

VOWEL HARMONY IN KAZAN TATAR

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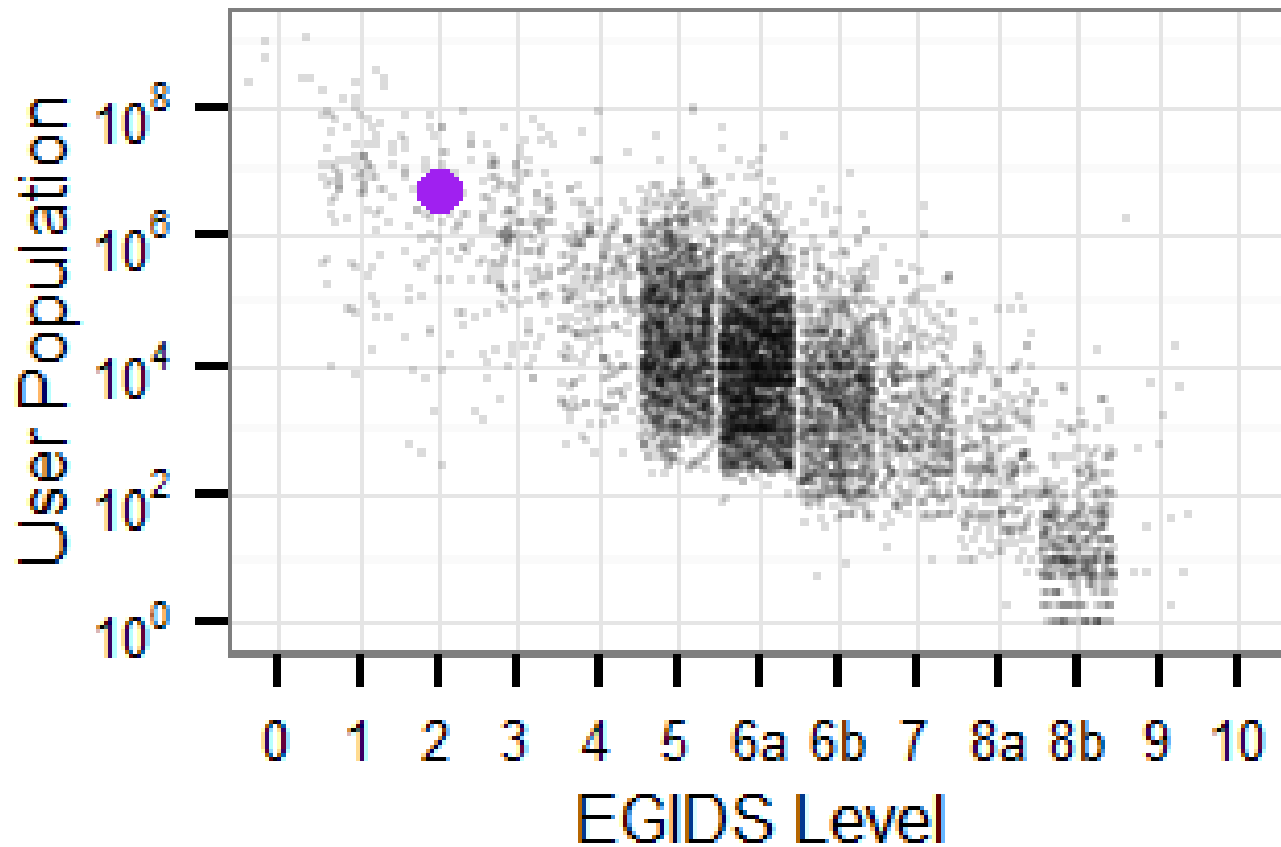


KAZAN TATAR INFORMATION

- ❖ Kazan Tatar, or more simply known as “Tatar,” is a Turkic language spoken primarily in Tatarstan in the Russian Federation.
- ❖ It is a member of the Kipchak family, along with Bashkir, Kazakh, and others
- ❖ Like all state languages of Russia, it uses Cyrillic as mandated by law

chak branch of Turkic





QUICK STATISTICS ON TATAR

From Ethnologue:

- Tatar has 5,188,710 speakers worldwide
- Its autonym is either татарча or татар теле
- High literacy rate, official provincial language, media available – means language is not high risk (EGIDS level 2)

Graph: Plotted on logarithmic use scale vs expanded graded intergenerational disruption scale

WHERE IS KAZAN? WHAT IS TATARSTAN?

