

# The Metrical System of a Bedouin Hijazi Dialect

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*This paper gives an account of stress patterns and parameters in an understudied Bedouin dialect, Bani Sulaim dialect, BSD. This dialect is spoken in the Hijaz region in Saudi Arabia. The analysis is based on Metrical Theory as represented in Hayes (1995). The speech of three native speakers of BSD is examined where words with different morphological and phonological shapes are analyzed. The data show that BSD is a moraic iambic dialect with (L̄L̄), (L̄H) and H̄ foot inventory. This makes BSD different from the larger moraic trochaic dialects spoken in neighboring cities, such as Urban Hijazi dialect. In BSD, final CV(C) syllable is extrametrical, and stress is limited to one of the last three syllables, which is enforced by End Rule Right principle. Final syllable extrametricality prevents stress from occurring on final syllable. Stress in BSD is assigned only to bimoraic words. This weight requirement is manifested in the absence of monosyllabic words with CVC and CV syllable shapes. CV syllable is monomoraic, while CVC syllable word finally is not bimoraic since the coda does not receive a mora due to the absence of weight by position rule, WBP. The bimoraic weight requirement suggests that degenerate feet are prohibited in BSD, however, final syllable extrametricality can render certain disyllabic words monomoraic which are repaired through revoking final syllable extrametricality. The interaction between final syllable extrametricality and disyllabic words without a heavy syllable result in surface trochaic feet (L̄L̄).*

**Keywords:** *iambic stress, Bedouin dialect, Hijazi*

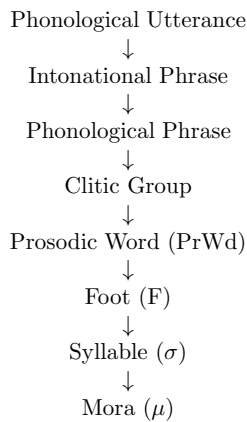
## 1 Introduction

Different dialects are spoken in the Arabian Peninsula. These dialects can be generally divided into Sedentary and Bedouin dialects. The two groups have a number of linguistic differences. Previous linguistic works have focused more on Sedentary dialects (e.g., Abu-Mansour 1987, 2011; Jarrah 1993; Al-Mohanna 1994, 1998; Al-Shehri 1995; Kabrah 2004). Bedouin dialects, on the other hand, have received less attention. Available studies that examined Bedouin dialects discussed syntactic as well morphological structures (e.g., Il-Hazmy 1975; Al-Sweel 1981; Albalawi 2015). Phonological and metrical systems in Bedouin dialects have not been examined in many studies (Al-Mozainy 1981; Al Solami 2007, 2020; Alqahtani 2014; Alhuwaykim 2018).

Bani Sulaim dialect, henceforth BSD, is among the Bedouin dialects spoken in the Arabian Peninsula. Bani Sulaim is one of the major tribes in the Arabian Peninsula and in other parts of the Middle East. In Saudi Arabia, members of this tribe have resided for hundreds of years in Wadi Starah (Starah Valley) in the Hijaz region, which is located in the western part of Saudi Arabia. Starah Valley is more than 75 km long and is located 180 km to the north of Jeddah city adjacent to the road between Jeddah and Madinah cities. The area surrounding Starah Valley is inhabited by many other Bedouin dialect speakers. These Bedouin dialects, including BSD, share several linguistic features but phonological studies are very scarce in this regard, see Al-Mozainy (1981) for a phonological description of a similar Bedouin dialect.

This paper aims to analyze stress patterns in BSD implementing the same framework in Hayes (1995), with reference to the Prosodic Hierarchy (Selkirk 1980; McCarthy & Prince 1986) as in (1). This study contributes to the literature of Bedouin dialects in general and to the understanding of metrical systems of Bedouin dialects in specific. With the decline in the numbers of Bedouin dialect speakers due to language contact with other non-Bedouin varieties, this study also documents stress patterns of a Bedouin dialect that is not found in non-Bedouin varieties.

