

# Ling 165B: Syntax II

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Checking in: **Poll ??** Last week we looked at:

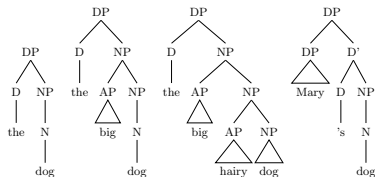
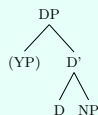
- (i) ambiguous structures,
- (ii) x-bar theory: VPs, TPs, CPs

How are you doing?

# Determiner Phrases (DPs) I

## DPs:

- The head: D
- Complement(s): NPs
- Specifier: DPs



D can be empty:

Dogs bite. ( Bare plurals:)



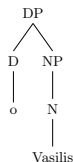
Proper Names in English:



### Is an empty D needed in the structure of proper names?

- In other languages proper names do require overt determiners.

- (1) Aftos ine o Vasilis  
This is the Basil  
'This is Basil'

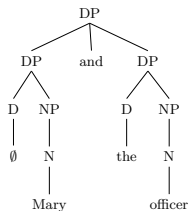


- Proper names and phrases headed by determiners have the same syntactic distribution.
  - they can be replaced by pronouns;

## Determiner Phrases (DPs) III

- proper names and phrases headed by determiners can be coordinated:

(2) [Mary and the officer] are arguing.



The specifier position of DP can be filled: the Saxon genitive case.

(3) Mary's brother

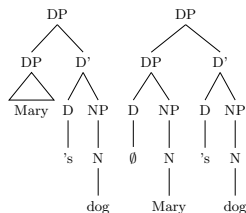
- [Mary's brother] is a DP because it has the distribution of a DP:
- [Mary] is also a DP, therefore it is a phrase. The only other position available for a phrase in the DP is the *specifier* position.
- 's is in complementary distribution with other determiners.

- (4) a.\*Mary's the brother  
b.\*Mary's that brother  
c.\*Mary's a brother

## Determiner Phrases (DPs) V

This brings to the following structure:

- (i) The DP-possessor is in specifier position;
- (ii) 's is the determiner (this account for the complementary distribution with determiners)
- (iii) The NP-possessee is in complement position



### Summary: DP structure

- the head of the DP is a determiner. which can be null.
- the complement is a NP;
- DPs can have subjects (the phrase occurring in specifier position), as in the case of the Saxon genitive.
- We did not see any examples of DP adjuncts (and probably we won't!)

Here are the lexical entries for Ds:

<b>the</b>	D	free	c-selects NP	example 'the book'
<b>this</b>	D	free	c-selects NP	example 'this book'
<b>'s</b>	D	bound selects subject DP	c-selects NP	example 'John's book'



## Determiner Phrases (DPs) VII

### Practice: Tree drawing

Draw trees for the following phrases:

- (5) Sue and Peter's car
- (6) Peter's sister's boyfriend
- (7) the old elephant's new tusks
- (8) Carol's former boyfriend runs in the morning every day.

# Noun Phrases (NPs) I

What's the difference between the following two sentences? They look very similar, but they are structurally different, as the replacement tests show:

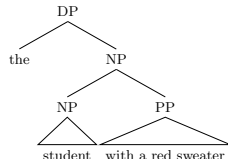
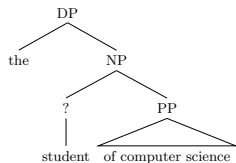
- (9) Fred met the **student** of computer science.

*\*Fred met the **one** of linguistics*

- (10) Fred met the **student** with a red sweater.

*And Peter met the **one** with a blue sweater*

[student] form a NP in (10) (therefore it can be replaced by 'one') but not in (9).



## Noun Phrases (NPs) II

This asymmetry is very similar to the one we discussed previously between *intransitive verbs* like ‘leave’ and *transitive verbs* like ‘return’ w.r.t. *do so* replacement:

(11) Fred **returned** the assignments on Monday.

\*Fred **did so** the assignments on Monday.

