

Synchronic and diachronic phonology of Lavïa

A Wa language of Yunnan and Myanmar

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Lavïa, spoken in a belt across both sides of the Yunnan-Myanmar border, is an under-researched Wa language falling under the Waic subgroup of Palaungic in the Austroasiatic language family. This study investigates the sound system of Lavïa and traces its development from an ancestral Proto-Wa-Lawa phonological system. Modern Lavïa phonology is characterized by well-preserved sesquisyllabic structure, rich inventories of consonant and vocalic clusters, and lack of phonemic tone or phonation. Diachronically, Lavïa shows widely attested Waic sound changes as well as certain distinctive innovations which, among other things, yielded voiceless nasals and caused huge upheavals in its vocalic system. These diagnostic innovations help define Lavïa's unique position within the Wa language cluster.

Keywords: Austroasiatic, Palaungic, Wa cluster, synchronic, diachronic phonology

1. Introduction

Of the vast array of Wa-Lawa languages¹ and dialects spoken in the Yunnan Province of China and neighboring areas in Burma,² one finds in the Chinese sources a heterogeneous “dialect group” called Awa 阿佤, which is said to include four “subdialects”, namely Masan 馬散, Awalai 阿佤來, Damangnuo 大芒糯, and

1. Wa-Lawa is one of the two language clusters under Waic (the other being Blang), one of the six sub-branches of the Palaungic branch in the Austroasiatic family (Diffloth 1980: 13–15; ms.).

2. One reviewer points out that “The number of Wa speakers in Thailand is minimal, and they are all relatively recent arrivals from Burma; there is no distinctive variety of Wa spoken in Thailand”.

Xiyun 細允 (Zhou et al. 2004). This is most misleading. We can now avow that Masan and Xiyun are distinct Wa-Lawa languages, to be renamed Lavia (*la-viʔ*) and Va (*vàʔ*; Sun 2018b) based on their autonyms. Moreover, Awalai and Damangnuo may also turn out to be separate languages on a par with Lavia, in view of their special phonological developments.³

Lavia is a non-tonal, non-phonational language spoken in a belt of communities (bearing various autonyms like *ʔa vɿʔ*, *rɿ viaʔ*, *ʔa vɔʔ*, *viaʔ*, and *vɿʔ*) stretching across northern Ximeng 西盟 County of Pu'er 普洱 City, Yunnan, and adjacent areas in northern Shan State of Myanmar, as shown on the following map:

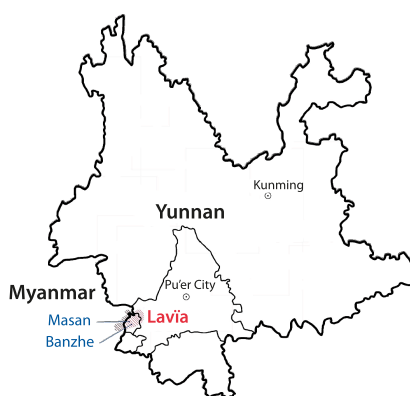


Figure 1. Map of the Lavia-speaking area

The first substantial work on this language was Drage (1907), in which an unspecified variety of Lavia was described using a shaky transcription. Linguistically reliable work on Lavia was not accessible until the national surveys of minority languages of China conducted in the 1950's, resulting in the publication of good-quality data on the Masan variety of Lavia (Zhou & Yan 1984: 107–153). Many years afterwards, further data on the Zhongke 中課, Yuesong 岳送, and Yancheng 岩城 varieties of Lavia also became available (Zhou et al. 2004).⁴

3. For example, these Wa-Lawa languages lost the PWL prenasal (**mpaŋ* 'ladder' > Lavia *npvŋ*, but Awalai and Damangnuo *pŋ*), and failed to share certain characteristic Lavian innovations, such as stop epenthesis in PWL nasal+liquid clusters (**ʔmraʔ* 'steal' > Lavia *nprivʔ*, but Awalai *mriaʔ*, Damangnuo *mrɔʔ*) and certain vowel breaking changes induced by onset voicing (**gaŋ* 'mouse' > Lavia *kʰiŋ*, but Awalai *kʰaŋ*, Damangnuo *kʰɔŋ*) (Zhou et al. 2004).

4. It is fortunate for our field that Zhou & Yan (2004) decided to include comparative data in their valuable book from the conservative Lavian variety of Yancheng, now part of Myanmar.

This article presents a phonological sketch of the Lavia variety of Banzhe 班哲 (*pa-cʰək*) Village, Mengka 勐卡 (*mənɰkʰa*) Town in Ximeng County, on the basis of firsthand materials collected in Kunming.

This paper is organized as follows: §2 presents the synchronic phonological system of Banzhe Lavia (hereafter: Lavia); §3 discusses the changes which shaped the modern Lavia phonology from the Proto-Wa-Lawa (PWL) sound system as reconstructed by Diffloth (1980; ms.). The salient traits of Lavia synchronic and diachronic phonology, and its typological importance as a Waic language are presented in the concluding section.

2. Synchronic phonology

2.1 Word structure

As is typical in Mon-Khmer languages, well-formed words in Lavia can be monosyllabic or sesquisyllabic, or a compound comprising elements exemplifying either syllable type. In sesquisyllabic words, a phonologically reduced minor syllable precedes a stressed major syllable. The iambic stress pattern also carries over to compound words, although the first compound element is not phonologically reduced; e.g. *kuan ʔiá* ‘chick’; *lai muóʔ* ‘time’; *vu vióʔ* ‘get dark’; *lu lié* ‘swim around’.

2.2 The minor syllable

Seven minor syllables occur in our data: *ʔa-*, *pa-*, *ka-*, *ca-*, *la-*, *ra-*, and *si-*. Minor syllables are unstressed with indistinctly pronounced vowels. The minor syllables, set off by a hyphen in this work, are realized with fully articulated vowels in citation or deliberate speech only. The major functions of minor syllables in Lavia are lexical, as in (1), as well as derivational, as in (2):

- | | | | | |
|-----|---------------|-------------|------------------|--------------|
| (1) | <i>taiʔ</i> | ‘vegetable’ | <i>ka-taiʔ</i> | ‘small hole’ |
| | <i>lian</i> | ‘spindle’ | <i>ʔa-lian</i> | ‘wheel’ |
| (2) | <i>nprivʔ</i> | ‘steal’ | <i>pa-nprivʔ</i> | ‘thief’ |
| | <i>vuok</i> | ‘reap’ | <i>si-vuok</i> | ‘sickle’ |
| | <i>lian</i> | ‘spindle’ | <i>ka-lian</i> | ‘spin’ |
| | <i>si-tɛʔ</i> | ‘eight’ | <i>ʔa-tɛʔ</i> | ‘eighty’ |

2.3 The major syllable

The Lavia syllable canon can be formulated as (C)C(C)-V(V)(V)(C), which is further analyzable into onset (C)C(C) and rhyme V(V)(V)(C) portions. The theoretically possible sequence CCCVVVC is not attested. The other syllable types licensed by this canon are illustrated below:

- (3)
- | | |
|--------|---|
| CV | <i>ɲu</i> ‘earthworm’; <i>ʔa</i> ‘smegma’ |
| CVC | <i>kap</i> ‘chin’; <i>ʔem</i> ‘raw, uncooked’ |
| CVV | <i>lai</i> ‘squirrel’; <i>ʔai</i> ‘first male child’ |
| CVVC | <i>kias</i> ‘serow’; <i>ʔauk</i> ‘chest’ |
| CVVV | <i>ɲuai</i> ‘thirty’; <i>muai</i> ‘heal, recover’ |
| CVVVC | <i>kən ɲiauʔ</i> ‘some’; <i>piauk</i> ‘tie up (animals or people)’ |
| CCV | <i>kla</i> ‘testicle’; <i>plv</i> ‘expand’ |
| CCVC | <i>pʰroʔ</i> ‘blanket’; <i>klap</i> ‘stick to [v]’ |
| CCVV | <i>plai</i> ‘liquor’; <i>ncʰai</i> ‘estimate’ |
| CCVVC | <i>pʰries</i> ‘wild boar’; <i>kʰruoʔ</i> ‘thin (of one’s body)’ |
| CCVVV | <i>pluai</i> ‘bead’; <i>pʰriau</i> ‘fierce’ |
| CCVVVC | <i>npiaun</i> ‘gourd flute’ |
| CCCv | <i>nkwi</i> ‘bamboo mat’; <i>npʰla</i> ‘waste time’ |
| CCCVC | <i>nkʰloc</i> ‘trigger’; <i>nkʰwac</i> ‘hiccup’ |
| CCCvV | <i>nprie</i> ‘dirty’; <i>nkʰwia</i> ‘hover, walk in circles’ |
| CCCVCV | <i>nkwiʋɲ ɲiʋʔ</i> ‘foundation (of house)’; <i>nkʰlauŋ</i> ‘height’ |
| CCCVVV | <i>npʰluai</i> ‘switch on (light), set afire’ |

2.3.1 Onsets

2.3.1.1 Simple onsets

Lavia has twenty-five simplex onset consonants:

- (4)
- | | | | | |
|-----------|-----------|-----------|-----------|----------|
| <i>p</i> | <i>t</i> | <i>c</i> | <i>k</i> | <i>ʔ</i> |
| <i>pʰ</i> | <i>tʰ</i> | <i>cʰ</i> | <i>kʰ</i> | |
| <i>m</i> | <i>n</i> | <i>ɲ</i> | <i>ŋ</i> | |
| <i>ɱ</i> | <i>ɳ</i> | <i>ɲ̥</i> | <i>ŋ̥</i> | |
| <i>f</i> | <i>s</i> | | | <i>h</i> |
| <i>v</i> | <i>z</i> | | | |
| | <i>r</i> | | | |
| | <i>l</i> | | | |
| <i>w</i> | | | | |

The affricate series symbolized here as *c*, *cʰ*, *nc*, and *ncʰ* are realized as alveolopalatals [tɕ], [tɕʰ], [ɲtɕ], and [ɲtɕʰ] before *i*; elsewhere, pronunciation varies between alveolar and alveolopalatal. The dental fricatives *s* and *z* are also pro-

nounced as prepalatals before *i*. Velar and palatal nasals contrast before *i*, as shown by minimal pairs like the following:

- (5) *ŋi* 'gums'
 ɲi 'second male child'

The voiceless continuents *ɲ*, *ɳ*, *ɲ̥*, *ɳ̥* are a notable feature, absent from most Waic languages.⁵ The phoneme *h-* is usually pronounced as a velar [x] or uvular [χ]. The phoneme *r* is normally a tap, often pre-voiced in word-initial position [ʳ-]. The voiced labial fricative *v*, varying in realization between a labiodental [v] and a bilabial [β], is distinct from the glide *w*, a marginal onset which occurs in Chinese loans only:

- (6) *va* 'a personal name'
 wa 'tile < Chinese 瓦'

The glottal stop /ʔ/ does not contrast with its absence at the syllable onset position.

Examples of these onset consonants are given below:

- (7) *p-* *ʔa-pac* 'bridge'; *pak* 'bald, barren'
 p^{h-} *p^hɔm* 'fart'; *p^hak* 'wash (something hard, with a brush or scrubber)'
 m- *ma* 'dry field'; *mək* 'mince'
 ɲ- *ɲa* 'bamboo strip'; *ɲɔŋ* 'hear'
 f- *faʔ* 'monkey'; *fap* 'yawn'
 v- *ʔa-vie* 'tiger'; *vum* 'scar'
 t- *tau* 'weasel'; *tək* 'kindle'
 t^{h-} *t^hu* 'peak'; *t^ha* 'ignore'
 n- *nim* 'urine'; *nɔh* 'laugh'
 ɳ- *ɳam* 'blood'; *ɳən* 'topple'
 s- *sup* 'tobacco'; *sak* 'full (with food)'
 z- *ʔa-zuon* 'thunder, dragon'; *zuon* 'know'
 l- *la* 'tea'; *luom* 'sharp'
 r- *rɔŋ* 'pole'; *raiʔ* 'far, deep'
 c- *cak* 'sambhar deer'; *cək* 'buy'
 c^{h-} *c^hə* 'bag, pocket'; *c^ha* 'poor'
 ɲ- *ɲivʔ* 'house'; *ɲies* 'smile, sneer'
 ɲ̥- *ɲ̥ak ɲai* 'eye secretions'; *ɲ̥up* 'catch'
 k- *kak* 'branch'; *kɔi* 'have, exist'
 k^{h-} *k^hauʔ* 'tree'; *k^hat* 'rough, coarse'
 ŋ- *ŋuo* 'fire'; *ŋuom* 'sit'

5. The Paraok Wa, for example, has breathy-aspirated nasals rather than voiceless nasals (Watkins 2002: 117).

ŋ-	ŋɔʔ 'rice plant'; ŋɛ 'pregnant'
h-	hɔc 'muscle'; hauk 'ascend'
ʔ-	ʔak ʔom 'crossbow'; ʔiaŋ 'return'

2.3.1.2 Cluster onsets

A Lavia cluster onset is of the structure (C₁)C₂(C₃)-. The C₁ slot can be filled only by a prenasal *n*- (see below), whereas the C₃ (or medial) slot only by *-r*-, *-l*- and *-w*-. Bilabial and velar stops combine with the two liquid medials *l* and *r* to form a major type of cluster initials. The medial *-w*- is phonetically labiodental. Velar stops in combination with *l* are often realized as uvulars:

(8)	<i>pl</i>	<i>pr</i>	<i>kl</i>	<i>kr</i>	<i>kw</i> [kv]
	<i>p^hl</i>	<i>p^hr</i>	<i>k^hl</i>	<i>k^hr</i>	<i>k^hw</i> [k ^h f]

Another major cluster type consists of stops or stop-liquid clusters preceded by a homorganic nasal, represented herein by /n/. These segment sequences are not treated as unitary *prenasalized stops* in our analysis since, at least in some cases, the prenasal element is a separate morpheme serving a derivational function (e.g. *hlaun* 'high' *nk^hlaun* 'height'). Unaspirated stops in these clusters are redundantly voiced, e.g. *npruon* [mbruon] 'horse'. The prenasal element is however always voiced, even before voiceless aspirated stops, e.g. *np^hla* [mp^hla] 'waste time'.

(9)	<i>np</i>	<i>nt</i>	<i>nc</i>	<i>nk</i>
	<i>np^h</i>	<i>nt^h</i>	<i>nc^h</i>	<i>nk^h</i>
	<i>npl</i>			<i>nkl</i>
	<i>np^hl</i>			<i>nk^hl</i>
	<i>npr</i>			<i>nkr</i>
	<i>np^hr</i>			<i>nk^hr</i>
				<i>nk^hw</i>

(10)	<i>np</i> -	<i>npa</i> 'thigh'; <i>npoŋ</i> 'dam up'
	<i>np^h</i> -	<i>np^hiɐ</i> 'cut diagonally'; <i>np^hok</i> 'ride'
	<i>pl</i> -	<i>pleʔ</i> 'fruit'; <i>plɔk</i> 'boil [v]'
	<i>p^hl</i> -	<i>p^hlən</i> 'sprout [N]'; <i>p^hliɐk</i> 'blind'
	<i>npl</i> -	<i>npleʔ</i> <i>tɛʔ</i> 'arm'; <i>nplɔc</i> 'deceive'
	<i>np^hl</i> -	<i>np^hlen</i> 'convex'; <i>np^hla</i> 'waste time'
	<i>pr</i> -	<i>pre</i> 'hail'; <i>preɪ</i> 'old (as of things)'
	<i>p^hr</i> -	<i>p^hris</i> 'rash, measles'; <i>p^hriɐʔ</i> 'eat (meal)'
	<i>npr</i> -	<i>npruon</i> 'horse'; <i>nprɪɐʔ</i> 'steal'
	<i>np^hr</i> -	<i>np^hraŋ</i> 'hoe'; <i>np^hro</i> 'blow (air)'
	<i>nt</i> -	<i>ntɔŋ</i> 'head'; <i>ntɔk</i> 'install'
	<i>nt^h</i> -	<i>nt^huok</i> 'corner, angle, country'; <i>nt^hə</i> 'put down'

<i>nc-</i>	<i>ncauk</i> ‘spoon’; <i>ncat</i> ‘put out (fire)’
<i>nc^h-</i>	<i>nc^hi</i> ‘declivity’; <i>nc^hun</i> ‘wait’
<i>nk-</i>	<i>nkɔs</i> ‘porcupine’; <i>nkan</i> ‘tie (knot)’
<i>nk^h-</i>	<i>nk^hɛŋ</i> ‘gall’; <i>nk^həʔ</i> ‘glad’
<i>kl-</i>	<i>klaŋ</i> ‘eagle, hawk’; <i>klian</i> ‘twist’
<i>k^hl-</i>	<i>k^hlaʔ</i> ‘trousers’; <i>k^hlap tɛʔ</i> ‘clap’
<i>nkl-</i>	<i>nkluoʔ</i> ‘mud’; <i>nklus</i> ‘explode’
<i>nk^hl-</i>	<i>nk^hluop</i> ‘scale’; <i>nk^hlat</i> ‘frighten’
<i>kr-</i>	<i>kraʔ</i> ‘road, way’; <i>kræi</i> ‘wither’
<i>k^hr-</i>	<i>k^hrəŋ</i> ‘object, possession’; <i>k^hrep</i> ‘cut with scissors’
<i>nkr-</i>	<i>nkriŋ</i> ‘termite’; <i>nkruoʔ</i> ‘burp’
<i>nk^hr-</i>	<i>nk^hrəŋ</i> ‘small bamboo basket’; <i>nk^hrak</i> ‘snore’
<i>kw-</i>	<i>kwe</i> ‘stir’
<i>k^hw-</i>	<i>k^hwit</i> ‘stir’
<i>nk^hw-</i>	<i>nk^hwiʔ</i> ‘foundation of house’; <i>nk^hwih</i> ‘crack [v]’
<i>nk^hw-</i>	<i>nk^hwia</i> ‘hover’; <i>nk^hwac</i> ‘hiccup’

A number of additional clusters, *hl-*, *hr-*, and *mr-*, are also attested; their usual phonetic realizations being *hl-* ([ɬ]), *hr-* ([χɾ]), *mr-* ([mɾ]). That is, the /h/ element in /hl/ and /hr/ is always voiceless.

- (11) *hl-* *hlaʔ* ‘leaf’; *hlak* ‘intelligent’
hr- *hɾaŋ* ‘tooth’; *hɾe* ‘thin (as of books)’
mr- *mɾɛʔ* ‘quantity, amount’; *mɾaŋ* ‘tattered’

2.3.2 Rhymes

2.3.2.1 Nuclear vowels

2.3.2.1.1 Simplex vowels

Lavïa distinguishes the following monophthongal vowels:

- (12)
- | | | |
|----------|----------|----------|
| <i>i</i> | <i>ɨ</i> | <i>u</i> |
| <i>e</i> | | <i>o</i> |
| <i>ɛ</i> | <i>ə</i> | <i>ɔ</i> |
| | <i>a</i> | <i>ɐ</i> |

The lower central vowel phoneme *ə* is phonetically [ʌ]. The language makes elaborate distinctions among back vowels. In addition to *u*, *o*, and *ɔ* common in Waic languages, *ɐ* is also additionally distinctive, as shown by these minimal sets:

- (13) *som* ‘want, desire’ *ʔoʔ* ‘crow (as of rooster)’
sɔm ‘night’ *ʔɔʔ* ‘bamboo’
sɐm ‘eat (rice)’ *ʔɐʔ* ‘flaunt, show off’
sum ‘till, plough’

Vowels in open syllables are markedly lengthened. The higher mid vowels *e*, *o*, *ə* tend to be realized as falling diphthongs, especially in open syllables; e.g. *le* [lei] ‘cup’, *po* [pou] ‘fly [v]’, *klə* [klai] ‘tadpole’. Another notable allophonic rule is glide insertion between a velar onset and the vowel *a*; e.g. *kaʔ* ‘fish’ [k^əaʔ].

- (14) *a* *ma* ‘dry field’; *hak* ‘skin’
i *mi* ‘rich’; *lik* ‘pig’
u *mu* ‘crawl’; *p^huk* ‘scoop’
e *me* ‘retreat’; *ŋem* ‘nail, claw’
ɛ *mɛʔ* ‘bleat’; *si-kɛ* ‘be blocked’
o *mo* ‘refine (ore)’; *ntok* ‘lead (the way)’
ɔ *mɔʔ* ‘hide something’; *lɔk* ‘(of water) boil’
ʋ *mʋ* ‘broadcast (seeds)’; *ŋvək* ‘hat’
ə *mə* ‘boundary’; *ncək* ‘key’
i *mi* ‘silver, money’; *nk^his* ‘badger’

2.3.2.1.2 Vowel clusters

Lav̊ia has an extensive inventory of vowel clusters in three types: (a) rising diphthongs *ia*, *ie*, *iə*, *iʋ*, *ua*, *uo*; (b) falling diphthongs *ai*, *ui*, *oi*, *ɔi*, *vi*, *əi*, *ii*, *au*, *iu*; (c) triphthongs *iau*, *uoi*, *uai*.

The rising diphthongs *ie* and *iə* are interchangeable in closed syllables (phonemicized as *ie*) but contrastive in open ones, as shown by the minimal pair *ŋie* ‘pregnant’ vs. *ŋiə* ‘thrust forcibly’.

The offglides *-i* and *-u* in the falling diphthongs could alternatively be treated as consonantal codas *-j* and *-w*, and in so doing simplify the rhyme system by eliminating all falling diphthongs. Little can be gained by this analysis for a diphthong-rich language like Lav̊ia, however, as some of these complex vocoids themselves take consonantal codas (e.g. *la-ʔaih* ‘sweat’, *ka-taiʔ* ‘hole’, *kən jiauiʔ* ‘some’). The consonantal-coda analysis of the offglides would create *cluster codas*, violating the typical Mon-Khmer syllable canon.

Of the triphthongs, the sequence *uoi*, distinct from *ui*, is another characteristic sound of the language. The contrast is established by minimal sets like the following: *lui* ‘swim’ vs. *luoi* ‘make same mistake again’; *ŋui* ‘lower (head)’ vs. *ŋuoi* ‘fifth child’; *mui* ‘large tree sp. with edible berries’ vs. *muoi* ‘common cattle’.