(1) Prosodic Hierarchy ( Selkirk 1980; McCarthy & Prince 1986; Roca 1994)



## 2 Data source

The data used in this study were collected from three speakers of BSD, two males and one female between the ages of 55 and 71. Words with different syllable shapes and morphological structures were recorded and then analyzed for stress patterns, see Appendix A for some examples.

Locating speakers of BSD who have not been influenced by the contact between BSD and other dialects was challenging. The main reason for this is the relocation of most BSD speakers from Starah Valley to neighbouring cities to improve their living conditions. This movement to major cities in the region created a situation where the contact between Bedouin and non-Bedouin dialects is possible. The contact between Bedouin and non-Bedouin dialect speakers was suggested in a number of studies to result in a shift in Bedouin dialect speakers toward non-Bedouin varieties (e.g., Al-Shehri 1995; Al Solami 2007, 2020; Miller et al. 2007; Al-Essa 2009). Therefore, to include only true representers of BSD, this study included those who spent the majority of their lives in an area where only BSD was spoken.

## 3 Stress patterns in BSD

The data of this study suggest that BSD is a quantity sensitive dialect and stress position is determined by syllable weight, and that stress is limited to one of the last three syllables. This is similar to stress in the majority of Arabic dialects (e.g., McCarthy 1980; Irshied 1985; McCarthy

& Prince 1990; Sakarna 1990; Watson 2011). The following stress patterns in (2) are found in BSD.

(2) Stress patterns in BSD

a. Stress final superheavy syllable CV:C and CVCC syllable<sup>1</sup>,

i. Final CV:C syllable

[ki.rí:m]	‘generous’
[ka.má:l]	‘completeness’
[dʒa.má:d]	‘non-living thing’
[sa.ná:m]	‘camel hump’
[ru.má:d]	‘ash’
[til.mí:ð]	‘student’
[gi.rí:b]	‘close’
[si.lí:m]	‘unharmed’
[ri.bí:ʃ]	‘spring’
[mi.ká:n]	‘place’

ii. Final CVCC syllable

[ri.kíbt]	‘I/you (masc. sg.) rode’
[sa:.fárt]	‘I/you (masc. sg.) travelled’
[la:.ʃábt]	‘I/you (masc. sg.) played with’
[sa:.máht]	‘I/you (masc. sg.) forgave’
[mak.tábk]	‘your (masc. sg.) office’
[si.míʃt]	‘I/you (masc. sg.) heard’
[ti.ʃíbt]	‘I/you (masc. sg.) got tired’
[tʃi.ʃíftʃ]	‘I/you (masc. sg.) got bored’
[sʰa.námk]	‘your (masc. sg.) statue’
[ʁa.námk]	‘your (masc. sg.) sheep’

b. in the absence of final superheavy syllable, stress heavy CV: syllable or CVC syllable in the penultimate or the antepenultimate position,

i. Heavy penultimate syllable:

[di.zá:.ʒah]	‘a chicken (fem.)’
[dʒi.má:.ʃah]	‘group’
[ʃa.bá:.jah]	‘gown’
[ʃa.lá:.mah]	‘sign’
[ħa.má:.mah]	‘a pigeon’
[ri.kíb.tin]	‘you (fem. pl.) rode’
[li.bís.tum]	‘you (masc. pl.) wore’
[ʃi.ríb.na]	‘we drank’

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<sup>1</sup> Syllables with geminates also occur in BSD. However, geminates are not discussed in this study.

[ti.ʕib.na] 'we got tired'  
[tʕi.fif.ti] 'you (fem. sg.) got bored'

ii. Heavy antepenultimate syllable:

[sá:.fa.rat] 'she travelled'  
[sá:.ʕa.dat] 'she helped'  
[gá:.ba.lat] 'she met'  
[ʕá:.na.dat] 'she was stubborn'  
[lá:.ma.sat] 'she touched'  
[mák.ti.bah] 'a library'  
[máz.ba.lah] 'garbage'  
[lúg.mi.ti] 'my morsel'  
[mír.ti.ki] 'reclining'  
[mír.ti.fī] 'bribed'

c. In trisyllabic words with light syllables, stress falls on the penultimate syllable,

[ʔa.ká.lat] 'she ate'  
[ʔa.ʕá.ðu] 'they (masc.) took'  
[ʔu.má.ra] 'princes'

d. In disyllabic words without final superheavy syllable, stress falls on the penultimate syllable.

