CHAPTER 6

TONE

6.0 Introduction

This chapter describes the tone in the language.

6.1 Tone

To define tone, Pike (1949:3) defines "a tonal language as a language having lexically significant, contrastive, but relative pitch on each syllable". Burquest (1993:186) also asserts that "languages which make use of differences in pitch to differentiate lexical items are commonly referred to as tone languages."

Based on the two proposals above, Syriem is a tonal language in which every syllable carries one of the three underlying tones. In isolation, three tones have been established: rising (low to high rise), falling (high to low fall) and low tone (fairly level but downslide before a pause). The following tonal transcriptions and abbreviations are adopted in this study:

- [ă] R rising tone
- [â] F falling tone
- [à] L low tone

6.1.1 Rising tone

The rising tone starts from a little above mid voice range and rises and relatively falls to mid voice range. The pitch pattern is shown below.

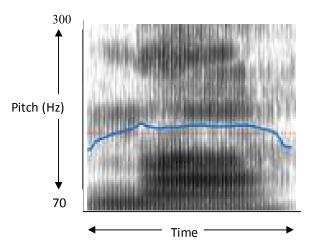


Figure 17: Pitch pattern of an open monosyllabic word with rising tone 'fish' /ŋǎa/

Rising tone occurs in both open and closed syllable. The open syllable has no restriction on the types of vowel. In closed syllables both short and long vowels can be found with nasals and stopped syllables.

Open rhyme	Nasals	Liquid Sto	pped syllables
rŭu 'bone'	t ^h ŭm 'three'	ŭy 'dog'	vŏk 'pig'
nŭu 'mother'	vŭun 'skin'	mŭul 'feather'	tsŏp 'suck'
ļǎa 'wing'	t ^h ĭiŋ 'wood'	t ^h ĭır 'iron'	lŭut 'enter'

In closed syllables with rising tone, the final consonant is restricted to voiceless stop series p, t, k, the nasal series m, n, y, lateral l, trill r and approximant y.

6.1.2 Falling tone

The falling tone starts from a fairly high voice range and gradually falls to a very lower voice range.

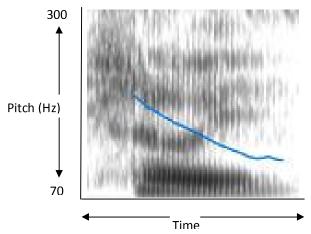


Figure 18: Pitch pattern of a close monosyllabic word with falling tone 'jhum' /lôy/

Falling tone can occur with both open and closed syllables. In closed syllables both short and long vowel can occur with nasals and stopped syllables.

Open rhyme	Nasal	Liquid	Stopped syllable	
sâa 'animal'	zôoŋ 'monkey'	k ^h ôoj 'bee'	hlôk 'brain'	
t ^h ûu 'word'	anthêŋ 'clear'	tsîil 'saliva'	êk 'excreta'	
t ^h îi 'blood'	indôn 'to ask'	nâar 'nose'	tûum 'who'	

6.1.3 Low tone

The low tone starts at a low position of the voice range and may fall slightly to extra low at the end point.

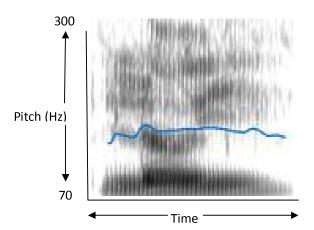


Figure 19: Pitch pattern of a close monosyllabic word with low tone 'medicine' /loy/

Low tone occurs in both open and closed syllables.

Open rhyme	Nasals	Liquid	Stopped syllables	
bùu 'cooked rice'	kùm 'year'	k ^h ùur 'cave'	nàp 'mucus'	
k ^h ò 'village'	sòlàm 'east'	p ^h ùuy 'dry'	mìt 'eye'	
nìı 'two'	ņàm 'push'	nùuy 'smile'	k ^h àt 'one'	

6.1.4 Contrasts

The occurrences of each of the three contrastive tones are provided below with the help of minimal and near minimal pairs:

ļî1	'wind'	în	'house'	ŋă 'fish'	lŏy 'jhum'
ļĭı	'pus'	ìn	'drink'	ŋâ 'five'	lòy 'medicine'
ļì	'to obstruct'	ĭn	'instrumental'	ŋàak 'to wait'	lôy 'take'

Figure 20 and 21 show the spectrographic image of three tones in Syriem in constrast.

