

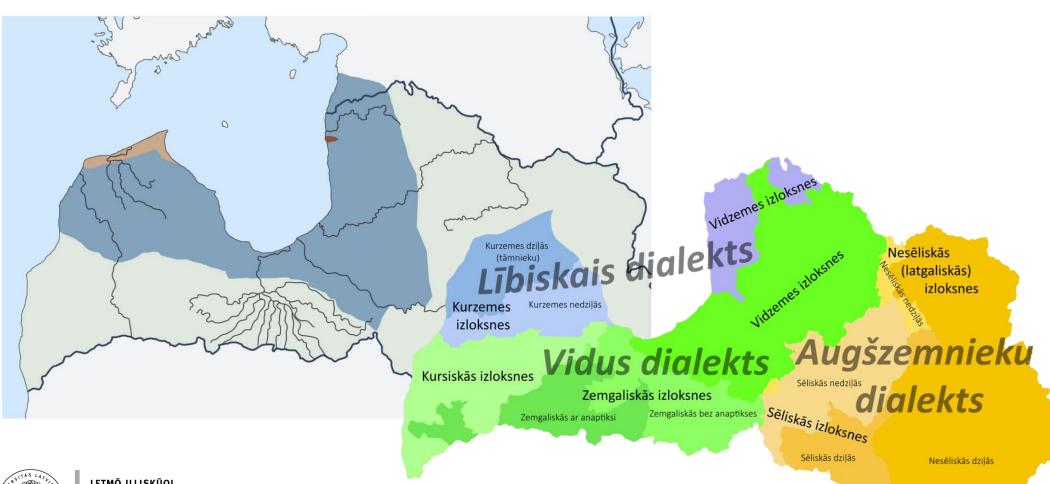
Building the Future Diversity: the University of Latvia Livonian Institute

Valts Ernštreits, UL Livonian Institute

National Research Programme "Digital Resources of the Humanities" Towards Development Of Open And Fair Digital Humanities Ecosystem In Latvia (Dheli, 2022-2025; VPP-IZM-DH-2022/1-0002)



Livonians – who are they?





Is it necessary to pay? I doubt it.

Ar reikia mokėti? Aš labai abejoju.

Kas on vaja maksta? Ma väga kahtlen.

Vai vajag maksāt? Es ļoti šaubos.

Voi vāga moksuot? As cīši šaubūs.
Või um vajāg maksõ? Ma väggi kōdlõb.







Livonians – who are they?

- Indigenous people of Latvia since 1991 with a long history and great importance in the Baltic region
- Currently, there are **around 1000–2000 Livonians**, **ca 20 fluent speakers**, the growing rate of interest among the younger generation (over 50 children aged 7–17 are practicing Livonian culture annually)
- Community is scattered across Latvia due to both World Wars and subsequent Soviet occupation, it is weak, fragmented, and extremely diverse, but at the same time – unproportionally active in sustaining its identity, safeguarding and developing its modern culture







The UL Livonian Institute

- Established in September 2018, built from scratch as a startup based on projects; research in three directions:
- 1) Research of the Livonians past 200 years of language, tangible and intangible heritage, culture, social structures, etc;
- 2) Research of the Livonian heritage Livonian traces in Latvian language, culture, and history; working closely with the general public
- **3) Livonian and global experience** strategies and methods for the sustainability of endangered communities







Key tool – Livonian.tech

- Vocabulary words and phrases with translations
- Grammatic data forms, variations
- **Textual data** corpora, texts in the Livonian with translations
- Audiovisual data words and texts voiced by Livonians
- Sources / people information on sources and people behind them
- Geospatial data locations, place names etc
- Cultural data information on events, stories, physical and digital objects







