The Latgalian TEZAURS and the challenges of linguistic diversity

Tool developed by a group at Rēzekne Academy of Technologies (Antra Kļavinska, Sanita Martena, Nicole Nau, Ilga Šuplinska, and Anna Briška). Presented by Nicole Nau.

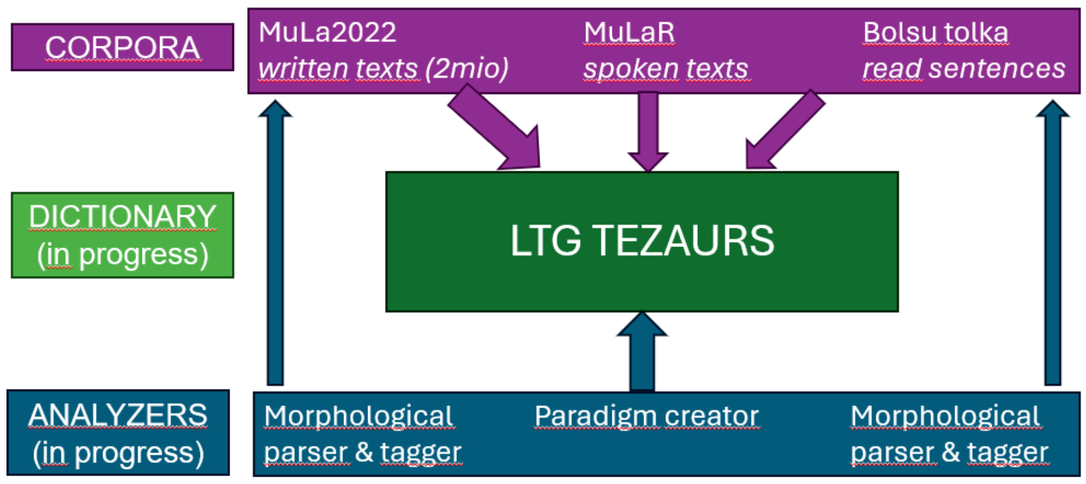
Why Latgalian?

- Latgalian is a lesser-used but vital language from Eastern Latvia with its own writing tradition.
- In Latvia, Latgalian and Standard Latvian are seen as varieties of one language – Latvian.
- Latgalian and Standard Latvian are…
  - so different that each needs its own set of resources and tools,
  - so similar that tools for Latgalian may partly be based on tools developed for Standard Latvian.

LTG TEZAURS: Three goals

- To **document** the lexicon of modern written Latgalian as well as Latgalian dialects, based on existing dictionaries and evidence from corpora.
- To support the **maintenance** of Latgalian by giving reliable information about:
  - word meaning,
  - word use in authentic texts,
  - spelling and inflection according to current standards,
  - pronunciation.
- To create a lexical database as an integral part of a **digital ecosystem** comprising corpora, dictionaries, morphological parsers and taggers, and future applications.

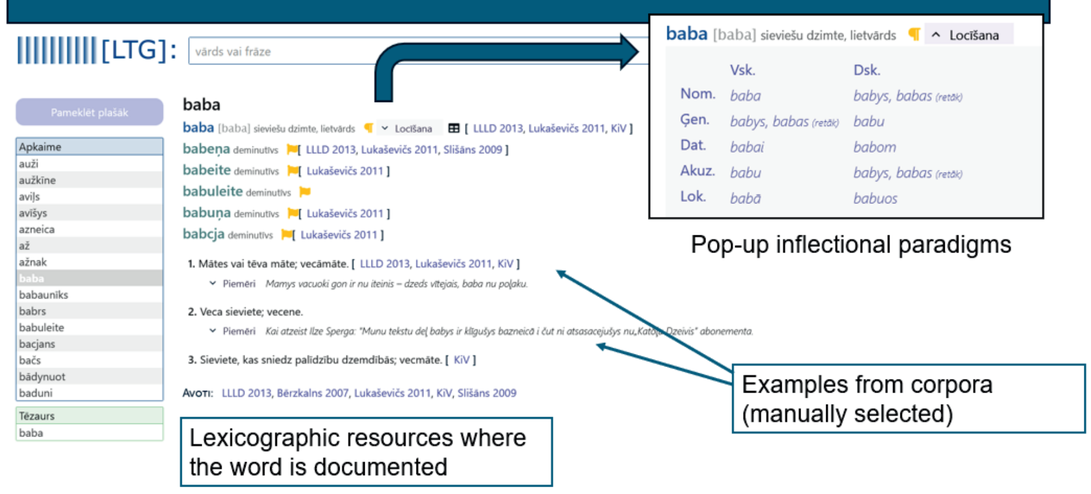
Digital resources and tools for Latgalian



