

Gender attribution of borrowings and native lexemes in Zilo (Andi)

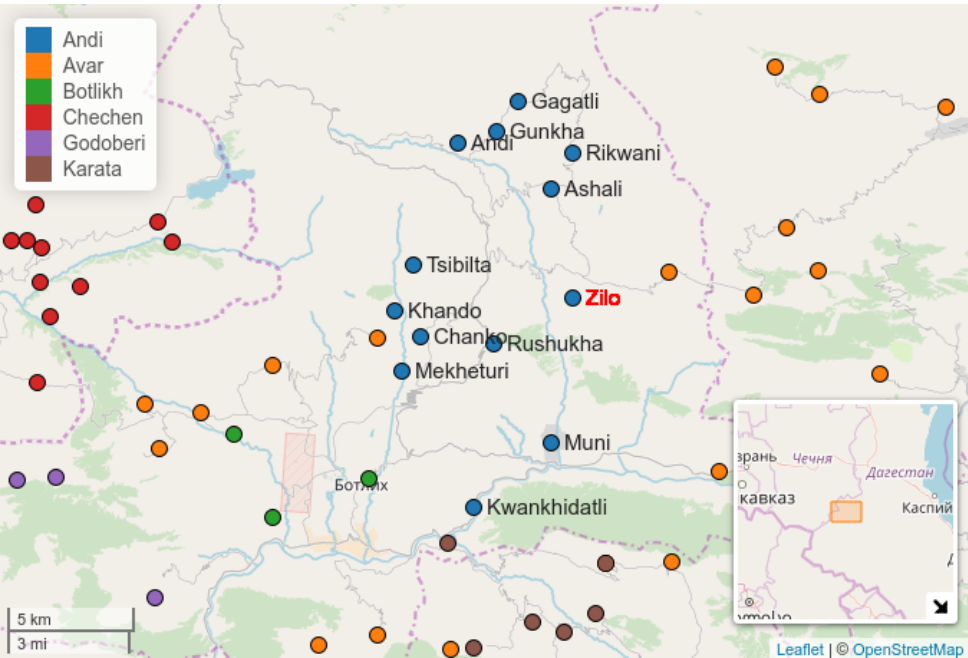
Samira Verhees and George Moroz

Linguistic Convergence Laboratory, NRU HSE, Moscow, Russia

11 May 2018 r.

Anatolia-the Caucasus-Iran: Ethnic and Linguistic Contacts
Institute of Oriental Studies in Russian-Armenian State University

- Andi
- Avar
- Botlikh
- Chechen
- Godoberi
- Karata



5 km
3 mi

Andi and their neighbors

- ▶ Nakh
 - ▶ Chechen
- ▶ Avaro-Andic-Tsezic
 - ▶ Avar
 - ▶ Andi
 - ▶ Botlikh
 - ▶ Karata
 - ▶ Andi

Andi and their neighbors

- ▶ Nakh
 - ▶ Chechen
- ▶ Avaro-Andic-Tsezic
 - ▶ Avar
 - ▶ Andi
 - ▶ Botlikh
 - ▶ Karata
 - ▶ Andi

All Andi speakers are multilingual:

- ▶ Avar — old lingua franca of a region
- ▶ Russian — new lingua franca for the whole of Daghestan (2 centuries of active Russification)

Gender systems

Gender systems

- ▶ The impact the systems have most notably on verbal agreement, but also on some adjective, numeral, adverbial, pronominal, and postpositional agreement.
- ▶ Some POS agree with absolutive argument of the clause. Some POS agree with its head.
- ▶ In most cases gender is a covert category, but there are some exception, such as:
 - ▶ *w-ots:i* (M-sibling)
 - ▶ *j-ots:i* (F-sibling)
 - ▶ *b-ots:i* (AN-sibling) — from the “Three Little Pigs” fairytale

Andi gender inventory

			M	F	AN	\neg AN 1	\neg AN 2	\neg AN 3	\neg H
[Alekseev 1999]	Andi	SG	w	j	b	b	r	-	
		PL			j				
[Salimov 1968]	Gagatli	SG	w	j	b	b	r	-	
		PL			j				
[Suleymanov 1957]	Rikwani	SG	w	j	b	b	r	b	-
		PL			j			r	
fieldwork	Zilo	SG	w	j	b	b	r	-	
		PL			j				
[Suleymanov 1957]	Muni	SG	w	j	-				b
		PL							

