A corpus of Andi field recordings

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Outline of the talk

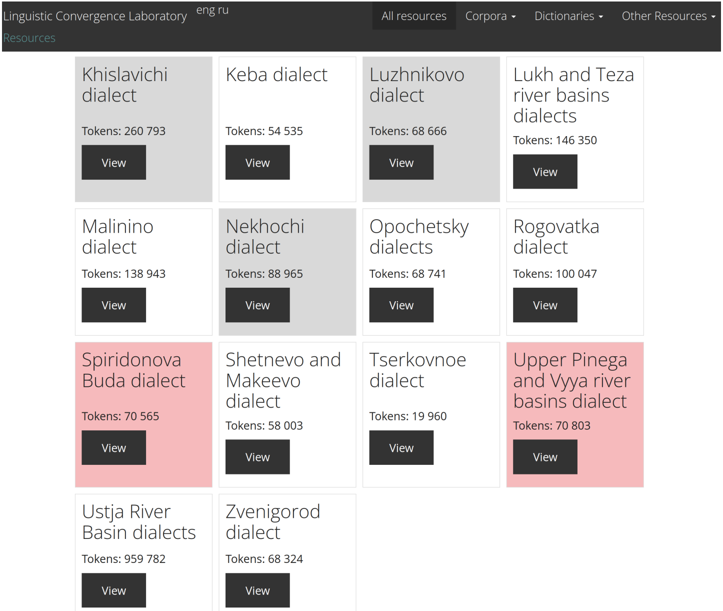
- Corpora of Linguistic Convergence Laboratory
- An example of Meadow Mari corpus
- Andi language and its data
- Our path towards the corpus

Corpora of Linguistic Convergence Laboratory

Corpora of Linguistic Convergence Laboratory: http://lingconlab.ru/

- Russian Dialect corpora (14)
- Corpora of Bilingual Russian (7)
- Corpora of minority languages of Russia (6)

Corpora of Linguistic Convergence Laboratory: http://lingconlab.ru/



Corpus	Tokens
Khislavichi dialect	260 793
Keba dialect	54 535
Luzhnikovo dialect	68 666
Lukh and Teza river basins dialects	146 350
Malinino dialect	138 943
Nekhochi dialect	88 965
Opochetsky dialects	68 741
Rogovatka dialect	100 047
Spiridonova Buda dialect	70 565
Shetnevo and Makeevo dialect	58 003
Tserkovnoe dialect	19 960
Upper Pinega and Vyya river basins dialect	70 803
Ustja River Basin dialects	959 782
Zvenigorod dialect	68 324

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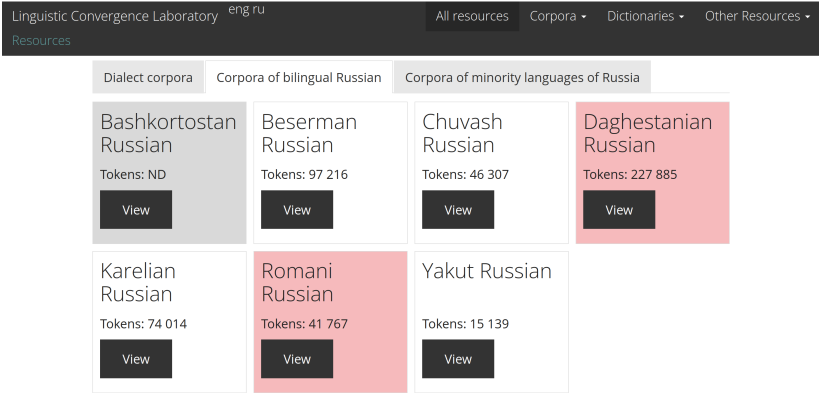
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All resources
Corpora
Dictionaries
Other Resources
Resources
Dialect corpora
Corpora of bilingual Russian
Corpora of minority languages of Russia
View

