

Introduction

This poster provides updated information about the vitality of Tsova-Tush (Batsbi) [bbl], a Northeast Caucasian language spoken in the village of Zemo Alvani, Georgia. We re-estimate speaker numbers and report findings from a language use and attitude survey.

Map

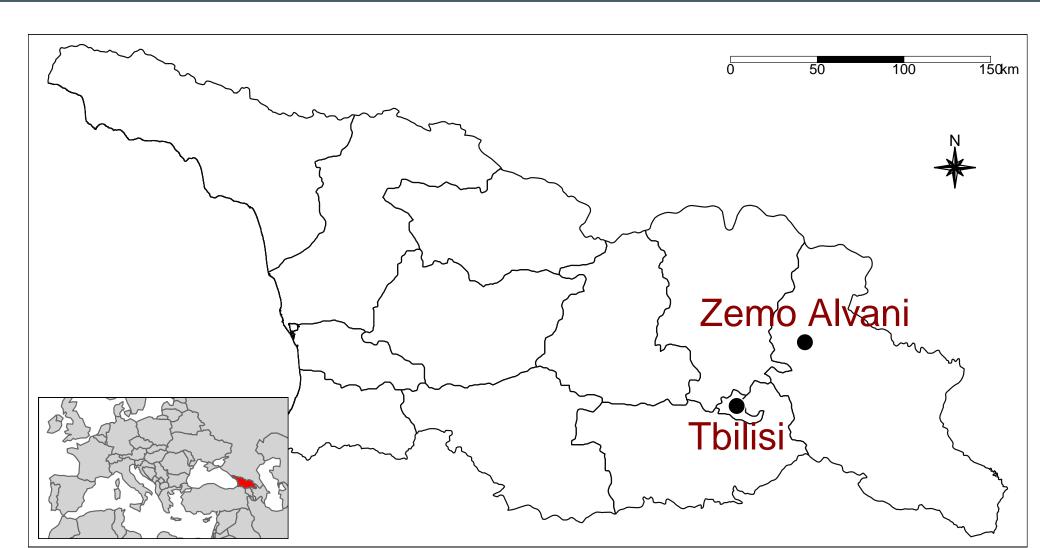


Figure 1: Location of Zemo Alvani, Georgia where Tsova-Tush is spoken

Estimating Speaker Numbers

A barrier to accurately reflecting the linguistic vitality of Tsova-Tush is the lack of reliable estimates of number of speakers. Most sources suggest between 2,500–3,200 speakers, an estimate apparently traceable back to a count taken in the 1960s, although these sources' recent publication dates obscure the age of this data.

Estimated speakers	Source	Estimate Year
3,200	Simons & Fennig 2018	2015
3,000	Comrie 2008, Salminen 2007, Holisky & Gagua 1994	unclear
2,500-3,000	Kolga 2001	1960s
2,000 200	Šavxelišvili 2001 Harris & Samuel 2011	unclear 2011

Table 1: Available estimates for number of Tsova-Tush speakers

We propose updating speaker number estimates based on consultation with speakers living in Zemo Alvani. Local experts indicate that roughly half the village is of Tsova-Tush heritage, and between one half and one quarter are speakers. The 2014 Georgian census claimed the population of Zemo Alvani was 3,306. Thus, locals predict the population of Tsova-Tush people to be roughly **1,600** and the number of speakers to be perhaps **400–800**.

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Survey Methods

Language vitality factors are understudied for Tsova-Tush. Only one sociolinguistic study has been carried out (Gigašvili 2016, 2014), which found that all Tsova-Tush speakers were bilingual in Georgian and that age negatively correlated with Georgian monolingualism. Tsova-Tush language attitudes and domains of use have not previously been studied.

To understand Tsova-Tush vitality, a language use survey was collected in Zemo Alvani in 2017, with 30 respondents (3.75%–7.5% of the estimated speakers). Survey results were analyzed using negative binomial and ordinal regression modeling and correspondence analysis combined with hierarchical clustering.

espondent Demographics				
Variable	n	Min	Max	Avg.
Age Self rating	30 30	31 1	96 10	61.9 7.8
Variable	Levels	n	%	∑ %
Gender	f	11	36.7	36.7
	m	19	63.3	100.0
L1 Tsova-Tush	yes	11	36.7	36.7
	no	19	63.3	100.0
L1 Georgian	yes	23	76.7	76.7
_	no	7	23.3	100.0
City of residence	Zemo Alvani	25	83.3	83.3
-	Akhmeta	4	13.3	96.7
	Tbilisi	1	3.3	100.0

Results

Two types of generalized regression, ordinal and negative binomial, were used to model differences in the responses based on respondents' demographic groups.

1. Who is more likely to find transmission of Tsova-Tush to youth important? (ordinal regression)

- Dependent variable: Importance of Tsova-Tush for youth (Not important at all, Somewhat important, Very Important, or Crucial)
- Independent variables: Age (centered), self rating of Tsova-Tush ability, native speaker of Tsova-Tush (0, 1), native speaker of Georgian (0, 1), gender, and city of residence
- Only **age** is significant. The older one is, the more they likely feel Tsova-Tush is important for youth.

2. Who is more likely to report being a user of Tsova-Tush? (negative binomial regression)

- Dependent variable: Count of domains where respondent indicated using Tsova-Tush weighted by reported frequency (range: 0-18)
- Independent variables: Age (centered), native speaker of Tsova-Tush (0, 1), native speaker of Georgian (0, 1), and gender
- Only **age** is significant predictor. The older one is, the more likely they report using Tsova-Tush.

