

Sept. 26th — 28th. 2018.

at Kyoto University

The 51st International Conference on Sino-Tibetan Languages and Linguistics
(ICSTLL-45)

A Phonological Sketch of Akha Chicho — A Lolo-Burmese language of Luang Namtha, Laos —

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1 Introduction

The Akha Chicho language is an Akha variety spoken in Luang Namtha Province of Laos and Sipsongpanna (Xishuangbanna) state of Yunnan Province of China. It is considered to be genetically affiliated with Southern Loloish (Ngwi) group of Lolo (Ngwi)-Burmese branch of Tibeto-Burman linguistic family (Bradley 1997).

This paper will describe a phonological sketch of the Akha Chicho variety spoken in Ban Pasang village of Muang Sing district of Luang Namtha Province of Laos (See Figure 1) and mention a brief contrast with the Akha Buli language. The data source comes from my field data collected in Ban Pasang (2014–2018).

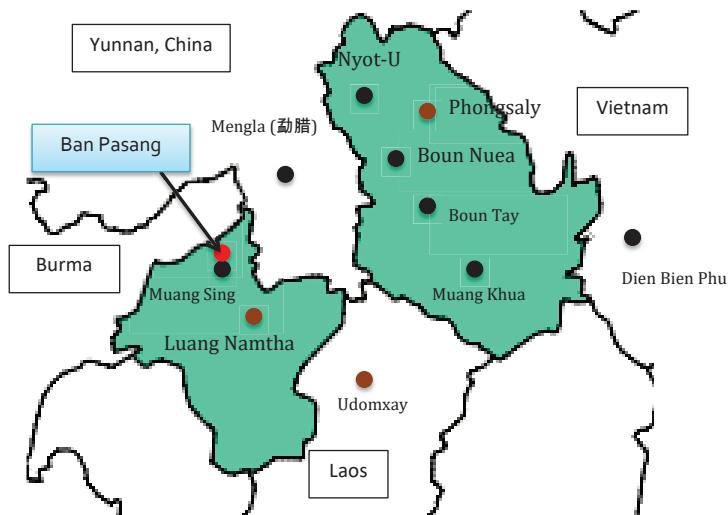


Figure 1: Field Site of Muang Sing, Laos

2 Previous Works

As I already summarized in Hayashi (2016), Akha is a relatively well-known language within the Lolo-Burmese branch and is one of the best described languages in Southeast Asian linguistics (Katsura 1966, Lewis 1968, Hansson 1989, Hansson 2003, Lewis 2008, and many others). Katsura (1966) describes the phonology of an Akha variety in Thailand. Lewis (1968) provides a detailed dictionary on Akha (Puli) in Burma/Myanmar. Hansson (1989) makes a comparison among Akha varieties in Thailand and China. Hansson (2003) outlines the linguistic features of Akha, while Lewis (2008) is a more comprehensive dictionary of Akha dialects. There are, however, very few studies that describe Akha varieties in Laos.

Kingsada and Shintani (1999) and Kato (2008) are considered to represent breakthrough research in the minority linguistics of Laos. Both of them present basic lexicons of some Akha varieties. However, there seem to be no linguistic studies on Akha Chicho.

3 Syllable Structure

The syllable structure can be described as $C_1(M)VC_2/T$. C_1 represents the onset, M the medial, V the vowel, C_2 the coda, and T the tone. Generally speaking, Akha Chicho words are open syllable, though there are some closed syllables with the nasal coda found in the lexicon.

4 Consonants

The consonants of Akha Chicho can be summarized in the following chart. All of them can be placed in the onset slot, with only the nasals occurring in the coda slot.

Table 1: Akha Chicho Consonants

| | | | | | |
|----|---|-----|----|----|----|
| p | b | t | d | k | g |
| ph | | th | | kh | |
| | | ts | dz | ʈs | ɖz |
| | | tsh | | ʈh | |
| m | n | | ɳ | ɳ | |
| | s | | c | x | χ |
| w | l | | j | | |

4.1 Consonantal Inventories

4.1.1 Stops/ Plosives

At the moment, I analyze that trichotomy can be found in VOT among stops/ plosives: voiceless unaspirated vs. voiceless aspirated vs. voiced unaspirated. Note that the voiceless unaspirated tends to occur with creaky vowels, whereas the voiceless aspirated only occurs with plain vowels.

/p/ [p]: /me²¹gvɪj²¹pi³³i⁵⁵ŋa³³/ [me²¹gvɪj²¹pi³³i⁵⁵ŋɛ³³] ‘to get’ (#325), /xv³³po³³la²¹/ [xv³³po³³la²¹] ‘now’ (#451), /pu²¹/ [pu²¹] ‘to boil’ (#264)

/ph/ [p^h]: /ka²¹phi²¹/ [k^he²¹p^hi²¹] ‘to close’ (#297), /(a⁵⁵j^ε³³) pho²¹la⁵⁵/ [(e⁵⁵j^ε³³) p^ho²¹l^ε⁵⁵] ‘to bloom’ (#220), /phu³³/ [p^hu³³/] ‘village’ (#283)

/b/ [b]: /xa²¹lo³³bi³³d^ze³³/ [xe²¹lo³³bi³³d^ze³³] ‘gecko’ (#196), /bo²¹da²¹/ [bo²¹de²¹] ‘table’ (#143), /a²¹bu⁵⁵/ [e²¹bu⁵⁵] ‘wife’ (#333)

/t/ [t]: /ti³³/ [ti³³] ‘one’ (#73), /t^z³³/ [t^z³³] ‘to ladle’ (#66), /j^o³³ta³³/ [jo³³te³³] ‘salty’ (#383)

/th/ [t^h]: /thi²¹bo³³/ [th^hi²¹bo³³] ‘trunk’ (#214), /j^o³³thu⁵⁵/ [jo³³t^hu⁵⁵] ‘thick’ (#393), /o³³tha²¹/ [o³³t^he²¹] ‘to place’ (#251)

/d/ [d]: /di⁵⁵de³³ni⁵⁵/ [di⁵⁵de³³ni⁵⁵] ‘smooth’ (#397), /du²¹xa²¹/ [du²¹xe²¹] ‘saliva’ (#383), /nxi⁵⁵da²¹/ [nxi⁵⁵de²¹] ‘chair’ (#144)

/k/ [k]: /ka³³/ [k^he³³] ‘bow’ (#327), /k^o²¹/ [ko²¹] ‘to bite’ (#59), /bø²¹ku⁵⁵/ [bø²¹ku⁵⁵] ‘turtle’ (#202)

/kh/ [k^h]: /kha⁵⁵cw³³/ [k^he⁵⁵cw³³] ‘sand’ (#116), /coŋ⁵⁵kho³³/ [coŋ⁵⁵k^ho³³] ‘rust’ (#118), /khu⁵⁵/ [k^hu⁵⁵] ‘to call’ (#297)

/g/ [g]: /ga⁵⁵ma³³/ [ge⁵⁵me³³] ‘road’ (#282), /go²¹dzo²¹/ [go²¹dz^o²¹] ‘mountain, hill’ (#361), /ja²¹gu²¹/ [je²¹gu²¹] ‘young of age’ (#442)

4.1.2 Affricates

At the moment, it can be arguable that there are six affricates in Akha Chicho, /ts/, /tsh/, /dz/, /t^z/, /t^h/ and /d^z/ . Currently, the words with /ts/ preceding plain vowels can not be found. Note that the aspirated affricates, /tsh/ and /t^h/, can only precede plain vowels.