[kí.tab] 'he wrote'  
[gá.lam] 'pen'  
[mák.tab] 'office'  
[mál.ʕab] 'pitch'  
[gá:.bal] 'he met'  
[ʕá:.rak] 'he participated'  
[rí.sib] 'he failed'  
[rí.sam] 'he drew'  
[ʕí.rif] 'he knew'  
[lí.ga] 'he found'  
[há.da] 'he guided'  
[mí.ʕa] 'he left'

#### 4 Stress parameters

Stress parameters in BSD are summarized in (3). The parameters in (3) are discussed further in what follows; see Hayes (1995) and Watson (2011) for similar parameters in other Arabic dialects.

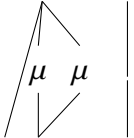

- (3) Stress parameters in BSD
- a. Syllable extrametricality: Final syllable that is not superheavy CV:C syllable or CVCC syllable is extrametrical  
 $\sigma \rightarrow \langle \sigma \rangle / \_\_\_\_\_\_ ] \text{word}$ .
  - b. Foot construction: Form iambic binary feet,  
 Degenerate feet are prohibited.
  - c. Word layer construction: End Rule Right (ERR).

In BSD stress does not fall word finally except if the final syllable is a superheavy syllable CV:C syllable or CVCC syllable, which means that final CVC and CV syllables do not attract stress. This can be accounted for by final syllable extrametricality (Lieberman & Prince 1977; Nanni 1977; Hayes 1979, 1982, 1995). In extrametricality, a particular prosodic constituent is designated invisible to rule applications. In stress assignment, an extrametrical syllable is not available for stress assignment and surfaces unstressed.

Not all syllables are available for extrametricality in word final position. Final superheavy syllables and monosyllabic words with a single superheavy syllable cannot be extrametrical since they receive stress, as in (4).

- (4)
- |                |                           |
|----------------|---------------------------|
| [xu.bú:g]      | ‘type of milk’            |
| [mis.tag.báلك] | ‘your (masc. sg.) future’ |
| [dzá:r]        | ‘neighbor’                |
| [ʃáms]         | ‘sun’                     |

In examples with a final superheavy syllable, the final consonant prevents extrametricality from occurring. The final consonant in CV:C and CVCC syllables is extrasyllabic. Final consonant extrasyllabicity prevents extrametricality from applying to the preceding syllable since it is not peripheral and is separated by a segment from the word edge, i.e., the peripherality condition (Prince 1983: 80; Hayes 1995: 57), as in (5).

(5)	CV:C		CVCC	
	(lá:μμ)<m>	‘he blamed’	(ʃúμrμ)<b>	‘drinking’
	(gá:μμ)<l>	‘he said’	(dzáμmμ)<ʕ>	‘addition’
	(X )	Word layer	(X )	Word layer
	(X)	Foot layer	(X)	Foot layer
	σ <σ>	Syllable layer	σ <σ>	Syllable layer
		Moraic layer		Moraic layer
	l a <m>	Segmental layer	ʃ u r <b>	Segmental layer

However, final syllable extrametricality applies to final CV(C) syllable marking it as extrametrical which prevents it from receiving stress. Therefore, CVC syllable only attracts stress in non-final position, when it occurs in penultimate or antepenultimate positions, while in final position it does not attract stress. So, in final position, CVC syllable patterns similarly to CV syllable, as in (6).

- (6) [ʔa.kál.ha] ‘he ate it’  
 [ʔá.kal] ‘he ate’

In other words, CVC syllable is heavy except in final position where it is considered a light syllable. To handle the asymmetrical behavior of CVC syllable, Arabic dialects have either final syllable or final consonant extrametricality in final CVC syllable.

