

CHAPTER 4

SYLLABLE STRUCTURE

4.0 Introduction

This chapter demonstrates the syllable structure in Syriem including internal constituents and the template. Also this chapter presents syllable and word structure, segmental distributions in a syllable, and processes conditioned by syllable structure.

4.1 Internal constituents and template

To present the internal structure of a syllable, Hyman (1975:188) asserts that “the syllable consists of three phonetic parts: (1) the onset, (2) the peak or nucleus, and (3) the coda”. Following this rule Syriem monosyllabic words can be displayed as in Figure 10.

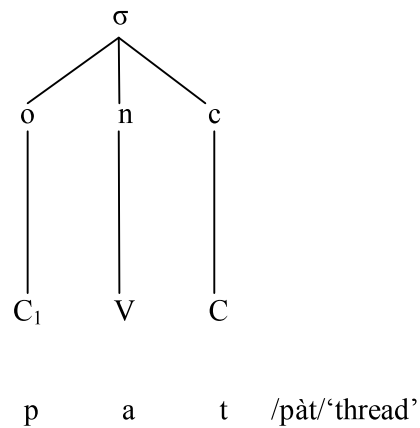


Figure 11: A syllable with coda

For phonological purposes, however, a further sub-grouping is relevant, namely (1) the onset, C_1 , and (2) the core or rhyme, consisting the phonetic peak and coda combined, V_1C_2 . Besides the CVC template, Burquest (2001:150) states that “every language has CV syllable which is considered to be universal but since a number of languages do not have a CVC syllable type, the coda position must be a subordinated syllable position. This, along with some other facts, has given rise to the notion of a syllable rhyme as an intermediate node in syllable structure”. In line with this structure the typical Syriem monosyllabic word can be analyzed as in Figure 11.

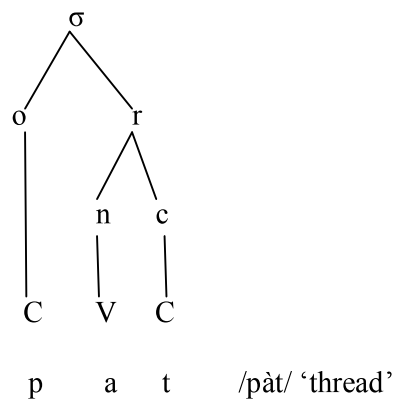


Figure 12: A syllable with rhyme

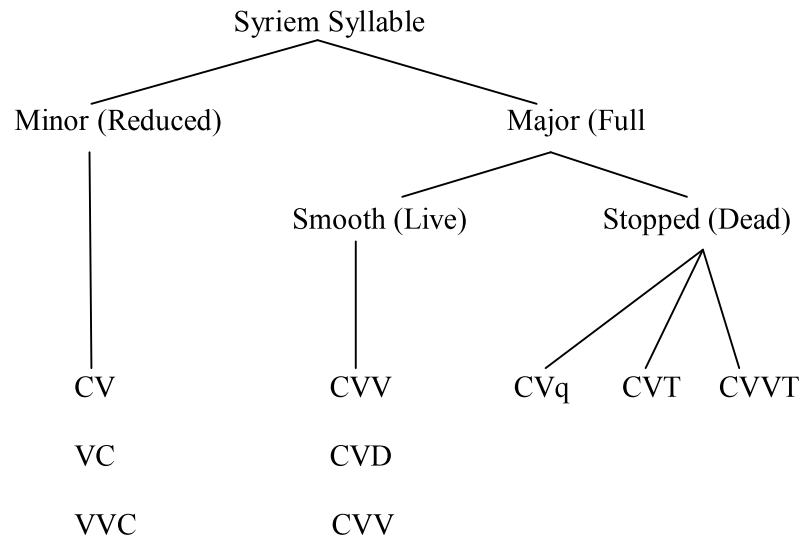
Based on the syllable structures discussed by the two linguists above, there are a total of eight syllable templates possible in Syriem as displayed in Table 3.

