



# Vowel raising processes in Uyghur

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# Two vowel raising processes in Uyghur

## Vowel reduction

*bala* 'child'

*tapan* 'paw'

*selle* 'turban'

*apet* 'custom'

*balilar*

*tapini*

*selliler*

*apiti*

'children'

'her paw'

'turbans'

'her custom'

## Umlaut (Regressive assimilation)

*yan* 'side'

*ten* 'body'

*yeydu* 'she eats'

*yéni*

*téni*

*yémek*

'her side'

'her body'

'to eat'

# Background: Syllables

**Syllables** are a unit of timing in a sequence of speech sounds

In Uyghur, each syllable has **exactly one vowel (nucleus)**

How many syllables in these words?

*at*

*bala*

*uniwérsité́t*

*uyghur*

*xet*

*weten*

# Syllable structure

Syllables can have consonants **preceding** and **following** the vowel

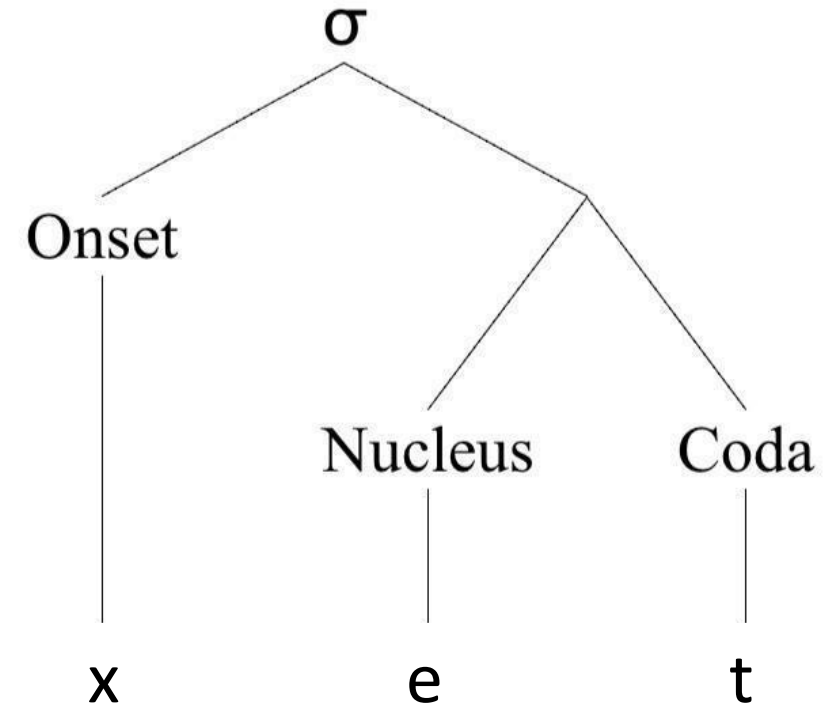
- Material preceding the vowel is called the **onset**
- Material following the vowel is called the **coda**

A syllable with no coda is called an **open syllable**

- V, CV, CCV, etc.

A syllable with a coda is called a **closed syllable**

- V, CV, CVCC, etc.



# Syllables in Uyghur

Most syllables in Uyghur are **V, CV, VC, CVC**

- Some exceptions to this, like *meshq* (CVCC), *dost* (CVCC), *proféssor* (CCV), etc., but Uyghur speakers often ‘repair’ these.

Identify the **onset** and **coda** of the following monosyllables. Which are **open** and which are **closed** syllables?

*at*

*xet*

*u*

*shu*

*dost*

*po*

*ta*

*el*

*bu*

*brak*

# Syllabifying words

We use a **period** to indicate **syllable boundaries**.

Sometimes words can be syllabified in multiple ways

- Is it *ba.la* or *bal.a*?

**Rule of thumb: Consonants prefer to be in onsets rather than codas**

*ba.la* not *\*bal.a*

This only holds when doing so doesn't create "bad" onsets

- *mesh.chit*, not *\*me.shchit*
- When in doubt, ask yourself "could I start a word with these sounds?"

# Syllabification practice

Add syllable boundaries to the following words

*ziyaret*

*apet*

*sözlesh*

*meshqler*

*dostum*

*qandaq*

*qeshqer*

*qebristan*

# Process 1: Vowel reduction

**Vowel reduction** turns *a* (ا) and *e* (ه) into *i* (ي) in **word-medial, open syllables**

- **Word-medial:** Neither the first nor last syllable in the word
- **Open:** Without a coda

*ba.la*      'child'

*ta.pan*      'paw'

*sel.le*      'turban'

*a.pet*      'custom'

*ba.li.lar*      'children'

*ta.pi.ni*      'her paw'

*sel.li.ler*      'turbans'

*a.pi.ti*      'her custom'



# Specific examples

*bala*

‘child’

***Why don't these vowels reduce?***

*balilar*

‘children’

***Why does the final vowel of ‘bala’ reduce? Why doesn't the vowel in –lar?***

*balilirim*

‘my children’

***Why does the vowel in –lar reduce here but not above?***

*balilargha*

‘to the children’

***Why doesn't the vowel in –lar reduce here?***

# Exceptions to vowel reduction

Many words (mostly loanwords) **categorically fail to reduce**

<i>hawa</i>	'weather'	<i>hawasi</i>	'its weather'
<i>derya</i>	'river'	<i>deryalar</i>	'rivers'
<i>seweb</i>	'reason'	<i>sewebi</i>	'her reason'

These need to be **memorized** (but you can guess if you suspect the origin)

