I. Checking the homework
Ex. 14, a) and c)

**Exercise 14**

The X-bar theory predicts that in English the following sentences are ungrammatical. Explain how the X-bar theory can account for the ungrammaticality of the sentences below. Notice that the phrases in italics are responsible for the ungrammaticality of the sentences.

(1)  a  *The *teacher from France of English* likes going to open lectures.
  b  *Mary often *drives too fast her car.*
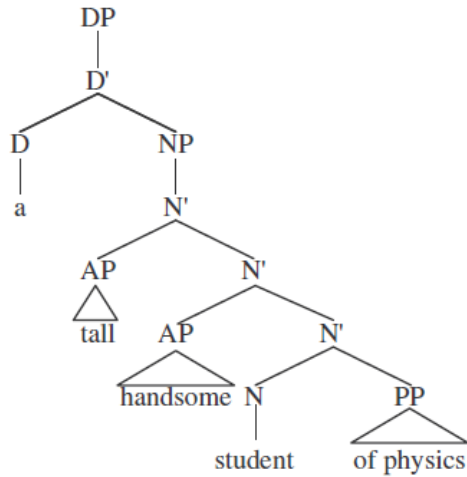  c  *Every *student in Cambridge of Physics* gets an excellent job.
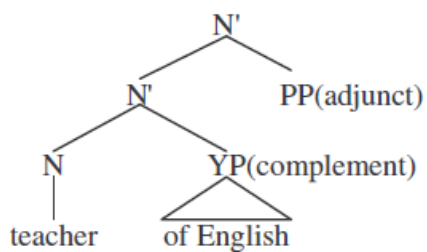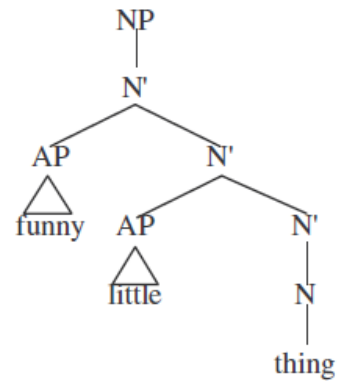


**Ex. 15**

c)
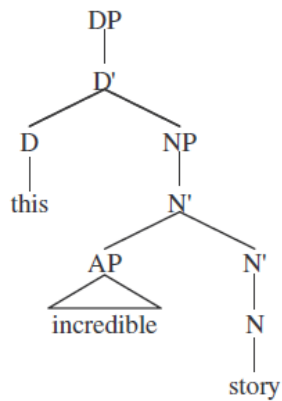
d)



e)



**II. What is the theta-role (= thematic role or semantic role) of the arguments in bold?**

1) *One night I was lying in my bed and **I** heard some strange noise.*
   A) agent
   B) patient
   C) experiencer
2) *I lent **him** some money that I never got back.*
   A) theme
   B) recipient/beneficiary
   C) goal
3) *Have you ever been **to the village called Egyházasdengeleg**?*
   A) source
   B) location
   C) goal
4) ***We** ate what you left.*
   A) agent
   B) recipient/beneficiary
   C) experiencer
5) *Are you **from Estonia**?*
   A) source
   B) location
   C) goal

# Movement. D-structure and S-structure. Theta-criterion and Case Theory. Traces

- There is a syntactic operation called **movement**, which is a central aspect of grammar in English (and not only in English but in many other languages of the world as well)
- Today we'll be talking about movement: what moves where, types of movement, the structure of the sentence before and after movement, and the trace that a moved element leaves behind in the abstract sentence structure

# 1 Types of movement

## 1) Topicalisation

(1) **This conclusion**, *virtually no one has ever come* **to**.

→ How does the phrase **This conclusion**, which is the complement of the preposition **to**, end up in the sentence-initial position, far from the preposition **to**?