/ts/ [t̪̪]: /(a²¹khur³³) ts^z³³/ [(e²¹khur³³) t̪̪³³] ‘to bark’ (#180), /la²¹ts^z²¹/ [l^he²¹t̪̪²¹] ‘elbow’ (#30), /ts^z²¹ly²¹/ [t̪̪²¹ly²¹] ‘salt’ (#255)

/tsh/ [t̪̪^h]: /tshε²¹ŋ²¹/ [t̪̪^he²¹ŋ²¹] ‘plow’ (#251), /tsho²¹d^z³³/ [t̪̪^ho²¹d^z³³] ‘it thunders’ (#113), /mi⁵⁵tsha²¹/ [mi⁵⁵t^ha²¹] ‘soil, earth’ (#114)

/dz/ [d^z]: /dze³³di⁵⁵/ [d^ze³³di⁵⁵] ‘to throw’ (#64), /thxi²¹dzø⁵⁵/ [thxi²¹d^zø⁵⁵] ‘to meet with’ (#361), /dza²¹/ [d^ze²¹] ‘to eat’ (#57)

/t^z/ [t̪̪]: /u²¹t̪̪i³³/ [u²¹t̪̪i³³] ‘night’ (#459), /bj^o⁵⁵t̪̪e⁵⁵ne⁵⁵/ [bj^o⁵⁵t̪̪e⁵⁵ne⁵⁵] ‘bright’ (#180), /khur⁵⁵t̪̪a²¹t̪̪a²¹xm³³/ [k^hur⁵⁵t̪̪a²¹t̪̪a²¹mm³³] ‘body hair’ (#1)

/t^h/ [t̪̪^h]: /j^o³³t̪̪hi²¹/ [j^o³³t̪̪^hi²¹] ‘wet’ (#491), /mi³³t̪̪he⁵⁵/ [mi³³t̪̪^he⁵⁵] ‘knife’ (#371), /d^z²¹t̪̪ha⁵⁵/ [d^z²¹t̪̪^he⁵⁵] ‘song’ (#310)

/d^z/ [d^z]: /a³³dzi³³/ [e³³d^zi³³] ‘bird’ (#162), /a²¹dze²¹/ [e²¹d^ze²¹] ‘what’ (#491), /dza²¹l^ε⁵⁵/ [d^ze²¹l^ε⁵⁵] ‘wind’ (#104)

4.1.3 Nasals

There are four types of nasals, such as /m/, /n/, /ŋ/ and /ɳ/.

/m/ [m]: /me²¹la⁵⁵/ [me²¹la⁵⁵] ‘tongue’ (#20), /nuŋ⁵⁵ma³³/ [nuŋ⁵⁵ma³³] ‘sun’ (#195), /i⁵⁵mo⁵⁵/ [i⁵⁵mo⁵⁵] ‘to look for’ (#365)

/n/ [n]: /mo⁵⁵ne⁵⁵/ [mo⁵⁵ne⁵⁵] ‘cattle’ (#182), /na⁵⁵xa²¹/ [na⁵⁵xa²¹] ‘to ask’ (#295), /no³³/ [no³³] ‘you, thou’ (#483)

/ŋ/ [ŋ]: /ŋe³³/ [ŋe³³] ‘to dance’ (#311), /ci²¹na³³/ [ci²¹ŋe³³] ‘to know’ (#371), /a²¹ŋo²¹/ [a²¹ŋo²¹] ‘buffalo’ (#170)

/ɳ/ [ɳ]: /ɳe⁵⁵/ [ɳe⁵⁵] ‘to forget’ (#373), /ɳa²¹/ [ɳe²¹] ‘five’ (#77), /tshe²¹ɳɔ²¹/ [ts^he²¹ɳɔ²¹] ‘plow’ (#251)

4.1.4 Fricatives

There are four kinds of fricative, such as /s/, /ç/, /x/ and /ɣ/. Only velar fricatives have voicing contrasts.

/s/ [s]: /thi³³se⁵⁵/ [thi³³se⁵⁵] ‘one hundred thousand’ (#92), /the⁵⁵sa⁵⁵/ [th^he⁵⁵se⁵⁵] ‘sound, noise’ (#410), /sɔ⁵⁵mx²¹ja²¹ɳi⁵⁵/ [sɔ⁵⁵mx²¹ja²¹ɳi⁵⁵] ‘rich’ (#291)

/ç/ [ç]: /ce³³mo³³/ [ce³³mo³³] ‘louse’ (#325), /ca²¹xo³³/ [ce²¹xo³³] ‘skin’ (#2), /jɔ³³çɔ⁵⁵/ [jɔ³³çɔ⁵⁵] ‘clean’ (#428)

/x/ [x]: /nuŋ⁵⁵ma³³dɔ³³xe²¹/ [nuŋ⁵⁵ma³³dɔ³³xe²¹] ‘east’ (#470), /xa²¹mɛ³³/ [xa²¹mɛ³³] ‘mouth’ (#19), /xɔ³³/ [xɔ³³] ‘to look’ (#53)

/ɣ/ [ɣ]: /ɣø²¹/ [ɣø²¹] ‘nine’ (#81), /sɣ²¹ya²¹/ [sɣ²¹ɣø²¹] ‘paper’ (#305), /ɣɔ⁵⁵mo⁵⁵/ [ɣɔ⁵⁵mo⁵⁵] ‘back’ (#52)

4.1.5 Approximants

/w/ occurs mainly in Tai-Lao loanwords.

/w/ [w]: /wieŋ²¹taŋ³³/ [wieŋ²¹taŋ³³] ‘Vientiane’ (#499, #500), /wa³³/ [wa³³] ‘temple’ (#358), /a⁵⁵phja³³lu³³wa³³/ [a⁵⁵p^{jh}e³³lu³³we³³] ‘spider’ (#188)

/l/ [l]: /dza²¹le⁵⁵/ [dze²¹le⁵⁵] ‘wind’ (#104), /me²¹la⁵⁵/ [me²¹le⁵⁵] ‘tongue’ (#20), /lɔ⁵⁵ba²¹/ [lɔ⁵⁵ba²¹] ‘river’ (#126)

/j/ [j~j]: /u²¹je⁵⁵/ [u²¹je⁵⁵] ‘rain’ (#106), /mi²¹ja²¹/ [mi²¹je²¹] ‘daughter’ (#335), /jɔ³³ni⁵⁵/ [jɔ³³ni⁵⁵] ‘few’ (#95)

4.2 Topics in Consonants

4.2.1 Medial Slot

The medial slot allows /j/ to occur, but in this case the onset should only be bilabial, though the words beginning with /pj/ are not found in my fieldnote at the moment. The medial /-j-/ can generally precede back vowels.

/phj/ [p^{jh}]: /j³³p^{jh}ja⁵⁵/ [j³³p^{jh}e⁵⁵] ‘light (weight)’ (#411), /khu³³phju⁵⁵/ [k^hu³³p^{jh}u⁵⁵] ‘sweat’ (#6), /n^ga³³phjo²¹/ [n^ge³³phjo²¹] ‘face’ (#14)

/bj/ [b^j]: /j³³bja³³/ [j³³b^je³³] ‘light’ (#108), /y^ga²¹bja²¹/ [y^ge²¹b^je²¹] ‘bee’ (#185), /khv^gl²¹bjx^ll²¹/ [k^hə^gl²¹b^jə^ll²¹] ‘throat’ (#24)

4.2.2 Coda Slot

Coda in Akha Chicho can be slotted by /-m/ and /-ŋ/. Most of the Tibeto-Burman cognates in this language are open syllables, but there are a few exceptions, as can be seen below.

/-m/ [-m]: /com⁵⁵/ [com⁵⁵] ‘iron’ (#117), /jam²¹/ [jəm²¹] ‘season’ (#460, #461)

/-ŋ/ [-ŋ]: /u²¹du²¹tsh^ge⁵⁵khv^ŋl⁵⁵/ [u²¹du²¹tsh^ge⁵⁵k^həŋ⁵⁵] ‘hair’ (#12), /khv^ŋl²¹l⁵⁵/ [k^həŋ²¹l⁵⁵] ‘neck’ (#23), /na³³bv^ŋl²¹/ [n^ge³³bəŋ²¹] ‘nose’ (#18)

Note that the nucleus of /v^ŋ/ is generally articulated like [-ə-] as seen above.