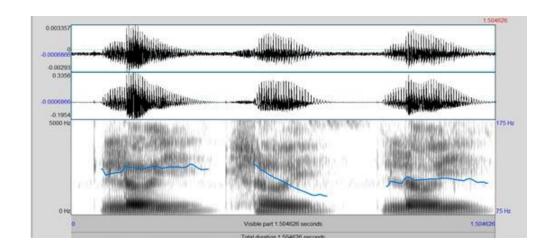


Figure 20: Syriem tone: $loo_{(R)}$ 'jhum' $loo_{(F)}$ 'take' $loo_{(L)}$ 'medicine'

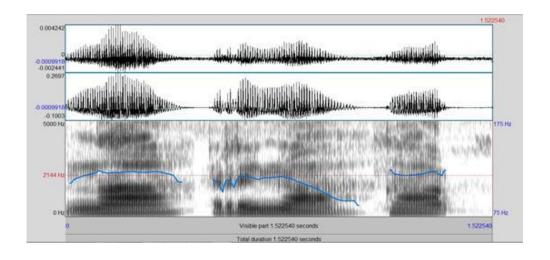
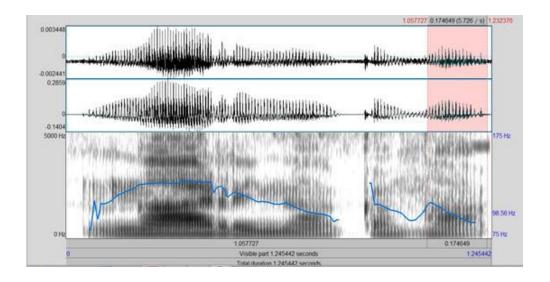


Figure 21: Syriem tone: ŋǎa (R) 'fish' ŋâa (F) 'five' ŋàak (L) 'wait'

Figure 22 is the spectrographic image of the three tones in a carrier phrase in which all the three tones occur. The carrier phrase is as follows: 'I waited for five fish'



narinaakanaak 'I waited for five fish'

Figure 22: Syriem tone in sentence

6.1.5 Tonal dissimilation

Among the three contrastive tones, low tone has two kinds of tone dissimilation patterns. The first tone dissimilation occurs when low tone verbs and nouns with live syllables are preceded by other low tone syllables, especially the pronominal markers (or subject agreement markers before a verb) such as /kà/ 'my (I)', /tà/ 'your (you)', and /à/ 'his/her/its (s/he, it)',the preceding tone is falling. This occurs whether the following syllable is closed or open. Only low tone allows this tone dissimilation pattern.

/khò/ 'village'

kâ khò 'my village'

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tâ khò 'your village'

â khò 'his/her village'

/mìt/ 'eye'

kâ mìt 'my eye'

tâ mìt 'your eye'

â mìt 'his/her eye'
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The second tone dissimilation occurs when low tone verbs and nouns in dead syllables are preceded by other low tone syllables, especially the pronominal clitics, the preceding tone stays the same and the second syllable is rising as in:

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/kàl/ 'kidney'

kà kǎl 'my kidney'

tà kǎl 'your kidney'

à kǎl 'his/her kidney'

/tàp/ 'to cry'

kà tǎp ee 'I cry'

tà tǎp ee 'you cry'
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In the case of low tone dissimilation, if the first syllable is closed there is no tone

dissimilation regardless of whether the second syllable is open or closed.

/vòk/ 'pig'

vòk ràat 'strong pig'

zâan vòk 'night pig'

6.1.6 Tone sandhi

According to Burquest (1993:195), "Tone sandhi is a morphophonemic

alternation among the tone phonemes of a language." Chen (2000:49) also

notesthat sandhi occurs because "tones associated with syllables in connected

speech tend to merge." Falam also has a tonemic alternation that requires sandhi

rules This section presents tone sandhi that occurs in rising tone and falling tones.

The sandhi form of tone will be marked with bold. Low tone undergo no sandhi

rule.

There is a tone sandhi rule which affects rising tone syllables ending with vowels

(open syllables). Although, there is no high tone in isolation, the rising tone of

such syllables is high and the vowel also becomes short in connected speech

regardless of the tone of preceding or following syllabes. Rising tone syllables

retain their underlying tone in isolation or in sentence final position.

