

Lexicon and Description of Sui Adjective Intensifiers

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Sui, an indigenous minority language of southwest China, has an elaborate system of adjective intensification. Adjectives are intensified with word-specific, bound morphemes that usually either rhyme with the base or alliterate with the base. Stanford (2007) notes morpho-phonological patterns that suggest reduplication, rhyme, alliteration, The Emergence of the Unmarked (McCarthy & Prince 1994, Yip 2001), identity avoidance, and “Copy But Don’t Repeat” (Kennard 2004). However, the adjective intensifiers defy a simple, fully predictable explanation in such terms; the intensifier lexicon may be best described as “patterned variety,” a case of lexicalized poetry or a poeticized lexicon. Word formation is guided by general patterns, but each specific intensifier may vary within those overall guidelines. Many adjectives have multiple intensifiers that bear subtle semantic and pragmatic distinctions. The current paper serves as a complement to Stanford (2007) by providing a detailed lexicon of the Sui adjective intensifiers for future reference and further analysis. This lexicon is based on the author’s fieldwork and represents the first detailed account of Sui adjective intensifiers for the wider linguistic community.

1. Introduction¹

The Sui people are an indigenous ethnic minority of southwest China, numbering 346,000 in a 1990 census (He et al. 1992:1) and reported to be 406,902 in 2000 (Xuecun Wei, Chinese Academy of Social Sciences). The great majority (93%) live in southern Guizhou Province (Buruspat et al. 2003). The language, a member of the Tai-Kadai family, is isolating, tonal, and largely monosyllabic.

1.1 Sui Phonology

Sui consonants are given below following Li (1948), Shuiyu Diaocha Baogao² (1956), Zhang (1980), Luo (1992), Zeng & Yao (1996), Edmondson et al. (2004), as well as the author’s observations of the specific village under investigation, Ljaj Ku Tsong (Zhonghe Township, Sandu Autonomous Sui County).

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²*Shuiyu Diaocha Baogao* [Report on Investigations of the Sui language] is an unpublished manuscript from 1956. A copy of the manuscript was acquired through the help of Jerold Edmondson.

p	t	ts	tɕ	k	q	ʔ
p ^h	t ^h	ts ^h	t ^h	k ^h	q ^h	
^m b	ⁿ d					
ʔb	ʔd					
m̥	n̥		ɲ̥	ŋ̥		
m	n		ɲ	ŋ		
ʔm	ʔn		ʔɲ	ʔŋ		
f	s		ɕ	x		
w	z			ɣ	ɛ	
				ʔɣ		
	l		j			
ʔw			ʔj			

Table 1. Consonants³

Table 2 outlines the Sui tone inventory of Ljaj Ku Tsong Village. The inventory is based on the author's observations and comparison with *Shuiyu DiaoCha Baogao* (1956), Zhang (1980), Luo (1992), Zeng & Yao (1996). The table follows Chao's (1930) 1-5 scale for contour tones (1=low, 5=high). Tone numbers are based on the traditional system used for areal languages (e.g. Li 1948, Zhang 1980, Edmondson & Solnit 1988). The even/odd distinction in tone numbers represents an interpretation of a historical tone split; even-numbered tones indicate syllables that are supposed to have had historically voiced onsets, while odd-numbered tones indicate syllables with historically voiceless onsets (Li 1948, Edmondson & Solnit 1988). Tones 7 and 8 represent "checked" syllables (defined in this transcription system as syllables ending in *-p*, *-t*, or *-k*). Finally, checked syllables are distinguished as S (short vowel) and L (long vowel).⁴

Tone	Tone	Tone	Tone	Tone	Tone	Tone	Tone	Tone	Tone
1	2	3	4	5	6	7S	7L	8S	8L
13	31	33	53	35	24	55	35	32	31

Table 2. Sui tones in Ljaj Ku Tsong village

³In the region under investigation, the sound represented by /w/ is usually perceived as having a labio-dental place of articulation when it occurs in syllable-initial position. It may be that it is a labio-dental approximant (cf. Edmondson et al. 2004). The underlying form is not yet entirely clear, so the sound is transcribed [v] in syllable-initial position in this study.

⁴Future study may reveal that the checked tones could be combined with corresponding unchecked tones into an underlying system of just six tones. Li (1948) opts to use all eight tones for clarity, and this transcription system is adopted here.

1.2 Sui Adjective Intensifiers

Sui has an elaborate system of adjective intensification that involves rhyme and alliteration. First, note that a generic, non-word-specific intensifier can be used to intensify adjectives, as exemplified in (1).

- | | | | | | |
|-----|-------------------|--------------|---|-----------------------------------|-------------------|
| (1) | va:ŋ ¹ | ‘tall’ | → | va:ŋ ¹ ɕɔ ³ | ‘very tall’ |
| | ʔnəm ¹ | ‘dark/black’ | → | ʔnəm ¹ ɕɔ ³ | ‘very dark/black’ |
| | koŋ ⁵ | ‘young’ | → | koŋ ⁵ ɕɔ ³ | ‘very young’ |

However, intensifiers also commonly take the form of a word-specific, bound intensifier. Such intensifiers may be divided into two major classes that Stanford (2007) calls the Rhyming Class and the Alliterative Class. Examples of the Rhyming Class are given in (2).

- | | | | | | | |
|-----|----|--|---------------|---|---|---|
| (2) | a. | ka:t ⁷ | ‘agile’ | → | ka:t ⁷ tɕa:t ⁸ | ‘very agile’ |
| | b. | ʔmɛj ⁵ | ‘selfish’ | → | ʔmɛj ⁵ tɛj ¹ | ‘very selfish’ (often referring to a child) |
| | c. | fa:ŋ ³ | ‘wide’ | → | fa:ŋ ³ lʰa:ŋ ² | ‘very wide’ |
| | d. | tom ¹ | ‘dull’ | → | tom ¹ ʔnom ¹ | ‘very dull’ |
| | e. | m ^h bu ³ | ‘bulging’ | → | m ^h bu ³ tɕ ^h u ⁵ | ‘very bulging’ |
| | f. | ʔnəm ¹ | ‘dark/black’ | → | ʔnəm ¹ fəm ² | ‘very dark/black’ |
| | g. | lap ⁷ | ‘garrulous’ | → | lap ⁷ tap ⁸ | ‘very garrulous’ |
| | h. | p ^h ɛ:k ⁷ | ‘dirty’ | → | p ^h ɛ:k ⁷ l ^h ɛ:k ⁷ | ‘very dirty’ |
| | i. | mow ¹ | ‘crude, rash’ | → | mow ¹ low ¹ | ‘very crude/rash’ |
| | j. | m ^h b ^h a ³ | ‘blurry’ | → | m ^h b ^h a ³ tɕa ⁴ | ‘very blurry’ |

Examples of the Alliterative Class are given in (3).

- | | | | | | | |
|-----|----|---------------------------------|-----------|---|---|--------------------------------|
| (3) | a. | ka:t ⁷ | ‘agile’ | → | ka:t ⁷ kow ¹ | ‘very agile’ |
| | b. | ʔmɛj ⁵ | ‘selfish’ | → | ʔmɛj ⁵ ʔmɔ:t ⁷ | ‘very selfish’ (general usage) |
| | d. | ɕu ¹ | ‘green’ | → | ɕu ¹ ɕiŋ ⁵ | ‘very green’ |
| | e. | tɕ ^h oŋ ⁵ | ‘spicy’ | → | tɕ ^h oŋ ⁵ tɕ ^h at ⁷ | ‘very spicy’ |
| | f. | za ³ | ‘light’ | → | za ³ zu ¹ | ‘very light/casual’ (attitude) |
| | g. | za ³ | ‘light’ | → | za ³ zeŋ ³ | ‘very light’ (weight) |
| | h. | qəm ¹ | ‘bitter’ | → | qəm ¹ qe ⁵ | ‘very bitter’ |
| | i. | a ¹ | ‘sharp’ | → | ɕa ¹ ɕɛn ¹ | ‘very sharp’ |
| | j. | kəm ¹ | ‘muddled’ | → | kəm ¹ koj ¹ | ‘very muddled’ |

In most cases, the intensifiers are word-specific, bound morphemes which are not attested elsewhere in the language. Homonymy with other lexical items outside the adjective intensifier lexicon occasionally occurs, but Sui speakers consider such rare homonyms to be coincidental and unrelated.

In addition to the two major classes of rhyming and alliterative intensifiers, some intensifiers do not show any phonological resemblance with their bases. For example, xom³ ‘sour’ → xom³ p^ha:t⁷ ‘very sour’. Stanford (2007) suggests the possibility that such items represent historical compounds where the second syllable has lost its original status as a stand-alone word.

(*Identical syllables cannot be adjacent*) and Kennard's (2004) "Copy But Don't Repeat." In this way, a combination of TETU and identity avoidance is used to explain $ləŋ \rightarrow ləŋ təŋ$ and $ləŋ \rightarrow ləŋ *ləŋ$.

As for tone, Stanford observes that rhyming intensifiers often copy the tone of their bases, although there are some cases where a non-falling-tone base has a falling-tone intensifier.

2.2 The alliterative class

Intensifiers in the Alliterative Class (e.g. (3)) do not show evidence of the TETU effects found in the Rhyming Intensifiers. The rhymes of alliterative intensifiers show a great deal of variety. Further, there is no apparent preference for unmarked forms as would be expected of TETU. Identity avoidance is clearly present since the intensifier rhymes differ from their base rhymes, yet the specific choice of rhyme appears to be quite flexible.

2.3 Patterned variety

Stanford concludes that Sui intensifiers represent a system of patterned variety that could be described as lexicalized poetry or as a poeticized lexicon. First, note in (7-8) that the presence of multiple intensifier options precludes the possibility of strict word formation rules for a given base.