# Exceptions to vowel reduction

Vowel reduction is **triggered by suffixation**

*ma.qa.le*      ‘article’      not \**ma.qi.le*

Most suffixes undergo vowel reduction, but **some don’t**

-*wat*:      *jü.gü.ri.wa.ti.du*      ‘she is running’      not \**jü.gü.ri.wi.ti.du*

-*ele/ala*:      *jü.gü.re.ley.du*      ‘she can run’      not \**jü.gü.ri.ley.du*

The progressive suffix **-*wat*** does not trigger vowel reduction

*anglidi*      ‘she listened’      *anglawatidu* ‘she is listening’

*sözlidi*      ‘she spoke’      *sözlewatidu* ‘she is speaking’

# Process 2: Umlaut

**Umlaut** turns *a* (ا) and *e* (ه) into *é* (ي)

Like vowel reduction, umlaut targets **open** syllables

Unlike vowel reduction:

- The syllable must be **word-initial**
- The vowel of the **following syllable** must be *i* (ي) or *e* (ه)

# Umlaut triggered by *i* (ی)

<i>yan</i>	'side'	<i>yéni</i>	'her side'
<i>bash</i>	'head'	<i>béshì</i>	'her head'
<i>ten</i>	'body'	<i>téni</i>	'her body'
<i>xet</i>	'letter'	<i>xéti</i>	'her letter'
<i>bardi</i>	'she went'	<i>bérish</i>	'going'
<i>berdi</i>	'she gave'	<i>bérish</i>	'giving'
<i>yazdi</i>	'she wrote'	<i>yézish</i>	'writing'
<i>kesti</i>	'she cut'	<i>késish</i>	'cutting'

# Umlaut triggered by *e* (◌e)

*yeydu* 'she eats'      *yémek* 'to eat'

*deydu* 'she says'      *démek* 'to say'

*bermek* 'to give'      *bérey* 'I'll give!'      *béreleydu* 'she can give'

*kelmek* 'to come'      *kéley* 'I'll come!'      *kéleleydu* 'she can come'

cf.

*barmaq* 'to go'      *baray* 'I'll go!'      *baralaydu* 'she can go'

# Fossilized umlaut

Some Uyghur words display permanent umlaut

## Modern word

*béliq*

*'fish'*

*étiz*

*'field'*

*hékim*

*'governor'*

*shéhit*

*'martyr'*

## Historical form

*baliq*

*atiz*

*hekim*

*shehit*

# Semi-fossilized umlaut

Some words have umlaut in unsuffixed forms, but not in (some) suffixed forms

*éghiz*      ‘mouth’

*aghzim*     ‘my mouth’



# Exceptions to umlaut

*i* produced by vowel reduction does not trigger umlaut

*balilar* 'children' not \**bélilar*

Some roots categorically resist umlaut

*sani* 'her number' not \**séni*

*kari* 'her business' not \**kéri*

*peri* 'her feather' not \**péri*

# Exceptions to umlaut

The non-past verbal suffix *-i* triggers umlaut for *e* but not for *a*!

<i>bér̄imen</i>	'I will give'	not	* <i>berimen</i>
<i>tép̄idu</i>	'she will kick'	not	* <i>tepidu</i>

BUT

<i>barimen</i>	'I will go'	not	* <i>bér̄imen</i>
<i>tapidu</i>	'she will find'	not	* <i>tép̄idu</i>

# Raising in contractions (for future reference)

Uyghur is full of *converbial constructions*, where the main verb is suffixed with *-(i)p* and a following “helper” verb contributes some meaning.

The verbs *almaq* ‘take’ and *bermek* ‘give’ can function as helper verbs

*anglidi* ‘she listened’

*anglap aldi* ‘she listened’

(for her own benefit)

*sözlidi* ‘she spoke’

*sözlep berdi* ‘she spoke’

(for someone else’s benefit,  
or despite some difficulty)

# Raising in contractions

*-p al* is often contracted to *-wal*

*anglap aldi*      →      *angliwaldi*

*-p ber* is often contracted to *-wer*

*sözlep berdi*      →      *sözlewerdi*

# Reduction and umlaut in contractions

Both raising and umlaut in contractions **violate the descriptions above**

Umlauting can occur on the vowel in *-wal/-wer* (when it would usually apply) even though the target syllable is **not word-initial**

<i>anglawérimen</i>	not	<i>*anglawerimen, *anglawirimen</i>
<i>angliwélish</i>	not	<i>*angliwalish, *angliwilish</i>

Raising occurs before *-wal* but not before *-wer*

<i>angliwaldi</i>	not	<i>*anglawaldi</i>
<i>anglawerdi</i>	not	<i>*angliwerdi</i>

# Why are contractions so weird?

Broadly speaking, raising and umlauting in contractions are the **same as in the uncontracted form**, even though this violates general patterns

A complication to this is **raising**, which follows the uncontracted form, but with the word boundary erased (which changes syllabification)

Uncontracted:	<i>ang.lap#al.di</i>	<i>ang.lap#ber.di</i>
Uncontracted (one word):	<i>ang.li.pal.di</i>	<i>ang.lap.ber.di</i>
Contracted:	<i>ang.li.wal.di</i>	<i>ang.la.wer.di</i>

# Conclusion

General patterns of vowel reduction and umlaut are sensitive to **syllable structure, position in word**, and (for umlaut) **following vowel identity**.

There are numerous exceptions to both that must be memorized.

Raising and umlauting are **usually represented orthographically**

- But, e.g., RFA often writes *amérikaliq* ‘American’, but this is always pronounced *amérikiliq*

# Contact info

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Excruciating detail in my dissertation:

Mayer, C. (2021). *Issues in Uyghur backness harmony: Corpus, experimental, and computational studies*. PhD Thesis, University of California, Los Angeles.