QUERYING THE AGLDT

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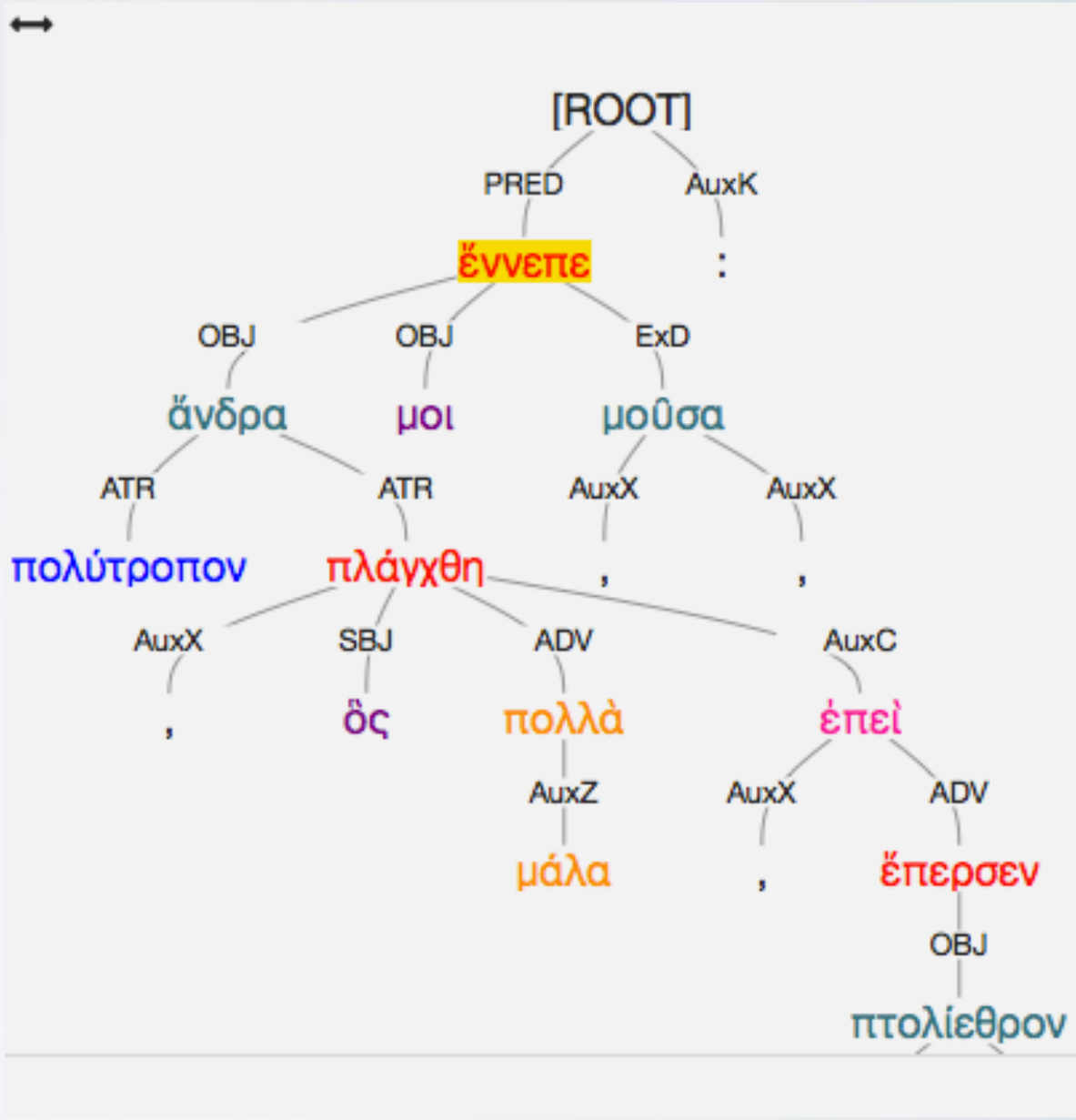
AGLDT

- Started and maintained by the Perseus Project (Website)
- Greek: more 750k annotated words, including:
  - lots of poetry (Homer, tragedy)
  - some prose (bk 1 of Hdt. and Thuc.)
- Latin: not very developed…



Morphology

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  <annotator>FrancescoM</annotator>
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```

TEXT

Syntax

WHAT ABOUT QUERYING?

- No software that work natively with the AGDT format
- Some "3rd-party" tools are linked on the website:
  - Structural Search (by N. Kallen)
- or… you can **hack it yourself**, by:
  - querying the AGDT XML files (refer to G. Celano's tutorial on using XQUERY)
  - using a custom DB: e.g. the gAGDT

THE REQUIREMENTS

- **Intuitive!** i.e. easy to learn

- **Powerful!**
  - it must be able to support all the stuff that INESS does (regexp, constituent order, complex dependency chains…)

- **in a word**: users must have no problem translating their research questions into the formal language for querying!

