

# Computational Logics, Semantics and Pragmatics: Semantic Interpretation

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# Plan

- **24/02** (German) :
  - Deep vs. Shallow Semantic Interpretation
  - Semantic Interpretation in action
- **26/02** (Rodrigo) :
  - Semantic Interpretation tasks: NERC + NED + Coref ...
- **03/03** (German) :
  - Processing strategies for semantic analysis I
- **05/03** (German+Itziar+Egoitz) :
  - Processing strategies for semantic analysis II
  - Implicit SRL
- **10/03** (Rodrigo) :
  - Hands-on with NLP tools
- **12/03** (Students+Rodrigo+German)
  - Hackathon
- **17/03** (Students+Rodrigo+German)
  - Hackathon presentations

# Evaluation

- Hackathon (on 12/03):
  - Student/teacher topic
  - 2/3 students per team
  - 5 minutes project plan presentation ~ 3 slides
- Short presentation + Demo (on 17/03):
  - 15 minutes sharp, ~ 10 slides
- Written report + Final demo (on 17/04):
  - Format:
    - <http://www.acl2013.org/site/call.html>
  - Example:
    - EuroLoveMap
    - <http://adimen.si.ehu.es/~rigau/publications/opener14-aemrs.pdf>

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Acquilex II

EuroWordNet

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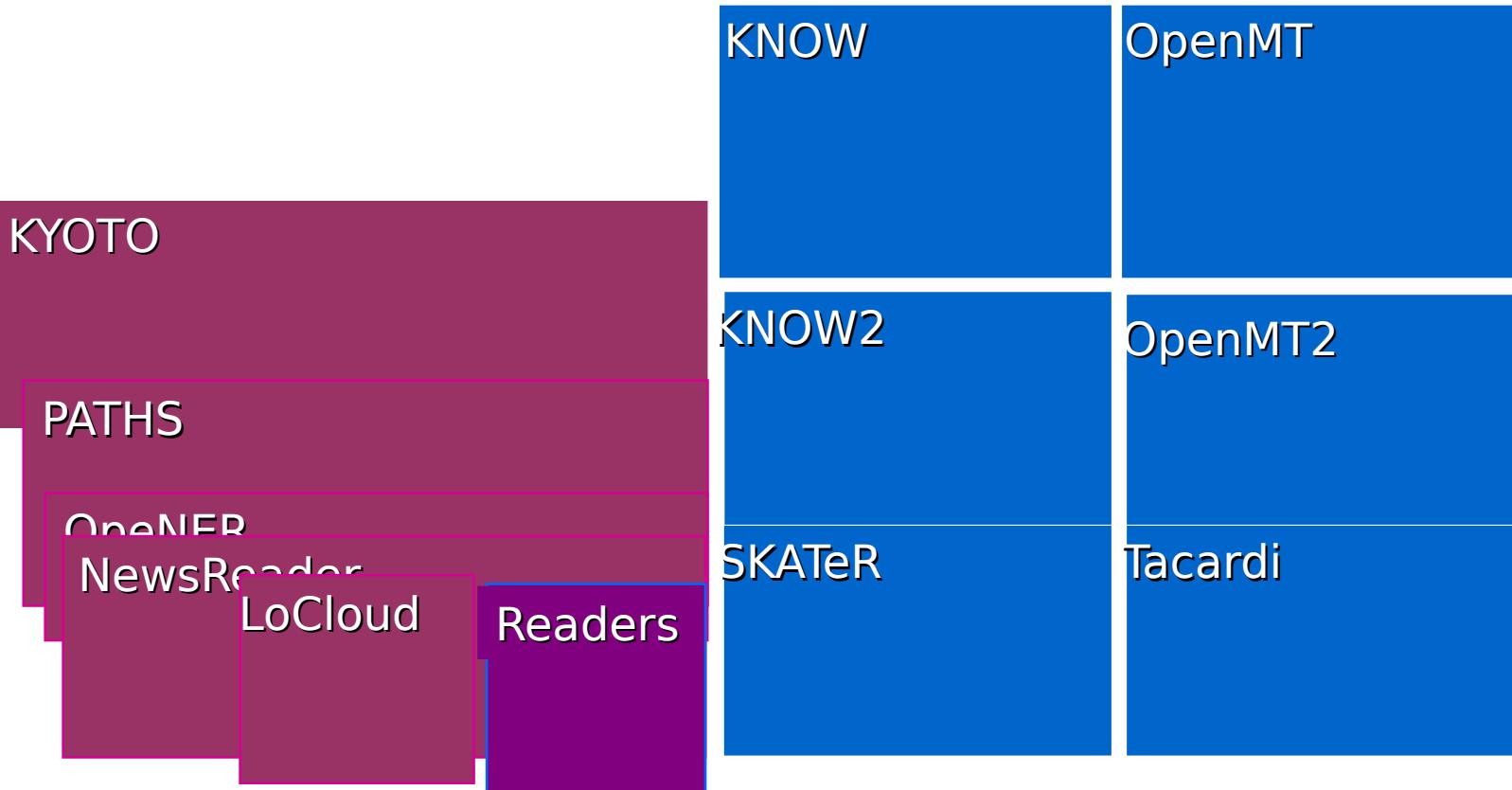
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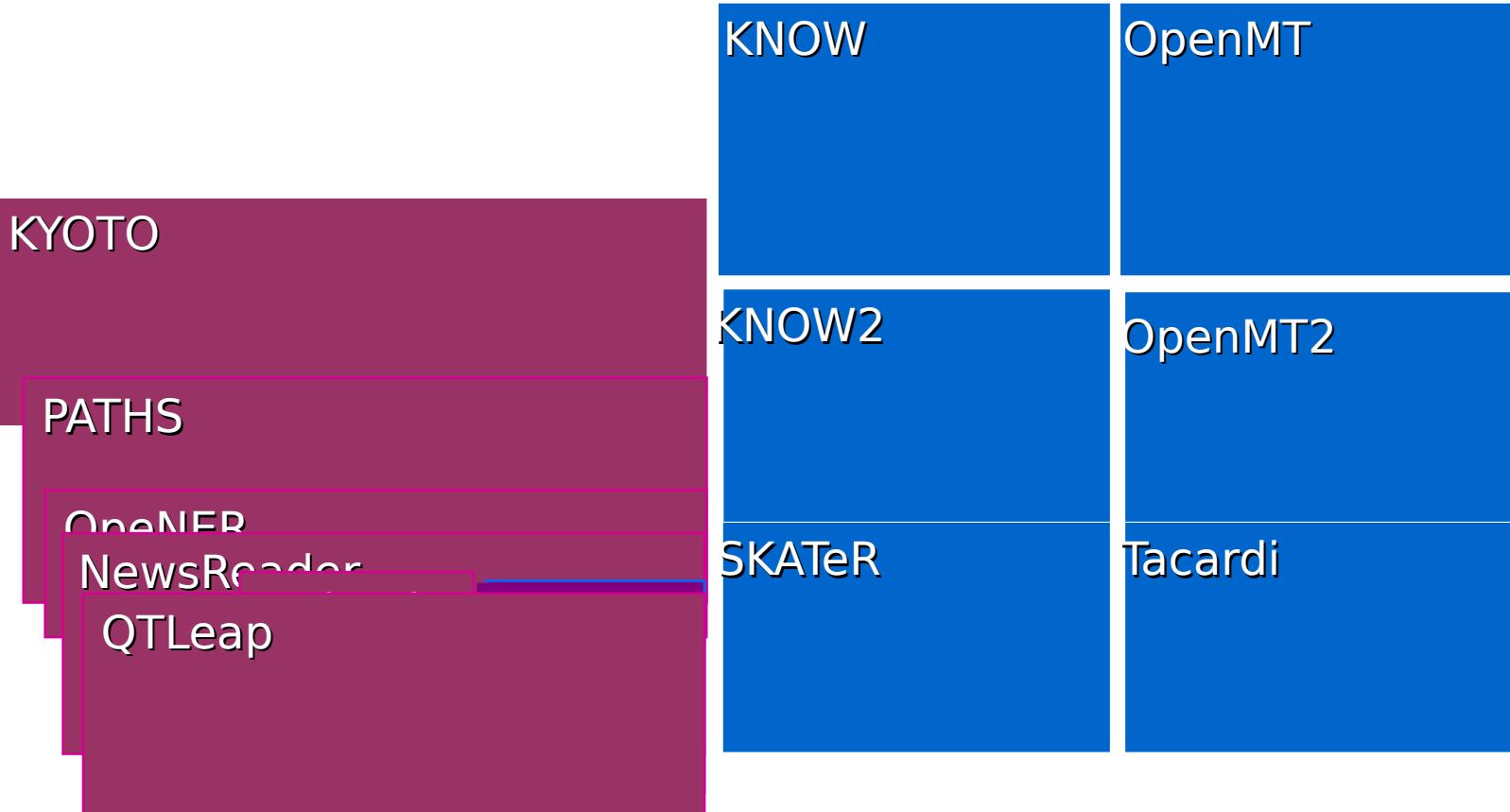
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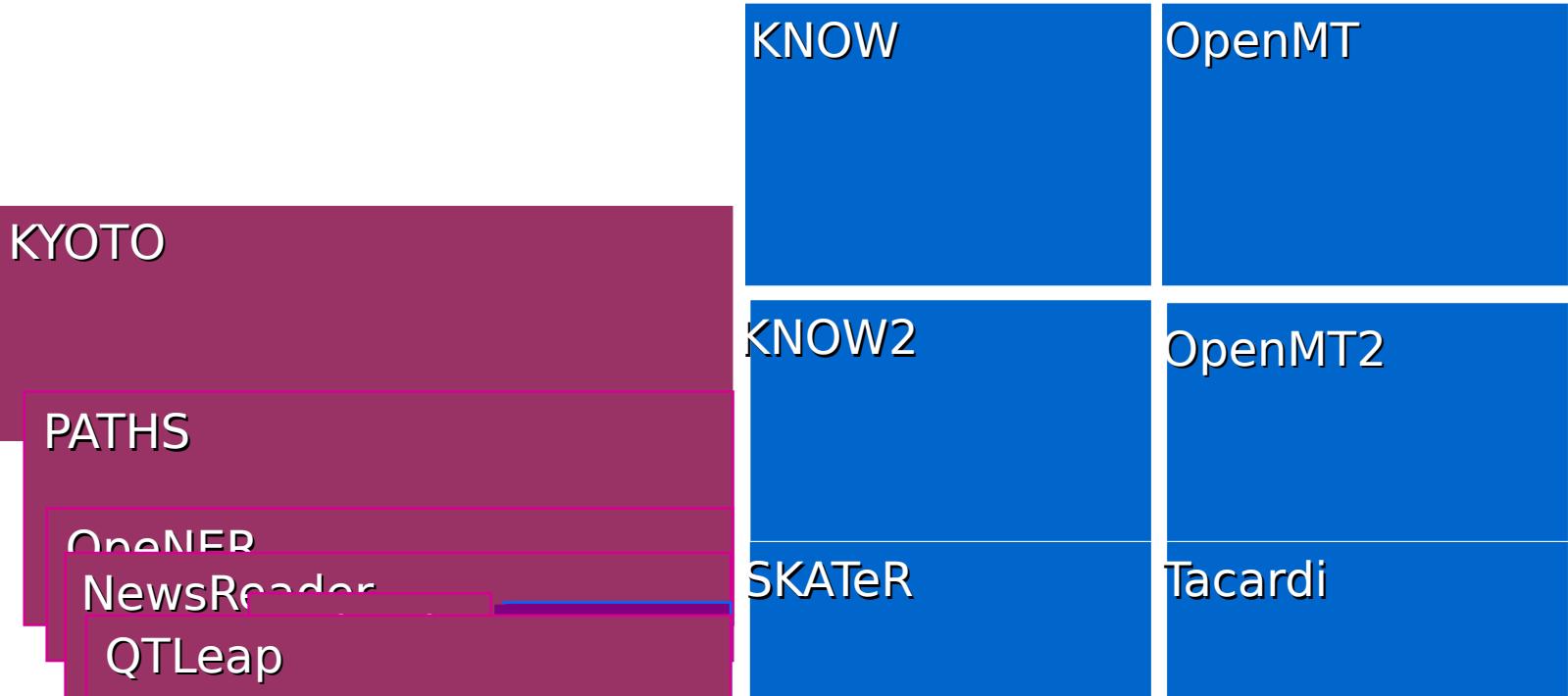
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# Motivation

