

Collaborative notebook

A space for collaborative notetaking (if you want!).

Instructions

- Keep this document tidy 😊

Useful links

- LiLa LP6.2 activity website: <https://lila-erc.eu/linked-pasts-6-activity/>
- Linked Pasts website: <https://ics.sas.ac.uk/events/linked-pasts-6>
- Linked Pasts 6: activity details and links:
https://docs.google.com/document/d/15OYNtGwImKfnkP-7dyTC1qRLLcBaFprZTI-OVoh_ePCs/edit#
- LiLa Lemma Bank query interface: <https://lila-erc.eu/query/>
- LiLa SPARQL interface: <https://lila-erc.eu/sparql/>
- **LiLa TextLinker: <http://lila-erc.eu:8080/LiLaTextLinker/>**
- LiLa LodLive interface: <https://lila-erc.eu/lodlive/>

Activity workflow

Objective: connect a Latin text to the LiLa Knowledge Base of Linguistic Resources.

Navigate to the LiLa Text Linker at: <http://lila-erc.eu:8080/LiLaTextLinker/>

Copy and paste a Latin text (in plain text format, TXT) in the box provided and click on the PROCESS button in top-right corner of your screen. You'll now see that your text is highlighted in three different colours. Why? The Text Linker has mapped your text to the LiLa Lemma Bank and highlighted each token (word) in the text in one of three colours: green indicates an exact match, blue an ambiguous match and red a no match. What the Text Linker has also done is parse the text for part of speech (PoS) and lemma. If you hover over a word in your text, a pop-up window will show you the PoS and lemma of that word. If you click on that same word, a pane will open on the right hand side of your screen with all the information associated with that lemma in the LiLa Knowledge Base: PoS, lemma, lemma ID, etc.

LILA: TEXT LINKER (β)



PASTE YOUR TEXT BELOW

TEXT PROCESS

Laudabunt alii claram Rhodon aut Mytilenen aut Epheson bimarisue Corinthi moenia uel Baccho Thebas uel Apolline Delphos insignis aut Thessala Tempe ; sunt quibus unum opus est intactae Palladis urbem carmine perpetuo celebrare et undique decerptam fronti praeponere oliuam ;

plurimus in Iunonis honorem aptum dicet equis Argos ditisque Mycenae : me nec tam patiens Lacedaemon nec tam Larisae percussit campus opimae quam domus Albunee resonantis et praeceps Anio ac Tiburni lucus et uda mobilibus pomaria riuis .

Albus ut obscuro deterget nubila caelo saepe Notus neque parturit imbris perpetuos , sic tu sapiens finire memento tristitiam uitaeque labores molli , Plance , mero , seu te fulgentia signis castra tenent seu densa tenebit tiburis umbra tui .

Teucer Salamina patremque cum fugeret , tamen uda Lyaeo tempora populea fertur uinxisse corona sic tristis adfatus amicos : quo nos cumque feret melior fortuna parente , ibimus , o socii comitesque , nil desperandum Teucro duce et auspice Teucro .

certus enim promisit Apollo ambigam tellure noua Salamina futuram . o fortes peioraque passi mecum saepe uiri , nunc uino pellite curas : cras ingens iterabimus aequor .

LILA KNOWLEDGE BASE

LINKING

Click a token to show linked data

Form: Laudabunt

Lemma: laudo - UPOS: VERB

Data from LemmaBank:

Linked to LiLa [lilaLemma:110078](#)

```
rdf:type Lemma
rdfs:label laudo
lila:hasBase Base224
lila:hasInflectionType first
conjugation verb
lila:hasPOS verb
ontolex:writtenRep laudo
```

Fig. 1: Processed output of the LiLa Text Linker. Clicking on a word in the text, e.g. *laudabunt*, will open a pane on the right-hand side of the screen displaying all of the information associated with that word in the LiLa Knowledge Base.

Clicking on the lemma ID in this pane (e.g. `lilaLemma:110078` in Fig. 1), will redirect you to the lemma's descriptive sheet (Fig. 2).

laudo
⋮

http://lila-erc.eu/data/id/lemma/110078
AN ENTITY OF TYPE: **Lemma**

rdfs:label	laudo
ontolex:writtenRep	laudo
rdf:type	lila:Lemma ↳ Lemma
lila:hasBase	<http://lila-erc.eu/data/id/base/224> ↳ Base224
lila:hasInflectionType	lila:v1r ↳ first conjugation verb
lila:hasPOS	lila:verb ↳ verb

INVERSE RELATIONS

is lila:isHypolemma of 3 resources

lodview

data from: <https://lila-erc.eu/data/>
 view on [LodLive](#)
 rdf: xml, ntriples, turtle, json, ld+json

Fig. 2: Descriptive sheet of the lemma *laudo* in LiLa.