LIVONIAN

Words

Places

Sound

Teaching aids

English

Log in

00

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Sound

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būom

beam, boom



doņņõ

to be naughty, to throw a tantrum, to be capricious



ī'd|vastālit

equality



agā

perhaps, maybe

Livonian Y



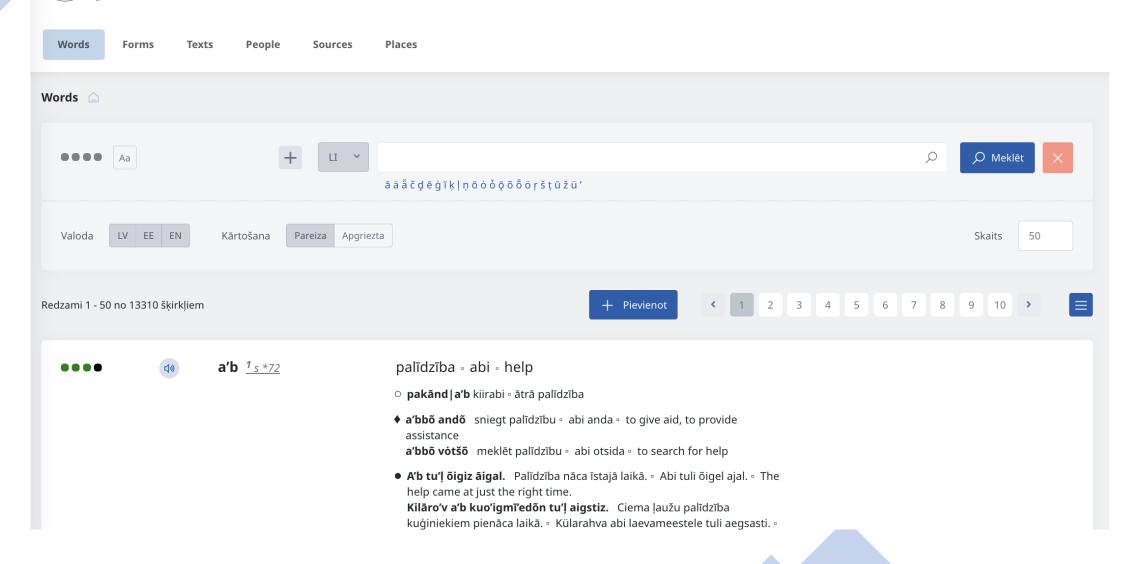
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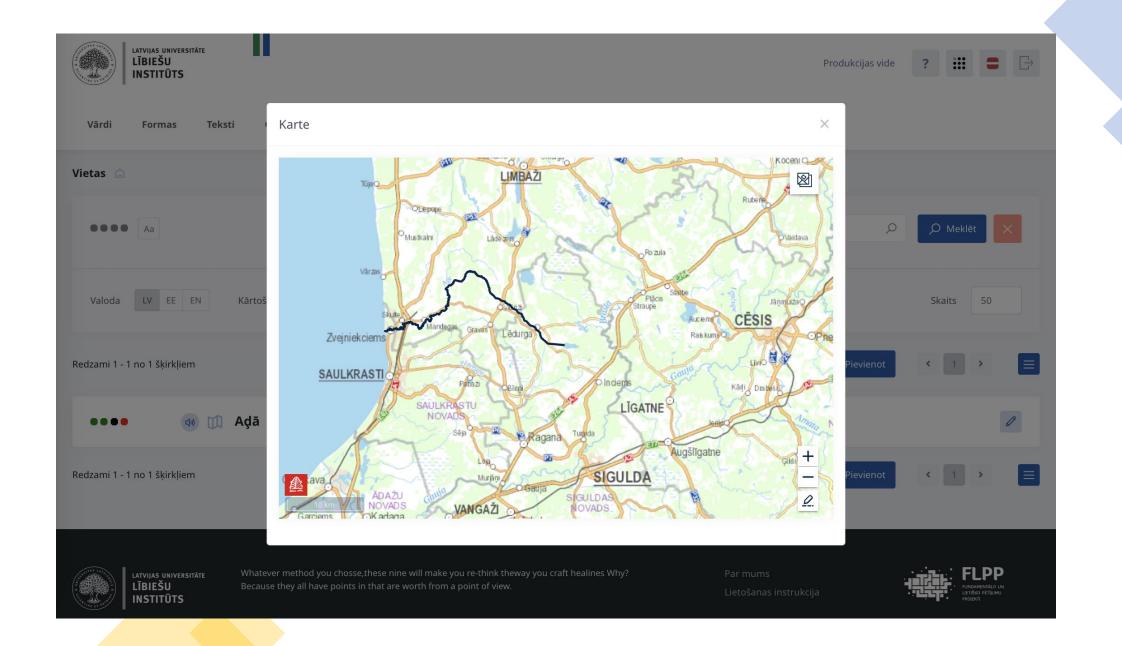
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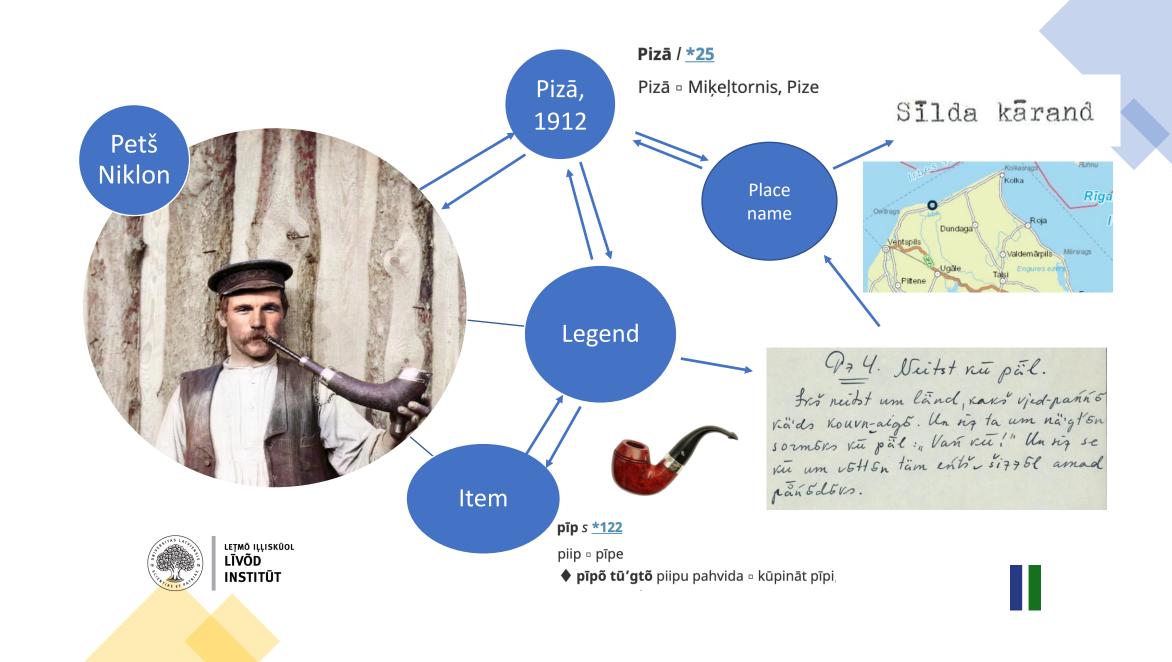


