

Structural Processing (2)

Contents

Information used to build structure

- Lexical information
- Prosody
- Non-linguistic information

A general overview

There are the **types of information** available to the parser which help it form a mind-internal structure of the signal.

These types of information are **lexical**, **prosodic**, and **non-linguistic**.

Lexical information

The direct input to the parser is a set of words ordered linearly (one after the other); the **parser's job** is to figure out **how these words are related hierarchically**.

Lexical material do not provide the parser with semantic information only. Lexical material can contain morphosyntactic information, too. Consider this ambiguous sentence:

Mary understood the problem had no solution.

The problem can be (object) or (subject)...

Prosody:

Prosody is: the **intonation** and **phrasing** of a sentence. Consider how changing the intonation can influence the meaning of this sentence (blue indicates rising intonation and black indicates falling intonation):

They invited Sue and Jim and Amanda got rejected.

They invited Sue and Jim and Amanda got rejected.

Non-linguistic information

Non-linguistic information (such as real-world knowledge) helps the listener in processing (understanding) the signal.

Consider this sentence:

Put the apple on the towel in the box.

The sentence is ambiguous if you cannot **see** the apple, the towel, and the box. The apple can be already on the towel and you are asked to put it in the box. Or the towel can be in the box and you are asked to put the apple on the towel which is inside the box.

Exercise

Which of the following helps the listener in perceiving the signal:

- A. Lexical information
- B. Prosody
- C. Non-linguistic information
- D. All the previous items are correct

The answer is (D).