

Life after ERC

What's New and What's Next in the LiLa Knowledge Base



Marco Passarotti

SwissText 2025 Winterthur, May 14-15, 2025



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.





What's New

Language Resources Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point TextLinker

What's Next

Discussion and Conclusion



What's New

Language Resources Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point TextLinker

/hat's Next Discussion and Conclusion





Textual Resources



- Textual Resources
- Lexical Resources



- Textual Resources
- Lexical Resources
- NLP Tools



- Textual Resources
- Lexical Resources
- NLP Tools

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





Use URIs for things (e.g. an entry in a lexicon, a token in a corpus)



- Use URIs for things (e.g. an entry in a lexicon, a token in a corpus)
- Use HTTP URIs to allow people (and machines) to look up things



- Use URIs for things (e.g. an entry in a lexicon, a token in a corpus)
- 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



- Use URIs for things (e.g. an entry in a lexicon, a token in a corpus)
- 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





A de facto W3C standard for publishing lexical data as LLOD



iLa



What's New

Language Resources

Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point TextLinker

/hat's Next Discussion and Conclusior



Resources connected so far https://lila-erc.eu/data-page/

- Lemmas in the Lemma Bank: approx. 170K (Written Reps: approx. 270K)
- Lexical Entries in Lexical Resources: approx. 170K
- Tokens in Textual Resources: approx. 12M
- Triples: approx. 140M



What's New

Language Resources Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point TextLinker

Vhat's Next Discussion and Conclusion

Lemma Bank Query Interface

To access the lemma datasheets and visualize the triples





What's New

Language Resources Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point Text1 inker

Vhat's Next Discussion and Conclusion

LiLa Search Platform

To write SPARQL queries in graphical manner



LiLa Search Platform https://lila-erc.eu/LiLaLisp/



What's New

Language Resources Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point TextLinker

What's Next Discussion and Conclusion



SPARQL Access Point https://lila-erc.eu/sparql/



What's New

TextLinker



TextLinker https://lila-erc.eu/LiLaTextLinker/



Fundamentals of LOD and Introduction to LiLa

Mission and Architecture

What's New

Language Resources Lemma Bank Query Interface LiLa Search Platform SPARQL Access Point TextLinker

What's Next Discussion and Conclusion



Automatic disambiguation of linking for textual resources



- Automatic disambiguation of linking for textual resources
- Meta-linking of LOD resources: images, geodata and prosopography for the ancient world



- Automatic disambiguation of linking for textual resources
- Meta-linking of LOD resources: images, geodata and prosopography for the ancient world
- Multilingual interoperability and Lemma Banks for other languages (LiITA, etymological resources)



- Automatic disambiguation of linking for textual resources
- Meta-linking of LOD resources: images, geodata and prosopography for the ancient world
- Multilingual interoperability and Lemma Banks for other languages (LiITA, etymological resources)
- Integrating NLP Tools



- Automatic disambiguation of linking for textual resources
- Meta-linking of LOD resources: images, geodata and prosopography for the ancient world
- Multilingual interoperability and Lemma Banks for other languages (LiITA, etymological resources)
- Integrating NLP Tools
- Exploiting explicit information stored in knowledge graphs to fine-tune LLMs

Thank you Let's interlink!



LiLa: Linking Latin Università Cattolica del Sacro Cuore **CIRCSE** Research Centre



info@lila-erc.eu



https://github.com/CIRCSE

https://lila-erc.eu





9

Largo Gemelli 1, 20123 Milan, Italy



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.