

CHAPTER 5

MORPHOPHONEMICS

5.0 Introduction

Burquest (2001:81) states that “when the sounds of morphemes vary as a result of being adjoined to other morphemes, the pattern is referred to as morphophonemics.” Burquest distinguished three types of morphophonemic alternation: phonologically conditioned alternation, lexical alternation, and morphologically conditioned alternation.” In Syriem, there may not be a direct correspondence to Burquest’s theories, but there are phonologically conditioned alternations and lexical alternations which will be described.

5.1 Phonologically conditioned alternations

In phonologically conditioned alternation, a sound undergoes changes due to the influence of the adjoining sound. In Syriem, phonologically conditioned changes in morphemes follow certain rule. These rules can mostly be seen in compound nouns and verbs. The alternations include vowel shortening, deletion and assimilation.

5.1.1 Vowel shortening (VS)

By the rule of vowel shortening, CVV syllables often become CV in context. Whether VS will occur depends on three factors: (a) the lexical vs. grammatical

status of the following vowel-initial morpheme; (b) the syntactic configuration in which the CVV is found; (c) the underlying form (or historical origin) of the CVV.

5.1.1.1 Noun stems

In Syriem, any open syllable is underlyingly (or phonemically) long. There is a process that shortens long vowels. The alternation in noun stems is limited to common nouns that have an open syllable when they occur as the first syllable of a compound word. There is no alternation of noun stems for closed syllables. CVV nouns tend to shorten before an adjective, a numeral, and the plural marker *hèy* as well as in noun-noun possessives and compounds.

/VV/ → /V/ __, in a compound word

ηaa + kooy – ηakooy ‘fishtrap’

fish + trap

ηaa + ruu – ηaruu ‘fish bone’

fish + bone

vaa + buu – vabuu ‘birdnest’

bird + nest

vaa + ļaa --vaļaa ‘bird wing’

bird + wing

roo + intsuj – rointsuj ‘bamboo roof’

bamboo + roof

roo + tooy – rotooy ‘bamboo shoot’

bamboo + shoot

The CVV nouns shorten before a numeral and the plural marker *hèy*.

vaa ‘bird’

va te ‘small bird’

va nii ‘two birds’

va hey ‘birds’

va ɭaa ‘bird wings’

va buu ‘birds nest’

CVV adjectives also shorten their vowel in the same contexts:

va taa niɪ ‘two good birds’

va taa hey ‘good birds’

Vowel shortening does not occur before the postposed demonstratives:

vaa hii ‘this bird’

vaa soo ‘that bird’

Multiple CVV nouns in a possessive or compound relation, if unmodified, will shorten: *vă lă rìu* ‘birds wing bone’. An adjective modifier of the first noun will similarly undergo VS: *thèy khà khǔoŋ* ‘bowl of bitter fruit’. While these examples show that the modifier on the first noun can undergo shortening, VS will never apply if the modifier is a numeral or plural *hey*: *vă hèy bâu* ‘the birds nest’.

A noun or adjective which is final in its noun phrase will not shorten before a subject marker or another noun phrase: *mǔu ŋaă kà pèk eê* ‘I gave the hawk a fish’.

VS will apply whether the following lexical morpheme begins with a consonant or with a vowel: *vă in* ‘bird house’, *ŋă ɛŋ* ‘green fish’. On the other hand, VS will not apply before a vowel-initial enclitic such as the plural possessor marker *ùu*: *kà vǎa ùu* ‘our bird’, *nà khò ùu* ‘your (pl.) village’. VS also does not apply before case markers: *zǔu in* ‘mouse (ergative)’, *lǔu in* ‘with the head (instrumental)’, *khò aâ* ‘in the village (locative)’.

CVV nouns which have either falling or rising tone in Syriem systematically undergo VS where the syntactic conditions are met: *kǔ* ‘horn’, *kǐ tè* ‘small horn’; *hǎa* ‘tooth’, *hǎ thùm* ‘three teeth’.

In addition to the low tone CVV nouns which resist VS is a class of F and R tone personal nouns eg. *nûu* ‘mother’, *pǔu* ‘grandfather’. The following shows that

there is shortening when the nouns are followed by an adjective or number, whether preceded by a possessive proclitic or not:

nũ tàa	‘good mother’	nũ ni	‘two mothers’
kà nũ tàa	‘my good mother’	à nũ ni ùu	‘our two mothers’
pû loòn	‘big grandfather’	à pû loòn	‘his big grandfather’
pû nû	‘two grandfathers’	à pû nû uù	‘their two grandfathers’

As seen in the following examples, these two nouns nûu ‘mother’, pûu ‘grandfather’ and other CVV personal nouns resist VS when the noun + noun combination is in turn preceded by a possessive proclitic:

nûu	kà nûu mêen	‘my mothers cat’
păa	kà păa khùt	‘my fathers hand’
pûu	kà pûu îñ	‘my grandfathers house’
pûi	kà pûi mâay	‘my grandmothers face’

5.1.1.2 Primary verb stems

In Syriem, verbs in open syllables also have shortening of their vowel length in connected speech.