Most of Arabic dialects deal with moraic trochees, such as for example: Urban Hijazi dialect (Al-Mohanna 1994, 1998), Cairene and Sanʕaani Arabic (Watson 2002, 2011), and Makkan Arabic (Kabrah 2004). In trochaic dialects the asymmetric pattern of CVC syllable mentioned above can be accounted for by final consonant extrametricality, which also accounts for stress avoidance on final CVC syllable. Consider the following examples from Jeddawi Arabic<sup>2</sup>, a moraic trochee dialect, in (7).

- (7) Jeddawi Arabic  
 a. (ðʕá.ra)<b> ‘he hit’  
 (rá.sa)<m> ‘he drew’  
 b. (bá.ka) ‘he cried’  
 (sá.ma) ‘sky’

In (7a) final consonant extrametricality suggests that final CVC syllable is light, and this accounts for avoiding stress word finally as well as for the asymmetric behavior of CVC syllable given in

<sup>2</sup> Jeddawi data were collected by the author of the paper.



- (10) a. L<sup>́</sup>  
 (ʔa<sub>μ</sub>.ká<sub>μ</sub>).<lat>  
 ‘she ate’
- (ʔa<sub>μ</sub>.sá<sub>μ</sub>).<ru>  
 ‘they (masc.) captured’
- ( X ) Word layer
- (˘ X) Foot layer
- σ σ <σ> Syllable layer
- μ μ μ Moraic layer
- ʔ a k a l a t Segmental layer
- b. L<sup>́</sup>  
 (si<sub>μ</sub>.má<sub>μ</sub>k<sub>μ</sub>).<na>  
 ‘our (masc.) fish’
- (li<sub>μ</sub>.bí<sub>μ</sub>s<sub>μ</sub>).<tin>  
 ‘you (fem. pl.) wore’
- ( X ) Word layer
- (˘ X) Foot layer
- σ σ <σ> Syllable layer
- μ μ μ μ Moraic layer
- s i m a k n a Segmental layer
- c. H<sup>́</sup>  
 (má<sub>μ</sub>k<sub>μ</sub>).<tab> ‘office’
- (mí<sub>μ</sub>s<sub>μ</sub>).<lim> ‘Muslim’
- (X ) Word layer
- (X) Foot layer
- σ <σ> Syllable layer
- μ μ μ Moraic layer
- m a k t a b Segmental layer

Word minimal weight requirement in BSD does not tolerate words made of a single light syllable, i.e., degenerate feet \*(L). However, a degenerate foot can stem from final syllable extrametricality in many dialects of Arabic in words of certain syllable shapes. In disyllabic words of the shape CVσ, where σ = CV(C), final syllable extrametricality results in the following violation of bimoraicity, where only one mora is available for parse. This is suggested by the examples in (9b) and (11).



- (11) /CVσ/ → CV<σ>  
 /kitab/ → ki<sub>μ</sub>.<ta<sub>μ</sub>b> 'he wrote'  
 /difaʕ/ → di<sub>μ</sub>.<fa<sub>μ</sub>ʕ> 'he pushed'  
 /liga/ → li<sub>μ</sub>.<ga<sub>μ</sub>> 'he found'

In order to adhere to the bimoraic weight requirement, languages with similar final syllable extrametricality parameter implement different mechanisms, amongst which are compensatory lengthening and extrametricality revocation (Allen 1973; Liberman & Prince 1977; Hayes 1982, 1989; Jeanne 1982; Michelson 1988; Gess 2011). In BSD, where degenerate feet are prohibited, the final extrametrical syllable is incorporated after the application of stress which results in a surface trochaic foot, according to the rule in (12). The repair rule in (12) is a consequence of the idea that languages allow degenerate feet early in the derivation and subject them to foot-repair mechanisms later in the derivation (Poser 1989; Halle & Kenstowicz 1991).