(12) Fred **left** on Monday.

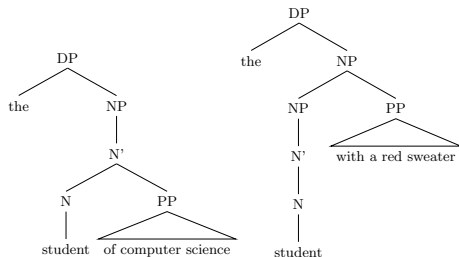
Fred **did so** on Monday.

In fact, nouns can also take complements (especially if they are nominalized version of some verbs).

- We are able to account for the data above, using the X-bar model.
- The complement of N is N’s sister, whereas the adjunct attaches to the maximal projection (NP).

## Noun Phrases (NPs) III

The PP [of computer science] is the complement of N, whereas the PP [with a red sweater] is an adjunct:



## Noun Phrases (NPs) IV

This makes the following predictions:

- We expect the noun ‘student’ (which is the nominalized form of the verb ‘study’) to select only one complement, whereas multiple adjuncts are possible.

(13)\*A student of computer science of physics (*under the intended meaning!*)

(14) A student from France with a red sweater ✓

- We expect to find the very same strict order we find in VPs:

Head >> Complement >> Adjunct

(15) A student of computer science with a red sweater ✓

(16)\*A student with a red sweater of computer science

### Practice: NP structure

Consider the sentences below:

(17)\*I read the book with a red cover of poems.

(18)\*I read the book of poems of fiction with a red cover.

(19) I read [a book of poems with a red cover from Blackwell by Robert Burns]

- One replacement: which constituents can be replaced with the word 'one' in (19)?
- Draw the tree structure for the DP in (19).
- How does our theory predict the data in (17)-(19)?

### Summary: NP structure

- the head of the NP is a noun.
- (some) nouns can take PP or CP complements;
  - book [<sub>PP</sub> of poems ]
  - claim [<sub>CP</sub> that TP ]
  - student [<sub>PP</sub> of physics ]
- No specifiers so far.
- NP adjuncts are very common: they can be PP or AP.
  - PP adjuncts are normally on the right.
  - AP adjuncts are normally on the left.

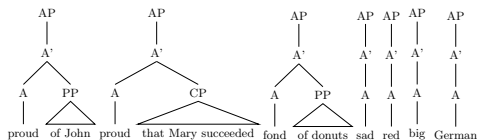
Here are the lexical entries for Ns:

<b>cat</b>	N	free		example 'cat'
<b>student</b>	N	free	(c-selects <i>of</i> -PP)	example 'student (of linguistics)'
<b>claim</b>	N	free	(c-selects <i>that</i> -CP)	example 'claim (that Mary is pregnant)'

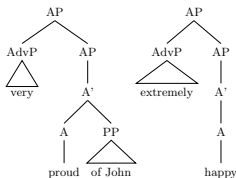
# Adjective Phrases (APs) I

## AP:

- The head: A
- Complement(s): PPs and CPs
- Specifier: none (for now)



Adjectives allow adjuncts. They normally express a degree and appear on the left in English:





## Adjective Phrases (APs) II

Any ideas on what may be going on here?

- |     |                                     |   |                                      |
|-----|-------------------------------------|---|--------------------------------------|
| (a) | I am <b>very happy</b>              |   | and Linda is <b>so</b> , too.        |
| (b) | I am <b>very fond of Lukas</b> ,    |   | and Linda is <b>so</b> , too.        |
| (c) | I am <b>very fond</b> of my nephew, | * | and Linda is <b>so</b> of her niece. |

## Adjective Phrases (APs) III

### Summary: AP structure

- the head of the AP is an adjective.
- (some) adjectives can take PP or CP complements;
  - proud [<sub>PP</sub> of DP ]
  - proud [<sub>CP</sub> that TP ]
  - fond [<sub>PP</sub> of DP ]
- Specifiers coming soon.
- AP adjuncts are normally expression of degree (*very, extremely*).