4.2.3 Syllabic Nasal

Akha Chicho has one type of syllabic nasals, that is /m/, as many of the Lolo-Burmese languages do. The syllabic nasal /m/ in Akha Chicho can bear a tone, and even can be slotted at the nucleus position.

syllabic nasal /m/: /a²¹xm³³/ [e²¹m³³] ‘mushroom’ (#226), /dɔ²¹xm²¹/ [dɔ²¹m²¹] ‘buttocks’ (#39), /jɔ³³dzm²¹/ [jɔ³³dzm²¹] ‘raw’ (#420), /dm³³/ [dm³³] ‘to wear’ (#280)

Note that /xm/ is phonetically articulated like [m̩], which can be analyzed as voiceless nasal in other languages, such as Yangon Burmese, Youle Jino (Hayashi 2009), and so forth.

Additionally, <the alveolar onset + /m/> can have a different phonetic variety like [Cŋ]. For example, the word for ‘to wear’ has two forms, such as /dm³³/ and /duŋ³³/ . It can be arguable that the functional load of the syllabic nasal is now declining.

4.2.4 Morphophonological Phenomenon: Numeral “one”

In Akha Chicho, the word for ‘one’ has two morphs: /t^g³³/ and /thi³³/ . When it comes at the final position, it should be /t^g³³/, while at the other positions, /thi³³/.

| | |
|----------------------|---|
| one | /t ^g ³³ / (#73) |
| one hundred | /thi ³³ ja ⁵⁵ / (#87) |
| one thousand | /thi ³³ ba ²¹ / (#90) |
| one hundred thousand | /thi ³³ se ⁵⁵ / (#92) |
| one million | /thi ³³ la ²¹ / (#93) |

5 Vowels

The vowels of Akha Chicho can be summarized in the following chart. Note that there are no contrasts in length or diphthongs.

Table 2: Akha Chicho Vowels

| [Plain] | | | | [Creaky] | | | |
|---------|-----|---|---|----------|---|---|---|
| i | (y) | ɯ | u | ɿ | ɯ | ڻ | |
| e | ø | ɤ | o | ɛ | ڦ | ڻ | ɔ |
| ɛ | | | ɔ | ɛ | | | ڻ |
| | | a | | | ڻ | | |

5.1 Plain Vowels

Akha Chicho has a relatively large number of vowels, though /y/ has only two attested words in the basic wordlist.

/i/ [i]: /xa²¹lɔ³³bi³³dze³³/ [xe²¹lɔ³³bi³³dze³³] ‘gecko’ (#196), /a³³dzi³³/ [e³³dzi³³] ‘bird’ (#162), /ci²¹/ [ci²¹] ‘blood’ (#4)

/y/ [y]: /y⁵⁵çy³³/ [y⁵⁵çy³³] ‘urine’ (#42), /y⁵⁵çy³³ey³³/ [y⁵⁵çy³³ey³³] ‘to urinate’ (#43)

/e/ [e]: /o²¹le³³/ [o²¹le³³] ‘to return’ (#476), /dɔ²¹khe²¹/ [dɔ²¹kʰe²¹] ‘feces’ (#40), /tshe⁵⁵/ [tʂʰe⁵⁵] ‘ten’ (#82)

/ø/ [ø]: /ci²¹lø³³ma⁵⁵dzi²¹/ [ci²¹lø³³me⁵⁵dzi²¹] ‘orange’ (#243), /xɔ²¹bø²¹/ [xɔ²¹bø²¹] ‘roof’ (#130), /yø²¹/ [yø²¹] ‘nine’ (#81)

/ɛ/ [ɛ]: /dza²¹lɛ⁵⁵/ [dza²¹lɛ⁵⁵] ‘wind’ (#104), /ci²¹be²¹tʃa³³/ [ci²¹be²¹tʃʰe³³] ‘tamarind’ (#245), /tshɛ²¹ŋɔ²¹/ [tʂʰɛ²¹ŋɔ²¹] ‘plow’ (#251)

/a/ [ə]: /me²¹la⁵⁵/ [mɛ²¹la⁵⁵] ‘tongue’ (#20), /dzi⁵⁵ba²¹/ [dʐi⁵⁵ba²¹] ‘wine’ (#259), /kha⁵⁵çur³³/ [kʰa⁵⁵çur³³] ‘sand’ (#116)

/ɔ/ [ɔ]: /a³³lɔ³³/ [e³³lɔ³³] ‘snake’ (#195), /a³³bɔ³³/ [e³³bɔ³³] ‘tree’ (#212), /tshɔ²¹du²¹/ [tʂʰɔ²¹du²¹] ‘floor’ (#137)

/ø/ [o]: /phe⁵⁵çɯ⁵⁵do²¹lo³³/ [pʰe⁵⁵çɯ⁵⁵do²¹lo³³] ‘priest’ (#359), /bo²¹da²¹/ [bo²¹da²¹] ‘table’ (#143), /tsho²¹dɛ³³/ [tʂʰo²¹dɛ³³] ‘it thunders’ (#113),

/ɤ/ [ɤ]: /yo³³my⁵⁵ly⁵⁵my³³/ [yo³³my⁵⁵ly⁵⁵my³³] ‘tomato’ (#235), /bx³³kha³³/ [bx³³kʰa³³] ‘mosquito net’ (#142), /dy³³xe³³/ [dy³³xe³³] ‘to cut’ (#150)

/u/ [u]: /lu³³thvŋ²¹/ [lu³³tʰvŋ²¹] ‘maggot’ (#189), /bu²¹dʐø³³/ [bu²¹dʐø³³] ‘earthworm’ (#193), /khu³³phju⁵⁵/ [kʰu³³pʰju⁵⁵] ‘sweat’ (#6)

/ɯ/ [ɯ]: /jɔ³³mu²¹/ [jɔ³³mu²¹] ‘good’ (#422), /khui⁵⁵tɕa²¹tɕa²¹xm³³/ [kʰu⁵⁵tʂʰa²¹tʂʰa²¹m̥m³³] ‘body hair’ (#1), /kha⁵⁵çɯ³³/ [kʰa⁵⁵çɯ³³] ‘sand’ (#116)

5.2 Creaky Vowels

Generally speaking, there are creaky vowels corresponding to plain ones, though there are no words with /y/ in my fieldnote at the moment.

/i/ [i]: /mja²¹b_i³³/ [m^je²¹b_i³³] ‘tears’ (#5), /n_i²¹/ [n_i²¹] ‘two’ (#74), /c_i³³/ [c_i³³] ‘seven’ (#79)

/e/ [e]: /ne³³/ [ne³³] ‘god, sprit’ (#357)

/ø/ [ø]: /a³³bø²¹/ [a³³bø²¹] ‘bamboo shoot’ (#225), /dø³³sø³³/ [dø³³sø³³] ‘eel’ (#201), /a²¹yø³³/ [a²¹yø³³] ‘uncle’ (#344)

/ɛ/ [ɛ]: /bɛ²¹la³³/ [bɛ²¹la³³] ‘to smell’ (#56), /dɔ²¹tsa²¹tsa²¹nɛ²¹y³³/ [dɔ²¹tsa²¹tsa²¹nɛ²¹y³³] ‘letter’ (#303), /sɛ²¹/ [sɛ²¹] ‘to kill’ (#207)

/a/ [ə]: /jɔ³³na²¹(na²¹)/ [jɔ³³na²¹(na²¹)] ‘deep’ (#395), /bø²¹s_a³³a²¹m_a³³/ [bø²¹s_a³³a²¹m_a³³] ‘fly’ (#186), /a³³y_a³³/ [y_a³³] ‘pig’ (#173)

/ɔ/ [ɔ]: /bɔ³³/ [bɔ³³] ‘to blow’ (#105), /sɛ²¹nɔ³³/ [sɛ²¹nɔ³³] ‘shoes’ (#277), /yɔ³³/ [yɔ³³] ‘to fly’ (#163), /kɔ²¹/ [kɔ²¹] ‘to bite’ (#59)