Examples of the attested vowel clusters are:

- (15) *ia* *kia* ‘look’; *tiak* ‘lose, away’
ie *t^hie* ‘duck’; *k^hiec* ‘shy, ashamed’
iə *j^hiə* ‘littered (with corpses)’; *ŋiə* ‘thrust forcibly’
iʋ *nt^hiʋ* ‘dike’; *v^hiʋʔ* ‘bring back’
ua *kua klan* ‘rapids’; *suat* ‘prick’
uo *nk^huo* ‘brain, marrow’; *np^huoʔ* ‘increase’

<i>ai</i>	<i>ŋai</i> ‘eye’; <i>saiʔ</i> ‘ache, be ill’
<i>ui</i>	<i>nkʰui ʔia</i> ‘cockscorn’; <i>pʰrui</i> ‘catch fire’
<i>oi</i>	<i>ʔoi</i> ‘eighth female child’; <i>koi</i> ‘Lahu’
<i>ɔi</i>	<i>mɔi</i> ‘axe’; <i>kɔi</i> ‘have, exist’
<i>vi</i>	<i>koi</i> ‘cicada species’; <i>ŋviʔ</i> ‘moo (of female buffaloes)’
<i>əi</i>	<i>kəi</i> ‘thread’; <i>nkʰəiʔ</i> ‘torch’
<i>ii</i>	<i>pʰii</i> ‘person, human’; <i>tʰii</i> ‘take’
<i>au</i>	<i>ka-ŋau</i> ‘lungs’; <i>zaʊŋ</i> ‘village’
<i>iu</i>	<i>si-kliu</i> ‘willow’; <i>liuŋ</i> ‘graze [VT]’
<i>iau</i>	<i>miau</i> ‘cat’; <i>piauk</i> ‘tie up (animal)’
<i>uoi</i>	<i>ɲuoi</i> ‘waist’; <i>kʰuoi</i> ‘cautious’
<i>uai</i>	<i>ŋuai</i> ‘thirty’; <i>tuai</i> ‘strike (match)’

2.3.2.2 Codas

Lavïa distinguishes the following consonantal codas:

(16)	<i>-p</i>	<i>-t</i>	<i>-c</i>	<i>-k</i>	<i>-ʔ</i>
	<i>-m</i>	<i>-n</i>	<i>-ɲ</i>	<i>-ŋ</i>	
		<i>-s</i>	<i>-h</i>		

Stop codas are unreleased. Between certain vowels and the coda *-n*, a transitional schwa is inserted; e.g. *ʔa-pon* [ʔapoən] ‘female’; *hɔn* [xɔən] ‘Chinese yam’. Between *i* and velar codas, the vowel *i* is automatically inserted, creating a phonetic-level diphthong [ii], e.g. *tʰiŋ* [tʰiinj] ‘big’; *lik* [liik] ‘pig’. Velar codas are conspicuously labialized after *u*, a feature reminiscent of Vietnamese: *auk* [ʔaukʷ] ‘chest’; *zaʊŋ* [zaʊŋʷ] ‘village’. After high front vowels, *-h* is realized as a palatal [ç].

(17)	<i>-p</i>	<i>kap</i> ‘chin’
	<i>-t</i>	<i>kat</i> ‘blocked’
	<i>-c</i>	<i>pac</i> ‘dig with hand’
	<i>-k</i>	<i>kak</i> ‘branch’
	<i>-ʔ</i>	<i>kāʔ</i> ‘fish’
	<i>-m</i>	<i>kam</i> ‘husk’
	<i>-n</i>	<i>nkan</i> ‘ramie’
	<i>-ɲ</i>	<i>kaɲ</i> ‘paddy field’
	<i>-ŋ</i>	<i>kaŋ</i> ‘bolt (door)’
	<i>-s</i>	<i>nkas</i> ‘foot’
	<i>-h</i>	<i>kah</i> ‘untie’

3. Phonological history

In this section, the sound changes that molded the modern Lavia phonological system out of the ancestral PWL system are identified.

3.1 Sound changes affecting onsets

3.1.1 Simplex onsets

The PWL simple onset inventory contained the following twenty-three consonants:

- (18)
- | | | | | |
|------|------|------|------|-----|
| *p- | *t- | *c- | *k- | *ʔ- |
| *ph- | *th- | *ch- | *kh- | |
| *b- | *d- | *j- | *g- | |
| *m- | *n- | *ɲ- | *ŋ- | |
| | | *s- | | *h- |
| | | *r- | | |
| | | *l- | | |
| *w- | *y- | | | |

Most of these survived as such in Lavia, except for the voiced stops and the glides. The plain voiced stops *b-, *d-, *g-, *j- transformed into voiceless aspirated stops, while the glides *w- and *y- strengthened to voiced spirants v- and z-:

- (19)
- | | | | | | |
|--------------|--------------------|----------------|--------|--------------------|-----------------|
| PWL | Lavia | | PWL | Lavia | |
| *pon | pɔn | ‘four’ | *cak | cak | ‘sambhar deer’ |
| *phɔn | p ^h uan | ‘five’ | *chyɔŋ | c ^h auŋ | ‘light(weight)’ |
| *bɛʔ | p ^h eʔ | ‘goat’ | *jeŋ | c ^h eŋ | ‘sew’ |
| *maʔ | maʔ | ‘mother’ | *ɲaʔ | ɲiɐʔ | ‘house’ |
| *wak | viɐk | ‘insect, worm’ | *yaʔ | zaʔ | ‘grandmother’ |
| *tɔŋ | tɔŋ | ‘roast’ | *koh | kauh | ‘get up’ |
| *th(ə)y | k ^h auʔ | ‘plough | *khiʔ | k ^h ɛʔ | ‘firewood’ |
| | t ^h ai | [N]’ | | | |
| *daŋ | t ^h iɐŋ | ‘cross’ | *gic | k ^h ic | ‘burn [vT]’ |
| **()nim/*nim | nim | ‘urine’ | *ləŋaʔ | la-
ɲiɐʔ | ‘sesame’ |
| *siʔ | seʔ | ‘head louse’ | *ʔip | ʔəp | ‘cooked rice’ |
| *rep | rip | ‘grass’ | *hum | hoŋ | ‘bedbug’ |
| *ləs | les | ‘six’ | | | |

3.1.2 Complex onsets

PWL had a rich system of cluster onsets. Several distinct types are recognized (Diffloth 1980: §4).

3.1.2.1 Preglottalized sonorants

The PWL preglottalized sonorants merged into the corresponding plain sonorants. The erstwhile preglottality had however triggered different vowel developments from PWL plain sonorant onsets, see §3.2.1 below:

(20)	PWL	Lavia		PWL	Lavia	
	*ʔmoʔ	mauʔ	‘rope’	*ʔrɔŋ	rɔŋ	‘house-pole’
	*ʔlaŋ	laŋ	‘long’	*ʔyoŋ	zauŋ	‘village’

3.1.2.2 Preaspirated sonorants

PWL clusters of this type were composed of sonorants preceded by an *h*-like element. The preaspiration is generally preserved in Lavia, but the actual realizations differ according to the sonorant type.

Preaspirated nasals became fused into unitary *voiceless nasals* in Lavia, creating an innovative manner type among onset consonants. The PWL *h+w* combination also turned into a distinct fricative *f*, further enriching the onset inventory. The PWL cluster **hr*- and **hl*- remained as complex onsets in Lavia – direct evidence that the so-called ‘preaspirated’ consonants in PWL were once true clusters:

(21)	PWL	Lavia		PWL	Lavia	
	*hnam	ɲam	‘blood’	*hɾaŋ	hɾaŋ	‘tooth’
	*hwaʔ	faʔ	‘monkey’	*hloŋ	hlaʊŋ	‘high’

3.1.2.3 Post-glottalized liquids

Certain PWL sesquisyllabic forms were reconstructed with liquid-onset minor syllables in combination with ʔ-onset major syllables. These forms are preserved as such in Lavia. Interestingly, simplification by way of syllable coalescence has already set in, and alternative monosyllabic pronunciations with simple liquid onsets are also permitted:⁶

(22)	PWL	Lavia	
	*rəʔom	ra-ʔɔm ~ rɔm	‘water’
	*ləɾʔa	ra-ʔa ~ ra	‘two’
	*ləʔɔy	la-ʔuai ~ luai	‘three’

6. Some exceptions are found; e.g. *la-ʔɔs* ~ **ʌs* ‘grease’ and *ra-ʔaŋ* ~ **raŋ* ‘rock’

3.1.2.4 Stop or nasal plus liquid clusters

With PWL onsets of the nasal+liquid type, stop epenthesis occurred after the nasal element, whereas in the case of the stop+liquid type, the liquid element survived as such:

(23)	PWL	Lavïa		PWL	Lavïa	
	*ʔmraʔ	npriʋʔ	‘steal’	*preṃ	preṃ	‘old, used’
	*səŋroŋ	nkruoŋ	‘knee’	*braʔ	pʰriʋʔ	‘eat (juicy food)’

3.1.2.5 Other consonant cluster types

A number of other complex onset types are posited for PWL, including prenasalized stops, *s+nasal, *r+consonant, *stop+stop sequences, and even more complicated combinations.

The prenasal element is well attested in Lavïa.⁷

(24)	PWL	Lavïa		PWL	Lavïa	
	*mpɔŋ	npɔŋ	‘ladder’	*ndɔut	ntʰut	‘snap (of a thread)’
	*mper	npiu	‘gourd’	*ndah	ntʰiʋh	‘slap’
	*ntiŋ	ntianŋ	‘wall’	*(r)ŋ- goŋ	nkʰuoŋ	‘pillow’
	*ntak	ntak	‘tongue’	*ŋgoʔ	nkʰuoʔ	‘embers’
				ŋuo		
	*mboh	npʰuoh	‘face’			

The other PWL clusters appear to be sesquisyllabic in nature, involving minor syllables containing *sa-, *ra-, and others, some of which are directly kept in the Lavïa reflexes:

(25)	PWL	Lavïa	
	*sə-ma	si-mia	‘seed’
	*rə-pon	ra-pɔn	‘forty’
	*kə-tɔm	ka-tɔm	‘egg’

But in some cases, the Lavïa forms contain minor syllables different from those posited in the PWL reconstructions (especially *rə-):⁸

7. In a number of cases the Lavïa forms do not reflect any nasal element in the protoforms; e.g. PWL *(n)taŋ > Lavïa tai ‘skirt’; PWL *rndak > Lavïa tʰiʋk ‘palm, sole.’ As pointed out by one reviewer, the change of voiced (and nasal+voiced) to voiceless aspirated stops (e.g. PWL *mb- > /npʰ/ [mpʰ]) must be chronologically ordered before the change of *nasal+voiceless unaspirated to phonetically voiced stops (e.g. PWL *mp- > /np/ [mb]).

8. However, even closely related Lavïa varieties sometimes show divergent minor syllables for the same root. Consider the word for ‘tiger’: Banzhe ʔa-vie, Masan ʔa-vi, Zhongke ra-ve, Yancheng si-vvi.

(26)	PWL	Lavïa	PWL	Lavïa
	*rə-way	ʔa-vie	*rə-waʔ	la-viaʔ
		‘tiger’		‘Lavïa (autonym)’
	*rə-mpik	ʔa-pac	*rə-mʋs	la-muos
		‘bridge’		‘banana’
	*rə-deŋ	ka-tʰeŋ		
		‘navel’		

3.2 Sound changes affecting nuclei

3.2.1 PWL vowels

The vocalic inventory of PWL contained nine vowels, with no length distinction:

(27)	*i	*i	*u
	*e		*o
	*ɛ		*ɔ
		*a	*v

Almost all these proto vowels underwent splitting conditioned by voicing of the proto onsets, or articulation places of the proto codas, or both. It should be noted that onset voicing as a conditioning factor for vowel splitting refers to voicing of a voiced consonant with or without a prenasal or liquid medial; in other words, *b(r)-, m(r)- and *mb- are ‘voiced’ in this sense but *hm-, *ʔm- and *mp- are not.⁹

3.2.1.1 PWL *a

The unrounded low vowel *a continued unchanged in Lavïa when the proto onset was a voiceless obstruent, or a preglottalized or preaspirated sononant:

(28)	PWL	Lavïa	PWL	Lavïa
	*paʔ	paʔ	*(-)ŋ-ʔar	ŋa
		‘you [DU]’		‘twenty’
	*klaŋ	klaŋ	*hnaŋ	naŋ
		‘eagle’		‘wear around neck’
	*sak	sak	*ʔmar	ma ruok
		‘sated’		‘dry field’

When the proto onset was voiced, *a underwent breaking into *iv* or *ie* depending on the proto coda: *iv* if the coda was a guttural (i.e. velar or glottal) (29), and *ie* otherwise (30):¹⁰

(29)	PWL	Lavïa	PWL	Lavïa
	*braʔ	pʰrivʔ	*rak	rivk
		‘eat’		‘call (as of an animal)’
	*ʔnaʔ	niʋʔ	*gaŋ	kʰivŋ
		‘house’		‘mouse, rat’
	*wah	viʋh	*saŋa	si-ŋiv
		‘wide’		‘green’

9. For extended discussion of the notion of voicing “permeability” with reference to tonogenesis, register genesis, and vowel breaking in modern Waic languages, see Diffloth (1980: 33ff).

10. Similar differentiation of diphthongs conditioned by different proto codas could also be at work in Drage’s Wa data. Owing to the erratic transcription in this source, however, this fact escaped Diffloth’s notice (1980: 38–39).

(30)	PWL	Lavïa	PWL	Lavïa
	<i>*bam</i>	<i>p^{hiem}</i>	<i>*kənas</i>	<i>nies</i>
	<i>*yam</i>	<i>ziem</i>	<i>*wac</i>	<i>viec</i>
	<i>*sənat</i>	<i>si-niet</i>	<i>*gac</i>	<i>k^{hie}c</i>
	<i>*gat</i>	<i>k^{hiet}</i>	<i>*baŋ</i>	<i>p^{hie}ŋ</i>
	<i>*wan</i>	<i>vien</i>		

3.2.1.2 PWL **i*

The PWL high front vowel **i* is kept unchanged in Lavïa with a voiced onset:¹¹

(31)	PWL	Lavïa	PWL	Lavïa
	<i>*lih</i>	<i>lih</i>	<i>*diŋ</i>	<i>t^{hi}ŋ</i>
	<i>*lik</i>	<i>lik</i>	<i>*(kə)-bit</i>	<i>p^{hi}c</i>
	<i>*gis</i>	<i>k^{hi}s</i>	<i>*ŋgri?</i>	<i>ŋkri?</i>
	<i>*gin</i>	<i>k^{hi}n</i>	<i>*ŋgi?</i>	<i>ŋk^{hi}?</i>

After voiceless onsets, **i* diphthongized to *ia* before **-ŋ* (32),¹² and lowered to *ə* otherwise (33):¹³

(32)	PWL	Lavïa	PWL	Lavïa
	<i>*ʔiŋ</i>	<i>ʔiaŋ</i>	<i>*ntiŋ</i>	<i>ntiaŋ</i>
	<i>*s(ŋ)kiŋ</i>	<i>si-kiaŋ</i>	<i>*kliŋ</i>	<i>ka-lian</i>
(33)	PWL	Lavïa	PWL	Lavïa
	<i>*khi?</i>	<i>k^hɛ?</i>	<i>*kli?</i>	<i>k^lɛ?</i>
	<i>*khi?</i>	<i>k^hɛ?</i>	<i>*pli?</i>	<i>p^lɛ?</i>
	<i>*mpi</i>	<i>m^pɛ</i>	<i>*hri</i>	<i>h^rɛ</i>

3.2.1.3 PWL **i*

With voiced onsets, the vowel **i* exhibits two reflexes depending on the coda. It lowered and moved further backed to *ə* (phonetically [ʌ]) before a guttural coda (34), and stays as *i* after other codas (35):

11. Exceptions: PWL **kədi?* > *t^he?* ‘one’.

12. The generalization cannot extend to all velar codas, as no PWL etyma were found with a voiceless onset and an **-ik* rhyme.

13. Exceptions: PWL **si?* > *se?* ‘head louse’; PWL **kris* > *kres* ‘black bear’; PWL **s(ŋ)krit* > *si-kret* ‘cricket’; PWL **(-)bi?* > *si-p^he?* ‘job’s tear millet’; PWL **ʔin* > *ʔien* ‘this’; PWL **phi?* > *p^hi?* ‘otter’.

- (34) PWL Lavia PWL Lavia
**ɲiʔ* *ɲəʔ* 'drink' **griŋ* *kʰrəŋ* 'things'
**klbiʔ* *ka-pʰəʔ* 'soul' **bliŋ* *pʰləŋ* 'shoot (of plant)'
- (35) PWL Lavia PWL Lavia
**bis* *pʰis* 'resin' **ʔɣriŋ* *nkriŋ* 'termite'
**nim* *nim* 'urine' **jrim* *kʰrim* 'soya bean'

With voiceless PWL onsets, Lavia likewise shows two-way splitting conditioned by the proto coda. Before a guttural coda, PWL **i* diphthongized to *ai* (36),¹⁴ and lowered to *ə* after other codas (37):

- (36) PWL Lavia PWL Lavia
**siʔ* *kuan saiʔ* 'grandchild' **rəmpik* *ʔa-pac* 'bridge'
**ʔriʔ* *raiʔ* 'deep' **kiŋ* *kaŋ* 'field'
**ləʔih* *la-ʔaih* 'sweat' **piŋ* *paŋ* 'blow'
- (37) PWL Lavia PWL Lavia
**him* *həm* 'bathe' **pi* *pə* 'grey'
**hlit* *hlət* 'deaf' **kir* *kə* 'wind'
**tis* *təs* 'breast'

3.2.1.4 PWL **u*

The high back vowel **u* generally lowered to *o*:¹⁵

- (38) PWL Lavia PWL Lavia
**bruʔ* *pʰroʔ* 'blanket' **tuŋ* *nton* 'stew, boil over slow fire'
**nsum* *ncʰom* 'plant [v]' **sut* *sot* 'pick up'
**ntum* *ntom* 'soak' **kus* *kos* 'boil (rice)'
**pur* *po* 'fly [v]' **klun* *klon* 'python'

3.2.1.5 PWL **o*

The PWL back vowel **o* underwent multiple splitting. After a voiced onset and followed by a coronal coda, **o* raised to *u*:

- (39) PWL Lavia PWL Lavia
**(rə)-moŋ* *ʔa-muŋ* 'wife' **bon* *pʰun* '(day-)time'
**jo* *ju* 'guest' **broy* *pʰrui* 'catch fire'
**jor* *ju* 'wax' **jos* *cʰus* 'sell'

14. The palatal codas in examples like 'bridge' stem from a further development; i.e. **rəmpik* > **ʔa-paik* > *ʔa-pac*.

15. Exceptions where **u* is kept as such: PWL **kədu* > *ka-tʰu* 'belly'; **ʔuc* > *ʔuc* 'be finished'.

After a voiced onset and before other codas, *o underwent diphthongization to *uo*:

(40)	PWL	Lavïa		PWL	Lavïa	
	*boʔ	<u>p^huoʔ</u> nkruom	‘friend’	*mrok	npruok	‘dhole’
	*sə-moʔ	si-muoʔ	‘stone’	*ɲom	ɲuom	‘sit’
	*roh	ruoh	‘bark [v]’	*ɲop	p ^h un ɲuop	‘early morning’

With a voiceless onset and a guttural coda, *o lowered and diphthongized into *au*:

(41)	PWL	Lavïa		PWL	Lavïa	
	*hoŋ	haun	‘steam [v]’	*ʔmoʔ	mauʔ	‘rope’
	*hok	hauk	‘climb’	*rəŋkoʔ	nkauʔ	‘husked rice’
	*koŋ	kaun	‘dig’	*croʔ	si-rauʔ	‘new’

With a voiceless onset and other codas, *o lowered to ɔ:¹⁶

(42)	PWL	Lavïa		PWL	Lavïa	
	* <i>rənsom</i>	<i>sɔm</i>	‘night’	* <i>rhom</i>	<i>ra-hɔm~hrɔm</i>	‘heart’
	* <i>hon</i>	<i>hɔn</i>	‘tuber’	* <i>pon</i>	<i>pɔn</i>	‘four’
	* <i>hoc</i>	<i>hɔc</i>	‘arrive’	* <i>ɲkos</i>	<i>nkɔs</i>	‘porcupine’
	* <i>r/ləʔos</i>	<i>la-ʔɔs</i>	‘grease’			

3.2.1.6 PWL *ɔ

With plain voiced onsets, PWL *ɔ underwent raising and diphthongization into *uo*:¹⁷

(43)	PWL	Lavïa		PWL	Lavïa	
	*ɲɔk	si-ɲuok	‘neck’	*ɲɔŋ	nk ^h uon	‘mountain’
	*mɔɲ	muon	‘mouth’	*rɔɲ	ruoi	‘fly (insect)’
	*kəmɔɲ	muoi	‘common cattle’	*pəɲɔŋ	ʔa- <u>zuon</u>	‘rainbow’
	*jɔs	c ^h uos	‘large black ant’			

With voiceless onsets, PWL *ɔ became lowered and diphthongized to *ua* before a coronal coda (44),¹⁸ lowered to *ɔ* before a velar coda (45), and remained as ɔ otherwise (46):¹⁹

(44)	PWL	Lavïa		PWL	Lavïa	
	*kɔn	kuan	‘child’	*ʔmɔc	muac	‘broken rice’
	*hɔt	<u>huat</u> k ^h ɛʔ	‘follow’	*sɔc	nc ^h uac	‘whistle’
				*ɲɔɲ	ɲuai	‘thirty’

16. With an important exception PWL *kol > kau ‘ten’, noted by Diffloth with reference to Drage’s Lavïa data (1980: 54).

17. Exceptions: PWL *bɔʔ > p^hoʔ ‘younger sibling’; *-lɔʔ > loʔ ‘snail’; *ɲɔl > ɲu ‘earthworm’.

18. Exception: PWL *ntɔt > tɔt ‘smoke (a cigarette)’.

19. Exception: PWL *krɔ > krɔ ‘cotton tree (*Bombax ceiba*)’, PWL *kəɔm > ka-tɔm ‘liver’.

- ### 3.2.1.7 PWL *v

(47)	PWL	Lavìa		PWL	Lavìa	
	<i>*mrɔŋ</i>	<i>npruɔŋ</i>	‘horse’	<i>*lɔm</i>	<i>luom</i>	‘sharp’
	<i>*rəmɔs</i>	<i>la-muos</i>	‘banana’	<i>*rɔs</i>	<i>ruos</i>	‘choose’
	<i>*ɲɔ</i>	<i>ɲuo</i>	‘fire’	<i>*yɔŋ</i>	<i>zuɔŋ</i>	‘know’
	<i>*gɔt</i>	<i>k^huot</i>	‘old, elderly’			

With voiceless, preaspirated or preglottalized onsets, **v* generally merged into *ɔ* (48), except before a coronal proto coda where it became diphthongized to *ua* (49):

- | | | | | | | |
|------|---------|--------------------|---------------------|----------|-------------------|----------------|
| (48) | PWL | Lav ^{ia} | | PWL | Lav ^{ia} | |
| | *ʔv | ʔv | ‘elder sister’ | *hlvŋ | hlvŋ | ‘cool’ |
| | *mpv | pɔ | ‘mortar’ | *plvŋ | plvŋ | ‘thatch grass’ |
| | *kətv̄m | ka-tv̄m | ‘egg’ | *sʔv̄h | si-ʔv̄h | ‘dry’ |
| | *klv̄m | klv̄m | ‘carry on shoulder’ | | | |
| (49) | PWL | Lav ^{ia} | | PWL | Lav ^{ia} | |
| | *kvt | kuat | ‘cold’ | *ʔvs | uas | ‘swell’ |
| | *phv̄n | p ^h uan | ‘five’ | *ʔənsv̄s | ka-suas | ‘charcoal’ |
| | *sv̄r | sua | ‘civet’ | *ʔlv̄s | luas | ‘loud’ |

20. The vowel **o* in the *pw* and *PWL* form **hmok* posited in Diffloth ms. was marked as doubtful. The Lavia evidence points rather to ***hmək*.

