

# **DagLoans: Quantifying the Contact**

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# Outline

- Purpose
- Methodology:
  - Wordlists and Sources
  - Data Collection
  - Analysis
- Rutul Region: A Case Study:
  - An Overview of the Region
  - Lexical Patterns of Khlut, Kiche, Rutul, Kina, Helmets and Kusur
  - Conclusions
- General Conclusions

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# Purpose of the Project

- DagLoans project aims at quantifying lexical convergence within East Caucasian and between them and immediately neighboring languages.

# Types of Borrowings

- Loanwords: компьютер, васисдас...
- Calques: всемогущий, allmächtig, almighty, omnipotens...
- Pattern borrowing: kinship system organization in Australia...

# Types of Borrowings

- Loanwords: компьютер, васисдас...
- Calques: всемогущий, allmächtig, almighty, omnipotens...
- Pattern borrowing: same type of kinship system organization in Australia (the words are not borrowed)...

# Calques and Patterns

- Calques and patterns are not directly countable.
- However, they may form +/- isoglosses.

# Calques and Patterns

- Kinship terms
- Body parts
- Sustainable lexicalizations, e.g. *cover+frog=turtle*



# Possible Questions

- To what extent does our list reflect contact patterns in the region? Is it sensitive enough to capture the differences between villages?
- Does lexical influence visibly change when one moves from the more «Lezgian» part of the valley to the more «Azerbaijani» one?
- How do our data correspond to the sociolinguistic data on bilingualism in the same villages?
- What are other factors that influence lexical borrowings?
- ...

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# Methodology: Wordlist for Major Languages

- Full WOLD list for major languages (Avar, Dargwa, Lezgian, Lak, Chechen, Kumyk, Azerbaijani);
- Extensions from «Отраслевая лексика»: animals, stars, diseases, kinship terms, utensils;
- Markup for possible loanword patterns in WOLD between major languages to locate potential high borrowability items.

# Markup

Lak	Dargwa	Lezgian	Avar	Azer	Chechen	Kumyk
къан	паст1ан	къавум	паст1ан	говун	паста	пастан
калан	[rus]	келем	хъапуст1ан	кэлэм	копаста	къапуста
бадан	NA	бадам	[rus]	бадам	миндаль	бадам

# «Pattern» markup

- ~900 nouns in Jakarta list;
- 7 major languages: Chechen, Kumyk, Azerbaijani, Avar, Lak, Lezgian, Dargwa;
- ~680 nouns marked as possibly borrowed at least between two of the languages.

# Methodology: Wordlist for Minor Languages

## Requirements:

- The list should be **collectable** from several speakers **within 1 day**;
- Hence, it should be **~200-300 words** long;
- The lexemes must have **high local borrowability rate**;
- The lexemes must be **easy to elicit** (bird names, agriculture...).

# Methodology: Wordlist for Minor Languages

What do we include:

- Nouns only
- Middle of WOLD List

# What Do We Exclude

- words that are hard to elicit (kingfisher aka зимородок, raven vs. crow, etc.);
- words that are never marked as borrowed in the markup of the major languages;
- words that are irrelevant for the region (grass skirt, ayahuasca, etc.);
- «modern world» and «law» categories as coming from dominant non-local cultures (Arabic, Persian, Russian);
- «Swadesh» part of WOLD as too resistant.



# Methodology: Wordlist for Minor Languages

- + words that are not marked as borrowed in the list for major languages but intuitively might be.
- + certain domain words (e.g. stars, diseases) that are used not for direct comparison but to find pattern copying.

# Methodology: Wordlist for Minor Languages

- 2017: constant adjustment in the field.
- Finally: an intersection of 227 lexemes (without ‘pattern copy’ items).

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# Data Collection

If a dictionary is available, we fill in the list from the dictionary in order not to write the words down during the session but to use a simple annotation:

- «same» for words same as in the dictionary;
- «other» for words other than in the dictionary;
- «confirmed» if a speaker cannot remember the word but accepts the word suggested in the dictionary;
- «rejected» if a speaker cannot remember the word and rejects the dictionary word;
- «no» if a speaker cannot remember the word and it is not in the dictionary;
- «added» if a speaker suggests a word but it is not in the dictionary.

# Methodology: Wordlist for Minor Languages

- The list is collected from 1 — 4 speakers.
- If we have more than one day, we re-collect the «other» and «added» words from several other speakers.
- Speakers between 40 and 70 are preferred (only their data is used in today's presentation), since speakers under 40 a higher degree of Russification is expected.

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- Identifying **patterns** of **possible** borrowing.
- So far, we do not identify the direction of borrowing.
- We also often cannot easily distinguish cognates from loanwords.

=> Comparative analysis (later)