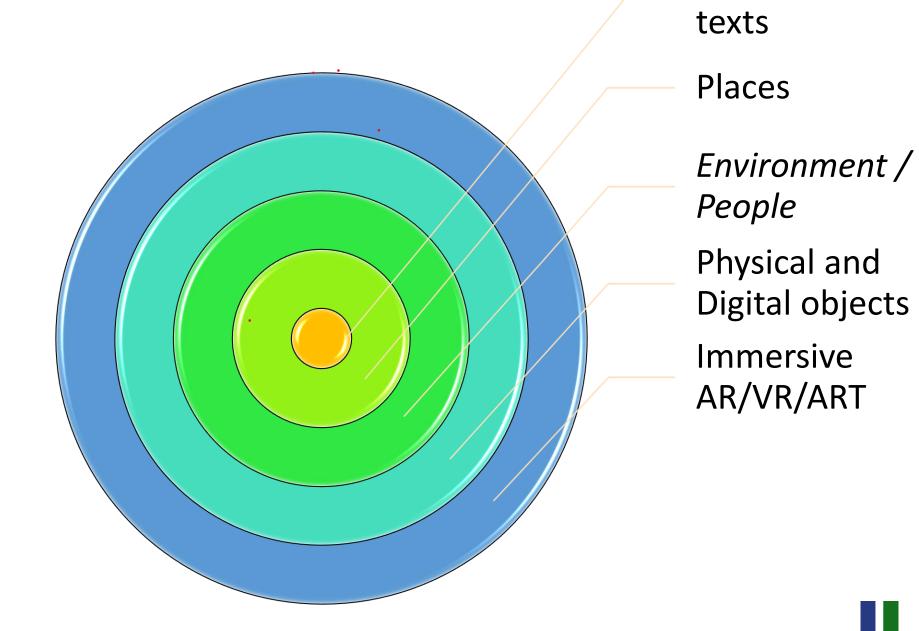












LEŢMŌ IĻĻISKŪOL **LĪVÕD**

INSTITŪT

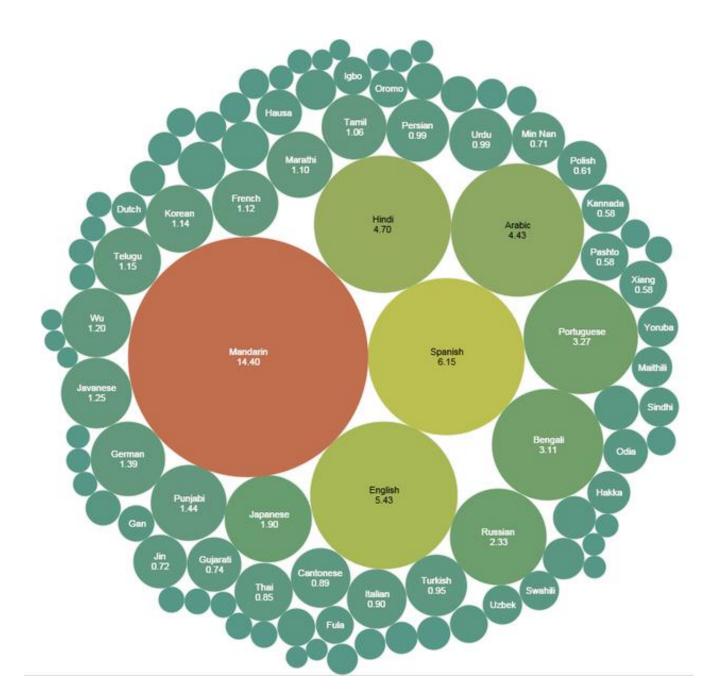
Language and

Why Livonians?

- Working with Livonians we are exploring the future as Livonians have been virtual for the past 80+ years
- Livonians have developed some kind of resistance sustaining the community, identity, and ICH
- Processes are compactly, but relatively well-documented

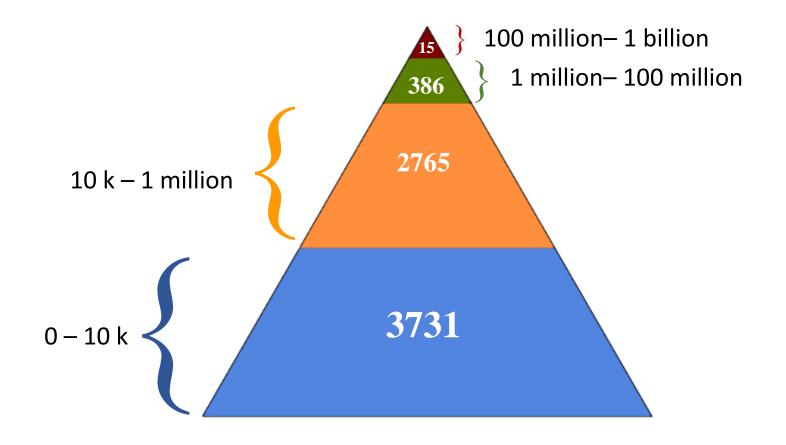


















Our Goals

- Sustainability of critically endangered languages and cultures
- Knowledge about processes in fragmented communities at the doorstep of virtualization in the global information and Al society
- Cultural and linguistic diversity of the humankind