Bashkortostan Russian

Tokens: ND

Beserman Russian

Tokens: 97 216

Chuvash Russian

Tokens: 46 307

Daghestanian Russian

Tokens: 227 885

Karelian Russian

Tokens: 74 014

Romani Russian

Tokens: 41 767

Yakut Russian

Tokens: 15 139

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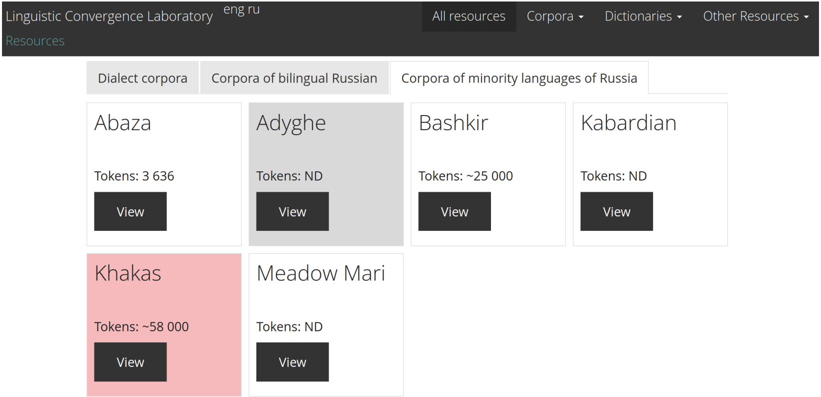
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View

Abaza

Tokens: 3 636

Adyghe

Tokens: ND

Bashkir

Tokens: ~25 000

Kabardian

Tokens: ND

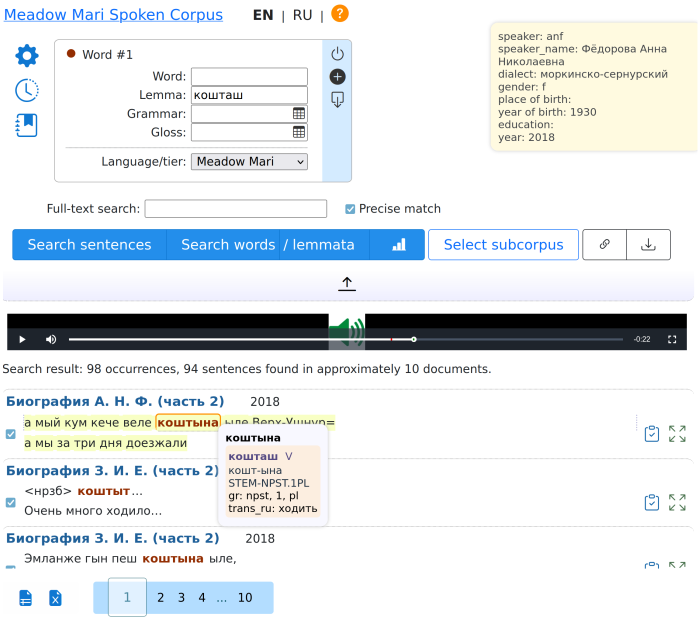
Khakas

Tokens: ~58 000

Meadow Mari

Tokens: ND

Example of Meadow Mari corpus



● Word #1

Word:

Lemma: кошташ

Grammar:

Gloss:

Language/tier: Meadow Mari

Full-text search:

☑ Precise match

speaker: anf
speaker_name: Фёдорова Анна Николаевна
dialect: моркинско-сернурский
gender: f
place of birth:
year of birth: 1930
education:
year: 2018

-0:22

Search result: 98 occurrences, 94 sentences found in approximately 10 documents.

Биография А. Н. Ф. (часть 2) 2018

☑ а мый кум кече веле **коштына** ыле Верх-Ушнур=
а мы за три дня доезжали

коштына
кошташ V
кошт-ына
STEM-NPST.1PL
gr: npst, 1, pl
trans_ru: ходить

Биография З. И. Е. (часть 2)

☑ <нрзб> **коштыт**…
Очень много ходило…

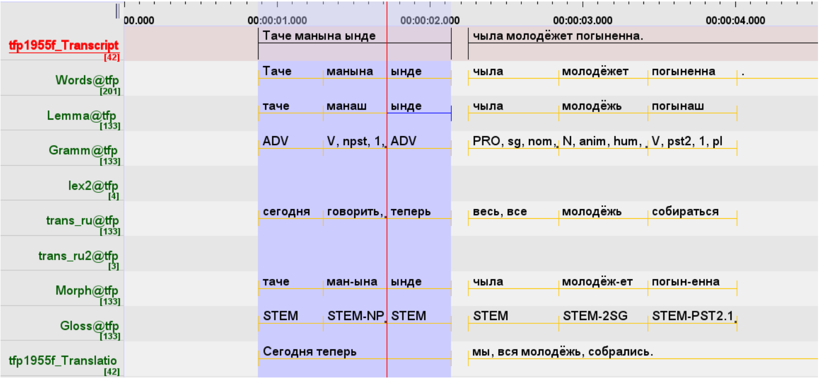
Биография З. И. Е. (часть 2) 2018

Эмланже гын пеш **коштына** ыле,

Example of Meadow Mari corpus

- translation
- glosses
- audio/video
- export to `.xlsx`
- sociolinguistic information