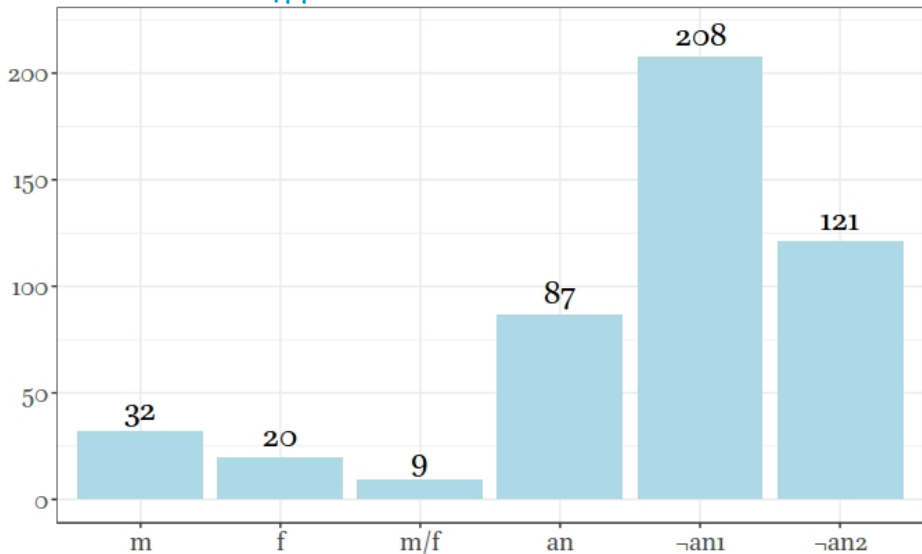
- ▶ M VS. F VS. \neg AN VS. \neg ANS
- ▶ SG = PL (except AN and \neg AN 3)
- ▶ Rikwani's \neg AN 3 gender contains only several words: *hotʃortʃ'in* 'scorpion', *odoruk'a* 'butterfly', and other 5 words
- ▶ In "lower-group" (Muni and Kvanxidatli) there are only three genders (M VS. F VS. \neg H)

Neighbour languages gender inventories

		M	F	\neg H				
[Alekseyev and Atayev 1997]	Avar	SG	<i>w</i>	<i>j</i>	<i>b</i>			
		PL	<i>r/l</i>					
[Magomedbekova 1971]	Karata	SG	<i>w</i>	<i>j</i>	<i>b</i>			
		PL	<i>b</i>		<i>r</i>			
[Gudava 1962]	Botlikh	SG	<i>w</i>	<i>j</i>	<i>b/m</i>			
		PL	<i>b</i>		<i>r/n</i>			
[Nichols 1994]	Chechen	SG	<i>w</i>	<i>j</i>	<i>j</i>	<i>d</i>	<i>b</i>	<i>b</i>
		PL	<i>b</i>	<i>d</i>				<i>d</i>

- ▶ M VS. F VS. \neg H
- ▶ SG \neq PL (except Chechen)

Distribution of 477 Zilo nouns



fieldwork data

Gender attribution experiment

Experiment: Set up

How speakers decide about new words?

- ▶ collect 25 native and 25 loan words of \neg_{AN} 1 gender
- ▶ collect 25 native and 25 loan words of \neg_{AN} 2 gender
- ▶ add some words of Rikwani's \neg_{AN} 3 gender
- ▶ pseudo random stimuli order
- ▶ 16 Zilo native speakers
- ▶ context: *di-b* / *di-r* X “my X”

Experiment: Selected Words

22 *kots'i* broom

48 *aw?ara* cap

4 *ʌats'a* grasshopper

13 *ts'a* fire

68 *nitfo* scythe

57 *rok'o* heart

92 *ʌen* water

29 *hark'u* eye

46 *tʌ'ir* bridge

25 *q'en* wall

85 *refa* tree

28 *k^weʌir* sleeve

79 *hunts':i* honey

98 *raketa* rocket

106 *kolxoz* collective farm

39 *kalendarʌ* calendar

83 *sumka* bag

65 *majina* car

58 *pasport* passport

71 *simkarta* sim-card

16 *kirpitʌ* brick

63 *tarif* tariff

105 *rozʌetka* power outlet

45 *patʌka* packet

64 *esemeska* SMS

75 *plastirʌ* plaster

Experiment: Inter-rater Reliability

	% agreem.	Fleiss' Kappa	z-score	[Fleiss 1971]
all stimuli	74.5	0.849	95.7	Almost perfect agreement
native stimuli	84.2	0.937	77.5	Almost perfect agreement
borrowings	63.3	0.732	56.1	Substantial agreement

Experiment: Inter-rater Reliability

	% agreem.	Fleiss' Kappa	z-score	[Fleiss 1971]
all stimuli	74.5	0.849	95.7	Almost perfect agreement
native stimuli	84.2	0.937	77.5	Almost perfect agreement
borrowings	63.3	0.732	56.1	Substantial agreement

