinese only in the school. Chinese is used in all public domains, including village meetings. Besides this sketch, there is no documentation of Lawu whatsoever. Hopefully, more extensive documentation can begin before Lawu becomes extinct.

3. Methodology

Fieldwork was conducted in March 2008 as part of a research project on geographical variation in lesser-known Central Ngwi languages of western Yunnan, including Lalo, Lolo, Limi, and Lawu. Further details regarding this project are given in Yang 2010a. In Jiuha Village, one male and one female native speaker, both elderly, were asked to give Lawu equivalents to the Chinese prompts of a 1,001 item wordlist adapted from Pelkey 2008. The male speaker was recorded uttering lexical items in citation form, and the female speaker was recorded giving the lexical item in utterance medial form. The utterance medial form was embedded in one of several carrier phrases chosen for semantic plausibility and designed so that the elicited item was usually preceded by a syllable with mid level pitch, from Pelkey 2008. Both citation and utterance medial forms were repeated three times. An Edirol R-09 digital recorder was used to record in uncompressed .wav format.

Contrastive tone categories were determined during elicitation by asking speakers if lexical items that differed only in pitch and/or phonation were in fact minimal pairs. In the carrier phrase, the syllable preceding the elicited lexical item had a mid level pitch; by comparing the

elicited item's pitch with the mid level pitch, I identified the tone categories of specific syllables. Comparison with lexical data from other Central Ngwi languages (Lolo, Lisu and Lahu (Huang & Dai 1992)) and with Bradley's (1979) reconstruction of Proto-Ngwi also helped clarify which tone category a syllable belonged to. All Proto-Ngwi forms cited in this paper are from Bradley 1979.

For the acoustic tonal analysis, monosyllabic target words were used in both citation and utterance medial form. For each tone, approximately 30 tokens were used (on average 10 lexical items, with three repetitions), for an average of 150 tokens per speaker. Fundamental frequency (F0) measured in hertz (Hz) was extracted using Praat language software (Boersma & Weenick 2009) and analyzed using procedures developed by Stanford (2008, 2011). Stanford's script in R (a free statistical software package) converts Hertz values to semitones, a logarithmic transformation that has been shown to better model speakers' intuitions about pitch difference than the Hertz scale (Nolan 2003). The speaker's mean pitch value of Tone 3, the mid-level tone, was defined as the zero level pitch value and thus served as the benchmark for normalized pitch (Stanford 2008). Stanford's script divides the pitch token into 600 equally spaced locations throughout the vowels' duration, and cuts off the first 25% of the vowel onset and the last 10% of vowel offset to avoid syllable edge effects. Similar to Stanford's (2008) study of Sui, the tone tokens in this study had a mix of onsets in terms of voicing and sonority; therefore, a larger portion of the onset was omitted, as different onsets have been shown to locally affect F0 (Hombert 1978, Hombert et al. 1979). For each tone category, pitch values were averaged for all tokens at each normalized time point. The tonal inventories in Figure 3 and Figure 4 are presented in semitones and normalized for duration and mean Tone 3 F0. When transcribing tone, Chao's (1930) system of pitch numbers is used to represent the relative pitch height of the tone (1 is low and 5 is high).

4. Phonology Sketch

Lawu's syllable template is (C)V(ŋ) with suprasegmental tone. There are 22 initial consonants, six monophthongs that may be followed by -ŋ, five diphthongs, and four tones. Like other Central Ngwi languages (Matisoff 2003), Lawu has lost Proto-Ngwi syllable-final consonants. Only a few instances of Proto-Ngwi *-ŋ are preserved, as in kəŋ³³ 'bracelet' from Proto-Ngwi *goŋ¹.

4.1 Initials

Table 1 gives the inventory of initials in Lawu, with allophones in brackets. Alveolar and alveopalatal obstruents are contrastive before all vowels except /e/; before /e/, only the alveopalatal occurs. The alveolar series does not occur before [i], as the allophone of /i/ after alveolar affricates and fricatives is [ɿ], an apical anterior vowel (Lee 2005). The female speaker distinguished between alveolars and alveopalatals before /i/ (i.e. [tei] and [tɿ]) were distinct in her pronunciation), but the male speaker had merged both syllables in favor of [tei]. There are no examples of [teɹ] in the wordlist, but /te/ contrasts with /ts/ before all other vowels, e.g. *tso*⁵⁵ 'drill a hole' contrasts with *tɕo*⁵⁵ 'lean (adj.)', and *tsu*³³ 'teach/train' contrasts with *tɕu*³³ 'cold (adj.)'.

/f/ has a restricted distribution, only appearing before close vowels /i/ and /u/. It is contrastive with /x/ before /i/: compare *a*⁵⁵*f*³³ 'left' with *xi*³³ 'situated crooked,' and with /s/ before both /i/

and /u/: compare *fu*⁵⁵ ‘swell,’ *su*⁵⁵ ‘iron’ and *a²¹sɿ³³* ‘who?’. Southwestern Mandarin likewise has no opposition between [xu] and [fu]; /x/ before [u] is pronounced as [f] (Ho 2003:130). There is a gap in the inventory, with no voiced alveopalatal fricative [z]. Proto-Ngwi *z, the most likely source for [z], instead is usually reflected as palatal glide [j] (e.g., *zak^l ‘descend’ > ja³³), thus merging with some reflexes of *y. /n/ is realized as [ɲ] before close front vowel /i/ and /e/. Table 2 gives lexical examples of Lawu initial consonants.

| | labial | alveolar | alveopalatal | palatal | velar |
|------------------------|----------------|-----------------|-----------------|---------|----------------|
| stops | | | | | |
| voiceless unaspirated | p | t | | | k |
| voiceless aspirated | p ^h | t ^h | | | k ^h |
| affricates | | | | | |
| voiceless unaspirated | | ts | tɕ | | |
| voiceless aspirated | | ts ^h | tɕ ^h | | |
| fricatives | | | | | |
| voiceless | f | s | ɕ | | x |
| voiced | v | z | | | |
| nasal sonorants | m | n [ɲ] | | | ŋ |
| oral sonorants | w | l | | j | |

Table 1: Inventory of initial consonants in Lawu

| Initial | Lawu | English | Initial | Lawu | English |
|-----------------|--|---------------|---------|-----------------------------------|---------|
| p | pa ⁵⁵ | exchange | f | fu ⁵⁵ | swell |
| p ^h | p ^h a ³³ | leaf | v | va ²¹ | snow |
| t | ta ⁵⁵ | carry in arms | s | sa ³³ | poor |
| t ^h | t ^h a ⁵⁵ | sharp | z | za ³³ | chicken |
| k | ka ⁵⁵ | scratch | ɕ | ɕa ²¹ | know |
| k ^h | k ^h a ⁵⁵ | hard | x | xa ³³ | borrow |
| ts | t ^h a ³³ | boil | m | ma ²¹ | NEG |
| ts ^h | ts ^h a ³³ | dirty | n | na ²¹ | many |
| tɕ | tɕo ⁵⁵ | drill a hole | ŋ | ŋa ³³ | 1SG |
| tɕ ^h | tɕ ^h a ³³ tu ²¹ | fire pit | l | la ³³ | come |
| j | ja ³³ | descend | w | ka ²¹ wa ³³ | outside |

Table 2: Examples of initial consonants in Lawu

Table 3 summarizes the development of manner of articulation of Lawu stops and affricates, compared with other CN languages (Matisoff 2003:17). Bilabial stops (P, P^h, B) are used in the table to represent all places of articulation for stops and affricates. *C is a cover symbol for the Proto-Tibeto-Burman voiced consonantal prefixes *b, *d, *g, *r, *l (Bradley 1979). *m-

represents the Proto-Ngwi homorganic nasal prefix. Proto-Ngwi voiced and nasal prefixed stops and affricates have unconditionally devoiced in Lawu, so that Lawu no longer has any voiced stops and affricates, unlike most other CN languages. This development may be due to the influence of Southwestern Mandarin, whose voiced stops and affricates have also devoiced. Other languages Lawu is in contact with, i.e. Nisu and Lolo, have retained voiced onsets. The devoicing of voiced stops and affricates was the trigger for the phonologization of the tone splits described in Section 4.3.

| Proto-Ngwi | Lawu | Lahu | Lalo, Lisu, Lolo |
|------------|----------------|----------------|------------------|
| *P, *C-P | p ^h | p ^h | p ^h |
| *ʔB, *ʔP | P | P | P |
| *B, *C-B | B > P | P | B |
| *m-B, *m-P | B > P | B | B |

Table 3: Development of manner of stops and affricates in Central Ngwi

Proto-Lawu had preglottalized sonorants *ʔm, *ʔn, *ʔl, and *ʔw, a coalescence of the Proto-Ngwi *ʔ or *s- prefixes before sonorants. Preglottalization has since been lost in Lawu, but at the time of the Lawu tone splits (see Section 4.3), preglottalization blocked the lowering of the pitch seen in plain voiced sonorants. Modern pitch reflexes in syllables with Proto-Lawu preglottalized sonorants match those of voiceless initials rather than voiced, e.g. Proto-Lawu *ʔla¹ ‘spirit’ > la⁵⁵ and *ʔpa¹ ‘exchange’ > pa⁵⁵ versus *la¹ ‘come’ > la³³.

Table 4 summarizes the Proto-Ngwi sources of Lawu initials. The majority of Proto-Ngwi consonant clusters of stop plus *-l, *-r, *-y have merged with the simple stops. Only *ky and *gy palatalized to the alveopalatal affricate before close vowels (e.g., *ky > tɕ/_*i, e, o) and merged with the alveolar affricates before rhymes with *a (e.g., *gyaw² ‘waist’ > [tso²¹]; *kyaŋ² ‘friend’ > [ts^hu²¹]). Palatoalveolar affricates and fricatives merge with the alveolar series (*c > /ts/ and *ʃ > /s/). Before rhymes *a and *aŋ, *my merges with *n to /n/. Proto-Ngwi resonants *r and *y become fricatives before back vowels, with the place of articulation conditioned by the vowel, e.g., *r and *y > v/_*u and > z/_*a-. Elsewhere, *r becomes /ɣ/, and *y remains a palatal glide /j/. *w also becomes a fricative, usually /v/. *h merges with *x, and becomes /ɕ/ before high front vowels. Labial prefixes preempt initial liquids *l and *r, with both *b and *m becoming a labial stop, e.g., *b-le² ‘four’ > [pi²¹], *m-le² ‘grandchild’ > [pi²¹], *m-rwe¹ ‘snake’ > [pe³³]. This suggests an early merger in Proto-Lawu of the *m- and *b- prefixes to an initial *b. Labial stops before *w became labiodental fricatives, as in *b-way² ‘left’ > *vi³³ > [fi³³] and *C-pwam² ‘swell’ > [fu⁵⁵]. Similarly, glottalized *ʔ-pl becomes /f/ in *ʔ-plu¹ ‘porcupine,’ but plain *plu¹ ‘silver/white’ merges with /p^h/, becoming [p^hu⁵⁵].

| Lawu | Proto-Ngwi source (does not include retentions) |
|-----------------|--|
| ts | *ʔ-c; *ʔ-ky, *gy/_*-a- |
| ts ^h | *c; *ky/_*-a- |
| tɕ | *ʔky, *gy/_*[high] |
| tɕ ^h | *ky/_[high] |
| s | *ʃ |
| n | *my/_*-a, -aŋ |
| m | *ml, *mr; *my/elsewhere |
| v | *w; *y, *r, *j/_*-u |
| z | *r, *y, *r-y/_*-a- |
| w | *ʔu, Southwestern Mandarin loanwords with w-onset |
| j | *g-y; individual items such as *ʒak ^L ‘descend’ *yak ^L ‘today’, *k-d-wam ¹ ‘bear’, *r-ywe ¹ ‘rain’ |
| ɕ | *x, *s, *h/_*[+high, -back] |
| x | *h/elsewhere |
| f | *labial stops/_*-w-, e.g. *b-way ² ‘left’, *C-pwam ² ‘swell’; also *ʔ-plu ² ‘porcupine’ |

Table 4: Proto-Ngwi sources of Lawu initial consonants

4.2 Rhymes

Lawu has six monophthongs and five diphthongs, given in Table 5. All monophthongs can be followed by the velar nasal -ŋ except -u-. Diphthongs may be followed by the velar nasal in Chinese loanwords (e.g., p^haŋ²¹kuaj³³ ‘bladder’), but not in native vocabulary. Lawu is unlike most other Central Ngwi languages in having a contrastive nasal final. In a few items, Proto-Ngwi *-ŋ has been retained, as in pəŋ³³ ‘full’ from Proto-Ngwi *m-bliŋ³ and tsəŋ⁵⁵ ‘tree’ from Proto-Ngwi *dzin¹. The nasal final is also seen in Chinese loanwords, e.g. ɛaŋ²¹fu²¹ ‘blessed, happy,’ and in some words whose diachronic origin is unclear (e.g. p^hiŋ³³ ‘knife’). In originally open syllables beginning with nasal stops, a nasal final has been added after back vowel *o, e.g. *s-mo¹ ‘mushroom’ > məŋ⁵⁵, and *C-no² ‘awake’ > nəŋ²¹. The close vowel [i] is realized as apical vowel [ɿ] after alveolar affricates and sibilants (i.e. /z, s, ts and ts^h/). Table 6 gives examples showing minimal or near minimal pairs.

| | Monophthongs | | Diphthongs |
|-------|--------------|---|------------|
| i [ɿ] | | u | ue, ie |
| e | ə | o | |
| | a | | au, ai, ua |

Table 5: Inventory of rhymes in Lawu

| Initial | Lawu | English | Initial | Lawu | English |
|---------|-------------------|----------------|---------|-------------------------------------|--------------|
| i | ki ³³ | open | iŋ | xiŋ ⁵⁵ | lean against |
| e | ke ⁵⁵ | suffix for hen | eŋ | keŋ ²¹ | busy |
| ə | kə ³³ | boil | əŋ | kəŋ ⁵⁵ | snap in two |
| a | ka ⁵⁵ | scratch | aŋ | ŋ ⁵⁵ kaŋ ⁵⁵ | between |
| u | ku ²¹ | nine | oŋ | koŋ ³³ tsa ⁵⁵ | thread |
| o | ko ²¹ | buckwheat | au | kau ³³ | in front |
| ue | tue ⁵⁵ | exit | ai | kai ³³ | very |
| ie | pie ³³ | explode | | | |

Table 6: Examples of rhymes in Lawu

The following near minimal pairs further distinguish phonetically similar rhymes:

1. Front vowels:

a²¹pi³³ ‘duck’

pie³³ ‘explode’

pe³³ ‘snake’

piŋ³³kaŋ⁵⁵ ‘rainbow’

2. Back vowels:

tu²¹ ‘dig a hole’

tue⁵⁵ ‘exit’

Table 7 gives the Proto-Ngwi sources for Lawu rhymes, arranged in order of decreasing frequency in the 1,001-item wordlist. I compared the Lawu lexical data to Bradley’s (1979) Proto-Ngwi reconstructed vocabulary of 866 items to determine the Lawu reflexes of Proto-Ngwi rhymes. The monophthongs [e] and [o] have fewer diachronic sources than [i] and [u] and are less frequent than other monophthongs. Monophthongs are more frequent than diphthongs or nasal final rhymes. Some nasal final rhymes and diphthongs occur only rarely, such as [eŋ] and [ua], which have only one example each in the wordlist.

| Rhyme | Proto-Ngwi source | Number of tokens | Frequency |
|-------|--|------------------|-----------|
| a | *a, *ak, *yak | 378 | 29% |
| i | *ay, *at, *wat, *an, *wan, *i, *it, *ik, *e, *ek, *ut | 277 | 21% |
| u | *u, *um, *ok, *uk, *wak, *am, *yam, *aŋ; *o/elsewhere | 214 | 16% |
| ə | *uk; *ay, *ut, *i, *it, *ok, *we, *e/*r_ | 169 | 13% |
| o | *aw, *ap, *yup, *yok | 89 | 7% |
| əŋ | *o/*nasal_; *iŋ/*bl, *kr_; *in/*ts, *dz_; individual items such as *doŋ ¹ ‘wing’, *mun ¹ ‘flour’ | 83 | 6% |
| e | *et; *at/*ts, *s_; *ok/*m, *n_; individual items such as *m-rwe ¹ ‘snake’, Tibeto-Burman *trek ‘thunder’ | 35 | 3% |
| aŋ | Chinese loans and unknown sources | 20 | 2% |
| ai | Chinese loans and unknown sources, individual item *dak ^H ‘ascend’ | 9 | 0.7% |
| oŋ | unknown source, individual item *həm ‘fragrant’ | 8 | 0.6% |
| iŋ | Chinese loans and unknown sources | 7 | 0.5% |
| ie | unknown sources; individual items such as *b-ni ² ‘near’, *s-nok ^H ‘bean’ | 5 | 0.4% |
| ue | unknown sources; individual items such as *ʔ-dwak ^H ‘take out’ | 5 | 0.4% |
| eŋ | unknown source | 1 | 0.1% |
| ua | Chinese loan | 1 | 0.1% |
| au | unknown source | 1 | 0.1% |

Table 7: Proto-Ngwi sources of Lawu rhymes

4.3 Tones

This section gives an acoustic analysis of the Lawu tonal system and describes Lawu’s complex tone splits and mergers. Lawu has four contrastive tones: three level pitches (high, mid, low) in modal phonation and one mid falling pitch in harsh phonation. Compared to other Central Ngwi languages, this tonal inventory is rather small: Lahu has seven (Matisoff 1982 [1973]), Lisu six (Bradley 2003), Central Lalo five (Yang 2010a). The reduced number of tones is due to the unconditioned merger of Proto-Ngwi Tones *1 and *H, and the multiple mergers with Tone *3 that occurred after the splits in Tones *2, *L, and *1/H.

The Proto-Ngwi tonal system had a three-way pitch height contrast in syllables ending in vowels or nasals: Tones *1 (*T1, high), *2 (*T2, low), and *3 (*T3, mid) (Bradley 1977). In syllables ending in *-p, *-t, and *-k, Proto-Ngwi had two distinct tone categories, *Low-stopped (*TL) and *High-stopped (*TH) (Matisoff 1972). In most Ngwi languages, syllable-final *stops

merged to a glottal stop and then to laryngealized vocal register on the vowel, often seen as harsh (or tense) phonation. Harsh phonation is marked with an underscore under the vowel, e.g., [a̰].

Harsh phonation is an aperiodic phonatory quality produced when the laryngeal sphincter (i.e., the thyroarytenoid muscle complex) is constricted and the ventricular folds incur over the vocal folds (Edmondson & Esling 2006: 162). High levels of jitter (irregularity in the duration of the glottal pulse cycle), shimmer (irregularity in amplitude), and high-frequency energy are acoustic correlates of harsh (Scherer 1986). In some Ngwi languages, such as Lalo (Yang 2010b), harsh phonation also correlates with increased pitch and shorter duration, compared to modal phonation. Figure 1 below gives the spectrogram of the male speaker's utterance of [na³¹] 'sticky', in harsh phonation. Note the blacker regions at high-frequency levels, reflecting high-frequency energy. Harsh [na³¹] has 2.7% local jitter and 12.8% local shimmer, measured with Praat. In comparison, modal [na²¹] 'rich' (spectrogram seen in Figure 2) has only 1.2% jitter and 8.3% shimmer.

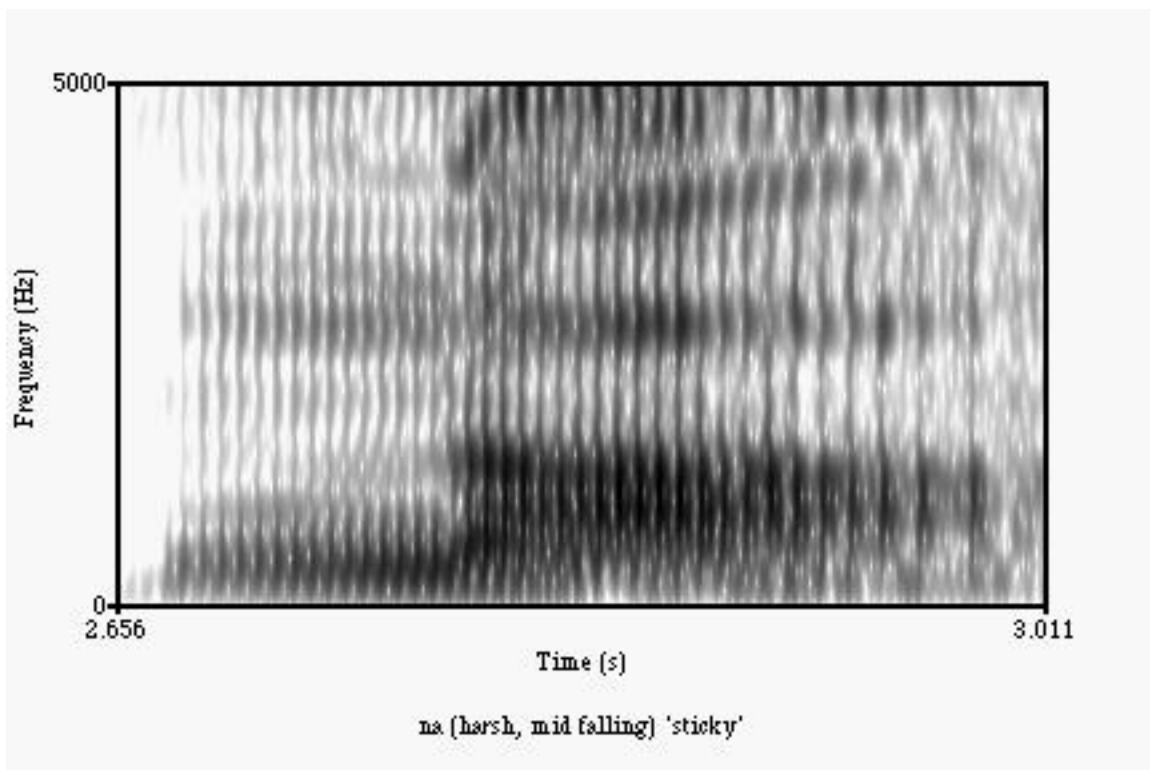


Figure 1: Spectrogram of [na³¹] 'sticky' by male speaker

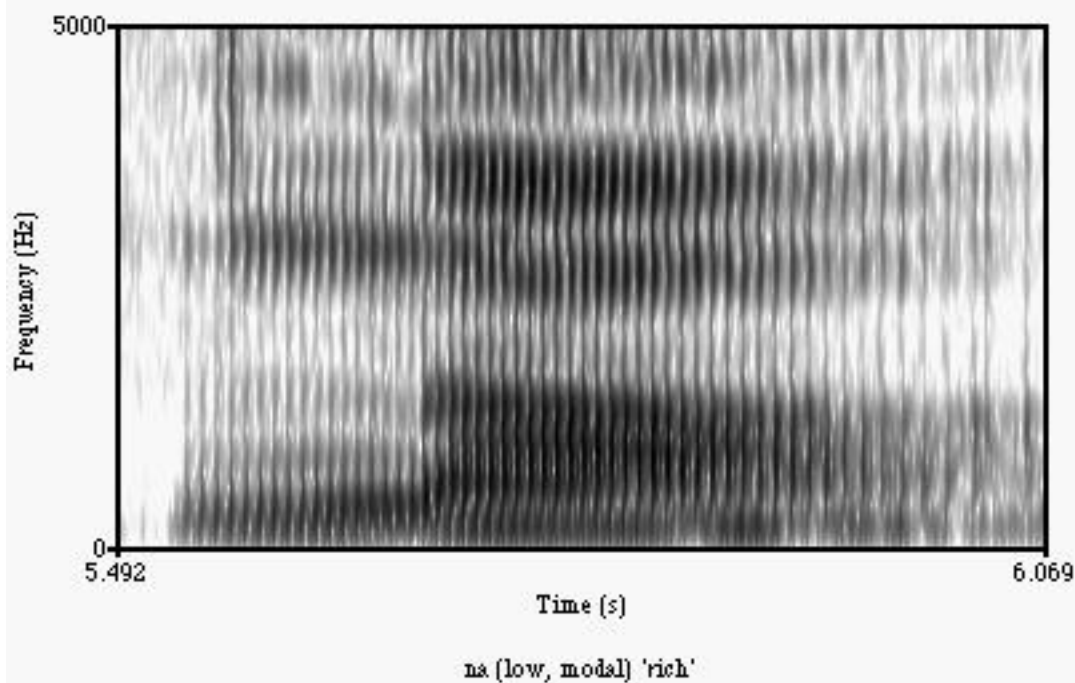


Figure 2: Spectrogram of [na²¹] 'rich' by male speaker

Figure 3 and Figure 4 show the acoustic tonal analysis of the male and female speaker, respectively, using the methodology described in Section 3. N is the number of tokens used in the analysis. Lawu's synchronic tone categories are abbreviated without asterisks as T1/TH (a merger of *T1 and *TH), T2, T3, and TL. The male speaker's tokens were all in citation form, and the female speaker's were in utterance medial form. In Figure 3, the merged T1/TH category is a high level pitch, and T3 a mid level pitch. T2 starts low and gradually falls to the bottom of the pitch range, while TL starts at the mid pitch and falls rapidly. TL is pronounced with slight harsh phonation, with a higher pitch onset and shorter duration than modal T2. The average duration for the male's TL tokens is roughly 75% of the duration of the average T2 token, and the duration difference between TL and T2 is statistically significant ($p < 0.01$). In the figures below, durations are normalized to depict relative differences, so TL is depicted in Figure 3 as 25% shorter in duration than the other tones.

