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.

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- In this talk we explore variation in a small, homogeneous speaker population and the probability that an average researcher of Nakh-Daghestanian languages catches this variation.

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

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Created with `lingtypology` [Moroz 2017]

- and 23 researchers of Nakh-Daghestanian languages via an online questionary

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Zilo Data

44 Zilo speakers were asked to translate 16 stimuli:

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'

Stimuli: 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	-	-
Rikvani	sg	w	j	b	b	r	b	-
Rikvani	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 *ʁats'a* 'grasshopper' (3, 4) belong to the rare `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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- Optional plural suffix *-l* can be added to progressive verb forms in *-rado/-mado* (12)
- 'rainbow', 'north', and 'thousand' (14, 15, and 16) show variation in word choice (14, 15) and adaptation (16): *ozrugu*, *ozirugu*, *ozurugu*

Zilo questionary (44 speakers): results
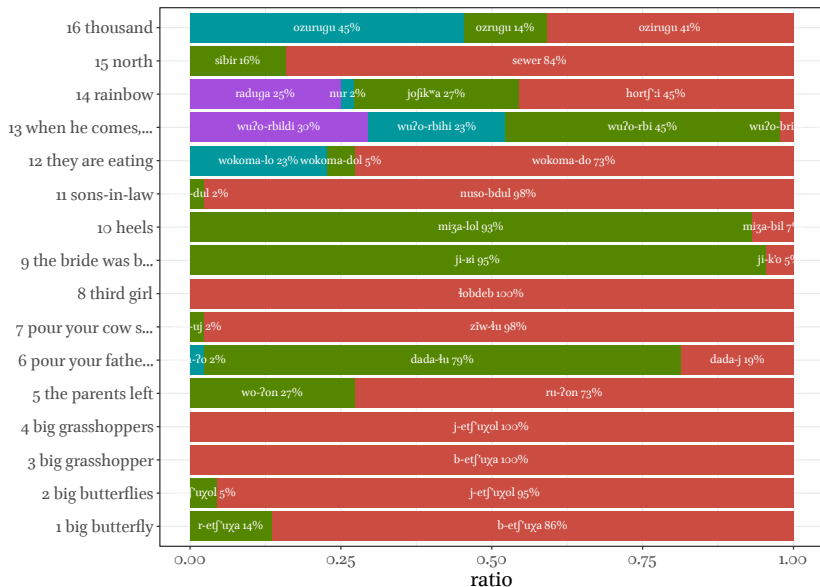
More about 'butterfly':

- previosly we claimed:

lect	number	m	f	an	inan 1	inan 2	inan 3
Rikvani	sg	w	j	b	b	r	b
Rikvani	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 the singular form of 'butterfly'

- in our new experiment):

sg	pl	n	class
b-etʃ'uχa	j-etʃ'uχol	38	an
r-etʃ'uχa	j-etʃ'uχol	4	ʕoʔ
r-etʃ'uχa	r-etʃ'uχol	2	inan 2

Nakh-Daghestanian Fieldwork Survey
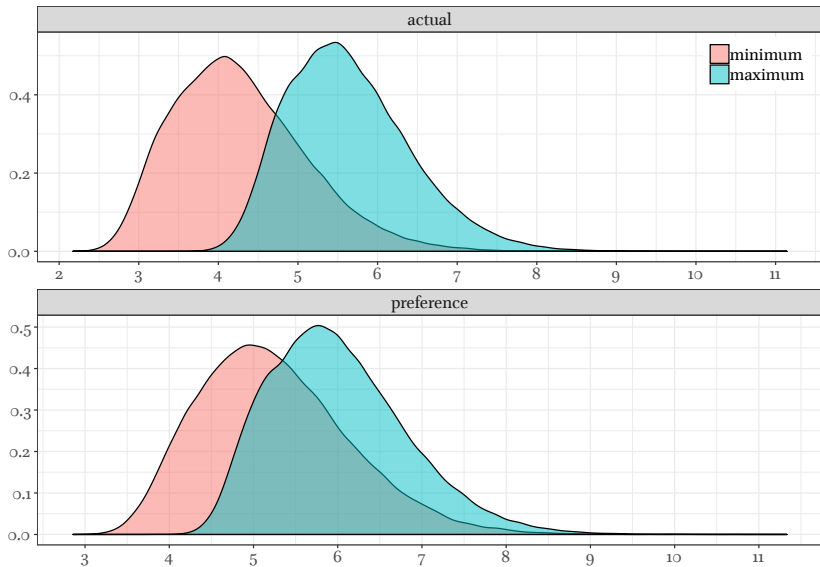
23 ND researchers were asked about:

- level of education
- linguistic interest
- studying linguistics at university
- fieldwork participation as a student
- year in which they finished their degree
- place of study and work
- number of people who participated in their fieldtrips
- preferred number of participants in fieldtrips
- goals of fieldwork
- use of elicitation and corpora
- **number of speakers a researcher *should* consult with**
- **number of speakers the researcher *usually* consults with**
- how researchers need to deal with interspeaker variability
- how researchers need to deal 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
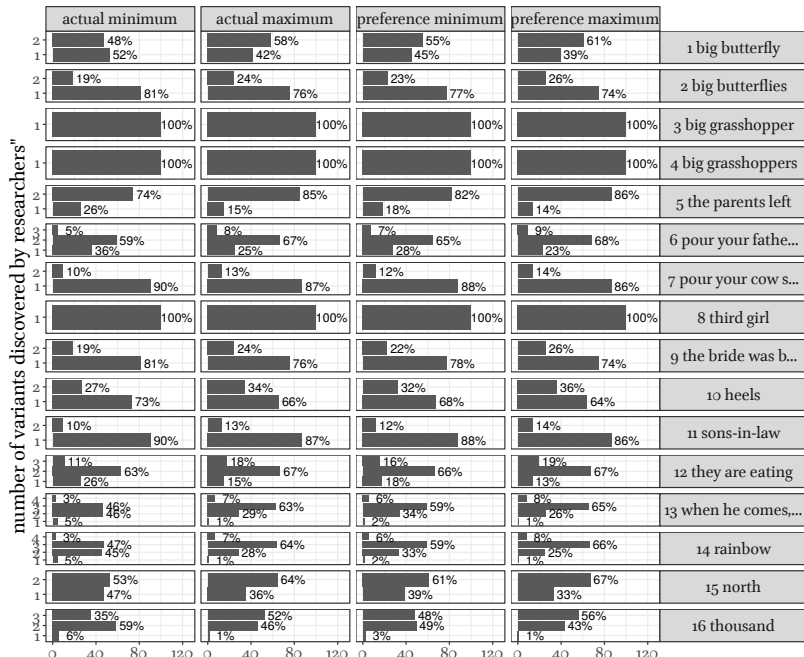
Number of speakers
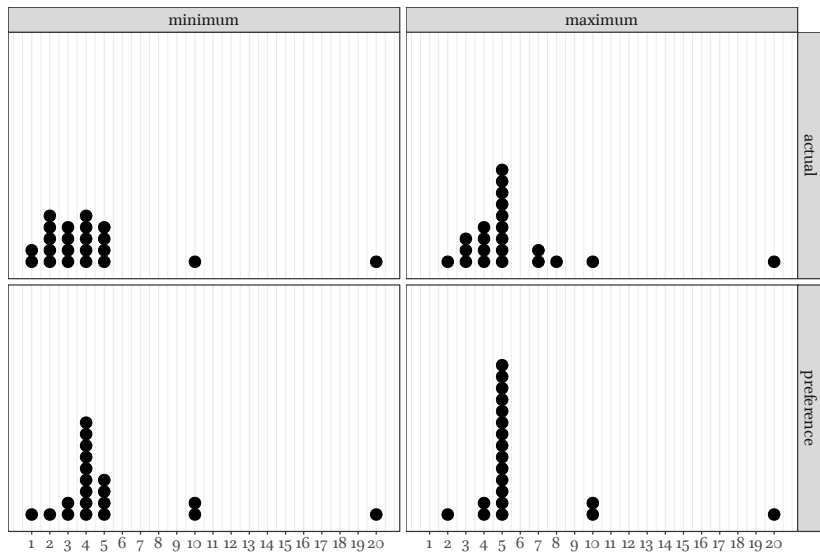
Bootstrapped mean number of speakers (10^5 iterations)

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

10^5 samples from experiment results

number of variants discovered by researchers"

variants	actual minimum	actual maximum	preference minimum	preference maximum	
2	48%	58%	55%	61%	1 big butterfly
1	52%	42%	45%	39%	
2	19%	24%	23%	26%	2 big butterflies
1	81%	76%	77%	74%	
1	100%	100%	100%	100%	3 big grasshopper
1	100%	100%	100%	100%	4 big grasshoppers
2	74%	85%	82%	86%	5 the parents left
1	26%	15%	18%	14%	
3	5%	8%	7%	9%	6 pour your fathe...
2	59%	67%	65%	68%	
1	36%	25%	28%	23%	
2	10%	13%	12%	14%	7 pour your cow s...
1	90%	87%	88%	86%	
1	100%	100%	100%	100%	8 third girl
2	19%	24%	22%	26%	9 the bride was b...
1	81%	76%	78%	74%	
2	27%	34%	32%	36%	10 heels
1	73%	66%	68%	64%	
2	10%	13%	12%	14%	11 sons-in-law
1	90%	87%	88%	86%	
3	11%	18%	16%	19%	12 they are eating
2	63%	67%	66%	67%	
1	26%	15%	18%	13%	
4	3%	7%	6%	8%	13 when he comes,...
3	46%	63%	59%	65%	
2	46%	29%	34%	26%	
1	5%	1%	1%	1%	
4	3%	7%	6%	8%	14 rainbow
3	47%	64%	59%	66%	
2	45%	28%	33%	25%	
1	5%	1%	2%	1%	
2	53%	64%	61%	67%	15 north
1	47%	36%	39%	33%	
3	35%	52%	48%	56%	16 thousand
2	59%	46%	49%	43%	
1	6%	1%	3%	1%	

0 40 80 120   0 40 80 120   0 40 80 120   0 40 80 120

Conclusions

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- An **"average researcher"** might overlook a significant amount of the variation we observed due to the low number of speakers they usually consult with
- However, our experiment with 44 speakers also failed to show some of the variation we found in prior research on this dialect
- The observed variation should be explored in more detail using the collected sociolinguistic parameters
- The characteristics of the **"average researcher"** of Nakh-Daghestanian languages can be further eloborated using the parameters collected in the survey
- The observed variation remains a collection of isolated lexical, phonological and morphological facts...

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  - Could variational variables be interrelated?

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  - Is it possible to study variation in syntax in this manner?
  - Could variational variables be interrelated?
- And what do all these results contribute to linguistic theory?

References

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