# Chapter 3: Syntactic Forms, Grammatical Functions, and Semantic Roles

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### Introduction

- two dimensions:
  - (1) a. Syntactic categories: N, A, V, P, NP, VP, AP, ...
    - b. Grammatical functions: SUBJ (Subject), OBJ (Object), MOD (Modifier), PRED (Predicate), . . .
  - (2) The monkey kicked a boy on Monday.
  - (3) a.  $[S]_{NP}$  The monkey  $[V_P]_{VP}$  kicked  $[V_P]_{NP}$  a boy  $[V_P]_{PP}$  on Monday  $[V_P]_{NP}$ .
    - b. [S [SUB] The monkey] [PRED kicked [OB] a boy] [MOD on Monday]]].

Semantic role: Constituents can be considered in terms of conceptual notions of semantic roles such as agent, patient, location, instrument, and the like. A semantic role denotes the underlying relationship that a participant has with the relation of the clause, expressed by the main verb.

- (4) a. John tagged the monkey in the forest.
  - b. The monkey was tagged in the forest by John.
- (5) a.  $[[_{agt} John] [_{pred} tagged [_{pat} the monkey] [_{loc} in the forest]]].$ 
  - b.  $[S |_{pat}$  The monkey  $[S |_{pred}$  was tagged  $[S |_{loc}$  in the wood  $[S |_{agt}]$  by John  $[S |_{pat}]$ .

### subjects

- subject, predicate, predicator
  - (6) a. [The cat] [devoured [the rat]].
    - b. [The rat] [devoured [the cat]].
- semantic role
  - (7) a. My brother wears a green overcoat.
    - b. This car stinks.
    - c. It rains.
    - d. The committee disliked her proposal.

### subjecthood tests: agreement

- (8) a. She never writes/\*write home.
  - b. These books \*saddens/sadden me.
  - c. Our neighbor takes/\*take his children to school in his car.
- (9) a. The book, including all the chapters in the first section, is/\*are very interesting.
  - The effectiveness of teaching and learning \*depend/depends on several factors.
  - c. The tornadoes that tear through this county every spring \*is/are more than just a nuisance.

# subjecthood tests: tag question

The pronoun in the tag question agrees with the subject in person, number, and gender – it refers back to the subject, but not necessarily to the closest NP, nor to the most topical one.

- (10) a. The lady singing with a boy is a genius, isn't she/\*isn't he?
  - b. With their teacher, the kids have arrived safely, haven't they/ \*hasn't he?

# subjecthood tests: Subject-auxiliary inversion:

- (11) a. This teacher is a genius.
  - b. The kids have arrived safely.
  - c. It could be more detrimental.
- (12) a. Is this teacher a genius?
  - b. Have the kids arrived safely?
  - c. Could it be more detrimental?
- (13) a. The kids in our class have arrived safely.
  - b. \*Have in our class the kids arrived safely?



# Direct objects

A direct object (DO) is canonically an NP, undergoing the process denoted by the verb:

- (14) a. His girlfriend bought this computer.
  - b. That silly fool broke the teapot.
- (15) a. Thunder frightens [the dog].
  - b. The dog fears [thunder].

# DO: passivization

- (16) a. His girlfriend bought this computer for him.
  - b. The child broke the teapot by accident.
- (17) a. This computer was bought for him by his girlfriend.
  - b. The teapot was broken by the child by accident.
- (18) a. This item belongs to the student.
  - b. \*The student is belonged to by this item.
- (19) a. He remained a good friend to me.
  - b. \*A good friend is remained to me (by him).