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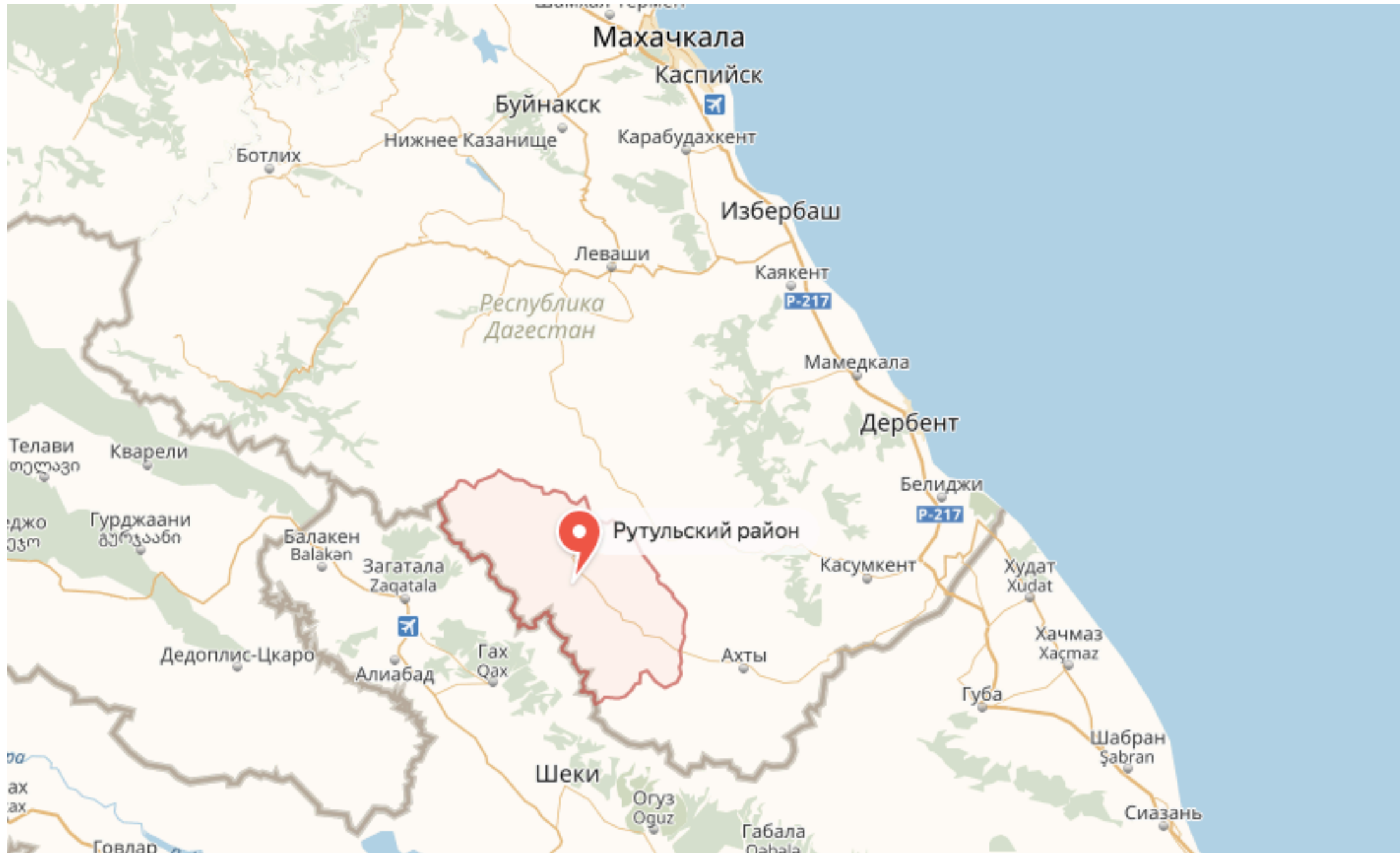
# Rutul Region

- 6 villages:
  - Khlut — Lezgian
  - Kiche — Rutul
  - Rutul — Rutul
  - Kina — Rutul
  - Helmets — Tsakhur
  - Kusur — Avar

# Rutul Region

- Khlut, Kiche and Kina are located in the «main» valley of the region.
- Kina, Helmets and Kusur are located in a side-valley closer to Azerbaijan.
- Kusur is located close to Azerbaijan but has no road access.