Figure 4 below, based on the female speaker's utterance medial forms, shows some differences from Figure 3. Acoustic analysis of additional speakers from both genders uttering citation and utterance medial forms is needed to investigate the cause of the differences. With the current limited data, I cannot conclude whether the differences are related to gender or to the phonetic environment of the token used. Unlike the male speaker, the female speaker's TL and T2 do not differ in their duration. Although the female's mean TL pitch is still higher than the mean T2 pitch at a 0.05 level of significance, TL's pitch onset in Figure 4 is lower than the mid pitch onset seen in Figure 3. One possible explanation for the differences is that harsh phonation may be neutralized in utterance-medial speech. This neutralization also occurs in some Lalo languages (Yang 2010a: 180) and Phula languages (Pelkey 2011). The eventual loss of harsh phonation would not be surprising, as SW Mandarin, the language that is currently replacing Lawu, does not have harsh phonation.

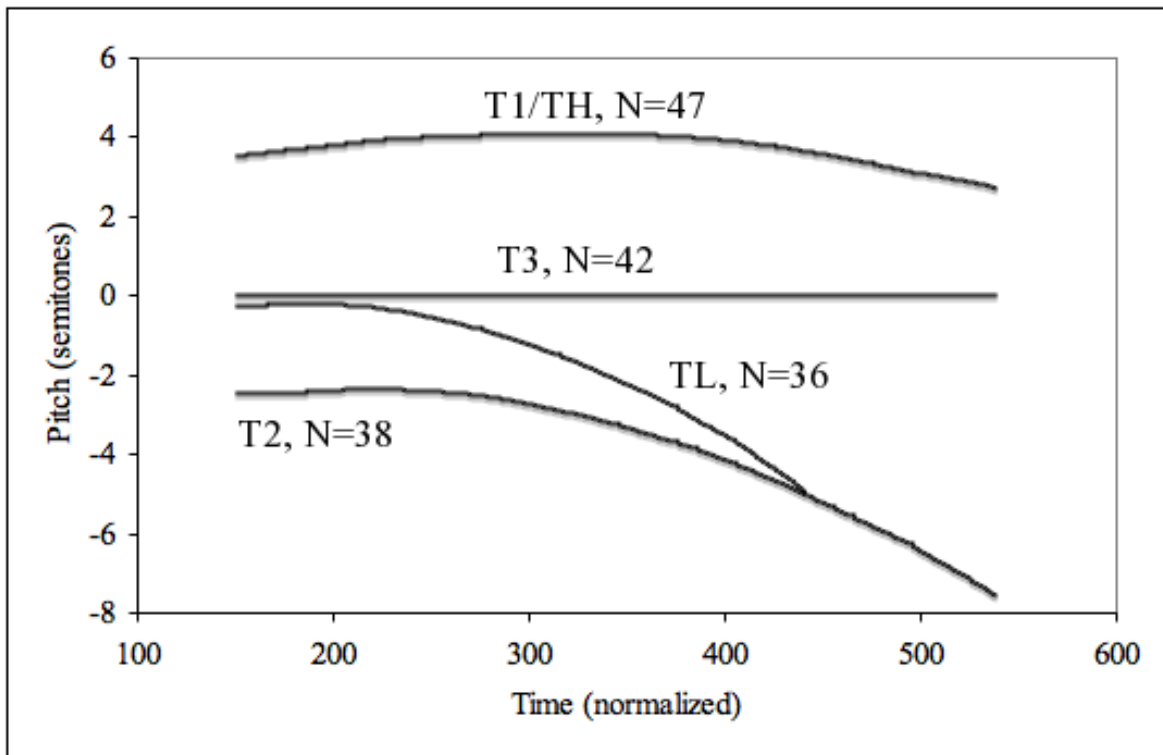


Figure 3: Acoustic tonal analysis of Lawu male speaker in citation form

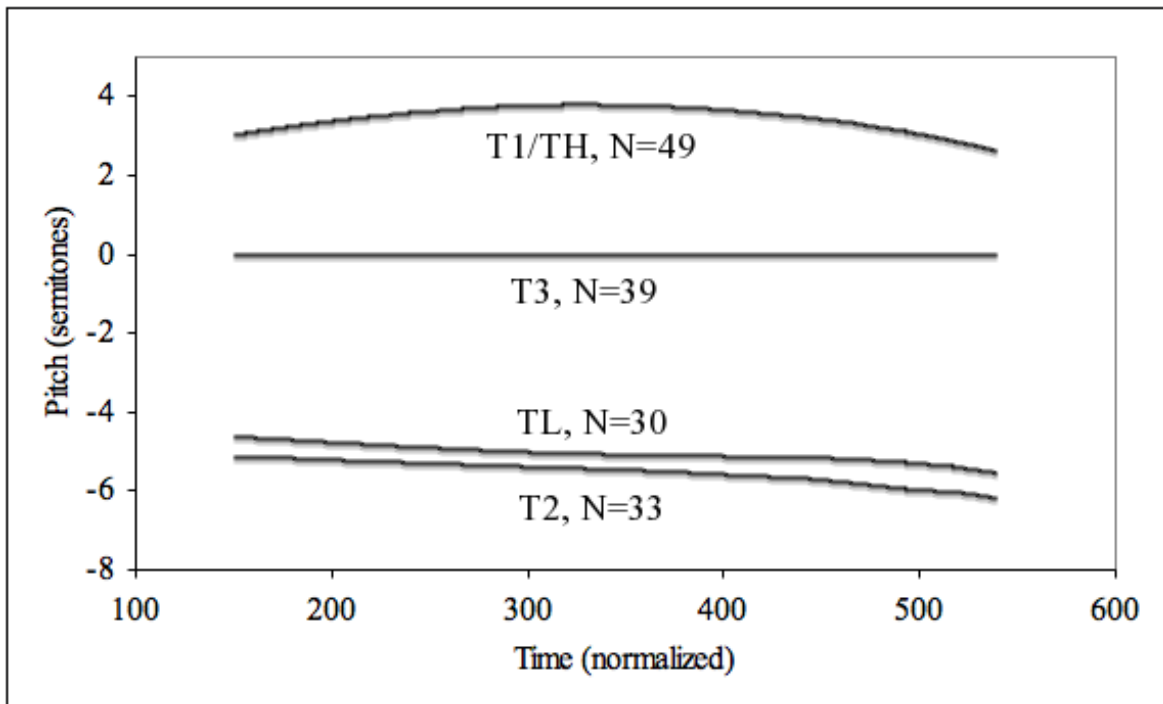


Figure 4: Acoustic tonal analysis of Lawu female speaker in utterance medial form

Table 8 below gives the Lawu tone box, showing the splits and mergers that were conditioned by voicing of the initial consonant. A tone box presents the historic interaction between initial and

tone, originally developed by Gedney (1972) for Tai languages. Proto-Ngwi *T1 and *TH merged unconditionally to a high level pitch, and then underwent a split wherein voiced initials conditioned the lowering of the high level pitch to a mid level pitch. This resulted in a partial merger with *T3. Syllables with voiceless initials (including preglottalized and voiceless aspirated) remained high. In *T2 (low) and *TL (low and harsh), voiceless initials conditioned a raising of the pitch to mid level, resulting in another partial merger with *T3. Syllables with voiced initials remained low in T2 or became mid falling in TL. After the tone splits and mergers described here, voiced obstruent initials became devoiced, making the mid falling and low pitches contrastive. Lawu tone splits go up or down a prosodic staircase: voiced initials condition the pitch to either step down one level (high > mid) or remain low if the original pitch was low, and voiceless initials condition the pitch to either go up one level (low > mid) or stay high if the original pitch was high.

| | | | | | | | | |
|------------------------|------|-----|----|--|----|---------------------|-----|----|
| Proto-Ngwi | *1 | | *2 | | *3 | | *H | *L |
| *voiceless | high | mid | | | | high | mid | |
| *glottalized/elsewhere | | | | | | | | |
| *glottalized/_*V[high] | | | | | | | | |
| *voiced | mid | low | | | | mid falling (harsh) | | |

Table 8: Lawu tone box

At the Proto-Lawu stage, *T2 and *TL underwent an unusual split in which both the initial consonant and the rhyme played a part. In Proto-Lawu syllables with voiceless unaspirated obstruents or glottalized sonorants, *T2 and *TL pitch reflexes are high when co-occurring with the Proto-Lawu high vowels *i and *u. Proto-Lawu voiceless unaspirated obstruents and glottalized sonorants descend from Proto-Ngwi glottal-prefixed obstruents and sonorants, as described in Section 4.1. Proto-Lawu high vowels *i and *u descend from various Proto-Ngwi rhymes, summarized in Table 7. Table 9 gives examples of the conditioning environment that triggered the tone split, and Table 10 gives examples of conditioning that did not (e.g., non-high vowels, non-glottal prefixed initials).

In an additional twist, the Proto-Lawu vowel had to match the place of articulation of the initial in order to trigger the split: after anterior initials (labial and alveolar), the vowel had to be both high and front (i.e., *i) for the split to occur, and after non-anterior initials (e.g., velar), the vowel had to be high and back (i.e., *u). For example, as seen in Table 9, Proto-Lawu *pi² ‘old,’ *ti² ‘to pound,’ and *ku² ‘head’ (from Proto-Ngwi *ʔ-kon²) all show the high level pitch, but not *pay² ‘duck’ (the split happened before *ay merged to /i/), *ʔmu² ‘to brood,’ or *ʔna² ‘ear.’ Unfortunately, the wordlist has no examples of *T2 preglottalized sonorants with the correct conditioning for the tone split, but since the split in *T2 and *TL parallel each other in other aspects, I assume that *T2 glottalized sonorants also took part. Likewise, in *TL *ʔli¹ ‘take off’ (Proto-Ngwi reconstruction unknown, compare Proto-Lalo *ʔli¹) and *ku¹ ‘to bend’ became *li*⁵⁵ and *ku*⁵⁵, respectively. For Proto-Ngwi *k-lok¹ ‘stone’ (probably with an epenthetic schwa after the *k- prefix, *kəlok¹), the vowels in the two syllables likely underwent metathesis while the initial prefix triggered glottalization, i.e., Proto-Ngwi *kəlok¹ > *kə²ʔlu¹ > *ku²ʔli¹ > *li*⁵⁵*ku*⁵⁵. As in *T2, the *TL vowel had to match the place feature of the initial, so neither Proto-Lawu

*ʔli^L ‘graze’ or *tu^L ‘to light a fire’ took part in the split. Vowel quality conditioned tone splits are rare, but have been shown to occur in Proto-Lalo (Yang 2010a: 182-186), another Central Ngwi language, and in Lugbara (Andersen 1986).

| | old | pound | head | take off | stone | bend |
|------------|--------------------|--------------------|---------------------|--------------------|-----------------------------------|---------------------|
| Proto-Ngwi | *ʔ-bi ² | *ʔ-di ² | *ʔ-kon ² | *ʔ-li ^L | *k-lok ^L | *s-gok ^L |
| Proto-Lawu | *pi ² | *ti ² | *ku ² | *ʔli ^L | *ku ² ʔli ^L | *ku ^L |
| Lawu | pi ⁵⁵ | ti ⁵⁵ | ku ⁵⁵ | li ⁵⁵ | li ⁵⁵ ku ⁵⁵ | ku ⁵⁵ |

Table 9: Examples of vowel-conditioned tone split in T2 and TL

| | duck | brood | ear | enough | graze | light fire |
|------------|---------------------|--------------------|--------------------|-------------------|---------------------|---------------------|
| Proto-Ngwi | *ʔ-bay ² | *ʔ-mu ² | *ʔ-na ² | *lok ^L | *ʔ-lok ^L | *s-dok ^L |
| Proto-Lawu | *pay ² | *mu ² | *ʔla ² | *lu ^L | *ʔlu ^L | *tu ^L |
| Lawu | pi ³³ | mu ²¹ | la ³³ | lu ³¹ | lu ³³ | tu ³³ |

Table 10: Examples of conditions that did not incur tone split

5. Lawu’s Position within Ngwi

Lawu is clearly a Ngwi language within the Tibeto-Burman language family, with transparent correspondences to Proto-Ngwi tone categories and many cognates shared with other Ngwi languages. Ngwi has been subgrouped into four main branches: Northern, Southern, Central, and Southeastern (Bradley 2002, Pelkey 2011). Lawu does not share any of the distinctive innovations that characterize Northern, Southern, or Southeastern Ngwi languages, but does show affinity with Central Ngwi through its tone splits in *T1, *T2 and *TL. In Northern Ngwi languages such as Nasu, *L became the highest pitch in the tone system (Bradley 1979), a change not seen in Lawu. In Southern Ngwi languages such as Hani and Akha, phonation caused a split in the manner of obstruents, also not seen in Lawu (Thurgood 1982). Other Southern Ngwi languages such as Bisu or Sangkong are very different from Lawu in their development of obstruents, with Proto-Ngwi glottal-prefixed stops becoming aspirated and nasals becoming voiced or prenasalized stops (Matisoff 2003: 17). Nor does Lawu show the development of velar- or alveolar-lateral clusters that distinguish Southeastern Ngwi languages (Pelkey 2011).

Instead, Lawu shares the Central Ngwi tendency to split *T1, *T2, and *TL, conditioned by voicing or prefixation of the initial. Table 11 shows a comparative tone box for some Central (C), Southern (S), and Southeastern (SE) Ngwi languages, organized by manner of Proto-Ngwi initial. An underscore below the Chao pitch number represents harsh phonation. Lawu’s conditioning of the *T2 split (*voiceless and *ʔ/*s- prefixed initials) overlaps with Lisu’s (*ʔ/*s- prefixed) and Lahu’s (*voiceless sibilants and *ʔ/*s- prefixed); Lawu and Lahu may have expanded the original Central Ngwi conditioning environment of *glottal stop and *s prefixation. In the conditioning of the *TL split, Lawu, Lisu and Lahu again share *glottal stop/*s- prefixation, with Lisu and Lahu expanding to include *C- prefixation (*C represents Proto-Tibeto-Burman voiced consonantal prefixes *b, *d, *g, *r, *l). In contrast, Hani (S) shows no such splits in any tone category. Nisu (SE) shows a glottal-conditioned split in *T1 but not

elsewhere. Sani (SE) shows tone splits similar to Lisu, but Pelkey (2011) groups Sani as a Southeastern Ngwi language based on other evidence. Although the tone splits suggest affiliation with Central Ngwi, Lawu does not show typical Central Ngwi lexical items such as reflexes of *a na² for ‘dog’ and *a ʔduk² for ‘fire,’ described in Bradley 2004a. However, such lexical items are not a requirement for membership in Central Ngwi, as Lahu does not show them either.

Even though Lawu is most likely a Central Ngwi language, it does not clearly belong to the Lisoid (Lisu, Lipo, Lolo), Laloid (Central, Southern, Eka), or Lahoid (Lahu, Kucong) clusters within Central Ngwi. Lawu speakers were previously classified as belonging to the Yi nationality (XPXZ 1993), but are now classified as Lahu. However, there is no linguistic evidence that the Lawu language belongs to the Lahoid cluster of languages (e.g., Kucong, Black and Yellow Lahu). Lawu does not share any distinctive Lahu phonological or lexical innovations, such as *li > [hɔ] and others listed in Bradley 2004b. Lawu does not share the distinctive Lalo *T2 split described in Yang 2010a, in which *T2 syllables with glottalized obstruents and the rhyme *-a shifted to *TL. Neither does Lawu share the creation of a high rising tone from a split in *H, as is seen in Lisu and Lamu (Bradley 2004a). At this point, it is unclear which Central Ngwi language Lawu shares the closest relationship with. Further data on other aspects of Lawu phonology and lexicon, as well as morphology and syntax, are needed to confirm Lawu’s place within Central Ngwi.

| Proto-Ngwi Initial Class | Lawu (C) | Lisu (C) | Lahu (C) | Hani (S) | Sani (SE) | Nisu (SE) |
|--------------------------|-------------|-------------|-------------|-------------|--------------|--------------|
| *3 all | 33 | 33 | 33 | 33 | 33 | 21 |
| *1 *voiced, *C-voiced | | | 21 | 55 | | |
| *voiceless, *C-voiceless | 55 | | 33 | | | |
| *ʔ/s- prefixed | | 44 | | | 44 | 55 |
| *2 *voiced, *C-voiced | 21 | 21 | 53 | 21 | 11 | 33 |
| *voiceless, *C-voiceless | 33 | | | | | 33/21 |
| *voiceless sibilants | | | 11 | | | 33 |
| *ʔ/s- prefixed | | 55 | | | 55 | |
| *H *voiced, *C-voiced | | 44 | 53? | <u>33</u> | 44 | <u>33</u> |
| *ʔ/s- prefixed | 55 | | | | | |
| *voiceless, *C-voiceless | | 35 | | | | |
| *L *voiced | <u>31</u> | <u>21</u> | 21? | <u>21</u> | 11 | <u>21</u> |
| *voiceless | 33 | | | | | |
| *C-voiceless | | 55 | | | | |
| *ʔ/s- prefixed | | | 35 | | 55 | |
| *C-voiced | <u>31</u> | | | | 11 | |

Table 11: Tone reflexes in some Ngwi languages

6. Conclusion

Based on diachronic phonology, Lawu is most likely a Central Ngwi language, but has diverged from more well known Central Ngwi languages such as Lisu or Lahu. The Lawu community is in the process of shifting to Southwestern Mandarin and Lawu phonology shows possible influence from contact with SW Mandarin. Although data was gathered from only two Lawu speakers, these preliminary observations lay a foundation for a more comprehensive investigation. Lawu's status as a severely endangered language highlights the urgent need for such investigation, while there are still speakers.