/ø/ [ø]: /jɔ³³kø⁵⁵/ [jɔ³³kø⁵⁵] ‘thin (body)’ (#440), /jɛ³³xø³³/ [jɛ³³xø³³] ‘sickle’ (#149), /ø³³/ [ø³³] ‘to pick up’ (#65)

/y/ [y]: /mja³³ny³³/ [m^je³³ny³³] ‘eyes’ (#16), /by³³ja²¹/ [b^y³³je²¹] ‘musket’ (#206), /a³³d^y³³m_a²¹/ [y³³d^y³³m_a²¹] ‘we’ (#485)

/u/ [u]: /la²¹du³³/ [l^u²¹du³³] ‘arm’ (#29), /u⁵⁵tu³³/ [u⁵⁵tu³³] ‘water’ (#124), /xa³³u³³/ [x^v³³u³³] ‘egg’ (#164)

/ɯ/ [ɯ]: /a⁵⁵bɯ³³/ [e⁵⁵bɯ³³] ‘covering’ (#140), /pho²¹tsɯ²¹/ [p^ho²¹tsɯ²¹] ‘knee’ (#50), /jɔ³³cɯ²¹/ [jɔ³³cɯ²¹] ‘new’ (#418)

6 Tones

There are three basic tonemes: /55/, /33/, /21/. Creaky vowels seldom occurs with /55/ tone, though they do.

/55/ [55]: /na⁵⁵xɔ⁵⁵/ [n^e⁵⁵xɔ⁵⁵] ‘forehead’ (#11), /kha⁵⁵cɯ³³/ [k^he⁵⁵cɯ³³] ‘sand’ (#116), /mo⁵⁵la⁵⁵/ [m^o⁵⁵le⁵⁵] ‘to see’ (#53), /a⁵⁵lu³³/ [e⁵⁵lu³³] ‘butterfly’ (#191)

/33/ [33]: /ya³³na³³na³³/ [ye³³ne³³ne³³] ‘to rest’ (#315), /b^y³³kha³³/ [b^y³³k^he³³] ‘mosquito net’ (#142), /ce³³mɔ³³/ [ce³³mɔ³³] ‘louse’ (#325), /a⁵⁵tu³³/ [e⁵⁵tu³³] ‘rope’ (#154)

/21/ [21]: /na²¹mɔ³³/ [ne²¹mɔ³³] ‘(medical) doctor’ (#354), /yɔ²¹mɔ⁵⁵nⁱ²¹kha²¹/ [y^o²¹mɔ⁵⁵nⁱ²¹k^he²¹] ‘far’ (#472), /ja²¹mɔ²¹/ [je²¹mɔ²¹] ‘old of age’ (#441), /la²¹tha⁵⁵/ [l^u²¹the⁵⁵] ‘left-hand’ (#28)

There can be found the words with /35/ and /53/, though the number of such words are rare. The words with /35/ can be often borrowings from Tai-Lao loanwords, whereas /53/ may be affected by the phrasal intonation.

/35/ [35]: /si³⁵/ [si³⁵] ‘color’ (#403), /ŋun³⁵xy²¹la²¹/ [ŋun³⁵xy²¹la²¹] ‘now’ (#451)

/53/ [53]: /y³³le⁵⁵ŋa⁵³/ [y³³le⁵⁵ŋe⁵³] ‘to sun clothes’ (#273), /ju⁵⁵tchø⁵⁵ŋa⁵³/ [ju⁵⁵t^hø⁵⁵ŋe⁵³] ‘cheap’ (#427)

7 Dialectal Variation: Akha Chicho and Akha Buli

The Akha varieties are widely spread in Muang Sing district of Luang Namtha Province, Laos, but most of them are Akha Buli. Akha Chicho speakers can communicate with Akha Buli without any difficulty, but both of them recognize their languages are different from each other.

The following table illustrates the phonological inventories of Akha Buli (Hayashi 2016: 78).

| | |
|-------------------------|-----|
| p b t d | k g |
| ph th | kh |
| ts dz t ^h dz | |
| tsh t ^h | |
| m n ŋ ŋ | ŋ ŋ |
| s z c j | x y |
| l | |

| [Plain] | | | | [Creaky] | | | |
|---------|---|---|---|----------|---|----|---|
| i | y | w | u | ĩ | ȳ | w̥ | ȳ |
| e | ø | ȳ | o | ɛ | ȡ | ȳ | ȶ |
| ɛ | | | ɔ | ɛ | | | ɔ |
| | | a | | | a | | |

Tonemes: 55, 33, 21

Compared to Akha Chicho, Akha Buli has /z/ and /y/ in its inventory, but does not have /w/.

Furthermore, some of the examples that shows similarities and differences in Akha Chicho and Akha Buli are as follows, which are to be analyzed in more details in the near future.

| Gloss | Akha Chicho | Akha Buli |
|----------|---|---|
| ‘bone’ | /ça ²¹ jø ²¹ / | /ça ²¹ jø ²¹ / |
| ‘blood’ | /ci ²¹ / | /ci ²¹ / |
| ‘to eat’ | /dza ²¹ / | /dza ²¹ / |
| ‘sand’ | /kha ⁵⁵ çur ³³ / | /kha ⁵⁵ çv ²¹ / |
| ‘sky’ | /unj ²¹ yunj ²¹ / | /m ²¹ / |
| ‘spider’ | /a ⁵⁵ phja ³³ lu ³³ wa ³³ / | /a ²¹ tcha ⁵⁵ tcha ⁵⁵ gɔ ²¹ / |
| ‘cicada’ | /a ⁵⁵ çv ⁵⁵ çv ⁵⁵ nɔ ³³ / | /a ²¹ dze ²¹ / |
| ‘easy’ | /jɔ ³³ ja ⁵⁵ / | /jv ³³ vɔ ²¹ / |

8 Concluding Remarks

This paper described and analyzed the phonology of Akha Chicho, a Lolo-Burmese language of Muang Sing, Laos. It is tentatively summarized as follows.

| | |
|-------------------------|-----|
| p b t d | k g |
| ph th | kh |
| ts dz t ^h dz | |
| tsh t ^h | |
| m n ŋ ŋ | ŋ ŋ |
| s z c j | x y |
| w l | j |

| [Plain] | | | | [Creaky] | | | |
|---------|-----|---|---|----------|---|----|---|
| i | (y) | w | u | ĩ | ȳ | w̥ | ȳ |
| e | ø | ȳ | o | ɛ | ȡ | ȳ | ȶ |
| ɛ | | | ɔ | ɛ | | | ɔ |
| | | a | | | a | | |

Tonemes: 55, 33, 21

There are some features of phonetic-phonological interfaces as follows:

1. /-j-/ can be slotted as medial. There are the words beginning with /phj-/ and /bj-/ in my fieldnote.
2. /m/ can be syllabic nasal, and even be slotted as nucleus. Syllabic nasal in Akha Chicho, however, may be being declining.
3. The word for ‘one’ has two morphs, /t_j/³³ and /thi/³³, the realization of which depends on the location of the numeral compound.