Lexeme	Gloss	Syllable Type
/in/	‘house’	VCT
/ôom/	‘chest’	VVCT
/âa/	‘locative’	VVT
/à/	‘his/her’	VT
/kà/	‘my’	CVT
/bêe/	‘bean’	CVVT
/pòp/	‘wound’	CVCT
/k ^h ûoŋ/	‘knit’	CVVCT

Table 3: Syriem syllable templates

As seen in Table 3, Syriem has an obligatory syllable type of V_1 , and an optional second vowel after an obligatory vowel $V_1(V_2)$, and can have up to one optional final consonant accompanied with an optional consonant $(C_1)V_1(V_2)(C_2)$. The syllable pattern $V_1(V_2)$ can be either long vowel (analyzed as two identical vowels) or diphthong. The T in Table 3 represents any tone that can occur in a syllable.

Words and morphemes are characterised by a set of minor syllables (prefixes or pre-syllables) followed by a major syllable. Figure 12 shows the division of syllable in Syriem.



(C=consonant, V=vowel, D=sonorant, q=glottal stop, T=stops)

Figure 13. Division of syllable

Since each syllable is a morpheme or a word, the following distinction is also made: a lexical morpheme (noun, verbs etc.) and grammatical morpheme (case, tense markers etc.). All lexical morphemes are phonological words, as are grammatical morphemes which are both full syllables and have a consonant onset. On the other hand, a preposed grammatical morpheme whose shape is CV or V will be referred to as a proclitic, while a postposed grammatical morpheme whose shape is VV or VC will be referred to as an enclitic.

4.1.1 Minor syllables

Like many other Tibeto-Burman languages—indeed, many other languages of the Southeast Asian area—some Kuki-Chin languages, such as Daai and Mro favour sesquisyllabic structure. That is major syllables are often preceded by minor

syllables. These minor syllables often have an epenthetic nucleus with a schwa-like vocalism as shown by a set of examples from So-Hartmann(2009:38).

Daai	Mro	gloss
m.jən	mə.ju	‘suck’
m.ləʔ	mə.lœ	‘vomit’
m.s ^h əp	mə.s ^h u	‘launder’

Syriem is characterized by a set of minor syllables followed by major syllables.

Syriem displays both CV and VC or VVC, where the vowel shape is either *i* or *ii*.

Table 4 shows minor syllables:

Prefix	words		kinds of prefix
in-	invaân	‘sky’	celestial body prefix
	inlîŋ	‘thorn’	plant prefix
sa-	sâkoôr	‘horse’	animal prefix
	sâloôy	‘buffalo’	.....
sɪ-	siäl	‘fox’	animal prefix
ɾɪ-	ɾiméy	‘tail’	-----
	ɾibaäl	‘flower’	.....
ka-	kâbeêŋ	‘cheek’	body part prefix
	kâdaâr	‘shoulder’	.....

ki-	kìzù	‘rat’	animal prefix
	kìruùl	‘snake’	.....
k ^h e-	k ^h emál	‘thigh’	body prefix
	k ^h ebuûr	‘knee’	.....
an-	ànnêm	‘low’	stative verb prefix
	ànsaân	‘high’	.....
va-	vàbù	‘birds nest’	bird prefix
	vàtsérík	‘sparrow’	.....
	vàtok	‘duck’	.....
a-	àkôŋ	‘to be thin’	stative verb prefix
	àdõŋ	‘shallow’	.....
ro-	ròtoòy	‘bamboo shoot’	plant prefix
aa-	aàhuũ	‘wet’	stative verb
	aàŋeěy	‘sharp’	.....
	aápâlõŋ	‘uncle’	kinship prefix

Table 4: Minor syllables

4.1.2 Major syllables

Unlike, minor syllables, major syllables have a more general distribution, occurring in all lexical morphemes that are not in a special position that is subject

to reduction. As shown in figure 12 above, major syllables can be either smooth or stooped.

