

Catching variation during fieldwork on Nakh-Daghestanian languages

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26 November 2019, Happy Birthday Ferdinand de Saussure!



Introduction

Investigating variation:

- In variationism (e.g. [Labov 1963] on Martha's Vineyard /ai/ ~ /au/, [Trudgill 1974] on Norwich speech, [Wolfram 1969] on Afro-American speech from Detroit) researchers get mad about social stratification, mostly urban.
"Two equally interesting questions are at the heart of this book: how an extraordinary degree of idiosyncratic linguistic variation can coexist with an extraordinarily homogeneous speaker population, and how linguists might overlook the possibility of their coexistence." [Dorian 2010: 3]

Data

Data were collected from

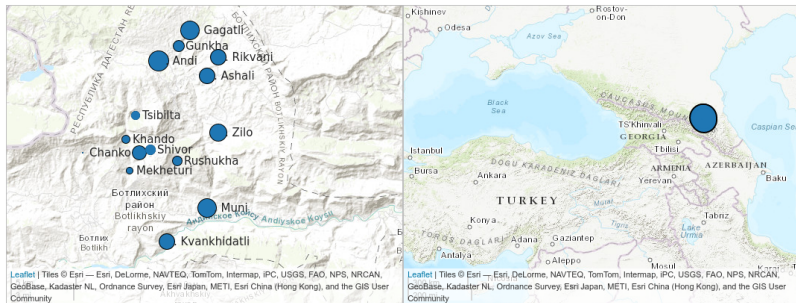
- 44 speakers of Andi (Nakh-Daghestanian) during fieldwork in Zilo (Botlikh district, Dagestan) in 2019



Created with [lingtypology](#) [[Moroz 2017](#)]

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- and 23 Researchers of Nakh-Daghestanian languages via an online questionnaire

Zilo Data

44 Zilo speakers were asked to translate:

- 1 'big butterfly'
- 2 'big butterflies'
- 3 'big grasshopper'
- 4 'big grasshoppers'
- 5 'the parents left'
- 6 'pour your father some water'
- 7 'pour your cow some water'
- 8 'third girl'
- 9 'the bride was beautiful at the wedding'
- 10 'heels'
- 11 'sons-in-law'
- 12 'they are eating'
- 13 'when he comes, we will eat'
- 14 'rainbow'
- 15 'north'
- 16 'thousand'

Zilo questionnaire (44 speakers): class attribution

lect	number	m	f	an	inan 1	inan 2	inan 3	non-h
Andi	sg	w	j	b	b	r	-	-
Andi	pl	w	j	j	b	r	-	-
Gagatli	sg	w	j	b	b	r	-	-
Gagatli	pl	w	j	j	b	r	-	-
Rikwani	sg	w	j	b	b	r	b	-
Rikwani	pl	w	j	j	b	r	r	-
Zilo	sg	w	j	b	b	r	-	-
Zilo	pl	w	j	j	b	r	-	-
Muni	sg	w	j	-	-	-	-	b
Muni	pl	w	j	-	-	-	-	b

- *odoruk'a* 'butterfly' (1, 2) and *kats'a* 'grasshopper' (3, 4) belong to **inan 3** class in Rikvani [Suleymanov 1957]
- *odoruk'a* 'butterfly' (1) is one of the most variable words according to [Moroz and Verhees 2019]

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- Samira, say something about (9, 13), please

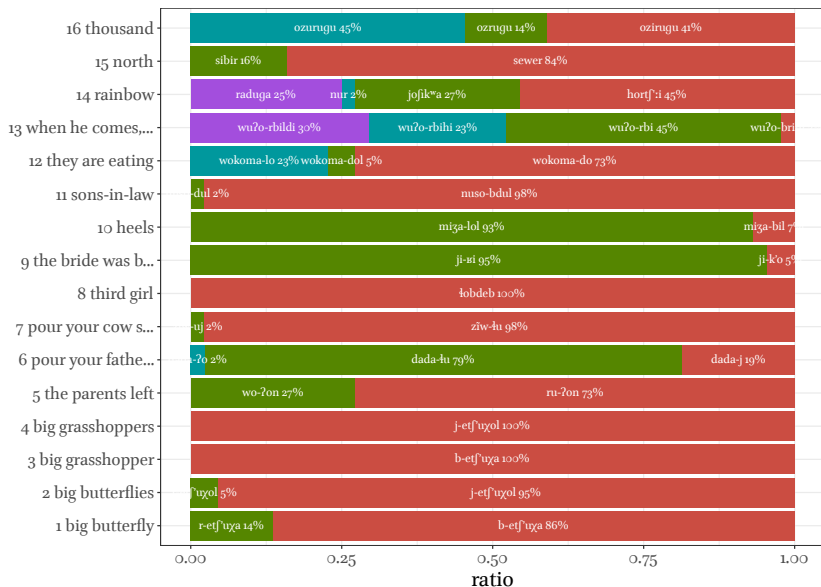
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- Examples ‘rainbow’, ‘north’, ‘thousand’ (14, 15, and 16) were selected since there were known problems in borrowings (14, 15) and borrowing adaptation (16): *ozrugu*, *ozirugu*, *ozurugu*.