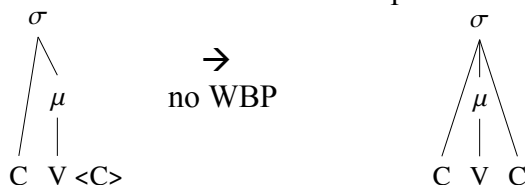
- (12) Incorporation of extrametrical material (Hayes 1982, 1995)  
 (X) → (X ~)  
 (~)<~> (~ ~)

The rule in (12) suggests that in disyllabic words stress is assigned to the initial syllable. It is analyzed by Hayes (1995: 111) as a result of forming a degenerate foot early in the derivation in such words and then incorporating the final syllable to avoid violating foot binarity requirement, which explains the trochaic stress in BSD, as in (13). Before discussing how the rule in (12) applies in BSD, we need first to discuss how to deal with CVC weight in medial and final positions.

- (13) [sí.miʕ] 'he heard'  
 [ʃi.rib] 'he drank'  
 [gí.ð'a] 'he judged'  
 [fi.da] 'sacrifice'

In BSD the final consonant in CVC syllable receives a mora through weight by position rule, WBP, where a mora is assigned to the coda position (Hayes 1989: 258, 1995: 52). However, due to extrametricality, this rule does not apply in final CVC, as in (14). Therefore, a final CVC syllable is not bimoraic in BSD, as in many other Arabic dialects.

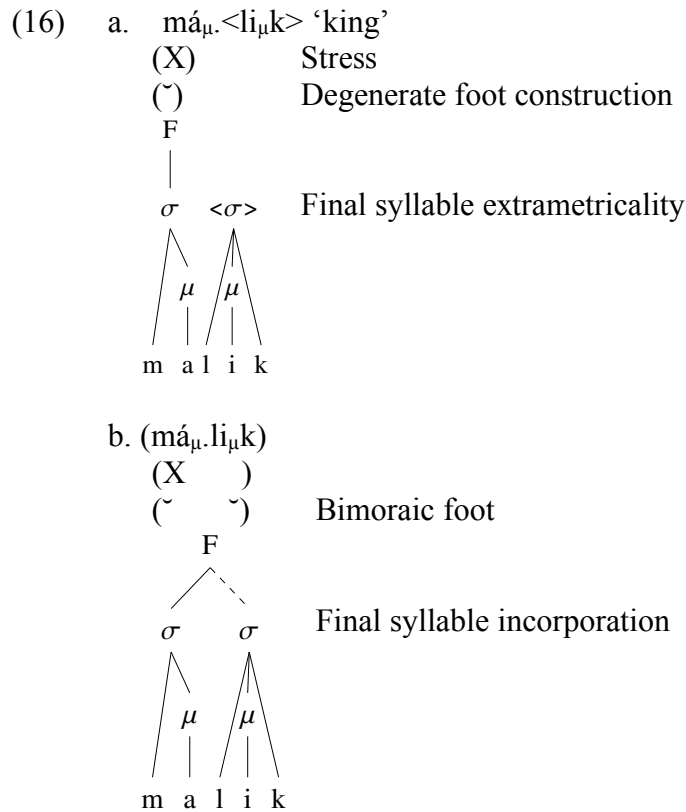
- (14) Monomoraic CV<C> in final position



Now, we turn to the rule in (12). Although feet are iambic (L $\acute{H}$ ) and (L $\acute{L}$ ) in BSD, in disyllabic words with light syllables stress is trochaic ( $\acute{L}$ L) due to extrametricality, as in (15).

- (15) [kí.tab] 'he wrote'  
 [lí.ga] 'he found'

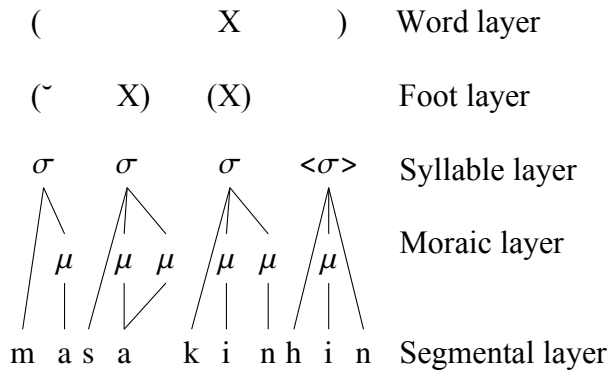
The trochaic stress in BSD can be explained based on the rule in (12). A degenerate foot is formed initially in (16a), and stress is applied in the beginning of the derivation. Then, as in (16b), the otherwise extrametrical syllable is incorporated into the foot in order to avoid the degenerate foot and to satisfy bimoraicity in BSD. This results in a trochaic foot.