	<i>Syriem</i>
<i>CVV</i>	<i>lû</i> ‘air’ <i>rúu</i> ‘bone’ <i>lúu</i> ‘head’
<i>CVD</i>	<i>sâm</i> ‘hair’ <i>ḡîḡ</i> ‘name’ <i>bèlʔ</i> ‘add’
<i>CVVD</i>	<i>soôm</i> ‘to invite’ <i>zoôr</i> ‘sell’ <i>suùn</i> ‘noon’
<i>CVT</i>	<i>bàk</i> ‘eat’ <i>bàt</i> ‘debt’ <i>nàt</i> ‘illness’
<i>CVVT</i>	<i>zaăp</i> ‘wave’ <i>naât</i> ‘sticky’ <i>maàk</i> ‘give up’

Table 5: Major syllables

4.1.2.1 Smooth syllables

A smooth(or live) syllable is defined as any syllable ending with a long vowel or a sonorant consonant /m,n,ŋ,l,r,w,j/. Smooth syllables ending with a vowel can have all three contrastive tones. Mostly, vowel finals in smooth syllables are usually long as provided in Table 5.

As an exception, the three syllables (possessive morphemes or subject agreement markers) /a/ ‘her, his, it (or s/he,it)’, /na/ ‘your (or you)’, and /ka/ ‘my (or I)’, which are always attached to following possessed nouns or verbs, have short vowels as already shown in Table 3.

Live syllables closed with sonorant finals can also occur with any tone and can have either long or short nuclei in Table 5.

4.1.2.2 Stopped syllables

A stopped syllable is any syllable closed with an oral stop, including a glottal stop. All of the three contrastive tones may occur with dead syllables but have different occurrence of their nuclei.

Dead syllables with low tone always have short nuclei as in:

/zàp/ ‘to swim’

/sik/ ‘to pinch’

/thàt/ ‘to kill’

Like oral stops, a syllable closed by a glottal stop is also analyzed as a dead syllable. This is because the occurrence of the glottal stop in syllable final positions functions similar to oral stops with low tone that does not allow long nucleus. It can have a diphthong but not a long vowel.

Dead syllables with rising tone also have long nuclei as in:

/tsoǒp/ ‘to suck’

/k^{he}ět/ ‘to shout’

/ŋaǎk/ ‘to wait’

Dead syllables with falling tone also have long nuclei as in:

/tsaât/ ‘to stop’

/ʈaâp/ ‘to winnow’

/ʁoôk/ ‘neck’

4.1.2.3 Onsetless syllables

Syriem also displays a handful of onsetless syllables as shown in Table 6.

	<i>Syriem</i>	<i>Gloss</i>
<i>VV</i>	<i>uû</i>	‘brother’
	<i>oô</i>	‘voice’

	<i>aâ</i>	‘locative’
<i>VD</i>	<i>ên</i>	‘look’
	<i>ân</i>	‘curry’
	<i>ûj</i>	‘dog’
<i>VVD</i>	<i>aâr</i>	‘hen’
	<i>aâj</i>	‘crab’
	<i>oóm</i>	‘chest’
<i>VT</i>	<i>êk</i>	‘excreta’
<i>VVT</i>	<i>aât</i>	‘cut, slash’

Table 6: Onsetless syllables

4.2 Word structure

In terms of the word structure, it is observed that Syriem permits more than one syllable, including disyllables, trisyllables, and quatrissyllables. Syriem is primarily monosyllabic like other Chin languages so there is an almost perfect one-to-one correspondence between the syllable and the morpheme. However, not all words are totally monosyllabic. Sometimes there is a highly complex word structure based on grammatical and semantic considerations. This study demonstrates up to quatrissyllabic words though Syriem may have more multi-syllabic words with affixation.

C. Trisyllabic word

The trisyllabic word pattern is rarely found in normal words. The Syriem trisyllabic word pattern can be seen as in Figure 13:

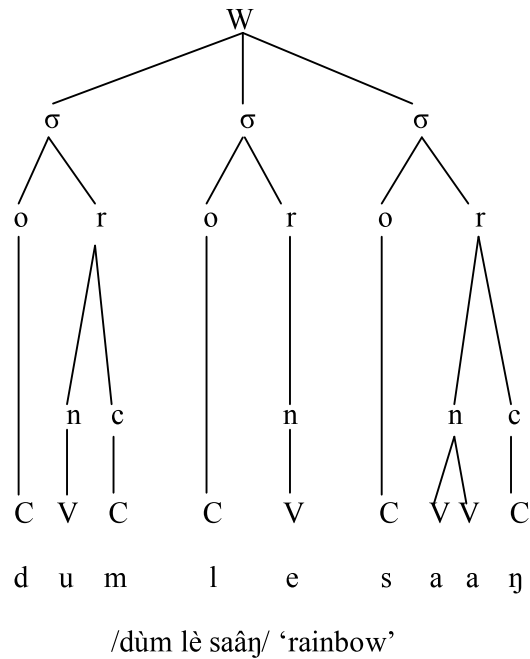


Figure 15. Trisyllabic word pattern

More examples are provided as in

/ây .mòm .vēt/ 'scorpion'