3.2.1.8 PWL *e

With voiced onsets, *e normally stayed as such:

(50)	PWL	Lavïa		PWL	Lavïa	
	*rædeŋ	ka-t ^h ɛŋ	‘navel’	*greh	reh	‘spill our’ ²¹
	*breʔ	p ^h reʔ	‘weather’	*səŋeʔ	si-ŋeʔ	‘sun’
	*get	k ^h et	‘bite’	*meʔ	meʔ	‘you [sg]’
	*beh	p ^h eh	‘spit out’			

With voiceless onsets, *e typically lowered to ε:²²

(51)	PWL	Lavïa		PWL	Lavïa	
	<i>*preʔ</i>	<i>preʔ</i>	‘spicy’	<i>*het</i>	<i>hɛc</i>	‘dried, parched’
	<i>*hreŋ</i>	<i>hreŋ</i>	‘thousand’	<i>*prem</i>	<i>prem</i>	‘old, used’
	<i>*-seh</i>	<i>sɛh</i>	‘down’	<i>*səntem</i>	<i>si-tɛm</i>	‘nine’
	<i>*ʔem</i>	<i>ɛm</i>	‘alive’	<i>*rəhmenŋ</i>	<i>ŋɛŋ</i>	‘male’
	<i>*kheʔ</i>	<i>k^hɛʔ</i>	‘back(side)’	<i>*(ŋ)-khen</i>	<i>nk^hɛŋ</i>	‘gall bladder’

3.2.1.9 PWL *ε

With voiced onsets, *ε became raised to e, merging with *e in this phonological context:

(52)	PWL	Lavïa		PWL	Lavïa	
	*bɛʔ	p ^h eʔ	‘goat’	*lɛs	les	‘six’
	*rɛm	rem	‘weed [v]’	*ʔɛʔ	ʔeʔ	‘we [INCL]’ ²³
	*rɛs	res	‘root’			

With voiceless onsets, *ε generally underwent lowering and diphthongization to ia (53), except when followed by a guttural coda, where it remained as ε (54):

(53)	PWL	Lavïa		PWL	Lavïa	
	*ʔet	ʔiat	‘small’	*p-()-her	hia	‘bee’
	*ηken	nkian tɛʔ	‘finger’	*ʔɛr	ʔia	‘chicken’
	*tɛp	tiap	‘flea’	*hrɛm	hriam	‘iron’

(54)	PWL	Lavïa	
	*ʔɛŋ	ʔɛŋ	‘excrement’
	*hlɛʔ	hlɛʔ	‘rain’
	*kætɛʔ	ka-tɛʔ	‘earth’

21. The r- onset is irregular.

22. A handful of exceptions with unaltered vowel e are found: PWL *pes > pes ‘sweep’; PWL *tes > tes ‘mushroom’; PWL *mhem > ŋem ‘nail (body part)’; PWL *ses > ses ‘write’; PWL *peʔ > peʔ ‘you [PL]’.

23. The vowel of the root *ʔɛʔ posited in Diffloth ms. was marked as doubtful.

3.2.2 Summary and generalizations

As demonstrated above, the nine PWL vowels went through a full range of conditioned splits in Lavia. The observed historical changes are typologically unusual in that, unlike the celebrated cases of Labovian vowel shifts, Lavia vowel shifting was conditioned by onset voicing and articulation place of codas rather than by quantity differences in the rhymes. Moreover, the direction of shifting may differ for the same proto vowel (e.g. PWL **o* could raise to *u* or lower to *ɔ*) depending on the conditioning factors. In the following table, the reflexes of the nine PWL vowels are given with their conditioning environments:

Table 1. Lavia vowel splits and their conditioning

	*ONSET VOICING	*CODA	LAVIA REFLEXES	
* <i>a</i>	+	guttural	<i>iv</i>	
		other	<i>ie</i>	
* <i>i</i>	–	regardless	<i>a</i>	
	+	regardless	<i>i</i>	
		*- <i>ŋ</i>	<i>ia</i>	
* <i>ĩ</i>	+	other	<i>ε</i>	
		guttural	<i>ə</i>	
	–	other	<i>i</i>	
* <i>ɨ</i>	+	guttural	<i>ai</i>	
		other	<i>ə</i>	
	–	guttural	<i>ai</i>	
* <i>u</i>	±	other	<i>ə</i>	
* <i>o</i>	+	regardless	<i>o</i>	
		coronal	<i>u</i>	
	–	other	<i>uo</i>	
		guttural	<i>au</i>	
* <i>ɔ</i>	+	other	<i>ɔ</i>	
		regardless	<i>uo</i>	
		–	velar	<i>v</i>
		coronal	<i>au</i>	
	–	other	<i>ɔ</i>	
* <i>v</i>	+	regardless	<i>uo</i>	
		–	coronal	<i>ua</i>
		other	<i>ɔ</i>	
	–	regardless	<i>uo</i>	
* <i>e</i>	+	coronal	<i>ua</i>	
	–	other	<i>ɔ</i>	
* <i>ε</i>	+	regardless	<i>e</i>	
	–	regardless	<i>ε</i>	
* <i>ε</i>	+	regardless	<i>e</i>	
		–	guttural	<i>ε</i>
	–	other	<i>ia</i>	

A number of generalizations present themselves in the table above.

First, all the PWL vowels except **u* underwent diversification conditioned by onset voicing (as defined in §3.2.1 above) and articulation place of the codas. In view of the insightful generalization “...phonation types (registers) affect vowel systems by causing diphthongization, but tones have little effect on vowel quality and do not create diphthongs...” (Diffloth 1980:36), Lavía may have once had a clear (from PWL voiceless stops) vs. slack (from PWL voiced stops) phonation distinction which, after triggering the observed massive vowel shifts, was subsequently lost in Banzhe and the other known Lavía varieties, save for a trace of slack phonation in the guise of secondarily aspirated stops.

Second, in the process of vowel splitting, most PWL vowels after voiced onsets shifted higher or, in the case of the PWL high vowels, stayed high. As discussed in Diffloth (1980:37ff.) concerning the proto low vowel **a*, raising may take the form of a high onglide in a diphthong, as in the case of **a* becoming *ia* and **o* becoming *uo*. Notably, raising and vowel breaking led to near-total merger of the PWL non-high back rounded vowels after voiced onsets. The converse process of lowering occurred with all PWL vowels after voiceless onsets, with the exception of the rounded low vowel *v*, for which further lowering would not be possible. Again, vowel lowering may be direct (**i* > *ε*; **i* > *ə*; **o* > *ɔ*; **ɔ* > *v*; **e* > *ε*) or realize by a low component vowel in a diphthong (**i* > *ia*; **i* > *ai*; **o/ɔ* > *au*; **ε* > *ia*). These facts fall in well with Thurgood (2002)’s prediction regarding the effects of voice quality on vowel height and fronting, such that breathy phonation conditions vowel raising and backing, while tense phonation conditions vowels lowering and fronting.

Third, the convoluted developments of proto vowels added many innovative vocoid clusters (*au*, *ua*, *uo*, *ie*, and *ia*) to the modern Lavía system, without diminishing the number of contrastive monophthongs and vocoid clusters inherited from the PWL nucleus inventory.

Fourth, regarding syllable codas, the gutturals and coronals are natural articulation-place classes that play the most prominent role in conditioning vowel splits.

3.3 Sound changes affecting codas

All its onset consonants, except *-l*, and *-w* and the voiced stops, could serve as syllable codas in PWL.

- (55)
- | | | | | |
|------------|------------|------------|------------|------------|
| <i>*-p</i> | <i>*-t</i> | <i>*-c</i> | <i>*-k</i> | <i>*-ʔ</i> |
| <i>*-m</i> | <i>*-n</i> | <i>*-ɲ</i> | <i>*-ŋ</i> | |
| | <i>*-s</i> | | | <i>*-h</i> |
| | <i>*-r</i> | | | |
| | | <i>*-y</i> | | |

The attested codas fall under three natural classes: labial (*-p, *-m), coronal (*-t, *-n, *-s, *-r, -c, *-ɲ, *-ɣ), and guttural (*-k, *-ŋ, *-ʔ, *-h). As we have seen in previous sections, codas belonging to the same natural class frequently patterned together in sound changes.

Lavia generally preserves the PWL stop and nasal codas, except that proto dental and velar codas became palatals after front vowels:

(56)	PWL	Lavïa		PWL	Lavïa	
	*ʔet	ʔɛc	‘sleep’	*hwek	fɛc	‘dark’
	*(kə)-bit	p ^h ic	‘glutinous (rice)’	*ʔɛŋ	ʔɛɲ	‘excrement’
	*ʔɛk	ʔɛc	‘elder brother’	*jeŋ	c ^h ɛɲ	‘sew’

Palatalization of dental and velar codas, for obvious reasons, did not apply where diphthongization had turned *i into (phonetic-level) *iɪ* (e.g. PWL *diŋ > t^hiŋ [t^hiɪŋ] ‘father’s elder brother’; PWL *lik > lik [liik] ‘pig’), *ia* (e.g. PWL *ntiŋ > ntiaŋ ‘wall’) and *ie* (e.g. PWL *ʔin > ʔien ‘this’).

Of the PWL continuant codas, *-s (57) and *-h (58) are preserved as such, making Lavia one of the few Waic languages where both contrastive Austroasiatic spirant codas are directly attested:

(57)	PWL	Lavïa		PWL	Lavïa	
	<i>*tes</i>	<i>tes</i>	‘mushroom’	<i>*ʔvs</i>	<i>uas</i>	‘swell’
	<i>*les</i>	<i>les</i>	‘six’	<i>*ʔənsəʋs</i>	<i>ka-suas</i>	‘charcoal’

(58)	PWL	Lavïa		PWL	Lavïa	
	<i>*lih</i>	<i>lih</i>	‘exit’	<i>*rntah</i>	<i>ʔa-tah</i>	‘medicine’
	<i>*koh</i>	<i>kauh</i>	‘get up’	<i>*ləʔih</i>	<i>la-ʔaih</i>	‘sweat’

PWL -y has also been retained in Lavia, interpreted here as a vocalic glide -i:

(59)	PWL	Lav̊ia		PWL	Lav̊ia
	*ʔlay	lai	‘squirrel’	*broy	p ^h rui ‘catch fire’
	*ɲɔy	ɲuoi	‘waist’	*kiy	kəi ‘thread’

On the other hand, PWL *-r was elided without a trace, constituting another source of modern open syllables:

(60)	PWL	Lavïa		PWL	Lavïa
	*ʔmar	<u>ma</u> ruok	‘dry field’	*kir	kə ‘civet’
	*spr	sua	‘civet’	*mor	mu ‘crawl’

4. Concluding remarks

This article delineates the phonological patterns and sound changes of Lavïa, a Waic language of southwestern Yunnan and eastern Myanmar.

Synchronically, the Lavïa sound system features a well-preserved sesquisyllabic structure, abundant consonant and vocalic clusters, and total absence of contrastive tone or phonation.

The innovations that shaped modern Lavïa phonology include a number of developments commonly attested in Waic languages, such as devoicing and aspiration of proto voiced stops, loss of marked glottality in the preglottalized consonants, and strengthening of glide **y-* to fricative *z-*. On the other hand, certain more distinctive phonological innovations are also found, such as transformation of **h*+nasal clusters into voiceless nasals and, in particular, prolific vowel shifts via raising, lowering and diphthongization which caused huge upheavals in the vocalic system.

The complete lack of either tone or register distinctions makes Lavïa typologically unusual among Waic languages.²⁴ On the other hand, Drage (1907) apparently heard multiple tones in the Lavïa dialect(s) he worked on (for discussions, see Diffloth 1980: 23–26). Could these simply be impressionistic whims of an untrained transcriber, or are they clues pointing to an earlier tonal or phonation stage still extant in some Lavïa dialects?

The foregoing generalizations are drawn on the basis of primary data from a single variety of Lavïa: Banzhe. A systematic comparison of the many local Lavïa varieties (Masan, Yuesong, Yancheng, and others) remains to be undertaken, but the internal diversity of Lavïa can be appreciated by noting that, for example, PWL **-s* merged into **-h* in Masan whereas PWL **-r*, dropped in Banzhe, still survives in the Yuesong (Yunnan) and Yancheng (Myanmar) varieties. Much further work needs to be done to document and analyze the more diverse forms of Lavïa in Yunnan and Myanmar, in order to identify significant innovations that are shared across the whole Lavïa dialect complex, which will be indispensable for a proper characterization of Lavïa as a distinct member among the Waic language cluster.

24. This is true of Banzhe (our target Lavïa variety) as well as the Masan, Zhongke, Yuesong, and Yancheng varieties reported in Zhou et al. (2004). On the other hand, many Waic languages make contrastive use of tones (e.g. all the Blang languages, such as Pang reported Sun (2018a), and the Wa-Lawa language Vă?) or phonation (e.g. Paraok (Watkins 2002) and Phalok (Diffloth, ms.)).

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Abbreviations

PWL Proto-Wa-Lawa

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Appendix. English-Lavía Vocabulary

10th year, chicken; <i>num ʔia</i>	ancestors, forebears; <i>taʔ-ntu zaʔ-luan</i>
11th year, dog; <i>num soʔ</i>	and; <i>mii</i>
12th year, pig; <i>num like</i>	angle [v]; <i>met kaʔ</i>
1-litre-volume measuring container; <i>sej</i>	angry, take offence; <i>si-kʰic ra-həm; npʰrus ra-həm; rau ra-həm</i>
1st day of the lunar month; <i>las kʰeʔ ta-səm</i>	animal fat, grease; <i>la-ʔos</i>
2nd day of the lunar month; <i>ntʰis kʰeʔ ra-səm</i>	animal, beast; <i>neʔ pʰreʔ</i>
2nd year, ox; <i>num krak muoi</i>	ankle; <i>ncʰɔŋ cʰuonj</i> ; (ankle bone) <i>ŋai cʰuonj</i>
3rd year, tiger; <i>num ʔa-vie</i>	answer, reply; <i>pək</i> ; (respond to calling) <i>luos</i>
4th year, rabbit; <i>num ka</i>	ant; <i>məc</i> ; (large, black sp.) <i>cʰuos</i>
5th year, dragon; <i>num ʔa-zuonj</i>	ant-lion; <i>nkriŋ məc</i>
6th year, snake; <i>num si-ʔonj</i>	anus; <i>ka-taiʔ kre</i>
7th year, horse; <i>num npruonj</i>	anxious; <i>kʰie ra-həm</i>
8th year, ram; <i>num pʰeʔ</i>	appearance, shape; <i>kʰauʔ ncʰonj</i>
9th year, monkey; <i>num faʔ</i>	apply (ointment); <i>kreʔ; pʰə</i>
a (bamboo) tube for blowing on a fire; <i>npʰaŋ ŋuo</i>	arm; <i>npleʔ (teʔ)</i>
a few, several; (few) <i>kən ɲiauʔ; ra-luai</i>	armband; <i>nple teʔ</i>
a lifetime; <i>ncʰu</i>	armpit; <i>klec</i>
a piece of cloth with straps for carrying a toddler on the back; <i>nivʔ</i>	armspan, fathom; <i>təp</i>
a section of bamboo used as a container; (small) <i>npʰəʔ ʔəʔ</i> ; (shorter) <i>si-tʰuo</i> ; (longer) <i>ncʰv</i>	arrive; <i>həc</i> ; (arrive for the first time) <i>las</i>
a unit of dry measure for grain (=1 decaliter); <i>kʰra</i>	arrogant, conceited; <i>ʔa-miv</i>
a vertical bamboo flute; <i>ncʰu</i>	arrow; <i>tʰe</i> ; (~ groove) <i>nkʰuonj ʔak</i> ; (~ poison) <i>ʔom</i>
a while; <i>kən ti vut</i>	ashes; <i>ɲuoʔ</i>
abdomen; <i>kej paunj</i>	ask to come, summon; <i>kək</i>
abstain from eating certain foods; <i>tʰuos</i>	ask (a question); <i>ŋaŋ</i>
accomplish, succeed; <i>huac zuh</i> ; <i>ʔuc zuh</i>	askew, wry, slanting, too much weight on one side; <i>nkʰej; hlai</i>
accomplished; <i>huac</i> ; <i>ʔuc</i>	assemble, muster [VT]; <i>(n)kʰrəm</i>
accumulate; <i>ntʰuŋ</i>	assess, estimate; <i>ncʰai; si-pək</i>
accustomed to, have the habit of; <i>mit; rian</i>	astringent; <i>kren</i>
ache, be painful; <i>saiʔ</i> ; (of teeth from eating sour food); <i>saiʔ ke hraŋ</i>	at present; <i>lai ʔien</i>
Adam's apple; <i>nkʰət</i>	at the bottom of (a hill); <i>ncʰuonj ra-ʔaŋ</i>
add; <i>npʰuoʔ; nauk</i>	audit, check (accounts); <i>səp kia</i>
add (water), dilute; <i>pləm</i>	aunt (mother's brother's wife); <i>mivʔ/tʰiŋ</i>
admire, envy; <i>kəi/npʰaŋ ra-həm</i>	aunt (mother's sister), (older than mother) <i>tʰiŋ</i> ; (younger than mother) <i>mivʔ</i>
adult; <i>pʰii tʰiŋ</i>	aunt (wife of father's elder brother); <i>tʰiŋ</i>
advantage, benefit; <i>kaʔ/krəŋ-ŋəm</i>	aunt (wife of father's younger brother); <i>mivʔ</i>
advise, counsel; <i>kleh</i>	awl; <i>ntəh; ncai</i>
affectionate, intimate; <i>ʔa-cʰaŋ</i>	awn of wheat; <i>ʔa-ŋəc (pleʔ nkauʔ)</i>
afraid, fear; <i>hlat</i>	ax; <i>məi</i>
again; <i>npʰuoʔ</i>	baa/bleat; <i>npeʔ; meʔ</i>
age; <i>num</i>	baby; <i>kuan ŋa</i>
agree on, arrange; <i>huac nəʔ/ʔəh</i>	baby food; <i>mam</i>
agree, consent; <i>ɲiat</i>	back; <i>si-ʔaŋ kʰeʔ; kaʔ kʰeʔ</i>
aim [v]; <i>si-təŋ ɲəm</i>	back door; <i>ʔa-vivʔ lies</i>
alcoholic beverage; <i>plai</i>	back of hand; <i>npriʔ teʔ</i>
alkali; <i>ka-ʔat</i>	back of head; <i>(ntəŋ) npluok</i>
all of us; <i>nkəm mau; kʰu kaiʔ/pʰii</i>	back up, retreat; <i>me; me tə zauŋ; me tə ɲivʔ; me kaʔ-kʰeʔ</i>
all, everything; <i>nkəm mau/kʰu kaiʔ</i>	bad; <i>lut</i>
alone; <i>noŋ</i>	badger; <i>nkʰis</i>
alter; <i>ʔa-tʰivh</i>	bag; <i>hə</i>
aluminum; <i>nprak</i>	bald, bare; <i>pak</i>

- baldhead; *pa-pak*
 bamboo; ʔ; (very strong sp., good for building houses) *ries*; (a single ~) *paŋ ʔʔ*
 bamboo basket; (large, fine-meshed) *kʰra*; (smaller) *lan*; *nkʰrɔŋ*
 bamboo bell; *rɔh*
 bamboo cluster; *tʰiɔk ʔʔ*
 bamboo flute; *ncʰu*
 bamboo food steamer; *hauŋ*
 bamboo knob; *ncʰɔŋ*; *keŋ pauŋ*
 bamboo mat; *vi ~ nkwi*
 bamboo partition in house; *ntiaŋ si-tʰiɔŋ*
 bamboo partridge; *pʰreh*
 bamboo rat; *npəi*
 bamboo section; *ncʰɔŋ*; *npʰəʔ*
 bamboo shoot; *ŋɛm*; (on the ground) *pʰlɔŋ ʔʔ*
 bamboo strip; *ŋa*
 bamboo or twig fence; *si-pa*
 ban, forbid, prohibit; *ʔaŋ lət*
 banana; *la-muos*; (wild ~) *paŋ hlaʔ*
 bang, strike; (with palm) *kʰlap*; (with fist) *tʰup*; (pat) *ntʰih*
 bank (of river); *plak klɔŋ*; *keh klɔŋ*
 banyan; *paŋ rɛʔ*
 Banzhe; *pa-cʰək*
 bark [N]; *hlɔʔ kʰauʔ*
 bark [V]; *ruoh*
 barren, sterile; *neh*
 basket carried on back; *lan*; *nkʰrɔŋ*
 bat; *nplivk*; (bat sp.) *ncʰɔs*; *nkʰak*
 be; *mɔh*
 be at a location; *ʔt*
 be broken (of a bowl); *nkruaŋ*
 be burnt (e.g. finger); *haʔ*
 be called/named; *mɔh (ŋai)*
 be complete; *kʰup*
 be familiar with, know well; *mit*; (very much so) *hliau*; *hliu*
 be hooked; *vɛc*; *vɔk*
 be left over, remain; *prah*
 be on the other side of (river); *ʔa-liap*
 be poisoned; *ʔp*
 be one's turn; *hɔc (nah)*
 be startled; *hlat*
 bead; *pluai*
 beak; *nkʰuoh sem*
 beam; *praj*; (one of the two main horizontal beams) *nok*
 bean; *tʰo*
 bear; *kres*
 bear (fruit); *plɛʔ (plɛʔ-kʰauʔ)*
 beard; *hac kap*; (moustache, goatee) *hac nkʰis*; *hac ntɔt*
 beat (drum); *taih*
 beat up; *ŋoh*
 beat with fist; *tʰup*
 beautiful; *ŋɔm*
- beckon; *nkʰe*
 become blocked; *si-kiat*; *si-kɛ*; *kat*; (clogged) *ntʰɔʔ*; *kʰən*; *nkʰən*; *si-kʰən*
 become crazy; *laŋ*; *hiɔt*
 become curved/bent; *vɔk*
 become full/filled up; *nuok*; *reh*
 become loose (of ropes); *npʰac*
 become mixed, blended; *ʔa-nɛʔ*
 become torn apart (of a family); *ncas jivʔ*
 bed; *nkʰruon*; *npɛ*
 bedbug; *hoŋ*
 bee; (small sp.) *hia*; (sp. in the mountain areas producing honey) *ʔa-ŋəʔ*
 bee larva; *kuan hia*
 beehive; *jivʔ hia*
 beeswax; *la-hauŋ*
 beetle; *si-re*
 before, long ago; *nɔ-nɔʔ*; *ncʰu ka (-nɔʔ)*
 beg (for food); *pua (pʰrivʔ)*
 beggar; *pʰii pua*; *pa-pua*
 belch, burp; *nkruoʔ*
 believe, trust; *ŋiat*; (trust) *kaiʔ ra-hɔm*
 bell; *si-pʰuok*; **leŋ*
 bellows; *səs*
 belly; *ka-tʰu*
 belly bend; *mauʔ huat npruonŋ*
 below, under; (under) *plak/kaʔ nkrəm*; (river, mountain) *plak/kaʔ-seh*
 belt, girdle; *mauʔ si-nu*
 bend; *nkwpk*
 bend body; *kɔʔ*
 bet; *zuh ləʔ*
 betel; *po*
 between; *ʔa-liap*
 bid somebody welcome, greet; *ʔa-taih (tʰii)*
 big, large; *tʰiŋ*
 bigger, more [V]; *nplɔs*
 bind, tie up; (~ an animal) *piauk*; (~ an animal, ~ limbs) *ʔa-pauŋ*; *vien*; (~ objects) *ŋuat*
 bird; *sem*
 bird (crop-eating sp.); *sem-sac*
 bird (small sp.); *ruc*
 bird sp.; *sem sua*
 bird's nest; *kʰək sem*; *ŋəm sem*
 birthday; *si-ŋeʔ kʰeh*
 bite; *kʰet*; (of a poisonous snake) *tos*; (of a bee) *hac*
 bitter; *sɔŋ (ʔa-tah)*
 black; *loŋ*
 black drongo; *tij tia*
 blacksmith; *cau mo*
 bladder; *nplaj*
 blind; *pʰlivk*; *njet ŋai*
 blind person; *pa-pʰlivk*
 blink, wink; *cʰiap ŋai*
 blissful; *ŋɔm pʰrivʔ num mɔk*
 blister; *lim (= pus)*