→ Via a syntactic operation that we call **movement**:

(2)
a    -    virtually no one has ever come to this conclusion

b    this conclusion, virtually no one has ever come to    -

There are different types of movement, one of them is called **topicalisation**. In (1)-(2) we have topicalisation:

- An element interpreted as a topic (*This conclusion* in (1) and in (2a)) is moved **to the front of the sentence**
- What is a **topic**? Typically something that has already been **mentioned before** in a text or a conversation, or can be interpreted as easily accessible in a text/conversation: *this conclusion* in (1)-(2) must have been a part of the preceding discussion; it has not just been newly introduced.

> Topicalisation is a phenomenon that exists in many languages, including Hungarian. Could you construct a Hungarian example?

**VP-movement:**
- The verb and its complement (e.g., its direct object) can also undergo movement (this is also a sort of topicalisation):

(3)
I thought the policeman would search the bishop, and
[search the bishop], he did –

## 2) Wh-movement
- *wh*-words: interrogative words (kérdőszavak) like *which*, *what*, *where*, *why*, etc.
- in English, they have a position at the beginning of the sentence
- dual function:
    1) they indicate the interrogative status of the clause
    2) a syntactic function within the clause: e.g., object in the sentence in (4)

(4) *What did they find?*
→ We assume that the *wh*-word doesn't originate sentence-initially but is moved from the object position to the clause-initial position (*They found* **something** → **What** *did they find?*):

(5)
what did they find –

> 1) Are *wh*-words always sentence-initial in English, or are there cases where *wh*-words can stay elsewhere in a sentence? If so, when do you use such sentences?
>
> 2) Are *wh*-words always sentence-initial in Hungarian, or can they also appear elsewhere in a sentence?

### 3) Passivisation

- Passivisation: what is originally an object of the verb is realised as the subject of the sentence:

(6)  a. _Shakespeare wrote_ **Hamlet**.  → **active sentence**
        subject          object
     b. **Hamlet** _was written_ _by Shakespeare_.  → **passive sentence**
        subject              PP-adjunct

The _by_-phrase (the PP adjunct) may be also missing from the passive sentence:

(7)  _The water was wasted._

- It is assumed that in a **passive** sentence, the direct object moves from object position into subject position:

(8)

a    -    was wasted the water

b  the water was wasted    -

> Is there something like a passive construction in Hungarian?
>
> Are there passives in: German, Spanish, French, Italian (or any language that you speak besides English)?

### 4) Subject–auxiliary inversion in _yes–no_ questions

- _Yes-no_ questions (eldöntendő kérdések): questions that may be answered with a simple "yes" or "no", like e.g. _Is this the end?_

> → Are **wh**-questions **yes-no** questions as well?

- In _yes-no_ questions in English, the auxiliary verb and the subject appear to switch places
- It is assumed that the auxiliary moves to a position to the left of the subject:

(9)

a  - this is the end

b  is this - the end

### 5) Extraposition

- Splitting a constituent across the structure
- The PP _for the new car park_ in (10) is the complement of the noun _plans_:

(10)  [DP The [NP plans [PP for the new car park]]]

- The PP _for the new car park_ can be moved out of the subject DP into the sentence final position, cf. (11b) – this process is called **extraposition**:

(11)

a  the plans for the new car park were released    –

b  the plans    –    were released for the new car park

- Topicalisation, wh-movement, passivisation, subject-auxiliary inversion are leftward movements
- Extraposition is a rightward movement

Construct an example of 1) topicalisation, 2) passivisation, 3) extraposition

## 2 D-structure and S-structure

- There are two levels that can describe the structure of any sentence: a level before movement takes place and a level after movement:
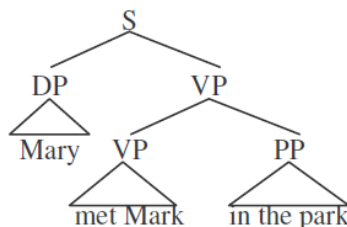
(12)

structure
↓
movement
↓
structure
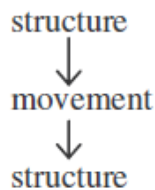
- The **difference** between the two levels of structural description will simply be the **positions** that the moved elements occupy