/pù .rùn .vaâr/ 'garlic'

/kà .zaaḡ .kòm/ 'back'

D. Quatrisyllabic word

Only a few quatrisyllabic words are found as in Figure 16.

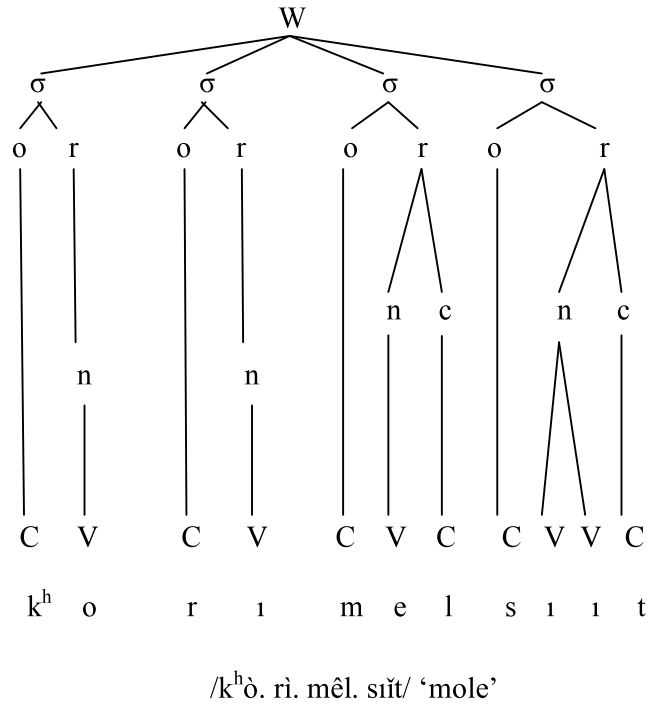


Figure 16. Quatrisyllabic word pattern

More examples are provided as in

/in .tsùk .tìr .paã/ ‘master’

/sà .mà .tà .raây/ ‘orange(fruit)’

4.3 Rhymes

Many of the interesting phonological patterns in Kuki-Chin languages involve syllable rhymes. These include distributional restrictions and alternations in

quantity. The complete rhyme inventory is a subset of the combinatorial possibilities between the syllabic nuclei and the syllabic codas. The following section presents the combinatorial possibilities syllabic nuclei and the syllable codas.

	<i>m</i>	<i>n</i>	<i>ŋ</i>	<i>l</i>	<i>r</i>	<i>w</i>	<i>j</i>	<i>p</i>	<i>t</i>	<i>k</i>	<i>ʔ</i>
<i>i</i>	im	in	iŋ	il	ir	iw	—	ip	it	ik	
<i>e</i>	em	en	eŋ	el	er	?	ej	ep	et	ek	eʔ
			eŋʔ			ejʔ					
<i>u</i>	um	un	uŋ	ul	ur	uw	uj	up	ut	uk	uʔ
<i>o</i>	om	on	oŋ	ol	or	ow	oj	op	ot	ok	oʔ
			oŋʔ								
<i>a</i>	am	an	aŋ	al	ar	aw	aj	ap	at	ak	
	amʔ		aŋʔ		arʔ						
<i>ii</i>	iim	iin	iiŋ	iil	iir	—	—	iip	iit	iik	
			iiŋʔ								
<i>ee</i>	eem	een	eeŋ	eel	eer	—	—	eep	eet	eek	
	eemʔ										
<i>uu</i>	uum	uun	uuŋ	uul	uur	—	—	uup	uut	uuk	
<i>oo</i>	oom	oon	ooŋ	ool	oor		ooj	oop	oot	ook	
			oolʔ								
<i>aa</i>	aam	aan	aanŋ	aal	aar	aaw	aaj	aap	aat	aak	
	aamʔ	aanʔ									
<i>ie</i>	iem	ien	ieŋ	iel	ier	iew	—	iep	iet	iek	