If, in this sheet, you click on the three-dot icon in the top-right corner of your screen will redirect you to the graph view of *laudo* (Fig. 3). Clicking on the node's "satellite" nodes will open up all connections associated with that lemma in LiLa!

lod

lodlive

A central purple circular node labeled 'laudo' is surrounded by several smaller satellite nodes. Some of these nodes are white with black outlines, while others are solid purple. There are also some small icons (a gear and a list icon) near the top of the central node.

Fig. 3: Graph representation of *Iaudo* in LiLa.

Now, back to the Text Linker! Let us click on the red-highlighted lemma *plurimus* (Fig. 4). Doing so will open up the information pane on the right-hand side of the screen, which, as you'll see, is empty because this word has not been successfully matched against a lemma in LiLa.

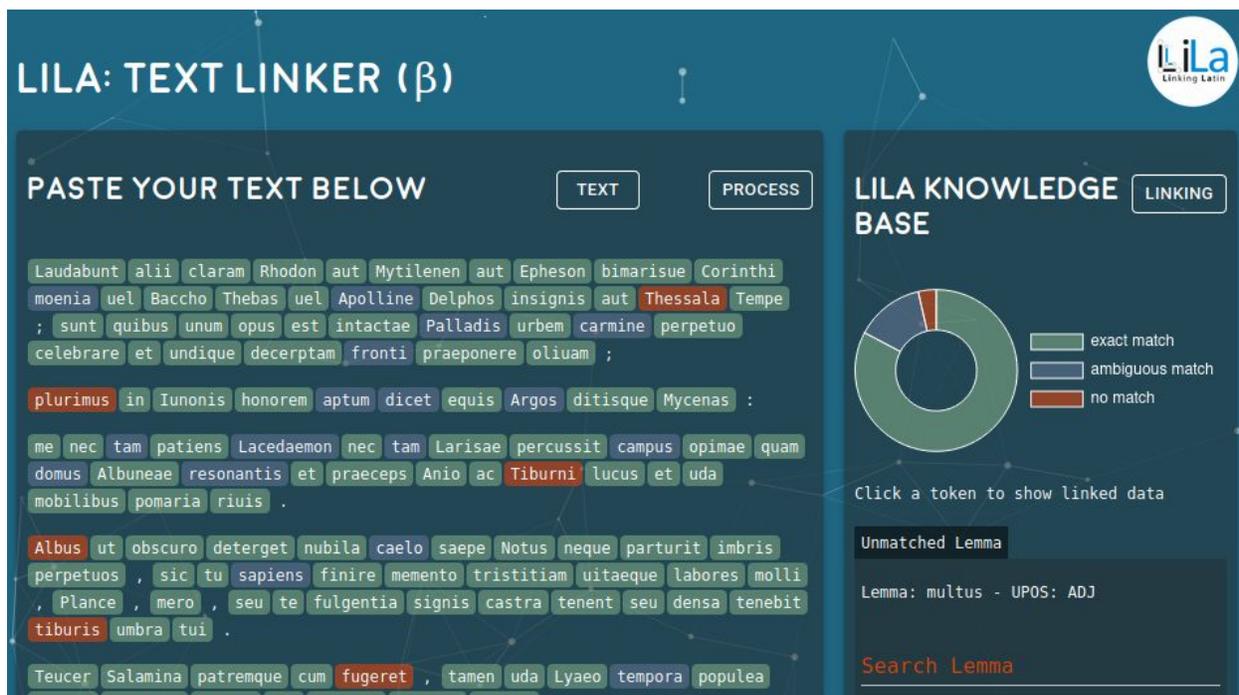


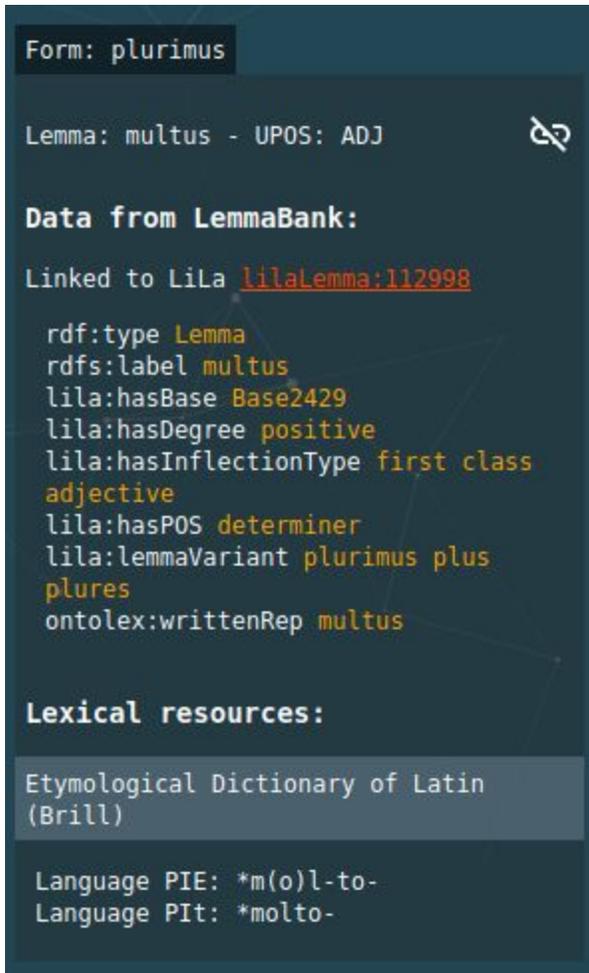
Fig. 4: Fixing a red-highlighted word (a “no match”).