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APPENDIX: Akha Chicho Basic Wordlist (tentative)

NB: No. English gloss: /Akha Chicho word/

1. body hair: /khw⁵⁵pa²¹pa²¹xm³³/
2. skin: /ba³³xo³³, ca²¹xo³³/
3. bone: /ca²¹jø²¹/
4. blood: /ci²¹/
5. tears: /mjə²¹bj³³/
6. sweat: /khu³³phju⁵⁵/
7. pus: /ca²¹tchi²¹/
8. saliva: /du²¹xa²¹/
9. phlegm: /u²¹tshu³³tshu²¹pɛ³³/
10. head: /u²¹du²¹/
11. forehead: /na⁵⁵xo⁵⁵/
12. hair: /u²¹du²¹tshɛ⁵⁵khvŋ⁵⁵/
13. comb: /u²¹du²¹ka³³/
14. face: /nə³³phjc²¹/
15. eyebrow: /mjə³³ny³³mja³³xvŋ⁵⁵/
16. eyes: /mjə³³ny³³/
17. ears: /nə³³pa³³/
18. nose: /nə³³bvŋ²¹/
19. mouth: /xa²¹mɛ³³/
20. tongue: /mɛ²¹la⁵⁵/
21. teeth: /sv²¹/
22. beard/ mustache: /mɛ²¹mvŋ²¹/
23. neck: /khvŋ²¹lvŋ⁵⁵/
24. throat: /khvŋ²¹bjvŋ²¹/
25. shoulder: /ba²¹phu³³/
26. hand: /la³³la³³/
27. right-hand: /la²¹ma⁵⁵/
28. left-hand: /la²¹tsha⁵⁵/
29. arm: /la²¹du³³/
30. elbow: /la²¹tsu²¹/
31. palm: /la²¹xɔ³³/
32. finger: /la²¹nø³³/
33. fingernail: /la²¹svŋ²¹/
34. breast: /nuŋ³³xvŋ²¹/
35. nipple: /a²¹tʃø⁵⁵/
36. waist: /dɔ⁵⁵tsu²¹/
37. belly: /u²¹ma³³/
38. navel: /bo³³lø³³pa³³thvŋ²¹/
39. buttocks: /dɔ²¹xm²¹/
40. feces: /dɔ²¹khe²¹/
41. to defecate: /dɔ²¹khe²¹/
42. urine: /y⁵⁵ɛy³³/
43. to urinate: /y⁵⁵ɛy³³ɛy³³/
44. to expel intestinal gas: /u²¹xa²¹phɛ²¹/
45. to have a fever: /tsɛ²¹thvŋ⁵⁵thvŋ⁵⁵phja²¹phja²¹/
46. to give birth: /ja²¹phu²¹/
47. leg: /a²¹khw⁵⁵/
48. foot: /a²¹khw⁵⁵phja²¹ya²¹/
49. thigh: /ca²¹phja²¹/
50. knee: /phɔ²¹tsu²¹/
51. tendon: /ca²¹gu²¹/
52. back: /χ⁵⁵mɔ⁵⁵/
53. to see, to look: /mɔ⁵⁵la⁵⁵, xo³³/
54. to seek: /dʒa⁵⁵tʃɔ³³/
55. to hear, to listen: /ga²¹la⁵⁵mi⁵⁵na²¹la²¹, na⁵⁵xa²¹/
56. to smell: /bɛ²¹la³³/
57. to eat: /dza²¹/
58. to drink: /dɔ⁵⁵/
59. to bite: /kɔ²¹/
60. to hold with the hand: /ŋi²¹thɛ²¹/
61. to put, to place in/ on: /o³³tha²¹/
62. to push: /thvŋ²¹, dɛ²¹dze³³/
63. to pull: /χ³³/
64. to throw: /dze³³di⁵⁵/
65. to pick up: /ɔ³³/
66. to ladle: /tɔ³³/

67. to walk: /t̪ʰyŋ³³/
68. to stop: /thyŋ⁵⁵dʐɔ⁵⁵/
69. to run: /t̪i⁵⁵t̪hə²¹t̪hə²¹/
70. to sit: /dɔ²¹nɛ⁵⁵nɛ⁵⁵/
71. to stand up: /ɣɔ²¹jɔ²¹jɔ²¹/
72. to cough: /u²¹tshə²¹tshə²¹/
73. one: /t̪i³³/
74. two: /nɔ²¹/
75. three: /sun⁵⁵/
76. four: /o²¹/
77. five: /hɔ²¹/
78. six: /kɔ²¹/
79. seven: /ci³³/
80. eight: /jɛ³³/
81. nine: /ɣø²¹/
82. ten: /tshe⁵⁵/
83. eleven: /tshe⁵⁵t̪i³³/
84. twelve: /tshe⁵⁵nɔ²¹/
85. twenty: /nɔ²¹tshe⁵⁵/
86. ninety nine:
/ɣø²¹tshe⁵⁵ɣø²¹/
87. one hundred: /thi³³ja⁵⁵/
88. one hundred and one:
/thi³³ja⁵⁵t̪i³³/
89. one hundred and ten:
/t̪i²¹ja⁵⁵tshe⁵⁵/
90. one thousand:
/thi³³ba²¹/
91. ten thousand:
/tshe⁵⁵ba²¹/
92. one hundred thousand:
/thi³³sɛ⁵⁵/
93. one million: /thi³³la²¹/
94. many: /ɣɔ³³mja⁵⁵ŋi⁵⁵/
95. few: /jɔ³³ŋi⁵⁵/
96. all: /dɔ³³tɔ⁵⁵ŋi⁵⁵/
97. only: /~t̪ɛ³³/
98. sky: /uŋ²¹ɣuŋ²¹/
99. cloud: /u²¹dun³³/
100. fog: /t̪ʰy²¹/
101. sun: /nuŋ⁵⁵ma³³/
102. moon: /ba³³la³³/
103. star: /a²¹gu⁵⁵/
104. wind: /dʐa²¹lɛ⁵⁵/
105. to blow: /bɔ³³/
106. rain: /u²¹jɛ⁵⁵/
107. it rains: /u²¹jɛ⁵⁵jɛ⁵⁵/
108. light: /jɔ³³bja³³/
109. shadow: /a³³ba³³/
110. bright:
/bjɑ⁵⁵t̪ɛ⁵⁵ne⁵⁵,
lɔ²¹kha⁵⁵ne⁵⁵/
111. dark: /jɔ³³ɣyŋ⁵⁵/
112. thunder: /u²¹dʐɛ²¹dʐɛ²¹/
113. it thunders: /tsho²¹dɛ³³/
114. soil, earth: /mi⁵⁵tsha²¹/
115. stone: /xa²¹lo³³/
116. sand: /kha⁵⁵čw³³/
117. iron: /čom⁵⁵~čon⁵⁵/
118. rust: /čon⁵⁵kho³³/
119. gold: /čw⁵⁵/
120. silver: /phju⁵⁵/
121. copper: /ɣw²¹/
122. hill, mountain:
/gɔ²¹dʐɔ²¹/
123. valley: /ga²¹ɣyŋ⁵⁵y³³/
124. water: /u⁵⁵čy³³/
125. lake: /čɔŋ³³ma³³/
126. river:
/čɔ⁵⁵ba²¹/
127. fire: /mi²¹dza²¹/
128. smoke: /u²¹xø²¹/
129. house: /nun³³~jun³³/
130. roof: /xɔ²¹bø²¹/
131. grave: /tshɔ³³či³³mc³³du²¹/
132. to open: /phyŋ³³/
133. to close: /ka²¹phi²¹/
134. pillar: /dɣyŋ³³lɣyŋ³³/
135. door: /lɛ⁵⁵č³³/
136. window: /lɛ⁵⁵č³³ja²¹/
137. floor: /tsha²¹du²¹/
138. key: /mc²¹tɔ²¹tɔ²¹du⁵⁵/
139. mat: /gɔ²¹phu³³/
140. covering: /a⁵⁵bw³³/
141. pillow: /uŋ³³ɣuŋ³³pha⁵⁵či²¹/
142. mosquito net: /bɣ³³kha³³/
143. table: /bo²¹da²¹/
144. chair: /nɣyŋ⁵⁵da²¹/
145. to sweep: /jɑ³³phjɔ⁵⁵ja³³/