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Appendix A: Lawu Word List

To listen to the Lawu audio files, please visit the HTML version of this paper [here](#).

| English | Chinese | Frame | Proto-Ngwi | Proto-Lalo | Lawu-Xinping Shuitang Jiuha |
|-----------------------|-----------|-------|--|---|--|
| 1.0 sky | 天 (天空) | 很高 | *mo ² | mo ² di ² ma ³ | məŋ ³³ |
| 2.0 sun | 太阳 | 很高 | *mo ² (?)ne ¹ | a ¹ mo ² yi ¹ | mə ²¹ tʃ ^h a ⁵⁵ |
| 3.0 sunshine | 阳光 | 很亮 | *tsa ¹ & *pu ¹ | a ¹ mo ² ts ^h a ¹ | |
| 4.0 moon | 月亮 | 很好 | *bəla ³ | xa ³ ba ³ k ^h i ¹ | la ³³ pa ³³ |
| 5.0 star | 星星 | 三颗 | *C-gray ¹ | kje ¹ | mə ²¹ kə ⁵⁵ sɿ ³³ |
| 6.0 cloud | 云 | 三朵 | *mo ¹ C-dim ¹ | a ¹ mo ² ti ¹ | tʃo ²¹ ku ³³ |
| 7.0 wind | 风 | 很大 | *le ¹ | a ¹ mo ² hi ¹ | mi ²¹ li ⁵⁵ |
| 8.0 rain | 雨 | 很大 | *r-ywa/we ¹ | a ¹ mo ² ha ¹ | mi ²¹ ji ³³ |
| 9.0 lightning | 闪电 | 三道 | *b-lyap ¹ | a ¹ mo ² bja ^t | |
| 10.0 thunder | 雷 | 很大/响 | *gyan ² & *gro ² | a ¹ mo ² go ² ti ² | mən ³³ ti ²¹ , mə ²² te ⁵⁵ te ⁵⁵ |
| 11.0 rainbow | 彩虹 | 三道 | *ji ³ | a ¹ mo ² se ¹ yi ¹ daŋ ¹ | piŋ ³³ kaŋ ⁵⁵ |
| 12.0 snow | 雪 | 很白 | *wa ² | va ² | va ²¹ |
| 13.0 water (a) | 水 | 三桶 | *re ¹ ?-grak ^H & *laŋ ¹ | yi ¹ | |
| 13.1 water (b) | 水 | 三桶 | *ŋ ²¹ ?-grak ^H | gje ^H | ŋ ²¹ ka ⁵⁵ |
| 14.0 fog | 雾 | 很大 | | mu ¹ | tʃo ²¹ ku ³³ |
| 15.0 frost | 霜 | 很白 | | ʔni ¹ p ^h u ¹ | paŋ ⁴⁵ |
| 16.0 dew | 露 | 很多 | | kjy ² | |
| 17.0 hail | 雹 (雹暴) | 很大 | *wa ² | ʔlo ^H ha ¹ | |
| 18.0 earth | 地 (大地/草地) | 很大 | *ʔ-mre ¹ tsa ² | ʔmi ¹ di ² | mə ³³ ts ^h a ³³ |
| 19.0 soil; dirt | 土(干) (土壤) | 很好 | | e ² ts ^h i ² | naŋ ³³ k ^h e ³³ |
| 20.0 mud | 泥(巴) | 三桶 | *(m)-cat ^{H/L} & *ʔput ^L /poŋ ² | e ² haŋ ² | |
| 21.0 river (a) | 河 | 很大 | *laŋ ¹ | yi ¹ dzaŋ ² | |
| 21.1 river (b) | 河 | 很大 | *laŋ ¹ | laŋ ¹ dzaŋ ² | lu ³³ ma ³³ |
| 22.0 ditch | 沟 | 三条 | | yi ¹ k ^h a ² | ʔə ³³ k ^h a ³³ |
| 23.0 pond | 池塘 | 三个 | | yi ¹ by ³ | ŋ ²¹ ka ³³ |
| 24.0 puddle | 小池塘 | 三个 | | yi ¹ by ³ za ² | ŋ ²¹ ka ³³ i ⁵⁵ jo ²¹ |
| 25.0 well inside | 井 | 三口 | | tse ³ du ² | |
| 25.1 well outside | 井 | 三口 | | yi ¹ du ² | ŋ ²¹ ka ³³ ʔə ³³ du ²¹ |
| 26.0 mountain (dirt) | 山(土山) | 三座 | *kaŋ ¹ | k ^h u ¹ dʒe ² | kə ²¹ ma ³³ |
| 27.0 cliff | 悬崖 | 三座 | *ʔ-rak ^t , C-rakL | ʔe ¹ | pa ²¹ ma ³³ |
| 28.0 valley | (山)谷 | 三个 | *C-kyoŋ ¹ , laŋ ¹ | laŋ ¹ ka ^t | kə ³¹ ku ²¹ |
| 29.0 cave | (山)洞 | 三个 | | k ^h u ¹ du ¹ | k ^h əŋ ⁵⁵ |
| 30.0 hole (in ground) | 洞 | 三个 | | k ^h u ¹ | k ^h əŋ ⁵⁵ |
| 31.0 gold | 金 | 三两 | *s-rwe ¹ & *[kam] | ʃe ¹ | tʃiŋ ⁵⁵ |
| 32.0 silver | 银 | 三俩 | *plu ¹ & *C-ŋwe ¹ | p ^h u ¹ | p ^h i ⁵⁵ tʃe ²¹ |
| 33.0 iron (ore) | 铁 | 很好 | *xam ¹ | xy ¹ | su ⁵⁵ |
| 34.0 tin | 锡 | 很好 | | | |
| 35.0 coal | 煤 | 很黑 | | | mə ²¹ |
| 36.0 stone | 石头 | 三个 | *k-lok ^t & *C-rak ^t | ka ¹ lu ^H | li ⁵⁵ ku ⁵⁵ |
| 37.0 sand | 沙 | 三堆 | *say ² | ʃa ³ | san ²¹ tʃi ³³ |
| 38.0 fire | 火 | 三堆 | *C-mi ² | a ¹ tə ^t | tʃiŋ ⁵⁵ |
| 39.0 flame | 火焰 | 很大 | *ʔ-lam ¹ | a ¹ tə ^t ʔly ¹ | |
| 40.0 smoke | 烟 (炊烟) | 三股 | *ko ² | ʔmu ² k ^h o ² se ^t | mo ²¹ sa ³³ |

| | | | | | | |
|------|----------------------|---------|---------|---|---|---|
| 41.0 | night | 夜 | 三个夜晚 | *ʔ-rak ^L | he ^t | mi ²¹ tɕ ^h e ³³ , pi ³³ |
| 42.0 | day | 天 | 三天 | *(ʔ)ne ³ | ʔni ³ | ni ³³ |
| 43.0 | today | 今天 | 他__过来 | *yak ^L (ʔ)ne ³ | i ² ʔni ³ | je ³¹ ni ³³ |
| 44.0 | yesterday | 昨天 | 他__过来 | *ʔəmi ¹ | a ² ʔni ³ | mi ⁵⁵ tɕ ^h i ³³ |
| 45.0 | day before yesterday | 前天 | 他__过来 | *ʔəʃik ^H | ʃi ^H ʔni ³ | su ³³ mi ⁵⁵ tɕ ^h i ³³ |
| 46.0 | three days ago | 大前天 | 他__过来 | | ʃi ^H ʔu ² ʔni ³ | pi ²¹ mi ⁵⁵ tɕ ^h i ³³ |
| 47.0 | four days ago | 四天前 | 他__过来 | | | |
| 48.0 | tomorrow | 明天 | 他__过来 | *ʔ-praŋ ² | a ² gy ¹ ʔni ³ | sa ³³ na ²¹ |
| 49.0 | day after tomorrow | 后天 | 他__过来 | *pak ^H | ts ^h a ¹ p ^h ɕ ^H ʔni ³ | p ^h a ³³ ni ³³ |
| 50.0 | three days from now | 大后天 | 他__过来 | *pin ² | a ² p ^h e ^H ʔni ³ | p ^h i ⁵⁵ ni ³³ |
| 51.0 | four days from now | 四天后 | 他__过来 | | a ² yo ³ ʔni ³ | p ^h i ⁵⁵ ŋa ²¹ ni ³³ , pi ²¹ ni ³³ ka ³³ na ⁵⁵ |
| 52.0 | year | 年 | 三年 | *s-nik ^H & *C-kok ^L | k ^h o ^t | k ^h u ³³ |
| 53.0 | new year | 新年 | 他__过来 | | k ^h o ^t xɿ ^t | k ^h u ³³ ɕi ³³ |
| 53.1 | new year | 新年 | 他__过来 | | k ^h o ^t xɿ ^t | k ^h u ³³ ɕi ³³ |
| 54.0 | this year | 今年 | 他__过来 | | tʃ ^h i ² ni ^H | tɕi ⁵⁵ k ^h u ³³ |
| 55.0 | last year | 去年 | 他__过来 | | a ² ni ^H | mi ⁵⁵ k ^h u ³³ |
| 56.0 | year before last | 前年 | 他__过来 | | ʃi ^H ni ^H | su ³³ mi ⁵⁵ k ^h u ³³ |
| 57.0 | three years ago | 大前年 | 他__过来 | | ʃi ^H ʔu ² ni ^H | |
| 58.0 | four years ago | 四年前 | 他__过来 | | a ² ʔu ² ni ^H | |
| 59.0 | next year | 明年 | 他__过来 | | ʔna ² he ^t | naŋ ²¹ k ^h u ³³ |
| 60.0 | year after next | 后年 | 他__过来 | | na(ŋ) ¹ ni ^H | nəŋ ⁵⁵ k ^h u ³³ |
| 61.0 | three years from now | 大后年 | 他__过来 | | na(ŋ) ¹ ʔu ² ni ^H | p ^h i ⁵⁵ k ^h u ³³ |
| 62.0 | four years from now | 四年后 | 他__过来 | | | pi ²¹ k ^h u ³³ ka ³³ nəŋ ⁵⁵ |
| 63.0 | daytime | 白天 | 他__过来 | | | mi ⁵⁵ kəŋ ⁵⁵ |
| 64.0 | dawn | 黎明 | 他__过来 | *C-nak ^L | | mi ²¹ na ²¹ ma ³³ |
| 65.0 | morning (early) | 早晨 | 他__过来 | *ʃaw ² | da ² ne ^t | ma ²¹ se ²¹ |
| 66.0 | noon | 中午 | 他__过来 | | dza ¹ dʒi ² dza ² | |
| 67.0 | afternoon | 下午 | 他__过来 | *(C)-kut ^L /ʰ, ʔk ^w ut ^t | a ¹ mo ² k ^h i ^t | |
| 68.0 | dusk/evening | 黄昏 | 他__过来 | *(C)-kut ^L /ʰ, ʔk ^w ut ^t | a ¹ mo ² yi ¹ | mə ²¹ ma ²¹ tɕ ^h i ³³ |
| 69.0 | night(time) | 夜(里)/黑夜 | 他__过来 | | mo ² k ^h i ^t se ¹ | məŋ ³³ tɕ ^h e ³³ |
| 70.0 | this evening | 今晚 | 他__过来 | *ʔ-kut ^L | i ² mi ¹ | jin ³³ tɕ ^h e ³³ , zɿ ²¹ ni ³³ tɕ ^h e ³³ |
| 71.0 | this morning | 今早 | 他__过来 | | i ² sy ¹ ny ¹ | je ³³ na ³¹ , zɿ ³³ na ³¹ |
| 72.0 | time | 时间 | 等了很长时间 | *[jam] | t ^h a ² | i ³³ t ^h u ²¹ |
| 73.0 | cow | 牛 | 他家有三口__ | *nwa ² | a ¹ ni ² | ŋ ²¹ |
| 74.0 | buffalo (water) | 水牛 | 他家有三口__ | *o ² & *ŋya ² | yo ¹ ni ² | ɤə ³³ ni ²¹ |
| 75.0 | field cow | 黄牛 | 他家有三口__ | *ʔ-myaŋ ¹ & *nwa ² | a ¹ ni ² ʃe ¹ | ŋ ²¹ ni ⁵⁵ |
| 76.0 | horse | 马 | 他家有三口__ | *mraŋ ¹ | a ¹ mju ² | mə ²¹ tu ²¹ |
| 77.0 | pig | 猪 | 他家有三口__ | *wak ^L | a ¹ ve ^t | va ³¹ |
| 78.0 | sow | 母猪 | 他家有三口__ | | a ¹ ve ^t ma ³ | va ³¹ ma ³³ |
| 79.0 | piglet | 小猪 | 他家有三口__ | | a ¹ ve ^t za ² | va ³¹ ja ²¹ |
| 80.0 | boar | 公猪 | 他家有三口__ | | a ¹ ve ^t pa ^t | va ³¹ pa ³³ |
| 81.0 | boar (wild) | 野猪 | 他家有三口__ | | a ¹ ve ^t kaŋ ² | va ³¹ ɤə ²¹ |
| 82.0 | goat | 山羊 | 他家有三口__ | *(k)-cit ^L | a ¹ tʃ ^h i ^t | tɕ ^h i ³³ |
| 83.0 | ram | 公羊 | 他家有三口__ | | a ¹ tʃ ^h i ^t pa ^t | tɕ ^h i ³³ pa ³³ |
| 84.0 | sheep | 绵羊 | 他家有三口__ | *ʒo ¹ | a ¹ ʒaŋ ¹ | |
| 85.0 | dog | 狗 | 他家有三口__ | *kwe ² | a ¹ k ^h i ² | k ^h ə ³³ |
| 86.0 | cat | 猫 | 他家有三口__ | *ni ¹ & *mi ¹ | a ¹ ne ¹ | |
| 86.1 | cat | 猫 | 他家有三口__ | *ni ¹ & *mi ¹ | a ¹ mi ¹ | ma ³³ mi ⁵⁵ |

| | | | | | | |
|-------|------------------|---------|-------|--|---|---|
| 87.0 | rabbit | 兔子 | 他家有三只 | *taŋ ² loŋ ^{2/1} | hɛ ^H h ^h a ³ la ³ | ka ³³ tu ²¹ |
| 88.0 | dragon | 龙 | 山上有三条 | | lu ² | məŋ ³³ |
| 89.0 | animal | 动物 | 山上有三只 | *zan/zaw/zan ² | a ¹ dze ² | pə ²¹ pe ⁵⁵ |
| 90.0 | wild animal | 野兽 | 山上有三只 | | dze ² kaŋ ² | |
| 91.0 | bear | 熊 | 山上有三只 | *k-d-wam ¹ | a ² yy ¹ | sa ³³ ju ³³ |
| 92.0 | tiger | 老虎 | 山上有三只 | *k-la ² | la ² pa ¹ | k ^h a ⁵⁵ la ²¹ |
| 93.0 | leopard; panther | 豹 | 山上有三只 | *k-zikL | zi ¹ | k ^h a ⁵⁵ la ²¹ |
| 94.0 | wolf | 狼 | 山上有三只 | | ve ¹ | |
| 95.0 | monkey | 猴子 | 山上有三只 | *myok ¹ | mjo ¹ | mɔ ³¹ |
| 96.0 | otter | 水獭 | 水里有三只 | *ʃ-/ʔp-yam ¹ | ʃy ¹ | ŋ ²¹ ka ³³ ma ⁵⁵ mi ⁵⁵ |
| 97.0 | weasel | 黄鼠狼 | 山上有三个 | | hɛ ^H la ² pa ¹ | |
| 98.0 | pangolin | 穿山甲 | 山上有三只 | *krap ^H | t ^h aŋ ² k ^h je ² k ^h y ^H | |
| 99.0 | muntjak deer | 麂子 / 赤鹿 | 山上有三只 | *kye ¹ | t ^h i ¹ | sa ³³ tɕ ^h i ⁵⁵ |
| 100.0 | sambar deer | 水鹿/黑鹿 | 山上有三只 | *(k)-tsat ¹ | ts ^h e ¹ | |
| 101.0 | porcupine | 豪猪/箭猪 | 山上有三只 | *ʔ-plu ² | pu ¹ | fu ⁵⁵ k ^h a ³³ |
| 102.0 | rat; mouse | 老鼠 | 他家有三只 | *(k)-rwak ^H | hɛ ^H | u ⁵⁵ sa ³³ |
| 103.0 | squirrel | 松鼠 | 树上有三只 | *tok ^H | | u ⁵⁵ sa ³³ pi ²¹ la ³³ ku ³³ |
| 104.0 | chicken | 鸡 | 他家有三只 | *k-rak ^H | a ¹ ye ^H | za ³³ |
| 105.0 | rooster | 公鸡 | 他家有三只 | *po ¹ | a ¹ ye ^H p ^h o ¹ pa ¹ | za ³³ p ^h u ⁵⁵ ku ³³ |
| 106.0 | hen | 母鸡 | 他家有三只 | | a ¹ ye ^H ma ³ ko ^H | za ³³ ma ³³ ke ⁵⁵ |
| 107.0 | duck | 鸭子 | 他家有三只 | *ʔ-bay ² & *gap ¹ | a ¹ be ² | a ²¹ pi ³³ |
| 108.0 | goose | 鹅 | 他家有三只 | | a ¹ ŋwa ¹ | |
| 109.0 | bird | 鸟 | 树上有三只 | *s-nyak ^H | ŋja ^H | k ^h a ¹⁵⁵ ja ²¹ |
| 110.0 | swallow | 燕子 | 树上有三只 | | py ^H | |
| 111.0 | sparrow | 麻雀 | 树上有三只 | *m-ja ¹ | dʒa ¹ mu ² | |
| 112.0 | crow | 乌鸦 | 树上有三只 | *ak ¹ /a ³ | a ¹ ne ^H | a ⁵⁵ na ³³ |
| 113.0 | magpie | 喜鹊 | 树上有三只 | | a ¹ tʃe ¹ | k ^h a ⁵⁵ pa ²¹ |
| 114.0 | dove; pigeon | 鸽 | 树上有三只 | *k-ʔ-ko ² & *k-m-gu ² | a ² pi ¹ mu ² | |
| 115.0 | pheasant | 野鸟/野鸡 | 山上有三只 | | a ¹ ʃu ² | za ³³ k ^h a ³³ |
| 116.0 | eagle; hawk | 老鹰 | 树上有三只 | *[k]-dzwan ¹ | a ¹ dzy ¹ | za ³³ ta ²¹ |
| 117.0 | owl | 猫头鹰 | 树上有三只 | | gy ³ ly ² | |
| 118.0 | bat | 蝙蝠 | 树上有三只 | *bo ¹ no/na ^{3/2} | a ¹ py ^H ma ³ | |
| 119.0 | frog | 青蛙 | 地上有三只 | *k-ʔ-pa ² | ʔmu ¹ pa ¹ | k ^h a ³³ pa ³³ |
| 120.0 | toad | 癞蛤蟆 | 地上有三只 | *ʔ-brut | ʔmu ¹ pa ¹ | k ^h a ³³ pa ³³ na ⁵⁵ |
| 121.0 | fish | 鱼 | 水里有三条 | *ŋa ² | ʔŋa ² | ŋa ²¹ sa ³³ |
| 122.0 | snake | 蛇 | 地上有三条 | *m-rwe ¹ & *laŋ ¹ | la ¹ ʃe ¹ | pe ³³ |
| 123.0 | lizard | 蜥蜴 / 壁虎 | 他家有三只 | | | |
| 124.0 | leech | 蚂蟥/水蛭 | 水里有三条 | *k-rwat ¹ | yi ¹ ve ¹ | ne ³¹ |
| 125.0 | spider | 蜘蛛 | 树上有三只 | *baŋ ³ & m-gu ¹ /m-ga ² | | |
| 126.0 | insect | 昆虫 | 地上有三只 | *bi/bo ² | bo ² | pə ²¹ pə ⁵⁵ tɕ ^h i ³³ |
| 127.0 | ant | 蚂蚁 | 地上有三只 | *p-rwak ^H | bo ² ʒo ^H | pə ²¹ ju ³³ |
| 128.0 | termite | 白蚁 | 地上有三只 | *k-ru ² | a ² ʒu ² | |
| 129.0 | mantis | 螳螂 | 地上有三只 | | a ¹ t ^h i ¹ lo ¹ | |
| 130.0 | roach | 蟑螂 | 地上有三只 | *ʔ-pi/ʔ-pya ³ | | tsue ⁵⁵ sa ³³ ma ³³ |
| 131.0 | fly | 苍蝇 | 他家有三只 | *C-brut ¹ | yaŋ ¹ ʃe ¹ | za ³³ məŋ ³³ |
| 132.0 | honeybee | 蜜蜂 | 树上有三只 | *bya ² | bja ² | pa ²¹ |
| 133.0 | wasp | 黄蜂 | 树上有三只 | | bja ² tu ¹ | |
| 134.0 | mosquito | 蚊子 | 他家有三只 | | yaŋ ¹ bi ¹ | za ³³ məŋ ²¹ tɕ ^h e ³³ |
| 135.0 | dragonfly | 蜻蜓 | 树上有三只 | | dʒe ² m ² k ^h a ³ la ³ | |
| 135.0 | dragonfly | 蜻蜓 | 树上有三只 | | dʒe ² m ² k ^h a ³ la ³ | ma ³³ la ³³ ku ³³ |

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|-------|------------------|---------|---------|--|--|---|
| 136.0 | butterfly | 蝴蝶 | 树上有三只__ | *C-lu ³ | bo ² ʔlu ³ | a ⁵⁵ pu ²¹ i ⁵⁵ ti ⁵⁵ |
| 137.0 | cricket | 蟋蟀 | 地上有三只__ | | bi ¹ tʃe ¹ | a ³³ tsoŋ ²¹ tsa ³³ tsɿ ⁵⁵ |
| 138.0 | grasshopper | 蚱蜢 | 地上有三只__ | | tʃe ¹ pu ¹ | a ³³ tsoŋ ²¹ tsa ³³ tsɿ ⁵⁵ i ⁵⁵ 33nəŋ ⁵⁵ |
| 139.0 | flea | 跳蚤 | 地上有三只__ | | k ^h i ² xe ¹ | kə ³³ çi ⁵⁵ |
| 140.0 | louse (clothing) | 虱子(衣上) | 地上有三只__ | *xan ¹ | xe ¹ | çi ⁵⁵ tʃe ³³ |
| 141.0 | centipede | 蜈蚣 | 地上有三只__ | | ʃa ¹ xe ¹ | pə ²¹ çi ⁵⁵ |
| 142.0 | earthworm | 蚯蚓 | 地上有三条__ | *bu ^{1/2} di ¹ | a ¹ di ¹ | pi ²¹ ti ⁵⁵ |
| 143.0 | worm | 虫 | 地上有三只__ | *bu ^{1/2} di ¹ | bo ² di ¹ | |
| 144.0 | caterpillar | 毛虫 | 地上有三条__ | | | |
| 145.0 | maggot | 蛆/蛆虫 | 地上有三条__ | | ho ^H | tʃ ^h i ³³ pi ⁵⁵ |
| 146.0 | nest | 窝(鸟窝) | 树上有三个__ | | k ^h i ¹ | pəŋ ²¹ |
| 147.0 | egg | 蛋 | 桌上有三个__ | *u ³ | fu ³ | ɤ ³³ |
| 148.0 | wing | 翅膀 | 三只 | *doŋ ¹ | du ¹ le ¹ | təŋ ³³ na ²¹ |
| 149.0 | claw; talon | 爪 | 三只 | | k ^h i ¹ kji ³ | k ^h ə ⁵⁵ çi ³³ |
| 150.0 | hoof | 蹄 | 三个 | | k ^h i ¹ by ¹ | k ^h ə ⁵⁵ |
| 151.0 | horn | 角 | 三个 | *kro ¹ | k ^h o ¹ | k ^h u ⁵⁵ |
| 152.0 | tail | 尾巴 | 三条 | *daŋ ¹ ʔ-mri ² | ʔme ² | ta ³³ k ^h əŋ ⁵⁵ |
| 153.0 | tusk | 长牙 | 三个 | *ʔ-cway ¹ | dʒe ¹ | su ⁵⁵ tʃi ⁵⁵ |
| 154.0 | (cocks)comb | 冠(鸡冠) | 三个 | | kjo ¹ | pa ²¹ ta ³³ |
| 155.0 | tree | 树 | 他家有三棵__ | *sik ^H & *ban ² & *dzin ¹ | si ^H dze ¹ | sɿ ⁵⁵ tsəŋ ⁵⁵ |
| 156.0 | pine tree | 松树 | 他家有三棵__ | *C-grip ¹ & *taŋ ² & *ʔ-man ² & *jun ³ | t ^h aŋ ² dze ¹ | mo ²¹ su ³³ tsəŋ ³³ |
| 157.0 | fir tree | 杉树 | 他家有三棵__ | | ʔŋy ¹ dze ¹ | |
| 158.0 | willow tree | 柳树 | 他家有三棵__ | | ɣi ¹ mi ² dze ¹ | lue ²¹ tsəŋ ³³ |
| 159.0 | bamboo | 竹子 | 他家有三根__ | *wa ² & *ma ¹ | va ² | va ²¹ ma ³³ |
| 160.0 | bamboo shoot | 竹笋 | 他家有三根__ | *s-myet ^{L/H} | | va ²¹ mi ²¹ |
| 161.0 | wheat | 小麦 | 他家有三棵__ | ʃa ³ | ʃa ¹ | sa ⁵⁵ |
| 162.0 | buckwheat | 荞麦/荞子 | 他家有三棵__ | | ga ² | ko ²¹ ma ³³ sa ³³ |
| 163.0 | millet | 稷 | 他家有三棵__ | | ts ^h y ¹ | |
| 164.0 | barley | 大麦 | 他家有三棵__ | zi ¹ | zi ³ | |
| 165.0 | sorghum | 高粱 | 他家有三棵__ | | ʔlu ² | sa ⁵⁵ p ^h a ⁵⁵ tsəŋ ³³ |
| 166.0 | job's tears | 薏苡 | 他家有三棵__ | | na ² ban ² se ² | lo ²¹ ko ²¹ tsəŋ ³³ |
| 167.0 | corn | 玉米 | 他家有三棵__ | *ʃa ¹ & *C-kok ^L | ʃa ¹ mi ² | sa ⁵⁵ ma ³³ |
| 168.0 | ear of grain | 穗子 | 他家有三棵__ | | ʔny ¹ | sa ⁵⁵ vi ⁵⁵ |
| 169.0 | peanut | 花生 | 桌上有三个__ | | loan | mi ⁵⁵ su ²¹ sɿ ³³ |
| 170.0 | walnut | 核桃 | 桌上有三个__ | | sa ² me ¹ | ko ⁵⁵ to ⁵⁵ sɿ ³³ |
| 171.0 | cotton | 棉花 | 他家有三棵__ | | sa ¹ la ² | sa ⁵⁵ la ⁵⁵ |
| 172.0 | ramie | 苧麻 | 他家有三棵__ | | dzi ² | |
| 173.0 | bean | 豆子 | 桌上有三个__ | *s-nok ^H & *ʔ-bay ² /at ^H | nu ^H | nie ³³ sɿ ³³ |
| 174.0 | melon | 瓜 | 桌上有三个__ | *pe ^{2/3} | p ^h y ² | ta ³³ k ^h u ³³ |
| 175.0 | gourd | 葫芦 | 桌上有三个__ | *(ʔə)-pu ² | p ^h y ² | a ⁵⁵ p ^h u ³³ |
| 176.0 | cucumber | 黄瓜 | 桌上有三个__ | | sa ² kje ² | sɿ ³³ k ^h u ³³ |
| 177.0 | eggplant | 茄子 | 桌上有三个__ | | ga ¹ zi ³ | ka ³³ tu ²¹ sɿ ³³ |
| 178.0 | vegetable | 蔬菜 | 他家有三种__ | | yaŋ ² tʃe ¹ | ko ²¹ pi ⁵⁵ |
| 179.0 | cabbage greens | 青菜 | 他家有三棵__ | *Craŋ ² | yaŋ ² | ko ³¹ pi ⁵⁵ nəŋ ⁵⁵ |
| 180.0 | radish | 萝卜 | 桌上有三个__ | | yaŋ ² tʃ ^h e ¹ | ko ²¹ ma ³³ p ^h u ⁵⁵ |
| 181.0 | garlic | 蒜 | 桌上有三个__ | *swan ^{1/2} | k ^h a ² sy ¹ | k ^h a ³³ çi ⁵⁵ |
| 182.0 | ginger | 姜 | 桌上有三个__ | | tʃ ^h aŋ ² | ts ^h ə ³³ |
| 183.0 | galangal | 高良姜(山奈) | 他家有三棵__ | | | pi ²¹ sɿ ³³ |