# Rutul Region



# Rutul Region

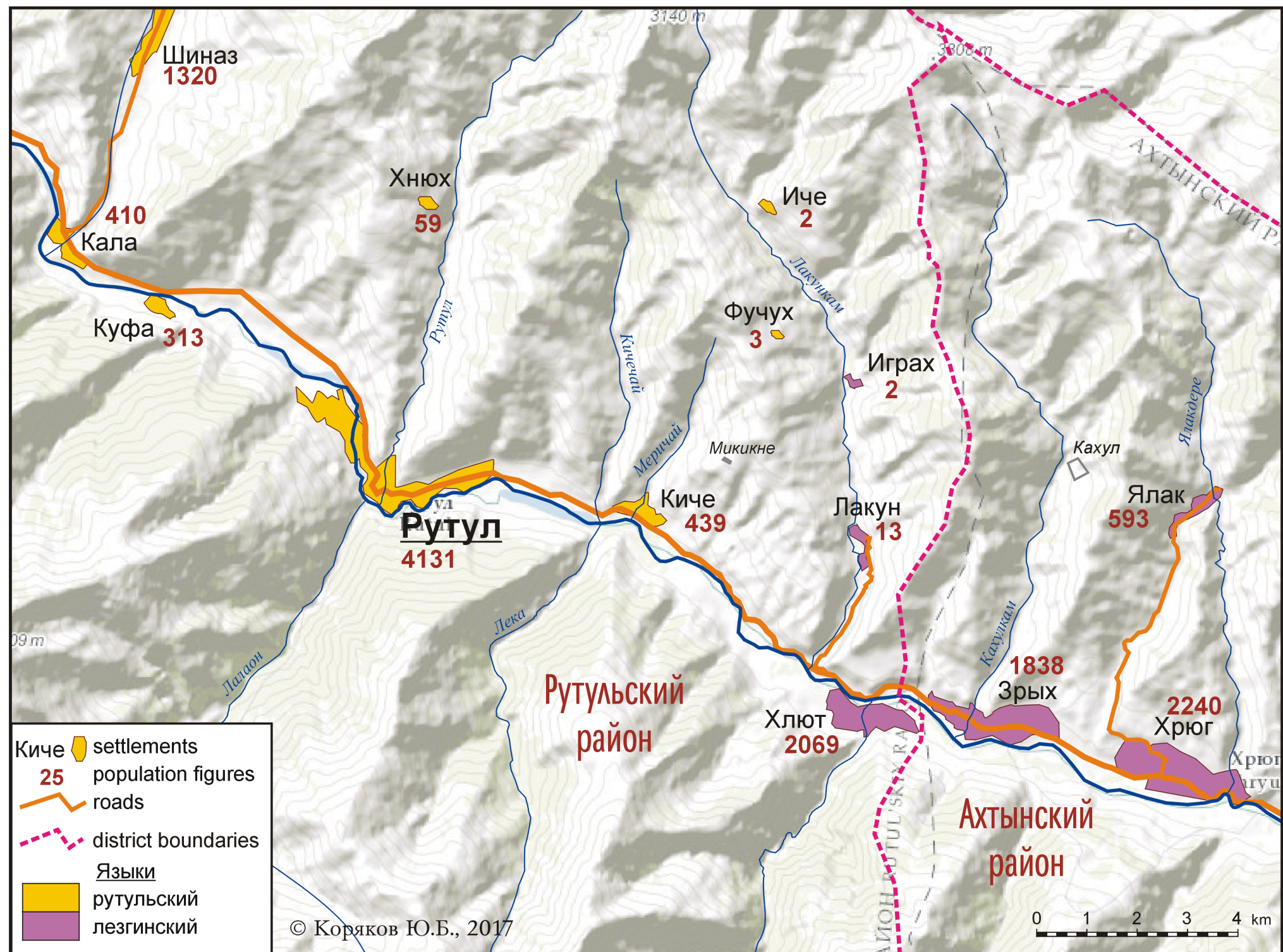


# Rutul Region





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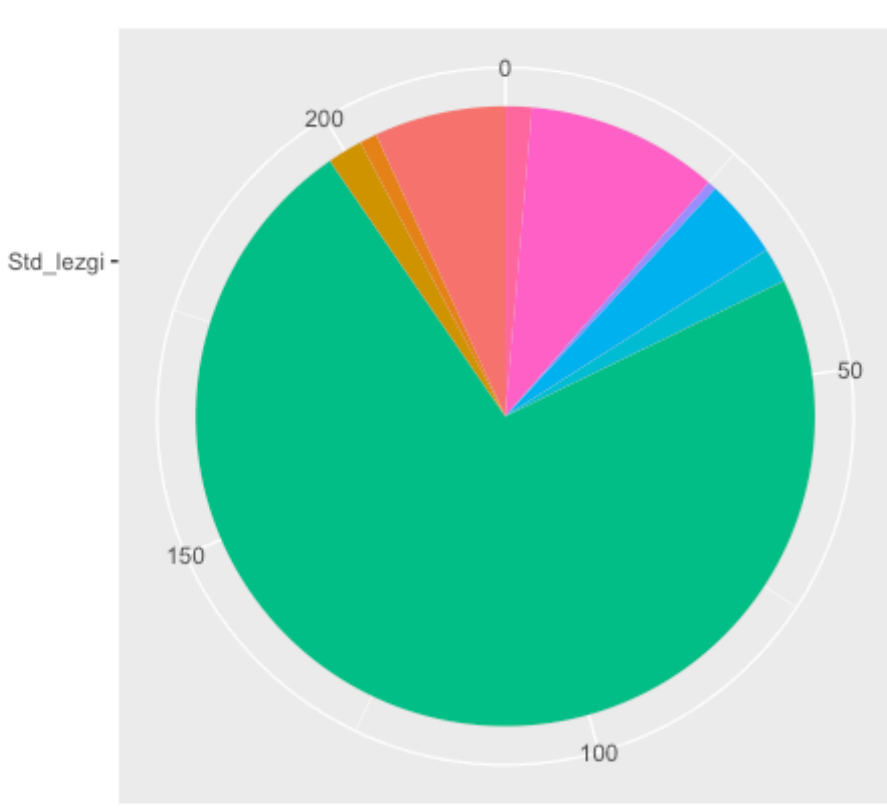


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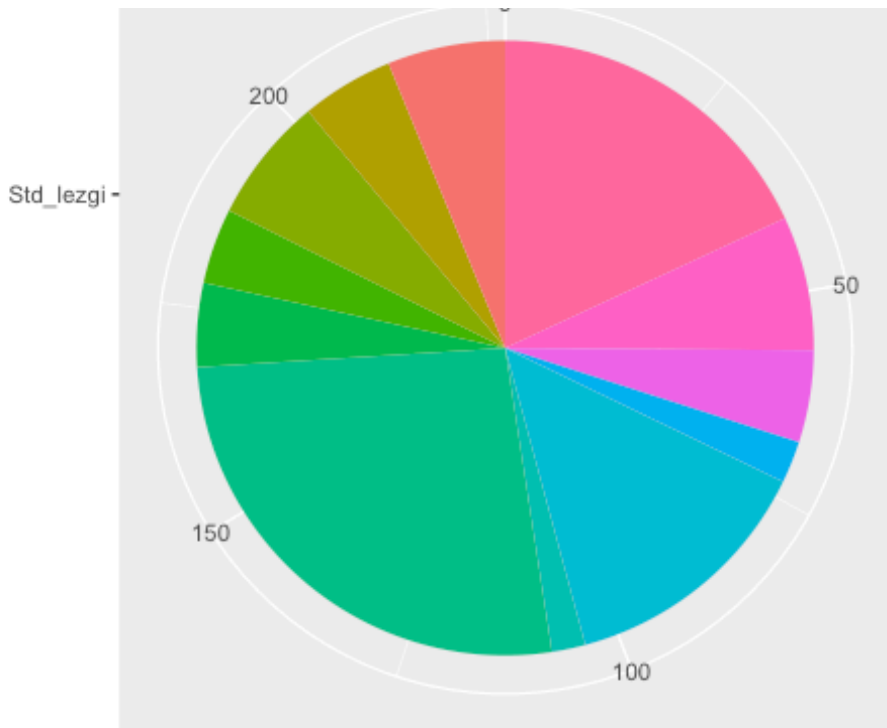
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	Std_Lezgi	Std_Avar	Dct_Rutul	Dct_Tsakhur
arab/pers	15	15	14	6
rus	9	9	5	8
turk	70	22	16	35
turk+other	0	3	41	31
std_chechen	0	2	0	0
std_dargwa	0	4	0	0
lak	0	6	0	0
std_lezgi	0	0	15	3
std_lezgi (cog?)	0	0	9	0
std_lezgi+other	0	0	10	0
khlut	0	0	11	2
nd_cognate?	0	1	4	1
rutul	0	0	0	17
rutul+other	0	0	0	21
tsakhur	0	0	11	0
unique	123	159	60	58
no	10	4	31	44

