Interoperable Words

Interlinking Lexical (and Textual) Resources for Latin in the LiLa Knowledge Base

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IRCSE

Eighth Conference on Electronic Lexicography in the 21st Century
(eLex 2023)
Brno, June 27–29, 2023

This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme - Grant Agreement No. 769994.

Overview

Introduction and Fundamentals

- LiLa: Mission and Architecture

LiLa now!

- Lemma Bank and Lexical Resources
- Services and Tools

Conclusion

- State of Affairs
- Closing Remarks

Table of Contents

Research question
State of affairs

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Scattered and unconnected

ERC Consolidator Grant
2018-2023

A collection of multifarious, interoperable linguistic resources described with the same vocabulary for knowledge description (by using common data categories and ontologies)

Interlinking as a Form of Interaction

The Linked Data Principles

…just to be FAIR

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- Use HTTP URIs to allow people (and machines) to look up things
- Use web standards to represent/query (meta)data, such as RDF and SPARQL
- Include links to other URIs

LiLa Knowledge Base

Lexically-based architecture and (meta)data sources

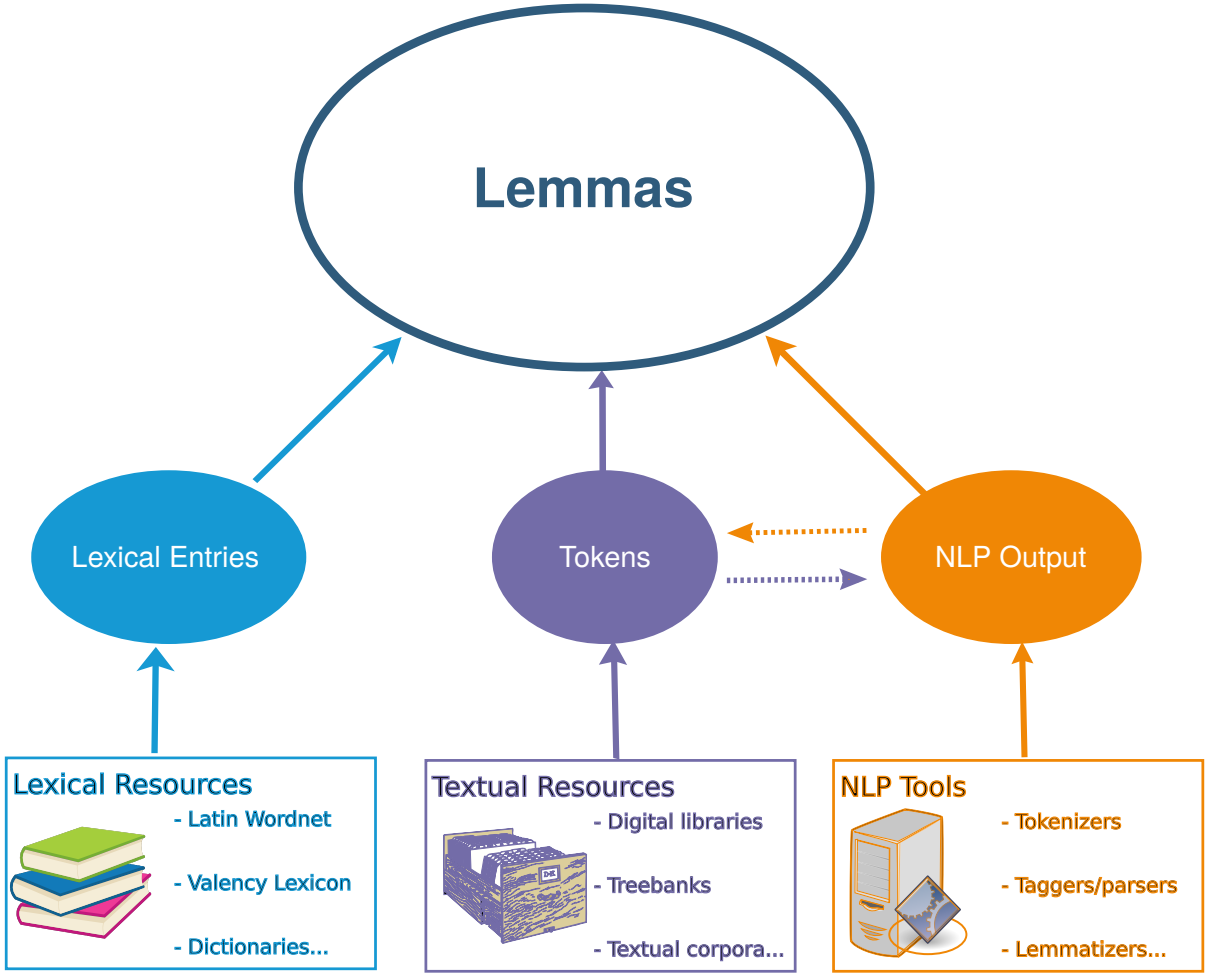
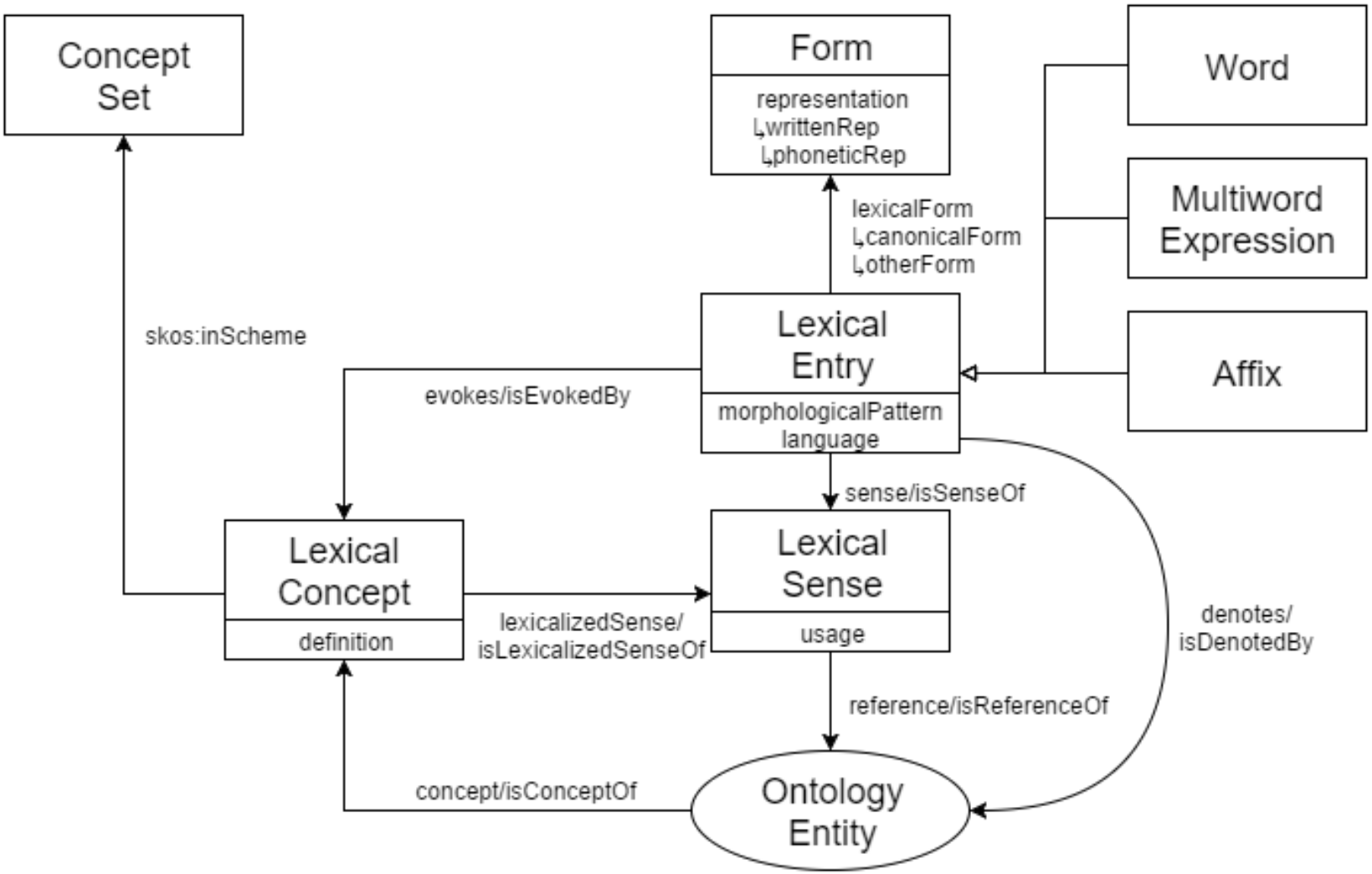