Rule: $R \rightarrow H / _T$

/thĭı/ 'to die'

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à thǐi ăn thii 1Sg. die 1Pl. die He died. They died. thí à tì thí ăn tì die 1Sg. will die 1Pl. will He will die. They will die. thí màa ăn thí màa à 1Sg. die Neg. 1Pl. die Neg.

He is not dead. They are not dead.

Rising tone sandhi rule with closed syllables requires the following environments.

A rising tone becomes low when it occurs before falling tone.

Rule: $R \rightarrow L/_F$ rŏol 'food' ròol rîŋ kàn bàk food green we eat We eat green food.

But rising tone with closed syllable stays the same when it occurs before low tone as in:

rŏol 'food'
rŏol dìk kà bàk
food correct I eat

I eat the correct food.

When two syllables of rising tone come together in connected speech, a rising tone directly following another rising tone changes into a high tone.

Rule:
$$R \to H/_R$$
 /tsǔu tsǎaŋ/ \to [tsúu tsâaŋ] sugarcane segment 'segment of sugarcane'

When three syllables of rising tone come together in a phrase, the first two syllables undergo the L H pattern and the third syllable remains unchanged as in

Rule:
$$R R R \to L H R$$

/měeŋ ěŋ lŏoŋ/ \to [mèeŋ éŋ lŏoŋ]

cat yellow big 'big yellow cat'

When a preference is to be four syllables long, it creates a (syllableL syllableH) (syllableL syllableH) pattern. It is assumed that the sequence of the L H sandhi pattern of two rising tone syllables is basically derived from the rule that rising tone always becomes low before high tone and falling tone.

There is a tone sandhi rule which affects falling tone syllables with vowel finals (open syllables). The tone of such syllables becomes high (and the vowel shortening) when followed by a low tone syllable as in (34) and becomes low when followed by a high tone as in (35). No tone alternations are found when followed by any other tone syllables. Falling tone syllables retain their underlying rising tone in isolation or in sentence final position.

$\textbf{Rule} \colon F \to H \: / \: L__T$

/khâa/'to be bitter'

à khâa èe

3Sg. bitter Dcl.

It is bitter.

à **khá** thêy

3Sg bitter may

It may be bitter.

à **khá** màa

3Sg. bitter Neg.

It is not bitter.

Rule: $HL \rightarrow L/H__T$

/khâa/ 'to be bitter'

ăn khâa

3Pl. bitter

They are bitter.

ăn **khà** tì

3Pl. bitter will

They will bitter.

ăn khà thêy

3Pl. bitter may

They may be bitter.

ăn **khà** màa

3Pl. bitter Neg.

They are not bitter.

Low tone undergoes no tone sandhi. A rising tone open syllable becomes high when it occurs before any tone syllables. But a rising tone closed syllable becomes low when followed by another rising tone syllable, which itself becomes high. The rising tone converts a rising tone directly following another rising tone into a high tone. Falling tone open syllables become low when preceded by a high tone syllable and becomes high when preceded by a low tone. Falling tone closed syllables undergo no tone sandhi.

6.1.7 Tone distribution

This section provides tone distributions in a syllable. In Syriem a tone occurs on the whole syllable as a unit, of which the vowel is the peak. All three tones can occur with all vowels. The relation between tone and syllable structure is different according to its environment. Syllables retain their underlying tones in isolation. In other places some alternations of tones occur according to their neighboring tone. The following table illustrates tone distributions in a syllable.

Syllable				
Tones	Initial consonants	Open rhyme	Sonorant finals	Stop finals
Low tone	All consonants	Monophthong	mnŋ rlwj	p t k
		Long nucleus	mnŋ rlwj	
		Diphthong	mnŋ rlwj	
Rising tone	All consonants	Monophthong	mnŋ rlwj	
		Long nucleus	mnŋ rlwj	ptk?
Falling tone	All consonants	Monophthong	mnŋ rlwj	p t k
		Long nucleus	mnŋ rlwj	p t k
		Diphthong	mnŋ rlwj	p t k

Table 11. Tone distributions

As shown in the table above, all consonants are possible with all tones. Monophthongs, long vowels, and diphthongs can occur in the open rhyme of syllables with all tones. Two glides /w/ and /j/ significantly occur word finally in a syllable. Low tone never allows final stops with long nucleus and diphthong. Rising tone does not allow sonorant finals and final stops /p, t, k, ?/ only with a diphthong. Falling tone allows all finals with monophthongs, long nuclei and diphthong.