We need to create this association! To do so, using the “Search Lemma” functionality in that pane, we start typing the lemma of *plurimus*, that is, *multus* (Fig. 5). As you type, the Text Linker will provide suggestions. In our case, the only suggestion provided is *multus* - determiner.



Fig. 5: Adding a LiLa lemma association to *plurimus*.

Clicking on that suggestion will automatically link our red *plurimus* to the lemma *multus*! What you should see now is a screen with all of the information associated with the lemma *multus* in LiLa (Fig. 6).



The screenshot shows a dark-themed interface with the following content:

- Form: plurimus
- Lemma: multus - UPOS: ADJ
- Data from LemmaBank:
 - Linked to LiLa [lilaLemma:112998](#)
 - rdf:type Lemma
 - rdfs:label multus
 - lila:hasBase Base2429
 - lila:hasDegree positive
 - lila:hasInflectionType first class adjective
 - lila:hasPOS determiner
 - lila:lemmaVariant plurimus plus plures
 - ontolex:writtenRep multus
- Lexical resources:
 - Etymological Dictionary of Latin (Brill)
 - Language PIE: *m(o)l-to-
 - Language PIT: *molto-

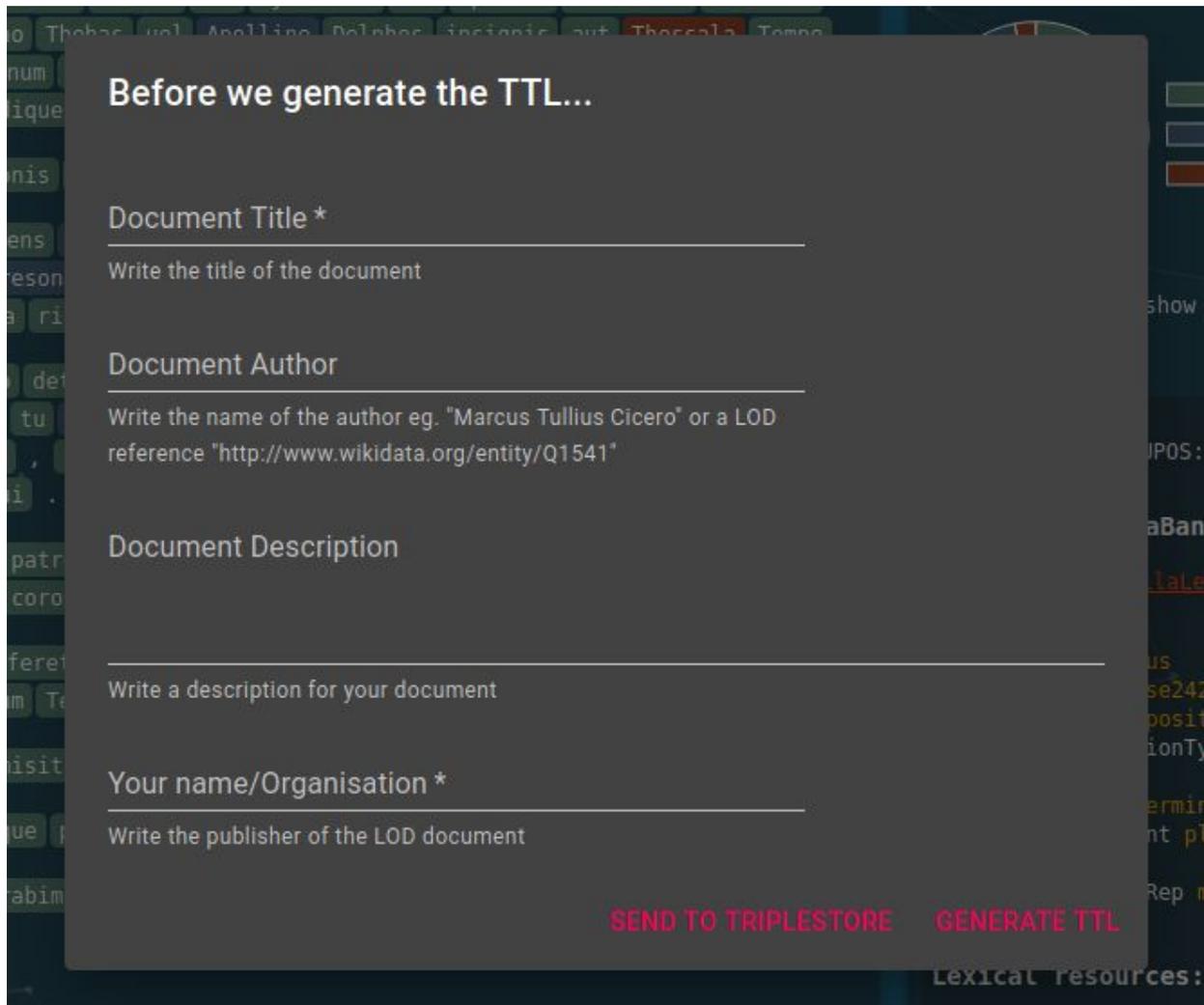
Fig. 6: The non-matched lemma *plurimus* has been successfully connected to the LiLa lemma *multus*.