/hôo/ ‘to come’

hò kà tí

come I will

I will come.

/thôo/ ‘to do’

kà thò rò

I do imp.

I do

The phonological alternation of verb stems occurs only with open syllables where the vowel length is shortened. This verb stem alternation occurs in primary stem forms in main clause followed by any syllable in connected speech. Verbs with rising tone have no shortened form.

5.1.1.3 No VS across major constituents

VS does not apply to words that come together across major constituents. A CVV noun will therefore remain long if followed by a subject marker or by a noun in another noun phrase: *văa môot kà pèk êe* ‘I gave a bird a banana.’

5.1.2 Resyllabification

Syriem does not allow two vowels from adjacent syllables to come together to form a vowel sequence. Therefore, when two vowels come together because of certain grammatical processes, one of the vowel is deleted to break up the vowel sequence.

5.1.3 Deletion

There is another process which effects the changing of syllable structure. Syriem also has a vowel deletion pattern in which initial vowel of adjacent prefix and other bound morphemes are deleted.

When the adjectival prefix which begins with /a/ is compounded with another noun which ends in a vowel or a glide, the /a/ of the adjective gets obligatorily deleted to break down the vowel sequences in Syriem. This is a result of historical morphological process.

rôol+àtsîer → rôolàtsîer ‘good friend’

(friend+good)

ûy+àthăa → ûythăa ‘fat dog’

(dog+fat)

kêel+à bân → kêelbân ‘white goat’

(goat+white)

5.1.4 Assimilation

In Syriem, the declarative marker ee and locative marker aa respectively assimilates the place of articulation of the preceding sound depending on the phonological shapes of the last segment of the word to which it is attached.

The declarative marker *ee*: The declarative marker *ee* is realised as *ee* if the verb ends in vowels, *mee* if the verb ends in bilabial consonants, *nee* or *lee* if the verb ends in alveolar consonants. Each of these is illustrated below.

à-khaa-ee → a-khaa-ee
 ‘It is bitter’

à-lum-ee → a-lum-mee
 ‘It is sweet’

The locative marker *aa*: In Syriem, the locative is realised as *maa* when it occurs in stem/word that ends in bilabial consonants, *naa* or *laa* occurs in stem/word that ends in alveolar consonants and *ɲaa* occurs in stem/word that ends in velar consonant.

sàm+àa (hair+Loc) gàmàa ‘in the hair’

bêel +àa (pot + Loc) bêellàa ‘in the pot’

în+àa (door+Loc) înnàa ‘in the house’

bâ:ŋ+àa (wall+Loc) bâ:ŋàa ‘on the wall’

5.2 Lexically conditioned alternations

In order to study lexically conditioned alternations, it is necessary to know that Syriem verbs have two stems, like other Kuki-Chin languages . Nouns do not have

two stems. This analysis will use the terms “primary” and “secondary” to refer to the two different verb stems. The primary verb stem form is found primarily in topic focus (Osburne 1975), independent (Chhangte 1993) or main clauses and the secondary verb stem form is found in non-focus (Osburne 1975), dependent (Chhangte 1993) or subordinate clauses. The occurrence of these stems is governed by grammatical conditions, yet they are phonologically related; this relationship is not fully researched here as the focus of this thesis is phonological. The two sets of stems are always phonologically related, and regular patterns of alternations are observed. In the Syriem verb stems, some stems remain unalternated with only their tone pattern alternating in the secondary stems. The segmental alternations in secondary verb stems include nasal alternation and stop alternation.

5.2.1 Nasal alternation

This alternation is between a final velar nasal with the primary stem and an alveolar nasal with the secondary stem.

$/ŋ/ \rightarrow /n/$

Primary stem	Secondary stem	Gloss
sôoŋ	sôon	‘to cook’
sîŋ	sîm	‘to cover’
sûuŋ	sûun	‘to pour’

tàŋ	tàn	‘to participate’
lêŋ	lên	‘to choose’
hûŋ	hûon	‘to open’

5.2.2 Stop alternation

Moira Yip (2003:18), in her *Phonological markedness and allomorph selection in Zahao* states that “all vowel final primary stems add a final /-t/ in the secondary stem”. Syriem also has final addition, although some verb stems have no addition of final stops, and /-k/ also appears in secondary stems. These stop alternations are called Epenthesis in Osburne’s (1975) analysis of Zahao. Final /-t/ additions are shown below.

Primary stem	Secondary stem	Gloss
taa	tat	‘to be good’
t ^h aa	that	‘to kill’
baa	bat	‘loan’
naa	nat	‘pain’
l _u u	l _u u	‘to fall’

Final /-t/ additions are shown below.

