

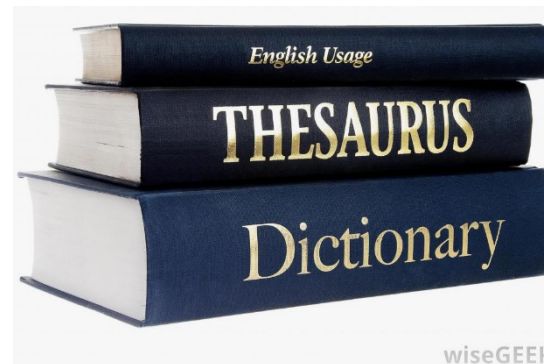
Lecture 7

Syntax

Contents

- **1. linguistic elements combined to form sentences**
 - constituents and constituency tests
 - categories of the constituents
- **2. rules underlying sentences**
 - -- phrase structure rules
 - -- lexical rules

- Normally, a speaker can produce and understand an infinite number of sentences.
- children
- BUT, a speaker does not need to store all those sentences in memory.
- not feasible

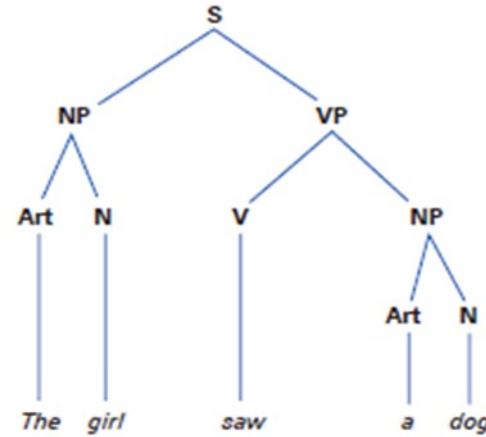


- **What does a speaker store in mind?**
- a limited set of words
- a limited set of rules for combining these words
- Speakers combine linguistic elements in a rule-governed way.

Constituents

- A sentence is composed of different subparts (words, groups of words).

- Constituents



- Not all sequences of words function as constituents.
- The child found a puppy.

Constituency tests

- How can we know some sequences of words are constituents while others are not in a sentence?
- moveable, replaceable, standing alone, ...

Constituency Tests

- **1. “move as a unit” test**
- If a group of words can move, they form a constituent.
- The child found a puppy.
- Cleft: ‘It is/was ... that ... ’
- fronting:
- Passive: “... be done by ...”
- ...

Constituency Tests

- **2. “replacement/substitution” test**
- If a group of words can be replaced by a pronoun/ do/so/as/..., they form a constituent.
- The child found a puppy in the park.

Constituency Tests

- A pronoun cannot be used to refer back to something that is not a constituent:
- John asked me to put the clothes in the cupboard.
- the clothes?
- in the cupboard?
- put the clothes?

Constituency Tests

- **3. “stand-alone” test**
- If a group of words can stand alone, they form a constituent.
- The professor met several former students at the conference.

Constituency Tests

- a. John looked [up the inside of the chimney].
- b. John looked [up the meaning of 'chanson'].

Constituency Tests

- And some other constituency tests... [e.g., coordination test]
- Passing one test is sufficient to determine constituency.
- Normally, failing all these tests is a requirement for determining non-constituency

Constituents

- Constituency is determined with respect to a particular sentence.
- *The girl [saw a dog].*
- *The girl [saw a dog] barking.*

Categories of constituents

- **Words:** Noun, Verb, Preposition, Adjective, Adverb, Auxiliary, Conjunction, and Determiner
- **Constituents:** NP, VP, PP, AdjP, AdvP (Phrasal categories)

Rules

- **Phrase structure rules** (generating structures)
 - -- rules governing the formation of constituents
 - -- rules governing the formation of sentences
- **Lexical rules** (specifying which words can be used)
 - -- rules that can turn the structures into recognizable words or phrases

Lexical rules

- Det \rightarrow {a, the, this, my, each,...}
- N \rightarrow {girl, dog, boy, Mary, students, ...}
- V \rightarrow {followed, helped, saw, ran, sang, ...}
- Adj \rightarrow {happy, uncomfortable, terrified, sad, ...}
- Adv \rightarrow {soundly, well, clearly, extremely, ...}
- P \rightarrow {from, in, on, with, under, ...}
- ...

Phrase Structure Rules

- A phrase structure rule tell us two things:
 - 1) what elements go into a phrase/sentence
 - 2) the order of the elements
- $S \rightarrow NP VP$
- $NP \rightarrow (Det) (Adj) N (PP/S)$
- $VP \rightarrow V (NP) (Adv/PP/S)$
- ...

Phrase Structure Rules

- _____ liked ice cream.
- Mary, I, you, students, the students, the tall students, the students from Seoul, the students who came from Seoul, etc.
- NP → (Det) (Adj) N (PP/S)

Phrase Structure Rules

- The student _____.
- a. ran, sang loudly, loved music, walked the dog through the park, thought Tom is honest, warned us that storms were coming...
- b. can run, will feel happy, must study English syntax, . . .
- $VP \rightarrow V (NP) (Adv/PP/S)$
- $VP \rightarrow V[AUX +] VP$

Phrase Structure Rules

- John feels _____.
- happy, uncomfortable, terrified, sad, proud of her, proud to be his student, proud that he passed the exam, etc.
- AP → Adj (PP/VP/S)

Phrase Structure Rules

- a. He behaved very _____.
- b. They worded the sentence very _____.
- c. He treated her very _____.
- soundly, well, clearly, extremely, carefully, very soundly, almost certainly, very slowly, etc.
- AdvP → (AdvP) Adv

Phrase Structure Rules

- from Seoul, in the box, in the hotel, into the soup, with John and his dog, under the table, etc.
- $PP \rightarrow P NP$

Phrase Structure Rules

- Rules governing the formation of sentences
 - a. This handsome man chased a dog.
 - b. A man kicked that ball.
 - c. Ryan asked for a beer.
 - d. Ryan begged beer from his dog.
- $S \rightarrow NP VP$

Reading materials for next week

- Chapter 9 Semantics