- block (wind); *nt^hiv*; *ʔa-t^hiv*
 block up, plug; *t^hʔ=nt^hiv* [vT]; *nt^hʔʔ=t^hiv* [vI]
 block view; *nt^hiv*; *ntian*
 block [vT]; *nkiat*; *nke*; (clogged) (*n*-)*t^hʔʔ*; *k^hən*
 blood; *ʔam*
 blossom [vI]; *pros*
 blow; *paj*; *np^hruo*; *np^hrias*
 blow (as of wind); *paj*/*klay* *kə*
 blow (~ one's nose); *hə mis t^heʔ*
 blow (~ trumpet); *paj*
 blue; *si-ʔa*
 blunt, dull; *nk^hu*
 boar; *lik ʔa*
 boat, ship; *rə*
 boatman; *cau p^hat rə*
 body; *kaiʔ*
 body filth; *kəm*; *riet*; *ka-məʔ*
 body hair; *hac hua*
 boil; (generic) *plək*; (~ rice) *kos ʔəp*; (~ gruel) *hrɔŋ*; (~ something hard) *nto*; (~ over slow fire, simmer, stew) *toŋ*; (~ water); *lək*
 boiled water; *ra-ʔəm lək*
 bolt (a door); *si-kaŋ ʔa-vivʔ*
 bone; *si-ʔaŋ*
 book; *lie*
 boot; *nten laŋ*
 bored; *lu-lah*
 bored, impatient; *ʔes*
 borrow; (~ what to be returned in kind) *npa*; (~ a tool) *vie*
 bothersome, disagreeable; *aŋ sɔm zuoʔ*; *k^huŋ*
 bottle; *kəŋ*
 bottle gourd; *si-kɛc t^huoŋ*
 boundary; *mə*
 boundary line, demarcation line; *mə*
 bowl; *kləŋ*
 box; *lɔŋ*
 box, case; *ziap*
 boy friend; *ʔa-meʔ fɛ*; *k^hun-mii-siam*
 bracelet; *nple tɛʔ*
 brag; *p^hiu*
 braid, plait; *hac kian*
 brains; *nk^huo*
 branch off; *nk^hries*
 branch, twig; *kak k^hauʔ*
 bray; *np^hris*
 bread; *npləh*; *ka-puk*
 break earth and come out (as of bamboo shoot); *nk^his*
 break earth lumps; *p^həh*; *ncos*
 break up, scatter; *zuh...t^huo*; *zuh...nk^hries*; *p^hu p^hre*
 break up, end (of a meeting); *rie*; *nk^hries*
 break, smash (a bowl); *nkruaŋ*
 break, snap; *nkwes*; *pɔt*; *npok*
 breast; *təs*
 breath; *np^hɔm*
 breathe; *np^hɔm*
- brick; **cuəŋ*
 bridge; *ʔa-pac*
 bright; *npləŋ*; *riəŋ*; *npləs*
 bring; *ʔa-pauʔ*
 bring back; *vivʔ*
 broad bean; *t^ho k^hauʔ*
 broadcast (seeds); *ruot*; *ruat*; *t^hivʔ*; *mə*
 broaden; *kauŋ*; *nk^hua*
 broken, smashed; *nkruaŋ*
 broom; *npes*
 brother; *p^hoʔ ʔɛc*
 bruise; *ŋut*
 bucket; *suəŋ*
 buckle up, button up; *nkaŋ cah*
 buckwheat; *ka-muŋ*
 bud; *hləm pros*
 buffalo; *krak*
 bugs (including lice, ticks, fleas, and bedbugs); *ʔas seʔ ʔas npriŋ*
 build a fire; *paj ʔuo*
 build by laying bricks, stones, etc.; (~ a wall) *roʔ*; (~ a house) *taŋ*; *zuh*
 bulbul; *zuo ʔwək*; (red-whiskered sp.) *zuo liau*; (yellow-vented sp.) *zuo pə*
 bull; *muoi ɲɛŋ*
 bullet; *luk si-niet*
 bullet shell; *t^huoŋ si-niet*
 bully, treat roughly; *ka-c^hec*
 bumblebee; *hia kres*
 bumpy road; *ca-lək*
 bunch/bundle (of vegetable); *nkwiən*; *nc^hop*
 Burmese; *man*
 burn; *ra-ʔək*; *tək*
 burn the grass on wasteland; *k^hic/np^hruai ma*
 burn [vT]; *k^hic*
 burnt, scorched; *haʔ*
 burnt rice stuck on bottom of pot; *hāʔ ʔip*
 burr; *ros*
 burst, burst open (balloon, ripe fruit); *npeh*; (when rice, etc. is popped) *ʔa-t^huos*
 bury; *ʔa-paj*
 busy; *k^hie*
 busy, noisy; *ʔauəŋ*; *nk^həʔ*
 butterfly; *p^huŋ p^hiəŋ*
 buttocks; *kre*
 button; *nkaŋ cah*
 buy; *cək*
 cabbage; *taiʔ p^hieŋ*
 cackle (of hens); *ka-tvət*
 calculate; *sum*
 calculating; *ʔa-kuas*
 calf (young cattle); *kuan muoi*
 calf (of leg); *npleʔ c^huoŋ*
 call together, convene; *nk^hrəm*
 can; *p^hun*
 can hold; *p^hun/k^hup ʔən*

- cane, rattan; *ŋo*
cannon; *muok*
capable; *npra?*
capital, principal; *nom mi*
careful; (attentive) *k^hrim*; (cautious) *k^huoi*
carp; *ka? nplah*
carpenter; *cau c^hi?*
carry; (~ load, of a pack animal) *taŋ*; (~ money on one);
pɛɲ; (~ on back) *p^ho?*; (~ firewood with forehead
strap) *k^huok*; (without forehead strap) *klɛc*; (carry
with pole on shoulder) *klɔm*
carrying pole, shoulder pole; *k^hau? nklɔm*
cartilage; *si-ŋaŋ kruc*
carve, engrave; *sec*
cast iron; *hriam ʔem*
cast light on; *san*
castrate; *seh*
cat; *miau*
catch and take away (as of tiger); *nke?*
catch cold; (*ʔeh*) *sai? p^həh*
catch fire, be on fire; *ha?*; *p^hru*
catch fish by damming up creek; *npoŋ ka?*
catch nothing; *nprah*
catch up with; *krop*
catch, capture; *nke?*
caterpillar; *k^huon hac*; (black sp.) *k^huon ha?*; (red, long-
haired sp.) *k^huon tɔp*; (small grey sp.) *k^huon ŋiv?*;
(edible sp.) *si-ŋie*
cattle; *krak muoi*
cattle illness (kind); *rau*
catty (=0.5 kg.); *kin*
cave in, sink; *nt^huoh*; (landslide) *nk^hrac*; (foot sinking
in mud) *p^hluon*
cave, hole; *ka-tai?*
celebrate (New Year); *vuo*
centipede; *si-ʔoŋ ʔia*
chaff, bran; (coarse) *kam k^huot*; (fine) *kam pa-zua*
change; *t^hivh*
chaotic, disorderly, messy; *t^həh tiak*; *su-sec*; *k^huŋ k^han*
character, word; *ŋai lie*
charcoal; *ka-suas*
charge, sprint; *p^hət*
chase after; *ʔa-vaŋ*; (~ around) *nk^hwia*
chat; *ʔa-p^hivk*
chat, shoot the breeze; *fɛ*; *ʔa-p^hivk*
cheap; *ziv*
cheek; *si-pa?*
cherish; *mɔ?*
cherry; *k^hau? ko*
chess; *si-pɔk*
chest; *ʔauk*; *nauk*
chest, box, trunk; *ʔa-ŋai*
chestnut; *plɛ? tias*; (small sp.) *k^hau? toŋ*
chew; *p^hiem*; *p^him*
chew, gnaw; *k^hɛɲ*; (~ betel) *si-cɛh*
chew up and feed; *p^hiem*
- chick; *kuan ʔia*; (*ʔia*) *ŋac*
chicken; *ʔia*
chicken coop; (basket for chicks) *nk^hrɔŋ ʔia*; *ntaŋ ʔia*;
luok ʔia; (*hen*) *k^hək ʔia*
chicken feed; *k^huoh*
chicken louse; *ŋɛ? ʔia*
chicken pen; *luok-ʔia*; *ntaŋ ʔia*
child; *kuan ʔiat*; *kuan ʔom*
chin; *kap*
Chinese chestnut; *paŋ li* (< Chinese 板栗)
Chinese ink; *mə?* (< Chinese 墨)
Chinese yam; *hɔn mau?*
chip (the rim); *ka-veh*
chirp; *npriɛ*; (of chicks) *cip*; (of mice) *cic*
chisel [N]; *nc^hɛc*
chisel, bore [V]; *sec*; *təh*
chive; *ka hɔ?*
choke (on food); *k^hɔm*
choke (on water); *la-hɔk*
choose, select; *sot*; *ruos*; (~ good ones) *lək*
chop; *nplak*; (~ bones) *nkam*; *kep*; *mok*; (~ in two) *lok*;
(cut into small pieces) *nkam*; *ŋɛ*; (~ down) *nk^ho*;
(~ small tree) *tuas*
chopper; *ŋau*; *ŋoŋ*
chopsticks; *si-kia*
churn; *ka-ve*; *k^hwit*
churning rod; *nk^hwit*; *nk^hwɛ*
cicada; *lu(k)-let*; (colored sp.) *kvi*
cigarette, tobacco; *sup*
circle, hover; *nk^hwia*; *pai liuŋ*
civet; *sua*
CL (day); *si-ŋɛ?*
CL (month); *k^hɛ?*
CL (night); *np^hu*
CL (year); *num*
CL (of a single shoe); *mau*
CL (of an ax); *npla?*
CL (backload of firewood); *np^hos*
CL (basketful of vegetable); *lan/k^hra*
CL (of a bird); *mau*
CL (of a bolt of cloth); *npua*
CL (of a bottle); *kɔŋ*
CL (of a bowl); *klɔŋ/mau*
CL (of a bridge); *nkɔŋ*
CL (of a broom); *mau*
CL (of a bucket); *suon/si-t^huoi*
CL (of a bundle, parcel); *nk^hiv*
CL (of a bundle, sheaf); *nk^hwien*; *p^hus*
CL (of length of dry field); *np^hv ma*
CL (of a drop of oil); *ncɛh*
CL (of ears of maize); *nkɔŋ*
CL (of eggs); *mau*
CL (of flags); *nkɔŋ/nplah*
CL (of flocks); *t^hi*
CL (of flowers); *nkɔŋ*
CL (of forests); *t^hivk*

- CL (of garments); *nplah*
 CL (of grain of rice); *sək; mau*
 CL (of grass); *nkəŋ*
 CL (handful, with hands cupped); *nt^huom*
 CL (of hats); *mau*
 CL (verbal classifier, times); *ntəm*
 CL (of a knife); *nk^hiəŋ*
 CL (lap, section of road); *nt^həh*
 CL (of a leaf); *nplah*
 CL (of a letter); *nplah*
 CL (of loads on animal's back); *laŋ*
 CL (of meals); *ntəm*
 CL (of tobacco); *k^hiə; ntət*
 CL (page); *nplah*
 CL (pair); *nprəm*
 CL (of pants); *mau*
 CL (of a patch of field); *nkwiəŋ*
 CL (of a pen); *nkəŋ/mau*
 CL (of a person); *kai?*
 CL (pile); *nkro?*
 CL (of a puddle); *nt^huŋ*
 CL (of a river); *t^huoh*
 CL (of a rock, stone); *mau*
 CL (of a room); *nc^hə*
 CL (of a rope); *mau/nkəŋ*
 CL (row of houses); *hlaŋ; praŋ*
 CL (of a section of bamboo); *ŋe; nc^həŋ*
 CL (sheet); *nplah*
 CL (of a song); *mau; krəŋ; c^hi*
 CL (of a square of cloth); *nplah*
 CL (stack of hay); *nkəm*
 CL (step); *nt^hiəŋ*
 CL (of a stick); *mau; nkəŋ; k^hau?*
 CL (of a string of beads); *nc^hies*
 CL (of a stroke with knife); *ntuas*
 CL (of a team of oxen); *nprəm*
 CL (of a team of people and horses); *t^hi*
 CL (of a tree); *nkəŋ; mau; nk^huo*
 CL (of an utterance, sentence); *npək; muŋ*
 claw, talon; *ras*
 clean; *si-ŋa(?)*
 clear (water); *si-ŋa(?)*
 clear, lucid; *si-klah*
 clear/sunny; *kəc/viec/ŋəm p^hre?*; (become sunny again)
təh p^hre?
 clever; *hlak; hlak hə? hlak siam*; (in compound) *p^hii*
hlak p^hii həj
 cliff; *tu-tat*
 climb (mountain); *hauk nk^hoh*
 climb up (tree); *hauk*
 clitoris; *hlian*
 close (mouth) lightly; *ŋiep*
 close (a book); *nt^huop; k^hlɔp*
 close (an umbrella); *zip; nɔp*
 close (eye); *zip*
 close (mouth); *ŋep*
 close (the door); *nc^həŋ*
 cloth; *man*
 cloth stretcher (in weaving); *npla? tap*
 clothes, garment; *cah*
 cloud; *(ta-)?əm*
 cloudy/overcast; *ka-?əm/zim/ka-ma p^hre?*
 cluck (of hen); *ka-tət*
 clumsy, awkward; *la-vu; nt^hok*
 coax; *nplac; la-məŋ; ncəm*
 cobweb; *ŋiv? p^hris*
 cock; *ŋia la-mə?*
 cockscomb; *nk^hui ŋia*
 coffin; *ləŋ*
 cold (weather, water); (weather) *kuat*; (water) *si-k^het*;
 (of boiled water) *hləŋ*; (feel freezing) *ka-mieŋ*
 collapse, cave in, fall down; (earth sunken) *nk^hrac*;
nklot; (wall, house) *nkrop*
 collar; *si-ŋuok cah*
 collect (grain or clothes); *kəh*
 collide, run into, bump against; (into each other) *la-*
k^hləh; la-k^hliŋ; (ram against door) *nton; si-t^hiŋ*
 comb; *si-kah*; (=comb [N]) *si-kat*
 combine; *la-nə?*
 come; *hau ka? ŋien*
 come from, originate from; *tom; nom*
 come loose; *nkah; ntah*; (completely untied)
np^həc~npəc; (not yet completely untied) *hlua*
 come out; *lih ka? ŋien*
 come out (of the sun); *lih*
 comfortable; *ŋum*
 commend, praise; *la-miv; zuo*
 common cattle; *muoi*
 common cold; *sai? p^həh*
 common people; *kuan kai*
 compare, compete; *la-lah*
 compensate; *prə*
 complain to his superior; *ŋau?*
 connect, join; *la-ti*
 consult, discuss; *sum; lie ŋaŋ t^he? ŋəŋ*
 converge (cf. roads); *la-kap*
 cook [VT]; *plək p^hriə?*; (~ rice) *kos la?*
 cooked; (dried rice) *run*; (over-done) *neh*; (ready to
 eat) *seŋ*; (main ingredients of gruel) *t^heh*
 cooking stove, fireplace; *npia?*
 cool; *np^həŋ; hləŋ p^hre?*
 copper; *la-vun*
 coriander; *hoŋ*
 corner, angle; *nt^huok*
 corpse; *pa-zum*; (resp.) *kai? pa-zum*
 corsac fox; *nc^həs*
 cotton; *pros ka-t^hie*
 cotton tree (Bombax ceiba); *krə*
 cough; *ŋauk*
 count; *la-men*
 country; *nt^huok*
 cover (the mouth); *nt^huop nk^his*

- cover up (objects); *tʰuop*; *rup*; (with hands) *ntʰuop*
 cover, cover with lid; *tʰuop*
 covered with corpses and blood (of battle-grounds); *nɪa*
 cow; *muoi* *cʰaŋ*
 cow dung; *ʔɛɪ muoi*
 cowshed, ox fence; *luok* (~ *muoi*)
 crab; *ka-tam*; (small sp.) *ka-tam hram*
 crack (on ceiling); *ntɔh*
 crack in two [VT]; *nkuah*
 crack [VT]; *ka-tʰoh*
 cramped, narrow; *kɔp*
 crawl; *mu*
 cricket; (large) *ka-tʰuon*; (small) *si-kret*
 crisp, brittle; *kʰrec*
 crops; *pleʔ pʰriɔʔ*
 cross (a river); *tʰiɔŋ*
 cross (bridge); *ntʰuo/hau nkuai ʔa-pac*
 cross, pass; *luan*
 crossbow; *ʔak ʔom*; (front part of ~) *ntɔŋ ʔak*; (~ bow)
mon ʔak; (~ hook) *nkʰloc ʔak*; (~ string) *las ʔak*;
 (~ stock) *paŋ*; (~ trigger) *nkʰloc ʔak*
 crow; *la-ʔak*
 crow [V]; (of a cock) *ra-ʔoʔ*; (of crows) *la-ʔak*
 crowded; *ʔa-kʰloʔ*
 crowded, disorderly; *su-sak*
 crown of head; *kʰuan ntɔŋ*; *ka-pʰiɔŋ ntɔŋ*
 crupper-strap; *mauʔ huat kre npruon*
 crush to pieces; *nkruaŋ*
 cry, weep; (of a baby) *ŋa*; *ziem*; (~ loudly) *riɔk*; (~ bad-temperedly) *ŋvɪ, si-keʔ*
 cry, yell, shout; *kɔk*; *ka-tauʔ*
 cubit, length from elbow to hand; *ncʰɔŋ teʔ*
 cuckoo; *sem ʔap pʰic*; *kuk ku*
 cucumber; *la-ke*
 cuddle, embrace; *ruom*; (hold in bosom) *tʰim*
 cultivate, reclaim wasteland; *hrɔm*
 cunt lips (labium); *hlɔʔ sɔk/pe*
 cup; *le*
 cupboard, cabinet; *ɲiɔŋ*
 curious; *rian ra-hɔm*
 curse; *tuok*
 curved, crooked, bent; *vɔk*
 cut; (~ diagonally) *npʰiɔ*; (~ downward) *kʰlaʔ*; (~ grass)
sɔh; (~ grass with sliding motion) *vuok*; *rih*; (~ many trees) *nta*; (~ meat into slices or chunks) *sɛ*;
set; (~ thatch) *tuas*; (~ rope) *pias*; (~ into sections)
ŋɛ; *kep*; *nje*; (~ with scissors) *kʰrep*; (~ down branch) *kleh*; (~ in half) *mak*; (~ off, sever) *tuas*/
pias ntʰut; (~ a slit) *pet*; (~ or rip open) *peh*; (dis-
 embowel) *liɔh*; (remove bark or unwanted parts of
 log) *hlah*
 cut in; *tos nkʰis*
 cut/gouge out; *kuac*
 cymbals; *cʰɛŋ*
 dagger; *nkuan*
 dam up (a creek); *npon*
 damage, spoil; ([V1]) *lɔʔ*; ([VT]) *nklaʔ*
 dance; *pɔi/pvi*; (~ around fire) *nkrauh*
 dandruff; *ka-məʔ*
 danger; *ʔa-kʰiɔʔ*
 dare; *pʰun*
 dark; *fɛc*
 daughter; *kuan ʔa-pon*
 daughter-in-law; *kuan ʔɔŋ*
 dawn; *nplas/riɔŋ pʰreʔ*
 day after tomorrow; *ʔa-kauʔ*
 day before yesterday; *si-ŋeʔ ʔua*
 daybreak; *nplas pʰreʔ*
 daytime; *pʰun si-ŋeʔ*
 deaf; *hlɔt*
 deaf person; *pa-hlɔt*
 decay (tooth); *nkrec hray*
 deceive, cheat; *nplɔc*
 declivity; *ncʰi*; (~ on a barren hill) *nciɔ*
 decoct; (~ herbal medicine) *hrɔŋ*; (boil water) *ŋo*;
 (reheat) *si-ʔo*
 deep; *raiʔ*
 deep hole in field, underground cave; *ka-taiʔ pɔŋ*
 deity; *ʔa-zivʔ*; *muc*
 delicious; *num*
 deposit, leave with; *ntʰəh*; *cɔʔ*
 descend; *lih*
 deserve; *pai lɔʔ*
 destroy, exterminate; *si-tec*; *si-tap*
 devil's tongue; *taiʔ nkah*
 dew; *cʰiɔʔ*
 diaper; *ha*
 dibble; *ʔa-pʰit*; (its business end) *ntɔŋ ʔa-pʰit*; (stick)
nkɔŋ
 die, dead; *zum*
 die out (of fire); *zət*; (cause to die out) *ncat*
 difficult; *no*
 dig or break through; *ntɔh*; (~ out, e.g. of hot ash) *kuas*;
 (~ out with finger) *kuac*; (~ with hand or paw)
pac; (of animals, ~ with hind legs) *ras*; (~ some-
 thing out with a tool, excavate) *kauŋ*; (~ with
 snout, of pigs) *kʰis*; (~ out a tuber) *luoh*
 dike, embankment; *ntʰiɔ*
 direction, orientation; *plak*
 dirt, filth; *kɔm*
 dirty; *nprie*
 disappear, vanish; *nkrai*
 disheveled; *zu-zah*
 dislocate (a joint); *ʔa-luc*
 disorderly; *nkʰɔn*
 distinction, difference; *ʔa-lah*
 disturb; *zu-zah*
 ditch, gully; *rə*
 divide up family property & live separately; *nkʰiɔh ɲiɔʔ*
 divide/share (things); *nkʰiɔh*
 do; *zuh*
 do business; *zuh li*