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|-------|----------------------|--------|---------|--|---|---|
| 184.0 | chili pepper | 辣椒 | 桌上有三个__ | *C-pat ¹ /pi ² | p ^h e ¹ | la ⁵⁵ p ^h i ⁵⁵ |
| 185.0 | fruit | 水果 | 桌上有三个__ | *si ² | se ² | i ⁵⁵ s ¹ ²¹ |
| 186.0 | peach | 桃子 | 桌上有三个__ | | sa ² vy ² | ci ³³ k ^h u ³³ s ¹ ³³ |
| 187.0 | persimmon | 柿子 | 桌上有三个__ | | mu ² be ¹ | s ¹ ²¹ po ³³ s ¹ ³³ |
| 188.0 | banana | 香蕉 | 桌上有三个__ | *b(y)aw ² & *s-ŋak ^H | ʔŋjaHbjo ² be ³ | k ^h a ⁵⁵ tɕəŋ ³³ s ¹ ³³ |
| 189.0 | taro | 芋头 | 桌上有三个__ | *ʔ-mun ¹ | a ¹ t ^h o ^H | |
| 189.1 | taro | 芋头 | 桌上有三个__ | *ʔ-mun ¹ | bi ² | pi ²¹ s ¹ ³³ |
| 190.0 | tobacco | 烟/烟草 | 他家有三棵__ | *[ja ¹] & *C-fuk ^L | | za ³³ xəŋ ²¹ |
| 191.0 | grass | 草 | 他家有三棵__ | *(C)-mruk ^L | f ⁱ ² by ^L | za ⁵⁵ mo ³¹ |
| 192.0 | thatch (cogon grass) | 茅草 | 他家有三棵__ | *ze ² | | tɕ ^h i ⁵⁵ k ^h əŋ ³³ |
| 193.0 | reed | 芦苇 | 他家有三棵__ | | | li ³³ ma ³³ |
| 194.0 | mushroom | 菌子 | 他家有三棵__ | *s-mo ¹ | mo ¹ | məŋ ⁵⁵ lu ⁵⁵ |
| 195.0 | seed | 种子 | 桌上有三粒__ | *yo ² & *je ³ *m-je ¹ /m-ge ³ & *mlik | f ⁱ ² kji ³ | zo ²¹ k ^h ə ³³ |
| 196.0 | root | 根 | 三根 | /g-lik ^L | | |
| 197.0 | stem; stalk | 茎 | 三根 | | dze ¹ | |
| 198.0 | leaf | 叶子 | 地上有三片__ | *C-pak ^L | p ^h e ^L | k ^h a ⁵⁵ p ^h a ³³ |
| 199.0 | sprout; bud | 芽(种子芽) | 地上有三棵__ | | b ⁱ ^H | s ¹ ⁵⁵ ka ³³ |
| 200.0 | flower | 花 | 地上有三朵__ | *k-wat ^H | ga ¹ lu ³ | sa ⁵⁵ vi ⁵⁵ |
| 201.0 | wood | 木 | 地上有三块__ | | si ^H da ¹ | |
| 202.0 | board | 板子 | 地上有三块__ | *C-m-bak L | pe ³ | ta ³¹ p ^h i ⁵⁵ |
| 203.0 | stick | 棍子 | 地上有三根__ | | ʔme ¹ tu ¹ | ta ⁵⁵ ku ²¹ |
| 204.0 | branch | 树枝 | 地上有三根__ | *C-gak ^L | si ^H ka ¹ le ^L | s ¹ ⁵⁵ tsəŋ ⁵⁵ la ²¹ |
| 205.0 | tree bark | 树皮 | 很厚 | *C-guk ^L | si ^H gi ¹ ko ^H | s ¹ ⁵⁵ tsəŋ ⁵⁵ kə ³³ |
| 206.0 | unhulled rice | 谷子(稻谷) | 桌上有三粒__ | *can ¹ | t ^h e ¹ se ² | t ^h a ²¹ k ^h a ⁵⁵ |
| 207.0 | rice (grains) | 米 | 桌上有三粒__ | *ʔ-gaw ³ /ok ^H | dza ²¹ k ^h a ¹ | t ^h a ²¹ p ^h u ⁵⁵ |
| 208.0 | cooked rice | 饭 | 桌上有三碗__ | *dza ¹ & *maj ² & *haj ² | dza ¹ | xəŋ ³³ |
| 209.0 | glutinous rice | 糯米 | 桌上有三碗__ | | t ^h e ¹ ja ² | tɕ ^h i ⁵⁵ nu ²¹ |
| 210.0 | rice seedling | 秧苗 | 他家有三棵__ | | ʔli ² | ko ³³ k ^h əŋ ³³ |
| 211.0 | rice hulls | 稻壳 | 地上有三堆__ | *pway ² | t ^h e ¹ p ^h e ² | ta ²¹ k ^h əŋ ³³ |
| 212.0 | chaff | 谷壳 | 地上有很多__ | *pway ² | ha ¹ kjo ² | |
| 213.0 | fruit peel | 果皮 | 地上有三块__ | | gi ¹ ko ^H | i ³³ kə ³³ |
| 214.0 | shell (egg, etc) | 皮/壳(蛋) | 地上有三个__ | | kjo ² | |
| 215.0 | thorn | 刺 | 地上有三根__ | *cu ² & *g(y)oŋ ³ | dzy ² | na ³³ ta ²¹ |
| 216.0 | moss | 苔(青苔) | 地上有很多__ | | yi ¹ me ² | |
| 217.0 | fern | 蕨草 | 地上有很多__ | *m-da ¹ C-kra ¹ | da ¹ van ² | ta ⁵⁵ ku ²¹ |
| 218.0 | yeast | 酵母 | 地上有很多__ | *m-di ² | dy ² | |
| 219.0 | ashes | 灰(草木灰) | 地上有三堆__ | *C-kap ^L C-la ¹ | k ^h u ² ts ^h a ¹ | k ^h a ³³ i ⁵⁵ |
| 220.0 | body | 身体 | 他的__很壮 | | gu ¹ ts ^h ʔ ^{2/3} | |
| 221.0 | head | 头 | 他的__很大 | *u ² & *ʔ-du ² & *ʔ-koŋ ² | nu ² dy ¹ | |
| 221.1 | head | 头 | 他的__很大 | *u ² & *ʔ-du ² & *ʔ-koŋ ² | nu ² kan ² | la ⁵⁵ ku ⁵⁵ |
| 222.0 | brains | 脑髓 | 他的__很好 | *(C)-nok ^L | ʔnu ¹ | ne ³¹ ku ⁵⁵ |
| 223.0 | forehead | 额头 | 他的__很大 | | ʔnu ¹ kan ¹ | na ⁵⁵ ku ⁵⁵ |
| 224.0 | head hair | 头发 | 他的__很长 | *ʔ-tsam ¹ kriŋ ¹ | ŋ ² ts ^h y ¹ | t ^h a ⁵⁵ k ^h əŋ ⁵⁵ |
| 225.0 | braid | 辫子 | 三条 | | ŋ ² ts ^h y ¹ p ^h e ² | t ^h a ³³ k ^h əŋ ³³ pi ²¹ |
| 226.0 | face | 脸 | 他的__很好 | *pyu ² | p ^h jaŋ ² ʔmjeH | ma ³³ p ^h u ³³ |
| 227.0 | eyebrow | 眉毛 | 他的__很好 | | ʔmjeHts ^h am ¹ | ma ³³ ts ¹ ³³ məŋ ³³ |
| 228.0 | eye | 眼睛 | 他的__很好 | *(C)-myak ^H | ʔmjeHse ² | ma ³³ ts ¹ ³³ |
| 229.0 | eyeball | 眼球 | 他的__很大 | | ʔmjeHse ² | ma ³³ ts ¹ ³³ s ¹ ²¹ |
| 230.0 | tears | 眼泪 | 滴 | | ʔmjeH(bi ¹)yi ¹ | ma ³³ ʔə ⁵⁵ |

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|-------|-----------------|-------|--------|---|--|--|
| 231.0 | nose | 鼻子 | 他的__很大 | sna ² kaŋ ² | ʔna ¹ k ^h aŋ ^{2/3} | na ⁵⁵ mi ⁵⁵ |
| 232.0 | ear | 耳朵 | 他的__很好 | ʔna ² ʔbaŋ ¹ | ʔna ² paŋ ¹ | la ³³ pu ³³ |
| 233.0 | cheeks | 颊 | 他的__很大 | *ba ² | ba ² | pa ²¹ ma ³³ |
| 234.0 | mouth | 嘴 | 他的__很大 | *(C)me ² /mok ^L *(C)me ² /mokL - re ¹ & *C-gukL | k ^h a ² pɛ ^L mi ² la ³ | mɛ ³¹ ni ³³ kə ³³ |
| 235.0 | lips | 嘴唇 | 他的__很好 | *C-gukL | mi ² la ³ | mɛ ³¹ ni ³³ kə ³³ |
| 236.0 | teeth | 牙齿 | 他有三个__ | *swa ² & *ʔ-cway ¹ | sy ² | su ³³ tɕi ³³ |
| 237.0 | front teeth | 前牙 | 他有三个__ | | | kao ³³ a ⁵⁵ su ³³ tsɿ ³³ |
| 238.0 | back teeth | 后牙 | 他有三个__ | | | su ³³ tɕi ³³ ka ²¹ nə ³³ |
| 239.0 | gums | 齿龈 | 他的__很好 | *ʔ-ko ³ & *diŋ ² | | k ^h ə ³³ tɕi ^h ³³ |
| 240.0 | tongue | 舌头 | 他的__很好 | *ʔ-l(y)a ¹ | ʔla ¹ | la ⁵⁵ li ⁵⁵ |
| 241.0 | beard; mustache | 胡子 | 他的__很长 | *ʔ-tsit ^H | ts ^h i ^H | mi ²¹ məŋ ³³ |
| 242.0 | chin | 下巴 | 他的__很长 | *ʔ-pi ¹ & *doŋ ² | mu ² pi ¹ daŋ ¹ | paŋ ³³ ku ³³ |
| 243.0 | neck | 脖子 | 他的__很长 | *liŋ ¹ /*ʔ-kroŋ ² | li ¹ kaŋ ² tsi ³ | lu ³³ pi ²¹ |
| 244.0 | throat | 喉咙 | 他的__很好 | *ʔ-kroŋ ² & *byiŋ ² | ly ¹ h ^y ³ | |
| 245.0 | shoulder | 肩膀 | 他的__很好 | *p/ʔ-rum ² | p ^h a ¹ k ^h e ² dzɿ ³ | p ^h i ²¹ ma ³³ |
| 246.0 | joint | 关节 | 他的__很好 | | vu ² tsi ^L | la ³¹ tɕi ³³ |
| 247.0 | hand/arm | 手·胳膊 | 他的__很粗 | *lak ^L | le ^L | la ³¹ |
| 248.0 | hand | 手 | 他的__很大 | | | la ³¹ pa ³³ |
| 249.0 | arm | 手臂 | 他的__很粗 | | | la ³¹ tu ²¹ |
| 250.0 | palm (of hand) | 手掌 | 他的__很好 | *k-wa ² | | |
| 251.0 | wrist | 手腕 | 他的__很好 | *C-dzik ^L | tsi ^L | la ³¹ tɕi ³³ , la ³¹ sɿ ³³ |
| 252.0 | elbow | 肘 | 他的__很硬 | *C-dzik ^L | tsi ^L | la ³¹ i ²¹ sɿ ³³ |
| 253.0 | finger | 指/手指 | 他的__很长 | *s-po ¹ | ʔni ¹ | la ³¹ ni ⁵⁵ |
| 254.0 | index finger | 食指 | 他的__很好 | | | la ³¹ ŋ ²¹ ma ³³ |
| 255.0 | pinkie finger | 小手指 | 他的__很好 | | | |
| 256.0 | thumb | 拇指 | 他的__很好 | *C-ma ³ | ma ³ | la ³¹ ma ³³ |
| 257.0 | finger nail | 指甲 | 他的__很好 | *siŋ ² | le ¹ ku ² se ² | la ³¹ sɿ ³³ |
| 258.0 | buttocks | 屁股 | 他的__很大 | *daŋ ^{1/2} | daŋ ¹ | tu ³³ ma ³³ |
| 259.0 | hip | 臀部 | 他的__很大 | | | tso ³³ ma ³³ tɕi ³³ |
| 260.0 | foot/leg | 脚·腿 | 他的__很好 | *kre ¹ | k ^h i ¹ p ^h e ^H | k ^h ə ⁵⁵ p ^h a ²¹ tu ²¹ |
| 261.0 | leg | 腿 | 他的__很长 | | k ^h i ¹ | |
| 262.0 | foot | 脚 | 他的__很好 | | | k ^h ə ⁵⁵ pa ³³ |
| 263.0 | thigh | 大腿 | 他的__很粗 | *(j)-boŋ ² | | p ^h a ²¹ tu ²¹ |
| 264.0 | calf (of leg) | 小腿 | 他的__很好 | *bay ¹ | | k ^h ə ⁵⁵ tɕi ²¹ pi ³³ |
| 265.0 | sole (of foot) | 脚底 | 他的__很大 | *taw(?) & *C-pay ^{2/1} | | k ^h ə ⁵⁵ pa ³³ |
| 266.0 | heel | 脚后跟 | 他的__很好 | *ni ² | | k ^h ə ⁵⁵ tɕi ³³ ku ²¹ |
| 267.0 | ankle (joint) | 踝 | 他的__很大 | *kre ¹ (C)-myak ^H | k ^h i ¹ ʔmjeH | k ^h ə ⁵⁵ tɕi ³³ tɕi ³³ |
| 268.0 | knee | 膝/膝盖 | 他的__很好 | *du ³ | | k ^h ə ⁵⁵ tɕi ³³ ku ³³ |
| 269.0 | toe | 趾/脚趾 | 他的__很大 | | | |
| 270.0 | big toe | 大趾 | 他的__很大 | | | k ^h ə ⁵⁵ ma ³³ ʔə ³³ |
| 271.0 | chest | 胸脯 | 他的__很好 | *koŋ ² | | la ²¹ p ^h i ³³ pa ³³ |
| 272.0 | back | 脊背 | 他的__很好 | | ka(ŋ) ² ta(ŋ) ³ si ³ | la ²¹ p ^h i ³³ sɿ ³³ |
| 273.0 | breast | 乳房 | | *loŋ ² & no ³ | a ¹ tɕi ^H be ^H | |
| 274.0 | armpit | 腋下/腋窝 | 他的__很好 | *ʔ-ga ³ & *li ¹ | ka ² | k ^h o ³³ |
| 275.0 | skin | 皮肤 | 他的__很好 | *re ¹ & *C-guk ^L | gi ¹ ko ^H | i ³³ kə ³³ |
| 276.0 | bone | 骨头 | 他的__很好 | *ʃə-ro ² | yo ² | i ³³ ku ³³ |
| 277.0 | rib | 肋骨 | 他的__很好 | | ʔny ¹ | |
| 278.0 | stomach | 胃 | 他的__很大 | *(j)-wut ^L | he ^L | wei ⁵³ |
| 279.0 | belly | 肚子/腹部 | 他的__很大 | *wam ² | he ¹ ma ³ dzɿ ³ | a ²¹ mo ³³ |

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|-------|---------------------|--------|----------------------|--|--|--|
| 280.0 | navel | 脐 (肚脐) | 他的__很大 | *(C-k)yak ^H & *ʔ-don ¹ & *Ck-ru ² | tʃ ^h e ^H du ^{1/2} | k ^h a ⁵⁵ pi ³³ |
| 281.0 | waist | 腰 | 他的__很粗 | *gyaw ² /ap ¹ | dʒo ¹ | tso ²¹ ma ³³ |
| 282.0 | kidney | 肾/腰子 | 他的__很好 | *ʔ-bin ¹ | di ¹ | tso ²¹ ma ³³ sɿ ³³ |
| 283.0 | intestines | 肠子 | 他的__很好 | *ʔu ¹ | he ¹ vu ¹ | wu ³³ ti ³³ |
| 284.0 | heart | 心 | 他的__很好 | *ni ³ | ʔni ^H ma ³ | aŋ ⁵⁵ ma ³³ çi ³³ |
| 285.0 | liver | 肝 | 他的__很好 | *(ʃ)-sin ² | se ¹ tsɛ ¹ | i ³³ ts ^h aŋ ³³ |
| 286.0 | lung | 肺/肺脏 | 他的__很好 | *(ʃ)-pap ¹ tsi ² /tsut ^H | ts ^h e ² ma ³ p ^h u ² | i ³³ p ^h o ³³ |
| 287.0 | bladder? | 膀胱 | 他的__很好 | | ts ^h i ² p ^h u ² | p ^h aŋ ²¹ g ^w aŋ ³³ |
| 288.0 | gallbladder | 胆/苦胆 | 他的__很好 | | ki ¹ | ts ^h aŋ ³³ p ^h o ³³ |
| 289.0 | bile | 胆汁 | 不好 | *C-ʔ-kre ¹ | ki ¹ ʔi ¹ | ts ^h aŋ ³³ p ^h o ³³ i ³³ ʔa ³³ |
| 290.0 | sweat | 汗 | 很多 | *ʔ-krwe ² | kje ² | kə ³³ ts ^h a ³³ |
| 291.0 | blood | 血 | 他的很好 | *swe ² | si ² | çi ³³ |
| 292.0 | snot | 鼻涕/粘液 | 不好 | *s-nap ^L ; | ʔny ¹ | |
| 293.0 | phlegm | 痰 | 不好 | | ti ² k ^h a ² | tsa ³³ pi ³³ |
| 294.0 | saliva | 口水 | 不好 | *kan ² | ti ² ʔi ¹ | tsa ³³ pi ³³ ʔa ³³ |
| 295.0 | milk | 奶 | 很好 | *co ¹ & no ³ | a ¹ tʃi ^H | tso ³³ pi ³³ ʔa ³³ |
| 296.0 | excrement | 屎 | 三堆 | *k(l)e ² | k ^h ji ² | ts ^h ɿ ³³ |
| 297.0 | urine | 尿 | 不好 | *m-ji ² & ʃi ² | zi ² | ŋ ²¹ ts ^h ɿ ⁵⁵ |
| 298.0 | pus | 脓 | 不好 | *m-bliŋ ¹ | bi ¹ | pi ³³ tu ²¹ |
| 299.0 | sore (wound) | 疮 | 三个 | | ge ² | |
| 300.0 | body hair; feathers | 毛(翎毛) | | *ʔ-mwe ³ | ts ^h y ¹ | məŋ ³³ |
| 301.0 | penis | 阴茎 | | *(n)-li ² | he ² | ŋ ³³ ku ³³ |
| 302.0 | vulva | 女阴 | | *bat ^L | tu ² | to ²¹ pi ²¹ tçi ²¹ |
| 303.0 | anus | 肛门 | | | | ts ^h ɿ ²¹ k ^h aŋ ⁵⁵ |
| 304.0 | tendon | 筋/腱 | | *(ʃ)-gru ² | gju ² tʃa ³ | i ³³ ku ²¹ |
| 305.0 | breath | 呼吸 | | *C-sak ^L | se ¹ xa ¹ | i ³³ sa ³³ sa ³³ |
| 306.0 | strength | 力气 | | *ra ² /roŋ ¹ | ya ² | i ³³ sa ³³ |
| 307.0 | person | 人 | 他家有三个__ | *tsaŋ ¹ | ts ^h aŋ ¹ | ts ^h u ⁵⁵ |
| 308.0 | male | 男人 | 他家有三个__ | *g-yok ^L | ʒo ¹ | za ²¹ k ^h a ³³ |
| 309.0 | female | 女人 | 他家有三个__ | *C-mi ² | za ² me ² | mi ²¹ ni ³³ |
| 310.0 | Autonym | (自称) | 我是彝族/ 腊罗巴人 | *Ngwi | la ² lo ^H pa ^L | la ²¹ wu ²¹ |
| 311.0 | Han Chinese | 汉族 | 他是汉族 他们是彝族/ 傩人 | *hyak ^H /hay ² | he ¹ /ha ¹ pa ¹ | a ²¹ xa ³³ |
| 312.0 | Yi/Lo | 彝族 | | | | i ²¹ ts ^h u ⁵⁵ |
| 313.0 | Bai | 白族 | 他们是 白族 | | | |
| 314.0 | Dai | 傣族 | 他是傣族 | | | tai ²¹ ts ^h u ²¹ ts ^h u ⁵⁵ |
| 315.0 | child | 儿童 | 他家有三个__ | | a ¹ ne ¹ za ² | za ²¹ ni ³³ |
| 316.0 | elderly person | 老人 | 他家有三个__ | | ts ^h aŋ ¹ maŋ ² | ts ^h u ⁵⁵ ma ³³ |
| 317.0 | older man | 老男人 | 他家有三个__ | | a ² pa ¹ | ts ^h u ⁵⁵ mu ²¹ ku ³³ |
| 318.0 | older woman | 老女人 | 他家有三个__ | | a ² p ^h i ² | ts ^h u ⁵⁵ ma ³³ |
| 319.0 | boy | 青年男人 | 他家有三个__ | | su ¹ le ¹ pa ^L | za ²¹ k ^h a ³³ |
| 320.0 | girl | 青年女人 | 他家有三个__ | | su ¹ le ¹ ma ³ | za ²¹ mi ²¹ |
| 321.0 | friend | 朋友 | 他有三个__ | *kyaŋ ² | | za ²¹ ts ^h u ²¹ |
| 322.0 | enemy | 敌人 | 他有三个__ | | | ts ^h u ⁵⁵ k ^h u ³³ |
| 323.0 | host | 主人 | 他有三个__ | | si ² p ^h a ² | i ⁵⁵ p ^h ai ³³ |
| 324.0 | guest | 客人 | 他有三个__ | | se ¹ ʔe ³ | ta ²¹ ni ³³ |
| 325.0 | lame person | 瘸子/跛子 | 村里有三个__ | | k ^h i ¹ pe ³ | k ^h a ⁵⁵ tu ³³ |
| 326.0 | official | 官 | 村里有三个__ | | dzi ^{2/3} | tsu ²¹ ma ³³ |
| 327.0 | high official | 大官 | 村里有三个__ | | dzi ^{2/3} | |