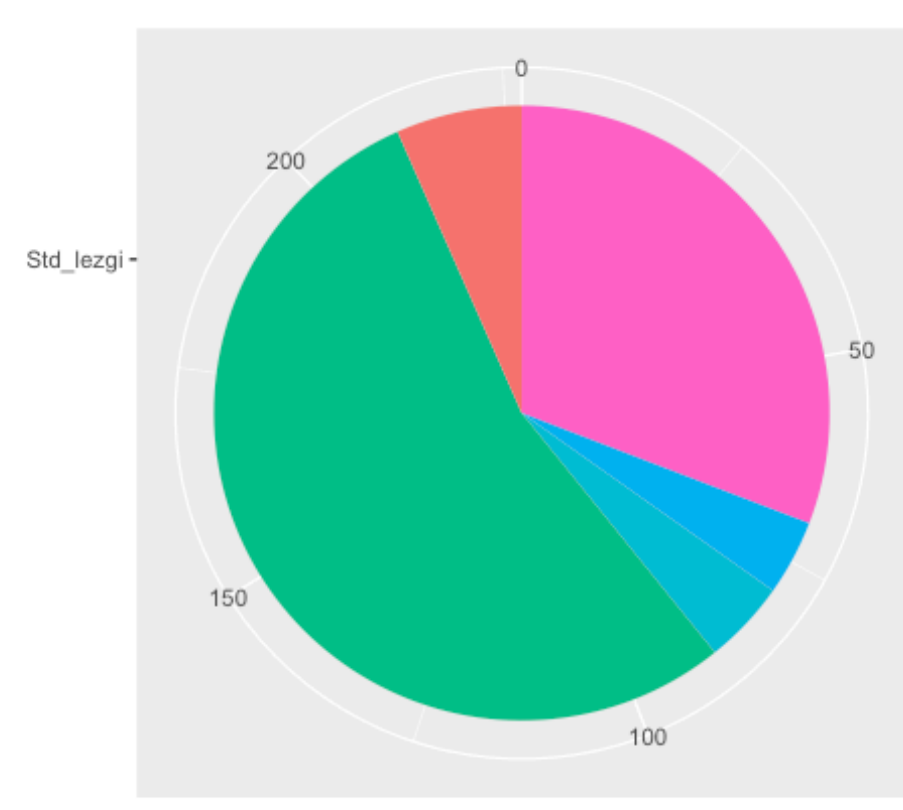
# Standard Languages



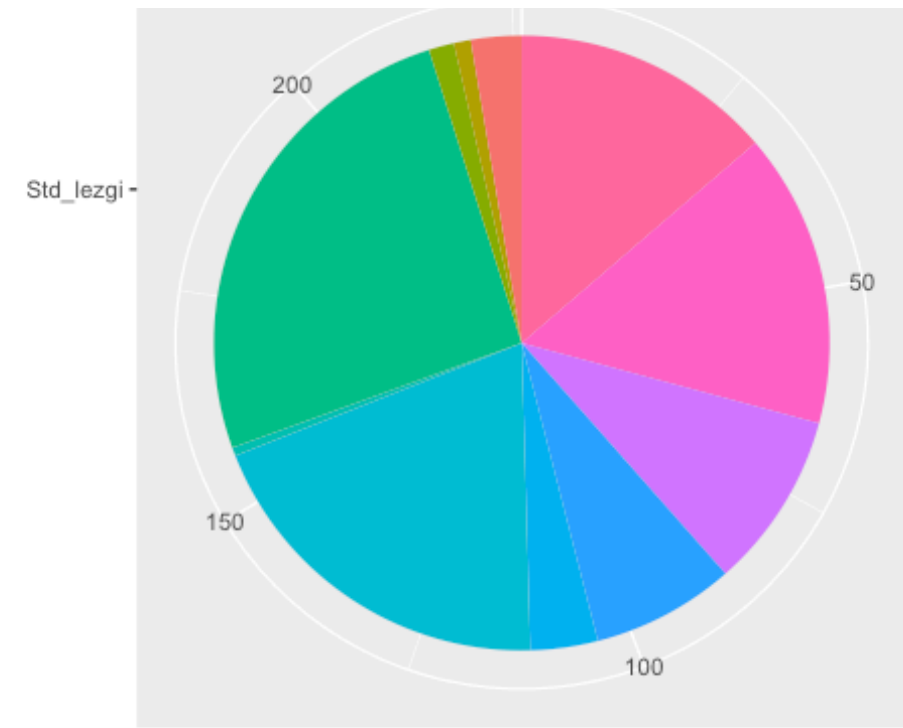
Standard Avar



Dictionary Rutul



Standard Lezgian



Dictionary Tsakhur

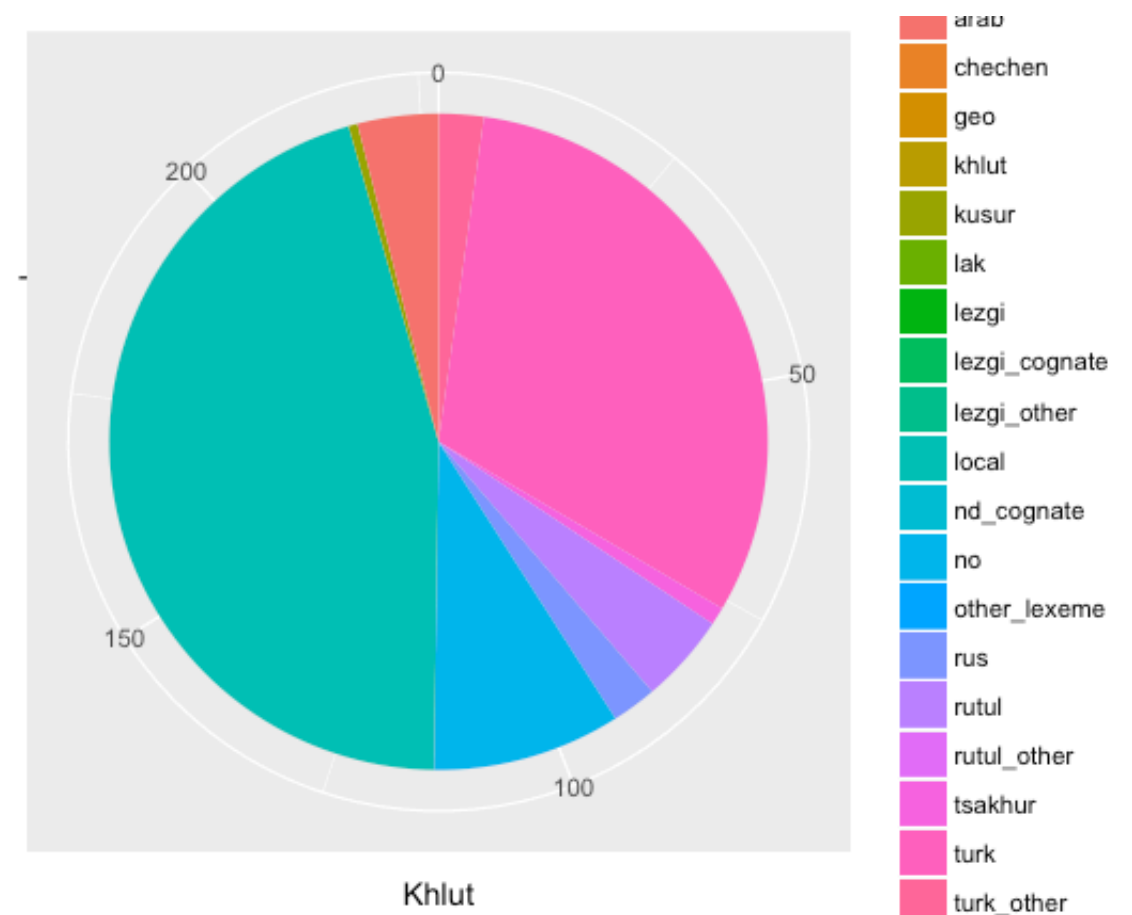


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# Khlut (the last Lezgian speaking village of the valley)

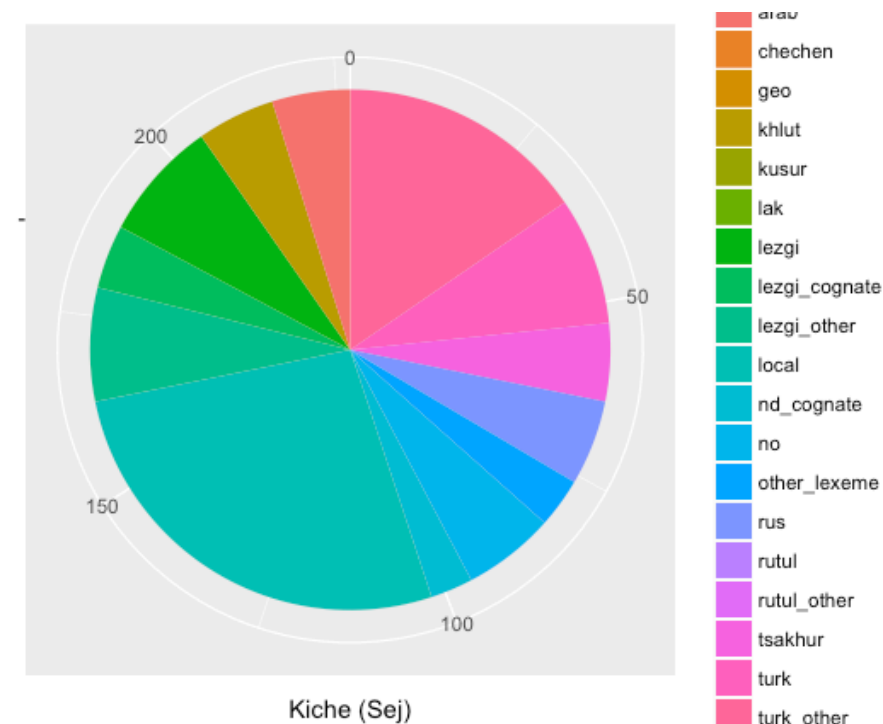
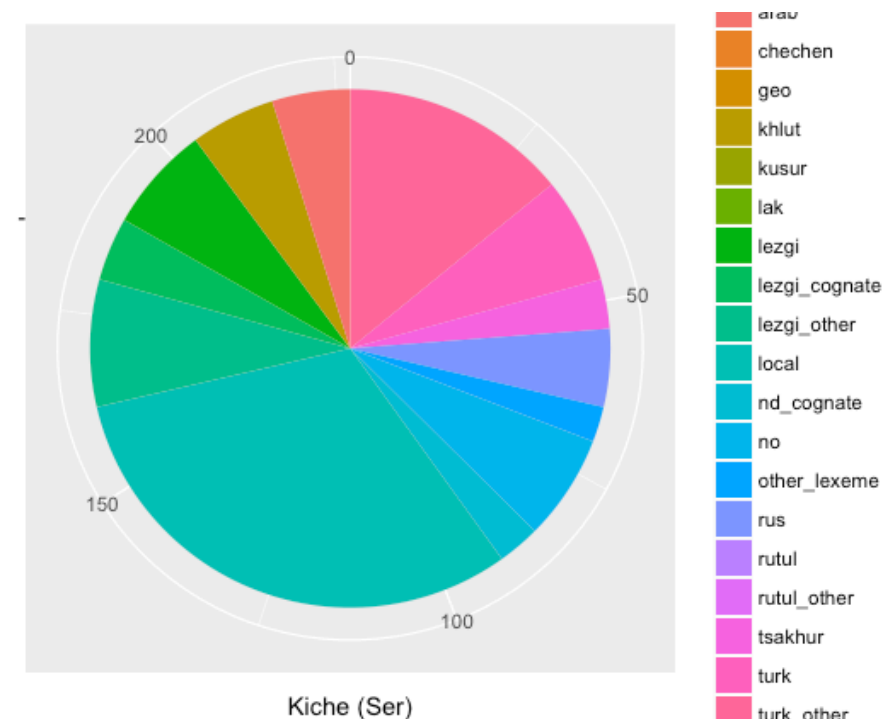
	Khlut	Std_Lezgi
arab	9	15
kusur?	1	0
unique	103	123
no	21	10
rus	5	9
rutul	10	0
tsakhur	2	0
turk	71	70
turk+other	5	0