146. to splash water: /u⁵⁵t₂²¹ce³³dze³³/
147. knife: /mi³³t₂ε⁵⁵/
148. sword: /mi⁵⁵t₂ε⁵⁵th₂ŋ³³ma³³/
149. sickle: /j₂³³x₂³³/
150. to cut: /d₂y³³x₂e³³, j₂ε²¹/
151. nail: /c₂ŋ⁵⁵t₂ε³³/
152. ladder: /d₂ɔ²¹dzuŋ³³/
153. basket: /xa³³dza₂³³/
154. rope: /a⁵⁵t₂³³/
155. stick: /g₂ɔ²¹j₂ø²¹/
156. tail: /d₂ɔ²¹mi²¹/
157. horn: /u²¹t₂hø⁵⁵/
158. wing: /a²¹d₂ŋ⁵⁵/
159. tiger: /xa²¹la²¹/
160. elephant: /j₂³³ma₂³³/
161. mouse: /xu³³t₂²¹/
162. bird: /a³³dzi³³/
163. to fly: /χ₂³³/
164. egg: /xa³³u³³/
165. to lay egg: /u³³kha³³/
166. sparrow: /xa²¹dza⁵⁵/
167. crow: /χ₂²¹a²¹/
168. hawk: /xa²¹dze⁵⁵/
169. peacock: /c₂ŋ⁵⁵dø²¹/
170. buffalo: /a²¹n₂o²¹/
171. cat: /a³³mi⁵⁵/
172. beef: /mo⁵⁵nε⁵⁵ca²¹dzi⁵⁵/
173. pig: /a₂³³y₂³³/
174. pork: /a₂³³y₂³³ca²¹dzi⁵⁵/
175. monkey: /a⁵⁵mjo²¹/
176. horse: /m₂ŋ²¹/
177. rabbit: /x₂³³/
178. bear: /xa²¹xm⁵⁵/
179. dog: /a²¹khw²¹/
180. to bark: /a²¹khw³³ts₂³³/
181. goat: /t₂³³m₂³³/
182. cattle: /mo⁵⁵nε⁵⁵/
183. chicken: /a²¹xa³³ca²¹dzi⁵⁵/
184. duck: /χ₂²¹a³³/
185. bee: /y₂²¹bja²¹/
186. fly: /bø²¹s₂³³a²¹ma₂³³/
187. mosquito: /t₂ha⁵⁵g₂ɔ³³a⁵⁵m₂⁵⁵/
188. spider: /a⁵⁵phja³³lu³³wa³³/
189. maggot: /lu³³th₂ŋ²¹/
190. ant: /a⁵⁵x₂³³/
191. butterfly: /a₂⁵⁵l₂³³/
192. cicada: /a⁵⁵ɛ₂⁵⁵ɛ₂⁵⁵n₂³³/
193. earthworm: /bu²¹d₂θ³³/
194. centipede: /la²¹ma³³t₂hi⁵⁵ce⁵⁵/
195. snake: /a³³l₂³³/
196. gecko: /xa²¹l₂³³l₂³³dzi⁵⁵, xa²¹l₂³³bi³³d₂z₂e³³/
197. fish: /ŋa²¹ca²¹/
198. shrimp: /ŋi³³b₂ŋ³³t₂hu⁵⁵xo³³/
199. crab: /a⁵⁵kha³³/
200. frog: /xa²¹pha²¹, xa²¹pha³³pha²¹ta²¹/
201. eel: /d₂ε³³s₂³³/
202. turtle: /bø²¹ku⁵⁵, bø²¹bja³³/
203. to fish with a rod: /ŋa²¹d₂z₂y³³d₂z₂y³³/
204. to hunt: /ca²¹th₂ε³³, a²¹dzi³³b₂y³³/
205. to shoot: /mi²¹b₂y³³ b₂y³³/
206. musket: /b₂y³³ja²¹/
207. to kill: /s₂ε²¹/
208. seed: /a⁵⁵ny³³/
209. to seed: /a⁵⁵ny³³xy²¹lo³³/
210. sprout: /a³³b₂y²¹/
211. stem: /la³³kh₂ŋ²¹, a⁵⁵kh₂ŋ²¹/
212. tree: /a³³b₂³³/
213. leaf: /a⁵⁵p₂a²¹/
214. trunk: /thi²¹kh₂ŋ²¹, thi²¹b₂³³/
215. root: /d₂ɔ²¹t₂hi⁵⁵/
216. grass: /ja³³m₂o²¹/
217. to grow: /χ₂³³l₂³³n₂³³xy²¹la⁵⁵/
218. to wither: /y₂³³i⁵⁵/
219. flower: /a⁵⁵j₂e³³/

220. to bloom:
 /a⁵⁵jɛ³³ pho²¹la⁵⁵/
221. poppy: /jɛ²¹je³³a⁵⁵jɛ³³/
222. thorn: /a²¹gɤŋ³³/
223. bean: /a³³bɛ³³/
224. bamboo: /xa²¹dʐɔ³³/
225. bamboo shoot: /a³³bɔ²¹/
226. mushroom: /a²¹xm³³/
227. paddy plant: /tʃɛ³³bɔ³³/
228. rice:
 /xɔ²¹, tʃɛ³³/
229. corn: /a⁵⁵dy³³,
 a²¹tʂy²¹/
230. wax gourd: /ɣ⁵⁵phu²¹/
231. cucumber: /ɕi²¹xo²¹/
232. bitter melon: /la²¹xa²¹/
233. pumpkin: /ma³³dɛ³³/
234. eggplant: /ma³³xɣ³³/
235. tomato:
 /ɣɔ³³mɣ⁵⁵lɣ⁵⁵mɣ³³/
236. papaya:
 /dɛ³³ma³³ŋa⁵⁵ɔ³³/
237. sesame: /nuŋ²¹ɕi²¹/
238. peanut: /nɣŋ³³phɣŋ²¹/
239. ginger: /tsho²¹tsɯ²¹/
240. fruit: /a⁵⁵ɕi²¹/
241. banana: /ŋa³³bɛ³³/
242. mango:
 /dʐa⁵⁵ɔ²¹(a⁵⁵ɕi²¹)/
243. orange:
 /ɕi²¹lø³³ma⁵⁵dʐi²¹/
244. mangosteen: ——
245. tamarind:
 /ɕi²¹bɛ²¹tʃe³³/
246. hogplums: ——
247. jackfruits: /ma⁵⁵mi²¹/
248. sugar cane: /pho²¹tʃo⁵⁵/
249. betel nut:
 /mɛ⁵⁵lɔ⁵⁵a⁵⁵ɕi²¹/
250. to plant: /kha³³/
251. plow: /tshɛ²¹ŋɔ²¹/
252. irrigated field: /dɛ³³ma³³/
253. upland field: /ja³³/
254. oil: /ɣa²¹tshi⁵⁵/
255. salt: /tsa²¹lɣ²¹/
256. sugar:
 /tsa²¹lɣ²¹tsa²¹tʃo⁵⁵/
257. chilli: /la²¹phi⁵⁵/
258. tea: /lɔ⁵⁵bɔ²¹/
259. wine: /dʐi⁵⁵ba²¹/
260. cigarette/ tobacco:
 /ja⁵⁵xɔ²¹,
 ja⁵⁵xɔ²¹xɔ²¹xa³³/
261. to cook rice:
 /xɔ²¹ɣŋ⁵⁵ɣŋ⁵⁵/
262. firewood:
 /mi²¹dza³³(mi²¹
 kho²¹)/
263. pot: /q²¹lɣŋ²¹/
264. to boil: /pu²¹/
265. to roast: /pɣ³³/
266. cloth:
 /ɣɔ³³mɔ³³mɛ²¹tsho²¹/
267. to sew: /mɛ²¹tsho²¹gu²¹/
268. needle: /a²¹ɣɔ²¹/
269. thread:
 /a²¹ɣɔ²¹kʰɣŋ⁵⁵mi³³/
270. to knit: /kha⁵⁵ja³³jɣ²¹/
271. to dye: /sa³³pha⁵⁵na³³/
272. to wash clothes:
 /ɪɛ²¹tshi²¹/
273. to sun clothes:
 /ɣɣ³³lɔ²¹,
 ɣɣ³³lɛ⁵⁵ŋa⁵³,
 u²¹tsha⁵⁵lɔ²¹/
274. clothes:
 /pʰe³³xɣŋ²¹mi²¹tʃɛ⁵⁵/
275. hat: /u²¹xo³³/
276. button: /pʰe³³tɔ²¹/
277. shoes: /sɛ²¹nɔ³³/
278. to make: /uŋ⁵⁵mjo²¹uŋ⁵⁵/
279. to break: /ga³³pɑ³³/
280. to wear: /duŋ³³~dm³³/
281. to undress: /lɛ³³/
282. road: /ga⁵⁵ma³³/
283. village: /phu³³/
284. to carry on the back:
 /phi⁵⁵/
285. to buy: /ɣɣ⁵⁵ɣɣ³³/
286. to sell: /ɣŋ²¹/
287. to get: /ɣa²¹la⁵⁵ŋa³³/
288. to lose:
 /mɛ²¹ɣŋ²¹pi³³i⁵⁵ŋa³³/
289. market:
 /ga⁵⁵i⁵⁵dʐu²¹i⁵⁵ɣ³³/
290. money: /phju⁵⁵/