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| 328.0 | low official | 小官 | 村里有三个__ | | dzi ^{2/3} | tsu ²¹ ma ³³ ji ⁵⁵ |
| 329.0 | emperor | 皇帝 | 三个 | | vu ¹ te ² | |
| 330.0 | doctor | 医生 | 村里有三个__ | *maw ² | | |
| 331.0 | blacksmith | 铁匠/锻工 | 村里有三个__ | *iron beater ¹ & [hlek ¹] | | su ⁵⁵ ti ²¹ ts ^h u ⁵⁵ |
| 332.0 | soldier | 兵/士兵 | 村里有三个__ | *C-mak ^L | me ⁴ | |
| 333.0 | bride | 新娘 | 村里有三个__ | | | za ²¹ mi ²¹ ci ⁵⁵ |
| 334.0 | groom | 新郎 | 村里有三个__ | | | za ²¹ k ^h a ³³ i ³³ ci ³³ |
| 335.0 | widow | 寡妇 | 村里有三个__ | *mum ² co ² | me ² tʃ ^h u ² ma ³ | |
| 336.0 | widower | 寡郎 | 村里有三个__ | | me ² tʃ ^h u ² pa ¹ | |
| 337.0 | blind (person) | 盲; 瞎子 | 村里有三个__ | *C-juk ¹ /u ¹ | ?mje ^H te ¹ | |
| 338.0 | deaf (person) | 聋(子) | 村里有三个__ | *baŋ ¹ | ?na ² baŋ ² | za ²¹ ka ³³ ka ³³ |
| 339.0 | father's father | 爷爷 | 他的__很好 | *ʔəpo ² | a ² pa ¹ | a ⁵⁵ pu ²¹ |
| 340.0 | father's mother | 奶奶 | 他的__很好 | *ʔəpi ¹ | a ² ne ³ | a ⁵⁵ za ²¹ |
| 341.0 | GP father | 祖父 | 他的__很好 | | a ¹ tsu ² | a ³³ pu ²¹ ma ²¹ |
| 342.0 | GP mother | 祖母 | 他的__很好 | | a ¹ maŋ ² /t ^h e ¹ | a ³³ pu ²¹ za ²¹ |
| 343.0 | father | 父亲 | 他的__很好 | *ʔəba ² | a ¹ ba ² | a ⁵⁵ pa ²¹ , a ⁵⁵ ti ³³ |
| 344.0 | mother | 母亲 | 他的__很好 | *ʔəC-ma ³ & ʔəyan ³ | a ¹ ma ³ | a ²¹ ma ³³ |
| 345.0 | wife's father | 岳父 | 他的__很好 | | ʒo ¹ p ^h a ² | |
| 346.0 | wife's mother | 岳母 | 他的__很好 | | ʒo ¹ ma ³ | |
| 347.0 | older brother | 哥哥 | 他有三个__ | *ʔəwik ^L go ¹ | a ¹ ka ¹ | a ⁵⁵ ku ³³ |
| 348.0 | older sister | 姐姐 | 他有三个__ | *ʔəwik ^L C-ma ³ & ʔətsi ³ | a ¹ tse ² | a ³³ tci ²¹ |
| 349.0 | younger brother of a male | 弟弟 | 他有三个__ | *ʔəpi ¹ | je ¹ za ² | a ³³ ki ⁵⁵ |
| 350.0 | younger sister of a male | 妹妹 | 他有三个__ | *ʔəs-nam ¹ /pi ¹ ma ³ | ?ny ² ma ³ | a ⁵⁵ ki ⁵⁵ |
| 351.0 | siblings | 兄弟姐妹 | 他有三个__ | | | a ⁵⁵ ki ⁵⁵ |
| 352.0 | oldest sibling | 老大 | 他的__很好 | | | |
| 353.0 | second sibling | 老二 | 他的__很好 | | | |
| 354.0 | third sibling | 老三 | 他的__很好 | | | |
| 355.0 | husband | 丈夫 | 他的__很好 | *m-laŋ/plaŋ ¹ | dʒe ¹ | za ²¹ k ^h a ³³ |
| 356.0 | wife | 妻子 | 他的__很好 | *mi ² ya ² | me ² ?ny ¹ | mi ²¹ ma ³³ |
| 357.0 | son | 儿子 | 他有三个__ | *ʒa ² | za ² | za ²¹ zo ³³ |
| 358.0 | daughter | 女儿 (姑娘) | 他有三个__ | *C-mi ² | za ² me ² | za ²¹ mi ²¹ |
| 359.0 | daughter-in-law | 儿媳 (媳妇) | 他有三个__ | *krwe ² | k ^h i ² ma ³ | za ²¹ ma ³³ |
| 360.0 | son-in-law | 女婿 | 他有三个__ | *ʒəmak ^L | ?me ¹ ʔo ¹ | za ²¹ ma ³¹ |
| 361.0 | brother's son | 侄子 | 他有三个__ | *ʔəʃa ² | za ² du ¹ | za ²¹ tu ³³ |
| 362.0 | brother's daughter | 侄女 | 他有三个__ | *ʔəʃa ² | za ² me ² du ¹ | za ²¹ tu ³³ |
| 363.0 | sis' child (Mvpt) | 外甥/外甥女 | 他有三个__ | *m-du ¹ | ʃa ¹ | |
| 364.0 | son's son | 孙子 | 他有三个__ | *(m)-le ² | ?li ² pa ¹ | za ²¹ pi ²¹ |
| 365.0 | son's daughter | 孙女 | 他有三个__ | *(m)-le ² | ?li ² ma ³ | za ²¹ pi ²¹ |
| 366.0 | ancestor | 祖先 | 他的__很好 | | p ^h i ² p ^h a ² | ni ²¹ ta ³³ |
| 367.0 | father's OB | 伯父 | 他有三个__ | *ʔəu ² | ta ⁵⁵ tie ³³ | a ⁵⁵ pu ²¹ |
| 368.0 | father's BW | 伯母 | 他有三个__ | | ta ⁵⁵ ma ³³ | a ⁵⁵ pu ²¹ za ²¹ |
| 369.0 | father's OS | 姑妈 | 他有三个__ | *ʔəkay ² | ku ³³ ma ³³ | |
| 370.0 | father's YB | 叔叔 | 他有三个__ | | a ¹ ʒe ³ | a ⁵⁵ su ²¹ |
| 371.0 | mother's OB | 舅舅 | 他有三个__ | *ʔəri ¹ | | a ⁵⁵ wu ⁵⁵ |
| 372.0 | mother's OS | 姨母 | 他有三个__ | *ʔəC-me ^{1/3} | | a ⁵⁵ ʔə ²¹ ma ²¹ |
| 373.0 | male suffix | 公的 | 三个 | *ʔ-pa ² | jaŋ ² pa ¹ | i ³³ pa ³³ |
| 374.0 | female suffix | 母的 | 三个 | *C-ma ³ | jaŋ ² ma ³ | i ³³ ma ³³ |
| 375.0 | father+children (CLF) | 三父子 | 三父子去干活 | | pa ¹ la ² | za ²¹ zu ³³ ci ³³ |
| 376.0 | mother+children (CLF) | 三母子 | 三母子去干活 | | ?ma ³ la ² | ts ^h u ⁵⁵ su ⁵⁵ me ³³ |
| 377.0 | grandfather+grandchildren (CLF) | 三爷孙 | 三爷孙去干活 | | pi ² la ² | |

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|-------|---------------------------------|------------|---------|---|--|---|
| 378.0 | grandmother+grandchildren (CLF) | 三奶孙 | 三奶孙去干活 | | pi ² la ² | |
| 379.0 | house | 房子 | 他有三栋__ | *yim ¹ | he ¹ | ts ^h o ⁵⁵ |
| 380.0 | home | 家 | 他的_很大 | | he ¹ ko ³ | |
| 381.0 | wall | 墙壁 | 他家有三面__ | *pyon ¹ | lu ¹ di ³ | nəŋ ³³ |
| 382.0 | roof | 房顶 | 三个 | *koŋ ¹ | he ¹ dzi ³ | k ^h a ³³ ma ³³ t ^h a ³³ |
| 383.0 | tile (ceramic) | 瓦片 | 三片 | *ŋwa ¹ pi ² | ŋwe ² p ^h e ² | paŋ ⁴⁵ |
| 384.0 | beam [main] | 梁(主) | 他家有三根__ | | | |
| 385.0 | beam[small] | 梁(小) | 他家有三根__ | *ʔ-cok ^H & *toŋ ² | he ¹ du ² | |
| 386.0 | post; pillar | 柱子(大) | 他家有三根__ | *m-don ¹ | | |
| 387.0 | door | 门 | 他家有三扇__ | *ya ¹ /la ¹ miŋŋ/ko ² | a ¹ k ^h je ² / ^L | ku ³³ pi ³³ |
| 388.0 | room | 房间 | 他家有三个__ | *m-ban ² | he ¹ ke ³ | ni ³³ ni ²¹ k ^h əŋ ⁵⁵ |
| 389.0 | fire-pit | 火塘 | 他家有三个__ | | a ¹ tə ² be ^L | tə ^h a ³³ tu ²¹ |
| 390.0 | charcoal | 木炭 | 地上有三块__ | *swe ² (k-)rut ^L | sa ² ŋi ² | çiŋ ⁵⁵ k ^h ə ³³ |
| 391.0 | field; wet field | 田 (稻田) | 他有三块__ | *ʔ-dan ³ C-mi ¹ | de ¹ mi ¹ | za ⁵⁵ |
| 392.0 | dry field | 田 (旱田) | 他有三块__ | *r-ya ¹ | mi ¹ be ¹ | nom ³³ pi ³³ |
| 393.0 | garden | 菜园 | 他有三个__ | | yaŋ ² (k ^h y ¹)mi ¹ | ko ²¹ pi ⁵⁵ za ⁵⁵ |
| 394.0 | pen; fold | 圈(牛圈) | 他有三个__ | | by ¹ | ŋ ²¹ kə ⁵⁵ |
| 395.0 | granary | 仓 (装粮食的柜子) | 他有三个__ | *ʔ-gyi ¹ | gi ¹ t ^h u ² | |
| 396.0 | shrine; temple | 庙 | 村里有三座__ | | ne ² he ¹ | |
| 397.0 | tomb; grave | 坟墓 | 村里有三个__ | | mə ^H / ^L be ¹ | lo ²¹ ka ²¹ |
| 398.0 | graveyard | 墓地 | 村里有三块__ | | mə ^H / ^L be ¹ k ^h y ¹ | lo ²¹ ka ²¹ ku ³³ |
| 399.0 | head-wrap | 头巾 | 他有三块__ | | | ŋ ²¹ t ^h o ⁵⁵ |
| 400.0 | headdress | 饰头巾 | 他有三块__ | | | |
| 401.0 | hat | 帽子 | 他有三顶__ | *ʔ-tsi ² | nu ² tsi ² | ŋ ²¹ ts ^h əŋ ³³ |
| 402.0 | earring | 耳环 | 他有三对__ | *k-waŋ ² | ʔna ³³ vaŋ ² | la ³³ pu ³³ tsu ³³ |
| 403.0 | bracelet | 手镯 | 他有三只__ | *(C)-goŋ ¹ | le ^L goŋ ¹ | la ²¹ kəŋ ³³ |
| 404.0 | ring (for finger) | 戒指 | 他有三个__ | *ʔ-ban ² | ku ³ | la ²¹ ts ^h əŋ ³³ |
| 405.0 | clothing | 衣服 | 他有三件__ | | p ^h ja(ŋ) ¹ | p ^h a ⁵⁵ tə ^h i ²¹ |
| 406.0 | collar | 衣领 | 个 | | p ^h ja(ŋ) ¹ k ^h je ² | p ^h a ⁵⁵ tə ^h i ²¹ p ^h a ³³ |
| 407.0 | sleeve | 袖子 | 个 | | p ^h ja(ŋ) ¹ le ^L | la ²¹ t ^h o ⁵⁵ |
| 408.0 | button | 钮扣 | 桌上有三个__ | *C-dup ^L | p ^h ja(ŋ) ¹ se ² | |
| 409.0 | palm bark rain cape | 蓑衣 | 他有三件__ | | ga ¹ by ¹ | k ^h u ⁵⁵ li ²¹ |
| 410.0 | pants | 裤子 | 他有三条__ | *ʔ-/k-la ² | ʔla ² | k ^h ə ⁵⁵ la ³³ |
| 411.0 | belt | 裤带 | 他有三条__ | | | tso ²¹ p ^h a ³³ |
| 412.0 | shoes | 鞋 | 他有三双__ | *ʔ(?)-nap ^L | k ^h i ¹ ne ^H | k ^h ə ⁵⁵ ts ^h əŋ ³³ |
| 413.0 | cloth (fabric) | 布 | 他有三块__ | *pa ¹ | ʔme ¹ | k ^h a ³³ p ^h a ⁵⁵ |
| 414.0 | baby sling | 背兜 | 他有三个__ | | | pu ²¹ |
| 415.0 | shoulder bag | 肩袋 | 他有三个__ | *(C)-m-it/ut ^{L/H} | ta ² la ² py ³ | t ^h o ³³ pa ²¹ |
| 416.0 | blanket; quilt | 被子 | 他有三张__ | *[bo+] | ʔla ² ba ² | pa ³³ lu ³³ |
| 417.0 | pillow | 枕头 | 他有三个__ | *m-gum ² | nu ² ka ¹ du ¹ | za ²¹ ko ²¹ |
| 418.0 | mat | (垫)席 | 他有三张__ | *m-gu ² & *ʔ-pu ³ *s-mun ¹ OR *ʔ-toŋ ² & | gi ¹ p ^h u ² | xua ²¹ ci ²¹ |
| 419.0 | rice powder | 米粉 | 桌上有三袋__ | *tsum ¹ & *ʔ-kri ¹ | mu ³ | tsa ²¹ p ^h u ⁵⁵ məŋ ³³ |
| 420.0 | flour | 面粉 | 桌上有三袋__ | *s-mun ¹ | mu ³ | sa ⁵⁵ i ³³ məŋ ³³ |
| 421.0 | porridge | 粥 | 桌上有三碗__ | | 烂饭 | xəŋ ³³ t ^h e ³³ |
| 422.0 | oil | 油 | 桌上有三瓶__ | | zu ¹ yi ¹ | sa ³³ ts ^h u ⁵⁵ |
| 423.0 | lard | 动物油 | 桌上有三罐__ | *tsi ¹ | ts ^h e ¹ | sa ³³ ts ^h u ⁵⁵ |
| 424.0 | salt | 盐 | 桌上有三碗__ | *(t)sa ² | ts ^h a ² bo ^H | tsa ³³ kə ⁵⁵ |
| 425.0 | meat | 肉 | 桌上有三块__ | *xa ² | xa ² | sa ³³ |
| 426.0 | soup | 汤 (菜汤) | 桌上有三碗__ | | yaŋ ² yi ¹ | ko ²¹ pi ⁵⁵ γə ³³ |

| | | | | | | |
|-------|-----------------------------|-----------|---------|--|--|--|
| 427.0 | liquor | 酒 | 桌上有三碗__ | nji ¹ | dʒi ¹ | tɕi ³³ pa ²¹ |
| 428.0 | tea | 茶 (茶水) | 桌上有三杯__ | *la ¹ | la ² | |
| 429.0 | sugar | 糖 | 桌上有三个__ | | ʃa ¹ ba ² | pi ⁵⁵ tsu ⁵⁵ ku ³³ |
| 430.0 | jaggery | 红糖 | 桌上有三只__ | | ʃa ¹ da ² (?ni ¹) | |
| 431.0 | saw | 锯子 | 他有三把__ | *s-lwa ³ | yi ¹ tsy ³ | ts ^h o ⁵⁵ tɕi ³³ |
| 432.0 | knife | 刀 | 桌上有三把__ | *taŋ ³ & *ʔ-mi(a) ¹ *& ta ² | a ¹ t ^h a ² | p ^h iŋ ³³ |
| 433.0 | kitchen knife | 菜刀 | 桌上有三把__ | | a ¹ t ^h a ² ba ² | pi ⁵⁵ to ⁵⁵ |
| 434.0 | pointed knife | 尖刀 | 桌上有三把__ | | a ¹ t ^h a ² le ^t | p ^h iŋ ³³ tɕi ³³ ja ²¹ |
| 435.0 | sickle | 镰刀 | 他有三把__ | *C-gap ^L | ŋ ² ts ^h o ^H | li ⁵⁵ tu ⁵⁵ |
| 436.0 | hatchet | 斧头 | 他有三把__ | *ʔ-cin ² | a ¹ ts ^h o ^H | pa ²¹ t ^h əŋ ⁵⁵ |
| 437.0 | hoe (large) | 锄头 | 他有三把__ | *ʔ-guk ^H | tse ² | tɕi ³³ tu ²¹ |
| 438.0 | plow | 犁 | 他有三张__ | | si ^H go ^t | t ^h a ⁵⁵ li ⁵⁵ |
| 439.0 | yoke | 牛轭 | 他有三根__ | | la ² le ^H | ŋ ²¹ pa ³³ la ³³ |
| 440.0 | thing | 东西 | 桌上有三种__ | *C-m(y)u ^{2/3} & *[cən] | dʒe ¹ ku ¹ | mu ²¹ ja ²¹ |
| 441.0 | loom | 织布机 | 他有三台__ | *(g)-rak ^L | | |
| 442.0 | needle | 针 | 桌上有三根__ | *g-rap ^L | ɣy ^t | ɕi ³³ kø ³¹ |
| 443.0 | awl | 锥子 | 他有三把__ | | | |
| 444.0 | thread | 线 (缝衣用的) | 桌上有三根__ | ?tsam ¹ | k ^h i ¹ | koŋ ³³ tsa ⁵⁵ |
| 445.0 | ball (of thread) | 线球 | 桌上有三个__ | | | koŋ ³³ tsa ⁵⁵ zo ³³ |
| 446.0 | rope; string | 绳子 | 他有三条__ | | | ŋ ²¹ tsa ⁵⁵ |
| 447.0 | chain | 链子 | 他有三条__ | *ʔ-cak ^H | ʃo ^H | su ⁵⁵ tsa ⁵⁵ |
| 448.0 | whip (horse whip) | 鞭子 (马鞭子) | 他有三根__ | | la ² k ^h o ^H | ta ³³ ku ²¹ |
| 449.0 | winning basket | 簸箕 (簸米用) | 他有三个__ | *ʔ-wa ¹ | ?va ¹ | pa ³³ ma ³³ |
| 450.0 | bamboo sieve; sifter (fine) | 筛子 (细的) | 他有三张__ | | ?va ¹ ki ¹ | ka ²¹ kə ⁵⁵ |
| 451.0 | whetstone | 磨刀石 | 他有三块__ | | a ¹ t ^h a ² se ² ka ¹ lu ^H | p ^h iŋ ³³ sɿ ³³ |
| 452.0 | millstone | 石磨 | 他有三块__ | | ni ^t | l ^h u ⁴⁵ |
| 453.0 | hammer | 锤子 | 他有三把__ | *C-tu ¹ & *kaŋ ¹ | | ta ³³ t ^h u ⁵⁵ sɿ ³³ |
| 454.0 | chisel | 凿子 | 他有三把__ | | | tsəŋ ²¹ |
| 455.0 | rice huller | 碓 | 他有三个__ | | ts ^h y ¹ | tso ⁵⁵ mi ⁵⁵ ku ³³ |
| 456.0 | rice pounder | 米臼 | 他有三个__ | | | ta ³³ t ^h u ⁵⁵ ku ³³ |
| 457.0 | mortar | 臼 | 他有三个__ | | | tsa ²¹ kə ³³ k ^h ə ²¹ tu ³³ |
| 458.0 | pestle | 杵 | 他有三个__ | | | ta ³³ t ^h u ⁵⁵ sɿ ³³ |
| 459.0 | medicine; herbal medicine | 药 | 桌上有三种__ | *C-nak ^H tsip ¹ /tse ² *C-krak ^L & *ka ² + *m-gyap ^L | ne/ɕ ^H ts ^h i ² | k ^h ə ³³ tɕi ³³ |
| 460.0 | bamboo basket | 箩筐 (背东西用) | 他有三只__ | | | k ^h u ³³ pəŋ ²¹ |
| 461.0 | broom | 扫帚 | 他有三把__ | *sut ^H | gɿ ¹ si ^H | sa ⁵⁵ p ^h a ⁵⁵ |
| 462.0 | pot; pan; wok | 锅 (炒菜的) | 他有三个__ | *ʔo ² | a ² t ^h ɕe ¹ | mi ²¹ k ^h u ³³ |
| 463.0 | tub; bucket | 桶 | 他有三个__ | | yi ¹ t ^h u ² | |
| 464.0 | barrel, ceramic | 土罐 | 他有三个__ | | ?nu ¹ | tsɿ ²¹ pa ²¹ koŋ ⁵⁵ |
| 465.0 | washbasin | 盆 | 他有三个__ | | laŋ ² | k ^h ə ³³ tu ²¹ |
| 466.0 | bag; sack | 袋子 | 他有三个__ | | la ¹ ?li ^t | |
| 467.0 | comb (regular) | 梳子 | 他有三把__ | *gwi ² | m ² pji ² | mu ²¹ su ³³ |
| 468.0 | fine toothed comb | 细密梳子 | 他有三把__ | | m ² pji ² dzi ¹ | pi ⁵⁵ tsɿ ²¹ |
| 469.0 | bowl | 碗 | 桌上有三个__ | | a ¹ kje ² | k ^h u ³³ |
| 470.0 | small bowl | 小碗 | 桌上有三个__ | | a ¹ kje ² za ² | k ^h u ³³ ja ²¹ |
| 471.0 | large bowl | 大碗 | 桌上有三个__ | | | k ^h u ³³ t ^h u ³³ ma ³³ |
| 472.0 | chopsticks | 筷子 | 桌上有三双__ | *d/gy/j/yu ^{1/3} | a ¹ dʒu ³ | tɕi ³³ ta ⁵⁵ |
| 473.0 | bed | 床 | 他有三张__ | | gy ² | zo ²¹ k ^h o ³³ |
| 474.0 | ladder | 梯子 | 他有三架__ | *dzam ³ & *m-gu ^{1/2} | dɕe ^H go ^t | ko ³³ tsu ³³ |
| 475.0 | firewood | 柴 | 地上有三根__ | | si ^H | ɕiŋ ⁵⁵ |