Table of Contents

LiLa and Ontolex Lemon

A *de facto* W3C standard for publishing lexical data as LLOD



Lemma Bank and Lexical Resources

The core of LiLa. Source: LEMLAT (extended)

Lemma *admiror* 'to admire'

`http://lila-erc.eu/data/id/lemma/87541`

- Lemma Bank
- A bilingual Latin English dictionary (Lewis & Short)
- A derivational lexicon (Word Formation Latin)
- A polarity lexicon (LatinAffectus)
- An etymological dictionary (De Vaan)
- A valency lexicon (Latin Vallex)
- A manually checked subsection of the Latin WordNet
- …and many others…

Table of Contents

Lemma Bank Query Interface

https://lila-erc.eu/query/

SPARQL Access Point

https://lila-erc.eu/sparql/

LiLa Search Platform

http://lila-erc.eu:8080/lila-lisp/

TextLinker

TextLinker

http://lila-erc.eu:8080/LiLaTextLinker/

Table of Contents

Linguistic Resources Interlinked in LiLa

...and some numbers

Resources connected so far

`https://lila-erc.eu/data-page/`

- **Canonical Forms** in the Lemma Bank: approx. 215K
- **Lexical Entries** in Lexical Resources: approx. 145K
- **Tokens** in Textual Resources (158 works): approx. 3,5M
- **Triples**: approx. 70M

Table of Contents

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  - Using interlinked resources to fine-tune LLMs
  - **Beyond Latin**: portability of the LiLa architecture in infrastructures

Thank you

Get in touch!

LiLa: Linking Latin
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CIRCSE Research Centre

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https://github.com/CIRCSE

https://lila-erc.eu

@ERC_LiLa

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