# Indirect objects

An indirect object (IO) is one which precedes a direct object (DO), as in (20); IOs are NPs and have the semantic roles of goal, recipient, or benefactive:

- (20) a. I threw [the puppy] [the ball]. (IO = goal)
  - b. John gave [the boys] [the CDs]. (IO = recipient)
  - c. My mother baked [me] [a birthday cake]. (IO = benefactive)

# Indirect objects: a caution

- passivization
  - (21) a. \*The CDs were given the boys by John.
    - b. \*A review copy of the book was sent her by the publisher.
  - (22) a. The boys were given the CDs (by John).
    - b. She was sent a review copy of the book (by the publisher).
- dative alternation
  - (23) a. John gave the CDs to the boys.
    - b. The publisher sent a review copy of the book to her.
    - c. My mother baked a cake for me.
  - (24) a. The CDs were given to the boys by John.
    - b. A review copy of the book was sent to her by the publisher.
    - c. This nice cake was baked for me by my mother.

# Predicative complements: basic

- basic data
  - (25) a. This is my ultimate goal.
    - b. Michelle became an architect.
  - (26) a. They elected Graham chairman.
    - b. I consider Andrew the best writer
- no passivization
  - (27) a. \*Chairman was elected Graham.
    - b. \*The best writer was considered Andrew.

# Predicative complements vs. object

- (28) a. John made Kim a great doll.
  - b. John made Kim a great doctor.
- (29) a. (28)a: Kim  $\neq$  a great doll
  - b. (28)b: Kim = a great doctor
- (30) a. The situation became terrible.
  - b. This map is what he wants.
  - c. The message was that you should come on time.
- (31) a. I made Kim *angry*.
  - b. I consider him immoral.
  - c. I regard Andrew as the best writer.
  - d. They spoil their kids *rotten*.



# oblique complements

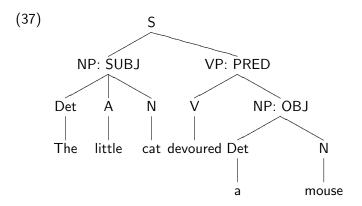
- (32) a. John put books in the box.
  - b. John talked to Bill about the exam.
  - c. She reminded him *of the last time they met*.
  - d. They would inform Mary of any success they have made.
- (33) a. John gave a book to the student.
  - b. John bought a book for the student.
  - c. John asked Bill of a question.

# modifiers vs. complements

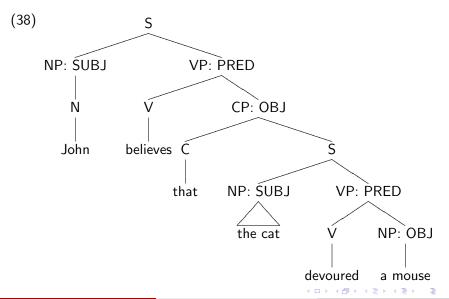
- Complements (DO, IO, predicative complement, and oblique complement) are obligatory whereas modifiers are optional
  - (34) a. The bus stopped suddenly.
    - b. Shakespeare wrote his plays a long time ago.
    - c. They went to the theater in London.
    - d. He failed chemistry because he can't understand it.
- stacking
  - (35) a. \*John gave Tom [a book] [a record].
    - b. I saw this film [several times] [last year] [during the summer].
  - (36) a. My uncle visited today.
    - b. \*Today was visited by my uncle.



# form and function together



# form and function together



# form or category of the subject

- (39) a. [NP The termites] destroyed the sand castle.
  - b. [VP Being honest] is not an easy task.
  - c. [CP That John passed] surprised her.
  - d.  $[_{VP}$  To finish this work on time] is almost unexpected.
  - e. [S What John said] is questionable.<sup>1</sup>
  - f. [PP Under the bed] is a safe place to hide.

<sup>&</sup>lt;sup>1</sup>The subject clause is canonically categorized as CP. See Chapter 10 and 11 how this S is different from a canonical S too.

# form or category of the object

- (40) a. I sent [NP] a surprise present to John.
  - b. They wondered [S what she did yesterday].
  - c. They believed [CP] that everybody would pass the test].
  - d. Are you going on holiday before or after Easter? I prefer [ $_{\mbox{PP}}$  after Easter].