- ❖ Kazan is the capital of the Republic of Tatarstan, in the Russian Federation. It is home of the Tatar people.
- ❖ Etymology: named after the Bulgar word *qazan*, which means 'boiler' or 'cauldron'
- ❖ The population is about half and half between ethnic Tatars and ethnic Russians, with minorities filling in the space inbetween.
 - ❖ According to the website for Tatarstan, it is one of the most diverse states within the Russian Federation



ONTO PHONOLOGY...

- ❖ Phonology is a subfield of linguistic science that aims to find, describe, and explain systematic sound patterns in human language.
- ❖ Phonologists and phoneticians use the International Phonetic Alphabet to transcribe and represent speech sounds.
- ❖ All human languages have systematic organizations and patterns of sounds. Some of them happen frequently enough across languages to have a standard name.
- ❖ The phonological phenomenon I am focusing on is called vowel harmony, and it is quite common in the Turkic languages.

<https://www.internationalphoneticassociation.org/>

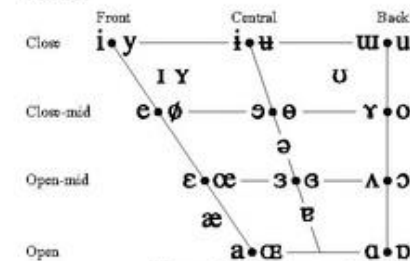
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ɔ Bilabial	ɓ Bilabial	Example:
ɠ Dental	ɗ Dental/alveolar	ɓ' Bilabial
ǀ (Fore)alveolar	ɟ Palatal	ɗ' Dental/alveolar
ǃ Palatoalveolar	ɡ Velar	k' Velar
ǂ Alveolar lateral	ɠ Uvular	s' Alveolar fricative

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

- ɸ** Voiceless labial-velar fricative
- ɠ** Voiced labial-velar fricative
- ʋ** Voiced labial-velar approximant
- ɰ** Voiced labial-palatal approximant
- ħ** Voiceless epiglottal fricative
- ʕ** Voiced epiglottal fricative
- ʡ** Epiglottal plosive
- ɕ ʑ** Alveolo-palatal fricatives
- ɭ** Voiced alveolar lateral flap
- ɥ ɮ** Simultaneous **ʃ** and **x**
- Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.

ts k͡p

DIACRITICS Some diacritics may be placed above a symbol with a descender, e.g. **ɳ̥̊**

◌̥	Voiceless	ɳ̥	ɰ̥	◌̬	Breathy voiced	ɳ̬	ɰ̬	◌̜	Dental	t̜	d̜
◌̚	Voiceless	ɳ̚	ɰ̚	◌̝	Creaky voiced	ɳ̝	ɰ̝	◌̞	Apical	t̞	d̞
◌̻	Aspirated	t̻	d̻	◌̼	Linguolabial	t̼	d̼	◌̽	Laminal	t̽	d̽
◌̽	More rounded	ɔ̽		◌̾	Labialized	t̾	d̾	◌̿	Nasalized	ẽ̿	
◌̿	Less rounded	ɔ̿		◌̥̽	Palatalized	t̥̽	d̥̽	◌̽̚	Nasal release	d̽̚	
◌̽̚	Advanced	u̽̚		◌̥̽̚	Velarized	t̥̽̚	d̥̽̚	◌̽̚̚	Lateral release	d̽̚̚	
◌̥̽̚	Retracted	e̥̽̚		◌̥̽̚̚	Pharyngealized	t̥̽̚̚	d̥̽̚̚	◌̽̚̚̚	No audible release	d̽̚̚̚	
◌̥̽̚̚	Centralized	ẽ̥̽̚̚		◌̥̽̚̚̚	Velarized or pharyngealized	t̥̽̚̚̚					
◌̥̽̚̚̚	Mid-centralized	ẽ̥̽̚̚̚		◌̥̽̚̚̚̚	Raised	e̥̽̚̚̚̚	(ɹ̥̽̚̚̚̚ = voiced alveolar fricative)				
◌̥̽̚̚̚̚	Syllabic	ɳ̥̽̚̚̚̚		◌̥̽̚̚̚̚̚	Lowered	e̥̽̚̚̚̚̚	(β̥̽̚̚̚̚̚ = voiced bilabial approximant)				
◌̥̽̚̚̚̚̚	Non-syllabic	e̥̽̚̚̚̚̚		◌̥̽̚̚̚̚̚̚	Advanced Tongue Root	e̥̽̚̚̚̚̚̚					
◌̥̽̚̚̚̚̚̚	Rhoticity	ɻ̥̽̚̚̚̚̚̚	ɻ̥̽̚̚̚̚̚̚	◌̥̽̚̚̚̚̚̚̚	Retracted Tongue Root	e̥̽̚̚̚̚̚̚̚					