Correspondence analysis combined with hierarchical clusterings was used to model the third research question.

- 3. What patterns emerge in how often respondents report using Tsova-Tush in selected domains?
- Domains: With spouse, with children, with parents, with extended family, with friends and neighbors, at market, at work, and at doctor
- Frequency: Always, often, sometimes, or never
- Identified four clusters based on frequency: Always use (gray), Often (red), Sometimes (yellow), and Never (blue)

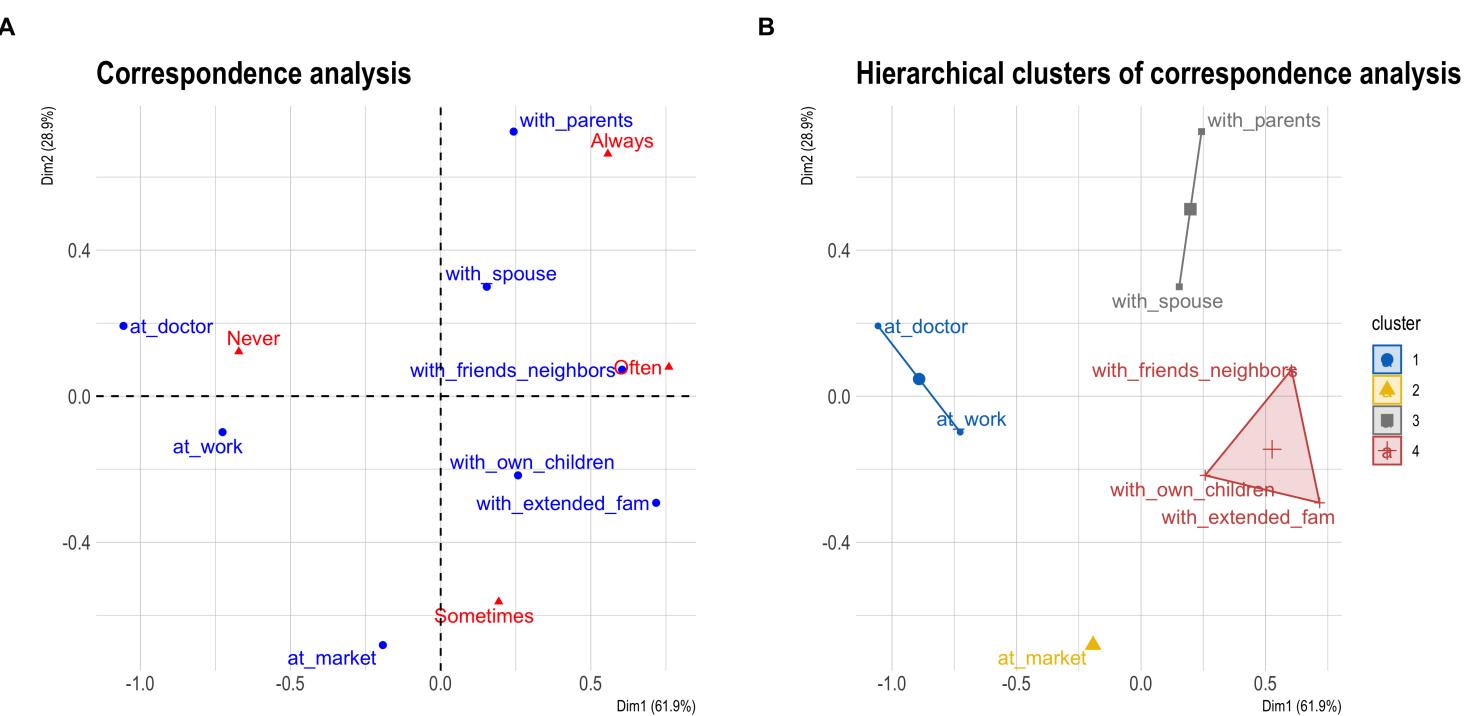


Figure 2: Correspondence analysis of domains of Tsova-Tush use (A) and hierarchical clusters of domains (B)

Conclusions

We found that widely cited estimates of Tsova-Tush speakers dramatically overrepresent the size of the present-day speakership. Even supposedly current sources still publish a speaker count that is likely 50 years old and 4–8 times too high, while failing to indicate the age or the provenance of the information. Recent publication dates, when associated with old estimates, give a false impression about the size of vulnerable and rapidly changing endangered language populations.

Results from the language use survey presented a mixed picture of language use and attitudes.

- Overall use: Older speakers were more likely than younger speakers to report using Tsova-Tush.
- Domains of use: Older speakers reported using Tsova-Tush in a more diverse set of domains than younger speakers.
 - Domains of use fell along a scale (see e.g., Blommaert 2007) where Tsova-Tush is used the least at translocal levels (doctor and work) and increasingly more often in more local levels.
 - Even in the most local levels, with spouse or parents, Tsova-Tush was either *always* or *never* used.
 - Reported use was greater with extended family than with children.
- Importance of transmission: Most respondents reported that it was "somewhat important" or "very important" for younger people to know Tsova-Tush.
 - Older respondents tended to rate transmission as more important than younger respondents.

Together, our updated speaker number estimates and results of the language use survey suggest that Tsova-Tush, while highly valued among speakers and still in use, is losing ground in all domains and is not being transmitted to children.

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Contact Information

Web brynhauk.com, rentz.weebly.com
Email bhauk@hawaii.edu, rentzb@hawaii.edu
Data & Code github.com/rentzb/icldc-bbl