do not have; <i>ʔaŋ kɔi</i>	ear; <i>la-hiauk</i>
doctor; <i>pa-zuh ʔa-tah</i>	ear, spike; <i>pleʔ ŋɔʔ</i>
dodge; <i>veh</i>	early; <i>ntʰuok</i> ; (~ to arrive) <i>kʰrat</i>
dog; <i>sɔʔ</i>	earrings; <i>npə (la-hiauk)</i>
don't; <i>pʰɔʔ</i>	earth, ground; <i>ka-tɛʔ</i> ; (earth, globe) <i>hak tɛʔ</i>
donkey; <i>la</i>	earth lump; <i>klɔn ka-tɛʔ</i>
door; <i>ʔa-viɔʔ</i>	earthen jar; <i>si-kʰoŋ</i>
doubt; <i>kʰauʔ mɔh</i>	earthworm; <i>ŋu</i> ; (large sp.) <i>la-vun</i>
dove; <i>ku-kɛ</i>	earwax; <i>ʔɛŋ la-hiauk</i> ; <i>nak</i>
down, hair; <i>hac</i>	east; <i>kaʔ lih si-ŋeʔ</i>
downstairs; <i>nkrəm nkʰrim</i>	easy; <i>ziv</i>
downstream; <i>ncʰuoŋ klɔŋ</i>	eat; <i>ʔɛh</i> ; (~ rice) <i>sɔm</i> ; (~ a meal) <i>pʰrivʔ</i> ; (~ something juicy) <i>pʰivʔ</i> ; (~ melon seed) <i>sep</i>
downwards; <i>plak (ka-)seh</i> ; <i>plak ka-sic</i>	eaves; <i>ncʰuo nprəʔ</i> ; (its short edge) <i>ʔa-pʰus</i> ; (its long edge) <i>tʰus nprəʔ</i>
dowry; <i>kʰrəŋ ntas</i>	edge, rim, margin; <i>npv</i> ; (~ of a knife) <i>luom viec</i>
doze off; <i>tac ŋai</i>	edible; <i>ŋɔm tʰeʔ ʔɛh</i>
drag, lead (a cow) along; <i>viɔʔ</i> ; (drag along with force) <i>tok</i>	egg; <i>ka-təm</i>
dragon; <i>ʔa-zuoŋ</i>	egg shell; <i>hlɔʔ ka-təm</i>
Dragon King (the god of rain); <i>ʔa-zuoŋ</i>	eggplant; <i>mak kʰə</i>
dragonfly; <i>nkrəŋ mɔi</i>	eight; <i>si-tɛʔ</i>
drain, strain; <i>ncʰuo</i>	eighteen; <i>kau-si-tɛʔ</i>
draw (bow); <i>luot</i>	eighty; <i>ʔa-tɛʔ</i>
draw (crossbow); <i>vec</i>	elapse, pass; <i>luan</i>
draw a picture; <i>*hua</i>	elbow; <i>ncʰu (tɛʔ)</i>
draw out (sword), stretch; <i>luot</i>	elder brother; <i>ʔɛc</i>
draw water; <i>kʰin/tauŋ/klɔm ra-ʔɔm</i>	elder sister; <i>ʔɔ</i>
dream; <i>ʔa-muoʔ</i>	elephant; <i>ka-saŋ</i>
dredge; <i>pɔk</i> ; (with tool) <i>vec</i>	eleven; <i>kau-tʰeʔ</i>
dregs, sediment; <i>la-hauk</i>	embrace, hug; <i>ruom</i>
drench; <i>ncʰəʔ/ntom nah hleʔ</i>	embroider; <i>taŋ</i> ; <i>cʰɛŋ</i>
drift, float; <i>(ca)-loi</i>	empty; <i>pʰiv</i>
drill; (bore) <i>tɔh</i> ; (auger) <i>ncʰɛc</i>	empty out; <i>tʰɔk</i> ; <i>ŋoŋ</i>
drink; <i>ŋəʔ</i> ; (~ soup) <i>si-rot</i>	empty the bowels; <i>ʔɛŋ</i> ; <i>muoŋ</i>
drive; (~ a car) <i>pʰat</i> ; <i>nkʰra</i> ; (~ animals); (~ out to pasture) <i>npleh</i> ; (~ back to fold) <i>nplec</i>	enclose; <i>nfiv</i>
drive in by pounding; <i>tʰet</i> ; <i>kom</i>	enclosure; <i>ʔa-viɔ</i>
drive out, expel; <i>nkʰra</i> ; <i>ʔa-vəŋ</i>	end, extremity; <i>tʰus</i>
drop, fall; <i>krɛc</i> ; [CAUS] <i>nkrɛc</i> ; (of leaves) <i>krəi~nkrəi</i>	endure; <i>nkeʔ ra-hɔm</i> ; <i>laŋ ra-hɔm</i>
drop by; <i>veh</i>	enough; <i>kʰup</i> ; <i>nɔʔ</i>
drop [v] (as of water); <i>cu-cɛh</i>	entangled; <i>zu-zah</i> ; <i>kʰuŋ-kʰən</i>
drum; <i>kraŋ</i>	enter (a house); <i>lec</i> ; <i>hauk</i>
drunk; <i>zoc</i>	enter a hole; <i>lec nuoŋ</i>
dry; <i>si-ʔɔh</i> ; (of water drying up) <i>hɛc</i>	envy; <i>pɔ ra-hɔm</i>
dry [VT]; (~ by airing) <i>nta</i> ; <i>hɔk</i> ; (~ by fire) <i>ka-ʔa</i>	epilepsy; <i>saiʔ zum pʰi</i>
dry field; <i>ma ruok</i> ; <i>tʰaiʔ ti</i>	err, make a mistake; <i>lut</i>
dry season; <i>lai rɔŋ</i>	escape, run away; <i>npriɔʔ tʰeʔ ʔa-vit</i> ; (cattle, horse) <i>luan</i>
duck; <i>tʰie</i>	esophagus; <i>krauŋ ɲəʔ</i>
dulap; <i>tuŋ tai</i>	evening; <i>(pʰun) npʰu</i>
dumb, mute; <i>pa-ntʰiv</i>	everybody; <i>kʰu-kaiʔ (kʰu pʰii)</i> ; <i>ti kaiʔ pʰii</i>
dusk, twilight; <i>vu viɔʔ</i>	everyday; <i>kʰu si-ŋeʔ</i>
dust; <i>ʔa-kə</i> ; (~ on ground) <i>ka-tɛʔ nprie</i>	evil spirit, demon; <i>pa-caih</i>
dust off; <i>pes</i> ; <i>pu-pes</i> ; (~ lightly) <i>puas</i>	exchange; <i>ʔa-lɔh</i>
dye; <i>kreʔ</i>	excrement; <i>ʔɛŋ</i>
dye [v]; <i>ka-saiʔ</i>	excuse, pretext; <i>npłɛc</i>
each, every; <i>kʰu kaiʔ</i>	exhale; <i>npʰro npʰɔm</i>
eagle; <i>klan</i>	exist; <i>kɔi</i>

- exit; *lih*; (of mice) *lus*
 expand, swell; *plv*; *plej*
 expensive; *no*
 explode; *nkluas*
 extinguish [VT]; *ncat*
 extinguished [VI]; *næt*
 extra, excessive; *hauh*
 extract; *ntep*
 eye; *ηai*
 eye secretion; *ηak/ruon ηai*
 eyebrow; *hac keŋ-re*
 eyelash; *hac ηai*
 eyelid; *hak ηai*
 face; *np^huoh*
 fade (as of color); *npah*
 faint; *zum p^hi*
 fall (of rain); (*lih*) *hle?*
 fall asleep; *t^hiec*; *num ʔec*
 fall down, topple; *nkrop*; *ncac*; *nk^hrac*
 fall off (hair); *nkric*
 fall down; (generic) *nk^hus*; (tumble down) *krac*; (slip and ~) *si-klā*; (trip over something and ~) *ʔa-vu*
 fall, autumn; *lai ple? p^hriov?*
 fallow land; *ma npre?*
 fan fire; *np^han ηuo*
 fan [N]; *pa-zip*
 far edge (esp. of basking platform); *zus*
 far, distant; *rai?*
 fart; *p^hom*
 fat [ADJ]; *np^hejn*; *kloŋ*
 fat meat; *ne? la-ʔos*
 father; (address) *nəŋ*; (reference) *kəŋ*
 father-in-law; *pau?*
 feather, plume; *hac*
 feed, breast-feed; *tvʔ/krəŋ p^həʔ*; (~ other food) *krəŋ*; (~ chicken) *tvʔ...k^huh*; (~ other animals) *tvʔ...səm*
 feed [N]; *nc^həm*
 feel bloated; *puon puoh*; *pleŋ ka-t^hu*
 feel dizzy; *pai liuŋ ntəŋ*
 feel strange; *miu*
 felt blanket; *p^hro?*
 female (animal); *miv?*
 female child; (1st) *zε?*; (2nd) *ʔe*; (3rd) *ʔam*; (4th) *ʔək*; (5th) *ʔip*; (6th) *ʔiat*; (8th) *ʔoi*
 ferment; *hac*
 fern; *hla? viov?*
 fertilizer, manure; *nk^hən*
 festival; *lai ʔeh npləh*
 fever; *sai? ka-luas*
 few, little; *zəm*
 fierce, ferocious; *p^hriau*
 fifteen; *kau-p^huan*
 fifty; *ra-huan*
 fig; (large sp.) *kros*; (small sp.) *ka-t^huc*
 fight; (between two people) *ʔa-zuh*; (one side stronger than the other) *ləh = lii*; (a group of people) *ηaŋ*
- fight/vie for; *ʔa-cia?*
 file; *k^han saŋ*
 fill, put into; (~ with food) *p^huk*; (~ with water) *prək*
 fill up (hollow); *riov*; *ntan*
 filter/strain; *si-k^hit*; *nc^hiəh*
 find; *zuo?*
 finger; *nkian tε?*; (middle finger) *nkian laŋ*; (index finger) *nkian c^hi*; (little finger) *nkian leh*
 fingerprint; *k^huan tε?*
 fingerspan; (tip of thumb to tip of middle finger) *nt^hiəʔ*; (tip of thumb to tip of index finger) *nkaun*
 finish, be over; *ʔuc*
 fire; *ηuo*
 fireplace rack; *nkriov?*
 fire-tongs; *nkiap*
 firewood; *k^hε?*
 first; *pa-ka*; *nt^ha*
 first day of the month; *ləs k^hε?*
 fish; *met ka?*
 fishing rod; *k^hau? met*
 fish-poison; *hrε?*; *lē?*
 fish-trap; *nk^hrəŋ ka?*
 fishy; *si-ʔoi ka?*; *ηec*
 fist; *tε? nc^həp*
 five; *p^huan*
 flat (and shallow); *ntap*
 flat (of a ball or tire); *təp*
 flatland; *npes priat*
 flatten; *ntiap*; *tap*
 flattened bamboo used to make floor; *ka-mus*
 flea; *tiap*
 flesh, muscle; *hoc*
 flight (of steps); *npəŋ*
 fling, toss; *si-vun*
 flint; *si-muo? ka-tuai*; *si-mu? ηuo tuai*
 flip (finger); *t^het*
 float; *si-liuŋ*
 flock; (of chickens) *ka?*; (~ of sheep) (*n*)*t^hi*
 flood; *ra-ʔəm ruoh*
 floor; *nk^hrim*
 flour; *ηvəŋ*
 flow; *lih*
 flower; *pros*
 flower sp.; *pros krəv*
 fluttered; *su-sak ra-həm*
 fly [N]; *ruoi*
 fly [V]; *po*
 flying fox; *hlauk*
 foam; *ηia*
 fodder, horse feed; *səm npruon*; *nc^həm npruon*
 fog, mist; (*t*-)*ʔəm*
 fold, time; *nap*; *son*
 fold one's arms around chest; *kləŋ tε?*; *ruom tε?*
 fold up (a quilt); *niap-nep*; *pua*
 follow; *huat k^hε?*
 food; *pa-ʔeh*; *p^hriov?*

foodstuff, grain; <i>p^hivʔ</i>	gem; <i>si-re</i>
fool, blockhead; <i>p^hii ʔv</i>	generous; <i>si-riv</i>
foot; <i>nkas</i> (<i>c^huon</i>)	germinate, sprout; <i>p^hlən</i>
foot (=1/3 meter); <i>sivk</i>	gesticulate; <i>nplas tēʔ; zuok tēʔ</i>
for the first time; <i>lai</i>	get accidentally separated from and lose contact with; (village dispersed because of war, disease) <i>t^huo;</i> <i>k^hra;</i> (a group of people) <i>ru-rie</i>
force, compel; <i>nk^hra; si-k^hət</i>	get close, approach; <i>ʔa-t^heʔ</i>
forehead; <i>keɲ-re</i>	get dark; <i>vu-vivʔ</i> (<i>p^hreʔ</i>); <i>fec</i> (<i>p^hreʔ</i>); (sunset) <i>klep si-ɲeʔ</i>
forehead strap; <i>ntua</i>	get together, assemble; (<i>n</i>) <i>k^hrəm</i>
foreskin; <i>ra-həm</i>	get up; <i>kauh</i>
forest, jungle; (distant virgin forest) <i>nɔŋ</i> ; (close to vil- lages) <i>ruok k^hauʔ</i> ; (close to village but more exten- sive) <i>t^hivk k^hauʔ</i>	get, gain, fetch; <i>p^hun t^hii</i>
forget; <i>p^hi</i>	ghost, spirit; <i>si-caʔ</i> ; (invisible living in leaves) <i>t^hon-t^hoʔ</i> ; (apparition) <i>c^hiv</i>
forty; <i>ra-pɔn</i>	gift, present; <i>pa-sət; k^hrən tɔʔ</i>
foundation (of house); <i>nkwiŋ ɲivʔ</i>	ginger; <i>si-kian</i>
four; <i>pɔn</i>	girl; <i>kuan si-nuo ʔa-pɔn</i>
fourteen; <i>kau-pɔn</i>	girl friend; <i>ʔa-pɔn fe; laiʔ mii nan</i>
fowl; <i>sem-sai sem-sac</i>	give; <i>tɔʔ</i>
fox; (also: wild dog) <i>sɔʔ p^hreʔ</i>	give birth to; <i>k^heh</i>
fragment, broken piece; <i>nplias</i>	gizzard; <i>nple</i>
fragrant (smell); (<i>num</i>) <i>ɲəi</i>	glans penis; <i>ntɔŋ kleʔ</i>
freeze; <i>t^hiec si-tap</i>	glass; <i>si-livŋ</i>
fresh; <i>np^həʔ; ɲəi</i>	glib; <i>vaʔ</i>
friend; <i>p^huoʔ nkruom</i>	glutinous rice; <i>ɲɔʔ p^hic</i>
frighten, scare; <i>nk^hlat</i>	gluttonous; <i>ʔa-c^hoʔ</i>
frog; <i>si-puan;</i> (bull frog) <i>nkris; si-puan num;</i> (small ~) <i>ka-noh</i>	gnaw, nibble; <i>k^hreɲ;</i> (~ wood) <i>k^het;</i> (~ hard) <i>k^hiu</i>
front; <i>kaʔ ka</i>	go downstairs; <i>lih kaʔ-seh</i>
front door, entrance door; <i>ʔa-vivʔ lauŋ</i>	go out to work in the early morning; <i>np^həi~np^həi;</i> <i>ɲəi~ɲəi</i>
frost; <i>si-tap</i>	go to market/a fair; <i>lec las</i>
frostbitten; <i>zu ze</i>	go to stool; <i>muon</i>
fruit; <i>plēʔ</i>	go to war, do battle; <i>zuh/poɲ nieɲ</i>
fruit sp. (oval, tart-sweet); <i>ŋo nkɔs</i>	go up, ascend; <i>hauk</i>
fruit sp. resembling a mango but tastes like a papaya; <i>ka-vak</i>	go up/rise (of water level); <i>huan</i> (<i>klɔŋ</i>)
fry; <i>t^hivk</i>	go, leave; <i>hau kaʔ ʔua</i>
frying wok; <i>k^han le</i>	goat; <i>p^heʔ</i>
full; <i>nuok; nēh</i>	goiter; <i>rɔh</i>
full (from eating), sated; <i>sak</i>	gold; <i>si</i>
fully recover (from an illness); <i>muai;</i> (partially, able to move about) <i>vu-vies</i>	gong; <i>ʔa-p^hivŋ</i>
gadfly; <i>prvp</i>	good; <i>ɲom</i>
gall bladder; <i>nk^hɛɲ</i>	good, well-behaved; <i>t^hum;</i> (tame) <i>ɲe</i>
game (animal); <i>neʔ poɲ</i>	good-for-nothing; <i>p^hii ləʔ</i>
gap, crevice; <i>nc^he; ʔa-liap</i>	goods, merchandise; <i>pa-c^hus pa-ʔeh</i>
garbage, rubbish; <i>pa-nprie</i>	goose; <i>han</i>
garden (of vegetables); <i>ʔa-p^him</i>	gore; <i>ʔa-vus</i>
garlic; <i>ru hv</i>	gossip; <i>ʔa-p^hivk</i>
gaseous; inclined to break wind; <i>tɔʔ</i>	gourd (gen.); <i>npiu</i>
gather firewood; <i>reʔ k^hɛʔ;</i> (search for) <i>sɔp k^hɛʔ;</i> (cut dried braches into smaller sections) <i>kep k^hɛʔ;</i> (cut down the whole tree to dry) <i>nk^ho k^hɛʔ</i>	gourd flute; <i>npiaun</i>
gather, assemble [vr]; <i>ʔa-num</i>	gourd ladle, wooden dipper; <i>np^huk</i>
gather/build up (of water); <i>nt^huŋ ra-ɔm</i>	government official; (<i>ʔa</i> -) <i>miŋ</i>
gecko; <i>nkɔi</i>	grab, seize, catch; (grab) <i>si-p^hin</i>
geld, castrate; <i>seh</i>	grader; <i>nc^has</i>
	grain left unhusked in the mortar; <i>ʔem nkauʔ</i>
	granary; <i>ɲivʔ nkrauk</i>
	granddaughter; <i>kuan saiʔ ʔa-pɔn</i>

grandfather; <i>taʔ</i>	hat; <i>ɲɔk</i>
grandmother; <i>zaʔ</i>	hat made of bamboo strips; <i>nɛʔ</i>
grandson; <i>kuan saiʔ ʔa-meʔ</i>	hatch [vɪ]; <i>nkweh</i>
grasp with the fingers of both hands; <i>viɪ</i>	hatch, incubate; (sit on egg) <i>ka-num</i> ; (hatch [vɪ]) <i>nkuah</i>
grass; <i>rip</i>	hate; <i>si-ɲiv/kʰuɲ ɲai</i>
grass sp.; <i>ɲak</i>	have, possess; <i>kɔi</i> ; <i>ʔən</i>
graze; <i>ɲɔm</i> ; <i>liuɲ</i>	have (eyes); <i>kɔi</i>
greasy, oily; <i>la-ɲiec</i>	have a fever; <i>ra-ʔauh/kɔc kaiʔ</i> ; <i>saiʔ hɔc</i> ; <i>kɔc ntɔɲ</i>
greedy; <i>tiɲ ra-hɔm</i>	have cramps; <i>rən si-nivɔk</i> ; <i>tos kuan ʔia</i>
green; <i>si-ɲiv</i>	have diarrhea; (<i>saiʔ</i>) <i>pʰrah</i> ; <i>saiʔ vec</i> ; (<i>saiʔ</i>) <i>si-kʰət</i>
grey; <i>pə</i>	have goosebumps; <i>ros kaiʔ</i>
grind; (~ flour) <i>kʰrit</i> ; (~ with grader) <i>səs</i>	have guessed right; <i>rok (si-pɔk)</i>
grinding stone; <i>lɛɲ</i>	have pins and needles; <i>ka-mieɲ</i>
grip, handle (of cup); <i>nkrɔɲ</i>	have sex; <i>ʔa-pət</i>
groan; <i>ɲivɔh</i> ; <i>ɲiu</i> ; <i>ɲəi</i> ; <i>ɲiai</i>	have stuffed nose; <i>ntʰuk</i>
groin; <i>ʔa-liap ntʰivɔɲ</i>	have taken hold of/gotten; <i>huac tʰii</i> ; (have caught) <i>huac nkeʔ</i>
groove in crossbow; <i>ntɔɲ ʔak</i>	hay (of rice); <i>nkaih</i>
grope; <i>pu-piu</i>	he; <i>nɔh</i> ; (at SAL: <i>ɲuom</i> ; (dist) <i>ɲuom ʔuan</i> ; (prox) <i>ɲuom ʔien</i>); (anaphoric) <i>hah</i>
grobe for fish; <i>pɔk</i>	head; <i>ntɔɲ</i>
grow; <i>huan</i> ; (emerge out of earth) <i>kʰuos</i>	head-cloth, turban; (male) <i>si-kruat</i> ; (female) <i>kun keɲ</i>
grow (a boil); <i>ka-muat</i>	headman, chieftain; <i>pʰii hraiɲ</i>
grow up; <i>huan</i>	headwaters; <i>tʰuoh klɔɲ</i>
growl (of a tiger); <i>ɲɔk</i>	heal (of a wound); <i>muai</i>
gruel, porridge; <i>klam</i> ; (watery) <i>hrɔɲ</i>	heap/stack; (stacks of hay) <i>roʔ</i> ; (loose grass) <i>nkɔm/muoʔ</i>
grunt (of a pig); <i>nek</i>	hear; <i>ɲɔɲ</i>
guard, defend; (e.g. tend sheep) <i>ɲɔm</i> ; <i>kʰuon</i>	heart; <i>ra-hɔm-hrɔm</i>
guess at; <i>si-pɔk</i>	heavy; <i>cʰen</i>
guest; <i>ɲu</i>	heel; <i>nkɔc cʰuonɲ</i>
gums; <i>ɲi</i>	height; <i>nkʰlauɲ</i>
gun, rifle; <i>si-niet</i>	help; <i>ʔa-zuɲ</i>
gunpowder; <i>ʔa-nie</i>	helper; <i>npʰiʔ</i>
gut (fish); <i>livɔh</i>	hemp; <i>kaiʔ-hɔc</i>
hail; <i>pre</i>	hen; <i>ʔia miɔʔ</i>
hair; <i>hac ntɔɲ</i>	here; <i>tʰoʔ ʔien</i>
hair whorl; <i>kʰuan</i>	hereafter, from now on; <i>kʰɛʔ ʔian</i> ; <i>kʰɛʔ ʔuan</i>
half; <i>plak</i>	hew (with jungle knife); <i>mok</i>
halter, bridle; <i>kə npruon</i>	heystack; <i>nkaih</i>
hammer; <i>nkʰoh</i>	hiccup; <i>si-ʔɔʔ</i> ; <i>nkʰwac</i>
hammer in (a nail); <i>kom</i> ; <i>tʰet</i>	hide (something); <i>mɔʔ</i> ; ([vɪ]) <i>mɔʔ tʰeʔ</i>
Han Chinese; <i>hvʔ</i>	hide oneself; <i>mɔʔ tʰeʔ</i>
hand; <i>tɛʔ</i>	high building; <i>ɲivʔ hlawɲ ɲivʔ tʰiɲ</i>
hand down (to posterity); <i>prah</i> ; <i>ʔən ʔeh</i> ; <i>ʔa-liet</i>	high, tall; <i>hlawɲ</i>
handful (of rice); <i>ncʰop</i>	hill; <i>tʰuo</i>
handicapped; <i>vɔk</i>	hire, empty; <i>vie</i>
handle, hilt; <i>si-tʰoʔ</i>	hit, beat; <i>zuh</i> ; (beat up) <i>ləh/lii</i> ; <i>pʰəh</i> ; (~ with thick plank or log) <i>tuai</i> ; (~ with small rod) <i>tʰes</i> ; (~ with log) <i>pʰəh</i> ; (~ with knuckle) <i>kʰuoh</i> ; (~ target) <i>ɲəh</i> ; <i>krɔʔ</i>
hang; <i>vɔk</i> ; <i>tac</i>	hoe [N]; <i>npʰraiɲ</i>
hang (on the wall); (~ painting) <i>kʰlaʔ</i> ; <i>hlɔp</i> ; (~ mirror, sword, bag, etc.) <i>vɔk</i> , <i>piə</i>	hoe up (weeds); <i>kʰras</i> ; (with hoe) <i>kʰruas</i> ; (with hands) <i>rem</i>
hang down, droop; <i>tak ta</i> ; <i>pruɲ praiɲ</i> ; <i>pruɲ pʰreɲ</i> ; (beautifully) <i>ncʰivɔh</i>	hoe [V]; <i>kʰruok</i> ; (~ horizontally) <i>npʰuok</i> ; <i>cauk</i>
happy and excited; <i>nkʰəʔ</i> ; (<i>nkʰəʔ</i>) <i>pʰit</i>	
hard; <i>krɔh</i>	
hard, laborious; <i>si-tʰiep</i>	
hardworking; <i>rian</i>	
harvest, reap; <i>vuok</i>	
harvested but not replanted (as of fields); <i>npreʔ</i>	