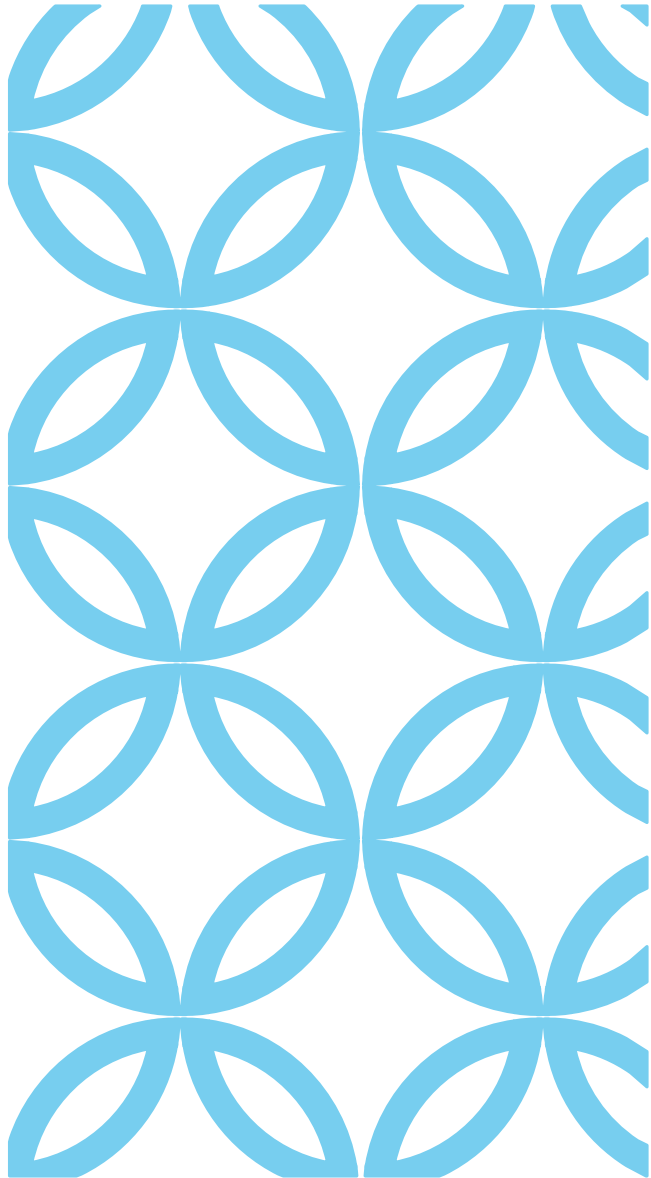
SUPRASEGMENTALS

- ' Primary stress **ˈ** **founˈtʃən**
- ˌ Secondary stress
- ː Long **eː**
- ˑ Half-long **eˑ**
- ˘ Extra-short **ɛ̘**
- ◌̥ Minor (foot) group
- ◌̦ Major (intonation) group
- ◌̧ Syllable break **ni.əkt̪**
- ◌̨ Linking (absence of a break)

TONES AND WORD ACCENTS

LEVEL	CONTOUR
ē or ᷀ Extra high	᷁ or ᷂ Rising
ē High	᷃ Falling
ē Mid	᷄ High rising
ē Low	᷅ Low rising
ē Extra low	᷆ Rising-falling
᷇ Downstep	᷈ Global rise
᷉ Upstep	᷊ Global fall

Typography: Doulos SIL (serif), Doulos SIL, IPA Kiel, IPA LS Uni (symbols)



Vowel harmony is a long distance assimilatory phonological pattern where vowels in a language harmonize based upon some common feature, such as backness or frontness, or roundedness

Essentially it means only certain vowels can occur near each other.