As you'll now notice, this operation has changed the colour of *plurimus* in your text from red to green.

Let's now turn to ambiguously-matched lemmas, those highlighted in blue in the TextLinker (Fig. 7). If you click on an ambiguous lemma, the TextLinker will provide you with possibilities for you to choose from. Look for the correct lemma - when you find it click on the CHOOSE button to select it. Choosing a lemma will change the colour of that word from blue to green.

Once you've cleaned the text of red- and blue-highlighted words, you may proceed to linking it to the LiLa Knowledge Base. "Linking" here means converting our clean, lemmatised text to the Turtle syntax (TTL, in short) required by LiLa to publish your text in the Knowledge Base.

To link the text, click on the LINKING button in the top-right corner of your Text Linker screen. A Dialog box or form will appear asking you to fill-in some details about your text (Fig. 7). Complete the form and then press on GENERATE TTL to generate and download the Turtle version of your text.



The image shows a dark-themed dialog box with the title "Before we generate the TTL...". It contains four input fields, each with a label and a placeholder text:

- Document Title ***: Placeholder "Write the title of the document".
- Document Author**: Placeholder "Write the name of the author eg. 'Marcus Tullius Cicero' or a LOD reference 'http://www.wikidata.org/entity/Q1541'".
- Document Description**: Placeholder "Write a description for your document".
- Your name/Organisation ***: Placeholder "Write the publisher of the LOD document".

At the bottom right of the dialog box, there are two buttons: "SEND TO TRIPLESTORE" and "GENERATE TTL". The background of the dialog box is semi-transparent, showing a blurred view of a text editor with Latin text.

Fig. 7: Dialog box to generate and download a TTL version of your clean, lemmatised Latin text.

You can now open the downloaded `.ttl` file on your computer in any text editor (e.g. Notepad, Sublime Text Editor, Atom, etc.). This is what that file looks like (Fig. 8):

```

1 | @prefix dc: <http://purl.org/dc/elements/1.1/> .
2 | @prefix dcterms: <http://purl.org/dc/terms/> .
3 | @prefix documentNamespace: <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/> .
4 | @prefix lilaPolLemma: <http://lila-erc.eu/data/id/hypolemma/> .
5 | @prefix lilaLemma: <http://lila-erc.eu/data/id/lemma/> .
6 | @prefix lilaOntology: <http://lila-erc.eu/ontologies/lila/> .
7 | @prefix lila_authors: <http://lila-erc.eu/data/corpora/id/authors/> .
8 | @prefix lila_corpus: <http://lila-erc.eu/ontologies/lila_corpora/> .
9 | @prefix ontolox: <http://www.w3.org/ns/lemon/ontolox#> .
10 | @prefix owl: <http://www.w3.org/2002/07/owl#> .
11 | @prefix powla: <http://purl.org/powla/powla.owl#> .
12 | @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
13 | @prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
14 |
15 | <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test>
16 |   a powla:Document, owl:NamedIndividual;
17 |   dc:description "test";
18 |   dc:title "test";
19 |   dcterms:creator "test";
20 |   dcterms:license <http://www.wikidata.org/entity/Q4255366>;
21 |   dcterms:publisher "test";
22 |   rdfs:label "test" .
23 |
24 | <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure>
25 |   a lila_corpus:CitationStructure, owl:NamedIndividual;
26 |   lila_corpus:first <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1>;
27 |   lila_corpus:isLayer <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1>;
28 |   dc:description "test Citation Layer";
29 |   dc:title "Citation Layer";
30 |   powla:hasDocument <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test> .
31 |
32 | <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1>
33 |   a lila_corpus:citationUnit, owl:NamedIndividual;
34 |   lila_corpus:first <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-1>;
35 |   lila_corpus:hasCitLevel "1"^^xsd:int;
36 |   lila_corpus:hasRefType "Sentence";
37 |   powla:hasChild <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-1>,
38 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-10>,
39 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-11>,
40 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-12>,
41 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-2>,
42 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-13>,
43 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-3>,
44 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-4>,
45 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-5>,
46 |     <http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test/CiteStructure/s-1/t-6>,