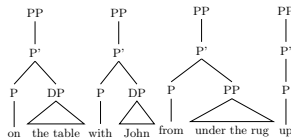
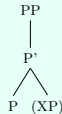
Here are the lexical entries for As:

<b>red</b>	A	free	example 'red'
<b>proud</b>	A	free (c-selects <i>of</i> -PP or CP)	examples 'proud (of John)' or 'proud that TP'

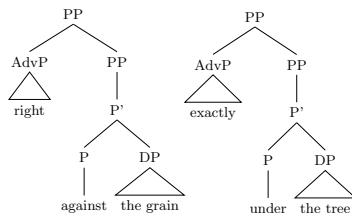
# Prepositional Phrases (PPs) I

## PP:

- The head: P
- Complement(s): PPs and DPs
- Specifier: none (for now)



Prepositions can sometimes have adjuncts:



## Prepositional Phrases (PPs) II

### Summary: PP structure

- the head of the PP is a preposition.
- (some) preposition can take PP or DP complements;
- Specifiers coming soon.
- PP adjuncts are normally adverbial phrases (*right, exactly*).

Here are the lexical entries for Ps:

<b>up</b>	P	free	(c-selects DP)	examples 'up' or 'up the rope'
<b>of</b>	P	free	c-selects DP	example 'of linguistics'
<b>from</b>	P	free	c-selects DP or PP	examples 'from Italy' or 'from under the rug'

### **Practice: Tree drawing**

Draw trees for the following sentences:

(20) For Maurice to quarrel with Joel frightened Maggie.

(21) Mary claimed that that very young guy wrote the novel.

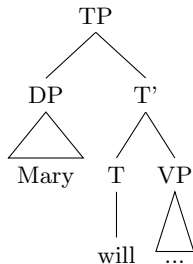
# Subjects

# Subjects across categories I

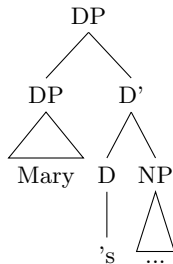
→ So far we only encountered two phrases with specifiers: TPs and DPs

- (i) Specifier (or subject) of T or TP  
(the subject of the sentence).

It can be a DP or a CP.



- (ii) Specifier (or subject) of D or DP  
(the possessor)



## Subjects across categories II

→ VPs, APs, PPs can also have subjects: let's talk about small clauses!

(22) Fred saw John drunk. *and Mary sober*

(23) Mary prefers her soup in a bowl *and her cereal in a mug*

(24) I consider Bill smart *and his girlfriend stupid*

(25) Peter heard Mary leave *and the door close*

*What kind of constituent are these?*

(26) Fred saw [John drunk].

(27) Mary prefers [her soup in a bowl].

(28) I consider [Bill smart].

(29) Peter heard [Mary leave] .

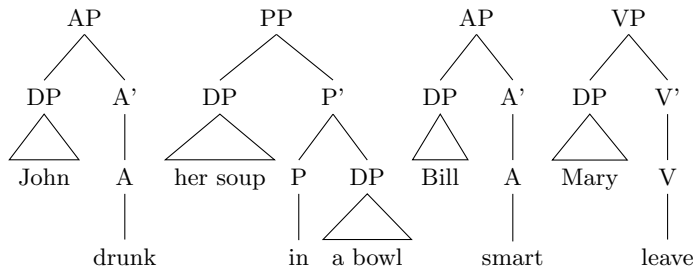


## Subjects across categories III

Some of them can have a *that*-TP counterpart:

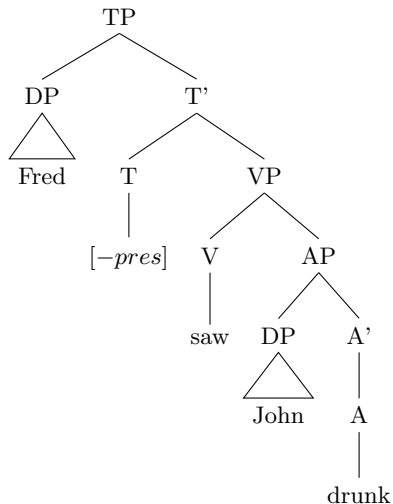
Peter heard [Mary leave] ~ Peter heard that Mary left

- (30) a.\*Peter heard Mary left.  
b.\*Peter heard that Mary leave.