- (7) $p^h a^1$:
- | | | | | |
|-----------|--------|---------------|---------------------|---|
| $p^h a^1$ | 'gray' | \rightarrow | $p^h a^1 p^h o j^1$ | 'very gray' (e.g. ash spots on clothing) |
| $p^h a^1$ | 'gray' | \rightarrow | $p^h a^1 p^h əŋ^1$ | 'very gray/pale' (especially referring to skin) |
| $p^h a^1$ | 'gray' | \rightarrow | $p^h a^1 p^h ɛ w^3$ | 'very gray' |
| $p^h a^1$ | 'gray' | \rightarrow | $p^h a^1 p^h o k^7$ | 'very gray' (often referring to a distant, misty scene) |

- (8) $x o m^3$:
- | | | | | |
|-----------|--------|---------------|---------------------|-------------|
| $x o m^3$ | 'sour' | \rightarrow | $x o m^3 t o m^4$ | 'very sour' |
| $x o m^3$ | 'sour' | \rightarrow | $x o m^3 ? n o m^5$ | 'very sour' |

The intensifiers (exemplified in (7-8)) follow general guidelines (rhyme, alliteration, TETU, "Copy But Don't Repeat"), yet the specific features of a given intensifier may vary within those general guidelines. For example, in rhyming intensifiers, TETU encourages a coronal onset, yet the specific choice of coronal varies.

Alliterative intensifiers further illustrate this patterned variety on the tonal level. Stanford observes that the tone of an alliterative intensifier and the tone of its base usually come from the same side of the tone split discussed above. In other words, both are usually either even-numbered tones or odd-numbered tones. Thus, the tones of alliterative intensifiers exhibit patterned variety: the specific choice of intensifier tone can vary, but it usually must stay within the same side of the tone split, even or odd.

Stanford's analysis may be confirmed through future cross-linguistic comparisons. Phenomena that appear to be at least generally similar to Sui adjective intensifiers have been reported in nearby Tai-Kadai languages such as Bouyei (Yu et al. 1994), but no data are

available for comparison. Vietnamese may also have similar adjective intensification (Thompson 1965, James Kirby personal communication). Thus, a cross-examination of the Sui data with other languages may yield further insights in the future.

3. The lexicon

The data entries provided here represent phonetic observation of the pronunciation of a native male Sui speaker in *Ljaj Ku Tsong* village, July 2004. The author collected 400 intensifiers from that speaker with the goal of providing the first detailed set of data representing a Sui speaker's intensifier system. Prior work includes Wei (1999), who provides an initial description of about 20 Sui intensifiers. Two general Sui dictionaries (Burusphat, Wei, & Edmondson 2003 and Zeng & Yao 1996) also include intensifiers in their entries. However, such collections sometimes have a mix of dialect variants or historical variants, especially since intensifiers can vary in subtle ways from village to village. Therefore, the author set out to establish a single, detailed intensifier lexicon representing the synchronic lexicon of a single speaker.

Future phonological analysis of Sui may provide insight into transcription decisions for features such as the length of /ɑ:/ and the status of onset glides. The data set is divided into two main categories, the Alliterative Class and the Rhyming Class, and then further subdivided by morpho-phonological features. The small class of intensifiers with no base-reduplicant phonological resemblance is listed separately (the No-Pattern Class).

For all adjective intensifying expressions, the leftmost syllable is assumed to represent a monosyllabic adjective unless otherwise indicated. When an expression has more than two syllables, an underline is used to indicate which pair of syllables belong to the given category being analyzed in that section.

As noted above, a single base adjective often has more than one possible choice of intensifier. In such cases, each intensifier is listed in its appropriate category below. When available, further information is provided to show semantic/pragmatic contrasts between such different intensifier options for a single base adjective.

“Variant” refers to a minor alternation in pronunciation of a given entry that the consultant views as equivalent to his primary pronunciation.

3.1 The Alliterative Class

The intensifiers in the alliterative class are organized in the following groups (where “checked” refers to syllables with *-p*, *-t*, *-k* in syllable final position):

1. Checked base syllable, unchecked reduplicant syllable
2. Checked base, checked reduplicant
3. Unchecked base, checked reduplicant
4. Unchecked base, unchecked reduplicant:
 - 4.1 Nasal-final base, nasal-final reduplicant
 - 4.2 Nasal-final base, vowel/glide-final reduplicant
 - 4.3 Vowel/glide-final base, nasal-final reduplicant
 - 4.4 Vowel/glide-final base, vowel/glide-final reduplicant

In addition to the adjective intensifiers, a few alliterative nouns and other word classes are included for future analysis, e.g., ʔnet⁷ ʔno³ ‘swing’ (n.). Such words could share similar alliterative origins as the adjective intensifiers since Sui is otherwise largely monosyllabic.

3.1.1 Checked base, unchecked reduplicant

ka:t ⁷ kow ¹	‘very nimble, agile’ (general use)
m ^h bɔ:k ⁷ m ^h bow ¹	‘very protruding, having many protrusions’ (general use)
ʔnep ⁷ ʔneŋ ³	‘very narrow’ (higher level of intensity than ʔnep ⁷ ʔne:t ⁷)
ʔnet ⁷ ʔno ³	‘a swing’ (n.)
ʔbok ⁷ ʔbow ¹	‘very coarse’ (for small objects or tabletops)
ʔdaŋ ¹ t ^h ak ⁷ t ^h ej ¹	‘very bright’ (ʔdaŋ ¹ ‘bright’)
na:k ⁷ nen ¹	‘very coarse, rough’
ne:t ⁷ nej ¹	‘sealed very tightly’ (higher intensity than ne:t ⁷ now ¹)
ne:t ⁷ now ¹	‘sealed very tightly’ (general use)
net ⁷ nej ¹	‘sealed very tightly’
nit ⁷ no ³	‘very cold’ (weather)
ʔjet ⁷ ʔjo ³	‘very long ago’
lap ⁷ leŋ ⁵	‘very chatty, talkative’ (derogatory)
ʔek ⁸ ʔuj ²	‘very strong’ (general use)
ʔep ⁷ ʔu ³	‘very remote, very faraway place’ (ʔep ⁷ is not attested as a monosyllabic adjective)
ʔet ⁷ ʔaw ³	‘hypocritical, false display of affection’ (ʔaw ³ is not otherwise attested in this region, but it appears in other dialects as ʔaw ³ ‘proud’)
ʔet ⁷ ʔom ¹	‘very proud’
ʔok ⁷ ʔen ¹	‘very sweaty’
ma:t ⁷ mew ¹	‘very dirty (derogatory, e.g., an animal or person’s face)
ma:k ⁷ mom ²	‘very fierce, brave’ (can refer to actions, unlike ma:k ⁷ te:k ⁸)
ma:k ⁷ mow ²	‘very fierce, brave, greedy’ (may be related to mow ² in q ^h a ¹ mow ² ‘greedy’)
pa:k ⁸ po ²	‘very white’ (often used to refer to skin)
pa:k ⁸ poŋ ⁴	‘very white’ (general use)
q ^h op ⁷ q ^h ej ⁵	‘very rugged’ (of mountain) (q ^h op ⁷ is not attested as a monosyllabic adjective)
q ^h at ⁷ q ^h ow ¹	‘very bitter’
su:t ⁷ som ¹	‘very hot’
sa:t ⁷ sew ³	‘very pretty, cute’ (esp. little animals or children)
t ^h u:t ⁸ t ^h aw ⁴	‘very wrinkled’ (e.g., clothes) (higher intensity than t ^h u:t ⁸ t ^h et ⁸)
te:k ⁷ teom ³	‘very stiff, inflexible’ (general use)
t ^h ak ⁷ t ^h aw ¹	‘very clear and bright’ (less common than t ^h ak ⁷ te:j ¹) (t ^h ak ⁷ is not attested as a monosyllabic adjective)
t ^h ak ⁷ t ^h ej ¹	‘very clear and bright’ (general use) (t ^h ak ⁷ is not attested as a monosyllabic adjective)

3.1.2 Checked base, checked reduplicant

ʔnep ⁷ ʔne:t ⁷	‘very narrow’ (general use)
ʔnep ⁷ ʔnu:t ⁷	‘very narrow’ (can be derogatory, higher level of intensity than ʔnep ⁷ ʔne:t ⁷)
ⁿ dop ⁷ ⁿ di:p ⁷	‘very crafty, sly’
təkak ⁷ təkop ⁷	‘very still, inflexible’ (higher intensity than təkak ⁷ təkom ³)
tʰot ⁸ tʰet ⁸	‘very wrinkled’ (e.g., clothes) (general use)
tsu:t ⁷ tsət ⁷	‘very wrinkled or curly’ (esp. hair)