291. rich: /sɔ⁵⁵mχ²¹ja²¹ŋi⁵⁵/ 314. to get tired: /yɑ²¹dø⁵⁵dø⁵⁵/ 339. elder sister: /a⁵⁵jχ³³/
292. poor: /jɔ³³ča²¹/ 315. to rest: /yɑ³³na³³na³³/ 340. younger sister: /du⁵⁵ma³³/
293. to steal: /su⁵⁵xø²¹xø²¹/ 316. to sleep: /ju²¹xɑ³³/ 341. grandfather: /a²¹bɔ⁵⁵/
294. to speak: /dɔ³³dža³³dža⁵⁵ɔ²¹/ 317. to dream: /ju²¹ma³³ma³³/ 342. grandmother: /a²¹phi²¹/
295. to ask: /na⁵⁵xa²¹/ 318. to get up: /ju²¹xɑ³³y³³θu⁵⁵ɔ²¹/ 343. grandchild: /ø²¹pha²¹/
296. to answer: /ɛ³³mɛ²¹/ 319. to die: /ɛi⁵⁵xɑ³³/ 344. uncle: /a²¹γɔ⁵⁵, a²¹γø³³, a²¹my³³/
297. to call: /khu⁵⁵/ 320. age: /a⁵⁵xo³³/ 345. aunt: /a²¹xo²¹, ə³³jχ²¹, tʃi⁵⁵ma³³/
298. Chicho language: /a⁵⁵džɔ⁵⁵a²¹kha³³y³³dɔ²¹/ 321. to be ill: /ma²¹je⁵⁵pa³³/ 346. cousin: /a²¹tħvŋ³³/
299. Lao language: /la²¹o³³dɔ²¹/ 322. painful: /mɔ⁵⁵du³³na⁵⁵/ 347. friend: /bɔ³³gɔ²¹/
300. Chinese language: /la²¹bγ³³y³³dɔ²¹/ 323. to hiccough: /y⁵⁵tχ³³tχ³³na³³/ 348. male/ man: /a²¹jo³³/
301. to write: /syŋ²¹bɔ²¹bɔ²¹/ 324. to talk in one's sleep: /dɔ²¹dža³³dža³³ma³³ma³³/ 349. female/ woman: /a²¹bu⁵⁵/
302. to read: /sy²¹ya²¹ yγ³³/ 325. louse: /cɛ³³mɔ³³/ 350. man/ human being: /tshɔ⁵⁵xa²¹(a³³ja²¹)/
303. letter: /dɔ²¹tsa²¹tsa²¹nɛ²¹y³³/ 326. medicine: /dža³³ya²¹/ 351. Akha Chicho people: /dʒi²¹džɔ⁵⁵a²¹kha³³y³³a²¹ma³³/
304. book: /sy²¹ya²¹pha⁵⁵dɣŋ²¹/ 328. arrow: /ka³³mja²¹/ 352. Lao people: /la²¹ɔ³³y³³tshɔ⁵⁵xa²¹/
305. paper: /sy²¹ya²¹/ 329. name: /tshɔ⁵⁵mjyŋ⁵⁵/ 353. Chinese people: /la²¹bγ²¹y³³tshɔ⁵⁵xa²¹/
306. to stick: /mjyŋ³³lɛ⁵⁵/ 330. father: /a²¹dæ³³/ 354. doctor: /na²¹mɔ³³/
307. to play: /ŋi⁵⁵γɛ³³/ 331. mother: /a²¹ma³³/ 355. teacher: /na²¹khu²¹, a³³ča³³/
308. story: /dɔ³³mɔ³³dɔ³³ø⁵⁵/ 332. husband: /a²¹jo³³/ 356. shaman: /ŋi⁵⁵pha²¹, bø⁵⁵mɔ²¹/
309. to tell a story: /dø³³dø³³ɛ³³ dža³³/ 333. wife: /a²¹bu⁵⁵/ 357. god, spirit: /ne³³/
310. song: /dɔ²¹tħa⁵⁵/ 334. son: /jɔ³³dži⁵⁵/ 358. temple: /wa³³/
311. to dance: /nɛ³³/ 335. daughter: /mi²¹ja²¹/ 359. priest: /phɛ⁵⁵čw⁵⁵do²¹lo³³, pha⁵⁵čw⁵⁵ja²¹/
312. to win: /thi³³yɑ³³i³³ma³³bi⁵⁵dža⁵⁵/ 336. child: /dža³³ja²¹/
313. to lose a game: /ma³³yɑ³³le⁵⁵ŋa³³/ 337. elder brother: /a³³gɔ³³/
338. younger brother: /a²¹ŋi⁵⁵/

360. to marry: /mi²¹ja²¹dɣj²¹dza²¹, mi²¹ja²¹ɣy²¹/
361. to meet with: /θɣj²¹dzø⁵⁵, i⁵⁵dzø⁵⁵/
362. to wait for: /dʒ²¹(θh²¹)/
363. to give to: /bɪ³³hɛ²¹/
364. to use: /mɛ²¹xɛ⁵⁵xɛ⁵⁵/
365. to look for: /i⁵⁵mo⁵⁵, la⁵⁵mo⁵⁵/
366. to laugh: /w⁵⁵/
367. to love: /ɣc²¹ča²¹ga²¹/
368. to fear, to be afraid of: /gu³³(la⁵⁵ŋa³³)/
369. to be frightened: /tshɔ²¹gu⁵⁵(ŋa³³)/
370. to be surprised: /nø²¹gu³³la⁵⁵ŋa³³/
371. to know: /ci²¹ŋa³³/
372. to remember: /nø²¹du²¹(tha³³ma⁵⁵)/
373. to forget: /hɛ⁵⁵(ŋa³³)/
374. cold: /j³³ŋɛ⁵⁵, ɣ²¹ga³³ga³³/
375. hot: /u²¹tsha⁵⁵tsha⁵⁵ŋa³³/
376. hungry: /χ²¹mɛ³³(ŋa⁵⁵)/
377. thirsty: /ɣ⁵⁵ču³³mɛ²¹la⁵⁵ŋa³³/
378. drunk: /dʒi⁵⁵ba²¹jɛ²¹ŋa³³, bu²¹džu⁵⁵džu⁵⁵ŋa³³/
379. delicious: /j³³khw⁵⁵/
380. sweet: /jɔ³³čhø⁵⁵/
381. sour: /jɔ³³čhɛ⁵⁵/
382. pepper hot: /la²¹phi⁵⁵(phi⁵⁵)/
383. salty: /jɔ³³ta³³/
384. thing: /mɛ²¹gɣj²¹mɛ²¹ma³³/
385. big: /jɔ³³xɣ²¹(xɣ²¹)/
386. small: /jɔ³³ŋi⁵⁵/
387. tall, high: /jɔ³³go⁵⁵/
388. low: /jɔ³³č³³/
389. long: /jɔ³³mɔ⁵⁵/
390. short: /jɔ³³dɣ³³/
391. broad, wide: /jɔ³³gɛ⁵⁵gɛ⁵⁵/
392. narrow: /jɔ³³sɛ²¹/
393. thick: /jɔ³³thu⁵⁵/
394. thin: /jɔ³³ba²¹/
395. deep: /jɔ³³na²¹(ŋa²¹)/
396. shallow: /ma²¹na²¹ŋa³³/
397. smooth: /di⁵⁵dɛ³³ŋi⁵⁵/
398. rough: /ɣø³³nɛ⁵⁵/
399. round: /lɣj³³dɣ⁵⁵ŋi³³/
400. sharp: /jɔ³³ča³³(ta³³), ta³³ju⁵⁵ŋi³³/
401. dull: /jɔ³³čč³³čč³³/
402. pointed: /jɔ³³čhɛ³³čhɛ³³/
403. color: /sɪ³⁵/
404. red: /jɔ³³ne⁵⁵/
405. yellow: /jɔ²¹čw⁵⁵/
406. blue: /jɔ³³phɣ⁵⁵/
407. white: /jɔ³³phju⁵⁵/
408. black: /jɔ³³na³³/
409. green: /jɔ³³ŋø⁵⁵/
410. sound, noise: /θe⁵⁵sa⁵⁵/
411. light: /jɔ³³phja⁵⁵/
412. heavy: /jɔ³³khɣj³³/
413. dry: /jɔ³³ɣw³³/
414. wet: /jɔ³³čhi²¹/
415. soft: /jɔ³³ɣɣj²¹/
416. hard: /jɔ³³ɣɣj⁵⁵/
417. full: /jɔ³³bjɣj³³/
418. new: /jɔ³³čw²¹/
419. old: /jɔ³³ø⁵⁵/
420. raw: /jɔ³³džurŋ²¹~jɔ³³džm²¹/
421. done, ripe: /jɔ³³dža²¹/
422. good: /jɔ³³mw²¹/
423. bad: /ma²¹mw²¹/
424. difficult: /jɔ³³xə³³/
425. easy: /jɔ³³ja⁵⁵/
426. expensive: /jɔ³³phø²¹/
427. cheap: /ju⁵⁵čhø⁵⁵ŋa⁵³/
428. clean: /jɔ³³čč⁵⁵/
429. dirty: /jɔ³³čč²¹/
430. gentle: /nuŋ³³ma³³jɔ³³mw²¹/
431. angry: /nuŋ³³ma³³jɔ³³xə²¹/

