



LACIM

European research network on linguistics and
languages of the Anatolia-Caucasus-Iran-
Mesopotamia area



glottothèque

languages of Anatolia, Caucasus, Iran, Mesopotamia

Armenian

Phonology and Phonetics

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Phoneme inventory

Eastern and Western Armenian have similar phoneme inventories, but Eastern has more phonemes (in parentheses)

	Bilab.	Labio-dental	Dental	Alveo.	Post-alveola r	Palatal	Velar	Uvular	Glottal
Stop	(p) p ^h b		(t) t ^h d				(k) k ^h g		
Affr.			(ts) ts ^h dz		(tʃ) tʃ ^h dʒ				
Fric.		f v		s z	ʃ ʒ			χ ʁ	h
Nas.	m			n					
Liq.				r (r) l					
Glide						j			

Laryngeal contrast

- Among stops, Eastern Armenian makes a 3-way laryngeal contrast /p, p^h, b/. The orthography provides a letter for each phoneme. Final unaspirates are variably glottalized.
- 3-way contrasts are pretty common in the area.

	East.		West.			
<p>	/b/	[bar]	/p ^h /	[p ^{har}]	'word'	բառ
<պ>	/p/	[par]	/b/	[bar]	'dance'	պար
<փ>	/p ^h /	[p ^{hak}]	/p ^h /	[p ^{hak}]	'yard'	փակ

- In Western Armenian, the 3-way contrast is reduced to 2-way. The /p/ and /b/ are switched.
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Laryngeal contrast

- Geographically, the exact phonetic values for the 2-way contrast in Western varies by the speaker's society

	Lebanon	USA	Turkey		
"voiced" labial	[b ar]	[p ar]	[b ar]	'dance'	պար
"voiceless" labial	[p ak]	[p^h ak]	[p^h ak]	'yard'	փակ

- Lebanese Arabic has a [b-p] distinction, so Western Armenian speakers in Lebanon use the [b-p] distinction
 - Language contact causes Western speakers to adopt the phonetic system of their surrounding
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Rhotic contrast

- Eastern Armenian has a phonemic trill and flap (spirantized)
- For Eastern speakers in Iran, the flap is actually a retroflex approximant
- Western Armenian doesn't have a phonemic trill
- Rhotic changes are typologically common

	Eastern (Armenia)	Eastern (Iran)	Western	
<ռ>	/r/	/r/	/r/	նամկական
	[ramkakan]	[rɒmkəkɒn]	[ramgagan]	'democratic'
<ր>	/r/	/ɻ/	/r/	Րաֆֆի
	[rafi/]	[ɻɒfi/]	[rafi/]	'Raffi'

Vowel space

- Both dialects utilize same basic set of vocalic phonemes = canonical set of 5 vowels plus schwa

/i/		/u/
/e/	/ə/	/o/
		/ɑ/

- Midvowels have variable ATR: lax [ɛ, ɔ] or tense [e, o]
- Across dialects, Eastern Armenian in Iran uses rounded /ɒ/ instead of unrounded /ɑ/ because of Persian contact
- For glide-vowel sequences, the Eastern /ju/ sequence is (usually) pronounced as [ɣ] in Western because of contact with Turkic

o 'guest': EA [hjur] hɟnɪɾ WA [hɣr] hɟnɪɾ

Stress

- Regular stress is 'final' like most other languages in the area, but... stress is on the rightmost non-schwa vowel

	West.	East.	
պատասխան	[ba.das.'χan]	[pa.tas.'χan]	'answer'
երբեմն	[jer'.p ^h e.mən]	[jer'.p ^h e.mən]	'sometimes'
հինգերորդ	['hiŋk ^h -erort ^h]	['hiŋg-erort ^h] [hiŋg-er'ort ^h]	'fifth'
չայրեմ	['tʃ ^h -aj.rem]	[tʃ ^h -aj.'rem]	'I don't burn'

- Some morphemes trigger irregular stress before or after them. Prestressing suffixes are common in Turkic, and stressed prefixes are common in Iranian.
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Syllable structure

- Typical syllable is max CVCC, like other languages in the area

	Western	Eastern		
V	[u]	[u]	'and'	նւ
CV	[ga]	[ka]	'it exists'	կա, կայ
CVC	[gan]	[kan]	'they exist'	կան
CVCC	[gank ^h]	[kank ^h]	'we exist'	կանք

- Complex onsets are typically avoided, except for /Cj/
- Complex codas typically have falling sonority, except the extrasyllabic appendix /k^h/ can be added after consonant cluster

CjVCC	[gjank ^h]	[kjank ^h]	'life'	կյանք, կեանք
CVCC-k ^h	[bartk ^h]	[partk ^h]	'debt'	պարտք

Schwa epenthesis

- Even though Armenian is generally a CVCC language, the orthography shows long sequences of consonants
- These clusters are predictably broken up in speech via schwa epenthesis. (Eastern transcription)

2C	3C	4C	5C	6C
դնել	գրպան	մկրտել	ճմռթկել	քրթմնջել
<dnel>	<grpan>	<mkrtel>	<tʃmrt ^h kel>	<k ^h rt ^h mndʒal>
[də.nel]	[gər.pan]	[mə.kər.tel]	[tʃə.mər ^h .kel]	[k ^h ər ^h .mən.dʒal]
'to put'	'pocket'	'to baptize'	'to wrinkle'	'to mutter'

- Location of schwa depends on a lot of factors (morphology, sonority, directional syllabification)
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ideas

One common thing across Armenian phonology is that it's very specific to dialect and region

Try to find an Armenian-speaking community near you.

Try to elicit and transcribe the words in the presentation on Praat.

See how easily their speech matches what you see in the slides vs. the phonology of the dominant language.

references

- Chapter 1 in Vaux, B. (1998). *The phonology of Armenian*. Oxford University Press.
- Baronian, L. (2017). Two problems in Armenian phonology. *Language and Linguistics Compass*, 11(8), e12247.
- Seyfarth, S., & Garellek, M. (2018). Plosive voicing acoustics and voice quality in Yerevan Armenian. *Journal of Phonetics*, 71, 425-450.
- Kelly, N. E., & Keshishian, L. (2021). Voicing patterns in stops among heritage speakers of Western Armenian in Lebanon and the US. *Nordic Journal of Linguistics*, 1-27.
- Feel free to ask me for current on dialectal phonetics 😊

this lecture

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