3.1.3. Unchecked base, checked reduplicant

ʔo ² ʔa:t ⁸	‘very empty’ (esp. empty-handed)
ⁿ dəm ⁵ ⁿ dε:t ⁷	‘very short’ (height) (general use)
ⁿ dəm ⁵ ⁿ du:t ⁷	‘very short’ (height)
ⁿ dij ⁵ ⁿ du:t ⁷	‘very dark’ (higher level of intensity than ⁿ dij ⁵ ⁿ dom ¹)
ʔo ³ ʔo:k ⁷	‘very clean/clear, wiped clean’
ʔnam ¹ ʔnat ⁷	‘very fierce’
ʔbaŋ ¹ ʔbe:p ⁷	‘very thin’
ʔda ³ ʔdo:t ⁷	‘very hard’
ʔdɛj ⁵ ʔdɛ:k ⁷	‘very shallow’ (general use)
ʔi:t ⁷ ʔna:t ⁷	‘very cold’
ʔnəŋ ⁵ ʔno:t ⁷	‘very salty’
ʔnəm ¹ ʔnut ⁷	‘very black/dark’ (higher level of intensity than ʔnəm ¹ ʔnej ¹)
ʔmej ⁵ ʔmu:t ⁷	‘very stingy’ (general use)
ʔna ¹ ʔno:k ⁷	‘very thick’ (general use)
ʔom ⁵ ʔo:t ⁷	‘very humid, muggy weather’ (higher intensity than ʔom ⁵ ʔoj ¹)
ɕəŋ ² ɕo:t ⁸	‘very straight or naïve/unintelligent’ (general use)
ŋow ⁵ ʔet ⁷	‘very ugly’ (general use)
ŋaw ⁶ ʔet ⁸	‘very slender, thin’ (of a person) (ŋaw ⁶ is not attested as a monosyllabic adjective)
noŋ ² ʔet ⁸	‘very muddled, confused’
nan ⁴ ʔək ⁸	‘very bored’
ŋaw ³ ʔo:k ⁷	‘very cold’
k ^h i ³ k ^h op ⁷	‘opened a little crack’ (e.g., a window) (consultant is unsure if this is an adjective+intensifier pair or simply a two-syllable word; k ^h i ³ means to open just a crack; k ^h op ⁷ is not otherwise attested)
kɔ ¹ ka:t ⁷	‘very sparse’
koŋ ³ kət ⁷	‘very dry’ (esp. for skin)
koŋ ³ kop ⁷	‘very dry’ (esp. for physical objects which once held water/moisture)
ʔok ⁷ ʔa:t ⁷	‘very sweaty’
ʔow ⁴ ʔjo:k ⁷	‘completely finished’
p ^h a ¹ p ^h ok ⁷	‘very gray’ (often referring to misty mountains)
p ^h aj ³ p ^h a:k ⁷	‘very crooked’ (p ^h aj ³ ‘crooked’ appears to be a variant of ʔbaŋ ³ ‘crooked’)
p ^h ow ³ p ^h ɔp ⁷	‘very swollen’
paj ⁶ pak ⁸	‘very crooked’
pi ² pot ⁸	‘very fat’ (only referring to people; has an intimate, ‘cute’ sense)
p ^h aŋ ⁶ p ^h ap ⁸	‘very shriveled, withered’; (note: there is a two-syllable word, p ^h ap ⁷ p ^h ε ¹ with similar meaning)
p ^h eŋ ² p ^h at ⁸	‘very flat’

pu ¹ pop ⁷	‘very swollen, bulging’
qəm ¹ qa:t ⁷	‘very bitter’ (often refers to vegetables)
qəm ¹ qu:t ⁷	‘very bitter’ (general use)
qəm ⁵ qa:t ⁷	‘very purple/dark’ (often refers to dark skin; higher intensity than qəm ⁵ qej ¹)
qəm ⁵ qu:t ⁷	‘very purple/dark’ (general use)
qen ⁵ qək ⁷	‘very colorful’ (higher intensity than qen ⁵ qew ¹)
qaj ² qək ⁸	‘very crooked’ (tends to be derogatory; higher intensity than qaj ² tʰaj ¹)
qom ² qək ⁸	‘having many protrusions, not level’ (higher intensity than qom ² qej ²)
sa ¹ sop ⁷	‘very itchy/prickly’ (e.g., thorns) (higher intensity than sa ¹ som ¹)
sʰow ³ sʰɛ:t ⁷	‘very few’ (general use)
tɕaw ¹ tɕak ⁷	‘very curved’ (e.g., curly hair) (indicates greater curvature than tɕaw ¹ ŋʰew ³)
tɕɛ ⁵ tɕop ⁷	‘very old’ (of people) (general use)
tɕoŋ ³ tɕop ⁷	‘very skinny’ (higher intensity than tɕoŋ ³ tɕen ¹ ; also tɕoŋ ³ tɕop ⁷ tends to be derogatory; tɕoŋ ³ tɕen ¹ and tɕoŋ ³ fʰoŋ ⁴ are not so derogatory)
tɕʰoŋ ⁵ tɕʰaat ⁷	‘very spicy’ (general use)
taj ⁵ tək ⁷	‘multicolored’ (higher intensity, brighter colors than taj ⁵ tew ¹)
tʰəm ⁶ tʰət ⁸	‘very anxious, agitated’ (status as an adjectival expression is unclear: tʰəm ⁶ is a verb ‘to stomp one’s feet’)
tʰen ² tʰək ⁸	‘very full’ (of food)
tʰu ⁵ tʰa:t ⁷	‘very tough, firm’
tsʰjaŋ ¹ tsʰjet ⁷	‘very attractive, good-looking’ (general use)
xɔ ³ xɔ:t ⁷	‘very poor’
xɑ:n ⁴ xit ⁸	‘very slender, tall (of a person) <i>or</i> a long road’
xut ⁷ xat ⁷	‘very skilled’
zaw ¹ zak ⁷	‘very numb, insensitive’

3.1.4 Unchecked base, unchecked reduplicant

3.1.4.1 Nasal-final base, nasal-final reduplicant

ⁿ dəm ⁵ ⁿ deŋ ³	‘very short’ (height) (higher intensity than ⁿ dəm ⁵ ⁿ dɛ:t ⁷)
ⁿ dʰen ³ ⁿ dʰon ³	‘very short’ (length) (higher intensity than ⁿ dʰen ³ ⁿ dʰow ⁵)
ⁿ dʰiŋ ⁵ ⁿ dom ¹	‘very dark’
ʔnʰəm ⁵ ʔnʰom ³	‘very dark’
ŋəm ³ ŋeŋ ³	‘very dizzy’
ŋəm ³ ŋən ⁵	‘very confused’
kʰiŋ ³ kʰən ¹	‘very brown’ (general use)
koŋ ³ keŋ ³	‘very dry’ (esp. for pools of water or cooking pots which once held water)
lʷən ⁶ lan ⁶	‘very disorderly, messy’
fʰan ⁵ fʰen ¹	‘very spicy’
fʰem ⁵ fʰa:ŋ ¹	‘very talkative’
pʰa:ŋ ³ pʰom ³	‘very moldy’ (higher intensity than pʰa:ŋ ³ pʰow ¹)
tɕoŋ ³ tɕen ¹	‘very skinny’ (general use)
tɕʰen ³ tɕʰeŋ ¹	‘very steep’ (general use)
tɕʰoŋ ⁵ tɕʰaŋ ¹	‘very spicy’ (less common than tɕʰoŋ ⁵ tɕʰa:t ⁷ ; higher intensity)

t ^h ɛŋ ³ t ^h om ¹	‘puffed, bulging, not wrinkled’ (general use)
təm ⁵ təm ³	‘very dark’ (weather)
vaŋ ¹ v ⁱ ɛn ⁵	‘very tall’ (vaŋ ¹ v ⁱ ɛn ⁵ does not include a sense of ‘strong’, unlike va:ŋ ¹ tɕa:ŋ ²)

3.1.4.2 Nasal-final base, vowel/glide-final reduplicant

ɣa:ŋ ⁵ ɣa:w ¹	‘very clean/clear/cool’
kəm ¹ kɔj ¹	‘very muddled, confused’ (mental)
koŋ ⁵ kɛw ¹	‘very young’ (general use)
koŋ ⁵ kɛw ³	‘very young’ (higher intensity than koŋ ⁵ kɛw ¹)
^m b ⁱ am ⁶ ^m b ⁱ ɛ ¹	‘very damp/humid’ (tends to refer to food, skin, or clothes; more limited usage than ^m b ⁱ am ⁶ tɕam ⁶)
^m b ⁱ ɪŋ ¹ ^m b ⁱ ɛj ¹	‘very expensive’
ⁿ da:ŋ ¹ ⁿ d ^w ɛj ¹	‘very fragrant’
ⁿ d ⁱ ɛn ³ ⁿ d ⁱ ow ⁵	‘very short’ (length) (general use)
ʔɣom ⁵ ʔɣi ³	‘very swollen’
ʔnɛn ³ ʔnwej ³	‘very tender’ (of objects or human heart)
ʔboŋ ⁵ ʔboj ¹	‘very soggy, muddy’
ʔd ⁱ ɛn ¹ ʔd ⁱ oj ¹	‘very smooth, shiny’
ʔd ⁱ ɛn ¹ ʔd ⁱ ɔ ⁵	‘very itchy’ (ʔd ⁱ ɔ ⁵ also appears as a verb ‘pull’)
ʔd ⁱ ɛn ³ ʔd ⁱ oj ³	‘very tender’ (a variant: ʔn ⁱ ɛn ³ ʔn ⁱ oj ³)
ʔjəm ¹ ʔjɔ ³	‘very deep’ (general use)
ʔjəm ¹ ʔjɔj ¹	‘very deep’ (often refers to dangerous situations, e.g., deep, opaque water)
ʔnəm ¹ ʔnej ¹	‘very black/dark’ (common, e.g., dark black clothes)
ʔnəm ¹ ʔɛw ¹	‘very black’ (esp. a portion of an object that is blackened)
ɕɛn ⁶ ɕ ^w ɛj ²	‘very tiring’
ŋəm ³ ɲi ³	‘very dizzy’ (described as being a reduced form of ŋəm ³ ɲɛŋ ³)
ŋa:n ⁵ ɲow ¹	‘very cold’ (esp. for water)
ŋən ⁴ ɲɔ ³	‘very stupid, stupefied’ (ŋən ⁴ is not attested as a monosyllabic adjective)
fa:n ¹ foj ¹	‘very gentle flavor <i>or</i> very relaxed, easy’; fa:n ¹ = ‘slow’)
fa:n ¹ foj ³	‘very gentle flavor’ (note that fa:n ¹ foj ³ doesn’t have the secondary meaning ‘relaxed, easy’ found in fa:n ¹ foj ¹)
fin ⁶ fu ²	‘very steep’
fom ¹ fi ³	‘very still and quiet’ (fom ¹ is not attested as a monosyllabic adjective)
jen ² joj ²	‘very orderly’
k ^h ən ¹ k ^h oj ¹	‘very diligent’ (k ^h ən ¹ is not attested as a monosyllabic adjective)
ka:n ⁵ kej ¹	‘very white’ (complexion)
kiŋ ³ k ⁱ u ¹	‘very pretty’
kom ⁵ ki ³	‘very weak/sickly’
liŋ ³ l ⁱ ow ¹	‘very clear/dry’ (weather)
l ⁱ ɛŋ ¹ l ⁱ ɛj ¹	‘all the same, all one kind’ (grammatically required to have another corresponding syllable l ⁱ ɛŋ ¹ at the beginning of the phrase: l ⁱ ɛŋ ¹ ow ⁴ l ⁱ ɛŋ ¹ l ⁱ ɛj ¹ ‘only rice, nothing else’ (ow ⁴ = ‘rice’))
l ⁱ ɛn ⁶ l ⁱ oj ²	‘very sweet’
loŋ ⁵ law ¹	‘very loose’ (esp. referring to a loosely fitting object which distinguishes this intensifier from loŋ ⁵ lɛw ³)
loŋ ⁵ lɛw ³	‘very loose, spacious’ (e.g. very few people present during market day)
m ^a n ³ m ^u j ³	‘pure yellow’