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|-------|------------------------|---------|---------|--|---|---|
| 476.0 | manure; fertilizer | 粪 (肥料) | 地上有三堆__ | | k ^h i ² | a ²¹ γə ²¹ |
| 477.0 | road | 路 | 村里有三条__ | *ʔ-ga(ŋ) ¹ OR ga ¹ OR gra ¹ | gja ¹ ma ³ | ka ³³ ma ³³ |
| 478.0 | bridge | 桥 | 村里有三座__ | *dzam ¹ | dzy ¹ | |
| 479.0 | market | 街子 (市场) | 村里有三个__ | *je ¹ | dʒi ³ | t ^h i ³³ li ²¹ |
| 480.0 | money | 钱 | 他有三块__ | | gi ² p ^h e ² | ta ⁵⁵ pe ³³ |
| 481.0 | price | 价钱 (价格) | 他的__很好 | *po ² | p ^h o ² | |
| 482.0 | folksong | 民歌 / 山歌 | 首 | | | a ²¹ xa ³³ |
| 483.0 | song | 歌 | 首 | | | |
| 484.0 | story | 故事 | 个 | | | |
| 485.0 | word (written) | 字 | 个 | | | su ⁵⁵ su ²¹ |
| 486.0 | speech | 话 | 种 | *daŋ ² & *ka(ŋ) ² | γe ¹ ŋli ¹ | to ²¹ |
| 487.0 | sound; voice | 声音 | 他的__很大 | | k ^h o ² t ^h y ¹ | |
| 488.0 | book | 书 | 他有三本__ | to ² yim ¹ | t ^h o ² γu ² | su ⁵⁵ su ²¹ pəŋ ²¹ |
| 489.0 | name | 名字 | 他有三个__ | *ʔ-m(y)in ¹ | ʔmi ¹ | i ³³ mi ⁵⁵ |
| 490.0 | dream | 梦 | 他有三个__ | *C-mak ^H | ʒi ¹ ʔmɛ ^H | zo ²¹ mo ³³ k ^h a ³³ |
| 491.0 | shadow | 影子 | 地上有三个__ | *ʒum ¹ | a ¹ γi ³ | ŋa ²¹ xo ³³ i ³³ ts ^h o ³³ |
| 492.0 | deity | 神 | 个 | *re ¹ sa ¹ | γi ¹ sa ¹ | səŋ ⁵⁵ səŋ ⁵⁵ ma ³³ |
| 493.0 | God | 上帝 | | *re ¹ sa ¹ | γi ¹ sa ¹ | |
| 494.0 | soul (1) | 魂 | 个 | *ʔ-la ¹ | ha ¹ | la ⁵⁵ |
| 495.0 | spirit (evil) | 鬼 | 三个 | *C-nat ^L | ne ² | ts ^h u ⁵⁵ la ⁵⁵ ka ³³ |
| 496.0 | boundary marker | 边界记号 | 村里有三个__ | | | |
| 497.0 | fence | 栅栏 | 他家有三个__ | *kram ¹ | k ^h jy ¹ | k ^h a ³³ |
| 498.0 | gun | 枪 | 他有三支__ | *[sənat ^L] | | a ²¹ po ³³ |
| 499.0 | bow | 弓 | 他有三张__ | *le ² | ta ¹ ne ³ | nu ²¹ |
| 500.0 | arrow | 箭 | 他有三支__ | *C-mla ² | mja ² za ² | |
| 501.0 | arrow (head) | 箭头 | 个 | *C-can ¹ | | |
| 502.0 | cage (e.g., for ducks) | 笼 | 他有三个__ | | | pəŋ ²¹ |
| 503.0 | drum | 鼓 | 他有三面__ | *tum/ʒum ² | | p ^h i ³³ ma ³³ ku ³³ |
| 504.0 | gong | 铜锣 | 他有三面__ | *loŋ ¹ | | maŋ ²¹ tɕi ³³ |
| 505.0 | town | 城 | 那里有三座__ | *[mən] | | |
| 506.0 | village | 村 (寨) | 那里有三座__ | *kak ^H & *koŋ ³ & *kwa ¹ & *pu ³ | k ^h a ^H | p ^h u ³³ |
| 507.0 | custom | 风俗 | 村里有三个__ | *[li] | | |
| 508.0 | ritual tree | 龙树 | 村里有三棵__ | | | məŋ ³³ ʂi ⁵⁵ tsəŋ ⁵⁵ |
| 509.0 | invocation | 祈祷 | 他的__很好 | *[ʃaŋ] | | |
| 510.0 | bell | 铃 | 他有三个__ | *m-ju ¹ | | ta ⁵⁵ kə ⁵⁵ |
| 511.0 | flute | 笛子 | 他有三支__ | *C-ga ² & *p-lwe ¹ ; gru ² lu ² | gji ² ly ² | ti ⁵⁵ li ⁵⁵ |
| 512.0 | gourd reed-organ | 芦笙 | 他有三台__ | *s-ŋaŋ ² | by ¹ | te ⁵⁵ xə ³³ |
| 513.0 | pipe (yuantong) | 烟筒 | 他有三个__ | *ʔ-gu ¹ & *C-fuk ^L | | za ²¹ ko ³³ |
| 514.0 | trap | 陷阱 | 那里有三道__ | *wa ³ & *(C)-toŋ ¹ | va ³ | ɕiŋ ⁵⁵ t ^h aŋ ²¹ |
| 515.0 | poison | 毒药 | 桌上有三服__ | *dok ^L | dɔ ^t | tu ²¹ |
| 516.0 | look at | 看 | 他__过 | *C-ŋi ¹ & *haŋ ³ | ʔni ¹ | ni ⁵⁵ |
| 517.0 | see | 看见 | 他__过 | *mraŋ ¹ | mjaŋ ¹ | mu ³³ tsu ³³ |
| 518.0 | show | 给看 | 他给他__过 | *səmraŋ ¹ | | |
| 519.0 | listen | 听 | 他__过 | *ʔ-na ¹ | ʔna ¹ | ka ²¹ |
| 520.0 | hear | 听见 | 他__过 | *gra ² | gja ² | ka ²¹ tsu ³³ |
| 521.0 | eat | 吃 | 他__过 | *dza ² | dza ² | t ^h sa ²¹ |
| 522.0 | feed | 喂 (人、猪) | 他__过 | *sədza ² | tʃa ^t | pi ²¹ t ^h sa ²¹ |
| 523.0 | feed animals | 喂 (喂鸡) | 他__过 | *sə(m)-lyak ^L | tʃa ^t | |
| 524.0 | drink | 喝 | 他__过 | *m-daŋ ¹ | daŋ ¹ | tu ³³ |

| | | | | | | |
|-------|--------------------------------|----------|-------|--|---------------------------------|---|
| 525.0 | give to drink | 给喝 | 他给他_过 | *səm-dan ¹ | tan ³ | |
| 526.0 | bite | 咬 | 他_过 | *C-tsat ^L & *C-kuk ^L | k ^h o ^r | tɕ ^h e ³³ |
| 527.0 | chew | 嚼 | 他_过 | *(g) wa ² & *m-bay ² | ga ² | k ^h o ³³ |
| 528.0 | lick | 舔 | 他_过 | *m-lyak ^L | le ^r | le ³³ |
| 529.0 | savor | 含 | 他_过 | | my ¹ | məŋ ³³ la ⁴⁵ |
| 530.0 | swallow | 咽 | 他_过 | *myo(k) ¹ /f | gjo ¹ | jĩŋ ⁵⁵ |
| 531.0 | spit | 吐 (吐口水) | 他_过 | | p ^h i ^r | tsa ²¹ pi ³³ pi ³³ |
| 532.0 | vomit | 呕吐 | 他_过 | *C-pat ^L | p ^h e ^r | m ²¹ p ^h i ³³ p ^h i ³³ |
| 533.0 | suck | 吸 | 他_过 | *C-cut ^L | | sɿ ²¹ |
| 534.0 | blow (on) | 吹 (吹火) | 他_过 | *s-mut ^H | ?my ^H | mi ³³ |
| 535.0 | say | 说 | 他_过 | *ʔuk ^H | be ^H | ko ³³ |
| 536.0 | speak | 讲 | 他_过 | *yaw ³ & *dze ² | t ^h y ¹ | |
| 537.0 | tell | 告诉 | 他_过 | | be ^H gu ² | ko ³³ væ ²¹ |
| 538.0 | call; be called | 叫 | 他_过 | *ku/kaw ¹ | ku ¹ | ku ³³ |
| 539.0 | ask | 问 | 他_过 | | ?na ¹ | na ⁵⁵ ni ⁵⁵ |
| 540.0 | answer | 答 (回答) | 他_过 | | po ^H | |
| 541.0 | send for; request | 请 | 他_过 | | ts ^h e ³ | ts ^h əŋ ³³ |
| 542.0 | smell | 闻 (嗅) | 他_过 | | ny ² | ni ⁵⁵ |
| 543.0 | touch; feel; stroke | 摸 (摸摸刀口) | 他_过 | *to ² | mo ^H | so ⁵⁵ |
| 544.0 | take | 拿 (拿书) | 他_过 | *yu ¹ | vu ¹ | vi ³³ |
| 545.0 | grasp; grip | 握 (握刀把) | 他_过 | *na ² | | so ⁵⁵ |
| 546.0 | grab | 抓住 | 他_过 | *s-mi ¹ | | ka ⁵⁵ |
| 547.0 | pick (e.g., fruit) | 摘 (摘果子) | 他_过 | *C-xak ^L | ts ^h e ^H | k ^h e ³³ |
| 548.0 | rub (with hands) | 搓 (搓绳子) | 他_过 | | vɛ ^r | kə ²¹ |
| 549.0 | rip; tear | 撕 | 他_过 | | tʃ ^h e ^r | sɿ ³³ |
| 550.0 | twist; wring | 拧 (拧毛巾) | 他_过 | *s-yök ^L | ʃi ^r | ni ³³ |
| 551.0 | pick up | 拾 (拾起) | 他_过 | | go ^H | ku ³³ |
| 552.0 | catch; seize | 捉 (捉鸡) | 他_过 | *s-mi ¹ | | pu ⁵⁵ |
| 553.0 | scatter; sprinkle (e.g., seed) | 撒 (撒种子) | 他_过 | | ʃi ² | ci ³³ |
| 554.0 | throw away | 丢掉 | 他_过 | | ?lo ^H | ʏə ³³ |
| 555.0 | pitch (throw from side way) | 摔 (石头) | 他_过 | | ?lo ^H | la ²¹ ʏə ³³ |
| 556.0 | toss (overhand) | 投 | 他_过 | | ?lo ^H | |
| 557.0 | stretch; stretch out | 伸 (伸手) | 他_过 | *s-ŋak ^L | dʒe ³ | |
| 558.0 | pound | 春/捣碎 | 他_过 | *ʔ-di ² & *ʔ-ton ² | te ² | ti ⁵⁵ |
| 559.0 | lift (over head) | 举起 | 他_过 | *kyi ² | tʃ ^h e ² | ta ²¹ |
| 560.0 | fold | 折 | 他_过 | *tup ^H | | tsə ²¹ |
| 561.0 | squeeze | 挤压/榨 | 他_过 | *s-nit ^L & *C-ŋap ^L & *tsit ^H | ni ^r | ti ³³ tɕin ²¹ |
| 562.0 | pinch | 捏 | 他_过 | *tsit ^H & *s-nit ^L & *C-ŋap ^L | ts ^h i ^r | ts ^h ɿ ³³ |
| 563.0 | massage | 按摩 | 他_过 | *(g)yit ^L | ʒi ^r | |
| 564.0 | bend | 使弯曲 | 他_过 | *səkək ^L | go ^r | ku ⁵⁵ |
| 565.0 | pull a | 拉 | 他_过 | *m-gaŋ ¹ & *cway ² | xi ³ | |
| 565.1 | pull b | 拉 | 他_过 | *m-gaŋ ¹ & *cway ² | gaŋ ¹ | ku ³³ |
| 566.0 | push | 推 | 他_过 | | dy ² | ti ³³ |
| 567.0 | kick | 踢 | 他_过 | *tek ^H | tʃ ^h e ^H | ti ⁵⁵ |
| 568.0 | kneel | 跪 | 他_过 | | gi ² te ¹ | ti ²¹ |
| 569.0 | sit | 坐 | 他_过 | *(C)n/?-mi ¹ | ni ¹ | wo ⁵⁵ |
| 570.0 | carry, on back | 背 (背小孩) | 他_过 | *bo ² & *bak ^L | bo ² | pe ⁵⁵ |
| 571.0 | carry, in arms | 抱 (抱小孩) | 他_过 | | te ^H | ta ⁵⁵ |
| 572.0 | carry, from hand | 提 | 他_过 | | tʃ ^h e ² | ta ³¹ |
| 573.0 | carry, mid pole | 担 | 他_过 | | py ² | ta ³¹ |

| | | | | | | |
|-------|--------------------------|------------|--------|---|---|---|
| 574.0 | fall | 跌 (跌倒) | 他__过 | | ʔly ² | p ^h u ³³ |
| 575.0 | lean (against) | 靠 (人靠在树上) | 他__过 | *s-new ^{2/3} /ek ^L | e ^H | xiŋ ⁵⁵ |
| 576.0 | spend night | 过夜 | 他__过 | *C-yak ^L | he ^L | |
| 577.0 | rest | 休息 | 他__过 | | na ² | wo ⁵⁵ |
| 578.0 | sleep | 睡觉 | 他__过 | *yip ^L | ʒi ¹ da(ŋ) ² | zo ²¹ |
| 579.0 | put to sleep | 使睡 | 他使他__过 | *səyip ^L | xi ^L | zo ²¹ vi ²¹ |
| 580.0 | awake | 醒 (睡醒) | 他__过 | *(C)-no ² | xa ^L | nəŋ ²¹ |
| 581.0 | awaken | 唤醒 | 他__过 | *səno ² | ku ² xa ^L | i ²¹ ku ³³ tu ³³ |
| 582.0 | do (work) | 做 (做工) | 他__过 | | pe ¹ | za ⁵⁵ məŋ ³³ |
| 583.0 | labor; work | 劳动 | 他__过 | *mi(aw) ² & *[kam] | mja ² ni ² ʔmu ¹ | |
| 584.0 | to plow | 犁 (犁地) | 他__过 | | mja ² | za ⁵⁵ h ^a 33 |
| 585.0 | dig (a hole) | 挖 (挖洞) | 他__过 | *m-du ² | ke ^L | tu ²¹ |
| 586.0 | plant; grow | 种 | 他__过 | | k ^h a ³ | zu ³³ |
| 587.0 | water | 浇 (浇菜) | 他__过 | | xy ² | səŋ ³³ |
| 588.0 | slice; cut | 切 (切菜) | 他__过 | *ʔ-dök ^H | ts ^h e ^H | so ²¹ |
| 589.0 | slice; cut | 切 (切苹果、西瓜) | 他__过 | *ʔ-brak ^H | be ² | |
| 590.0 | split; chop; cleave | 劈 (劈木柴) | 他__过 | *ʔ-brak ^H | k ^h je ² | k ^h ə ³³ |
| 591.0 | chop (down) | 砍 (砍树) | 他__过 | *m-cik ^H | k ^h e ^H | p ^h i ⁵⁵ |
| 592.0 | cut (reap) | 割 (割稻) | 他__过 | *rit ^L | ʔi ^L | ʔə ²¹ |
| 593.0 | whittle | 削 | 他__过 | *di ^{1/3} | tʃ ^h o ^H | ti ³³ |
| 594.0 | stab | 刺 | 他__过 | *m-gya/gay ² | dʒe ^L | ci ³³ |
| 595.0 | pull up; pull out | 拔 (拔草) | 他__过 | | tʃi ^H | ko ³³ |
| 596.0 | graze; herd (a flock) | 放牧 | 他__过 | *ʔ-lok ^L | ʔlo ^L | lu ³³ |
| 597.0 | raise animals | 饲养 | 他__过 | *m-yu ¹ | hu ¹ | zu ⁴⁵ |
| 598.0 | lead along | 牵 (牵牛) | 他__过 | | si ³ | ko ³³ |
| 599.0 | buy | 买 | 他__过 | *way ¹ | ve ¹ | vu ³³ |
| 600.0 | sell | 卖 | 他__过 | *(k)-rwan ² | vu ² | ŋ ²¹ |
| 601.0 | count (number) | 数 (数东西) | 他__过 | *(k)-raw ¹ | yo ³ | k ^h a ³³ ma ³³ |
| 602.0 | teach | 教 | 他__过 | *s-ma ² | ʔma ² | |
| 602.1 | teach/train | 教 | 他__过 | | tsaŋ ³ | tsu ³³ |
| 603.0 | study | 学 | 他__过 | *[hen] & *m-dzaŋ ¹ | dzaŋ ¹ | caŋ ⁵⁵ |
| 604.0 | cook; boil | 煮 | 他__过 | *C-dzak ^H & *m-bi ^{1/2} | tse ^L | tsa ³³ |
| 605.0 | fry (stirfry) | 炒 | 他__过 | *ʔ/g-raw ¹ | ʔlu ¹ | lu ⁵⁵ |
| 606.0 | steam | 蒸 | 他__过 | *C-sak ^L | se ^L | sa ³³ |
| 607.0 | hunt; go hunting | 打猎 | 他__过 | *m-gak ^L | kaŋ ² dzi ² de ² | |
| 608.0 | shoot (a gun) | 射 | 他__过 | *(?)-kukL, *m-pökH | bɛ ^H | pi ⁵⁵ |
| 609.0 | hit (a target) | 中 (射中) | 他__过 | | t ^h u ³ | ta ²¹ pa ²¹ |
| 610.0 | kill | 杀 (杀鸡) | 他__过 | *C-sat ^L | se ^L | ce ³³ |
| 611.0 | die | 死 | 他__过 | *ʃe ² | xi ¹ | sɿ ⁵⁵ |
| 612.0 | sharpen (grinding) | 磨 (磨刀) | 他__过 | *si ² | se ² | kə ²¹ |
| 613.0 | mill (grinding) | 磨 (磨米) | 他__过 | *m-krit ^H | gaŋ ³ | lu ³³ i ⁵⁵ kə ³³ |
| 614.0 | winnow with a fan | 簸 (簸米) | 他__过 | *ʔ-wa ¹ | ʔva ¹ | p ^h u ³³ |
| 615.0 | ladle out; spoon up | 舀 (舀水) | 他__过 | | k ^h o ^L | no ³³ |
| 616.0 | wear; put on | 穿 (衣服) | 他__过 | *wat ^L | vi ^L | je ³¹ , zɿ ³¹ |
| 617.0 | wear (hat); put on (hat) | 戴 (帽子) | 他__过 | *ʔ-kup ^H | k ^h o ^H | ts ^h əŋ ³³ |
| 618.0 | wear (turban) | 戴 (头巾) | 他__过 | *C-net ^L | so ^L | t ^h o ⁴⁵ |
| 619.0 | wear (upper clothes) | 穿 (上衣) | 他__过 | *m-dum ¹ | vi ^L | |
| 620.0 | clothe | 给穿 | 他给他__过 | *səwat ^L | ʔvi ^L tu ³ gu ² | |
| 621.0 | take off | 脱 (脱衣服) | 他__过 | | ʔli ^L | li ⁴⁵ |
| 622.0 | roll up | 卷 (卷烟) | 他__过 | | ʔly ³ | t ^h o ⁴⁵ |