How is the tezaurs created

- A group at Rēzekne Academy of Technologies (RTA) is developing a prototype with 100+ entries within the Latvian project DHELI (*Towards the Development of an Open and FAIR Digital Humanities Ecosystem in Latvia*).
- We are using the existing platform and dictionary-writing system of the Latvian *tēzaurs* (tezaurs.lv).
- We cooperate with the Artifical Intelligence Laboratory of the University of Latvia (LU MII AiLab), who is responsible for the technical side of the project.
- Crucial for our project is the successful cooperation among linguists, experts on Latgalian culture, and speech technologists.

What does an entry contain?



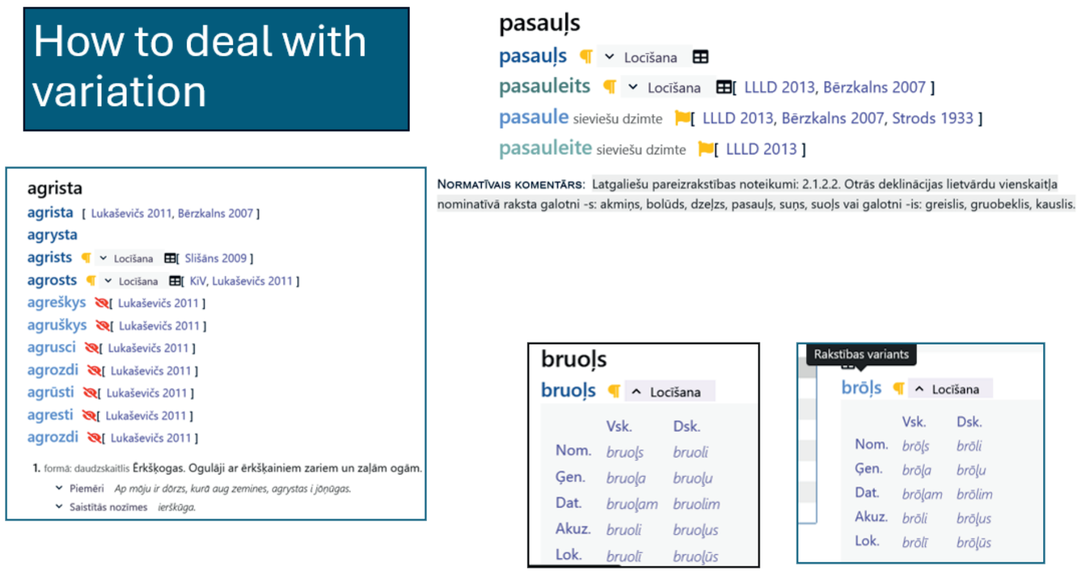
Other features

- Meaning explanations in Standard Latvian containing a translation equivalent enable the use as a bilingual dictionary.
- Semantic relations: linking synonyms
- Derivational relations: linking derived words with their base
- Pronunciation by real speakers, using audios collected by Bolsu tolka (under Common Voice)

Main challenge: inner diversity of Latgalian

- Variation in spelling and inflection **licensed** by the current standard (should be shown to users)
  - How to display in a user-friendly way?
  - Which are the preferred forms – from the point of view of users and that of language planners?
- **Non-licensed** variation (dialect forms, individual spelling, mistakes) – numerous instances in the corpora
  - All wordforms should be analyzable for lemmatization and tagging.
  - Paradigms for users should contain only licensed forms.
  - Unlicensed forms will show up in authentic examples.

How to deal with variation



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RĒZEKNES TEHNOLOĢIJU AKADĒMIJA

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Latvijas Zinātnes padome