```

Fig. 8: Version of our Latin text in the Turtle syntax.

Now, let us send our TTL to LiLa’s Knowledge Base! In the previously shown Dialog box (Fig. 7), click on SEND TO TRIPLESTORE, copy the link provided by the system and put it somewhere safe (Fig. 9)

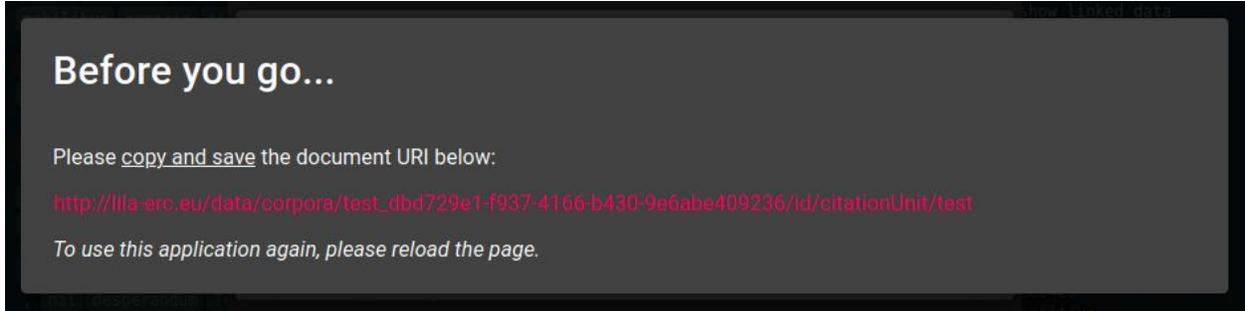


Fig. 9: LiLa URL of your Latin text.

If you paste that link in the URL field of your browser you will be redirected to the LiLa page of your text (Fig. 10).

test

http://lila-erc.eu/data/corpora/test_dbd729e1-f937-4166-b430-9e6abe409236/id/citationUnit/test

AN ENTITY OF TYPE **NamedIndividual**

dc:description	test
dc:title	test
dcterms:publisher	test
dcterms:creator	test
rdfs:label	test
rdf:type	owl:NamedIndividual <http://purl.org/powla/powla.owl#Document>
dcterms:license	<http://www.wikidata.org/entity/Q42553662>

INVERSE RELATIONS

is [<http://purl.org/powla/powla.owl#hasDocument>](http://purl.org/powla/powla.owl#hasDocument) of 1 resource

lodview

data from: <https://lila-erc.eu/data/>
view on LodLive
rdf: xml, ntriples, turtle, json, ld+json

Fig. 10: LiLa view of our Latin text.

Now, clicking on the three-dot icon in the top-right corner of this screen will open up the graph representation of your text (Fig. 11)! You can now explore your text in relation to all other information already contained in the LiLa Knowledge Base.

