A corpus of Andi field recordings

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20 September 2022

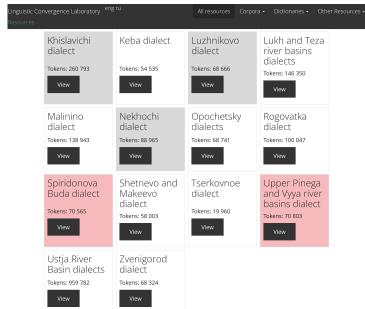
Tbilisi, VI International Conference: Language and Modern Technologies

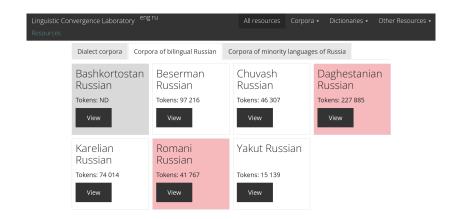
Outline of the talk

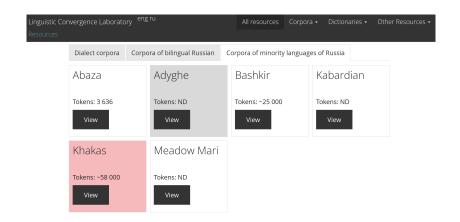
- Corpora of Linguistic Convergence Laboratory
- An example of Meadow Mari corpus
- Andi language and its data
- Our path towards the corpus

Corpora of Linguistic Convergence Laboratory

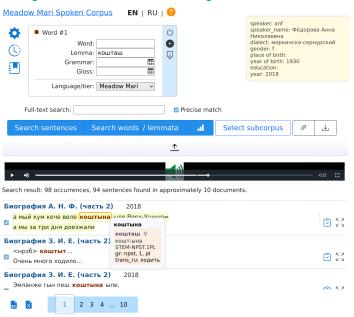
- Russian Dialect corpora (14)
- Corpora of Bilingual Russian (7)
- Corpora of minority languages of Russia (6)







Example of Meadow Mari corpus



Example of Meadow Mari corpus

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



Example of required ELAN .eaf file

| XX19YYf_Transcription-txt-mhr | Адак йомак г | ростынь денак | | | | | | |
|-------------------------------|---------------|-----------------|-------|---------------------|------------|------------|--------------------------|------------|
| Vords@SPEAKER 243) | Адак | | | йомак | | | простынь | денак |
| .emma@SPEAKER 227] | Адо | ад | әдак | йомак | йомаш | | простынь | ден |
| Gramm@SPEAKER | N, PN, persn, | e N, rus, emph, | s ADV | N, sg, nom, nonposs | V, emph, i | V, emph, n | N, rus, sg, nom, nonposs | CONJ, emph |
| lex2@SPEAKER | | | | | | | | |
| trans_ru@SPEAKER | Адо | де | опять | сказка | пропасть, | пропасть, | простыня | и |
| trans_ru2@SPEAKER | | | | | | | | |
| Morph@SPEAKER | ад-ак | ад-ак | адак | йомак | йом-ак | йом-ак | простынь | ден-ак |
| Gloss@SPEAKER (304) | STEM-EMPH | STEM-EMPH | STEM | STEM | STEM-EMPH | STEM-EMPH | STEM | STEM-EMPH |
| XX19YYf_cs-txt-mhr | | | | | | | | |
| XX19YYf_Translation-gls-mhr | Снова истори | я с простыней. | | | | | | |

- 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)





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

 $^{^{\}scriptscriptstyle 1}\!A$ pilot version of a morphological parser of Andi is presented in (Buntyakova 2022).



- 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
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- Recordings were made my different researchers, with different approaches to recording and processing
- How many hours do we have?
- How much is annotated?



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:



Thank you for your attention!

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