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|-------|-----------------------------------|------------|------|--|---|---|
| 623.0 | shave | 剃 (头) | 他__过 | | tʰo ^H | ts ^h ə ³³ |
| 624.0 | comb | 梳 (梳头) | 他__过 | *ʔ-pi ² | pji ² | ka ³³ |
| 625.0 | dye | 染 (染衣服) | 他__过 | | | na ²¹ |
| 626.0 | sew | 缝 (缝衣服) | 他__过 | *gyup ^L & *dap ^L | gu ^L | tʰ ³¹ |
| 627.0 | mend; patch | 补 (补衣服) | 他__过 | | ʔne ^L | ti ³³ |
| 628.0 | weave | 编织 | 他__过 | *rak ^L | dze ^L | ts ³¹ |
| 629.0 | plait; braid | 编 (编辫子) | 他__过 | | p ^h e ² | pi ²¹ |
| 630.0 | make the bed | 铺 (铺床) | 他__过 | | k ^h aŋ ² | |
| 631.0 | sweep | 扫 (扫地) | 他__过 | *sut ^H | si ^H | za ⁵⁵ |
| 632.0 | open | 开 (开门) | 他__过 | *pwaŋ ³ & *bloŋ ³ | p ^h u ³ | ki ³³ |
| 633.0 | close | 关 | 他__过 | *hap ^H & *pi ² | ts ^h i ²¹ | |
| 634.0 | shut | 闭 (闭眼) | 他__过 | | ts ^h i ^H | k ^h a ³³ |
| 634.1 | shut | 闭 (闭眼) | 他__过 | | mi ^H | mi ⁴⁵ |
| 635.0 | put down; put/place | 放 (下) [放置] | 他__过 | *ʔ-ta ² | ta ^L | p ^h i ³³ |
| 636.0 | release; let go; set free | 放 (把鸟放走) | 他__过 | *k-lwat ^H | p ^h ji ² | p ^h i ³³ |
| 637.0 | hang | 挂 (挂在墙上) | 他__过 | *C-gyit ^L & *ʔ-kuk ^L | ke ¹ | xəŋ ⁵⁵ |
| 638.0 | tie into a bundle | 捆 (绑) | 他__过 | | p ^h e ³ | p ^h a ³³ |
| 639.0 | tie; bind | 系 | 他__过 | *pay ¹ | p ^h e ³ | p ^h a ³³ |
| 640.0 | untie | 解 (解绳结) | 他__过 | *pre ¹ | p ^h i ¹ | p ^h i ⁵⁵ |
| 641.0 | load; pack (put in) | 装 (装进袋里) | 他__过 | *ʔ-kun ^{3/2} | ke ³ | ts ³³ |
| 642.0 | take out | 拿出 | 他__过 | *ʔ-dwak ^H /ök ^H | vu ¹ t ^h ɛ ^L | vi ³³ tue ⁵⁵ |
| 643.0 | press; fill in; squeeze in; stuff | 塞 (塞在洞口) | 他__过 | *C-ŋap ^L & *s-nit ^L & *tsit ^H | tsu ¹ | ti ²¹ ji ³³ |
| 644.0 | bury; cover up | 埋 (埋物) | 他__过 | *səm-du ² from dig m-du ² | ty ² | tʰ ³¹ |
| 645.0 | hide (thing) | 藏 (东西) | 他__过 | *səwak ^L | tʃe ¹ | xa ³³ |
| 646.0 | hide (self) | 藏/躲 (自己) | 他__过 | *wak ^L | vy ² | xa ³³ |
| 647.0 | choose | 挑选 | 他__过 | | se ¹ | |
| 648.0 | pile up; heap up | 堆 (堆积泥土) | 他__过 | *byum ¹ & *pup/uk ^H | k ^h jo ³ | tsəŋ ³³ |
| 649.0 | nail | 钉 (钉钉子) | 他__过 | | li ¹ | xa ⁵⁵ |
| 650.0 | want | 要 (我要这个) | 他__过 | | ya ³ | xa ⁵⁵ |
| 651.0 | get; obtain; | 得 (得到) | 他__过 | *ra ³ | sy ¹ | su ³³ |
| 652.0 | receive | 收 (收起来) | 他__过 | | p ^h i ^L | pu ⁵⁵ |
| 653.0 | lose | 遗失 | 他__过 | | tʃa ³ | tsa ³³ |
| 654.0 | seek (look for) | 找/寻找 | 他__过 | *x-ra ¹ | zy ² | |
| 655.0 | use | 用 (使用) | 他__过 | *zum ² & *nay ³ (<#850) | ga ³ | ŋ ⁵⁵ ka ³³ |
| 656.0 | play | 玩 | 他__过 | *m-gre ² & *ʔ-ga ³ | ya ^L | za ³³ |
| 657.0 | win | 赢 | 他__过 | | ga ³ | |
| 658.0 | sing | 唱 (歌) | 他__过 | *mi ¹ /ga ³ | ga ³ | |
| 659.0 | dance | 跳舞 | 他__过 | *ga ³ g/k(r)un ¹ /ut ^H | ga ³ k ^h e/e ³ | pi ⁵⁵ |
| 660.0 | borrow (money) | 借 (借钱) | 他__过 | *kye ² | tʃi ² | xa ³³ |
| 661.0 | borrow (thing) | 借 (借东西) | 他__过 | *s-ŋa ² | ʔŋa ² | |
| 662.0 | give back; return; repay | 还 (还钱) | 他__过 | *C-kok ^L | si ¹ | k ^h u ³³ |
| 663.0 | owe | 欠 | 他__过 | | bo ³ | ts ^h aŋ ³³ |
| 664.0 | compensate for; reimburse | 赔偿 | 他__过 | | de ¹ | k ^h u ³³ ko ²¹ |
| 665.0 | send-off; deliver | 送 | 他__过 | *C-po ³ | xɛ ² xa ¹ | pi ²¹ |
| 666.0 | wait; await; expect | 等 (候) | 他__过 | *C-lo ³ | ʔlaŋ ³ | tu ²¹ |
| 667.0 | meet; come across | 遇见 | 他__过 | *dzo ^{1/2} & *C-dəŋ ² & *[phum] | t ^h u ³ dzi ¹ | tso ³³ |
| 668.0 | marry a husband | 嫁 | 他__过 | | | xo ⁵⁵ |
| 669.0 | marry a wife | 娶 | 他__过 | | tsi ¹ | tsa ³³ |
| 670.0 | scold; curse | 骂 | 他__过 | | k ^h a ² | ko ³³ |

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|-------|------------------------------|------------|------|--|--|--|
| 671.0 | fight | 打架 | 他__过 | | dɛ ² n ² dɛ ¹ | ti ²¹ li ²¹ ma ³³ |
| 672.0 | hit; beat | 打 (打人) | 他__过 | *m-tok ^H & *m-di ² | dɛ ² | ti ²¹ |
| 673.0 | rob; loot | 抢 | 他__过 | | ho ³ | nəŋ ³³ |
| 674.0 | steal | 偷 | 他__过 | *ko ² | k ^h o ² | k ^h u ³³ |
| 675.0 | cheat | 骗 | 他__过 | | ke ¹ | |
| 676.0 | help | 帮助 | 他__过 | *gra ³ | gja ³ | ka ³³ pəŋ ²¹ |
| 677.0 | cure; treat; heal | 医治 | 他__过 | *səC-na ¹ | goŋ ³ | na ³³ ni ⁵⁵ |
| 678.0 | divide; separate; distribute | 分 | 他__过 | *bay ¹ & *C-klay ^{1/3} | by ¹ | pi ³³ |
| 679.0 | laugh | 笑 | 他__过 | *ray ¹ | ɣɛ ¹ | ɣə ³³ |
| 680.0 | cry | 哭 | 他__过 | *ŋo ¹ | ŋo ¹ | xəŋ ³³ |
| 681.0 | love | 爱 (爱小孩) | 他__过 | *[hak] | sɛ ² | ni ⁵⁵ tso ³³ |
| 682.0 | like; enjoy | 喜欢 (喜欢唱歌) | 他__过 | | | əŋ ⁵⁵ ma ³³ kə ³³ |
| 683.0 | know; understand | 懂; 知道 | 他__过 | *si ² | sɛ ¹ | ɕa ²¹ |
| 684.0 | remember | 记得 | 他__过 | | xə ¹ | nə ²¹ |
| 685.0 | forget | 忘记 | 他__过 | *ʔ-me ³ | ma ² xə ¹ | ma ²¹ o ²¹ |
| 686.0 | think | 思考 | 他__过 | *m-dəŋ ² | di ² | tu ²¹ ni ⁵⁵ |
| 687.0 | be angry | 生气 | 他__过 | *ʔ-(d)zup ^H | | na ⁵⁵ |
| 688.0 | hate | 恨 | 他__过 | | ts ^h i ² | |
| 689.0 | fear | 怕 | 他__过 | *(sə)-grok ^H | gjo ^H | ku ³³ |
| 690.0 | have courage | 敢 | 他__过 | | pi ² | |
| 691.0 | can (well) | 会 (会做) | 他__过 | *ʔ-put ^L & *ja ³ | k ^h e ¹ | ɕa ²¹ |
| 692.0 | affirmative | 是 (这是什么) | 他__过 | *ya ^{3/1} | ŋa ¹ | xiŋ ⁵⁵ |
| 693.0 | is not | 不是 (这不是我的) | 他__过 | | ma ² ŋa ¹ | ma ²¹ xiŋ ⁵⁵ |
| 694.0 | have | 有 | 他__过 | *jaŋ ¹ | dʒaŋ ¹ | vu ³³ |
| 695.0 | not have; lack; without | 没有 (我没有书) | 他__过 | | ma ² dʒaŋ ¹ | ma ²¹ vu ³³ |
| 696.0 | walk | 走 | 他__过 | *m-ju/əŋ ² & *du ² | sy ² | to ²¹ |
| 697.0 | run | 跑 | 他__过 | *p-re ² | gje ² | t ^h i ³³ |
| 698.0 | ascend | 上 (上山) | 他__过 | *ʔ-dak ^H | dɛ ^H | tai ⁵⁵ |
| 699.0 | descend | 下 (下山) | 他__过 | *ʒak ^L | zɛ ¹ | ja ³³ |
| 700.0 | come | 来 | 他__过 | *la ¹ & *li ³ | la ¹ | la ³³ |
| 701.0 | come up | 上来 | 他__过 | *la ¹ | dɛ ^H la ¹ | ta ³³ li ⁵⁵ |
| 702.0 | come down | 下来 | 他__过 | *li ³ | zɛ ¹ la ¹ | ja ²¹ li ³³ |
| 703.0 | go | 去 | 他__过 | *x-ra ¹ | ʒɛ ¹ | ʒi ³³ |
| 704.0 | go up | 上去 | 他__过 | *le ³ | dɛ ^H e ¹ | tai ⁵⁵ |
| 705.0 | go down | 下去 | 他__过 | *ay ¹ | zɛ ¹ ʒɛ ¹ | ja ³³ |
| 706.0 | climb | 爬(上) | 他__过 | | ʔmɛ ^H | ta ³³ |
| 707.0 | return | 回 | 他__过 | *gok ^L | ty ¹ | ku ²¹ li ³³ |
| 708.0 | arrive | 到 | 他__过 | *(k)-rok ^{H/L} | k ^h je ¹ | k ^h ə ⁵⁵ |
| 709.0 | cross (over) | 过 (过河) | 他__过 | | kjo ¹ | tɕɛ ³³ |
| 710.0 | go through | 经过 | 他__过 | | ko ¹ | |
| 711.0 | exit (come out) | 出 (出去) | 他__过 | *ʔ-dwak ^H /ɔk ^H | do ^H | tue ⁵⁵ |
| 712.0 | enter | 进 (进来) | 他__过 | *waŋ ¹ & *luk/ap ^L | dy ² | ni ²¹ li ³³ |
| 713.0 | move back | 退 | 他__过 | | | |
| 714.0 | flee; escape | 逃 | 他__过 | *paw ¹ | k ^h u ² gje ² | t ^h i ³³ |
| 715.0 | chase | 追 (追上) | 他__过 | | tʃu ² | ka ³¹ |
| 716.0 | step on | 踩 | 他__过 | | k ^h i ³ | nu ²¹ |
| 717.0 | jump; leap | 跳 | 他__过 | *ʔ-bok ^H | pɛ ^H | pi ⁵⁵ |
| 718.0 | stride | 跨 (跨小沟) | 他__过 | | | ʒi ³³ |
| 719.0 | ride; ride on | 骑 (骑马) | 他__过 | *dzi ² | dze ² | tai ⁵⁵ |
| 720.0 | EXIST; to be | 在; 有 | 他__过 | *C-plek ^L | dʒɛ ^H | wo ⁵⁵ |

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|-------|----------------------------|------------|-------|--|--------------------------------|--|
| 721.0 | dry (in the sun) | 晒 (晒太阳) | | | ʔly ^L | lo ³³ |
| 722.0 | rain (V) | 下雨 | | | ha ¹ | mi ²¹ ji ³³ |
| 723.0 | (of the wind) blow | 刮风 | | | k ^h y ¹ | mi ²¹ li ⁵⁵ li ⁵⁵ |
| 724.0 | light (on fire) | 点 (点火) | 他__过 | *səduk ^L | to ^L | tu ³³ |
| 725.0 | burn | 焚 (烧) | 他__过 | *duk ^L | k ^h u ¹ | ts ^h ɿ ⁵⁵ |
| 726.0 | burn up | 烧掉 | 他__过 | | k ^h u ¹ | ts ^h ɿ ⁵⁵ jo ²¹ |
| 727.0 | roast (in fire) | 烧 (火里) | 他__过 | *put ^H & cit/et ^H | | |
| 728.0 | roast (over fire) | 烤 (火上) | 他__过 | *ʔ-gaŋ ¹ | kaŋ ¹ | ku ⁵⁵ |
| 729.0 | smoke | 冒烟 | 它__过 | *(C)-fuk ^{H/L} | fɿ ^{H/L} | mo ²¹ sa ³³ |
| 730.0 | explode | 爆炸 | 它__过 | | bu ^H | pie ³³ |
| 731.0 | flow | 流 (水流) | 它__过 | | ʃi ³ | za ²¹ li ³³ |
| 732.0 | overflow; spill | 溢 | 它__过 | *xwan ² & *xwat ^H | ɣy ^L | ci ⁵⁵ |
| 733.0 | float | 浮 (浮在水面) | 它__过 | | | po ³³ |
| 734.0 | crack open; split open | 裂开 (墙裂开) | 它__过 | | be ^L | pie ³³ |
| 735.0 | collapse; topple down | 倒塌 | 它__过 | | by ² | ŋai ⁵⁵ |
| 736.0 | be short of; lack | 缺 (碗缺了一个口) | 它__过 | | k ^h ɛ ^L | k ^h e ³³ |
| 737.0 | roll | 滚 (石头滚) | 它__过 | *(C)-lim ³ | ʔly ^{3/2} | ka ³³ ja ³³ |
| 738.0 | revolve; rotate; spin | 旋转 | 它__过 | *g-waŋ ¹ | tʃaŋ ¹ | tsu ⁵⁵ |
| 739.0 | fall; drop | 掉 (掉在地上) | 它__过 | *(sə)-gla ³ & *(ʔ)-tse ¹ | ts ^h e ¹ | kai ⁵⁵ |
| 740.0 | snap in two (rope, string) | 断 (绳子断了) | 它__过 | | ts ^h ɛ ^H | kəŋ ⁵⁵ |
| 741.0 | break | 破 (罐子破了) | 罐子__过 | *cit ^H | | pie ³³ |
| 742.0 | leak | 漏 (水桶漏水) | 它__过 | | | tu ³³ |
| 743.0 | boil | 沸 | 它__过 | *C-dzak ^H & *m-bi ^{1/2} | tsu ¹ | kə ³³ |
| 744.0 | change | 变 (蛹变蛾) | 它__过 | | | pa ⁵⁵ |
| 745.0 | birth | 生 (生孩子) | 他__过 | baw ³ be born | be ³ | zu ⁴⁵ |
| 746.0 | grow | 长 (长大) | 他__过 | | ɣe ² | ɣə ³³ |
| 747.0 | tremble; shiver | 发抖 | 他__过 | | tʃ ^h e ² | tsu ³³ |
| 748.0 | swell | 肿 | 他__过 | *C-pwam ² /ap ^L & *sə-roŋ ² | p ^h y ^L | fū ⁵⁵ |
| 749.0 | fly | 飞 | 它__过 | *(b)-yam ¹ | bjy ¹ | pu ³³ |
| 750.0 | bark | 吠 (狗叫) fei | 它__过 | *h/loŋ ¹ | lu ³ | məŋ ³³ |
| 751.0 | call; crow (of animals) | 啼 (公鸡啼) | 它__过 | | bo ¹ | ku ³³ |
| 752.0 | lay (an egg) | 生 (生蛋) | 它__过 | | fū ³ | vu ⁵⁵ |
| 753.0 | brood, incubate | 孵 | 它__过 | | ʔmy ² | mu ²¹ |
| 754.0 | germinate, sprout, bud | 发 (芽) | 它__过 | | bi ^H | pu ³³ |
| 755.0 | bloom; blossom | 开 (花) | 它__过 | | ʔve ^H | vi ⁵⁵ |
| 756.0 | bear fruit | 结 (果) | 它__过 | | dʒe ² | to ²¹ |
| 757.0 | rot (fruit) | 腐烂 | 它__过 | *m-bup ^L | p ^h i ² | nəŋ ²¹ |
| 758.0 | begin; start | 开始 | 他__过 | *ʔ-ta ² | tu ¹ | ko ³³ ka ²¹ |
| 759.0 | stop | 停 | 他__过 | *tso ³ /up ^H & *m-jay ² | na ² | wo ⁵⁵ |
| 760.0 | remain | 留下 | 他__过 | *[lə] | | t ^h a ³³ tsɿ ³³ |
| 761.0 | write | 写 | 他__过 | *m-bup ^L | ʔve ^H | kə ²¹ |
| 762.0 | wash (self) | 洗 (手) | 他__过 | tse ² | ts ^h i ² | ts ^h ɿ ³³ |
| 763.0 | get up | 起来 | 他__过 | | tu ¹ | tu ⁵⁵ ta ⁵⁵ |
| 764.0 | shake | 摇动 | 他__过 | *k-lup ^H | ʔlu ^H | ni ³³ |
| 765.0 | sink | 沉 (下) | 他__过 | | | ja ³³ |
| 766.0 | finish | 完成 | 他__过 | *bran ¹ | | tɕi ³³ tu ²¹ |
| 767.0 | give; BEN | 给 | 他__过 | *be ² | gu ² | pi ²¹ |
| 768.0 | destroy | 破坏 | 他__过 | *pyak ^H | p ^h e ^H | ma ²¹ la ²¹ |
| 769.0 | draw water (well) | 吊 (水) | 他__过 | | | xəŋ ⁵⁵ |
| 770.0 | drain, to | 排 (水) | 他__过 | | p ^h e ² | p ^h i ³³ |

| | | | | | | |
|-------|----------------------|-----------|------|--|--|--|
| 771.0 | be standing | 站 (站位) | 他__过 | *ʔ-tu/oŋ ¹ ; *ʔ-ryapL | hy ¹ | zo ³³ |
| 772.0 | skin (animal), to | 剥皮 | 他__过 | | ts ^h i ¹ | li ³³ |
| 773.0 | peel (eggs, fruit) | 剥 | 他__过 | | | |
| 774.0 | clear field | 除田 | 他__过 | *C-mya ² | | tu ³³ |
| 775.0 | weed | 除草 | 他__过 | *C-mruk ^L | mø ¹ | tu ³³ |
| 776.0 | stir | 搅拌 | 他__过 | *m-kok ^H | gɛ ^H | la ⁵⁵ |
| 777.0 | weigh | 称 | 他__过 | *tsin ¹ | ki ¹ | |
| 778.0 | soak; pickle | 泡 | 他__过 | | tɿ ^H | ti ⁵⁵ |
| 779.0 | drown | 淹死/溺死 | 他__过 | | | ti ⁵⁵ nəŋ ²¹ |
| 780.0 | accompany someone | 陪 | 他__过 | | tʃ ^h u ¹ | k ^h u ³³ |
| 781.0 | swim | 游泳 | 他__过 | *[lɔj] | ʔi ¹ ga ³ | ŋ ⁵⁵ ka ³³ |
| 782.0 | drill (a hole) | 钻 (钻孔) | 他__过 | | t ^h u ¹ | tso ⁵⁵ |
| 783.0 | insert | 插 | 他__过 | | ts ^h y ^H | ts ^h o ⁵⁵ |
| 784.0 | drive out | 赶 (驱逐) | 他__过 | | ga ¹ | ka ²¹ tui ⁵⁵ |
| 785.0 | wither | 枯 (树叶枯) | 他__过 | *s-we ² & *gwe ³ (dry) | gu ³ | |
| 786.0 | cough | 咳嗽 | 他__过 | *tso ² & *ʔ-kyan ² | tsi ² | tsu ³³ tsu ³³ |
| 787.0 | yawn | 打呵欠 | 他__过 | *ha ^{2/3} mi ¹ | ʔli ¹ ku ³ | tsu ³³ |
| 788.0 | sneeze | 打喷嚏 | 他__过 | *ha ¹ kye ² | ha ¹ | |
| 789.0 | hiccup | 打嗝 | 他__过 | *ʔut ^H | ɿ ^H | |
| 790.0 | belch | 打饱嗝 | 他__过 | *ut ¹ /an ¹ | ɿ ¹ | |
| 791.0 | fart | 放屁 | 他__过 | *p(y)aw ² & *dek ^L | bjø ² ts ^h ɿ ² bjø ² | ts ^h ɿ ³³ ts ^h ɿ ³³ |
| 792.0 | defecate | 解大便 | 他__过 | *ʔ-ko ² | k ^h i ² e ² | ts ^h ɿ ³³ əŋ ⁵⁵ |
| 793.0 | urinate | 解小便 | 他__过 | *ʔi ² | zi ² tʃ ^h e ^H | n ²¹ ts ^h ɿ ³³ la ⁵⁵ |
| 794.0 | scratch | 挠/搔 | 他__过 | *m-krak ^H ~ m-prak ^H | ku ² | ka ⁵⁵ |
| 795.0 | live | 活 | 他__过 | *c/jya ² & ni ² | ze ¹ | ti ²¹ |
| 796.0 | exchange | 交换 | 他__过 | *ʔ-pa ¹ | pa ¹ | pa ⁵⁵ |
| 797.0 | butt | (用头)碰撞 | 他__过 | *m-krap ^H & *ʔ-m-con ³ & *ton ¹ | t ^h u ³ | ti ²¹ tso ³³ |
| 798.0 | white | 白 | 它__了 | *plu ¹ | p ^h u ¹ | p ^h u ⁵⁵ |
| 799.0 | black | 黑 | 它__了 | *C-nak ^H | ʔne ^H | na ³³ |
| 800.0 | red | 红 | 它__了 | *ʔ-ni ¹ | ʔni ¹ | ni ⁵⁵ |
| 801.0 | yellow | 黄 | 它__了 | *s-rwe ¹ | ʃe ¹ | sɿ ⁵⁵ |
| 802.0 | blue | 蓝 | 它__了 | *bra ¹ & *[lan] | ʔni ¹ | nə ⁵⁵ |
| 803.0 | green | 绿 | 它__了 | *ʔ-ŋo ¹ | ʔni ¹ | nə ⁵⁵ |
| 804.0 | grey | 灰色 | 它__了 | *pe ¹ | p ^h e ¹ | na ³³ p ^h u ⁵⁵ |
| 805.0 | sharp (point) | 尖 (笔嘴很尖) | 它__了 | | ts ^h y ¹ | tɛ ^h i ⁵⁵ |
| 806.0 | sharp (blade) | 快 (刀快) | 它__了 | *tak ^H | t ^h e ^H | t ^h a ⁵⁵ |
| 807.0 | dull | 钝 (刀钝) | 它__了 | *dum ² | du ² | ma ²¹ t ^h a ⁵⁵ |
| 808.0 | round | 圆 (球很圆) | 它__了 | *woŋ ² | va ³ | lu ³³ |
| 809.0 | flat | 平 (路很平) | 它__了 | *ʔ-bra ² | be ¹ | pa ³³ |
| 810.0 | steep | 陡 (山很陡) | 它__了 | | | |
| 811.0 | situated straight | 正 (帽子戴得正) | 它__了 | | | tu ³³ |
| 812.0 | situated crooked | 歪 (帽子戴歪了) | 它__了 | | | xi ³³ |
| 813.0 | straight | 直 (棍子很直) | 它__了 | *(C)-dwaŋ ¹ & *te ² | dʒaŋ ² | |
| 814.0 | crooked; bent | 弯 (棍子弯) | 它__了 | *gok ^L | go ¹ | ku ³¹ |
| 815.0 | thick; dense | 稠 (粥很稠) | 它__了 | | t ^h aŋ ² | t ^h i ³³ |
| 816.0 | thin; watery; sparse | 稀 (粥很稀) | 它__了 | | | |
| 817.0 | hard | 硬 | 它__了 | *krok ^H & *[keŋ] & *[heɪ] | k ^h a ^H | k ^h a ⁵⁵ |
| 818.0 | soft | 软 | 它__了 | *C-nu ² | nu ² | no ³³ |
| 819.0 | bright; light | 亮 (房子很亮) | 它__了 | *m-ba ³ | ba ³ | te ³³ |