Sbdm ip im vdu yonrckblms.

Abf ip im vdu bhhigu.

Sbdm yigaus ly vdu hbbvfnoo.

Abf zumv vb vdu aivgdum.

Mduku ip vdu hbbvfnoo? A:**yonrckblms**

Mduku znp Abf fuhbku vdu aivgdum? A:**bhhigu**

# Motivation

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# Motivation

John is in the playground.  
Bob is in the office.  
John picked up the football.  
Bob went to the kitchen.  
Where is the football? A:playground  
Where was Bob before the kitchen? A:office

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# Motivation

**party**

# Motivation

## party

- Which sense of “party”?
- How many senses have “party”?
- How a computer should represent these senses?

# Motivation

- For example:
  - The lexical-semantic knowledge allows us to better **characterize** the different meanings of the words
  - *In 1992 Perot tried to organize a third party at the national level*
  - *She joined the party after dinner*
  - *They organized a party to search for food*
  - *He planned a party to celebrate Bastille Day*
  - *The party of the first part*

# Motivation

- This better characterization may consist of:
- Add domain tags to each word sense
  - party<sup>1</sup><sub>n</sub>: politics
  - party<sup>4</sup><sub>n</sub>: free-time
- Distinguish the semantic relations that apply to each concept
  - party<sup>1</sup><sub>n</sub>: member of: political\_system<sup>1</sup><sub>n</sub>
  - party<sup>4</sup><sub>n</sub>: hyponym: wedding<sup>1</sup><sub>n</sub>
- Ontologies?

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