## Phonology

As in other Tai dialects and languages, the phonological pattern of Lungming is based on the syllable. Each syllable has distinctions in tone,
initial (consonant or consonant cluster), nucleus (vowel or diphthong), and optional final consonant.

Tones. On open syllables (those ending with final vowel, semivowel, or nasal), Lungming has six tones. These tones, along with pitch levels and contours based on the Chao 5 -level pitch scale (Chao 1930), include the following:

1 - high level, 55: laa ${ }^{1}$ 'to seek'
2 - high rising, 45: laa ${ }^{2}$ 'a flock'
3 - mid level. glottalized, 33: $1 a^{3}$ 'to be cracked'
4 - low falling, from mid low to low, 21: $1 a a^{4}$ to take one's leave'
5 - low level, 11: laa ${ }^{5}$ 'epidemic'
6 - falling. from mid-low to low and then rising to nic-low. glottalized, 212 : $1 a^{6}$ 'to snatch'

Checked syllables (those ending in $p t k$ ?) with short wels have tones phonetically similar to tones 12345 of open syllables: $10 P^{1}$ (final imperative particil) $10 ?^{2}$ (final imperative particle), phat ${ }^{3}$ 'to Eine kok 'to simmer', pik ${ }^{5}$ 'to be crowded'.
The distetion between tone 4 (low falling) and tone 5 (low meat) in short syllables is very hard to hear. In the course of the fieldwork, this distinctias only discovered in the eighth week of intensive esty and a careful recheck showed that a11 Central Tai dialects in Kwangsi under investigatio had it. Li's Lungchow glossary shows no such distinction, and with great respect and hesitation Ged suggests a possible oversight.

Checked syllables with long vowels have tones phonetically similar to tones 1235 of open syllables: teep ${ }^{1}$ 'to drink with pleasure, smacking the lips', kook ${ }^{2}$ 'rice husks', yiip ${ }^{3}$ 'to pickle in brine', laap ${ }^{5}$ 'to dry (meat)'. Tone 3 on the checked syllables is not glottalized as it is on the open syllables.

The six tones of Lungming had their origin in an earlier system of three tones on open syllables and no tonal contrast on checked syllables. Those tones on open syllables have been conventionally designated as $A B C$ and the fourth category as $D$. The tones in each of these categories underwent phonemic sp1its, conditioned by the phonetic nature of the initial consonant of each syllable. With the $D$ category, the splits were further conditioned by vowel length. The pattern of these splits in Lungming can be represented as follows:

| tone |  |  | D | D |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| initial | A | B | C | short | long |
| aspirate | 1 | 2 | 3 | 3 | 2 |
| plain | 1 | 2 | 3 | 3 | 2 |
| glottal | 4 | 2 | 3 | 3 | 2 |
| voiced | 4 | 5 | 6 | 4 | 5 |

In Lungming, tones $B, C$ and $D$ exhibit a two-way split between earlier voiceless and earlier voiced initials. Tone $A$, however, deviates from this split by including the glottals with the voiced initials. In a study on early Tai tones and tonal splits. Gedney (1978) notes that the tonal splits that
occurred in tone $B$ and tone $D$ with long vowels of ten show the same conditioning factor. Such is the case for Lungming. Based on the Lungming data, as well as on data from other Tai dialects, Gedney suggests that the $B$ and $D$ proto-tones may have had some phonetic similarity.

Note that the checked syllables with short vowels and tones 1,2 , or 5 , and the checked syllables with long vowels and tones 1 or 3 , do not reflect the historical development of the tone. These syllables with their respective tones probably resulted from secondary shortening of the vowel, or they represent distinctive vocabulary such as loanwords and particles or syllables resulting from onomatopoeic processes

Consonants. Lungming has the following consonant inventory:


Stops

| V1. unasp | p |  | t | C | k | $?$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V1. asp | ph |  | th | ch | kh |  |
| 1. spirants |  | f | 5 | š |  | h |
| d. nasals | m |  | n |  | ] |  |
| d. Sonorants |  | v | 1 | $\underline{V}$ | $\square$ |  |

The initial consonants of Lungaing include:
Voiceless unaspirated stops. $p$ c $k$ ?: paak ${ }^{2}$
'mouth', tam ${ }^{3}$ 'gall bladder', coo ${ }^{3}$ 'ancestor', kn ${ }^{4}$ 'person', pa ${ }^{4}$ 'to crow'.