432. happy, glad:
 $/jɔ^{33}mu^{21}mu^{21}ɛ^{55}dʐɔ^{55}/$
433. ashamed: $/ča^{21}dɔ^{55}bɔ^{33}/$
434. stupid:
 $/jɔ^{21}xa^{33}(ɛ^{33}) dyr^{33}(ŋa^{33})/$
435. clever: $/jɔ^{33}gɤŋ^{55}(ŋa^{33})/$
436. quick, fast: $/jɔ^{33}ɣø^{55}(ɣø^{55})/$
437. slow: $/jɔ^{33}ga^{33}/$
438. early: $/jɔ^{33}na^{21}/$
439. fat: $/jɔ^{33}tshu^{55}/$
440. thin: $/jɔ^{33}ko^{55}/$
441. old of age: $/ja^{21}mɔ^{21}/$
442. young of age: $/ja^{21}gu^{21}/$
443. year: $/a^{55}xɔ^{33}/$
444. this year: $/tsy^{33}nɤ^{55}xɔ^{33}/$
445. last year: $/mi^{55}nɤŋ^{33}xɔ^{33}/$
446. next year:
 $/a^{21}kha^{55}ne^{33}ja^{33}xɔ^{33}/$
447. month: $/ba^{33}la^{33}/$
448. this month:
 $/ba^{33}la^{33}xy^{33}ci^{21}/$
449. last month:
 $/mi^{55}nɤ^{33}nɤŋ^{33}ci^{21}/$
450. next month:
 $/xy^{21}sɤŋ^{55}ja^{33}ta^{21}a^{33}ci^{21}/$
451. now: $/ŋunj^{35}xy^{21}la^{21},$
 $xy^{33}ja^{21}ma^{33},$
 $xy^{33}po^{33}la^{21}/$
452. today: $/i^{21}nɤŋ^{33}/$
453. yesterday: $/mi^{55}nɤŋ^{33}/$
454. tomorrow: $/ŋi^{33}čy^{21}nɤŋ^{33}/$
455. everyday:
 $/a^{21}jɔ^{33}nɤŋ^{33}a^{21}jɔ^{21}/$
456. morning: $/u^{21}čɔ^{33}phɔ^{33}/$
457. noon: $/nɤŋ^{33}ɣɤŋ^{55}/$
458. evening:
 $/u^{21}či^{33}či^{21}thɔ^{33}/$
459. night: $/u^{21}či^{33}/$
460. rainy season:
 $/u^{21}jɛ^{55}jɛ^{55}ɣam^{21}/$
461. cold season:
 $/ɣ^{21}ga^{33}ga^{33}ɣ^{33}jam^{21}/$
462. above: $/la^{21}ta^{33}phɔ^{33}/$
463. below: $/dɤŋ^{21}dɤŋ^{33}phɔ^{33}/$
464. inside: $/la^{21}xø^{55}/$
465. outside: $/la^{21}ŋi^{55}/$
466. front: $/bø^{21}the^{55}phɔ^{33}/$
467. back: $/na^{55}xɤŋ^{33}phɔ^{33}/$
468. north:
 $/xø^{55}ta^{33}phɔ^{33}/$
469. south:
 $/dɤŋ^{21}dɤŋ^{33}phɔ^{33}/$
470. east:
 $/nuŋ^{55}ma^{33}dɔ^{33}xe^{21}/$
471. west:
 $/nuŋ^{55}ma^{33}ga^{33}xe^{21}/$
472. far: $/čy^{21}mɔ^{55}ŋi^{21}kha^{21}/$
473. near: $/dɔ^{21}phe^{33}/$
474. to come: $/la^{33}/$
475. to go: $/i^{55}/$
476. to return: $/o^{21}le^{33},$
 $o^{21}la^{33}/$
477. to enter: $/u^{33}/$
478. to exit: $/do^{33}/$
479. to climb, to ascend: $/da^{21}/$
480. to descend: $/da^{21}kha^{33}le^{33}/$
481. to fall: $/ga^{33}kha^{33}/$
482. I: $/ŋa^{33}/$
483. you, thou: $/nɔ^{33}/$
484. he, she: $/thɤ^{33}ya^{21}/$
485. we: $/ŋa^{33}ma^{21},$
 $a^{33}dɤ^{33}ma^{21}/$
486. you, ye: $/nun^{33}ma^{21}/$
487. they: $/xø^{55}bɔ^{33}ma^{21}/$
488. who: $/a^{21}so^{33}ya^{21}/$
489. this: $/xɤ^{33}/$
490. that: $/xø^{55}/$
491. what: $/a^{21}dʐɛ^{21}/$
492. where:
 $/a^{21}ga^{33}/$
493. why:
 $/a^{21}dʐɛ^{33}/$
494. very: $/jɔ^{33}xa^{55}mw^{21}a^{33}/$
495. still: $/si^{21}/$
496. I am Akha Chicho.:
 $/ŋa^{33} a^{21}kha^{33}ɣ^{33}$
 $dži^{21}dʐɔ^{33}a^{33}ma^{33}/$
497. I am not Akha Chicho.:
 $/ŋa^{33} a^{21}kha^{33}ɣ^{33}$
 $dži^{21}dʐɔ^{33}a^{33}ma^{33}$
 $ma^{21}ŋw^{33}/$
498. I have three children.
: $/ŋa^{33} ja^{21} sun^{33}ya^{21}$
 $dʐɔ^{33}/$
499. I came from Vi-
entiane.: $/ŋa^{33}$
 $xø^{55}ba^{21}wien^{21}čan^{33}=ne^{33}$
 $la^{53}dɛ^{33}/$
500. I will go to Vientiane.:
 $/ŋa^{33} wien^{21}čan^{33}$
 $i^{55}dɛ^{55}/$