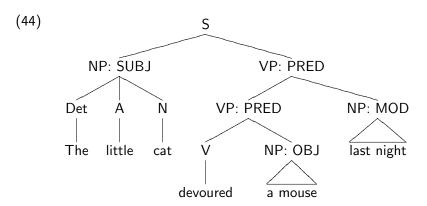
# form of the subject

- (41) a. [That John passed] surprised her, didn't it?
  - [[That the march should go ahead] and [that it should be cancelled]] have/\*has been argued by different people at different times.
- (42) a. [To finish it on time] made quite a statement, didn't it?
  - b. [[To delay the march] and [to go ahead with it]] have/\*has been argued by different people at different times.

### modifier

- (43) a. The little cat devoured a mouse [NP] last night].
  - b. John left [AdvP very early].
    - c. John has been at Stanford [PP for four years].
    - d. John studied hard [VP] to pass the exam].
    - e. She disappeared [S] when the main party arrived.

### modifier



- Semantic roles were introduced as a way of classifying the arguments of predicators (mostly verbs and adjectives) into a closed set of participant types.
- Agent: A participant which the meaning of the verb specifies as doing or causing something, possibly intentionally. Examples: subject of eat, kick, hit, hammer, etc.
  - (45) a. John ate his noodle quietly.
    - b. A boy hit the ball.
    - c. A smith hammered the metal.

Patient: A participant which the verb characterizes as having something happen to it, and as being affected by what happens to it. Examples: object of *kick*, *hit*, *hammer*, etc.<sup>2</sup>

- (46) a. A boy hit the ball.
  - b. A smith hammered the metal.

<sup>&</sup>lt;sup>2</sup>Patient and theme are often unified into 'undergoer' in the sense that both the patient and theme individual undergo the action in question:

Experiencer: A participant who is characterized as aware of something. Examples: subject of perception verbs like *feel, smell, hear, see*, etc.

- (47) a. The students felt comfortable in the class.
  - b. The student heard a strange sound.

Theme: A participant which is characterized as changing its position or condition, or as being in a state or position. Examples: direct object of *give, hand,* subject of *come, happen, die,* etc.

- (48) a. John gave a book to the students.
  - b. John died last night.

Benefactive: The entity that benefits from the action or event denoted by the predicator. Examples: oblique complement of *make*, *buy*, etc.

- (49) a. John made a doll for his son.
  - b. John bought a lot of books for *his sons*.

Source: The one from which motion proceeds. Examples: subject of *promise*, object of *deprive*, *free*, *cure*, etc.

- (50) a. John promised Bill to leave tomorrow morning.
  - b. John deprived *his sons* of game cards.

Goal: The one to which motion proceeds. Examples: subject of *receive*, *buy*, indirect object of *tell*, *give*, etc.

- (51) a. Mary received an award from the department.
  - b. John told the rumor to his friend.

Location: The thematic role associated with the NP expressing the location in a sentence with a verb of location. Examples: subject of *keep, own, retain,* locative PPs, etc.

- (52) a. John put his books in the attic.
  - b. The government kept all the money.

Instrument: The medium by which the action or event denoted by the predicator is carried out. Examples: oblique complement of *hit, wipe, hammer*, etc.

- (53) a. John hit the ball with a bat.
  - b. John wiped the window with a towel.

### semantic roles: good cases

- (54) a. [agt The cat] chased [pat the mouse].
  - b.  $[_{pat}$  The mouse] was chased by  $[_{agt}$  the cat].
- (55) a. There still remains an issue to be solved.
  - b. There lived a man with his grandson.
  - c. At the same time there arrived a lone guest, a tall, red-haired and incredibly well dressed man . . .
- (56) a. \*There sang a man with a pipe.
  - b. \*There ran a man with an umbrella.

### semantic roles: bad cases

- (57) a. John resembles his mother.
  - b. A is similar to B.
- (58) a. John runs into the house.
  - b. Mary looked at the sky.