Textbook: Mark Newson et al, Basic English Syntax with Exercises, Budapest, 2006 (**BESE**)

Rewrite rules and structure building, Hierarchy, Word categories
BESE Chapter 1 (2; 3.1), Chapter 2 (1; 2)

0. From the last class
Constituent: A group of words that function together as a unit. **Constituency tests**.
Question 1. *What is the difference?*
(1)   a. Peter met Mary [in the park yesterday].
           b. Peter met a [very beautiful] girl yesterday.

1. Rewriting rules
Remember constituents and possible ambiguity:
(2)   ENRAGED COW INJURES FARMER WITH AX
(!Informal) Nominal Constituent → Nominal Constituent + Prepositional Constituent
Verbal Constituent → Verbal Constituent + Prepositional Constituent
Rewrite rules – rules that describe how to decompose a constituent.
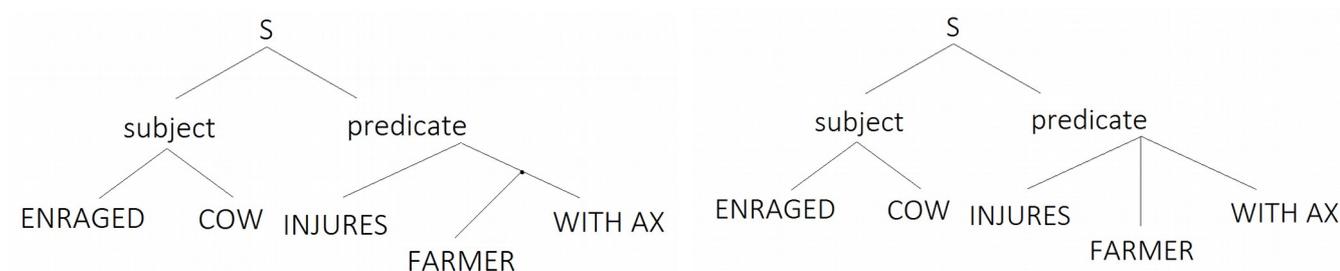! Do not forget about **recursion** !
(3)   sentence → word*, sentence*   {* = 0 or more}
Rules → grammar. Natural languages – **context-free grammars**. (cf. Chomsky hierarchy, Wikipedia)

2. Structure and Hierarchy
Constituents are embedded one inside another to form larger and larger constituents ← **hierarchical structure**.
(4)   ENRAGED COW INJURES FARMER WITH AX

Constituent → **Immediate Constituents**
Tree structure: **branches, nodes, mothers, daughters, sisters**.
Tree properties: 1) a single main ROOT, 2) no cycles, 3) *binarity (?binariness).
Hierarchy matters:
Depictives
(5)   a. Peter met Mary drunk.
           b. Peter met Mary drunk perfectly sober.
Adverbs
(6)   a. I did it by chance twice.
           b. I did it twice by chance.
Rewrite rules = **phrase structure rules**.
Question 2. *Phrases vs constituents?*

3. Word categories and types of phrases

Head of a phrase is the word that gives its **category** to the phrase. Phrase type is determined by its head.

Categories: nouns, verbs, adjectives, etc.

<u>How to determine a category</u>

- morphology
- distribution

Thematic (lexical) categories: verbs (V), nouns (N), adjectives (A), prepositions (P)

Functional categories: inflections (I), determiners (D), degree adverbs (Deg), complementisers (C)

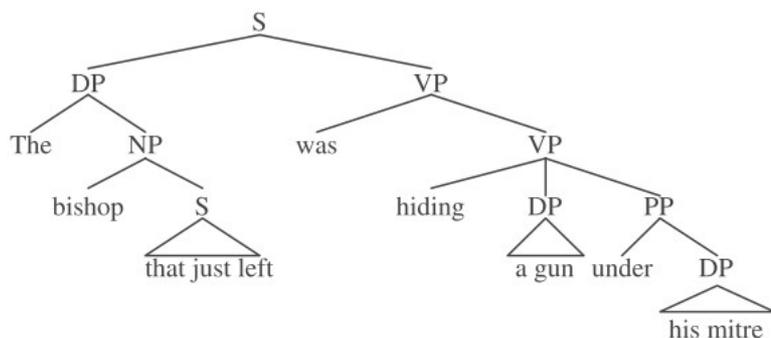**[+-F] [+-N] [+-V]**

Nouns: [-F, +N, -V]

Verbs: [-F, -N, +V]

Determiners: [+F, +N, -V]

Modals (inflections): [+F, -N, +V]

Question 3. *Adjectives and Prepositions?*

Question 4. *Adverbs?*

Exercise 1. *List the rewrite rules used in generating the following structure:*

Exercise 2. *Give an example:*

a. VP → AdvP V NP

b. NP → D AdjP+ N PP   {+ = 1 or more}

c. AdvP → (AdvP) Adv

Exercise 3. *Qu:ʔas and Mamu:k – nouns or verbs?*

Nootka (Canada)

a) Mamu:k-ma   qu:ʔas-ʔi.
   working-PRES   man-DEF
   "The man is working."

b) Qu:ʔas-ma   mamu:k-ʔi.
   man-PRES   working-DEF
   "The working one is a man."

Exercise 4. *Word category + an example:*

costs, fly, rings, water, talk