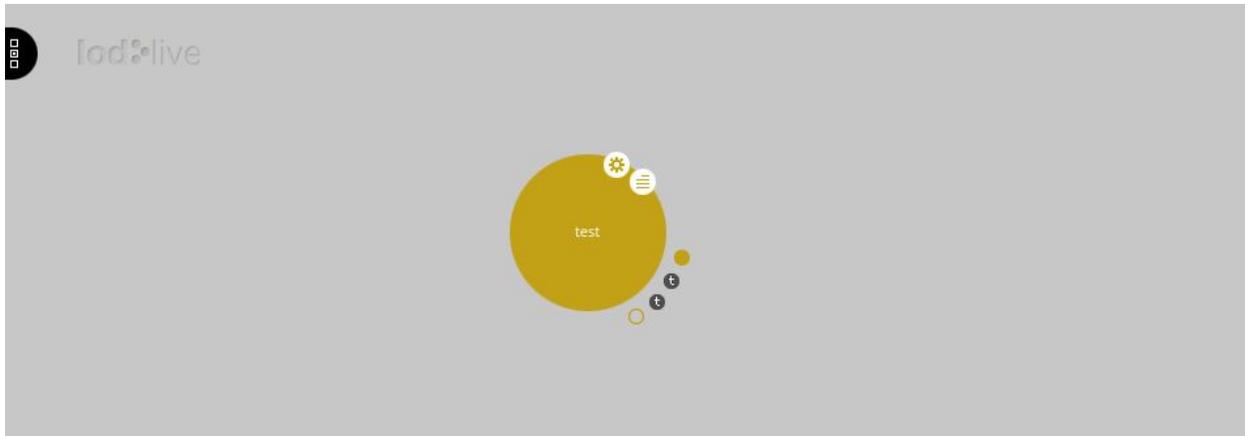


Fig. 11: Graph representation of your Latin text in LiLa. You can now explore your text in relation to all other information already contained in the LiLa Knowledge Base by clicking on all of the “satellite” nodes.

Let us now query our Latin text! Open the LiLa query interface at <https://lila-erc.eu/sparql/> (Fig. 12).

Apache Jena Fuseki
Version 3.14.0. Uptime: 1d 8m 40s

Datasets on this server

dataset name	actions
/corpora	query info
/lemmaBank	query info
/lexicalResources	query info

i Here you can access the ever-growing collection of connected resources of the **LiLa: Linking Latin** project (ERC No. 769994). The lemma bank of LiLa serves as the central hub to link lexical and textual resources to one another. The lemma bank and the resources can also be accessed through a simple graphical query interface available [here](#).

The End-points

Fig. 12: LiLa’s main SPARQL interface.

Look for the `lemmaBank` dataset and click on the QUERY button next to it. You should now see this SPARQL query interface (Fig. 13):

Dataset: /lemmaBank

query info

SPARQL query

To try out some SPARQL queries against the selected dataset, enter your query here.

EXAMPLE QUERIES

Selection of triples Selection of classes Classis Base Count affix Describe Lemma PIE etymology
Positive lemmas Negative in Thomas Aquinas Negative couplets in Thomas Aquinas
Positive lemmas in Aulularia

PREFIXES

rdf rdfs owl xsd lila corpora ontolox lemonEty lime lexinfo etymon
marl powla

SPARQL ENDPOINT: /sparql/lemmaBank/sparql
CONTENT TYPE (SELECT): JSON
CONTENT TYPE (GRAPH): Turtle

```
1  
2  
3 SELECT ?subject ?predicate ?object  
4 WHERE {  
5   ?subject ?predicate ?object  
6 }  
7 LIMIT 25
```

QUERY RESULTS

Table Raw Response

Fig. 13: SPARQL interface to query the LiLa lemma bank.

From the query file `LiLa_SPARQL_queries.rq` provided as part of this activity's materials, copy the first SPARQL query and paste it in this SPARQL interface box (Fig. 14). As explained in that file, this query can be used to produce the list of all lemmas in our text at least once in decreasing order of frequency.

```

1  prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
2  prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>
3  prefix ontollex: <http://www.w3.org/ns/lemon/ontollex#>
4  prefix lila: <http://lila-erc.eu/ontologies/lila/>
5  prefix lilacorpora: <http://lila-erc.eu/ontologies/lila_corpora/>
6  prefix lime: <http://www.w3.org/ns/lemon/lime#>
7  prefix marl: <http://www.gsi.dit.upm.es/ontologies/marl/ns#>
8  prefix powla: <http://purl.org/powla/powla.owl#>
9
10 SELECT (GROUP_CONCAT(DISTINCT ?wr ; separator=", ") as ?wrs) ?lemma
    ?freq
11 WHERE {
12  VALUES ?doc {<Your document URI>}
13  service <https://lila-erc.eu/sparql/corpora/query> {

```

Fig. 14: Pasting a SPARQL query in the LiLa SPARQL interface.

Doing so will flag-up a warning, visible thanks to the (!) icon. What the system is asking you is to insert the URI of your document (that displayed in Fig. 9). Paste that URI in between the angle brackets (< >) provided. Now click on the large black/white play button to the right of your screen to run the query on the Knowledge Base! The results of your query will be shown below the query box (Fig. 15).