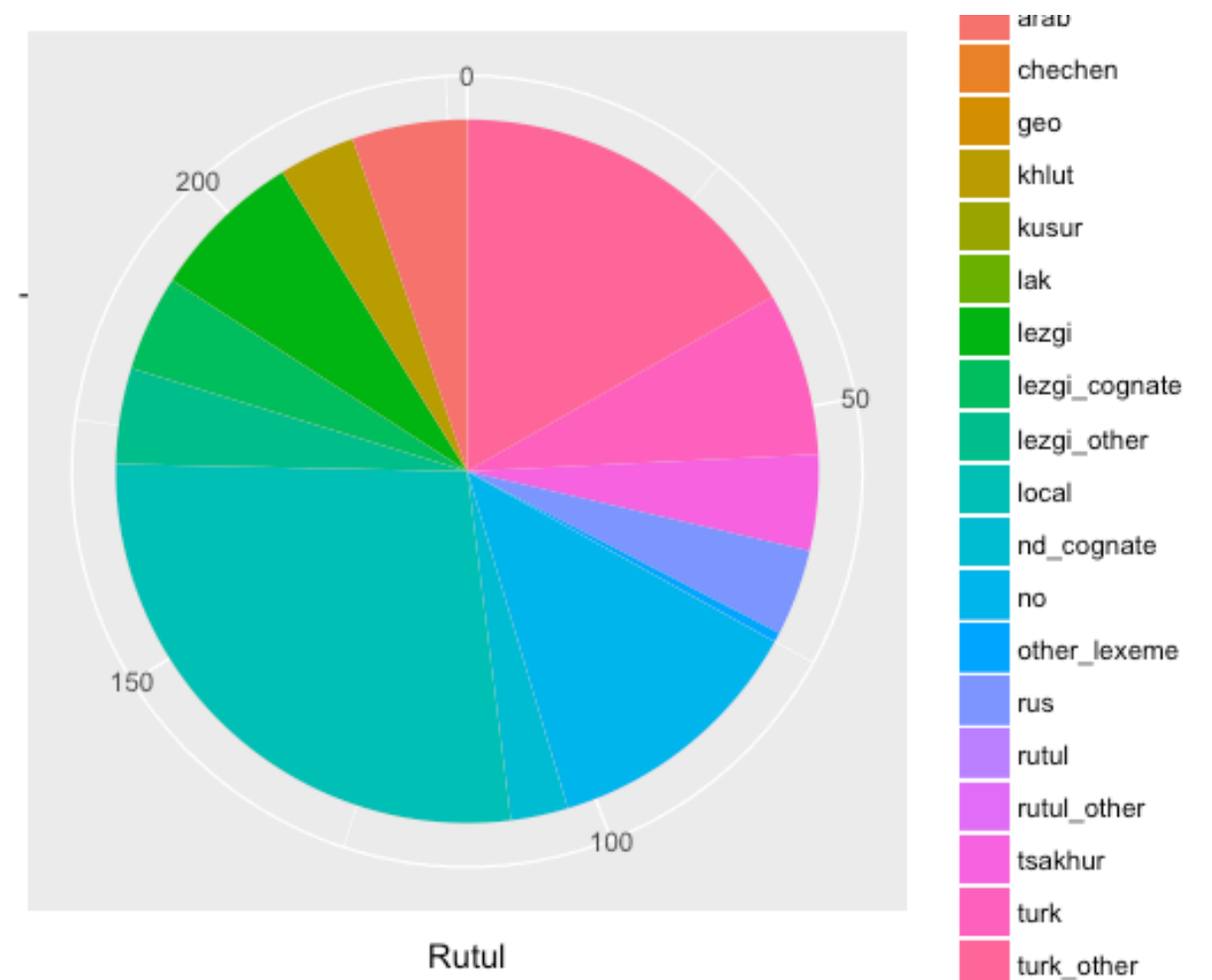
# Kiche (the first Rutul speaking village, 4 km from Khlut)

	Kiche_1	Kiche_2
arab	11	11
khlut	12	11
lezgi	15	17
lezgi (cog?)	9	9
lezgi+other	18	16
unique	71	61
nd_cognate?	6	6
no	15	13
other_lexeme	5	7
rus	11	12
tsakhur	7	11
turk	15	18
turk+other	32	35