Primary stem	Secondary stem	Gloss
pee	peek	‘to give’
ɲaa	ɲaak	‘to wait’
ruu	ruuk	‘to steal’

The primary verb stems with final stops /p, t, k/ also alternate with a glottal stop in their secondary stem forms as given below.

Primary stem	Secondary stem	Gloss
op	oʔ	‘to incubate’
zaap	zaʔ	‘to wave(fan)’
sook	soʔ	‘to go out’
hok	hoʔ	‘to scold’
tiit	tiʔ	‘to be afraid’
aat	aʔ	‘to reap’

To say that Syriem has final epenthesis means there has to be a consistent rule. But the insertion of final /-t/ or /-k/ or /ʔ/ is not clearly predictable. Looking at all examples show that Syriem has no consistent epenthesis rule but has only stop alternations. The simplest generalization is that a falling tone syllable with vowel final allows the final /k/ addition, while rising adds a final /t/, and low sometimes

adds /t/, sometimes /ʔ/. Besides, vowel length in primary stems becomes short when the glottal stop is added or when syllable finals are glottalized in the secondary stem forms. However, primary verb stems with diphthongs can survive without alternating their vowel qualities in secondary stems.

5.2.3 Glottalization

Glottalization is a general term for any articulation involving a simultaneous glottal constriction, especially a glottal stop. In Syriem, a primary verb stem with a low tone that ends with a sonorant final /w, j, r, l/ is glottalized in its secondary form.

Primary stem	Secondary stem	Gloss
bèel	bèlʔ	‘to add’
dàay	dàyʔ	‘to be cold’
ɲàar	ɲàrʔ	‘to be hard’

As seen in the examples above, glottalization never allows a long nucleus in secondary stem forms. Also glottalization is associated with low tone syllables with non-nasal sonorant finals. Rising tone and falling tone syllables are not glottalized in their secondary stem forms.

5.2.4 Vowel shortening

As seen already in 5.2.2, all of the secondary verb stems affected by glottalization also undergo vowel shortening. Another rule of vowel shortening occurs when a low tone syllable with a nasal final that has a long nucleus in primary verb stem appears in the secondary stem form.

Primary stem	Secondary stem	Gloss
tsùum	tsûm	‘to punch’
thìŋ	thîŋ	‘to shiver’
dòon	dôn	‘to answer’

There is no vowel shortening with other tones.

5.2.5 Tonal Alternations

Many tones of the primary stems alternate when they appear in secondary stem forms in ways that are not conditioned by their environment.

5.2.5.1 Low tone alternation

Low tone verbs with a nasal final consonant have falling tone in their secondary stem form regardless of whether the primary stem nucleus is long or short.

Primary stem	Secondary stem	Gloss
dòon	dôn	‘to answer’

thìŋ	thîŋ	‘to shiver’
zèŋ	zêŋ	‘to beat’
yùm	yûm	‘to believe’

5.2.5.2 Rising tone alternation

Rising tone verbs with open syllables, especially /i/, /a/, and /u/ finals, have low tone in their secondary stem form.

Primary stem	Secondary stem	Gloss
thǎa	thàt	‘to kill’
lǔu	lùt	‘to fall’
thǐ	thì?	‘to die’

A rising tone verb closed by a sonorant or an oral stop in the primary stem also has low tone in its secondary stem.

Primary stem	Secondary stem	Gloss
sǒom	sòom	‘to invite’
běek	bèek	‘to speak’
tsǎat	tsàat	‘to stop’

As shown in the above examples, rising tone is generally low in secondary stem whether the syllable is smooth or stopped. Rising tone syllables with vowel finals /e/ or /o/ have falling tone in their secondary stem form.

5.2.5.3 Falling tone alternation

Many falling tone verbs with a primary stem closed with a stop have a low tone in their secondary forms with accompanying vowel shortening and glottalization.

Primary stem	Secondary stem	Gloss
sâat	sàʔ	‘to chop’
dêet	dèʔ	‘to ask’
zêek	zèʔ	‘to write’

The following table illustrates a summary of the Syriem tone alternations.

Tone	Primary stem	Secondary stem
1 Low (L)	L	F
2 Rising (R)	R	L/F
3 Falling (F)	F	L

Table 10: Summary of tone alternation

Low tone syllables in primary stems alternate into falling tone. Low tone syllables with stop /p, t, k/ finals and sonorant (but not nasal) finals do not alternate their tones in secondary stems. Rising tone syllables, both open and closed with sonorants and stops, in primary stems alternate into low tone in secondary stems. Rising tone syllables with vowel finals (e and o) alternate with falling tone. Falling tone syllables with stop /p, t, k/ finals in primary stems alternate with low tone in secondary stems.