QUERY RESULTS

Table Raw Response

Showing 1 to 50 of 164 entries

Search: Show 50 entries

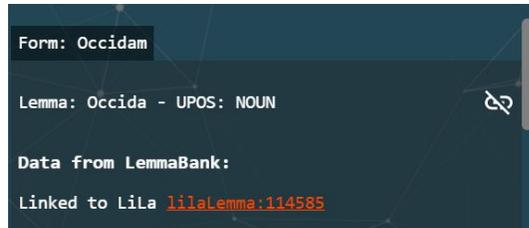
	wrs	lemma	freq
1	"et, id, es, ed, e"	<http://lila-erc.eu/data/id/lemma/101542>	"4"^^xsd:integer
2	"aut"	<http://lila-erc.eu/data/id/lemma/90827>	"3"^^xsd:integer
3	"sum, esum"	<http://lila-erc.eu/data/id/lemma/126689>	"3"^^xsd:integer
4	"teucer"	<http://lila-erc.eu/data/id/lemma/23213>	"3"^^xsd:integer
5	"apollo"	<http://lila-erc.eu/data/id/lemma/20103>	"2"^^xsd:integer
6	"apollo"	<http://lila-erc.eu/data/id/lemma/20104>	"2"^^xsd:integer
7	"bel, uel"	<http://lila-erc.eu/data/id/lemma/129695>	"2"^^xsd:integer
8	"ego, egopte, egomet"	<http://lila-erc.eu/data/id/lemma/100712>	"2"^^xsd:integer

Fig. 15: Results of our SPARQL query.

You can now repeat this process with all other queries provided in the `LiLa_SPARQL_queries.rq` file!

Questions

- Q: At this moment, diachronic linking of variants is considered and, if so, how it made?
 - A: Not at the moment, no. Definitely possible, but would require a significant amount of work :)
- Q: What would be the abstract instance showing to both lemmas *spectrum*/*spectrom* instances?
 - A: In LiLa, its URI
 - A: *Spectrum* is not currently among the ca. 9,300 lemmas of the Latin WordNet but we can certainly attach synsets/concepts to it in the next LiLa release, e.g. <http://wordnet-rdf.princeton.edu/lemma/spectre>
- Q: For long texts, can the work of choices in TextLinker be saved and later reloaded so that someone can close the browser and continue later? (Or could be added as next feature?)
 - A: TO BE IMPLEMENTED.
- Q: If we provide OCR versions of Mediaeval Latin editions of - say - biblical books, would the lemmatiser take into account variant spellings, and so on?
 - A: That depends on the data we used to train the pos-tagger/lemmatiser. The more data we train the lemmatiser on, the more likely it is to recognise variants.
 - A: If you mean OCR *errors*, if these are not corrected the lemmatiser won't be able to parse the text.
- Q: As the Latin texts in your interoperable network have been translated into vernacular languages, do you see any future linking possible with vernacular sources? Would you see yourselves partnering up with someone in such an endeavour?
 - A: That would be wonderful, yes! The Ancient Greek loanword resource that we described in our presentation points in that direction. But in order to link LiLa to other languages it would be necessary for other languages to produce a linguistic linked data Knowledge Base. If, for instance, we had a LiLa equivalent for Ancient Greek, we could connect "our" Ancient Greek words (e.g. *apsinthion*, as shown in our presentation) to those collected in the Ancient Greek Linked Data Knowledge Base.
- Q: Maybe I missed it: what happens if the token is not given the proper UPOS when the text is processed? For instance I had the word "Occidam" classified as "Lemma: Occida - UPOS: PROPN" but it is not a proper noun, it is a verb!
 - A: In that case, click on OCCIDAM and then, on the right of the screen, on the "unlink" ICON. Doing so will give you the option of searching for and choosing the correct lemma in the LiLa Knowledge Base.
 - I linked it to the verb ([occido — LodView \(lila-erc.eu\)](#)), but it is still shown as a noun..



- I think that might be a bug on our end, then. The system should have correctly linked your lemma to the VERB but the text does reflect this change. We'll work on it, thanks for flagging this up! :) OK, thanks!

Issues/Requests

- **Problem 1: On some computers, the LodLive window returns a 404 error.**
 - Diagnosis: this seems to be a problem with browsers set to French.
 - Workaround: participants using browsers set to French should change their browser language to English.
- **Problem 2: Undo action in TextLinker**
- **Problem 3: Add the possibility to check the lemmas in the LiLa KB when the drop-down menu appears**
- **Problem 4:** Once an incorrectly lemmatised token has been corrected, the TextLinker doesn't display the updated lemma and PoS but the original (incorrect) information.
- Nice to have : in the lod graph tool, for example exploring albus, and having opened its base node "Base205", when going over the satellite dots of the base it could be useful to read in the tooltip also the actual lemma (currently it only shows the lemma id and the type of relations); otherwise one has to check/open all the satellite dots to discover where are the subnodes of the base he's searching
- Nice to have : in the lod graph tool it could also be useful to have an option to close with one click all the currently open derived nodes of a base. it seems possible for the satellite dots (reclicking the cogwheel dot), but if someone has opened 20 descendants of a base it looks like he must close each of them manually
- Nice to have : also a kind of textbox filter near the base cogwheel, in adjunction to the satellite dots, to search quickly the descendants of a base (e.g. those starting with "sub...") and to open them immediately
- As it was mentioned during the workshop, the disambiguation is the most time-consuming part, and sometimes it is quite difficult to understand how two lemmas differ (we have to follow several links, etc.). I was wondering if it was a possible solution to add a translation, e.g. by linking to the Perseus dictionary? Or is this too complicated?
 - As mentioned in our presentation, we're in the process of cleaning and adding the Latin WordNet to LiLa. This means that the TextLinker will also provide word meanings to help with disambiguation :) Word meanings will be added as the cleaning of the Latin WordNet progresses.