m̩an ³ m̩ow ¹	‘deep yellow’ (most common)
ʔom ⁵ ʔoj ¹	‘very humid, muggy weather’ (general use)
ɕəŋ ² ɕɔj ²	‘very stupid’ (only referring to intelligence, not straightness of objects, cf. ɕəŋ ² ɕɔ:t ⁸)
n̩əŋ ⁵ n̩ɔ ³	‘very worried’
nuen ⁶ nej ²	‘very tender’
p ^h a:ŋ ³ p ^h i ³	‘very moldy’ (higher intensity than p ^h a:ŋ ³ p ^h ow ¹)
p ^h a:ŋ ³ p ^h ow ¹	‘very moldy’ (esp. for objects, e.g. clothes)
p ^h i:ɔn ⁵ p ^h iow ¹	‘very barren, clear’
pən ¹ poj ¹	‘very stupid’ (general use)
qa:ŋ ⁵ ʔa:ŋ ⁵ ʔa ⁴	‘very simple, crude’ (e.g. a simple house) (the syllables are not otherwise attested)
q ^h ən ¹ q ^h oj ¹	‘very delicious’
qəm ¹ qe ⁵	‘very bitter’ (higher intensity than qəm ¹ qu:t ⁷)
qəm ⁵ qəŋ ³	‘very purple/dark’
qəm ⁵ qej ¹	‘very purple/dark’ (often refers to dark skin)
qɔn ⁴ qow ²	‘very short’ (higher intensity than qɔn ⁴ ʔn ^ɔ n ³)
qen ¹ qew ¹	‘very agile/nimble’ (higher intensity than qen ¹ qoj ¹)
qen ¹ qoj ¹	‘very agile/nimble’ (general use)
qen ⁵ qew ¹	‘very colorful’ (general use)
qom ² qej ²	‘having many protrusions, not level’ (general use)
som ⁵ si ⁵	‘very wet and very dirty’ (neither syllable is otherwise attested in any similar context; this expression most commonly serves as an intensifier of another word such as p ^h ja:t ⁷ ‘filled with blood’)
tɕ ^h ən ³ tɕ ^h u ⁵	‘very steep’ (higher intensity than tɕən ³ tɕ ^h en ¹)
tɕ ^w ɔn ³ tɕew ³	‘wound a lot (wire, string) or a very winding, curving (road)’
tɕən ⁶ tɕej ²	‘very cheap’
t ^h en ³ t ^h aw ¹	‘puffed, bulging, not wrinkled’
tom ¹ tej ¹	‘very blunt, dull’ (does not refer to intelligence)
tom ¹ toj ¹	‘very blunt, dull’ (does not refer to intelligence; higher intensity than tom ¹ tej ¹)
ts ^h i:a:ŋ ¹ ts ^h iaw ³	‘very attractive, good-looking’
tsən ¹ tse ⁵	‘very constricted, bloated’
tsən ² ts ^w ej ²	‘very sharp’
xɔŋ ¹ xaw ¹	‘very hollow’
xəm ¹ xu ³	‘very early’
xən ⁵ xa:ŋ ¹	‘very strong/healthy’
zən ¹ z ^w oj ¹	‘very heavy’ (lower intensity than zən ¹ ɲak ⁷)

3.1.4.3 Vowel/glide-final base, nasal-final reduplicant

ɥ ⁶ ɥa:ŋ ⁴	‘very leaky’ (general use)
m ^h bu ³ m ^h bəŋ ¹	‘very protruding’ (often refers to small objects, food)
n ^h daw ⁵ n ^h d ^h a:ŋ ¹	‘to move around with rolling, rocking motion’ (adjective/verb status unclear)
ʔɥaj ³ ʔɥəŋ ²	‘very long’ (general use)
ʔb ^h a ⁵ ʔb ^h en ³	‘very smooth’ (e.g., skin)
ʔd ^h ej ⁵ ʔd ^h en ³	‘very shallow’ (higher intensity than ʔd ^h ej ⁵ ʔd ^h ε:k ⁷)
ɕa ¹ ɕen ¹	‘very sharp’
ɕu ¹ ɕiŋ ⁵	‘very green’

ɕu ³ ɕa:ŋ ¹	‘very lively’ (uncommon)
ŋow ⁵ ŋeŋ ³	‘very ugly’ (humorous; less common than ŋow ⁵ ŋet ⁷)
ŋu ¹ ŋiŋ ³	‘very smelly’ (esp. of a child)
kɔ ⁵ kiŋ ¹	‘not respectable, not decent, not honest’ (most commonly occurs with məŋ ⁴ ‘happy’ in məŋ ⁴ kɔ ⁵ kiŋ ¹ ‘extremely happy’; kɔ ⁵ is not attested as a monosyllabic adjective)
lɔ ³ ləŋ ¹	‘very bald’ (hair or a barren mountain)
mɛj ⁵ mɛŋ ³	‘very new’
nɔ ⁵ n'iŋ ¹	‘very unrespectable’ (general use) (n'iŋ ¹ also appears in n'iŋ ¹ s'iŋ ¹)
nɔ ⁵ n'iŋ ³	‘very unrespectable’ (tends to refer to taboo behavior, higher intensity than nɔ ⁵ n'iŋ ¹)
p ^h a ¹ p ^h əŋ ¹	‘very gray/pale’ (esp. for a pudgy person with pale skin)
p ^h iɛj ⁵ p ^h iɛŋ ³	‘very near’
pu ¹ pəŋ ¹	‘very swollen’
qaw ⁵ qəŋ ¹	‘very old’ (physical objects)
qu ⁵ lu ⁵ ləŋ ³	‘very round’ (tends to refer to smaller objects than qu ⁵ lu ⁵ su ⁵ does) (qu ⁵ lu ⁵ = ‘round’)
sa ¹ som ¹	‘very itchy/prickly’ (general use)
s'ow ³ s'a:ŋ ¹	‘very few’ (higher intensity than s'ow ³ s'ɛ:t ⁷)
s'u ⁵ s'aŋ ¹	‘very dry’
tɕaw ¹ tɕeŋ ³	‘very curved’ (higher intensity than tɕaw ¹ tɕak ⁷)
taj ⁵ təŋ ³	‘multicolored’ (higher intensity than taj ⁵ tɛw ¹ but not as high as taj ⁵ tək ⁷)
tɕɛ ⁵ tɕom ³	‘very old’ (of people) (higher intensity than tɕɛ ⁵ tɕop ⁷)
tik ⁷ mə ⁵ mən ¹	‘very full’; higher intensity than tik ⁷ n'dɛp ⁸ (tik ⁷ = ‘full’)
va ³ vəŋ ¹	‘very stupid’ (more derogatory than va ³ voj ³ ; slightly less intensity than va ³ nja ⁵)
za ³ zɛŋ ³	‘very light’ (general use)

3.1.4.4 Vowel/glide-final base, vowel/glide-final reduplicant

ɣɔ ⁶ ɣi ³	‘very leaky and dirty’
ɣai ⁶ ɣɛw ²	‘very coarse, rough’
m ^h bi ³ m ^h biow ¹	‘very blurry’ (higher intensity than m ^h bi ³ tɕa ⁴)
m ^h bu ³ m ^h boj ¹	‘very protruding’ (higher intensity than m ^h bu ³ tɕu ⁵)
m ^h bu ³ m ^h bow ¹	‘very protruding’ (higher intensity than m ^h bu ³ tɕu ⁵)
m ^h bu ³ tɕ ^h oj ¹	‘very protruding’ (tends to refer to large thick objects)
n ^h daw ⁵ n ^h dow ¹	‘to move around with rolling, rocking motion (adjective/verb status unclear)
ʔŋaw ¹ ʔŋɔ ³	‘to swing’ (v.); ʔŋɔ ³ also appears in ʔŋɛt ⁷ ʔŋɔ ³ ‘swing’ (n.)
ʔb ^h a ⁵ ʔb ^h ɛj ¹	‘very bored’
ʔb ^h a ⁵ ʔb ^h uj ³	‘very smooth’
ʔdaj ¹ ʔdɛw ⁵	‘very good’
ʔdi ¹ ʔd'u ⁵	‘very far’
ʔma ³ ʔmɛw ³	‘very soft’ (usually implies rotten)
ʔma ³ ʔmi ³	‘very soft’ (uncommon)
ʔma ³ ʔm ^w ɛj ³	‘very soft’ (most common)
ʔna ¹ ʔnoj ¹	‘very thick’ (implies both big and thick; higher degree of emphasis than ʔna ¹ ʔnɔ:k ⁷)
ʔne ⁵ ʔnoj ¹	‘very tired’