# Rutul (the administrative center of the region)

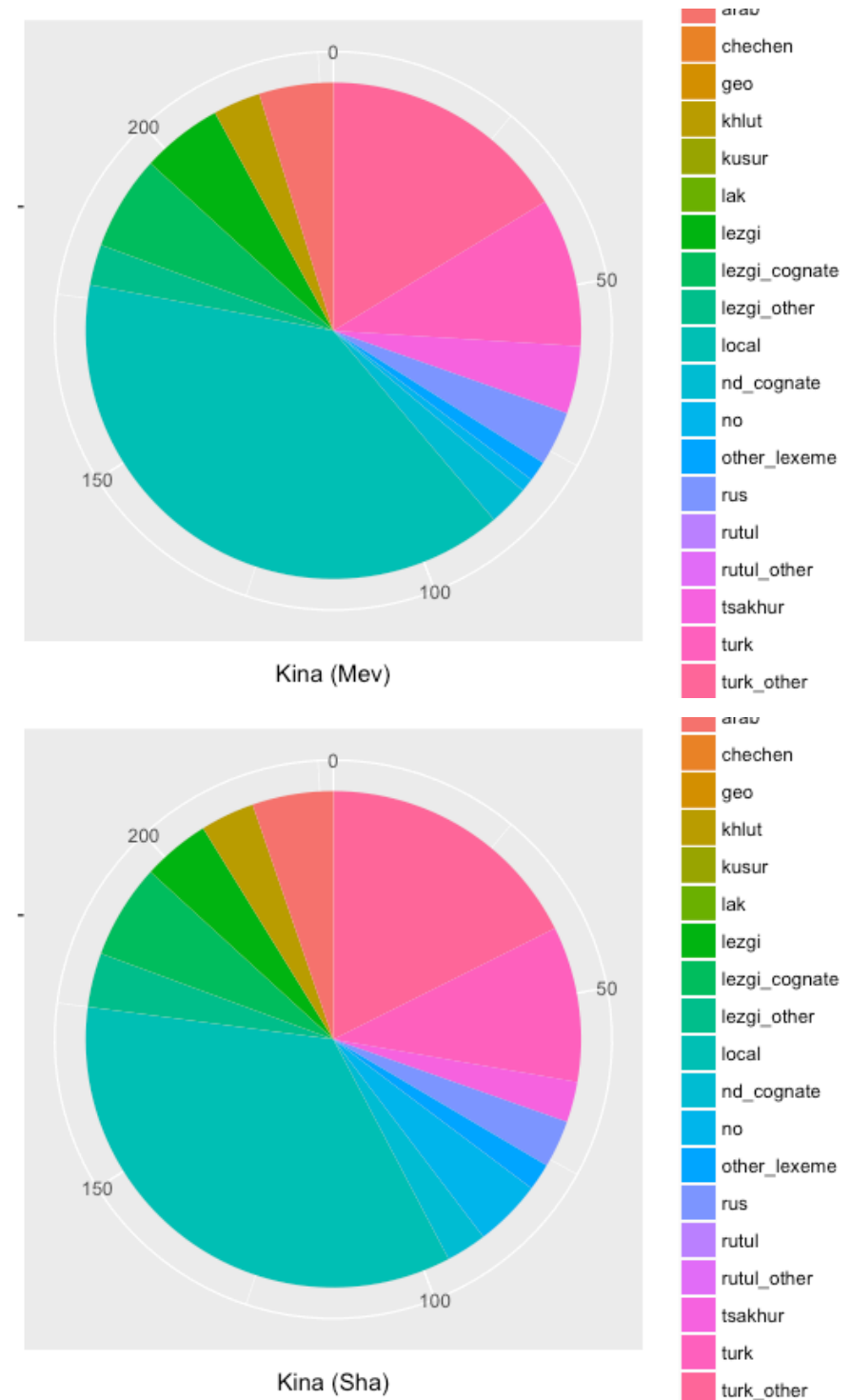
	Rutul
arab	12
khlut	8
lezgi	16
lezgi (cog?)	10
lezgi+other	10
unique	62
nd_cognate?	6
no	28
other_lexeme	1
rus	9
tsakhur	10
turk	17
turk+other	38





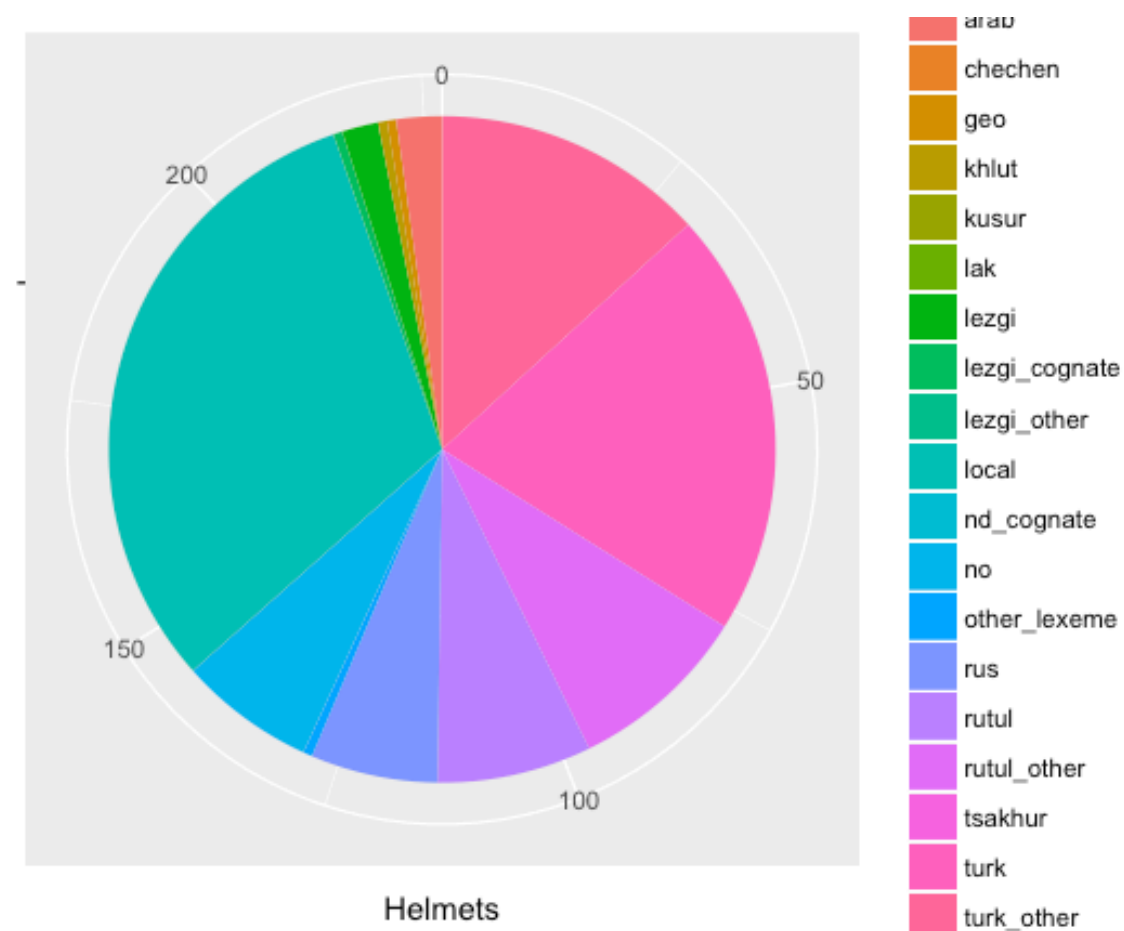
# Kina (a Rutul speaking village, ca. 20 km from Rutul, located in a side-valley)