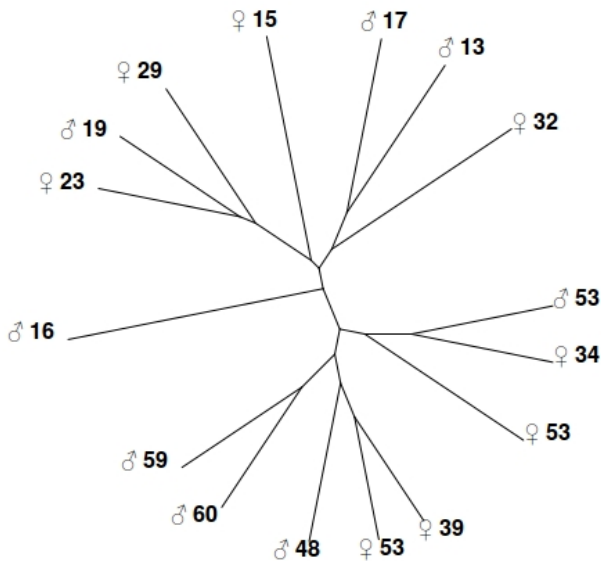
- ▶ very high agreement among speakers
- ▶ very high but not ideal agreement among speakers in native lexicon
- ▶ smaller but still high agreement among speakers in borrowing lexicon

Experiment: Variable Words

27 variable words with more than one speaker:

id	Zilo	English	source	¬AN 1	¬AN 2
45	<i>patfka</i>	packet	loan	3	13
64	<i>antena</i>	antenna	loan	3	13
101	<i>paket</i>	packet	loan	3	13
17	<i>χur</i>	field, garden	native	4	12
44	<i>provod</i>	line	loan	4	12
70	<i>gol</i>	goal	loan	5	11
21	<i>simkarta</i>	SIM card	loan	6	10
24	<i>zatfетка</i>	students record-book	loan	6	10
2	<i>vagon</i>	train car	loan	9	7
20	<i>odoruk'a</i>	butterfly	native	9	7
39	<i>kalendar^j</i>	calendar	loan	9	7
75	<i>plastir^j</i>	plaster	loan	10	6
41	<i>sputn^jik</i>	satellite	loan	12	4
98	<i>raketa</i>	rocket	loan	12	4
71	<i>kometa</i>	comet	loan	14	2
72	<i>lift</i>	lift	loan	14	2

Experiment: Speakers' Hierarchical Clustering



Experiment: conclusion

- ▶ There is a variability in gender attribution even in native words
- ▶ Gender attribution in borrowings are more variable than native words
- ▶ Variability is symmetrical: there is no \neg AN 1 or \neg AN 2 gender preference
- ▶ Variability is somehow connected with the age, and not with the gender

Experiment: conclusion

- ▶ There is a variability in gender attribution even in native words
- ▶ Gender attribution in borrowings are more variable than native words
- ▶ Variability is symmetrical: there is no \neg AN 1 or \neg AN 2 gender preference
- ▶ Variability is somehow connected with the age, and not with the gender
- ▶ It is interesting to compare these results with results of non-words experiments (compare with [Dąbrowska 2005])

Thank you!

Send us a mail!

agricolamz@gmail.com
jh.verhees@gmail.com

References

- Alekseev, M. Y. (1999). Andiyskiye yaziki. In M. Y. Алексеев, S. A. Starostin, G. A. Klimov, and Y. G. Testeleets (Eds.), *Yaziki mira. Kavkazskiye yaziki*, pp. 220–228. Academia.
- Alekseyev, M. Y. and B. M. Atayev (1997). *Avarskiy yazik*. Academia.
- Dąbrowska, E. (2005). Productivity and beyond: mastering the polish genitive inflection. *Journal of child language* 32(1), 191–205.
- Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological bulletin* 76(5), 378.
- Gudava, T. E. (1962). *Botlikhskiy yazik*. AN GSSR.
- Magomedbekova, Z. M. (1971). *Karatinskiy yazik: grammaticheskij analiz, teksty, slovar*. Metsniyereba.
- Nichols, J. (1994). Chechen. In R. Smeets (Ed.), *The indigenous languages of the Caucasus, vol. 4: The North East Caucasian languages, part 2*, pp. 2–77. Delmar, NY: Caravan Books.
- Salimov, K. S. (2010 (1968)). *Gagatlinskiy govor andiyskogo yazika*. Institut yazika, literaturi i iskusstva im. G. Tsadasi.
- Suleymanov, Y. G. (1957). *Grammaticheskij ocherk andiyskogo yazika (po dannim govora s. Rikvani)*. Ph. D. thesis, Institut yazikoznaniya AN SSSR.