(13)    a. *Mary met Mark* **in the park**.  – before movement
        b. **In the park**, *Mary met Mark*.  – after movement
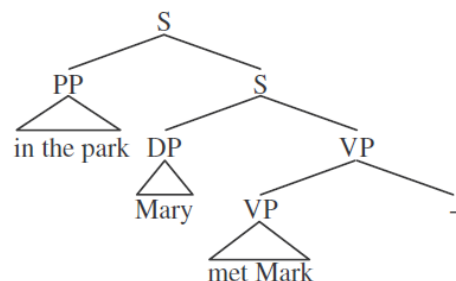
What type of movement do we have in (13a-b)?

- The structure before movement:          The structure after movement:
  (14)                                     (15)



→

- The structure before movement takes place = a **D-structure** ((14) is a D-structure)
- The postmovement structure = **S-structure** ((15) is an S-structure)
  ('D' and the 'S' originally stood for *deep* and *surface*)
- Theta-role **assignment to arguments happens at D-structure**, while
- **Case assignment to arguments (nominative/accusative) happens at S-structure**

## 2 D-structure and Theta-theory

- There may be different principles that operate at the D-structure level and the S-structure level, and
  o a D-structure principle may require a constituent X to occupy a certain position,
  o an S-structure principle may require X to occupy a certain position,
  o and if these two positions are not the same then X will have to **move** from its D-structure position to the required S-structure position.

- D-structure positions are more basic: e.g., in a passive sentence, what sits in the subject position at S-structure is interpreted as the object of the verb and hence is assumed to occupy the object position at D-structure:

(16)    a.  S-structure: ***Ken*** *was fired*

                 ↑

    b.  D-structure: *was fired* ***Ken***

- In (17), we have two sentences, S1 (*Ken is supposed*) and S2 (*to be fired*), and S2 is embedded (subordinate) to S1 (S2 alá van rendelve S1-nek) (S2 is a so-called non-finite sentence):

(17)    S-structure: [$_{S1}$ ***Ken*** *is supposed* [$_{S2}$ *to be fired]]*

- In (17), the subject of S1 is Ken, but we have the impression that Ken somehow belongs to the verb *fired*

- So in D-structure, Ken is the object of S2:

(18)    D-structure: [$_{S2}$ *is supposed* [$_{S2}$ *to be fired* ***Ken****]]*

    → (18) is the basic structure and (17) is derived from (18) (with *Ken* moving)

- But what is the theta-role (thematic role/semantic role) of *Ken* in these sentences?

→ It has the PATIENT theta-role in all of these sentences (even in (16a) and in (18)): the theta-role that it received from the verb **'fire'** in the D-structures (16b) and (18)

→ **Moved elements preserve their theta-role** (the semantic role that they receive from the verb they belong to at D-structure)

- So we say that **theta-role assignment happens at the level of D-structure**, and that D-structure **is a pure representation of thematic relations**

(19)  **The Theta Criterion:** A theta-role must be assigned to one and only one argument, and an argument must bear one and only one theta-role.

(20)



(Besides the Theta Criterion, Theta-theory involves sume further principles as well, cf. pp. 105-110 of the textbook)

## 4   S-structure and Case Theory

- Case: certain pronouns in English have different Case forms (nominative: *he, she, I, we*; accusative: *him, her, me* and *us*). This is the notion of **morphological case**

- What determines which form the pronoun appears in is its S-structure position. If a pronoun is the subject of a finite (tensed) clause it will be **nominative**, anywhere else it is _accusative_:

(21)    a. **he** has helped _her_
        b. **I** consider [_him_ to be unkind to _us_]

- The notion of **Abstract Case**: we say that at an abstract level of description, not only personal pronouns but every DP argument has a Case (either nominative or accusative), even when it is morphologically not visible (with nouns and proper nouns it's not visible)

- In the previous section we said that in passive sentences, the argument that sits in the subject position at S-structure occupies the object position at D-structure:

(22)    a. D-structure: _was fired_ **Ken**   (**Ken** = direct object)
        → Ken moves to subject position, so we get (22b):
        b. S-structure: **Ken** _was fired_  (**Ken** = subject)

- However, subjects of passive sentences are in the nominative case (and not in the accusative, even if they are direct objects in D-structure):

(23)    **He** _was fired_
        (*_Him was fired; *Was fired him_)

➔ **What counts for the purposes of Case assignment** is not the position of the argument in the D-structure but its **position in the S-structure**

- **DP-s receive a case (nominative/accusative) at S-structure**
- So subjects of finite clauses will be in the **_nominative Case_** (24), while anywhere else a DP will be in the _accusative Case_ (25), (26) even when the distinction is morphologically not visible (_Ken_ has the same form but different cases in these sentences):

(24)    **Ken/he** _was fired._    → _Ken/he_: subject → nominative Case
(25)    _The boss fired Ken/him_  → _Ken/him_: direct object → accusative Case
(26)    _This letter is for Ken/him_ → _Ken/him_: complement of a preposition → accusative Case

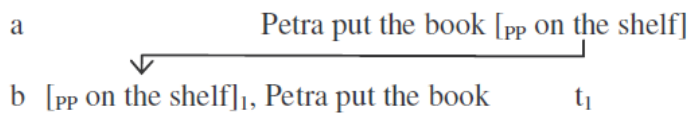- A principle that operates at the S-structure level:

(27) **The Case Filter: All DPs must be assigned Case.**

(28)
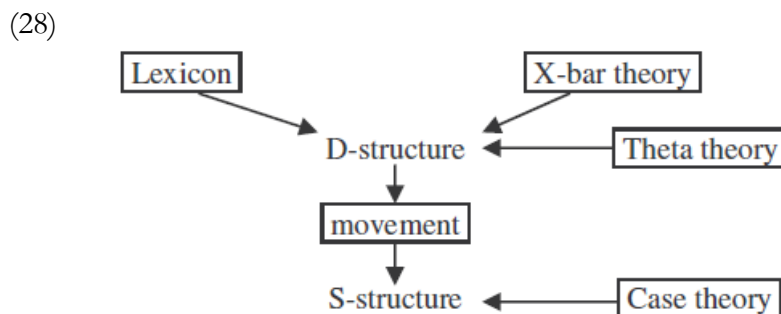
## 5 Traces

- The position in which elements originate at D-structure **= Extraction site**
- The positions they move to at S-structure = the **Landing site**
- When an element moves, it leaves behind a copy of itself in the extraction site → this copy is called a **trace** (*t*)
- The main way in which the trace differs from the moved element is that the trace has no phonological content and hence is unpronounced
- Traces are typically represented by a *t*, which bears an **index** (marked by a 1 in subscript in sentence (29b) which it shares with the moved element. This indicates that the trace and the moved element have the same reference:

(29)

a          Petra put the book [$_{PP}$ on the shelf]

b   [$_{PP}$ on the shelf]$_1$, Petra put the book      $t_1$

(30)

a   who$_1$ did Susan say [Fred helped $t_1$]
b   who$_1$ did Susan say [$t_1$ helped Fred]

> What's the difference between the meaning of (30a) and (30b), and how would you translate them to Hungarian?

- (30): the movement of the interrogative pronoun (the *wh*-word) *who* from two different D-structure positions, marked by the trace:
    - In (30a) *who* moved from object position and hence the sentence is interpreted as a question about the one who was helped;
    - In (30b) *who* moves from the subject position and hence the question is about the one who does the helping

## Homework: p. 127 Ex. 18 a)-e)

### Exercise 18

Identify the thematic roles assigned by each predicate and identify the Cases of the DPs as well.

(1)    a   Who do you think Izzy will invite?
       b   Terry thinks that the car has been stolen.
       c   Frank will fly from New York to Amsterdam.
       d   Sally seems to be selected by the committee.
       e   I expect this girl to rewrite her essay.
       f   For Chuck to choose from these chicks will be hard.