Voiceless aspirated stops. ph th ch kn: phaay ${ }^{5}$ 'to strike', thorn ${ }^{1}$ 'to swallow', chou ${ }^{1}$ 'rough', khan ${ }^{1}$ 'to crow'. In some words, probably all loanwords, the informant fluctuated between initial ch and si: kif $^{1}$ kwan $^{1}$ chain ${ }^{1}$ or kif ${ }^{1}$ kwan ${ }^{1}$ šaaŋ ${ }^{1}$ 'machine gun'. These variations are cross-referenced in the glossary under the main entries.

Voiceless spirants. $f \quad s$ sc $h$ : fool ${ }^{6}$ 'brown', sid ${ }^{2}$ 'to abandon', scop ${ }^{3}$ 'to smell', huuy ${ }^{4}$ 'chief'.

Nasals. m $n$ g: mit $^{3}$ 'to pinch', nad ${ }^{2}$ 'to scold', gee ${ }^{6}$ 'fish barbel'. Before the vowels $w w$ and $u u$, the nasals are often preg1ottalized.

Voiced sonorant. v 1 y w up. vel ${ }^{4}$ 'fence', lay 5 'to unroll', jim ${ }^{4}$ 'salt', poon ${ }^{1}$ moo $^{4}$-wa ${ }^{4}$ 'a herd of oxen', may ${ }^{4}$-ща ${ }^{4}$ 'a leaf'. Note that $w$ and $\mu$ only occur initially due to an assimilation process (see Consonant Assimilation).

Initial consonant clusters consist of a consonant plus $w$ or $y$. There are no final clusters.

Clusters with w. kw khw: wat ${ }^{2}$ 'to rake', khwiin ${ }^{1}$ 'circle'.

Clusters with $y$. ply phy ty thy dy ky thy my ny ty my My: pom ${ }^{1}$ 'to take down', phyaa ${ }^{1}$ 'rocky mountain', tyook ${ }^{2}$ 'to chop fine', thyaaw ${ }^{6}$ ?uv $^{1}$ 'to dance', cyaay ${ }^{6}$ val $^{4}$ 'to speak', kyat ${ }^{3}$ 'to be near', khyow $^{4}$ 'ball', myook ${ }^{2}$ 'flower', neat ${ }^{3}$ 'to be very tired', 1 lan $^{3}$ 'to play', syow ${ }^{1}$ 'pimple', hyaa ${ }^{6}$ 'summer'.

Consonant Assimilation. A number of morphemes, including the article $-\mathrm{a}^{4}$ and the interrogative particle $-a^{3}$, acquire an initial consonant through assimilation with the final vowel or consonant of the preceding syllable. These patterns are illustrated in the following table:

| Preceding Final | Initial | Example |
| :---: | :---: | :---: |
| --ii | y | $\begin{gathered} \text { kway }^{1} \\ \text { little }{ }^{\text {ii }}{ }^{3} \text { further } \end{gathered}{ }^{4} \text { 'a }$ |
| --шш | 삐 | $\begin{aligned} & \text { teew }{ }^{4} 1 \text { w }^{6} \text {-ча }{ }^{4} \text { 'а } \\ & \text { fence' } \end{aligned}$ |
| --uu | w | $\begin{aligned} & \text { krn }^{4} \text { maa }^{6} \text { puu }^{1}-\text { wa }^{4} \\ & \text { 'a horse groom' } \end{aligned}$ |
| $--\gamma \gamma$ | -- | yeen ${ }^{4} \mathrm{srr}^{4}-\mathrm{a}^{4}$ a color' |
| --ee | y | $\begin{aligned} & \operatorname{cook}^{2} \mathrm{kaa}^{3} \mathrm{fee}^{1}-\mathrm{ya}^{4} \text { 'a } \\ & \text { cup of coffee' } \end{aligned}$ |
| --aa | -- | $\operatorname{cook}^{2}$ caa $^{4}-a^{4}$ a cup of tea' |
| --00 | w | pooy ${ }^{1}$ moo $^{4}{ }^{- \text {wa }^{4}}$ 'a herd of oxen' |
| --p | p | ?an $^{4}$ tiip $^{5}-$ pa $^{4}$ one dish' |
| --t | t | maat $^{2}-$ ta $^{4}$ one time, once' |
| --k | k | mow ${ }^{2}$ nok ${ }^{4}-\mathrm{ka}{ }^{4}$ a flock of birds' |
| --m | m | ? $\mathrm{an}^{4} \mathrm{khom}^{\text {- ma }}{ }^{4}$ a pit |
| --n | n | $\begin{aligned} & \operatorname{fog}^{1} \sin ^{2}-n a^{4} a \\ & \text { letter } \end{aligned}$ |
| --】 | I | meej ${ }^{3}-\mathrm{ga}^{4}$ 'at one side' |