	Kina_1	Kina_2
arab	11	12
khlut	7	8
lezgi	12	10
lezgi (cog?)	14	14
lezgi+other	6	8
unique	89	79
nd_cognate?	6	6
no	2	10
other_lexeme	3	4
rus	8	7
tsakhur	10	6
turk	22	23
turk+other	37	40



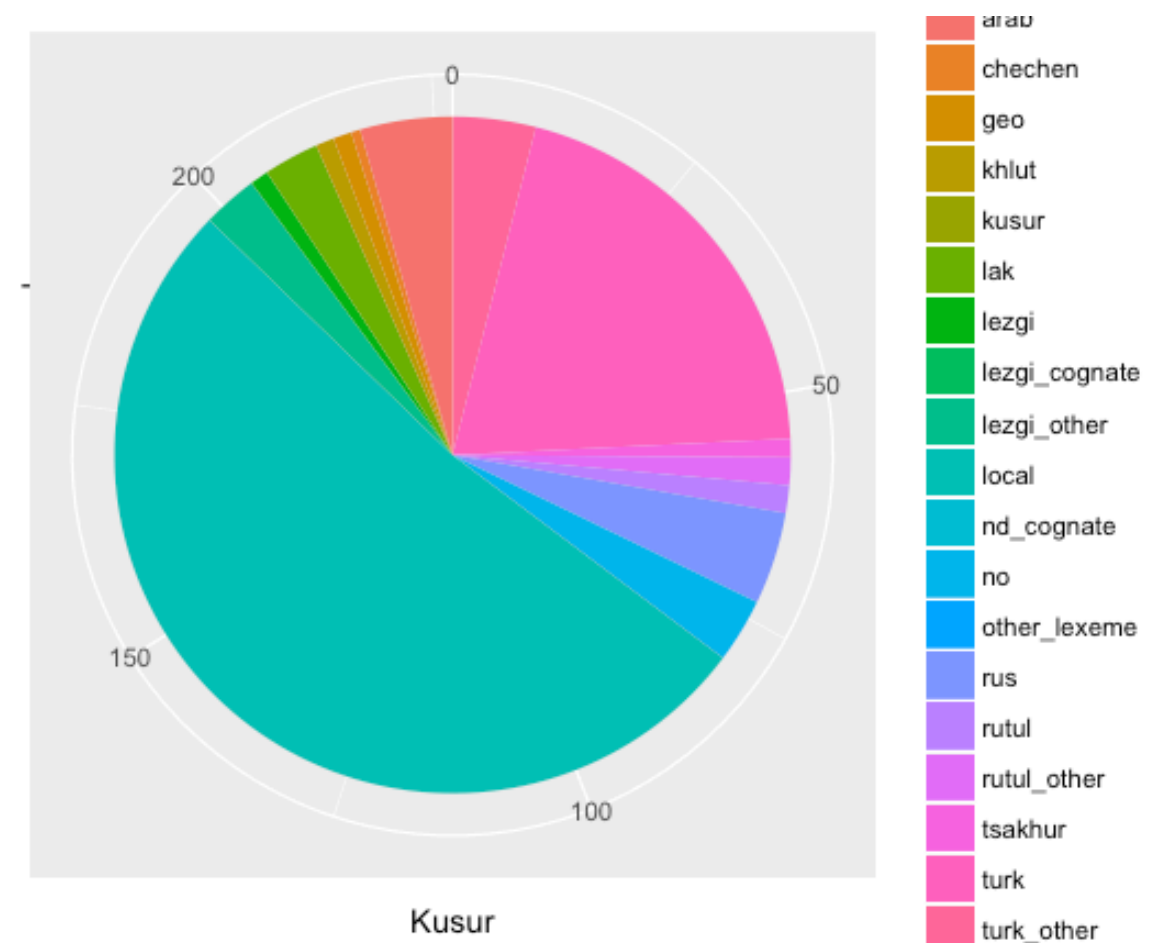
# Helmets (The first Tsakhur speaking village, ca. 10 km from Kina)

Helmets	
arab	5
geo?	1
khlut	1
lezgi	4
lezgi (cog?)	1
unique	71
no	15
other_lexeme	1
rus	14
rutul	17
rutul+other	20
turk	47
turk+other	30



# Kusur (the last village of the valley, the only avar-speaking village in the region, no road access)

	Kusur	Std_Avar
arab	10	15
chechen?	1	2
geo?	2	4
khlut	2	0
lak	6	5
lezgi	2	0
lezgi+other	6	0
nd_cognate?	0	1
unique	118	159
no	7	4
rus	10	9
rutul	3	0
rutul+other	3	0
tsakhur	2	0
turk	46	22
turk+other	9	3



# Comparison

	Kh lut	Kiche	Rutul	Kina	Helmets	Kusur
Lezgi (Total)	X	42/42	36	32/32	5	8
Turk (Total)	76	47/53	55	59/63	77	55
Rutul (Total)	10	X	X	X	37	6
Tsakhur (Total)	2	11/7	11/10	10/6	X	2

# Comparison

	Kh lut	Kiche	Rutul	Kina	Helmets	Kusur
Lezgi (Only)	X	15/17	16	12/10	4	2
Turk (Only)	71	15/18	17	22/23	47	46
Rutul (Only)	10	X	X	X	17	3
Tsakhur (Only)	2	11/7	11/10	10/6	X	2

# Conclusions

- The list in its present state provides ground for distinguishing local varieties from standard languages but does not provide grounds for distinguishing the villages of the local scale.
- The list shows a light center-periphery effect, but the differences may not be significant.
- Standard languages might be more resistant to borrowing than local varieties.

# The members of the DagLoans project are grateful to:

- Nina Dobrushina for the idea of the project,
- Sven Grawunder for discussions and help with the recordings,
- the students who made primary annotation of WOLD List,
- and the speakers whom we tortured.