The representation in (16) suggests that although degenerate feet are prohibited in BSD, they are tolerated in the beginning of the derivation. The tolerance toward the degenerate foot is to allow stress to be assigned. Later in the derivation, foot bimoraic weight requirement is satisfied through incorporating the extrametrical syllable.

Stress in BSD is limited to one of the last three syllables, as in the majority of Arabic dialects. Through End Rule Right (Hayes 1982, 1983, 1995) stress falls on the rightmost eligible syllable, as in the following example.

(17) (ma.sa:).(kín).<hin>  
 ‘their habitat (fem.)’



## 5 Conclusion

BSD is a Bedouin dialect which has not received much attention, similar to other Bedouin dialects in the Arabian Peninsula. This study examined the stress patterns in BSD. The study presented stress patterns, parameters, and syllable weight requirement in addition to how extrametricality and weight requirement in BSD resulted in trochaic stress, which is different from the iambic stress patterns found in the dialect. BSD is similar to other Bedouin dialects in the Arabian Peninsula, where stress is iambic, and feet are minimally bimoraic (Al Solami 2020).

A point that warrants further examination is how BSD is influenced by the contact with other non-Bedouin dialects. This is a topic that has not been examined previously and seems to be very essential in understanding the current situation of the dialect.

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## Appendix A: BSD Examples

### 1. Monosyllabic words:

#### i. CV:C

[lá:n]	‘became soft’
[sá:m]	‘estimated’
[ʕá:m]	‘a year’
[ʃá:m]	‘Levantine’
[rá:ħ]	‘he left’
[há:s]	‘he messed up’
[fá:s]	‘axe’

#### ii. CVCC

[sábt]	‘Saturday’
[láms]	‘touching’
[náfs]	‘soul’
[kálb]	‘dog’
[díbs]	‘molasses’
[tárk]	‘leaving’
[kárt]	‘card’

### 2. Disyllabic words:

#### i. CVCV

[rú.ma]	‘he threw’
[dí.fa]	‘warmth’
[sí.ma]	‘sky’
[ʕá.ma]	‘blindness’

[bá.la]	‘plight’
[θá.ra]	‘soil’
[wú.tʰa]	‘he stepped on’

## ii. CVCVC

[ʕá.rab]	‘Arab’
[mí.sak]	‘he grabbed’
[ká.ram]	‘generosity’
[dí.faʕ]	‘he paid’
[fá.ram]	‘he grinded’
[lí.mas]	‘he touched’
[rí.maʃ]	‘he blinked’

## iii. CVCV:C

[fi.sá:d]	‘corruption’
[da.lá:l]	‘spoiling’
[ka.lá:m]	‘talk’
[ni.bá:t]	‘plants’
[θu.wá:b]	‘reward’
[gi.zá:z]	‘glass’
[ba.lá:f]	‘free’

## iv. CVCVCC

[ki.tábt]	‘I/you (masc. sg.) wrote’
[ga.lámk]	‘your (masc. sg.) pen’
[ri.kíbt]	‘I/you (masc. sg.) mounted’
[si.límt]	‘I/you (masc. sg.) was unharmed’
[tʰa.lábt]	‘I/you (masc. sg.) requested’
[ri.gádt]	‘I/you (masc. sg.) slept’
[fa.rákt]	‘I/you (masc. sg.) rubbed’

## v. CV:CVC

[sʰá:.mat]	‘she fasted’
[sá:.dah]	‘plain’
[lá:.man]	‘they (fem. pl.) blamed’
[sá:.ʕah]	‘later’
[má:.lik]	‘owner’
[rá:.fiðʰ]	‘refusing’
[gá:.sʰid]	‘intending’

**vi. CVCCVC**

[máð.hab]	‘a way’
[más.kan]	‘a domicile’
[máb.laʁ]	‘amount’
[lák.mah]	‘a punch’
[ráf.sah]	‘a kick’
[dáf.tar]	‘notebook’
[mán.fað]	‘an exit’