Latin text suggestions

Text	URL	Comment
Pliny the Elder, Naturalis Historia	https://penelope.uchicago.edu/Thayer/L/Roman/Texts/Pliny_the_Elder/2*.html	
I'm interested in David Hilchen text corpora but unfortunately I cannot provide any URL's. Given that, I would prefer any neo-latin text	http://www.mlat.uzh.ch/MLS/xanfang.php?corpus=9&lang=0	
Petrus Ransanus: Epitome Rerum Hungararum	https://szovegtar.iti.mta.hu/hu/muvek/epithoma-rerum-hungararum-id-est-annalium-omnium-temporum-liber-primus-et-sexagesimus/	Copy-pasting from the PDF works well
De Bello Gallico	http://www.latin.it/autore/cesare/de_bello_gallico/!01!liber_i	
Thomas de Vio Cardinal Cajetan texts (1462-1534), on analogy, biblical exegesis, commentaries to Aquinas S. Th. Etc.		Can't find a link :(
Ursus Beneventanus	https://github.com/paolomone/lla/ursus	
The Book Psalms/mediaeval source material for vernacular translations	http://www.mlat.uzh.ch/MLS/xanfang.php?tabelle=Biblia_cps0&corpus=0&id=Biblia_cps0.%20Biblia%20Sacra%20iuxta%20Vulgatam%20Clementinam	
Giovanni Pico della Mirandola, Conclusiones secundum Thomam	http://cds.library.brown.edu/projects/pico/about.php	
Hor., carm. VII	http://mizar.unive.it/mqdq/public/testo/testo?codice=HOR%7Ccar2%7C007	Book? :)
The Vulgate (Psalms, Canticles, and New Testament for starters?)	http://music2.princeton.edu/cchant_html/bibles.html	This gathers several online texts (provided via links), but i'm not sure about the possibility of distribution and/or "text aspiration"

Feedback

A space to let us know how we can improve, be that the pace of the activity or a feature request for the Text Linker! Anything 😊

Some random comments from Joel:

- You have my sincere thanks and congratulations. The amount of work you've put into your datasets is impressive and exhausting to think about! I also appreciate the contagious enthusiasm exhibited by all members of the team.
- There is an initiative underway, by Christian Chiarcos, to do better in LOD linguistic annotations: <https://github.com/ld4lt/linguistic-annotation> . The work is in its early days, and I recommend participation.
- In the coming year or two I hope to refine the [TAN-LM and TAN-A-mor formats](#), to try to show that it can be treated as a kind of highly regulated RDF serialization. It might be a complete failure! Whether it is or not, I look forward to trying to synchronize my efforts with you all.

Some random questions from Joel (you can contact me at kalvesmaki@gmail.com or director@textalign.net):

- For our test example, there was *carmine*, with ambiguous lemmata. But they looked identical to me, despite having two different lemmata numbers. Was my eyes playing tricks on me?
- In our wonderful quiz we learned that there are three lemmata for *cum*. But in the sample Horace text, no cases of *cum* resulted in ambiguities. Why? I'm curious to know if you've developed a weighted scoring system, and how that worked out.
- In the [Text Alignment Network](#), I have developed [functions for Morpheus's morphological service](#) for Latin and Greek, to help accommodate those who are working within XSLT to incorporate queries straight into their XML workflow, to develop RDF-friendly lexico-morphological data for their TEI files. These are successful because I can pass a URL to the API and get results. Can I can a URL to LiLa, something like this: <https://lila-erc.eu/sparql/corpora/query?SELECT%20%2A%0AWHERE%20%7B%0A%3Fs%20%3Fp%20%3Fo%20.%0A%7D%0ALIMIT%203>
If I can, then I can write a function in the TAN library that taps into LiLa.
- Both my TAN work has made me realize that straightforward triples are fine for simple straightforward linguistic annotation, but not for more complex cases. For this, it seems that there needs to be reification, and adoption of [RDF*](#). What complications if any would there be if I adapted and exposed LiLa RDF in this more reified version? Have you given any thought to moving your triples toward this model?