Challenges

- **Under-researched** lack of knowledge, incorrect interpretation of processes, lack of right perspective of tools needed and feasible
- Under-documented fragmented and limited data for all purposes including AI tools; limited data, but the same results to be achieved
- **Under-resourced** lack of financial and human resources to perform necessary actions
- **Diversity** every situation is unique, there are no transferrable sets, just strategies, approaches, methods, and tools

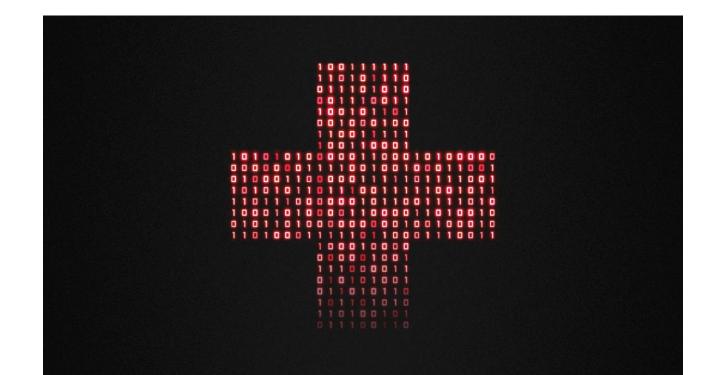






Benefits

- Limited data better overview and somewhat easier data handling, less computing capacities
- The key benefit data integration and cross-usage





Things to remember

- Protection of the community no data processing or products should be harmful to the community
- **Tech to support people s**emi-automated approaches, augmented Golden Standard is the key to the quality when resources are low

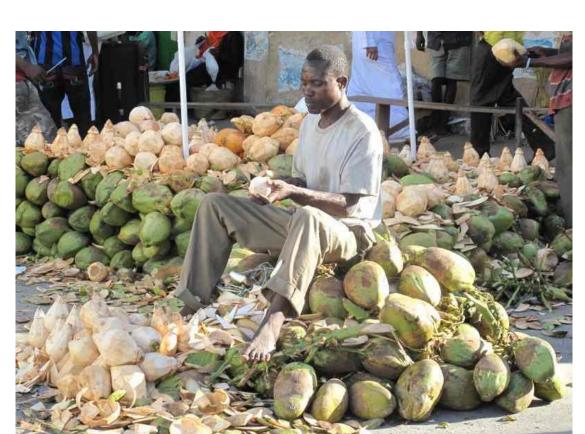
- Zero Waste policy all efforts should be meaningful, no data or resource is useless
- **Dreams, not fantasies** resources to be planned based on need and effort necessary







Strategies: big data versus small data









Strategies: statistics and approaches

- Limited opportunities for statistical decisions for big data statistics erase deviations (1 out of 1000000 is a deviation), small data 1 out of 10 may be correct; quality methods developed
- Flexible approaches, inclusive standards, and skill-based task division tools are planned to provide involvement of people with different levels of skills; reactive products and developments to obtain new data (e.g. cultural data from geospatial activities)
- Open and unfinished: platform-free online access, only necessary interpretations and decisions according to existing knowledge, several options – gaps left open to avoid being stuck







Strategies: planning and applications

- Rule-based: simple algorithms to support speeding up manual annotation, the inclusion of statistical data and hypothetical data, building of declension paradigms, spellchecking, helping to ensure documentation consistency (through other languages); mapping
- AI-based: machine translation (using other languages) to provide accessibility to the ICH; speech synthesis and speech recognition (double-trained AI) providing access to the content
- **Mixed applications**: machine translation, form prediction, language acquisition, subtitling etc







Our friends

universität wien







Q40 Giellatekno









TE TAURA WHIRI I TE REO MĀORI













KULTUURIMINISTEERIUM



Eesti Geenivaramu















2022-2032 | INTERNATIONAL DECADE OF

Indigenous Languages





Thank You! | Tienū!