**vii. CV:CV:C**

[ʃa.fú:h]	‘they (masc. pl.) saw him’
[la.mú:h]	‘they (masc. pl.) blamed him’
[fa.dú:k]	‘they (masc. pl.) benefited you (masc. sg.)’
[ba.rú:h]	‘they (masc. pl.) matched him’
[χa.nú:h]	‘they (masc. pl.) betrayed him’
[dʒa.bú:h]	‘they (masc. pl.) brought him’
[za.rú:h]	‘they (masc. pl.) visited him’

**viii. CVCCV:C**

[mas.kú:n]	‘occupied’
[mal.bú:s]	‘worn’
[mam.dú:h]	‘praised’
[mað.bú:h]	‘killed’
[man.dú:h]	‘bumped’
[ml.ʃú:n]	‘cursed’
[madʒ.rú:h]	‘wounded’

**ix. CV:CVCC**

[la.mátk]	‘she blamed you (masc. sg.)’
[za.rátk]	‘she visited you (masc. sg.)’
[fa.dátk]	‘she benefited you (masc. sg.)’
[ba.rátk]	‘she matched you (masc. sg.)’
[ʃa.látk]	‘she carried you (masc. sg.)’
[χa.nátk]	‘she betrayed you (masc. sg.)’
[ha.rátk]	‘your (masc. sg.) neighborhood’

**x. CVCCVCC**

[bir.kátk]	‘your (masc. sg.) pond’
[fir.gátk]	‘your (masc. sg.) group’
[bað.látk]	‘your (masc. sg.) suit’
[dʒam.ʃátk]	‘your (masc. sg.) gathering’
[gib.látk]	‘she accepted you (masc. sg.)’
[sim.ʃátk]	‘she heard you (masc. sg.)’



[far.ʃátk] ‘your (masc. sg.) rug’

### 3. Trisyllabic words

#### i. CVCVCCV

[li.bán.ha] ‘her milk’  
[ħa.más.ha] ‘he roasted it (fem.)’  
[mi.sák.na] ‘we grabbed’  
[ʃa.rát.ha] ‘she bought it (fem.)’  
[li.gát.ha] ‘she found it (fem.)’  
[ħa.mát.na] ‘she protected us’  
[si.tár.na] ‘he covered us’

#### ii. CVCCVCVC

[mídʒ.ma.rah] ‘brazier’  
[mís.ba.ħah] ‘rosary’  
[mál.ħa.mah] ‘butchery’  
[máð.ba.ħah] ‘slaughter’  
[mís<sup>s</sup>.ja.dah] ‘snare’  
[mág.ʃa.dah] ‘stool’  
[míd.ɣa.nah] ‘chimney’

#### iii. CVCV:CVC

[mi.ká:.tib] ‘offices’  
[ma.zá:.riʃ] ‘farms’  
[ma.ná:.zil] ‘homes’  
[mi.ká:.sib] ‘profits’  
[ma.rá:.tib] ‘levels’  
[ma.ná:ʃif] ‘towels’  
[ta.ná:.fis] ‘competition’

#### iv. CVCVCCV:C

[ð<sup>s</sup>a.rab.tú:h] ‘you (masc. pl.) hit him’  
[ma.lak.tú:h] ‘you (masc. pl.) owned it’  
[fi.him.tú:h] ‘you (masc. pl.) understood him’  
[ʃi.rib.ná:h] ‘we drank it (masc.)’  
[ta.rak.tí:h] ‘you (fem. sg.) left it (masc.)’  
[ga.s<sup>s</sup>ad.tí:h] ‘you (fem. sg.) meant it (masc.)’  
[ʃa.mad.tí:h] ‘you (fem. sg.) went to him’

#### v. CVCV:CV:C

[sa.ma:.wá:t]	‘skies’
[sa.la:.má:t]	‘wellness’
[si.fa:.rá:t]	‘embassies’
[ʔa.ʃa:.rá:t]	‘traffic lights’
[ʃa.la:.má:t]	‘signs’
[ka.ra:.má:t]	‘miracles’