- hold, grasp; *si-p^hin*; *nkeʔ*; (~ hidden in the fist) *nchəp*
 hold danglely in the mouth; *k^het*
 hold out hands to catch or receive something; *t^huon*
 hold in mouth; *mi*
 hold in the arms, hug; *neŋ*; *t^him*; (hug) *ruom*
 hold one's chin; *t^hu kap*
 home; (*nuon*) *niŋʔ*
 honest person; *p^hii cəŋ*; *p^hii cək*
 honest, well-behaved; *cək*; *p^hii cək p^hii rian/nč^has*
 honey; *ra-ʔəm keŋ hia*
 hoof; *ŋem*
 hook [N]; *met*
 hook up [V]; (with a hook) *ka-vec*; (with other tools)
kuas
 hope; *ʔa-miv*
 horizontal; *nke*; *kuŋ ke*
 horn; *ron*
 horse; *npruon*; (mare) *npruon c^haŋ*; (colt) *kuan npruon*
 horse dung; *ʔeŋ npruon*
 horse mane; *hac npluok*
 horseshoe; *si-t^he c^huon npruon*
 hospitable; *juu*
 host; *cau* (*niŋʔ*)
 hot; (of weather) *hlok*; *ra-ʔauh*; (of water) *kəc*
 hot pepper, chili; *ma(k)-kriəm*; *p^hret*; *p^hret*
 hot, spicy; *preʔ*
 hound; *səʔ hək*
 house; *niŋʔ*
 household; *niŋʔ p^hii*
 house-pole; *rəŋ*; (central~) *rəŋ t^hiŋ*
 how; *hlək muoʔ*/ *hlək p^həh*
 how many/much; *mreʔ muoʔ* (*kaiʔ*)
 howl (of a wolf); *npruoh*
 huddle/curl up; *rət*; *kək kəm*; *rək rən*
 human being; *p^hii*
 hunchback; *p^hii kəʔ*
 hundred; *keŋ*
 hungry; *vuk vec*
 hunt; (alone) *nc^huom*; (in a group) *hək*; (for a few days
 in mountain) *ŋec*
 hunt (for some time in the hills); *k^huon*; *ŋec*
 hunter; *cau nc^huom*; *pa-hək*
 huqin (a two-stringed bowed instrument); *si-con*
 hurriedly, hastily; *k^hie*
 husband; *ʔa-meʔ*
 hush-money; *sum*
 husk; (separated from grain) *kam*; (still on grain); *ləŋ*
 husk powder; *ŋəvŋ*
 I; *ʔəʔ*
 ice; *pre*
 idea, opinion; (*pa-*) *nc^hem*
 idiot; *p^hii nt^hək*
 idle, unoccupied; *p^hiŋ*
 if; *k^heŋ*
 ignore; *t^ha*
 ill/sick; *saiʔ*
- immerse, submerge; *nc^həʔ*
 impatient; *ʔah*
 in (the sky); *nkuai ka-ma*
 in a low voice; *k^hre*
 in ancient times; *nc^hu ka*
 in shambles, ruined; *hram*
 in the future; *k^heʔ ʔien saʔ*
 in the past; *kaʔ ka nŋʔ*; *nc^hu ka*
 incisor; *hraŋ vui*
 increase; *np^huoʔ*; *nauk* (*hon*)
 industrious, hardworking; *rian*; *k^hi*; *lom ŋem*
 infect; *hauk*
 inhale; *zuat np^həm t^heʔ*
 initially, in the beginning; *lai ɲai*
 injure/hurt; *mat*
 inside; *nuon*
 install; *ntək*
 interest; *ru mi*
 interrogative marker; *həʔ*
 interstice; *ʔa-liap*
 intestine; *vec*
 invite; *hak*
 invite (someone in a crowd of people secretly home
 for a meal); *kuas*
 iron; *hriam*
 itch/tickle; *ŋiŋʔ*; (when tickled) *la-ŋic*; *la-ŋiec*
 ivory; *hraŋ saŋ*
 jab, poke, stab; *suat*; (~ with great force) *npluŋ*; (prick
 with needle) *sət*
 jackfruit; *mak nun*
 January; *k^heʔ t^heʔ*
 Jingpo; *k^haŋ*
 job's tears millet; *si-p^heʔ*
 joint; *si-ʔaŋ ruc*
 joke, jest; *ləŋ*
 jump, leap; (~ up, ~ up and down) *ca-loŋ*; (of a frog) *ca-
 pos*; (~ over a ditch) *pos*; (~ while running) *p^huos*
 just now; *nəʔ*
 jostle; *k^huk k^hat*
 keep secret; *məʔ*
 keep, take care of; *preʔ*
 kernel, pit; *sək*
 kettle, teapot; *ka-təŋ la*
 key; *ncək*
 kick; (with tip of foot) *t^het*; (with entire surface of foot)
si-ton
 kidney; *sək-len*; *sək-laʔ*
 kill; *plaiʔ*; (slit throat) *ŋiu*; (chicken, cut throat and
 then singe off feather) *təŋ*; (butcher cattle) *p^həh*;
 (butcher pig) *suat*
 kill oneself; *plaiʔ t^heʔ zum*; *zum ca*
 kind [N]; *ʔə*; *c^hi*
 kindle; *tək*; (switch on light) *np^hluai təŋ/tiŋ*
 king; (*ʔa-*) *mivŋ zaŋ*
 kiss; *ʔəŋ*; *zuat nk^his/si-pa*
 kitchen; *niŋʔ p^hriŋʔ/səm*

- knead (dough); *tʰic*; *pua*; *zuh*; *mian*
 knee; (*mus*) *nkruoŋ*
 kneel; *ʔoŋ*; *kʰrik kʰrin*
 knife; *viec*; (battle knife) *viec niep*; (long ~) *viec laŋ*;
 (small ~) *nkuan*
 knock; *kʰoh*
 know, recognize, know through learning; *zuoŋ*
 knuckle; *ncʰoŋ teʔ*
 lack, want; *cʰut*
 lad, young chap; *kuan si-nuo ʔa-meʔ*
 ladder; *npvŋ*
 ladle; (water) *npʰuk*; (for food) *lak tʰoh*
 lag behind; *ntʰai*
 Lahu; *koi*
 lake; *ntʰuŋ*
 lamb; *kuan pʰeʔ*
 lame person; *pa-vok*
 land, descend; *krəc* [vɪ]; *nkɾəc* [vɪ]
 lap; *nkuai npa*
 large intestines; *vec tʰiŋ*
 last month; *kʰeʔ ka*
 last night; *npʰu pa-kauʔ*
 last year; *num kauʔ*
 late; *liaŋ*
 laugh, smile; *nʋh*; (without sound, sneer) *jies*
 lay (eggs); (*lih*) *ka-tɔm*
 lazy; *ka-niʋh*; *ʔas seʔ ʔas npɾiŋ*
 lead; *hɾaŋ*
 lead (metal); *la-vun*
 lead (the way), guide; *ntok kraʔ*
 lead to; *npləs*
 leader; *pʰii nkʰraŋ*
 leaf; *hlaʔ kʰauʔ*
 leak; *cʰiu*; *ruac*;
 lean meat; *hoc*
 learn; *nkʰi*
 leave, depart, set out; *zuok*; (leave, walk away, move
 away, dodge) *nkas*
 leave (home) in anger; *ŋvʰ*
 leave behind; *pʰi*; *prah*
 leave behind, push away, jilt; *kʰən*
 leave fallow; *vaŋ*
 leave home; *prah zauŋ*
 leech (land); *npłom*
 left; *kaʔ veʔ*
 leftover; *pʰriʋʔ hlɔŋ/hauh*
 leg; *cʰuoŋ*
 legendary ancestor of the Wa; *si-kaŋ lih*
 length of fist; *ncʰɔp*
 leopard; *ʔa-vie si-ʔoŋ*; *ʔa-vie ka-suas*
 leprosy; *saiʔ nkɾec*
 let up (rain); *hec*
 letter; *lie* (*tvʔ* ~ *ʔa-pauʔ*)
 level, flat; *nke*; (obsolete) *tʰuoŋ*
 lick, lap; *let*
 lid, cover; *ntʰuop*
 lie; *jiaɪ pət tʰeʔ*; (~ on one's back) *ʔec lup lak*; (~ on one's
 side) *ʔec lup liaɪ*; (~ on one's stomach) *ʔec nkop*;
 (~ down) *jiaɪ*
 lie (speak falsehood); *pʰiu*
 lie scattered on the ground (of trees, corpses, etc.); *nai*
 life line on palm; *kraʔ teʔ*
 life-span; *ncʰu*
 lift (lids); *fak*
 lift up, carry; *zuok*; *neŋ*
 light; *kɔc*
 light (a fire); *tvk*
 light (weight); *cʰauŋ*
 light, lamp; **təŋ*
 lighten; *ʔa-sas*
 lightning; *jivʔ cʰus kʰrəŋ*
 like [+COMP CLAUSE]; *rian*; *mit*
 like, love; *mit*; *ŋɔm/tʰum ra-hɔm.nah*; *rian...nah*; *sɔm*
ʔɔt.mii; (like to do something) *rian...nah*
 lime; *ra-ʔɔm si-muʔ*
 line (of wheat); *lvʔ*
 line up; *ntia*; (Indian file) *ntia kʰeʔ ka*; *ntia ncʰoŋ*;
 (shoulder against shoulder) *ntia ti plak*; *ntia kəŋ ke*
 lip; *hlɔʔ nkʰis*; *ntɔt nkʰis*
 listen; *ŋiaɪ*
 litre; *seŋ*
 live coal; *nkʰuoʔ ŋuo*
 live, reside; *ʔɔt*; (move and live at a place permanently)
kət; (~ at a place temporarily) *npaŋ*
 liver; *ka-tɔm*
 livestock, domestic animal; *kʰrəŋ ʔai*
 living, alive; *ʔem*
 lizard; *ka-lu*
 loach; *kaʔ nkluoʔ*
 lobed Kudzu vine root; *ra-heʔ*
 lock; *suo* (< Chinese 鎖)
 locust, grasshopper; *si-tʰu*
 lonely; *ncʰi/npʰvŋ ra-hɔm*
 long; *laŋ*
 long (time); *ntʰuok*
 long ago; *nvʔ*
 look like, resemble; *hlɔk* (*ʔa-tʰu* = identical)
 look up; *ŋiet*
 loom; *kʰrəŋ taŋ*
 loose, slack; *ntah*; *hlua*; (loosen) *npʰlv*; *la-hv*
 loquat; (large sp.) *kros*; (small sp.) *ka-tʰuc*
 lose (something); *tiak*; *nkrai zuh*; (~ a game, be
 defeated) *pʰək*; (~ a finger/toe/limb) *kʰo*
 loud; *luas*; (of voice) *lvʔ tʰiŋ*
 loufah; *tʰuoŋ*
 louse; (body ~) *npɾuŋ*; (head ~) *seʔ*
 love, like; *ʔauʔ*; (~ a child, ~ to eat certain foods) *mit*
 low; *tʰem*
 lower body; *cʰuoŋ*
 lower head; *ŋui/ʔoŋ/ntʰem ntəŋ*
 lower lip; *nkʰis seh*
 lukewarm; *si-ʔo*

lunatic; <i>pa-lan</i> ; <i>pa-hiət</i>	miss [VT]; <i>mos ~ mus</i> ; <i>nt^hut ra-həm</i>
lungs; <i>ka-ŋau</i>	mistake, error; <i>lut</i>
machete; <i>pa-kəm</i> ; <i>ma-kəm</i> ; (with curved blade) <i>ŋau</i>	mix (powder) with water; <i>si-ka?</i> ; <i>ŋfit</i>
maggot; <i>nkrec</i>	mix [VT]; <i>zuh ʔa-ne?</i> ; (stir) <i>si-ka?</i> ; <i>ku-ka?</i>
maggpie; <i>nprieŋ</i>	molar; <i>hraŋ k^hie</i>
maize, corn; <i>vuon</i>	moldy; <i>ʔa</i>
make (prepare food); (~ bread) <i>zuh</i> ; (~ tea) <i>ntom (la)</i> ; (~ cold dishes) <i>sa</i>	mole (body part); <i>ŋai ʔa-ziv?</i> ; <i>mu</i>
make a row/racket; <i>riək</i> ; <i>ʔa-cai?</i>	mole (animal); <i>kli</i>
make friends; <i>səp</i> ; <i>zuh t^he? məh (p^huo? nkruom)</i>	mole cricket; <i>nt^hi ʔeŋ</i>
make a mark; <i>zuh niat</i>	money; <i>mi</i>
make way, give way, step aside; <i>zak</i> ; <i>nkas</i> ; <i>nkleh</i>	monk; <i>vat</i>
make (something happen), cause; <i>zuh</i>	monkey; <i>fa?</i>
malaria; <i>sai? prəh</i>	month; <i>k^he?</i>
male (animal); <i>ŋeŋ</i>	moo (of cattle calves) <i>npe?</i> ; (of female cattle) <i>məh</i> ; (of male cattle) <i>npəh</i> ; (of female buffalos) <i>ŋvi?</i> ; (of male buffalos) <i>ʔvi?</i>
male child; (biggest) <i>ʔai</i> ; (2nd) <i>ŋi</i> ; (3rd) <i>soi</i> ; (4th) <i>sai</i> ; (5th) <i>ŋuoi</i> ; (6th) <i>ŋuo?</i> ; (7th) <i>se</i> ; (8th) <i>lok</i>	moon; <i>k^he?</i>
man; <i>ʔa-me?</i>	more; <i>ntə</i>
manage, control; <i>k^ham</i> ; <i>pre?</i> ; (watch over object) <i>kia</i>	morning; <i>p^hun ŋuop</i>
mane; <i>hac npluok</i>	mortar; <i>pə</i>
manger; <i>ntəŋ səm npruon</i>	mosquito; <i>mep</i> ; (large sp.) <i>praŋ</i> ; (~ larva) <i>nkrec</i>
mango; <i>pə</i>	moss; <i>ʔeŋ ʔak</i>
mantis; <i>ʔak-sə?</i>	mother; (term of address) <i>ma?</i> ; (reference) <i>miv?</i>
many, much; <i>hon</i> ; <i>hlə</i> ; <i>ne</i>	mother-in-law; <i>t^hiŋ</i>
mark, sign; <i>ŋai</i>	mountain; <i>nkəŋ (ra-)?aŋ</i> ; <i>nk^huon (ra-)?aŋ</i> ; (peak) <i>t^hu</i>
marriage ceremony; <i>p^hri? kən caŋ</i>	mountain cave; <i>ka-tai? ra-?aŋ</i>
marrow; <i>nk^huo</i>	mouse; <i>k^hiəŋ</i> ; (~ sp.) <i>nk^huos</i>
marry; <i>kən caŋ</i> ; (~ a woman) <i>t^hii</i> ; (~ a husband) <i>hau</i> <i>jiə?</i>	mouth; <i>nk^his</i> ; <i>ntət</i> ; (oral cavity) <i>muon</i>
marten; <i>ka</i>	move; <i>ʔa-səh</i> ; <i>luas</i> ; <i>ʔa-t^hiəh</i> ; (~ objects closer to one- self) <i>kuas</i> ; (~ house) <i>t^hiəh/nkas jiə?</i>
mat; <i>npe</i> ; <i>ka-ne</i> ; <i>npe ka-ne</i>	Mowo 莫窩 (village to the north of Banzhe); <i>məŋ-ŋau</i>
match; <i>ka-tuai</i>	mu (unit of area; = 667 square meters); <i>kau k^hau?</i>
matter, affair; <i>si-vai</i>	mud; <i>nkluo?</i>
means, solution; <i>krəŋ</i>	muddle (the water); <i>ku-ka?...si-ka</i>
measles; <i>təŋ</i> ; <i>p^hris</i>	muddy pool; <i>ləh</i> ; <i>np^hiəŋ</i>
measure; <i>hiat</i>	muddy, turbid; <i>si-ka</i>
meat; <i>ne?</i>	mulberry; <i>k^hau? lias</i>
medicine; <i>ʔa-tah</i>	multicolored; <i>p^hris</i> ; (as of chicken and clothes, black and yellow) <i>si-krak</i>
meet, come across; <i>ʔa-tai</i> ; <i>təh ʔai</i>	mung bean; <i>ʔian</i>
melt, dissolve [VI]; <i>liec</i>	muntjac, barking deer; <i>pəs</i>
melt, dissolve [VT]; <i>nkriak</i> ; <i>nklic</i>	mushroom; <i>tes</i>
men's sarong; <i>k^hla? t^hiŋ</i>	mute; <i>p^hii ʔə</i>
menses; <i>k^he? ŋam</i>	nail (body part); <i>ŋem</i>
meow; <i>nprum</i>	nail, tack; <i>si-t^he</i>
merchant; <i>pa-li</i>	naked; <i>nkaun</i>
mess up; <i>k^huŋ k^han</i> ; <i>t^hu t^hia</i>	naked (as of mountain); <i>t^hu-pak</i>
messy, chaotic; <i>su se?</i>	name; <i>ŋai</i>
middle; <i>ka-piaŋ</i> ; <i>npiaŋ</i>	nape; <i>npluok</i>
midge; <i>mep</i> ; (smaller sp.) <i>mu</i>	narrow; <i>kəp</i> ; <i>klə?</i> ; <i>kləp</i>
midnight; <i>ka-piaŋ səm/np^hu</i>	nasal mucus; <i>mis</i> ; <i>nk^huo mis</i>
milk; <i>ra-ʔəm təs</i>	nauteous; <i>si-rəŋ</i>
millet; <i>k^hə?</i>	navel; <i>ka-t^heŋ</i>
millstone; <i>nk^hrit</i>	near, close; <i>t^he?</i>
mimic; <i>təi</i>	neck; <i>si-ŋuok</i>
mince; <i>mək</i>	necklace; <i>(pa-)?aŋ</i>
mirror; <i>si-livŋ</i>	

- needle; *ka-niʔ*
 neigh; *npʰros*; *npʰris*; *riʷk*
 neighbor; *pʰuoʔ niʷʔ*
 nephew (brother's son); *kuan taŋ*
 net; *rup*
 net fish; *rup kaʔ*
 new; *si-rauʔ*
 New Year's Day; *num si-rauʔ*
 New-Rice Festival; *npʰoŋ ɲɔʔ*
 news, message; *lɔʔ ʔa-pauʔ*
 next year; *num saʔ*
 night; *npʰu*; *sɔm*
 nimble; *si-klah*
 nine; *si-tem*
 nineteen; *kau si-tem*
 ninety; *ʔa-tem*
 nipple; *nkon tɔs*
 nit; *ka-tɔm seʔ/npruŋ*
 nod; *ʔiʔ ntɔŋ*; *ɲəh ntɔŋ*
 noisy, make noise; *nkʰəʔ*
 noon; *ka-piaŋ/(lai) nɕʰoŋ si-ŋeʔ*
 nose; *mis*
 nose ridge; *nkʰuoŋ mis*
 nostril; *ka-taiʔ mis*
 not at all; *ʔaŋ tu*
 not busy, idle; *ɲic*
 notify, inform; *ɲauʔ*
 numb; *zum pʰi*; (sore) *ka-mieŋ*
 obverse; *nkuai*
 occur, happen; *kɔi*
 offer (food, drink) respectfully; *lus*
 offer, dedicate; *sət*
 often; *npraʔ*
 old, used; *preŋ*; *cʰuoʔ*
 old lady; *zaʔ kʰuoʔ*; *kʰuoʔ ʔa-pon*
 old man; *kʰuoʔ ʔa-meʔ*; *taʔ kʰuoʔ*
 old, elderly; *kʰuoʔ*
 olive; *si-me*
 on; (~ a roof) *npraʔ niʷʔ*; (~ a table) *nkuai*; (~ a wall) *nkuai (ntiaŋ)*
 one; *tʰeʔ*; (in numerical phrases) *ti ~ tɔ*
 one hundred and one; *tɔ keŋ mii tɔ mau*
 oneself; *tʰeʔ*
 onion, scallion; *ka num*
 open; (~ a door) *pauh*; (~ eyes) *nplies*; *kʰu-kʰries*; (~ mouth) *ʔaŋ/vies nkʰis*; (~ wide) *viʷh nkʰis*; (~ an umbrella) *plas*; *nplas*
 open water conduit; *ntʰuoh ra-ʔɔm*; *ntʰuŋ ra-ʔɔm*
 oppose; *ʔa-tʰe*; (*ʔa-tʰe*) *ʔa-tʰiʷ*
 orange; *mak ɲe*
 order, command; (request) *nəʔ*; *nkʰrə*
 origin; *tom*; *nom*
 orphan; (*kuan*) *ntɔi*
 other; *nplah heʔ*
 other side; *lak*; (turn over to the other side) *ʔa-l(i)ak*
 other person(s); *pʰii piauiŋ*; *pʰii nplah*
 otter; *pʰiʔ*
 out of order; *lɔʔ*
 outside; *nprauʔ*; (of utensil) *nkuai*; (of house) *klaŋ ka-teʔ*
 over, above; *plak lauŋ*
 overeat; *si-tap*
 overflow, spill; *reh*
 owe (money); *npa*
 owl; *plɔŋ plɔh*
 oxhide string; *mauʔ hak*
 pack rack; *laŋ/taŋ muoi*
 pad; *ha*; *tʰom*
 pad, cushion; *ha nkʰuoŋ*
 paddle, row; *pas*
 paddy field; *kaŋ*
 paddy rice; *ɲɔʔ kaŋ*
 pail (of bamboo); *si-tʰuoi*
 pain, agony; *saiʔ*
 painting; **hua*
 pal, partner; *pʰuoʔ hau*
 palate; *ntʰiʷŋ hraŋ lauŋ*
 palm; *ka-tʰiʷk tɔʔ*
 palm tree; *kʰruai*; *sək*
 pancreas; *la-vuot*
 pangolin; *ʔa-pʰuoʔ*
 pant, be out of breath; *hə npʰɔm*
 pants, trousers; *kʰlaʔ*
 papaya; *si-vuok*
 paper; *ce*
 parakeet, parrot; *le*
 pare/peel with a knife; (peel) *kʰes*; (to sharpen) *npʰuac*;
 (twittle into round shape) *ruon*; (twittle into flat shape) *tah*
 part company; *nkʰries*
 pass, exceed; *luan*
 pass, go by; *hɔc...tʰoʔ/pʰiʷ*; (*hau*) *prah...*
 paste, glue; *juu-ɲaʔ*; *hluop*; *kʰlɔp*
 pat (e.g. head); *ntʰih*
 patch (clothing); *ʔa-pʰluoʔ*
 patient; *pa-saiʔ*
 pave, lay; (~ road) *ntʰien kraʔ*; (~ bed) *tʰom npe*
 pea; *tʰo mauʔ*
 peach; *ka-tʰiʷ*
 peacock; *kauŋ*
 peanut; *kʰrim ka-teʔ*
 peck; *tos*
 peel off; *ntak*; (bark, leaves) *ka-rəi*; (old paint~) *npas*
 pen; *nkrɔŋ lie*
 pen in, drive back to fold; *nplec*
 penis; *kleʔ*
 pepper; *si-ləʔ*
 perch, rest for the night; *npan*
 perch, light [v]; *pan*
 permit, allow; *tɔʔ*
 persimmon; *kʰauʔ nkrɔŋ mɔi*
 persist; *kʰin*