ɕa ¹ ɕu ⁵	‘very sharp’ (general use) (ɕu ⁵ also appears in the lexicon as ‘really’ (adv.), but the consultant views ɕa ¹ ɕu ⁵ as having “a true intensifier here”, not simply the adverb ‘really’)
ŋaj ⁴ ŋew ¹	‘very dirty/blackened’
fe ¹ fi ³	‘very late’ (general use)
fe ³ foj ¹	‘very tired’
k ^h a ⁵ k ^h ej ¹	‘vigorously blazing (a fire) <i>or</i> very greasy (food)’
nɔ ² nɔj ²	‘stupid, silly’ (nɔ ² also appears in tom ¹ nɔ ² sɔ ² ‘very stupid; nɔ ² has been observed as an independent adjective)
p ^h a ¹ p ^h ew ³	‘very gray’ (esp. gray ash/powder spots on clothing) (variant: p ^h a ¹ p ^h ew ¹)
p ^h a ¹ p ^h oj ¹	‘very gray’ (esp. gray ash/powder spots on clothing)
p ^h ja:t ⁷ sɔm ⁵ si ⁵	‘bleeding a lot’ (adjective/verb status unclear) (variant: sɔ ⁵ si ⁵)
pi ⁵ li ⁵ ljoj ¹	‘very messy’ (cf. pi ⁵ li ⁵ si ⁵ which includes the sense ‘narrow’) (variants: p ^h i ⁵ li ⁵ lʰej ¹ and p ^h i ⁵ li ⁵ lʰej ¹)
qaw ⁵ qe ⁵	‘very old’ (physical objects) (higher intensity than qaw ⁵ qəŋ ¹)
tɕaw ¹ ŋ ^h ew ³	‘curved, bent’ (not a very high degree of curvature)
taj ⁵ tew ¹	‘multicolored’ (general use, but relatively shallow colors)
ti ³ ti ⁴	‘very small’ (general use)
ti ³ tʰu ⁴	‘very small’ (higher intensity than ti ³ tʰu ⁵ and ti ³ tʰu ⁴)
ti ³ tʰu ⁵	‘very small’ (general use)
tiw ³ tʰɔ ⁵	‘very dry’ (general use)
va ³ voj ³	‘very stupid’ (more subtle connotation than va ³ vəŋ ¹)
za ³ zu ¹	‘very light’ (also: flighty, frivolous attitude)
zaw ¹ ze ⁵	‘very numb, insensitive’ (less intensity than zaw ¹ zak ⁷)

3.2 The rhyming class

The intensifiers in the rhyming class are organized into six groups: intensifiers with labial onsets (Group 1), dorsal onsets (Group 2), glottal onsets (Group 3), coronal onsets (Group 4), fully reduplicated pairs (Group 5), and three-syllable expressions (Group 6). Within those groups, intensifiers are further differentiated as sets of intensifiers sharing similar onset feature changes. Finally, within some sets, intensifiers are differentiated into subsets of similar feature changes.

In a few cases where a pair of intensifiers rhyme with each other but do not rhyme with the base adjective, then the rhyming pair being analyzed in that section is underlined, e.g., tom¹ ‘dull’ → tom¹ ŋɔ² sɔ² ‘very dull’.

The third syllables of three-syllable rhyming expressions (e.g., mow¹ ‘rash (adj.)’ → mow¹ low¹ ‘very rash’ → mow¹ low¹ tow² ‘extremely rash’) are analyzed as a separate set. The two rhyming syllables being analyzed in that section are underlined, e.g., mow¹ low¹ tow². In addition, for a few intensifiers where speakers report that the rhyming syllables cannot be separated, e.g., p^haj⁵ l^haj⁵ s^haj⁵ ‘extremely messy’; *p^haj⁵ l^haj⁵, then the whole expression is listed along with the more typical two-syllable expressions with the first two syllables underlined to show they are being analyzed in that section, e.g., p^haj⁵ l^haj⁵ s^haj⁵.

Group 1. Labial base onsets

Set 1.1: Voiced labial becomes a voiceless coronal obstruent

Feature changes in this set:

[+voice] → [-voice]

[labial] → [coronal]

Variation in Onset Place: 7 cases of [tɕ], 1 case of [tj], 1 case of [tɕ^h], 1 case of [t]

m ³ bɔ:k ⁷ tɕɔ:k ⁸	‘very protruding, having many protrusions’
m ³ b ³ a ³ tɕa ⁴	‘very blurry’ (most common)
m ³ b ³ am ⁶ tɕam ⁶	‘very damp/humid’ (general use)
m ³ b ³ aw ³ tɕaw ⁴	‘very muddled’
m ³ bu ³ tɕ ^h u ⁵	‘very protruding, having many protrusions’
ʔba ³ j ³ tɕ ^h a ⁴ j ⁴	‘very crooked’
ʔbok ⁷ tɕ ^h ok ⁸	‘very coarse’ (used for large objects such as rocks)
ʔme ⁵ j ⁵ tɕej ¹	‘very stingy/selfish’
mət ⁷ tɕət ⁸	‘very tight’
mək ⁷ tɕək ⁸	‘very fierce, brave’
va:ŋ ¹ tɕa:ŋ ²	‘very tall’

Set 1.2: Voiceless labial becomes a voiced coronal sonorant

Feature changes in this set:

[-voice] → [+voice]

[labial] → [coronal]

[-lat] → [+lat] (exception: pən¹ ʔnən¹)

[-son] → [+son] (exceptions: mow¹ low¹)

pən ¹ ʔnən ¹	‘very stupid’
pi ² p ¹ u ¹ f ¹ u ¹	‘very fat’ (pi ² ‘fat’) (p ¹ u ¹ is not attested as a monosyllabic adjective)
pi ⁵ li ⁵	‘messy’ (e.g. a messy desktop) (pi ⁵ is not attested as a monosyllabic adjective)
p ¹ aj ⁵ f ¹ aj ⁵ s ¹ aj ⁵	‘very messy’ (e.g. messy writing or messy soup, differs from pi ⁵ li ⁵ si ⁵ or p ¹ a:n ⁶ f ¹ a:n ⁶ ɲa:n ⁶ ; p ¹ aj ⁵ is not attested as a monosyllabic adjective)
p ¹ a:n ⁶ f ¹ a:n ⁶ ɲa:n ⁶	‘very messy’ (e.g. a messed up pile of books) (p ¹ a:n ⁶ is not attested as a monosyllabic adjective)
p ¹ ɛ:k ⁷ f ¹ ɛ:k ⁷	‘very dirty’
p ¹ ɛŋ ² f ¹ ɛŋ ²	‘very flat’ (general use)
mow ¹ low ¹	‘very crude’ (derogatory)
fa:ŋ ³ f ¹ a:ŋ ²	‘very wide’
fa:n ¹ f ¹ a:n ²	‘very slow <i>or</i> gentle flavor’ (e.g. alcohol) (Note that fa:n ¹ f ¹ a:n ² doesn’t have the secondary meaning ‘relaxed, easy’ found in fa:n ¹ foj ¹)

Unclassified:

p^hɑj³ tɑj⁴ ‘very crooked’ (the base may be in free variation with ʔbɑj³)
 fɑ:t⁸ ʎɑ:t⁸ ‘very disheveled, weary’ (fɑ:t⁸ is not attested as a monosyllabic adjective)

Group 2. Dorsal base onsets

Set 2.1: Voiced dorsal becomes a voiceless coronal

Feature changes in this set:

[dorsal]→[coronal]

Other feature changes are listed below by subset.

Subset 2.1.1:

[+voice]→[-voice]

[+cont]→[-cont]

κɑ:t⁷ tɑ:t⁸ ‘very agile’, also ‘hurried, hasty’

Subset 2.1.2:

[+voice]→[-voice]

[-nasal]→[+nasal]

ʔɣɑj³ ɲɑj¹ ‘very long’

Subset 2.1.3:

[+voice]→[-voice]

[+nasal]→[-nasal]

ɲɑ:t⁷ ta:t⁷ ‘very still and quiet’ (ɲɑ:t⁷ is not attested as a monosyllabic adjective)

ɲət⁸ sət⁸ ‘very stupid’

tom¹ ɲɔ² sɔ² ‘very dull’ (of a knife), ‘unintelligent’ (of a person) (tom¹ ‘dull’)

Set 2.2: Voiceless dorsal becomes a voiced coronal

Feature change in this set: [dorsal]→[coronal]. Other feature changes are listed below by subset.

Subset 2.2.1:

[-voice]→[+voice]

[-cont]→[+cont]

[-lat]→[+lat]

[-son]→[+son]

In this subset, the bases are not attested as monosyllabic adjectives.

ʔda ³ qəŋ ⁵ ləŋ ⁵ səŋ ⁵	‘very hard’ (ʔda ³ ‘hard’)
ʔda ³ qət ⁸ lət ⁸	‘very hard’
ʔda ³ qe ⁵ le ⁵ se ⁵	‘very hard’
məŋ ⁴ kə ⁵ lə ⁵ ləm ¹	‘very happy’ (məŋ ⁴ ‘happy’)
qə ⁶ lə ⁶ sə ⁶	‘very bald’
qəm ⁶ ləm ⁶	‘round’
qəŋ ⁵ ləŋ ⁵ lə ⁴	‘very simple, crude’ (e.g., a simple house)
qak ⁷ lak ⁷	‘mysterious’
qew ³ ləw ³	‘clever, mysterious’
qu ⁵ lu ⁵	‘round’ (for ball-like objects)
təŋ ³ k ^w em ³ ləm ³	‘very skinny’; free variant: təŋ ³ kwam ³ ljam ³

Subset 2.2.2:

[-voice]→[+voice]
 [-cont]→[+cont]
 [-nasal]→[+nasal]
 [-son]→[+son]

ʔma ³ k ^w et ⁸ n ¹ et ⁸	‘very soft’ (ʔma ³ ‘soft’) (k ^w et ⁸ is not attested as a monosyllabic adjective)
xət ⁷ k ^w at ⁸ nat ⁸	‘very lazy’ (ʔma ³ ‘soft’) (k ^w at ⁸ is not attested as a monosyllabic adjective)
qən ⁴ ʔn ¹ ən ³	‘very short’ (general use)
xom ³ ʔnom ⁵	‘very sour’ (higher intensity than xom ³ p ¹ a:t ⁷)

Subset 2.2.3:

[-lat]→[+lat]
 [-son]→[+son]

xə ³ lə ⁴	‘very poor’
xop ⁷ ləp ⁸	‘very dizzy with success’ (xop ⁸ is not attested as a monosyllabic adjective)

Subset 2.2.4:

pi ² ka ⁵ n ^d ə ⁵ n ^d əm ¹	‘very fat’ (pi ² ‘fat’) (ka ⁵ is not attested as a monosyllabic adjective)
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Set 2.3: Voiceless dorsal becomes a voiceless coronal obstruent

Feature changes are listed by subset below.