#### vi. CV:CVCCV:C

[ra:.ʃag.ná:h]	‘we befriended him’
[sa:.ʃad.ná:h]	‘we helped him’
[la:.zam.ná:h]	‘we accompanied him’
[χa:.s <sup>s</sup> am.tí:h]	‘you (fem. sg.) reproached him’
[wa:.dzah.tú:h]	‘you (masc. pl.) confronted him’
[za:.mal.ná:h]	‘we collegued with him’
[na:.fas.ná:h]	‘we competed with him’

#### vii. CV:CVCCV(C)

[la:.ʃáb.na]	‘we played with’
[ra:.dzáʃ.na]	‘we revised’
[da:.wú:.kum]	‘they (masc.) cured you (masc. pl.)’
[na:.dú:.kum]	‘they (masc.) called you (masc. pl.)’
[wa:.dzáh.na]	‘we confronted’
[za:.mál.na]	‘we collegued with’
[na:.fás.na]	‘we competed’

### 4. Longer words:

#### i. CV:CVCCV:CV(C)

[dza:.war.tú:.hum]	‘you (pl.) neighbored them (masc. pl.)’
[sa:.ʃad.tú:.hin]	‘you (pl.) helped them (fem. pl.)’
[ʃa:.rak.tú:.na]	‘you (pl.) shared with us’
[χa:.s <sup>s</sup> am.tú:.na]	‘you (pl.) reproached us’
[fa:.rag.tí:.hum]	‘you (fem. sg.) abandoned them (masc.)’
[ha:.rab.ná:.hum]	‘we fought them (masc.)’
[sa:.bag.tú:.hin]	‘you (masc. pl.) raced them (fem.)’

#### ii. CVCVCCV:CV(C)

[fi.him.tú:.ha]	‘you (masc. pl.) understood it (fem.)’
[mi.sak.tú:.ni]	‘you (masc. pl.) grabbed me’
[ri.fas.tú:.ha]	‘you (masc. pl.) kicked her’
[ki.tam.tú:.ha]	‘you (masc. pl.) suffocated her’

[si.rag.tú.hin]	‘you (fem. sg.) stole them (fem.)’
[ħa.rag.tú.ha]	‘you (masc. pl.) burnt it (fem.)’
[dʒi.maʃ.ná.ha]	‘we collected it (fem.)’

### iii. CVCV:CV:CV(C)

[ha.de:.tú.ni]	‘you (masc. pl.) guided me’
[li.ge:.tú.hum]	‘you (masc. pl.) found them (fem.)’
[ka.le:.tú.ha]	‘you (masc. pl.) boiled it (fem.)’
[ga.le:.tú.ha]	‘you (masc. pl.) fried it (fem.)’
[ta.le:.tú.ha]	‘you (masc. pl.) recited it (fem.)’
[θa.ne:.tú.ha]	‘you (masc. pl.) twisted it (fem.)’
[ħa.ne:.tú.ha]	‘you (masc. pl.) caged it (fem.)’

### iv. CV:CVCCV:CV(C)

[sa:.bag.tú.na]	‘you (masc. pl.) raced us’
[ra:.fag.tú.hin]	‘you (masc. pl.) accompanied them (fem. pl.)’
[la:.ʃab.tú.ni]	‘you (masc. pl.) played with me’
[dʒa:.mal.tú.na]	‘you (masc. pl.) complimented us’
[ra:.dʒaʃ.tú.ha]	‘you (masc. pl.) revised it (fem.)’

### v. CVCV:CVCCV(C)

[χa.ra:.bát.na]	‘our dump’
[ru.fa:.gát.hum]	‘their (masc. pl.) company’
[li.ga:.fát.kum]	‘your (masc. pl.) curiosity’
[sa.ma:.hát.na]	‘our fairness’
[ri.dʒa:.lát.kum]	‘your (masc. pl.) manhood’
[si.fa:.hát.hum]	‘their (masc.) foolishness’
[ma.χa:.zín.na]	‘our stores’