'to eat', sip $^{2}$ 'to step on (something)', $1 w w \eta^{5}$ 'loose', thus ${ }^{1}$ 'head', phon ${ }^{1}$ 'rain', yeen ${ }^{4}$ syr ${ }^{4}$ 'color', ne ${ }^{3}$ 'this', cheek ${ }^{2}$ 'to tear', vat ${ }^{4}$ 'to dip', thai ${ }^{1}$ 'eye', thou ${ }^{1}$ 'to leak', cook ${ }^{2}$ 'cup'.

Diphthongs also occur and are analyzed as a vocalic nucleus plus a final $w$ or $y$. Those with a final $w$ include tow, eew, aw, aw, ow. kiiw ${ }^{1}$ 'to ca11', hew ${ }^{6}$ 'completely', law $^{3}$ 'liquor', law ${ }^{1}$ 'to fear', yow ${ }^{2}$ 'to stay'. Those with a final $y$ include uuy, ey, ley, by, aby, ooy buy ${ }^{4}$ 'person', per ${ }^{1}$ 'to go', key ${ }^{4}$ (vocative particle), shay ${ }^{1}$ 'to open', lay ${ }^{4}$ 'striped', nooy ${ }^{2}$ 'little'. There are also the diphthongs $\gamma 川 \mu$ and $a \underline{L}$ in which $y_{l}$ represents the semivowel corresponding to the high back unrounded w: soul ${ }^{6}$ 'to buy', may ${ }^{2}$ 'new'.

The diphthongs ley, $\gamma \mu$, and $o w$, in many cases, reflect the earlier high monophthongs ii, ww, and uv, respectively. egg., khwey ${ }^{2}$ 'to ride' (cf. Siamese $k h i{ }^{2}$ ). sra $^{6}$ 'to buy' (cf. Siamese sw ${ }^{4}$ ), and mow ${ }^{1}$ 'pig' (cf. Siamese mus ${ }^{5}$ ).

Final nasals include $m \quad n \quad \eta$ : sam ${ }^{1}$ 'three', nan ${ }^{3}$ 'to itch' soon 'two'.

Final voiceless stops of checked syllables include $\boldsymbol{P} \quad \boldsymbol{t} k$ : poop ${ }^{2}$ 'bubble', shot ${ }^{2}$ 'to incite', lox ${ }^{5}$ child. The final glottal stop only occurs in $1 a^{3}$ (final emphatic particle), $1 e^{r^{3}}$ (sentence-final emphatic particle), $10 \boldsymbol{P}^{1}$ (final imperative particle), $10 \boldsymbol{r}^{2}$ (final imperative particle) $\log ^{3}$ (emphatic clause-final particle). ne? ${ }^{3}$ 'this, these

The following chart shows all the possible rhymes in the Lungming data:

| Vowel | Final Consonant |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | p | t | k | $?$ | m | n | 〕 | w | y | 삐 |
| i |  | ip | it | ik |  | im | in | iv |  |  |  |
| ii | ii | iip | iit | iik |  | iim | iin | iin | iiw |  |  |
| шш | шш | шшр | uwt | unk |  | шшт | umn | шแท |  |  |  |
| uu | uu | uup | uut | uuk |  | uum | uun | uuy |  | uuy |  |
| $\gamma$ |  |  | $\gamma t$ | rk |  |  | $\gamma \mathrm{n}$ | $\gamma \eta$ |  |  | 8u |
| $\gamma \gamma$ | $\gamma \gamma$ |  |  |  |  |  |  |  |  |  |  |
| e | e |  |  |  | $e^{?}$ |  |  |  |  | ey |  |
| ee | ee | eep | eet | eek |  | eem | een | eeŋ | eew | eey |  |
| a | a | ap | at | ak | a? | am | am | ay | aw | aay | ащ |
| aa | aa | aap | aat | aak |  | aam | aan | aaŋ | aaw | aay |  |
| 0 |  | op | ot | ok | o? | om | on | OJ | Ow |  |  |
| OO | 00 | oop | oot | ook |  | oom | oon | OOJ |  | ooy |  |

William J. Gedney's

# THE TAI DIALECT OF LUNGMING 

Glossary, Texts, and Translations

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