uo uom uon uoŋ uol uor — — uop uot uok

Table 7: Rhyme inventory of Syriem full syllables

4.4 Segmental distributions in syllable

According to the inventory of consonant and vowel phonemes proposed in section 3.1 and 3.2 Syriem has 26 consonants and 5 vowel phonemes which can occur either long or short. This section describes segmental distribution patterns of consonant-vowel sequences, ambiguous segments and sequences, vowel-vowel sequences, vowel length distributions, monophthong distributions, and diphthong distribution.

4.4.1 Ambiguous consonant determinations

The phoneme /ts/ is interpreted as occupying a single consonant position. This single consonant interpretation is called for because the only unambiguous word-initial onsets in Syriem are single consonants. There are no unambiguous clusters like /st/, /kt/, and /pl/ for which an interpretation as a cluster is justified. Therefore, they can best be analyzed as affricates because this keeps the syllable template simpler. Consonant clusters are not permitted.

4.4.2 Consonant-vowel distributions

There is no heavy restriction on the co-occurrence of initial consonants with vowels. Almost all consonant phonemes can appear in a syllable initial position with monophthongs as well as with diphthongs except the glottal stop /ʔ/. In syllable final position the unreleased allophones [p̚, t̚, k̚] of stops /p, t, k/, voiced

nasals /m, n, ŋ/, voiced lateral /l, r/, approximants /w, j/, and glottal stop /ʔ/ occur as displayed in Table 8.

	Labial	Alveolar	Velar	Palatal	Glottal
Glottal stop					ʔ
Voiced nasals	m	n	ŋ		
Voiced trill		r			
Voiced lateral		l			
Approximants	w			j	

Table 8: Final consonant phonemes

4.4.3 Vowel- vowel sequences

Syriem vowel sequences are displayed in Table 9.

	i	e	a	u	o
i	+	+			
e		+			
a			+		
u				+	+
o					+

Table 9. Vowel sequence

4.4.4 Vowel length distributions

In Syriem, open syllables always have vowel length phonetically, but this is never contrastive, while vowel length is contrastive in closed syllables. Below is evidence for vowel length contrasts in Syriem.

/i/ : /ii/

/tsiŋ/ ‘regularly’ /tsiîŋ/ ‘offspring’

/sim/ ‘south’ /siîm/ ‘close(eyes)’

/kir/ ‘to curl’ /kiîr/ ‘to return’

/e/ : /ee/

/tèt/ ‘kick’ /teêt/ ‘congested’

/zèp/ ‘insert tightly’ /zeêp/ ‘whipping’

/a/ : /aa/

/kàŋ/ ‘fry’ /kaâŋ/ ‘barn’

/hàm/ ‘grab’ /haâm/ ‘yawn’

/p^hàn/ ‘knit’ /p^haâŋ/ ‘banana bunch’

/u/ : /uu/

/sùn/ ‘poke/pierce’ /suûn/ ‘noon’

/pùt/ ‘carry’ /puût/ ‘spring’

/k^hùp/ ‘upside down’ /k^huûp/ ‘knee’

/o/ : /oo/

/sòm/ ‘ten’ /soôm/ ‘to invite’

/kòy/ ‘bend’ /koôy/ ‘hook’

/zòŋ/ ‘to search’ /zoôŋ/ ‘monkey’

4.4.5 Vowel length constraint

As stated already in section 4.4.4, Syriem has length contrasts in closed syllables but there is a constraint against long vowels closed with glottal stop. Although the occurrence of glottal stop is limited to the final syllable it cannot occur with long or identical vowels.

4.4.6 Monophthong distributions

Monophthongs can occur word initially, word medially and word finally.

4.4.7 Diphthong distributions

This analysis proposes that Syriem has two diphthongs /ie/ and /uo/. They can occur word initially, word medially and word finally like monophthongs. In live syllables, diphthongs occur with the three contrastive tones. Diphthong distribution in dead syllables permits only falling tones.