THE REQUIREMENTS 2

- must be fast!
- support output as:
  - visualized trees
  - tabular form and/or statistics
- synergize well with the digital editions of the texts
- be extensible (new texts and annotation types)

```
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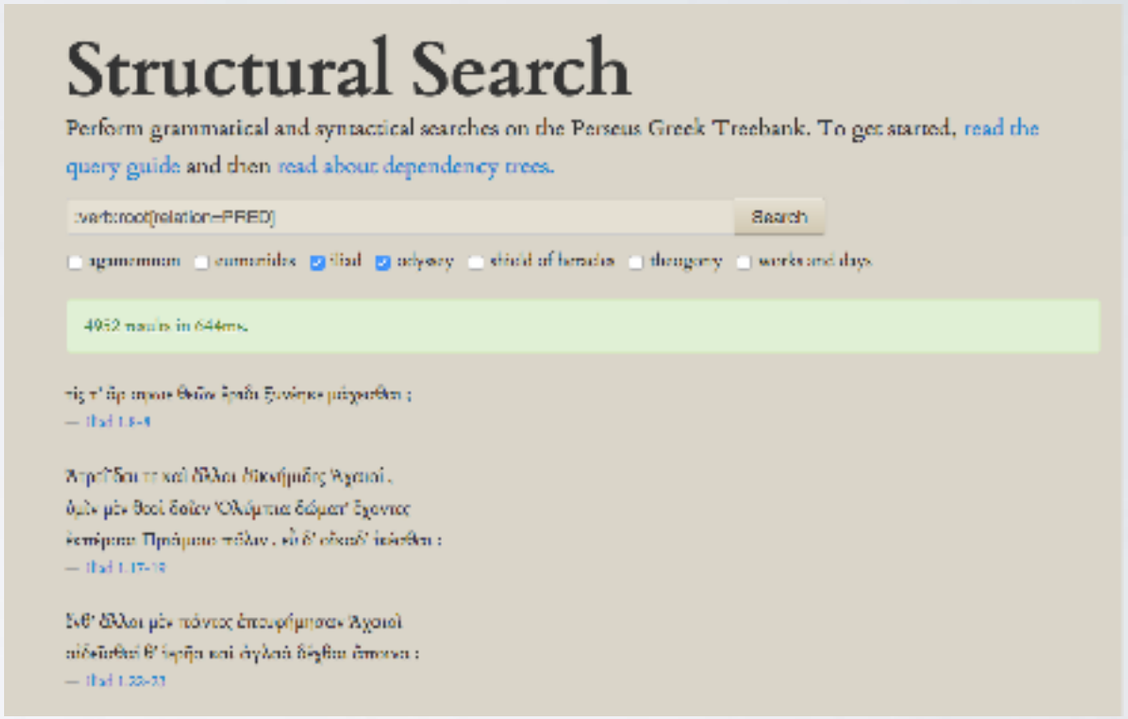
    <l n="934">διατομαῖς οὐ φίλοις,</l>
    <l n="935">ἔριδι μαινομένᾳ,</l>
    <l n="936">νείκεος ἐν τελευτᾷ.</l>
  </sp>
</div>
```

I'd like to inspect all the "genitive absolutes" or accusative + inf. in Homer

I'd like to know what are the most frequent compounds of "*syn*" used by each characters in Sophocles

STRUCTURAL SEARCH

A simple but very powerful solution to query (some of) the AGDT, based on CSS3 selector syntax



http://www.iliados.com/

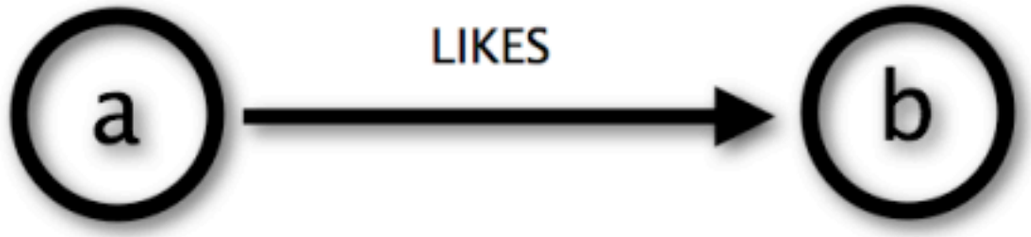
gAGDT

A graph database (based on Neo4j) that includes the AGDT data in a graph structure. Still experimental!

https://github.com/francescomambrini/gAGDT

- it's fast and scalable
- it allows powerful semantic queries
- extensible at will
    - add new types of nodes and relations

Cypher using relationship 'likes'



Cypher

```
(a) -[:LIKES]-> (b)
```

CYPHER

a query language inspired by SQL and based on ASCII art… ;-)

(node {property: “value”})

(head)-[:Dependecy]->(dep)