

**Handout 5 Syntax**

?Why do we need syntax?

Sentences → constituents / phrases → single words *What is the difference between a phrase and a constituent?*

**Constituents:** constituency tests (to put it simply and rather informally, a constituent is a somewhat 'complete' unit that can be used independently, for example, in short answers)

**Constituent:** head + dependent elements. *How do we determine what is the head?*

→ Usually, the head determines the distribution of the whole constituent.

Ambiguity: *Wanted: Man to take care of cow that does not smoke or drink.*

**We need rules** → *How do we write them? What is our inventory?*

Functional vs. lexical heads → functional vs. lexical syntactic categories

**Syntactic category:** morphology + syntactic distribution

Lexical categories: nouns, verbs, adjective, prepositions.

Functional categories: have grammatical functions rather than descriptive meanings.

*What about adverbs?*

Predicates and arguments

Examples: *John runs, Mary talks, the cat is black, the book is on the table.*

**Arguments** – the participants (entities) that are necessarily involved in the situation identified by the predicate.

**Adjuncts** – constituents which are not structurally required by the verb but add optional information about place, time, manner, purpose, etc.

Thematic roles, thematic structure vs. grammatical relations

Agent, Theme, Experiencer, Goal, etc.

Again, not only verbs can be predicates!

Tall <Theme>, Painting <Agent, Theme>, On <Theme, Location>

Rules to combine single words into larger constituents →

X-bar theory: three (universal) rules *Remember the Universal Grammar and grammars in general*

- the specifier rule:  $XP \rightarrow \text{Specifier } X'$
- the complement rule:  $X' \rightarrow X \text{ Complement}$
- the adjunct rule (optional, recursive):  $XP \rightarrow XP, \text{ Adjunct}$

! Rules are **recursive**.

Representation: trees / brackets. Nodes, branches, projections.

Various verbal predicates *How many arguments can a verb have?*

- Ditransitive verbs: *send, introduce, show, put*
- Transitive verbs: *kill vs. see vs. drop*
- Intransitive verbs
  - unergative verbs: *dance*
  - unaccusative verbs: *arrive*

Internal vs. external arguments

Functional projections: **IP**. *Finite vs. non-finite clauses*

*What about active / passive / middle, present tense vs past tense → completely different trees?*

**Exercise 1.** Determine a category for *water* in each sentence.

a. I *watered* the flowers.

b. deep *waters*

**Exercise 2.** Provide a verbal and a non-verbal examples for each set of thematic roles

a. <Theme, Location>

b. <Agent, Theme, Addressee>

c. <Agent>

d. <Theme>

**Exercise 3.** Reveal the constituent structures:

a. The student who has just passed the exam is very happy.

b. This theory of language acquisition is easy for students who understand mathematics.

**Exercise 4.** Tree structures

a. *John introduced Mary to Bob*

b. *The book fell onto the floor.*

c. *Mary sang. Mary sang a song.*