Subset 2.3.1:

[+cont]→[-cont]

xɑ:n ³ t ¹ ɑ:n ²	‘very red’ (can be derogatory)
xək ⁷ tək ⁸	‘very crowded, constricted’ (general use)

xom³ tom⁴ ‘very sour’ (higher intensity than xom³ pja:t⁷)
 xom³ tom⁵ ʔnom⁵ som⁵ ‘very sour’ (higher intensity than xom³ ʔnom⁵)

Subset 2.3.2:

[dorsal]→[coronal]

[-cont]→[+cont]

[-strid]→[+strid]

In this subset, the bases are not attested as monosyllabic adjectives.

kɔ⁵ sʰɔ⁵ ‘to be stunned, stupefied’
 kəŋ⁵ səŋ⁵ ‘can’t help doing something, have no alternative’

Subset 2.3.3:

[dorsal]→[coronal]

[+asp]→[-asp]

k^hiŋ³ tiŋ⁴ ‘very brown’

Subset 2.3.4

[dorsal]→[coronal]

[+bk]→[-bk]

qaj² tʰaj¹ ‘very crooked’ (tends to be derogatory)

Set 2.4: Voiceless velar fricative becomes a voiceless uvular stop

Feature changes in this set:

[dorsal]→[uvular]

[+cont]→[-cont]

xɔŋ¹ qɔŋ² ‘very hollow’ (Another version, xɔŋ¹ tɕɔŋ², is observed in the Shuilong region)
 xok⁷ qok⁸ ‘very hurriedly, not carefully’ (adverbial)

Set 2.5: Voiceless velar stop becomes a voiced velar fricative

Feature changes in this set:

[-cont]→[+cont]

[+asp]→[-asp]

[-voice]→[+voice]

k^hoŋ³ ɣoŋ⁴ ‘very hollowed, sunken (object) or greedy’

Set 2.6: Tone change only

koŋ² koŋ⁶ koŋ³ ‘very much’ (only used when speaking to a child in a silly manner)

Group 3. Glottal base onsets

Feature change: [glottal]→[coronal]

ʔom³ tom⁴ ‘very hunchbacked’
ʔom⁵ tom² ‘very humid’ (weather)

Group 4. Coronal base onsets**Set 4.1: Voiceless coronal obstruent becomes coronal nasal (with same [back] feature)**

Feature changes in this set:

[-son]→[+son]

[-nasal]→[+nasal]

[-voice]→[+voice]

pu ¹ təŋ ¹ ʔnəŋ ¹ (also: pu ¹ təŋ ¹)	‘very swollen’ (e.g. an inflated basketball) (təŋ ¹ is not attested as a monosyllabic adjective)
tʰəŋ ¹ nəŋ ¹	‘very long’ (time)
tʰəŋ ⁵ nəŋ ⁵	‘very full’ (of food)
tʰak ⁷ nak ⁷	‘very broken’
tom ¹ ʔnom ¹	‘very dull’ (of a knife), also ‘dumb’ (of a person)
tow ⁵ ʔnow ⁵	‘very dull, slow’ (of ability to think)
xom ³ tom ⁵ ʔnom ⁵ som ⁵	‘very sour’ (higher intensity than xom ³ ʔnom ⁵) (ʔnom ⁵ is not attested as a monosyllabic adjective)
çəŋ ² tçoj ² ɲoj ²	‘very stupid’ (çəŋ ² ‘stupid’) (tçoj ² is not attested as a monosyllabic adjective)
pi ² tʰəŋ ² nəŋ ²	‘very fat’ (pi ² ‘far’) (tʰəŋ ² is not attested as a monosyllabic adjective)

The following intensifying expressions for ⁿdəm⁵ ‘short’ (height) bear close phonological resemblance. The consultant reports all four expressions, but it is unclear whether they should be classified as individual entries or “free variants” of a single entry. In addition, except for tu:t⁷, the bases are not attested as monosyllabic adjectives.

ⁿ dəm ⁵ tɛ:t ⁷ nɛ:t ⁷	‘very short’ (height) (ⁿ dəm ⁵ ‘short’ (height))
ⁿ dəm ⁵ tɛ ² nɛ ²	‘very short’ (height) (ⁿ dəm ⁵ ‘short’ (height))
ⁿ dʰɛn ³ tɔ:t ⁷ nɔ:t ⁷	‘very short’ (height) (ⁿ dəm ⁵ ‘short’ (height))
ⁿ dəm ⁵ tu:t ⁷ nu:t ⁷	‘very short’ (height) (ⁿ dəm ⁵ ‘short’ (height)); also the consultant reports that tu:t ⁷ can also function as an independent word meaning ‘short’)

Set 4.2: Voiceless coronal obstruent becomes a lateral

Feature changes in this set listed below by subset.

Subset 4.2.1:

Feature changes:

[-voice]→[+voice]

[-lat]→[+lat]

[-cont]→[+cont]

ɕəŋ² tət⁸ lət⁸ ‘very straight’ (can only refer to objects) (tət⁸ is not attested as a monosyllabic adjective)
 tɕɑ:t⁷ lʰɑ:t⁷ sʰɑ:t⁷ ‘very disorderly, messy’ (e.g., a messy dinner table) (tɕɑ:t⁷ is not attested as a monosyllabic adjective)
 xa:n³ tʰɑ:n² lʰɑ:n² ‘extremely red’ (higher intensity than xa:n³ tʰɑ:n²) (xa:n³ ‘red’)

Subset 4.2.2:

Feature changes:

[-voice]→[+voice]

[+strid]→[-strid]

sən⁴ sop⁷ lʰop⁸ ‘very flustered, hurried’ (sən⁴ ‘flustered, hurried’) (sop⁷ is not attested as a monosyllabic adjective)

Set 4.3: Nasal or lateral coronal becomes a voiceless coronal obstruent (or voiceless nasal)

Feature changes listed by subset below.

Subset 4.3.1:

[+voice]→[-voice]

[+nasal]→[-nasal]

[-strid]→[+strid]

[+son]→[-son]

The bases in this set are not attested as monosyllabic adjectives.

ⁿdəm⁵ ne² se² ‘very short (height)’ (ⁿdəm⁵ ‘short (height)’)
ⁿiŋ¹ sʰiŋ¹ ‘very filthy, unrespectable’
ⁿiŋ⁵ sʰiŋ⁵ ‘very filthy, unrespectable’
ⁿɔ⁵ ɕɔ⁵ ‘very filthy, unrespectable’
 noj² ɕoj² ‘very stupid’

Subset 4.3.2:

[+voice]→[-voice]

[+lat]→[-lat]

[-strid]→[+strid]

[+son]→[-son]

lət⁸ sət⁸ ‘Very blunt, stubborn’

Subset 4.3.3:

[+voice]→[-voice]

[+lat]→[-lat]

[+son]→[-son]

[+cont]→[-cont]

l^wɔn⁴ tɕɔn² ‘very blunt, dull’ (e.g. a knife)l^wɔn⁶ t^wɔn⁶ ‘very disorderly, messy’ləŋ⁵ təŋ⁴ ‘very careless’ləŋ⁵ tɕəŋ⁴ ‘very straight’ləp⁷ tɔp⁸ ‘very chatty, talkative’ (derogatory)

Subset 4.3.4:

[+voice]→[-voice]

[+lat]→[-lat]

[+son]→[-son]

[-nasal]→[+nasal]

[+cont]→[-cont]

l^wɑ:n⁶ ɲɑ:n⁶ ‘Very messy’ (e.g. a pile of books) (l^wɑ:n⁶ is not attested as a monosyllabic adjective)**Set 4.4 Voiced coronal obstruent onsets becomes another coronal obstruent**

Subset 4.4.1:

[+voice]→[-voice]

[-strid]→[+strid]

[-cont]→[+cont]

ʔdɛ:t⁷ sɛ:t⁷ ‘Very quiet’

Subset 4.4.2:

[-cont]→[+cont]

[-lat]→[+lat]

ʔdɛ:t⁷ lɛ:t⁷ sɛ:t⁷ ‘very quiet’ (higher intensity than ʔdɛ:t⁷ sɛ:t⁷)

Set 4.5: Coronal obstruent becomes an obstruent with different place of articulation

Feature changes listed by subset below.

Subset 4.5.1:

[-cont]→[+cont]

[coronal]→[dorsal]

tɕəm⁴ ɣəm⁴ ‘very fierce’

ɕəŋ² t^hu³ ɣu⁴ ‘very stupid’ (ɕəŋ² ‘stupid’) (t^hu³ is not attested as a monosyllabic adjective)

Subset 4.5.2:

[+voice]→[-voice]

[coronal]→[dorsal, +labial]

ʔda:ŋ¹ k^wa:ŋ² ‘Very bright’, esp. when light suddenly emerges (could be related Chinese *guang* ‘light; ray; bright’, but the Sui consultant views k^wa:ŋ² as a purely Sui intensifier and it is not otherwise attested in Sui. However, a similar word k^wa:ŋ¹ exists which means ‘bright’.)

