MO434 - Deep Learning
Introduction to Text Analysis

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Text Analysis and Natural Language Processing

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- We will divide text analysis into four lectures: text processing, representation, recurrent neural networks and transformers. Applications will be presented along with the lectures.

Agenda

- Why do we need text (pre)processing?
- What are the main NLP techniques and the importance of a corpus in text processing?
- A simple text classification application.

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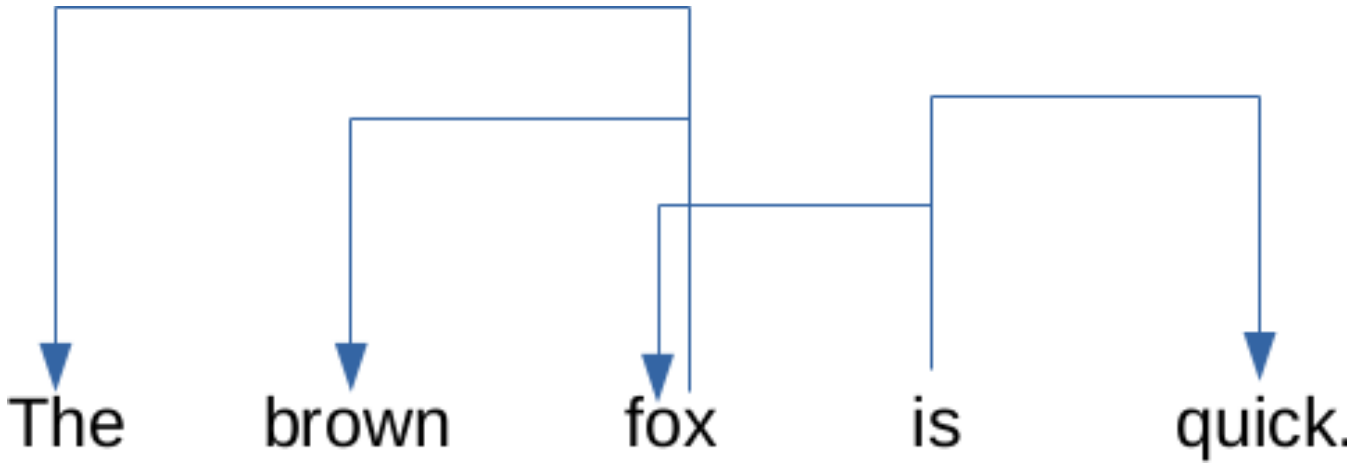
- A text can be divided into sentences and each sentence into tokens (entities).
- Each token has a role (part of speech - POS) and may be categorized (Named Entity Recognition - NER) by a pretrained model.
- Sentences can also be structured and viewed by different ways for better understanding and reasoning.

Different ways to view sentences

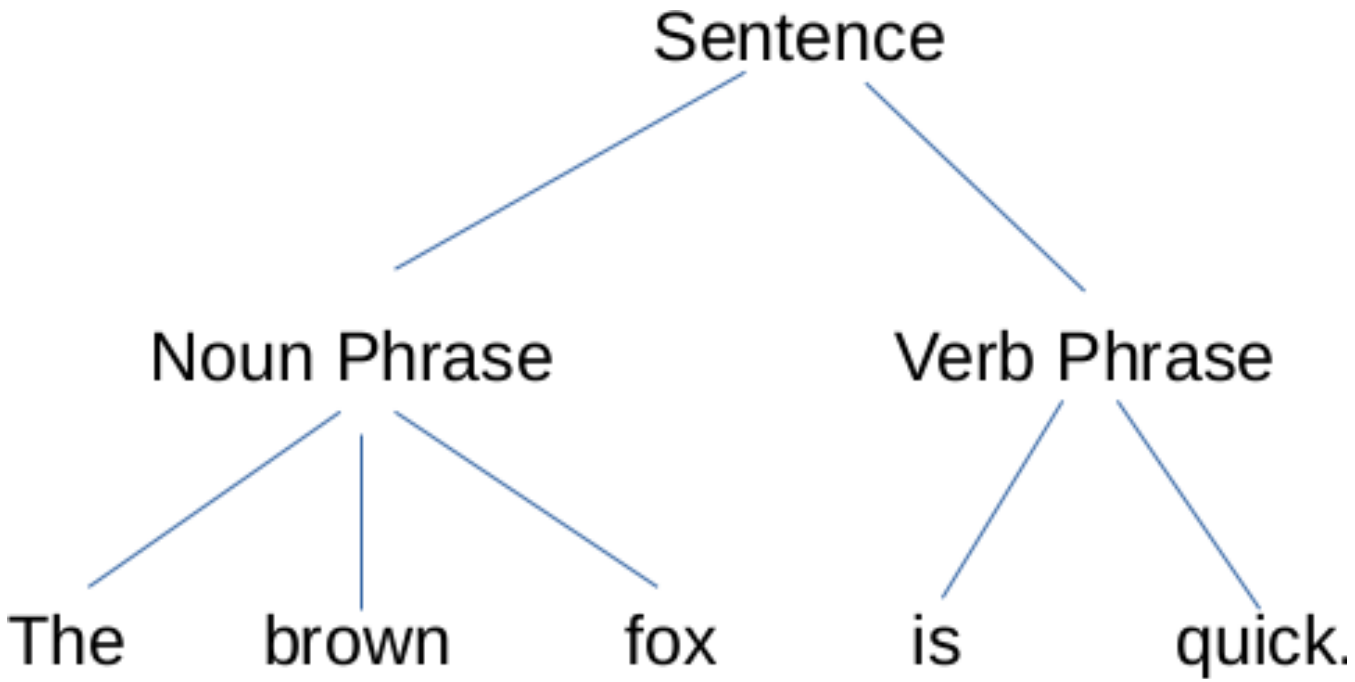
The dependency of a token with another token.



One may use that information to create knowledge graphs.

Different ways to view sentences

The constituent parts of a sentence.



Groups that contain information about the subject of the sentence.

NLP techniques and a simple application

Let's see the following notebook with NLP techniques, the importance of a corpus, and a simple application. ▸ (TEXT PROCESSING).