

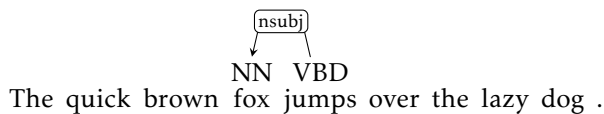
Dependency Parsing exercises: Dependency Structures

Part 1

Deadline: 24.04.2017

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1. Complete the dependency analysis of the sentence:



Use the Universal Dependency annotation scheme. Each word should have a part-of-speech tag and an incoming edge from its head, labeled with a basic dependency relation (e.g., *nsusbj*, *obj*, ...).

See <http://universaldependencies.org/u/overview/simple-syntax.html>

Draw the diagram by hand or use your favorite drawing software. If you use \LaTeX , *tikz-dependency* is recommended.

(You could 'cheat' by letting the computer parse the sentence for you using one of the available online parsers, but it's useful to practice working with dependency structures for the rest of the course.)

2. Give an example of an ambiguous sentence and explain the ambiguity in terms of dependency relations.

For example: "John sees Mary with a telescope." Ambiguity: the preposition 'with' is a dependent of either 'sees' or 'Mary.'

Other ideas for difficult sentences: headlines, informal language, questions, etc.

Try giving the sentence to an online parser. For example:

- <https://demos.explosion.ai/displacy/>
- <http://demo.ark.cs.cmu.edu/parse>
- <http://corenlp.run/>

Show the analysis given by the parser. Is it the correct analysis? If not, show the expected analysis. If it is, repeat with a more difficult sentence.