Subset 4.5.3:

[+voice]→[-voice]

[coronal]→[dorsal]

[-nasal]→[+nasal]

tom¹ tɔ² ŋɔ² sɔ² ‘Very dull’ (of a knife), ‘very dumb’ (of a person) (tom¹ ‘dull’) (tɔ² is not attested as a monosyllabic adjective)

Subset 4.5.4:

[-cont]→[+cont]

[coronal]→[labial]

tɕoŋ³ ɸoŋ⁴ ‘very skinny’ (higher intensity than tɕoŋ³ tɕɛn¹)

tiw³ fiw⁴ ‘very dried up’ (higher intensity than tiw³ tʰɔ⁵)

Subset 4.5.5:

[-cont]→[+cont]
 [coronal]→[labial]
 [+nasal]→[-nasal]

ʔnəm¹ fəm² ‘very black/dark’

Subset 4.5.6:

[-cont]→[+cont]
 [coronal]→[labial]
 [-voice]→[+voice]

tse:k⁷ vε:k⁷ ‘very bright’

Subset 4.5.7:

[-cont]→[+cont]
 [coronal]→[labial]

ʔdʰa:n³ vʰa:n³ ‘very shiny/glittering’

Set 4.6: Tone change only

ʔda³ ʔdɔ:t⁷ ʔdɔ:t⁸ ‘very hard’ (ʔdɔ:t⁷ is not attested as a monosyllabic adjective)
 ʔna³ ʔna⁴ ‘very far forward, frontmost’
 ti³ ti⁴ ‘very small’ (same meaning as ti³ tʰu⁴)
 lən² lən⁶ lən³ ‘farthest behind’ (only used when speaking to a child in a silly manner)

Group 5. Fully reduplicated pairs

The expressions in this set, primarily ABB full reduplication pairs, are considered distinct from the rhyming/alliterative intensifiers since (a) these ABB expressions are usually clearly onomatopoeic, unlike the rhyming/alliterative intensifiers and (b) these expressions usually occur as verb modifiers, unlike rhyming/alliterative intensifiers which apparently cannot modify verbs. (c) Further, note that the fully reduplicated pairs attach to phonologically distinct syllables (e.g., ku¹ ‘to laugh’ → ku¹ ɕi⁵ ɕi⁵ ‘to laugh quietly’). Although rhyming/alliterative intensifiers occasionally attach to a phonologically distinct adjective (e.g., ʔda³ ‘hard’ → ʔda³ qət⁸ lət⁸ ‘very hard’), such examples are uncommon among the rhyming/alliterative type. Thus, the fully reduplicated set shown here appears to represent a separate process.

ʔaw¹ lo⁵ xæ:t⁸ xæ:t⁸ ‘sound of breathing’ (ʔaw¹ lo⁵ ‘to inhale’)
 ʔne³ na² na² ‘sound of crying’ (ʔne³ ‘cry’)
 m³ba³ m³ba³ ‘snow falling in sheets’ (verb modifier)
 n¹da¹ ya:k⁷ ya:k⁷ ‘many tears falling’ (n¹da¹ ‘eye’)

ja:p ⁷ ja:p ⁷	‘talks a lot, talkative’ (onomatopoeic; most commonly modifies verbs)
kiw ¹ <u>k^{wh}it⁷</u> k ^{wh} it ⁷	‘sound of whistling’ (kiw ¹ ‘whistle’)
ku ¹ <u>ci⁵ ci⁵</u>	‘to laugh quietly’ (ku ¹ ‘laugh’)
ku ¹ <u>xɑ² xɑ²</u>	‘to laugh loudly’ (ku ¹ ‘laugh’) (xã ² xã ² also has the sense ‘disrespectful’)
k ^w ɑ:n ¹ <u>lap⁷ lap⁷</u>	‘shining very brightly, strong light’ (k ^w ɑ:n ¹ ‘shining ₂ bright’) (?da:n ¹ ‘shining, bright’) also: k ^w ɑ:n ¹ <u>lip⁷ lip⁷</u> and ?da:n ¹ <u>lip⁷ lip⁷</u>
p ^h ɑ:t ⁷ <u>vɔ² vɔ²</u>	‘to bleed a lot or filled with blood’ (p ^h ɑ:t ⁷ ‘blood, bleed’)
p ^h ɑ:t ⁷ <u>liŋ¹ liŋ¹</u>	‘to bleed a lot or filled with blood’ (p ^h ɑ:t ⁷ ‘blood, bleed’)
sut ⁷ <u>ˈda:t⁷ ˈda:t⁷</u>	‘very scalding, scald a lot’ (higher intensity than sut ⁷ som ¹) (sut ⁷ ‘to scald, scalding, hot’)
tik ⁷ <u>men⁵ men⁵</u>	‘very full’ (tik ⁷ ‘full’) (men ⁵ may be related to Chinese <i>man</i> ‘full’)
tiw ⁴ <u>vɑ:m⁶ vɑ:m⁶</u>	‘sound of stomping feet’ (tiw ⁴ ‘to stomp’)
tow ⁶ <u>ju¹ ju¹</u>	‘very sharp’ (e.g., of a knife) (tow ⁶ ‘sharp’)

Group 6. Three-syllable rhyming expressions

In this section, the second and third syllable of three-syllable expressions are analyzed as base+reduplicant pairs. Neither of the syllables are attested as monosyllabic adjectives.

Set 6.1: Coronal lateral to voiceless coronal nasal

Features changed in this set:

- [+voice]→[-voice]
- [+lat]→[-lat]
- [+cont]→[-cont]
- [-nasal]→[+nasal]

p^hɑ:n⁶ l^hɑ:n⁶ ɲɑ:n⁶ ‘extremely messy’ (e.g. a disorderly pile of books)

Set 6.2: Coronal lateral to voiceless coronal stop

Features changed in this set:

- [+voice]→[-voice]
- [+lat]→[-lat]
- [+cont]→[-cont]
- [+son]→[-son]

mow¹ low¹ tow² ‘extremely crude/rash’ (mow¹ ‘crude/rash’)
 qom³ lom² tom² ‘sound of thunder’ (onomatopoeia) (included here for comparison)
 qu⁵ lu⁵ tu⁴ ‘very round’ (slightly different usage than qu⁵ lu⁵ su⁵; e.g. a person who has rolled into a ball; higher intensity than qu⁵ lu⁵)

Set 6.3: Coronal lateral to voiceless coronal fricative

Features changed:

[+voice]→[-voice]

[+lat]→[-lat]

[-strid]→[+strid]

[+son]→[-son]

ʔda ³ qəŋ ⁵ ləŋ ⁵ səŋ ⁵	‘extremely hard’ (ʔda ³ ‘hard’)
ʔda ³ qət ⁸ lət ⁸ sət ⁸	‘extremely hard’ (ʔda ³ ‘hard’)
ʔda ³ qe ⁵ le ⁵ se ⁵	‘extremely hard’ (ʔda ³ ‘hard’)
ʔde:t ⁷ lɛ:t ⁷ sɛ:t ⁷	‘extremely quiet’ (ʔde:t ⁷ ‘quiet’)
çəŋ ² tət ⁸ lət ⁸ sət ⁸	‘extremely stupid’ (çəŋ ² ‘stupid’)
mow ¹ low ¹ sow ¹	‘extremely crude/rash’ (mow ¹ ‘crude/rash’)
pi ² pu ¹ lu ¹ su ¹	‘extremely fat’ (pi ² ‘fat’)
pi ⁵ li ⁵ si ⁵	‘extremely messy’, also includes the meaning ‘narrow’, e.g., a messy, narrow room (pi ⁵ li ⁵ ‘messy’)
pʲaj ⁵ lʲaj ⁵ sʲaj ⁵	‘extremely messy’, e.g., messy writing or messy soup, not the same meaning as pi ⁵ li ⁵ si ⁵ or pʲa:n ⁶ lʲa:n ⁶ sʲa:n ⁶
pʲa:n ⁶ lʲa:n ⁶ sʲa:n ⁶	‘extremely messy’ (e.g. a disorderly pile of books)
pʲɛ:k ⁷ lʲɛ:k ⁷ sʲɛ:k ⁷	‘extremely dirty’ (pʲɛ:k ⁷ ‘dirty’)
pʲeŋ ² lʲeŋ ² sʲeŋ ²	‘extremely flat’ (pʲeŋ ² ‘flat’)
qo ⁶ lo ⁶ so ⁶	‘extremely bald’
qom ⁶ lom ⁶ som ⁶	‘extremely round’ (qom ⁶ lom ⁶ ‘round’)
qak ⁷ lak ⁷ sak ⁷	‘extremely mysterious’ (qak ⁷ lak ⁷ ‘mysterious’)
qok ⁸ lok ⁸ sok ⁸	‘very round-wheel-like’ (qok ⁸ lok ⁸ ‘wheel’(n.))
qu ⁵ lu ⁵ su ⁵	‘very round’ (qu ⁵ lu ⁵ ‘round’ (not wheels))
tɕa:t ⁷ lʲa:t ⁷ sʲa:t ⁷	‘very disorderly’
tɕoŋ ³ kʷem ³ lʲem ³ sʲem ³	‘extremely skinny’ (tɕoŋ ³ ‘skinny’)
xɑ:n ³ tʲɑ:n ² lʲɑ:n ² sʲɑ:n ²	‘extremely red’ (xɑ:n ³ ‘red’)

Set 6.4: Coronal nasal to voiceless coronal fricative

Subset 6.4.1:

Features changed in the onset:

[+nasal]→[-nasal]

[+son]→[-son]

[+voice]→[-voice]

[-strid]→[+strid]

[-cont]→[+cont]

ⁿ dəm ⁵ tɛ:t ⁷ nɛ:t ⁷ sɛ:t ⁷	‘extremely short (stature)’ (ⁿ dəm ⁵ ‘short’ (height))
ⁿ dəm ⁵ tɔ:t ⁷ nɔ:t ⁷ sɔ:t ⁷	‘extremely short (stature)’ (ⁿ dəm ⁵ ‘short’ (height); note similarity with ⁿ dəm ⁵ tɛ:t ⁷ nɛ:t ⁷ sɛ:t ⁷)
ⁿ dəm ⁵ te ² ne ² se ²	‘extremely short (stature)’ (ⁿ dəm ⁵ ‘short’ (height))
ⁿ dʲen ³ tɔ:t ⁷ nɔ:t ⁷ sɔ:t ⁷	‘extremely short (length)’ (ⁿ dʲen ³ ‘short’ (length))