| | | | | | | |
|-------|-------------------|--------------|-----|---|---|---|
| 820.0 | dim; dark | 暗 (房子很暗) | 它_了 | | yi ¹ | |
| 821.0 | clear (sky) | 晴 | 它_了 | | te ¹ | |
| 822.0 | overcast | 阴 | 它_了 | | ti ¹ | ni ³³ |
| 823.0 | full | 满 | 它_了 | *m-bliŋ ³ | bi ³ | pəŋ ³³ |
| 824.0 | beautiful | 美丽 {漂亮} | 它_了 | | me ² | nəŋ ³³ |
| 825.0 | ugly | 丑 | 它_了 | | he ¹ | ma ³³ la ²¹ |
| 826.0 | fat (person) | 胖 | 它_了 | *tsu ¹ | ts ^h u ¹ | ts ^h u ⁵⁵ |
| 827.0 | fat; fatty (meat) | 肥 (肉肥) | 它_了 | *tsi ¹ | ts ^h u ¹ | ts ^h u ⁵⁵ |
| 828.0 | lean | 瘦 (瘦肉) | 它_了 | | ne ¹ | tɕo ⁵⁵ |
| 829.0 | skinny; thin | 瘦 (人瘦) | 它_了 | | gy ¹ | tɕo ⁵⁵ |
| 830.0 | clean | 干净 | 它_了 | | xəŋ ¹ | xa ⁵⁵ |
| 831.0 | dirty | 脏 | 它_了 | *kre ² & *kyit ^H & *(C)cak ^{H/L} | | ts ^h a ³³ |
| 832.0 | old (person) | 老 (老人) | 它_了 | *maŋ ² | maŋ ² | mu ²¹ |
| 833.0 | young | 年轻 | 它_了 | *nay ^{2/1} | le ¹ | la ³³ |
| 834.0 | good | 好 (东西好) | 它_了 | *ʔ-min ^{1/2/3} & *m-d(y)akL | me ² | la ²¹ |
| 835.0 | bad | 坏 (人坏) | 它_了 | *pyakH > destroy | p ^h e ^H | t ^h i ³³ |
| 836.0 | fast | 快 (走得快) | 它_了 | *m-gi ¹ & *[waj] | ?mjyH | |
| 837.0 | slow | 慢 (走得慢) | 它_了 | | gja ¹ | a ²¹ za ³³ |
| 838.0 | wet | 湿 (衣服湿) | 它_了 | *(s)-nak ^{H/L} & *ʔjwap/at ^H | tʃ ^h i ² | nə ²¹ |
| 839.0 | dry | 干 (衣服干) | 它_了 | *s-we ² & *gwe ³ | fe ³ | xə ³³ |
| 840.0 | new | 新 | 它_了 | *C-ʃik ^L | xɿ ¹ | sɿ ³³ |
| 841.0 | old | 旧 | 它_了 | *ʔ-bi ² & *ʔ-li ¹ | ?li ¹ | pi ⁵⁵ |
| 842.0 | raw; unripe | 生 (生肉) | | | dʒi ² | |
| 843.0 | cooked; ripe | 熟 (熟肉) | 它_了 | *s-miŋ ³ | ?mi ³ | mi ³³ |
| 844.0 | early | 早 (来得早) | 它_了 | | ne ¹ | sə ²¹ |
| 845.0 | late | 迟 (来迟了) | 它_了 | *(k)-l(y)ay ³ | mja ³ | |
| 846.0 | easy | 容易 | 它_了 | *sa ¹ | le ¹ | ts ^h a ⁵⁵ ts ^h a ⁵⁵ |
| 847.0 | difficult | 难 | 它_了 | *kak ^H & *ʔ/s-ra ² | ʃa ¹ | k ^h a ⁵⁵ |
| 848.0 | hot (temp.) | 热 | 它_了 | *ʔ-loŋ ¹ & *tsa ¹ | ts ^h a ¹ | vu ⁵⁵ |
| 849.0 | cold (weather) | 冷 | 它_了 | *C-grak ^H | gje ^H | |
| 849.1 | cold (body) | | | | gjaŋ ¹ | tɕu ³³ |
| 850.0 | warm | 暖和 | 它_了 | *lum ¹ | ly ¹ | ni ²¹ |
| 851.0 | cool | 凉快 | 它_了 | *(C)-m-gaŋ ¹ & *C-cok ^L | | |
| 852.0 | sour | 酸 | 它_了 | *ʔ-kyin ¹ | tʃe ¹ | tɕi ⁵⁵ |
| 853.0 | sweet | 甜 | 它_了 | *kyo ¹ | tʃ ^h i ¹ | tɕ ^h u ⁵⁵ |
| 854.0 | bitter | 苦 | 它_了 | *ka ² | k ^h a ² | k ^h a ³³ |
| 855.0 | hot (spicy) | 辣 | 它_了 | *pi ¹ | p ^h e ¹ | p ^h i ⁵⁵ |
| 856.0 | salty | 咸 | 它_了 | | | |
| 857.0 | delicious | 好吃 | 它_了 | *may ¹ | me ¹ | k ^h ə ⁵⁵ |
| 858.0 | insipid | 没味道 | 它_了 | | bjɛ ^H | |
| 859.0 | fragrant | 香 (花香) | 它_了 | *[həm] | sy ¹ (by ²)ny ¹ | xoŋ ³³ |
| 860.0 | stinky | 臭 | 它_了 | *ʔ-nam ² | by ² ny ¹ | pi ²¹ |
| 861.0 | fishy (smell) | 腥 (鱼腥) | 它_了 | | dzi ² ny ¹ | |
| 862.0 | rotten | 腐烂的 | 它_了 | *m-bup ^L & *ʔ-kri ² | p ^h i ² | po ²¹ |
| 863.0 | full (stomach) | 饱 | 他_了 | | bɔ ^H | pu ³¹ |
| 864.0 | hungry | 饿 | 他_过 | *C-mwat ^L | mɿ ¹ | mɿ ³¹ |
| 865.0 | thirsty | 渴 | 他_过 | *C-sip ^L | sɿ ¹ | so ³³ |
| 866.0 | tired | 累 (疲乏/疲劳/疲倦) | 他_过 | *[hə] | | ma ²¹ ka ²¹ |

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|-------|---------------------|-----------|-------|---|---|--|
| 867.0 | blessed; happy | 幸福 (日子好过) | 他__过 | *byaw ^{1/2} | ko ¹ sa ¹ | caŋ ²¹ fu ²¹ |
| 868.0 | sad | 忧愁 | 他__过 | *ʔ/s-ra ² | ko ¹ ʃa ¹ | ma ²¹ wu ³³ ci ²¹ |
| 869.0 | ashamed | 惭愧/害羞 | 他__过 | *s-rak ¹ & *ʔ-daŋ ¹ | ʃe ¹ taŋ ¹ | za ³¹ tu ³³ |
| 870.0 | itchy; ticklish | 痒 | 他__过 | *g-ya ² & *m-tsik ^H | dzi ^H | tsɿ ³³ |
| 871.0 | sick | 病 (生病) | 他__过 | *C-na ¹ | na ¹ | na ³³ |
| 872.0 | intelligent; clever | 聪明 | 它__了 | | ʔlu ¹ | ca ²¹ |
| 873.0 | proud | 骄傲 | 它__了 | | | |
| 874.0 | stupid | 愚蠢 | 它__了 | | mi ¹ | pəŋ ⁵⁵ |
| 875.0 | crazy | 疯狂 | 它__了 | *ru ² & *ʔ-but ^H | t ^h ε ³ | vu ²¹ |
| 876.0 | diligent | 勤(勤奋) | 它__了 | | ʃa ² dε ¹ | le ⁵⁵ |
| 877.0 | busy | 忙 | 它__了 | | | keŋ ²¹ |
| 878.0 | capable | 能干(的) | 它__了 | | | tci ²¹ ka ²¹ |
| 879.0 | lazy | 懒 | 它__了 | *m-byaŋ ^{1/2/3} | ʃa ² ma ² dε ¹ | |
| 880.0 | rich | 富 | 它__了 | | baŋ ³ | na ²¹ |
| 881.0 | poor | 穷 | 它__了 | | ʃa ¹ | sa ³³ |
| 882.0 | alive | 活着 | | *dat ^L | ka ² | ti ²¹ la ³³ |
| 883.0 | brave | 勇敢 | 他__了 | *[hak] | | xə ²¹ |
| 884.0 | drunk | 醉 | 他__过 | *yet ^L | ʒe ¹ | je ³¹ , zɿ ³¹ |
| 885.0 | backwards | 落后 | 他__了 | | | ka ³³ nəŋ ⁵⁵ |
| 886.0 | different | 不同 | 他们都__ | *[pəŋ] | ma ² sy ² | ma ²¹ tu ³³ |
| 887.0 | same | 一样 (相同) | 他们都__ | *du ¹ | sy ² | tu ³³ |
| 888.0 | sticky | 粘 | 它__了 | | pe ³ | |
| 888.1 | sticky | 粘 | 它__了 | | ŋa ¹ | na ³¹ |
| 889.0 | slick | (光)滑 | 它__了 | | maŋ ³ | lie ³³ |
| 890.0 | tight | 紧 (绑的紧) | 它__了 | | k ^h i ^H | taŋ ³³ |
| 891.0 | loose | 松 (绑的松) | 它__了 | | loan | ma ²¹ taŋ ³³ |
| 892.0 | expensive | 贵 | 它__了 | *kak ^H (oŋ ¹) & *[peŋ] | k ^h a ^H | k ^h a ⁵⁵ |
| 893.0 | cheap | 便宜 | 它__了 | | | |
| 894.0 | correct | 正确 | 它__了 | *C-t(s)a(w) ^{1/2} | | caŋ ⁵⁵ |
| 895.0 | enough | 足够 | 它__了 | *lok ^L | lo ¹ | lu ³¹ |
| 896.0 | FAR | 远 | 它__了 | *we ² | vi ² | yə ²¹ |
| 897.0 | NEAR | 近 | 它__了 | *b-ni ² | ne ² | nie ³³ |
| 898.0 | HIGH | 高 | 它__了 | *(?)-mroŋ ³ | ʔmu ¹ | na ³³ |
| 899.0 | LOW | 低 | 它__了 | *ʔ-n-yim ³ | ʔni ¹ | |
| 900.0 | LONG (distance) | 长 | 它__了 | *s/m-riŋ ¹ | ʃi ¹ | su ⁵⁵ |
| 901.0 | SHORT | 短 | 它__了 | *ʔ/s-n-yum ¹ | ʔpy ² | t ^h u ³³ |
| 902.0 | MANY | 多 | 它__了 | *[laŋ]/C-mya ² | mja ² | na ²¹ |
| 903.0 | FEW | 少 | 它__了 | *nay ² | ne ² | |
| 904.0 | WIDE | 宽 | 它__了 | *glay ¹ | fe ¹ | |
| 905.0 | NARROW | 窄 | 它__了 | *ʔ-nak ^L | ʔna ¹ | i ⁵⁵ |
| 906.0 | BIG | 大 | 它__了 | *k/ʔ-ri ² / | ye ² | yə ³³ |
| 907.0 | LITTLE | 小 | 它__了 | *n-yay ¹ | ŋa ¹ | i ⁵⁵ |
| 907.1 | LITTLE | 小 | 它__了 | *n-yay ¹ | ʒaŋ ¹ | i ⁵⁵ |
| 908.0 | DEEP | 深 (水深) | 它__了 | *ʔ-nak ^L | ʔne ¹ | na ³³ |
| 909.0 | SHALLOW | 浅 (水浅) | 它__了 | *tim ² | ma ² ʔne ¹ | |
| 910.0 | LIGHT | 轻 | 它__了 | *laŋ ¹ | laŋ ¹ | p ^h a ⁵⁵ |
| 911.0 | HEAVY | 重 | 它__了 | *C-li ² | li ² | nəŋ ²¹ |
| 912.0 | THICK (2d) | 厚 | 它__了 | *tu ¹ | t ^h u ¹ | t ^h u ⁵⁵ |
| 913.0 | THIN (2d) | 薄 | 它__了 | *ba ² & *C-jokL | ba ² | pa ²¹ |
| 914.0 | THICK (3d) | 粗 (粗大) | 它__了 | | ta ³ | yə ³³ |

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|-------|---------------------|-------------|-------|---|--|--|
| 915.0 | THIN (3d) | 细 (细小) | 它_了 | | ts ^h i ¹ | xi ³³ , a ⁵⁵ ci ³³ ci ³³ |
| 916.0 | HOW FAR? | 有多远? | | *a, *ka ¹ -X ³³ dzu ⁵⁵ | | |
| 917.0 | HOW HIGH? | 有多高? | | *a, *ka ¹ -X dzu ⁵⁵ | | |
| 918.0 | HOW LONG? | 有多长? | | *a, *ka ¹ -X dzu ⁵⁵ | | |
| 919.0 | HOW WIDE? | 有多宽? | | *a, *ka ¹ -X dzu ⁵⁵ | | |
| 920.0 | HOW BIG? | 有多大? | | *a, *ka ¹ -X ³³ dzu ⁵⁵ | | |
| 921.0 | HOW DEEP? | 有多深? | | *a, *ka ¹ -X ³³ dzu ⁵⁵ | | |
| 922.0 | HOW HEAVY? | 有多重? | | *a, *ka ¹ -X ³³ dzu ⁵⁵ | | |
| 923.0 | one | 一 | __个很好 | *ti ² | t ^h i ² | t ^h i ³³ |
| 924.0 | two | 二 | __个很好 | *s-ni(k) ^{2/L} | ni ² | ŋ ²¹ |
| 925.0 | three | 三 | __个很好 | *C-sum ² | sa ^{1/3} | su ³³ |
| 926.0 | four | 四 | __个很好 | *b-le ² | ?li ³ | pi ²¹ |
| 927.0 | five | 五 | __个很好 | *ŋa ² | ŋa ² | ŋa ²¹ |
| 928.0 | six | 六 | __个很好 | *C-krok ^L | k ^h o ^L | k ^h u ³³ |
| 929.0 | seven | 七 | __个很好 | *C-ʃi(k) ^{2/L} | xi ² | sŋ ³³ |
| 930.0 | eight | 八 | __个很好 | *C-yet ^L | he ^L | xe ³³ |
| 931.0 | nine | 九 | __个很好 | *go ² | ko ^{1/3} | ku ²¹ |
| 932.0 | ten | 十 | __个很好 | *tsay ¹ | ts ^h e ¹ | tɕ ^h i ⁵⁵ |
| 933.0 | eleven | 十一 | __个很好 | *tsay ¹ di ² | ts ^h e ¹ ti ^L | tɕ ^h i ⁵⁵ t ^h i ³³ |
| 934.0 | twelve | 十二 | __个很好 | | ts ^h e ¹ ni ² | tɕ ^h i ⁵⁵ ŋ ²¹ |
| 935.0 | twenty | 二十 | __个很好 | s-ni ² ?tsay ¹ | ni ² tse ¹ | ŋ ²¹ tɕ ^h i ⁵⁵ |
| 936.0 | twentyone | 二十一 | __个很好 | | ni ² tse ¹ ti ^L | ŋ ²¹ tɕ ^h i ⁵⁵ t ^h i ³³ |
| 937.0 | hundred | 百 | __个很好 | *C-ra ¹ | ha ¹ | za ³³ |
| 938.0 | thousand | 千 | __个很好 | *ʔ-toŋ ¹ | tu ¹ | |
| 939.0 | half | 半 (一半) | __个很好 | *[khwe] & *pak ^H | k ^h y ² | |
| 940.0 | bowlful (MW) | 碗 | 一碗很好 | | kje ² | k ^h u ³³ |
| 941.0 | arm spread (2 arms) | 度(两臂伸直) pai | 一度很好 | | ly ¹ | lu ³³ |
| 942.0 | span (hand-width) | 柞 (拇指-中指) | 一柞很好 | | t ^h y ¹ | |
| 943.0 | CLF.times | 次 | 一次很好 | | p ^h o ^H | po ²¹ |
| 944.0 | 1S | 我 | 很好 | *C-ŋa ¹ | ŋa ¹ | ŋa ³³ |
| 945.0 | 1PL | 我们 | 很好 | *C-ŋa ¹ ?-way ^{2/3} | ŋa ¹ t ^h sa ³ | ŋa ³³ xə ³³ |
| 946.0 | 1PL (inclusive) | 咱们 | 很好 | *ni ¹ ?-way ^{2/3} | a ² va ² | ti ³³ tɕ ^h aŋ ²¹ |
| 947.0 | 2S | 你 | 很好 | *naŋ ¹ | ni ¹ | nu ³³ |
| 948.0 | 2PL | 你们 | 很好 | *naŋ ¹ ?-way ^{2/3} | ŋa ² | nu ³³ xə ³³ |
| 949.0 | 3S | 他 | 很好 | *ʒaŋ ² | (ʒ)aŋ ^{2/3} | i ³³ |
| 950.0 | 3PL | 他们 | 很好 | *ʒaŋ ² ?-way ^{2/3} | ʒaŋ ³ t ^h sa ³ | i ³³ xə ³³ |
| 951.0 | 3SR (another) | 其他人 / 别人 | | *su ¹ | su ¹ | wu ²¹ za ³³ |
| 952.0 | self | 自己 | 他自己 | | e ¹ me ³ | i ³³ mu ³³ |
| 953.0 | another (thing) | 另外 | | | | wu ²¹ za ³³ |
| 954.0 | POSS | 的 | 他的很好 | *way ^{3/2} | ʏi ² | ya ³³ |
| 955.0 | this (1) | 这 (个) | 很好 | *ti ¹ /ci ¹ | tʃu ¹ | ta ³³ |
| 956.0 | this kind | 这种 | 很好 | | | ti ³³ k ^h aŋ ²¹ |
| 957.0 | here (1) | 这里 | 很好 | | | ti ³³ ka ³³ |
| 958.0 | that one | 那个 | 很好 | | | na ³³ ka ²¹ |
| 959.0 | that (higher) | 那 (上位) | 很好 | *ʔ-nam ^{1/2} | na(ŋ) ¹ | |
| 960.0 | that (lower) | 那 (下位) | 很好 | *man ² | | |
| 961.0 | that (far) | 那 (远位) | 很好 | *jam ^{1/2} | | |
| 962.0 | there | 那里 | 很好 | | | na ³³ no ²¹ |
| 963.0 | in front | 前面 | 他在 | *ʔ-ru ² s-re ³ | | kao ³³ |
| 964.0 | on the other side | 对面 | 他在 | *m-ba ¹ & ?-ni ¹ | | ka ³³ saŋ ⁵⁵ |

| | | | | | | |
|--------|---------------------|-----------|-------|---|---|---|
| 965.0 | behind | 后面 | 他在 | *C-ka ² ~ C-kok ^L ?-nok ^L | i ² se ¹ | ka ³³ nəŋ ⁵⁵ |
| 966.0 | between | 中间 | 他在 | *C-kra ¹ | ka ¹ kaŋ ¹ | ŋ ⁵⁵ kaŋ ⁵⁵ |
| 967.0 | left | 左边 | 他在 | *b-way ² & C-may ² | ʔve ² | a ⁵⁵ fi ³³ |
| 968.0 | right | 右边 | 他在 | s-ya ¹ /ŋma ¹ | ʒa ¹ | a ³³ ʒi ²¹ , a ³³ ʒi ²¹ |
| 969.0 | beside | 旁边 | 他在 | | ba ² ta ³ | p ^h i ⁵⁵ tɕu ⁵⁵ |
| 970.0 | side | 边 | | *pa ² | ba ² dzi ¹ | p ^h i ⁵⁵ tɕu ⁵⁵ |
| 971.0 | upon | 上面 | 他在 | *tak ^H | ka ^L | a ³³ t ^h a ⁵⁵ |
| 972.0 | beneath | 下面 | 他在 | *ʔok ^H /ok ^L | | ti ³³ ku ³³ , a ²¹ kə ³³ |
| 973.0 | inside | 里面 | 他在 | *klo ¹ | k ^h jo ² | ni ⁵⁵ k ^h əŋ ⁵⁵ ka ²¹ wai ³³ , ka ²¹ wa ³³ |
| 974.0 | outside | 外面 | 他在 | | | t ^h i ³³ saŋ ⁵⁵ saŋ ⁵⁵ |
| 975.0 | everywhere | 到处 | | | | a ²¹ sɿ ³³ |
| 976.0 | who? | 谁? | __打我? | *ʔəsu ¹ | a ² sa ² | a ⁵⁵ ʔə ³³ , t ^h a ²¹ ʔə ³³ |
| 977.0 | what? | 什么? | 他说__? | *ʔəje ² & *ʔəpa ¹ & *ʔətap ^L | a ¹ tsa ¹ | a ²¹ təŋ ⁵⁵ |
| 978.0 | where? | 哪里? | 他去__? | *ʔəlam ³ | a ² di ¹ | a ²¹ ti ³³ xə ⁵⁵ |
| 979.0 | why? | 为什么? | 他__去? | | a ¹ tsa ¹ pe ¹ | a ²¹ təŋ ⁵⁵ , t ^h i ³³ ma ³³ vi ³³ |
| 980.0 | which (one)? | 哪 (一个)? | 他要__? | | a ² da ¹ | |
| 981.0 | how? | 怎么? | 他__去? | {'ADV/RELQ + choose' cf. 811} | | |
| 982.0 | how much? | 多少? | 你要__? | *ʔəC-mya ¹ | a ¹ ma ³ | k ^h a ³³ sa ³³ |
| 983.0 | now | 现在 | 他__去 | *m-but ^L & ʔəmay ¹ | tʃu ¹ t ^h a ¹ | ti ³³ xəŋ ⁵⁵ |
| 984.0 | just now | 刚才 | 他__去 | | a ² ʃu ³ | |
| 985.0 | before (sequential) | 先 (先去) | 他__去 | | | kao ³³ |
| 986.0 | after | 后 (后去) | 他__去 | | | ka ³³ nəŋ ⁵⁵ |
| 987.0 | before (temporal) | 以前 | | | | |
| 988.0 | formerly | 从前 | | | | |
| 989.0 | already | 已经 | 他__走了 | | | |
| 990.0 | immediately | 立刻 | 他__去 | | | |
| 991.0 | frequently | 常常 (常常来) | 他__去 | | bi ¹ | t ^h i ³³ ca ³³ |
| 992.0 | slowly | 慢慢 (慢慢走) | 他__去 | *ya ³ /yak ^L | a ² de ³ de ³ | a ²¹ lo ³³ |
| 993.0 | quickly | 快快 (快快走) | 他__去 | *mran ¹ & *[hak ^L] | ʔmjy ^H | mi ³³ mi ³³ |
| 994.0 | very | 很 (很漂亮) | 她很漂亮 | | | kai ³³ |
| 995.0 | most | 最 (最大) | 它是最大 | | | |
| 996.0 | all | 都 (大家都来) | 大家都来 | | | |
| 997.0 | again | 再 (明天再来) | 明天再来 | *m-gu ³ | | |
| 998.0 | really; certainly | 一定 (我一定去) | | *m-day ¹ | | |
| 999.0 | not (NEG) | 不 (他不来) | 他不来 | *ma ² | ma ² | ma ²¹ |
| 1000.0 | don't | 别 (别去) | | *ta ² | t ^h a ² | t ^h a ³³ |
| 1001.0 | each other | 互相 | | *m-dak ^L | | |