Zilo questionnaire (44 speakers): results



More about ‘butterfly’:

- previously we claimed:

lect	number	m	f	an	inan 1	inan 2	inan 3
Rikwani	sg	w	j	b	b	r	b
Rikwani	pl	w	j	j	b	r	r
Zilo	sg	w	j	b	b	r	-
Zilo	pl	w	j	j	b	r	-

- in [Moroz and Verhees 2019] we asked only singular form
- in our new experiment:

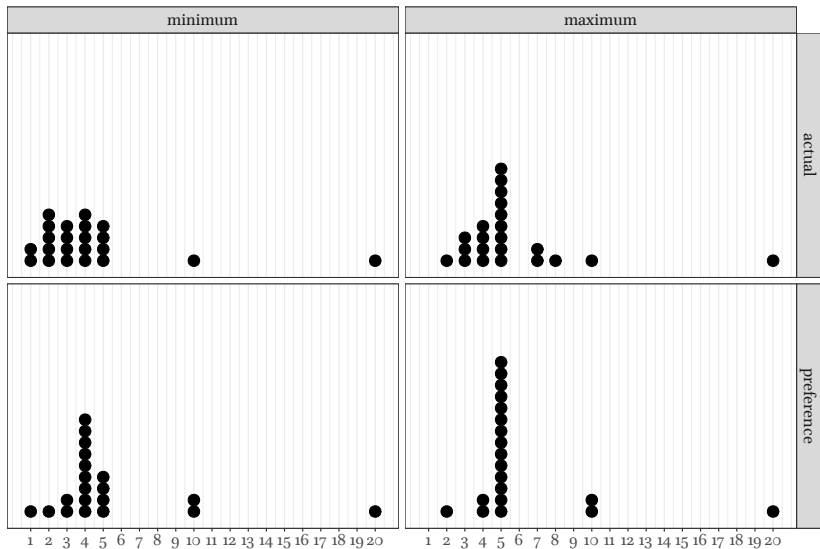
sg	pl	n	class
b-etf'uxa	j-etf'uxol	38	an
r-etf'uxa	j-etf'uxol	4	‘o’
r-etf'uxa	r-etf'uxol	2	inan 2

Nakh-Daghestanian Fieldwork Survey

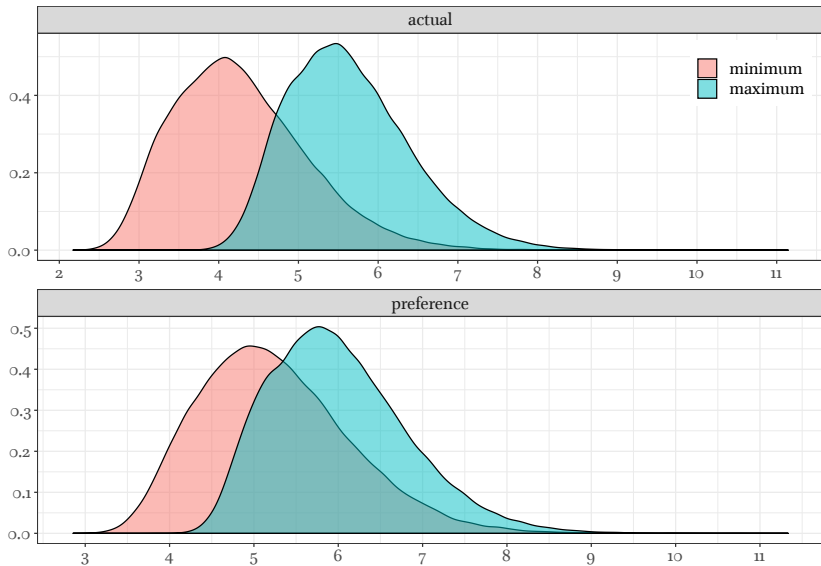
23 ND researches were asked to answer about:

- level of education
- linguistic interest
- study linguistics at university
- fieldwork participation when student
- year of finishing study
- place of study and work
- number of people in fieldtrips participated
- number of people in fieldtrips preder to participate
- fildwork goal and the main goal
- elicitation and corpora use
- **number of speakers that researcher should consult with**
- **number of speakers that researcher usually consult with**
- how researcher need to cope with interspeaker variability
- how researcher need to cope with intraspeaker variability
- whether speakers under the age of 13 are reliable consultants
- whether speakers older than 70 are reliable consultants
- personal (dis)preferences about the choice of consultants

Number of speakers

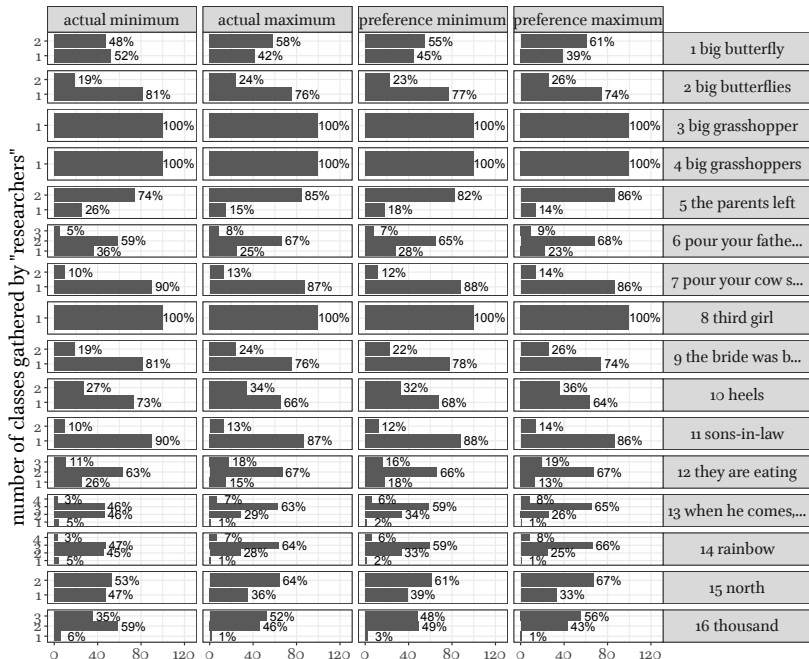


Bootstrapped mean number of speakers (10^5 iterations)



What if 10^5 “average researchers” ...
come to Zilo?

10⁵ samples from experiment results



Conclusions

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- “Average researcher” might overlook the variation
- Observed variation should be further explored using collected sociolinguistics parameters
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 - Is it possible to work on some syntax?
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- Observed variation is still just a bunch of isolated lexical, phonological and morphological facts...
 - Is it possible to work on some syntax?
 - Is it possible to find some interaction between different variation variables?
- What do all those results add to the linguistic theory?

References

- Dorian, N. C. (2010). *Investigating variation: The effects of social organization and social setting*. Oxford University Press.
- Labov, W. (1963). The social motivation of a sound change. *Word*, 19(3):273–309.
- Moroz, G. (2017). *lingtypology: easy mapping for Linguistic Typology*.
- Moroz, G. and Verhees, S. (2019). Variability in noun classes assignment in Zilo Andi: experimental data. *Iran and the Caucasus*, 23(3):268–282.
- Suleymanov, J. G. (1957). *Grammatičeskij očerk andijskogo jazyka (po dannim govora s. Rikvani)* [Grammar sketch of the Andi language (based on material from the dialect of the village Rikvani)]. PhD thesis, Institut Jazykoznanja AN SSSR.
- Trudgill, P. (1974). *The social differentiation of English in Norwich*. Cambridge University Press.

Wolfram, W. A. (1969). *A Sociolinguistic Description of Detroit Negro Speech*, No. 5., volume 5 of *Urban language*. Center for Applied Linguistics.