VOWEL HARMONY

PREVIOUS WORK ON TATAR VOWEL HARMONY

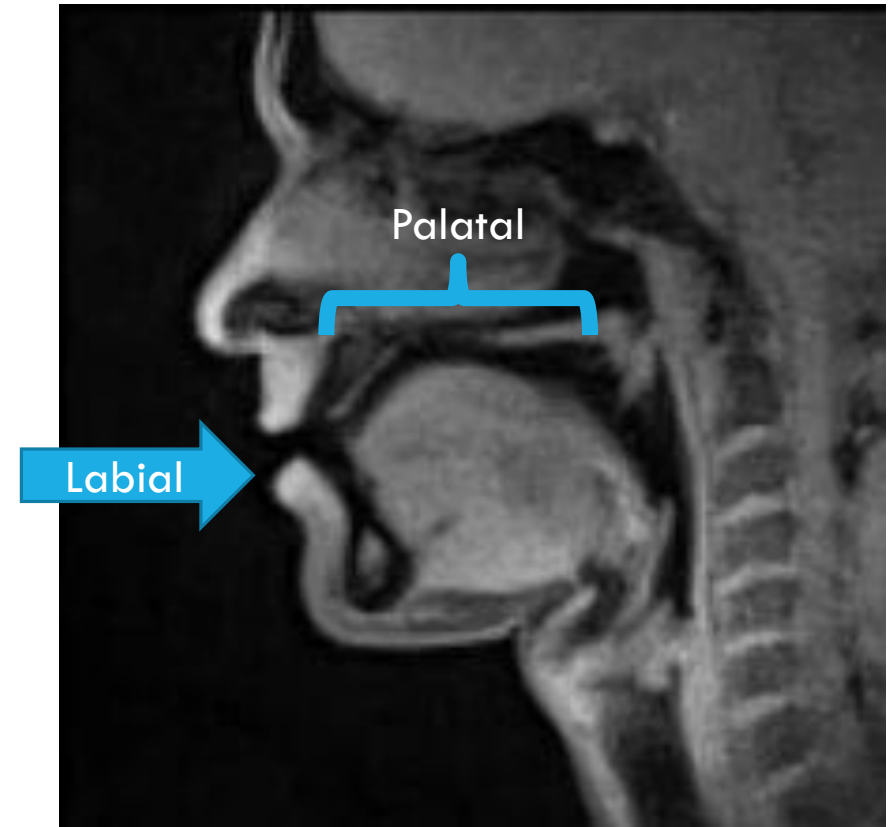
Nicholas Poppe published *Tatar Manual* in 1963, a Tatar reference grammar.

Bernard Comrie published *Tatar Phonology* in 1997, an account of the phonological processes in Tatar.

Jenna Conklin published her dissertation, “The interaction of gradient and categorical processes of long-distance vowel-to-vowel assimilation in Kazan Tatar” in 2015.

PREVIOUS WORK, CONTINUED

- ❖ Comrie and Poppe argue vowel harmony is labial and palatal – meaning it is affected by both roundness and backness.
- ❖ Conklin argues only for the existence of palatal harmony.
- ❖ My work agrees with her assertions, and joins her in rejecting Comrie and Poppe’s assertion of labial harmony.



MY DATA

- ❖ Recorded speech data of female native speaker from Kazan, Tatarstan
- ❖ Various forms of words from a crafted elicitation set based upon Comrie's work, and expanded based on needs of analysis
- ❖ 187 words recorded in total, then transcribed to IPA using Praat

FINDINGS

- ❖ Assert Conklin 2015 in that Kazan Tatar only has palatal harmony.

$$V \rightarrow \begin{bmatrix} a_{back} \\ \beta_{front} \end{bmatrix} / \begin{bmatrix} a_{back} \\ \beta_{front} \end{bmatrix} \overset{V}{C_0} \text{ ______ } \text{ (iterative)}$$

- ❖ Rule essentially states that every vowel in a word will follow the same features as the first vowel in the word. This occurs with little exception.
- ❖ The exceptions that do occur are frequently in loanwords, although I am hoping to use Optimality Theory in future work to explain these exceptions

EXCEPTION CASES

- ❖ Native disharmonic words observed, which are harder to explain. Very infrequent – only 2 cases out of 187 observed in my data.
- ❖ Loanwords tend to follow the pattern of taking affix harmony of the last vowel of the word.
- ❖ According to Comrie 1997, in loans, but Russian loans especially, /i/ and /e/ are treated as neutral in regards to vowel harmony, and loanwords that are disharmonic tend to default to backness.

FUTURE WORK

- ❖ Optimality Theory (OT) analysis of this phonological phenomenon, as a constraint based analysis may be able to better explain the exceptions
- ❖ Phonetic data analysis of mapping vowel spaces of several speakers, as Tatar seems to have undergone a vowel shift. This will enable better phonological analyses all around.



Any
questions?

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THANK YOU! РӘХМӘТ!