person with pock-marked face; <i>pʰris npʰuoh</i>	poke (a sign into earth), insert; <i>npluŋ</i>
personal enemy, antagonizer; <i>pʰii kʰuon</i> ; <i>pʰii si-ŋiəŋ ɲai</i> ; <i>pʰii ncʰuoʔ</i>	polite, courteous; <i>ʔa-tʰiə</i>
perspire; <i>las/lih/npʰras la-ʔaih</i>	pond; <i>ntʰuŋ</i>
pestle; <i>nkriʔ</i>	pool (money); <i>ʔa-pʰən</i>
pestle/pound; <i>taih</i>	poor; <i>cʰa</i> ; <i>hət</i>
photo; <i>cʰiə</i>	poor (land); (<i>kʰru</i>) <i>kʰrec</i>
physical strength; <i>si-niəp</i> ; <i>npraʔ</i>	pop open; <i>ʔa-tʰuos</i>
pick up; <i>sot</i>	popped maize; <i>vuəŋ npʰros</i>
pick up food with chopsticks; <i>kiap</i>	porcupine; <i>nkəs</i>
pickled bamboo shoot; <i>ʔa-niəʔ</i>	pot, jar; <i>si-kʰoŋ</i> ; (pots in general) <i>ka-təŋ</i> ; (large iron pot) <i>kʰaŋ</i>
pierce; <i>suat ntəh</i>	potato; <i>ka-len</i>
pig; <i>lik</i> ; (piglet) <i>kuan lik</i>	pound to pieces; <i>npluoŋ</i> ; (emph) <i>si-tec</i>
pig dung; <i>ʔeŋ lik</i>	pound with force; <i>nkluiʔ</i>
pig feed, pigwash; <i>səm lik</i>	pound with pestle (first round); <i>ɲaʔ</i>
pigsty, hogpen; <i>luok lik</i>	pound with pestle (second round); <i>sək</i>
pile/stack up; <i>roʔ</i> ; <i>nkəp</i>	pour into; <i>rək</i>
pillar, house-pole; <i>rəŋ</i> ; (central) <i>ruəŋ</i> ; <i>rəŋ prəŋ</i>	pour out; <i>klop tiak</i> ; (pour out a little) <i>nkreh</i> ; (~ water) <i>cʰit</i>
pillow; <i>nkʰuoŋ</i>	pour water on; <i>sə</i>
pine, pine torch; <i>nkʰiʔ</i>	pregnant; <i>ɲe</i>
pineapple; <i>nkraç</i>	prepare, make ready to do something; <i>preʔ</i>
pipe; <i>lək sup</i>	press, squeeze; <i>npiat</i>
piss, urinate; <i>nim</i> (<i>nim</i>)	press, push down; <i>ɲiap</i> ; (with palm or finger) <i>zin</i> ; <i>ɲiap</i> <i>nah teʔ</i> ; (with something heavy) <i>nkot</i>
pit; <i>ntʰuoh</i> ; (small pit made by cows stepping on it) <i>kʰlək</i> ; <i>nkʰlək</i> ; <i>nklək</i>	pretend; <i>ɲə</i> (e.g. <i>ɲə tʰeʔ ziem</i> 'pretend to weep')
pit, stone; <i>sək</i>	price, wages; <i>ɲuos</i> ; <i>ris</i>
pitchfork; <i>kʰauʔ pʰəp</i>	prick; <i>suat</i> ; <i>cək</i>
pitchfork (weapon); <i>kʰauʔ npluŋ</i>	prison; <i>ɲiəʔ ləʔ kai</i>
pitiable, pitiful; <i>cʰuoʔ pʰəm</i> ; <i>saiʔ ra-həm</i>	promise, consent; <i>ʔiʔ</i> ; <i>ɲiat</i>
place; <i>tʰoʔ</i>	prop, support; <i>tʰu</i>
place, location; <i>taŋ</i> (cf. <i>taŋ ət meʔ</i> 'place where you are')	protect; <i>ɲəm</i>
place for hen to lay eggs; <i>kʰək ʔia</i>	protruding tooth; <i>hraŋ nkəp</i> ; <i>hraŋ pʰries</i>
place frequented by animals or people; <i>nkləh</i>	protruding, raised; <i>npʰlen~nplen</i> ; <i>tən</i>
placenta; <i>hrəm</i>	proverb, saying; <i>ləʔ kʰuoʔ</i>
plait; <i>kian</i>	provoke, seek trouble; <i>hak</i>
plane [N]; <i>ncʰəs</i>	pry; <i>vies</i>
plane [V]; <i>səs</i>	pubic hair; (of a male) <i>hac kleʔ</i> ; (of a female) <i>hac sək/pe</i>
plank, board; <i>tap</i>	pull (e.g. a quilt) over oneself; <i>ʔəm</i>
plant [V]; (plant seedling) <i>ncʰom</i> ; (by casting seeds) <i>ruot</i>	pull (trigger); <i>kʰluc</i>
plant [N]; <i>kʰauʔ ʔəʔ</i>	pull down (a house); <i>ziəh</i>
plant sp. with edible pith; <i>klun</i>	pull open (drawer); <i>pauh</i>
plate, dish; <i>ntʰiəŋ</i>	pull out (weeds, turnip); <i>ric</i> ; * <i>nploh</i>
platform for drying grain; <i>nkras</i>	pull, draw (sword); <i>luot</i>
play, amuse oneself; <i>klian</i>	pull, tug, drag; <i>kʰrut</i>
pleasant to the ears; <i>num/ɲəm tʰeʔ ɲiat</i>	pulse, beat; <i>ca-ləh</i>
pleasant to the eyes, beautiful; <i>num/ɲəm tʰeʔ kia</i>	pumpkin; <i>npiu num</i>
plough [N]; <i>kʰauʔ tʰai</i>	puncture [VT]; <i>təh</i>
plough [V], till; <i>sum</i> ; <i>kʰruok</i>	punish; <i>zuh ləʔ</i>
ploughshare; <i>hriam tʰai</i>	pupil (of eye); <i>kuan ɲai</i>
pluck, pick; <i>cəc</i> ; (~ fruit) <i>peh</i>	pus; <i>lim</i>
plum; <i>pleʔ hak ra-ʔaŋ</i>	push (grass) aside with both hands; <i>viəs</i>
pocket; <i>tʰəŋ</i>	push, shove; <i>cot</i> ; (topple) <i>ɲən</i> ; (awake so.) <i>ʔa-səh</i>
point at/to/out; <i>cʰi</i>	put (rice) into pot; <i>taʔ</i>
point, tip; <i>ru</i>	put (soil) on; <i>ntʰien</i> ; <i>kəm</i>
poison, toxin; <i>ʔa-tah ʔəp</i>	put away with care; <i>cəʔ</i>

- put hands on the hips, hands akimbo; *ruom teʔ*
 put in (salt); *taʔ*; (~ round rim of pot) *nkruoi/nkræc*
 put in order, arrange; *ntia*
 put in order, tidy; *preʔ kʰrim*
 put into a container, pack; (into pocket, bag) *jəh/nplec/səm/ʔən nuon*; (into bowl/plate) *jəh/ʔən nuon*
 put on; *ʔəm*; (~ pants, shoes, etc.) *ʔeh; cəp*; (~ another layer of clothing) *npʰuoʔ ʔəm*
 put hand(s) on something for support; *nkeʔ kraʔ*
 put something somewhere; (put down) *ntʰəh*; (put away carefully) *ʔən/cəʔ*; (~ in container) *səm*
 put stopper in; *tʰəʔ*
 puttee; *man huat (cʰuon)*
 python; *klon*
 quail; *kʰit*
 quake of earth; *kla rim*
 quarrel; *ʔa-cə*
 quick, fast; *cʰaun*; *npraʔ*; (horse) *cʰaun*
 quilt; *pʰroʔ*
 quit (bad habit); *tʰuos*
 rabbit; *mo*
 rafter; *si-ʔəʔ*
 rain; *hleʔ*
 rainbow; *ʔa-zuon*
 rainy season; *lai rəʔ*
 raise, heave; *zuok*
 raise, keep; *ʔai*
 raise (head); *ɲiet*
 raise (tail); *ncʰəŋ; zuok*
 rake; *nkʰət*
 rake (the fields); *kʰot; ku-kaʔ*
 rake and spread (grain) for drying; *ra(s)*
 rake [v]; *kʰot*
 ram, butt; (with bead) *si-tʰiŋ*; (fight with horn) *si-tʰit*;
 (with head tilted to one side) *ʔa-vus*
 ramie; *nkan*
 ramie bag; *cʰə*
 rape; *lit*
 rapid; *kua kləŋ*
 reach for; *cəs*
 read; *nkʰi; kia*
 recall, recollect; *ncʰem*
 recall, remember; (think of, figure out) *ntəh ncʰem*;
 (recall) (*zuon...tʰeʔ me ncʰem*)
 receive; *huac tʰii*
 recently, lately; *si-rauʔ ʔien*
 recognize; *zuon*
 red; *leh*
 red jungle fowl; *ʔia pʰreʔ*
 reduce; *zəm; nteh*; ([vt]) *nteh; zuh zəm*
 refine (iron); *sah; mo; sec*
 refuse by making excuses; *ʔa-tʰiə*
 regret; *ntʰiəp ra-həm; kles (ra-həm)*
 reheat; *si-ʔo*
 reins; *kə npruon*
- relatives; *pa-nivʔ*; (paternal relatives) *ntaʔ ntʰuon*; (in-laws) *tʰun*
 release, set free; *npʰluai; npʰla*
 rely on; *si-tʰuon*; *tʰu*
 remember; (*kʰən*) *niat*; (*kʰən*) *zuon*
 remove, move out of the way; *zak*
 repay; *prə npa*
 request; *maŋ*
 rescue, save; *ʔa-cʰuo*
 reserve (seeds); *cəʔ; ʔən*
 resin; *pʰis nkʰiʔ*
 respective, individual, each; *nəŋ*
 rest; *laiʔ*
 return; *ʔiaŋ*; (return halfway) *me*
 return (blow); *təʔ teʔ*
 return [vt]; *prə*
 return, retreat; *ntʰəs*
 reverse [adj]; *nkrəm*
 reverse [v]; (*ʔa-lak*; (*ʔa-lia*)) *liak*
 rheumatism; *saiʔ kʰreŋ*
 ribs; *si-ʔaŋ prauk*
 rice; (rice plant) *ŋəʔ*; (unhusked ~) *ŋəʔ (kaŋ)*; (husked ~) *nkauʔ*; (cooked ~) *ʔəp*; (non-glutinous ~) *ŋoʔ ʔah*; (crushed ~) *muac*; (early ~) *ŋəʔ ka-luas*
 rich; *mi; zuoʔ; mie*
 rich person; *pa-mi; pʰii ʔas ʔeʔ*
 riddle; *si-pək*
 ride (a horse); *npʰok*
 rift, crack, fissure; *ntəh*
 right(side); *ka-təm*
 right away; *kən ʔa-vut*
 right, correct; *rok*
 ring; *nple nkian*
 rinse (mouth); *pʰak*
 rinse, flush; *si-kra*
 ripe; (of fruit) *tʰim*; (of crops) *kaiʔ*
 rise, go up; (of the sun) *lih*; (of a flag) *zuok*
 rise/stand up; *zuok (tʰeʔ cʰuon)*; (get up from bed) *kauh*
 river; *kləŋ*
 road; *kraʔ*
 roar; *ŋək; npʰris; nprih*
 roast; (on live charcoal) *təŋ*; (over fire) *ka*
 rob; *caʔ*
 robber; *pa-caʔ*
 rock; *ra-ʔaŋ*
 rock, sway; *zuŋ zaŋ; puk-plak*
 rod with flat end for churning rice in the pot; *nkwe*
 rod, stick; *kʰauʔ*; (thin rod) *si-vat; si-vet*
 roll; *lu-liu*; ([vt]) *pa-liu*; (~ something downhill) *paŋ liu*
 roll up (cloth); *pua*
 roof; *npraʔ*; (top rim) *praŋ nivʔ*; (side roof) *vui hə*
 roof-top; *si-taʔ nivʔ*
 root; *res kʰauʔ*
 rope, string; *mauʔ*
 rot; *si-ʔom*

- rough, coarse; *kʰat*; *npʰruj*; *npʰruoj*
round, circular; *pai vit*
rub (hands); *puai teʔ*
ruin, render out of order; *npləh*
ruler; *sək*
ruminate; *klej niu tʰeʔ*; *ʔej le*; (rare) *pʰiem sɔm tʰeʔ*
run; *ʔa-vit*; *tɔ*
rust; *hram*; *kram*
sacrifice [N]; *hlaʔ tauh*
sad; *saiʔ ra-hɔm*; *ntʰut ra-hɔm*; *cʰuoʔ ra-hɔm*
saddle; *taŋ npruon*
safe and sound; *ŋɔm ʔɔt*
saliva; *nia*
salt; *kʰis*
salty; *sɔŋ kʰis*
sambhar deer; *caŋ*
sand; *ŋac*
sap, juice; *pʰis*
satiated; *ʔas*
satisfy, meet (a condition); *kʰup*
save (something); *preʔ*; *cɔʔ*
saw; *npias*; *pias*
scabies; *saiʔ ŋivʔ*; *saiʔ pʰrəs*
scald/burn; (by boiling water) *hlac*; (by fire) *tok*; (by hot metal, etc.) *pʰiet*
scale (of pangolin); *nkʰluop*
scalp; *hak ntɔŋ*
scar; *vum*; *nproʔ*; *nkuai mat*
scarab; *ntʰiv ʔej*
scent; *si-ʔɔi*
school (of fish); *ŋac kaʔ*
scissors; *nkʰrep*
scold; (with bad language) *ka-cʰak*; *ka-cʰec*; *kluan*; (scold) *ʔah*; *ʔən*; (~ each other) *ʔa-mah*
scoop up; *pʰuk*
scorching (sun); *kla*
scratch (an itch against something); *kuk-kat*; *kʰuk-kʰat*
scratch (an itch); *pac*; *krem-krem*
scratch earth (as of fowl); *ras*
scream; *riɔk* (*si-rut*)
scrotum; *kla*
search, look for; *kʰu-kʰras*; *kʰries*; *sɔp*
second; *pa-ra*
second male child; *ni*
section (of bamboo); *ncʰɔŋ*
see; *zuoʔ*
see (doctor); (see doctor, see a patient) *kia saiʔ*; (see a doctor) *tʰii ʔeh ʔa-tah*
see off; *tau*
seed; *si-miv*
seed of Chinese prickly ash; *ʔa-cʰep*
seedling (of rice); *ŋɔʔ lu*
seep into, permeate; *lec*
sell; *cʰus*
semen; *ŋivŋ*
send (letters); *ʔa-pauʔ*
- send, dispatch; *toʔ.hau*; (by force) *nkʰrə*; *nəʔ*
separate [V1]; *nkʰries*
separate [VT]; *zuh...nkʰries*
serow (Capricornis sumatraensis); *kias*
servant; *cʰuon*
sesame; *la-ŋivʔ*
set (of the sun); *lec*; *klep*
set (trap); *taun*
set on fire; *npʰluai/kʰic ŋuo*
set out; *zuok*
seven; *ʔa-les*
seventeen; *kau ʔa-les*
seventy; *ʔa-nkles*
severe, fierce, sharp; *npraʔ*
sew; *cʰej*
shadow; (=shade) *npɔi*
shady side; *kaʔ ntʰiv si-ŋeʔ*
shake (as of limb in a fit of disease); *ca-ruas*
shake body (to chase off bugs); *ka-ruas*
shake head; *vuk vat*/(animals, child) *pluas ntɔŋ tʰeʔ*
shake, quake; *ʔa-sɔh*; *zun ʔap*; (quake with a lot of noise) *ʔa-ləh*
shallow; *tʰeʔ*; *tʰɔ*
shank; *ŋuon*; *npʰəʔ*
shard of earthen pot; *ntʰivŋ*
share [N]; *pun*
share, portion, part; *kroʔ*
sharp; *luom*
sharp (shooting); *rəh*; *ŋɔm ʔiaŋ*
sharp-pointed; *ncʰuac*
shave; *kʰriɔk*
shave (hairs), scrape; *kʰət~kʰɔt*
sheath, scabbard; *nkʰivŋ viec*
shed (tears, blood); *lih/ruac* (*ra-ʔɔm ɲai/ɲam*)
shed skin (snake); *pəc si-ʔon hak tʰeʔ*
sheep; *pʰeʔ* (*lay hac*)
sheep dung; *ʔej pʰeʔ*
sheepfold, sheep pen; *luok-pʰeʔ*
shell; *ntʰuop*
shell, peel [VT]; *pas*
shepherd boy; *kuan ŋɔm*
shin; *nkʰuon*; *npraʔ ŋuon*
shiver, tremble; *la-kʰuo*; (shudder) *ka-zuat*; (shake body intentionally to get rid of bugs) *kruas*
shoe; *nten* (*cʰuon*)
shoot; *pon*; *kʰluc* (*si-niet*)
shooting star; *si-ʔon po*
short; *ŋej*
shoulder; *si-play*
shoulder bag; *ʔa-miŋ klec*
shoulderblade; *ruon*
shout, yell; *riɔk*; (call someone) *kɔk*
show; *toʔ kia*
shrew (Apodemus sylvaticus); *loh*
shrimp; *ntaŋ*
shrivel up, wither; *krəi*

- shrivelled, shrunken; *tɔp*; *fɛc*
 shy, bashful; *k^hieç*
 sickle; *si-vuok*
 side; *nɸv*
 side (of body); *prauk*
 sideburns; *hac si-pa?*
 sieve, sifter; *nk^hrəŋ*
 sift; *k^hrəŋ*
 silk; *kəi luat*
 silk fabric; *luat*
 silver; *nk^hri*; *mi*
 silver coin; *mi hriam*
 silver grey (hair); *kra*
 silver pheasant; *tuai*
 sing; *nc^hau?*
 sing (cicada); *viaŋ*
 singe (food) in hot ash; *p^hɔ?*
 singe (off hair); *np^hrui*
 sink; *ka-rəç*; (~ on purpose) *lec*
 sister-in-law (elder brother's wife); *ʔ*
 sisters; *p^ho?* *ʔ*
 sit; (posture) *ɲuom pɔt*; (~ down) *ɲuom*
 sit on egg; *ka-num*
 six; *les*
 sixteen; *kau les*
 sixty; *nkles*
 skeleton; *si-ʔaŋ k^hrec*
 skilled; *kət*
 skim; *fɪu*
 skin; *hak*
 skin [VT], strip bark; *lit*; *tak*
 skirt; *tai*
 skull; *si-ʔaŋ ntɔŋ*
 sky; *ka-ma*; (and earth) *p^hre?*
 slanting, leaning; *vɔk*; *si-viu*; (miss) *lus*
 slap, clap; (slap) *nt^hiəh*, *k^hlap*; (clap) *k^hlap tɛ?*
 slave; *ç^huon*
 sleep; *ʔɛç*
 sleep with eyes half open; *ʔɛç ʔia*
 sleepy; *ta(c) ɲai*
 sleeve; *ntɛ?* *cah*
 slice; *pias*; (on chopping board) *set*
 slingshot; *mau?* *ʔa-tok*
 slip off, become loose; *np^həç*
 slippery; *si-tah*; *ɲu*
 slit on the side of skirt; *np^hrak tai*
 slit open; *si-re*
 slope, acclivity; *nk^hɔh*; (steeper) *npluon*
 slough off; *pəç*
 slow; *ɲieç*; (of a horse) *ɲɛ*; (of a car) *hau ɲieç*
 slowly, carefully; *k^huoi*
 sluggish, too slow in action; *ɲu-ɲie*
 sly, cunning; *lu(k)-liak*
 small; *ʔiat*
 small intestines; *vec ʔiat*
 small of the back, back of waist; *ɲuon*
- smear; *kre?*
 smegma; *ʔa*
 smell; *hət*; *ɲət*
 smoke; *mət* (*ɲuo*)
 smoke (a cigarette); *tɔt*
 smoke, fumigate; *si-tɔ?*; *nk^hɔh*; (to drive animals out of den) *plə*; *pləŋ*; *mət*
 smooth, glossy, sleek; *si-tah*
 snack; *npruan*
 snail; *lo?*
 snake; *si-ʔon*
 snap (a thread) [VT]; *rut*
 snap (of a thread) [VI]; *nt^hut*
 snap (of something stiff) [VI]; *pok*
 snap, break; (by holding both ends) *ves*; (by holding one end) *pok*; (break branch from tree) *leh*
 snare, trap; *nkiap*; (long, of bamboo) *k^hiə*
 snatch; *tɔç*; *si-p^hut*
 sneeze; *ɲuas*
 sniff; *hət*
 snore; *nk^hrak*
 snot; (dry) *ɲɛ?* *mis*; (snot) *nk^huo mis*, *mis*; (nasal mucus) *ra-ʔɔm mis*
 snow; *si-tap*
 soak, steep; *ntom*
 soap; *ʔa-tah si-tai?*
 sob; *si-cok*; (choking with emotion, weep but no sound comes out) *ziem la-ʔət*
 sock, stocking; *nk^huat*
 soft; *pa-zua*; *cua*
 soil, earth; *ka-tɛ?*
 soldier; *ç^hau*; *len*
 solid, sturdy; *kai?*
 solidify/congeal; *run*; *klɔn*
 some; *kən ɲiau?*
 son; *kuan ʔa-me?*
 song; *nc^hau?*
 son-in-law; *kuan ʔɔi*
 soot; *pəŋ* (*ka-təŋ*)
 sore, boil; *ka-muat*
 sorghum; *ka-səŋ*
 soul, spirit; *ka-mivɲ*; *ka-p^hə?*
 sound; *lɔ?*
 soup; *ra-ʔɔm hrəp*
 sour; *niə?*
 sow; *lik miə?*
 sow again (at places where broadcast seeds fail to grow up); *p^hum*
 soy bean; *k^hrim*
 spacious, commodious; *viəh*
 sparrow; *sac*
 speak; *ʔah* (*sai*); *ʔa-kah*
 spear; *p^hles*
 spear fish; *con ka?*
 spear-trap; *nc^hua*
 speech, words; *lɔ?*

