Estonian National Corpora 2013–2025: methodological foundations and constucticographic applications

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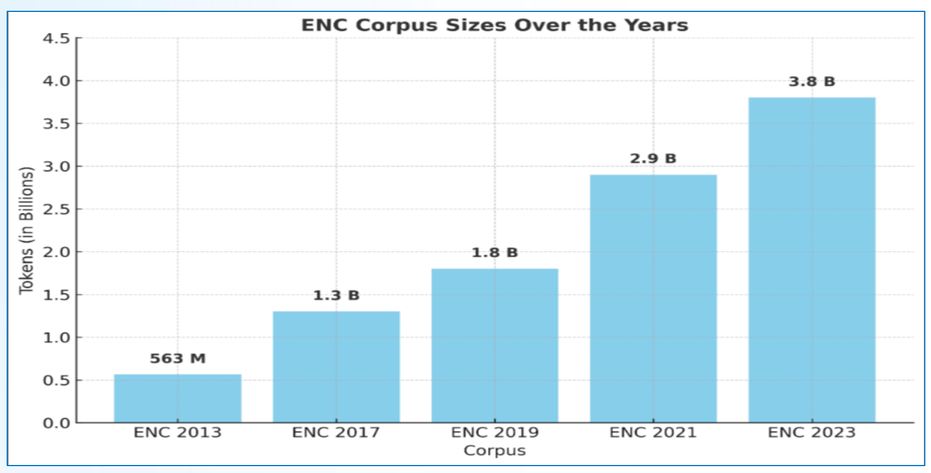
The series of the Estonian National Corpus (ENC) 2013–2025

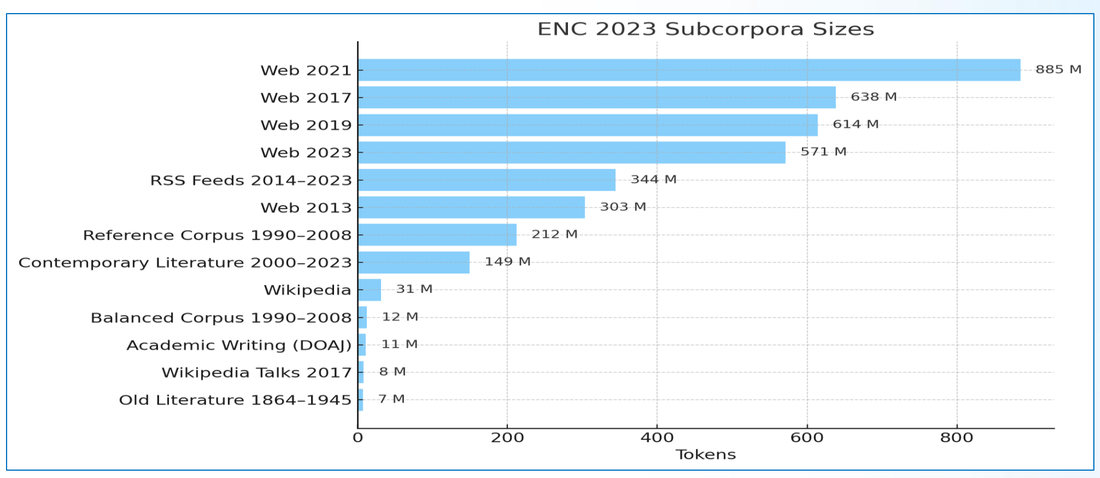
Developed by the Institute of the Estonian Language in collaboration with Lexical Computing Ltd.
Accessible via the Sketch Engine interface (Kilgarriff et al., 2004)
ENC 2021: Fully dependency-annotated (CONLL format)
ENC 2023:

- Accessible also as a PostgreSQL database (workflows in the EstNLTK GitHub repository)
- Semi-automatic classification: 7 genres (e.g., periodicals, blogs, literature), 21 topics (e.g., history, sports, politics & government)

ENC 2025:

- Collaboration with National Library; new types of sub-corpora (e.g., domain-specific books)
- Data from public sector, and from the Web (e.g., cleaned Common Crawl)
- Size: up to 15 billion tokens; to be used also as training data for LLMs

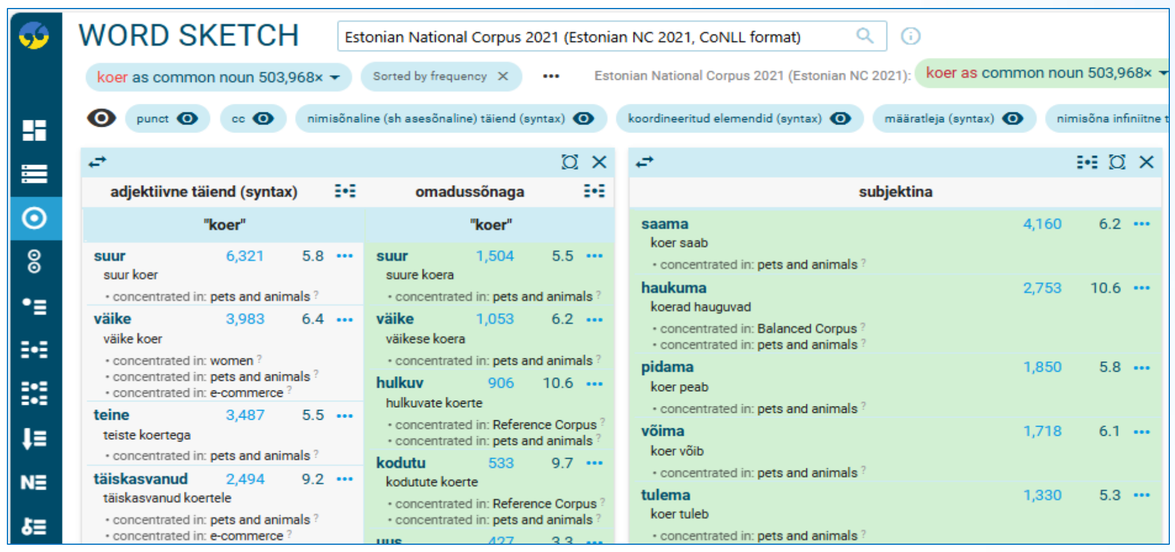




Lexicographic and constructicographic applications

Automatic detection of collocations:

- Part-of-Speech pattern approach: the Estonian Sketch Grammar v2.1 defines 113 grammatical relations.
- Dependency-based approach (cf. Uhrig & Proisl, 2012): 23 syntactic relations (e.g., nsubj, obj, obl, advmod, amod, nummod etc.).



Automatic detection of Good Dictionary Examples (Kosem et al., 2019)

Estonian Constructicon project (2022–2027) (Vainik et al., 2024): Developing a Constructicographic Workflow

- Training language models (EstBERT, Est-RoBERTa, Claude-Sonnet-4, GPT-4.1) to identify construction instances in corpora
- Applying collostructional analysis to identify the lexical slot-fillers (cf. Stefanowitsch & Gries, 2003)
- Automatically detecting argument structure constructions on the basis of morpho-syntactically annotated corpora (UD schema) (Saul et al., 2025)

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