ʔma ³ k ^w et ⁸ n ⁱ et ⁸ s ⁱ et ⁸	‘extremely soft’ (ʔma ³ ‘soft’)
pi ² t ⁱ əŋ ² n ^a ŋ ² s ⁱ əŋ ²	‘extremely fat’ (pi ² ‘fat’)
pu ¹ təŋ ¹ ʔnəŋ ¹ səŋ ¹	‘extremely swollen’ (pu ¹ ‘swollen’)
t ⁱ əŋ ¹ n ^a ŋ ¹ s ⁱ əŋ ¹	‘extremely long time’ (t ⁱ əŋ ¹ ‘long time’)
t ⁱ əŋ ⁵ n ^a ŋ ⁵ s ⁱ əŋ ⁵	‘extremely full’ (t ⁱ əŋ ⁵ ‘full’ (of food))
t ⁱ ak ⁷ n ^a k ⁷ s ⁱ ak ⁷	‘extremely broken’ (t ⁱ ak ⁷ ‘broken’)
tom ¹ ʔnom ¹ som ¹	‘extremely dull’ (tom ¹ ‘dull’)
tom ¹ t ^ɔ ² ŋ ^ɔ ² s ^ɔ ²	‘extremely dull’ (tom ¹ ‘dull’)
tow ⁵ ʔnow ⁵ sow ⁵	‘extremely slow (intelligence)’ (tow ⁵ ‘slow in intelligence’)
xom ³ tom ⁵ ʔnom ⁵ som ⁵	‘extremely sour’ (xom ³ ‘sour’)
çəŋ ² tɕoj ² n ^ɔ j ² çoj ²	‘extremely stupid’ (çəŋ ² ‘stupid’)
pi ² tet ⁷ net ⁷ set ⁷	‘extremely fat’ (pi ² ‘fat’)
xət ⁷ k ^w at ⁸ nat ⁸ sat ⁸	‘extremely lazy’ (xət ⁷ ‘lazy’)

Subset 6.4.2:

Features changed in the onset:

[+nasal]→[-nasal]

[+son]→[-son]

[-strid]→[+strid]

[-cont]→[+cont]

ʔɣaj³ n^aaj¹ sⁱaj¹ ‘extremely long (length)’ (ʔɣaj³ ‘long’ (length))

Set 6.5: Voiced labial fricative to voiceless coronal fricative

Features changed in this set:

[+voice]→[-voice]

[labial]→[coronal]

tse:k⁷ vɛ:k⁷ se:k⁷ ‘extremely bright’ (light)

ʔdⁱa:n³ vⁱa:n³ sⁱa:n³ ‘extremely shiny, glittery’ (ʔdⁱa:n³ ‘shiny, glittery’)

3.3 The No-Pattern Class

Intensifiers in this class show no apparent phonological connection between base and reduplicant.

ɕəm ¹ n ^d iŋ ¹	‘very muddled’ (referring to liquids, includes the sense ‘dirty’, cf., ɕəm ¹ ɕoj ¹)
qaj ² pət ⁸	‘very crooked’ (for physical objects)
qaj ² n ^ɔ ²	‘very crooked’ (esp. for describing a child or little animal in a humorous sense, e.g. a child walking in an unstable manner)
qaj ² t ⁱ ək ⁸	‘very crooked’
nu ¹ ʔnak ⁷	‘very smelly’ (general use)
pi ² n ^a ŋ ²	‘very fat’ (for both farm animals and people)

tɕɛn ³ ɲɛt ⁷	‘very tight’ (note that this intensifier is distinguished by vowel length from ɲɛ:t ⁷ in ɲɛ:t ⁷ ɲow ¹)
tik ⁷ nɔ̃p ⁸	‘very full’ (general use)
tʰu ³ ɲək ⁷	‘very sticky’ (most common; tʰu ³ ɲaw ³ ‘very sticky’ occurs rarely and indicates higher intensity)
xɑ:n ³ səŋ ¹	‘very red’ (general use, not derogatory; cf. xɑ:n ³ tʰɑ:n ²)
xom ³ pʰɑ:t ⁷	‘very sour’ (general use)
zən ¹ ɲək ⁷	‘very heavy’ (general use)
ʔɣaj ³ ɲɔ ³	‘very long’ (e.g., long rope or bamboo; more limited use than ʔɣaj ³ ʔɣəŋ ²)
ʔɣak ⁷ ʔbət ⁷	‘very wet’ (most common)
ʔɣak ⁷ ʔda:t ⁷	‘very wet’
n ^{du} ³ ɣoŋ ²	‘very hot’ (temperature)
lʰɛk ⁸ k ^h əŋ ³	‘very strong/healthy’ (esp. referring to a child’s health)
pɑ:k ⁸ lʰəŋ ²	‘very white’ (e.g. a line of white clouds)
pu ¹ ɲɔ ¹	‘very swollen’ (esp. swelling due to an insect bite)
xək ⁷ tɕɛ ⁵	‘very crowded, constricted’ (higher intensity than xək ⁷ tɕək ⁸)
k ^h iŋ ³ n ^{di} ²	‘very brown’ (often humorous usage)
ʔda:ŋ ¹ t ^h ɛŋ ³	‘very bright’ (e.g., a bright sunrise)
qom ² ʔu ²	‘having many protrusions, not level’ (has a gentler connotation than qom ² qɛj ² and qom ² qək ⁸)
ɕi ⁵ ʔɲej ¹	‘very dense and fine’ (ɕi ⁵ is not attested as a monosyllabic adjective)
ɲu ¹ n ^d ɛn ¹	‘very smelly’ (general use)

References

- Burusphat, Somsong, Xuechun Wei, and Jerold A. Edmondson. 2003. Sui (Shui) Chinese-Thai Dictionary, Mahidol University, Bangkok (Sui, Chinese, and English entries by Wei and Edmondson).
- Chao, Y.R. 1930. A System of Tone Letters. *La Maitre phonetique* 45/24-27.
- Edmondson, Jerold A., John H. Esling, Jimmy G. Harris, and James Wei. 2004. A Phonetic Study of the Sui Consonants and Tones. *Mon-Khmer Studies* 34/47-66.
- Edmondson, Jerold A. and David B. Solnit (eds.) 1988. *Comparative Kadai: Linguistic studies beyond Tai*. Dallas, TX: SIL.
- He, Jiquan, Pan Chaofeng, and Liu Zhiyang. 1992. *Shuizu minsu tanyou* (Exploring folk customs of the Sui people). Chengdu, China: Sichuan Minorities Publishing.
- Kennard, Catherine Hicks. 2004. Copy But Don’t Repeat: the Conflict of Dissimilation and Reduplication in the Tawala Durative. *Phonology* 21/3.303-323.
- Li, Fang-Kuei. 1948. The Distribution of Initials and Tones in the Sui Language. *Language* 24/2.160-167.
- Luo, Shiwu. 1992. *Sandu Shuizu Zizhixian Zhi* [Sandu Sui Autonomous County Report]. Guizhou, China: Guizhou People’s Publishing.
- McCarthy, John and Alan Prince. 1994. The Emergence of the Unmarked: Optimality in Prosodic Morphology. *NELS 24, Proceedings of the 24th Conference of the Northeast Linguistics Society*. University of Massachusetts, Amherst, 333-379.
- Prince, Alan and Paul Smolensky. 1993. *Optimality Theory: Constraint Interaction in Generative Grammar*. Ms., Rutgers University & University of Colorado, Boulder. Published 2004, Blackwell, Malden, Massachusetts and Oxford.

- Shuiyu Diaocha Baogao (Report on Investigations of the Sui Language). 1956. Ms.
- Stanford, James N. 2007. Sui adjective reduplication as poetic morpho-phonology. *Journal of East Asian Linguistics* 16/2.87-111.
- Thompson, Laurence C. 1965. *A Vietnamese Grammar*. Seattle: University of Washington Press.
- Wei, Xuechun. 1999. Shuiyu Xingrongci Houzhui Yanjiu [Research of Sui language adjective suffixes]. In *Shuijiaxue Yanjiu* Vol. 3. Guizhou, China: Guizhou Province Sui Association, 221-225.
- Yip, Moira. 1995a. Identity Avoidance in Phonology and Morphology. Ms, University of California, Irvine.
- Yip, Moira. 1995b. Repetition and its Avoidance: the Case of Javanese. In K. Suzuki and D. Elzinga (eds.), *Proceedings of South Western Optimality Theory Workshop 1995 Arizona Phonology Conference Volume 5: University of Arizona Department of Linguistics Coyote Papers*, 238-262.
- Yip, Moira. 1996. Lexicon Optimization in Languages Without Alternations. In Jacques Durand and Bernard Laks (eds.) *Current Trends in Phonology: Models and Methods*, Vol. 2. Salford: University of Salford Publications, 757-788.
- Yip, Moira. 1998. Identity Avoidance in Phonology and Morphology. In S. LaPointe, D. Brentari and P. Farrell (eds.) *Morphology and its Relation to Phonology and Syntax*. Stanford, CA: CSLI Publications, 216-246.
- Yip, Moira. 1999. Reduplication as Alliteration and Rhyme. *Glott International* 4/8.1-7.
- Yip, Moira. 2001. Segmental Unmarkedness Versus Input Preservation in Reduplication. In L. Lombardi (ed.), *Segmental Phonology in Optimality Theory*, Cambridge University Press, 206-230.
- Yu Jiongbiao, Wil Snyder, and Donna Snyder. 1994. Two initial grammatical discoveries in the Fucun speech of Libo Buyi. In Stuart R. Milliken (ed.), *SIL Occasional Papers on the Minority Languages of China* vol. 1, Summer Institute of Linguistics, Hong Kong, 1-11.
- Zeng, Xiaoyu and Yao Fuxiang. 1996. *Hanshui Cidian [Chinese-Sui Dictionary]*. Chengdu: Sichuan People's Publishing.
- Zhang, Junru. 1980. *Shuiyu Jianzhi [Sketch of the Sui language]*. Beijing: Minorities Publishing House.

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