- spend night; *krəh; pan; nkʰɛŋ*
 spheric; *ca-luk*
 spider; *pris*
 spin; *kian/ka-lian kai*
 spindle; *nplaʔ tap*
 spine, backbone; *si-krəŋ; si-ʔan krəŋ*
 spit; (spit out) *pʰeh*; (~ spit) *npʰɛc*; (~ sputum) *nkʰak*
 splash, sprinkle; *ka-lop*; (pour out downward) *npʰivh*
 splashing sound; *va*
 split open, rend; (clothing at seams) *ntak*; (wall) *ka-tʰoh*
 split up (bamboo); (into halves) *lok*; (into strips) *pʰivk*
 spoon; *ncauk*
 spout, burst forth; *ca-loŋ; ca-pos*
 spread (blanket) on the ground; *tʰom; nies; las*
 spread out [v1]; *ru-rie*
 spring; *lai roŋ*
 spring (water); *ra-ʔom nəŋ*
 sprinkle, spray; *ncʰəʔ*
 sprout, shoot; *pʰləŋ*
 spur; *nkʰluoc tuai ʔia*
 sputum; *nkʰak*
 square, rectangular; *kʰlap; ntəp*
 squat; *cʰuok-cʰuo*
 squeeze (for milk); *npiat*
 squirrel; *lai*
 stable, horse fence; *luok-npruon*
 stallion; *npruon mɛŋ*
 stamp (foot); *si-ton/ca-ruas cʰuon*; (less forcibly) *ncʰəh*
 stand; *cʰoŋ*; (~ up) *zuok*
 star; *sem-ʔoŋ*
 stare; *nple; nplin*
 start, begin; *tom*; (~ to work) *lih*
 startle, disturb; *nkʰlat*
 stay behind; *kət*
 stay motionless; *mək*
 stay temporarily at a place; *npan*
 steal; *nprioʔ*
 steam [N]; *npʰauŋ ra-ʔom*
 steam [V]; *haun*
 steamer; *paŋ haun*
 steelyard, scales; *ncʰivŋ*
 steep, precipitous; *nkʰoh*; (steep and wide) *rivh*
 step across; *tʰivŋ*
 step on, trample, stamp; *cʰic*; (~ loose earth) *nkrau*
 stepfather; *kəŋ; pauʔ; kəŋ kʰɛʔ*
 stepmother; *miʋʔ (kʰɛʔ)*
 stick, paste [VT]; *kʰlop*
 stick down; *kʰlaʔ; hɫəp*
 stick in; *tʰəʔ*
 stick into, stab; *suat; npluŋ*
 stick to [v1]; *klap*
 sticky, glutinous; *pʰic*
 sting; *həc*
 sting [N]; *ʔa-ŋic*
 stingy; *ʔa-pʰen; ven*
- stinking, smelly; *si-ʔai; si-ʔom*; (fishy) *ŋɛc*
 stir, mix; *kʰwit; kwe*; (~ liquid) *ku-kaʔ*; (~ rice on a
 basking basket) *nkreh*
 stir-fried maize; *vuon tʰivk*
 stirrup; *ncʰan*
 stomach; *plaʔ*
 stone; *si-muoʔ*
 stool, bench; *ŋət; nkʰuon*
 stop, cease; *laiʔ*
 storey; *nkrau*
 story; *npin*
 straight; *npləŋ; rəh*
 straighten; *npləŋ*
 strangle, choke; *ruot*
 strangle, rein in; *mian*; (~ one's neck) *ruot si-ŋuok*; (rein
 in) *tok*
 straw or palm-bark rain cape; *cah kʰruai; cah sək*
 strawberry; *hak ra-ʔan*
 street; *(kra) las*
 stretch oneself; *luot juoi*
 stretch out (arm); *tuʔ; pʰla tɛʔ*; (reach for something)
pʰla/zuok tɛʔ
 strike (match); *tuai*
 strike (of thunderbolt); *(tos) ʔa-sas*
 strike down with fist; *tʰuop*
 string (of musical inst.); *las*
 string bean; *ʔa-pʰie mauʔ*
 stroke, touch; (gently) *si-pə*; (caress) *(pu)-piu*; (touch)
piu; (touch invol.) *mɛŋ*
 strong; (~ nation, healthy and of great physical strength)
npraʔ; (tall and powerful-looking) *ku-klih kʰauʔ*
 strong (as of liquor); *npraʔ*
 strong (as of tea); *səŋ*
 struggle; *ca-ruas (zum)*; *(pu-)pluas*
 stuffy; *la-ʔət*
 stumble over; *si-tʰəh*
 stump of tree; *nom*; (unburnt portion from a fire) *ŋu*
 stupid; *ʔə; ʔə la-vivʔ ʔə koi*
 stutterer; *kɫe*
 subside (of a swelling); *ntep; tɔp; ntɛh; sɛc*
 suck; (suck juice while eating fruit, smoke) *zuat*; (with
 straw, smoke) *tət*; (~ milk) *pəʔ*
 suckle [v1]; *pʰəʔ*
 suffer losses (in business); *nai; ləʔ*
 sugar; *nam ʔvi*
 sugarcane; *la-meʔ*
 suitable; *lət; ʔa-pʰieŋ; kʰup*
 summer; *lai rəʔ*
 sun; *si-ŋeʔ*
 sunbathe; *cʰu; si-ʔo; hək*
 sunflower; *preh ʔak*
 sunflower seed; *sək preh-ʔak*
 sunken, dented; *ntʰuoh*
 sunny side; *kaʔ san si-ŋeʔ*
 suona; *hraun*

- support; *ʔa-zuok*; (support with one's hands) *tok*; (help to stand up) *zuok*; (raise) *ruoʔ*
 surname, family name; *nt^huoŋ*
 surroundings; *nprauʔ*
 swallow; *mic*
 swallow [N]; *si-vec*
 swear, vow; *ʔauʔ muc ʔa-zivʔ ʔuŋ*
 sweat; *la-ʔaih*
 sweep; *pes*
 sweet; *te*
 swell; *ʔuas*
 swelling, bump; *ʔuas*
 swim; *lui*; (of fish swim around) *lu-lie*
 swing, sway; *pu-pɔi*; (leaves/flag in wind) *pu-poi*; ([VT]) *vuk-vat*
 table; *p^hən*
 taboo; *t^huos*
 tadpole; *ka-lə*
 tael (=50 grams); *ruoŋ*
 Tai; *siam*
 tail; *si-taʔ*
 take; *t^hii*; (hold) *nkeʔ*
 take care of (children); *p^hoʔ*
 take out of container; *haih*
 take off (clothes, hats); *pəc*; (cf. come off) *np^həc ~ npəc*
 take off (handle); *kəh*
 take out, draw; *luot*
 tame (animal); *ŋe*
 tangerine, orange; *mak-cok*; (large sp.) *mak-ŋe*
 tap lightly with rod; *t^hes*
 tapeworm; *vuk vas*
 tares; *rip*
 taro; *krauʔ*; (different sp.) *krauʔ num*; *krauʔ hvʔ*
 tartar; *ʔeŋ hraiŋ*
 taste, try the flavor of; *c^him*
 tasteless, bland; *npec*
 tasty, delicious; *jum t^heʔ ʔeh*
 tattered; *liʔ*; *mraiŋ*
 tea; *la*
 teach; *ntok*; *nk^hi*
 teach, admonish; *təm*
 tear up, rip; *cias*; *res*; *nkrias*
 tears; *ra-ʔəm ɲai*
 tease, play prank on; *ləŋ*
 tell; *ʔauʔ ʔuŋ*
 tell (a story); *ʔa-p^hivk*
 temple; *ɲivʔ muc*
 ten; *kau*
 ten cents; **coʔ*
 ten thousand; *vaŋ*
 tender; *pa-zua*
 tendon, sinew; *si-niok*
 tense, tight, taut; *sat*; *kaiʔ*; (clothing) *k^həm*
 termite; *nkriŋ*
 testicle; *kla*
 tether; *si-kaŋ*
- that; *ʔua*; *ʔuah*; (gen) *ʔuan*; (that on the same level) *tiat*; (those on the same level) *nteh*; (that down there) *sic*; (that up there) *luoŋ*; (yon) *ʔuá ʔua*; *ʔuá ʔuah ʔuah*; (gen) *ʔuan ʔuan*; (that on the same level) *tiát tiat*; (those on the same level) *ntéh nteh*; (that down there) *síc sic*; (that up there) *luoŋ luoŋ*
 that (way), (like) that; *hlək ʔua*
 that side, there; *kaʔ ʔua*
 thatch grass; *ploŋ*; (wide-leaved sp.) *t^hivʔ*
 thatch-grass mat (used for roof); *ka-tiap*
 the beginning of a month; *lai nt^his k^heʔ*
 the end of a month; *lai ʔiat k^heʔ*
 the lower part of, lower reaches; *kaʔ seh*
 the middle of a month; *ka-piaŋ k^heʔ*
 the upper part of, upper reaches; *kaʔ lauŋ*
 then, afterwards; *kaʔ k^hεʔ*; *p^hun k^hεʔ*; *np^huoʔ k^hεʔ ʔian*
 there; (generic) *t^hoʔ/kaʔ ʔua*; (on the same level) *kaʔ/t^hoʔ nteh*; (down there) *kaʔ/t^hoʔ sic*; *t^hoʔ-luoŋ*; (up there) *kaʔ lauŋ*
 these; *heʔ ʔien*
 they; *heʔ*
 they two; *haʔ*
 thick (as of books); *p^hu*
 thick (in diameter); *t^hiŋ*
 thick (of liquid foods); *p^hic*
 thief; *pa-npivʔ*
 thigh; *npa*
 thin; *k^hruoʔ*; *k^hrvp*
 thin, sparce; *c^hiu*; *c^hu(ŋ)-c^hivŋ*
 thin (e.g. book); *hre*
 thin (in diameter); *ʔiat*
 thin (of body); *k^hruoʔ*; (become thin) *k^him k^hruoʔ*
 thing; *k^hraŋ*
 think; *nc^hem*
 thirsty; *hət*; (emph) *si-ʔəh krauŋ*
 thirteen; *kau-(la-)uui*
 thirty; *ɲuai*
 this; *ʔien*; *ʔiə*; *ʔiəh*
 this (way), (like) this; *hlək ʔien*
 this side, here; *kaʔ ʔien*
 this year; *num ʔien*
 thorn; *kat*
 those; *heʔ ʔua*
 thou; *meʔ*
 thousand; *hreŋ*
 thread; *kəi*
 thread (a needle); *c^hies*
 three; *luai ~ la-ʔuai*
 three days ago; *si-ŋeʔ ʔua nvʔ*
 three days from now; *ʔa-kec*
 three-stringed instrument; *si-coŋ hvʔ*
 thresh grain; (the event) *t^hic*; (the particular action) *puat*
 threshing staff (with curved and flatten end); *npuat*
 threshold; *nt^hivŋ (ʔa-) vivʔ*
 throat; *krauŋ*

throw out (one's chest); <i>nat ʔauk</i>	true, real; <i>rok</i>
throw out sideways; <i>nc^həi; ncəi</i>	trunk (of a tree); <i>ruoŋ k^hau?</i>
throw, hurl, toss; <i>vun; (~ at) tɛŋ; (~ a spear) p^huos; (~ out something unwanted) tiak; (~ or toss up) caloŋ</i>	try, attempt; <i>zuh t^he? kia</i>
thrush (<i>Garrulax canorus</i>); <i>c^ha</i>	tuberculosis; <i>hra</i>
thrust; <i>suat</i>	tuck, lead by hand; <i>tok</i>
thumb; <i>nkon; nkian t^hiŋ</i>	turn, spin [VT]; (e.g. ~ a millstone) <i>ʔa-lian; (cause to spin) ka-lian; (~ something small) ʔa-zet</i>
thunder; <i>ka-num</i>	turn (a corner); <i>(ʔa-)vɔk</i>
tick; (buffalo ~) <i>se? krak; (large cattle ~) tɔp; (dog ~) npa?</i>	turn (clothing) inside out, or the reverse; <i>(ʔa-)lak</i>
tickle; <i>la-ŋic</i>	turn (page); <i>fak</i>
ticklish; <i>hlat la-ŋic</i>	turn around; <i>ʔa-liak (kai?)</i>
tidy, orderly; <i>si-pa?~si-ŋa?</i>	turn head; (turn body) <i>ʔa-liak ntɔŋ; plak/ʔaliak kai?; nk^he; plak</i>
tie (knot); <i>nkaŋ; ʔa-zɔk</i>	turn over (in bed); <i>(ʔa-)liak; (ʔa-)t^hiɔp; (ʔa-)lak; (toss and turn) ʔa-liak ʔa-le</i>
tiger; <i>ʔa-vie</i>	turn, hand over, consign; <i>pɛ?</i>
tight (of shoes); <i>k^hɔm</i>	turnip; <i>tai? ka-lau?</i>
tightly-woven (fabric), dense; <i>p^hu</i>	twelve; <i>kau ra</i>
time; <i>lai muo?</i>	twenty; <i>ŋa</i>
time before daybreak; <i>ka nplas p^hre?</i>	twist; <i>kliŋ; puai; si-vet; ʔa-zet; (~ hands) puk pec tɛ?; (pinch and twist) si-kliat</i>
timid, cowardly; <i>hlat sɔ?</i>	two; <i>ra ~ ra-ʔa</i>
tinea; <i>sai? hac</i>	ugly; <i>c^huo?</i>
tinker (pans); <i>ʔa-p^hluo?</i>	umbrella; <i>ne? hɔ?; ne? zɔŋ</i>
tip, sharp end; <i>ru</i>	uncle; (father's elder brother) <i>t^hiŋ; (father's younger brother) kəp; (mother's brother/father's sister's husband/mother's sister's husband) pau?</i>
tired; <i>ri; t^hə?</i>	unclog; (water pipe, toilet) <i>pas ra-ʔɔm; (pipe) cək</i>
tit; <i>ntɔŋ tas; nkon</i>	uncooked, raw; <i>ʔɛm</i>
toad; <i>ruok</i>	under; <i>nkrəm</i>
tobacco ash; <i>ŋiu sup</i>	understand; <i>si-klah; zuoŋ</i>
today; <i>ra-ʔien ~ rien</i>	united; <i>nkrum</i>
tomb, grave; <i>ʔa-mic</i>	unload burden and rest; <i>tah</i>
tomorrow; <i>pa-sa?</i>	unripe (fruit); <i>k^hok</i>
tomorrow night; <i>np^hu pa-sa?</i>	unseam; (~ clothes) <i>ziɔp; (~ seam) luot; (~ quilt) t^hɔk</i>
tongue; <i>ntak</i>	untie, undo; <i>kah; pə; (n)tah</i>
tonight; <i>np^hu neh; np^hu ra-ʔien</i>	upper back; <i>nk^huok</i>
too, exceedingly; <i>luan</i>	upper body; <i>kai?</i>
tool; <i>k^hrəŋ nte?</i>	upper lip; <i>nk^his lauŋ</i>
tooth; <i>hraiŋ; (incisor) hraiŋ nc^hɔŋ; (canine) hraiŋ kap; (molar) hraiŋ nk^hi?/t^hiŋ</i>	upper part of dry field; <i>kɛŋ</i>
topple [VT]; <i>ziɔp; (tree) zuh nkrɔp</i>	uproot; <i>luoh; (pull up grass) ric</i>
torch; <i>nk^hi?; nk^həi?</i>	upstairs; <i>nkuai nk^hrim</i>
torn; <i>nkres</i>	upstream; <i>ka? t^huoh klɔŋ</i>
tortoise, turtle; <i>ris</i>	upward; <i>ka-lauŋ; ka-nkluoŋ</i>
tough; <i>k^huot; vɔŋ</i>	upwards; <i>plak lauŋ</i>
trace, track; <i>si-krɔp; (animal track) nkas; krɔŋ</i>	urge, hurry, speed up; <i>ra-ʔan; nauk</i>
transplant (rice seedlings), insert; <i>nc^hom</i>	urine; <i>nim</i>
trap; <i>ntəm</i>	use; <i>nte?; (instrument) ʔeh</i>
trap fish; <i>nk^hrɔŋ ka?</i>	use or lean on (a walking stick); <i>nk^hi? k^hau? nk^hi?</i>
trap, pitfall; <i>ka-tai? kauŋ</i>	used, old; <i>pɛm; c^huo?</i>
treasured object, treasure; <i>si-re</i>	useful; <i>kɔi pa-nte?</i>
tree; <i>k^hau?; paŋ k^hau?</i>	uterus; <i>ŋiɔ? nkuan</i>
tree sp.; <i>hra?</i>	uvula; <i>ŋen liat</i>
trickle; <i>nchu</i>	valley; <i>ntɔŋ; nt^huoh</i>
trigger; <i>nk^hluc</i>	vegetable; <i>tai?</i>
trivet; <i>np^hai? hriam</i>	vegetable oil; <i>la-man</i>
trough; (for water) <i>nt^hoŋ ra-ʔɔm; (for pigwash) ntɔŋ sɔm lik</i>	

- vein; *si-nipk*
 vertical; *nc^həŋ*
 very; *k^hiet*
 vicinity; *nprau?*
 village; *zauŋ*
 violate, breach; *ʔa-lak*
 visit; *lɔŋ*
 visit around and gossip; *fə*
 voice, sound; *lo?*
 vomit; *k^huo?*
 vulva, vagina; *sək; pə*
 waist; *juoi*
 wait; *ŋəm; nc^hun*
 wake up; *fah*; (recover conscious-ness or waken up by noise, etc.) *si-t^heh*; (stay awake, stay up) *heŋ*
 wake up [VT]; *ʔa-səh; zu-zah*
 walk; *hau nah c^huoŋ t^he?*
 walk around something; *nk^hwe*
 walk in circles around something; *nk^hwia*
 walk with body bent; *k^hii*
 wall; *ntiaŋ*
 walnut; *k^hau? mak-man*
 want [+COMP CLAUSE]; *som; səŋ*
 want, need; *som*; (taking a complement clause) *saŋ*
 war, battle; *nieŋ*
 warehouse, storehouse; *niə? nkrau; niə? krau*
 warm; *si-ʔo p^hre?*
 warm oneself by (a fire); *c^hu ŋuo*
 wash; (~ part of body) *k^hoc*; (~ clothing) *si-tai?*; (bathe) *həm*; (~ something hard, with brush or scrubber) *p^hak*; (~ hair, rice, meat, vegetable) *si-kra*; (~ by rubbing, rice, a lot of vegetables, etc.) *npac*; (~ by rubbing) *t^hic*
 wash away (e.g. bridge by flood); *tas*
 wasp; (low, cone-shaped hives) *ka-p^huo?*; (large, in underground holes) *ʔvŋ*; (round hives in bushes) *preh ʔak*; (black head, grey body, builds cone-shaped hives in high trees) *ka-ʔaŋ*; (in underground holes) *hia-ka-tə?*; (lives in tree-holes) *hia k^hau?*
 waste time; *np^hla*
 waste [VT]; *hiap*; (on purpose) *nai*
 watch, look; *kia*
 watch over fire; *rum*
 water; *ra-ʔəm ~ rəm*
 water, sprinkle, irrigate; *nc^hə?*
 water snail; *si-ŋe?*
 watery/thin (porridge); *t^heh; si-tec; hrɔŋ; plu-play*
 wave; *ʔa-zaŋ ra-ʔəm*
 wave, wield; *vuk-vat*
 wax; *juu*
 we; [EXCL, PL]; *zi?*; [INCL, PL] *ʔe?*; [EXCL, DU] *zā?*; [INCL, DU]; *ʔa?*
 weak; *k^hraup k^hau?*
 weapon; *k^hrəŋ poŋ nieŋ*
- wear; (~ a sword at hip) *si-kia*p; (~ with strap on shoulder or across chest) *klec*; (~ around neck) *ŋaŋ*; (~ bracelets) *nple*; (~ pants, rings, bracelets) *ʔeh*; (~ earrings) *(n)c^hies*; *ʔeh*; (~ hats) *cəp*; *ʔeh*; (~ turbans, of a woman) *huat kuŋ-keŋ*; (~ turbans, of a man) *huat si-kruat*
 weasel; *tau*
 weather; *p^hre?*
 weave, knit; *taŋ*; (~ a basket, a shoulder bag) *taŋ; vok*
 wedge; *nkla?*
 weigh; *c^hiəŋ*
 weight unit (=0.1 tael); *t^he*
 weld, solder; *ʔa-tɔi*
 well; *nt^huŋ ra-ʔəm*
 welt; *si-krək*
 west; *ka? klep si-ŋe?*
 wet; *c^hə?; hlən*
 what; *p^həh ~ p^həh*
 wheat; *ple? nkau?*
 wheat straw; *nkəŋ*
 wheel; *ʔa-liəŋ*
 when; *lai muo?*
 where; *t^ho? muo?*
 whet, sharpen; *kleŋ*
 whip; *mau? si-vat/si-vet*
 whip, thrash; *si-vat; si-vet*
 whirlpool; *kləŋ kwit*
 whirlwind; *kə pai liuŋ*
 whistle; *nchuac*
 white; *p^hieŋ*
 white (of egg); *k^huat ka-təm ʔia*
 white grub; *mu*
 who; *p^hii*
 wide, broad; *viəh*
 widow; *miə? ntɔi*; *miə? mie*
 widower; *ʔa-me? ntɔi*
 width of finger; *nplah; nkian*
 wife; *ʔa-muŋ*
 wild boar; *p^hries*
 wild dog, dhole; *np ruok*
 wild goose; *ʔa-kai?*
 willow; *si-kliu*
 win; *p^he?*; *pə*
 wind; *kə*
 wind (thread onto a keel); *mu*
 window; *ʔa-viə? riəŋ*
 windpipe; *krauŋ np^həm*
 wine jar; *le*
 wine lees; *ka-c^hiəh*
 wine yeast; *ʔa-se?*
 wing; *proc*
 winnow; *k^him*
 winnowing basket; *npia*
 winter; *lai kuat*
 winter gourd; *npiu pə*

wipe (the table); (with soft instruments) <i>ʔuat</i> ; (with hard instruments) <i>kat</i>	wrinkle; <i>ʔa-vəm hak re</i> ; <i>rak run</i> ; (on forehead) <i>kaŋ hak re</i>
wipe away, erase; <i>ʔuat tiak</i>	wrinkled, creased; <i>ʔa-vəm</i> ; <i>ŋom ŋem</i>
wire, electric cord; <i>mauʔ hriam</i>	wrist; <i>ncʰəŋ/npʰəʔ tɛʔ</i>
witch, sorcerer; <i>pa-ncʰai</i>	wrist pulse; <i>si-nivk</i>
withdraw, take out; (from pocket, bag) <i>luot</i> ; (from drawer, boxes) <i>tʰii</i>	write; <i>se</i>
wither; (n) <i>ta</i> ; <i>krəi</i> ; (~ slightly) <i>fec</i>	wrong; <i>lut</i>
withhold the facts, conceal; <i>məʔ</i>	Ximeng; <i>məŋ-kʰa</i>
wizard, sorcerer; <i>pa-ncʰai</i>	yam; <i>həm</i> ; (yam sp.) <i>kʰaiʔ</i>
woman; <i>ʔa-pon</i>	yawn; <i>fap</i>
womb; <i>niʋʔ nkuan</i>	year; <i>num</i>
wood ear; <i>tes kruc</i>	year after next; <i>num ʔa-kɛc</i>
wood, log; <i>kʰauʔ</i> ; (log) <i>kʰauʔ cʰiʔ</i> ; <i>kʰrəŋ niʋʔ</i>	year before last; <i>num ka</i>
wood-borer; <i>ka-muat</i>	yellow; <i>si-ŋiu</i>
wooden tray; <i>*pʰəŋ</i> ; (platter) <i>tʰuok kʰauʔ</i>	yen; <i>zen</i>
woodpecker; <i>nkʋk</i> ; <i>sem tos kʰauʔ</i>	yesterday; <i>pa-kauʔ</i>
wool, fleece; <i>hac pʰeʔ</i>	yield; <i>tʋʔ</i>
work/labor; <i>zuh si-vai</i>	yoke; <i>kʰauʔ kʰuok</i>
worm; (caterpillar) <i>kʰuon</i> ; <i>viʋk</i> ; <i>kʰuon mu</i>	yolk; <i>kʰuan ka-təm</i>
worn through/torn; <i>ncias</i> ; (at seams) <i>nkres</i> ; (worn out) <i>ntɕh</i> ; <i>ləʔ</i>	you [sg]; <i>meʔ</i>
worry; <i>ʔa-kʰiʋʔ ra-həm</i>	you [pl]; <i>peʔ</i>
worry, be anxious; <i>fiʋ ɲai</i>	you [du]; <i>paʔ</i>
wound; <i>taŋ mat</i>	young; <i>si-nuo</i>
wound [v]; <i>mat</i>	younger brother; <i>pʰoʔ ʔa-meʔ</i>
wrap; <i>kʰiʋ</i>	younger sister; <i>pʰoʔ ʔa-pon</i>
	yuan (= Chinese dollar); <i>vaŋ</i>

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