Example of required ELAN .eaf file



00.000 00:00:01.000 00:00:02.000 00:00:03.000 00:00:04.000

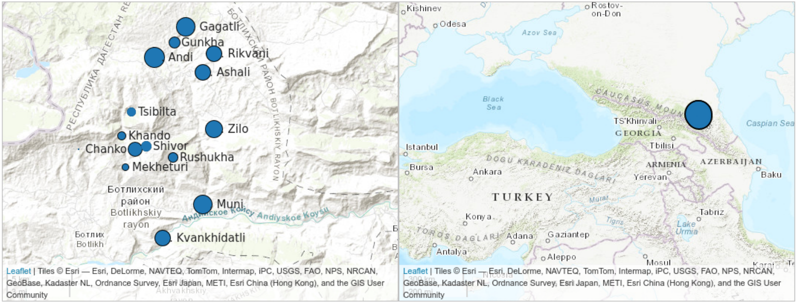
tfp1955f_Transcript [42]	Таче манына ынде			чыла молодёжет погыненна.			
Words@tfp [201]	Таче	манына	ынде	чыла	молодёжет	погыненна	.
Lemma@tfp [133]	таче	манаш	ынде	чыла	молодёжь	погынаш	
Gramm@tfp [133]	ADV	V, npst, 1,	ADV	PRO, sg, nom,	N, anim, hum,	V, pst2, 1, pl	
lex2@tfp [4]							
trans_ru@tfp [133]	сегодня	говорить,	теперь	весь, все	молодёжь	собираться	
trans_ru2@tfp [3]							
Morph@tfp [133]	таче	ман-ына	ынде	чыла	молодёж-ет	погын-енна	
Gloss@tfp [133]	STEM	STEM-NP	STEM	STEM	STEM-2SG	STEM-PST2.1	
tfp1955f_Translatio [42]	Сегодня теперь			мы, вся молодёжь, собрались.			

- hierarchy of tiers
- time alignment
- stem forms

Developing the corpus of Andi

The Andi Language: a sociolinguistic background

- Andic < Avar-Andic < East Caucasian, glottocode [andi1255]
- spoken in several villages of the Botlikh district of Dagestan.
- more than 20,000 speakers of Andi [Aglarov (2002); All-Russian National Census 2010]
- Andi speakers are trilingual in Andi, Avar and Russian
- Avar serves as a lingua franca and is taught in school (Dobrushina et al. 2017)



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Created with lingtypology (Moroz 2017)

Andic data

	Andi	Rikvani	Gagatli	Zilo
sources	(Kibrik and Kodzasov 1988; Alekseev 1999; Dirr 1906; Tsertsvadze 1965);	(Sulejmanov 1957)	(Salimov 2010)	(Kaye et al. rthc)
grammar sketch	+	+	+	+
dictionary	+	-	±	±
morphological parser	±[1]	-	-	-

[1] A pilot version of a morphological parser of Andi is presented in (Buntyakova 2022).

Andic data

- Written texts from grammar sketches, some with translation
- Field recordings from 1 trip to Rikvani, a few trips to Muni and Kwankhidatli, and several trips to Zilo
- Especially the Kwankhidatli dialect is endangered; only known record is a few short texts in (Tsertsvadze 1965)

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- Recordings were made my different researchers, with different approaches to recording and processing
- We have approximately 8.27 hours of recordings
    - 7.77 hours is transcribed
    - 3 hours are aligned with sound
    - 17.35 minutes are fully glossed

Problems

- Andi has several dialects and no cross-dialectal standard;
  - no full-fledged dictionary
  - no full-fledged grammatical parser (though see a first attempt in (Buntyakova 2022))
- Our recorded data are heterogeneous
  - different dialects
  - different conventions
  - different file formats
- Due to our limited knowledge of the Andi dialects, sometimes we do not know what the correct analysis of a given word form is.

Solution

The material has to be converted to a singular format using `phonfieldwork` (Moroz 2020). For the Andi dialectal corpus the pipeline is as follows:

- we preprocess the annotation files, converting them to ELAN `.eaf` format (Wittenburg et al. 2006),
- align them with the sound
- gloss them manually or correct mistakes and ambiguities left by morphological parser
- publish online using the Tsakorpus platform (Arkhangelskiy 2019)
- repeat all previous steps

Conclusions

Conclusions:

Thank you for your attention!

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