## Subjects across categories IV

These small clauses can be the complements of verbs like ‘see’, ‘hear’, ‘consider’, ‘prefer’. Here is the tree structure for (26):



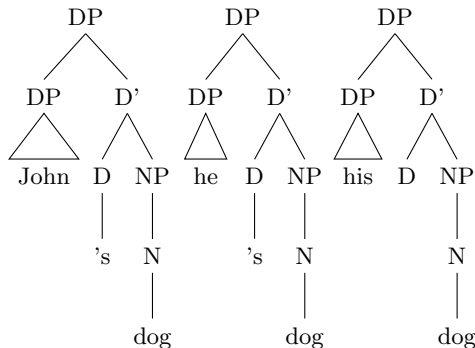
## Subjects across categories V

### Possessive Pronouns

The structure of possessive pronouns is very similar to the genitive construction we discussed last time:

(31) John's dog

(32) His dog (you can think of this as he's dog)



## Subjects across categories VI

### Practice: Tree drawing

Draw a tree for each of the following sentences:

(33) Bill made Mary feel very anxious about her results.

(34) His wife's boss saw Sue naked last night.

## Subjects across categories VII

Let's revise the lexical entries of VPs, PPs and APs to reflect these new discoveries!

### V-heads

<b>leave</b>	V	free	(select DP)	
<b>kiss</b>	V	free	(select DP)	c-selects DP
<b>eat</b>	V	free	(select DP)	(c-selects DP)
<b>give</b>	V	free	(select DP)	c-selects DP, PP

### A-heads

<b>red</b>	A	free	(selects DP)	
<b>proud</b>	A	free	(selects DP)	(c-selects <i>of</i> -PP or CP)

### P-heads

<b>in</b>	P	free	(selects DP)	c-selects DP
<b>with</b>	P	free	(selects DP)	c-selects DP

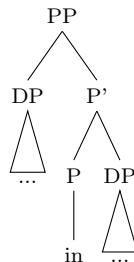
## Locality of Selection I

At this point, we have a system where structure is mostly dictated by the selectional properties of individual lexical items.

→ **Lexical entries can be used to represent this information.** The information in these lexical entries tells us how to build structure.

- It tells us whether, and which, complements are required. And it tells whether a specifier is required.
- For example the lexical entry below tells us that two structures are possible for the phrase headed by 'in':

**in**      P    free    (selects DP)    c-selects DP



## Locality of Selection II

- Locality of selection means that these requirements are local: the argument required by 'in' is a complement to this P head, whereas the subject must be in the specifier position.

### Locality of Selection (preliminary)

If an atom selects an element, it acts as a head. This head must have the selected element as its complement or its subject. Selection is local in the sense that there is a maximal distance between a selector and what it selects.

If  $\alpha$  selects  $\beta$  as complement,  $\beta$  is a complement of  $\alpha$ ;

If  $\alpha$  selects  $\beta$  as subject,  $\beta$  is the subject of  $\alpha$ ;

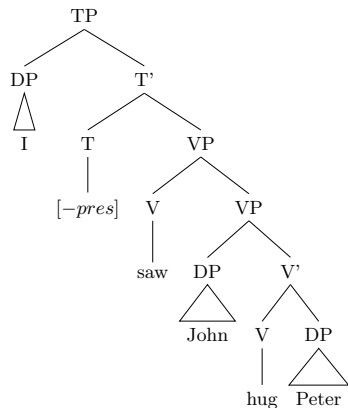
If  $\alpha$  selects  $\beta$  as an adjunct,  $\beta$  is the adjunct of  $\alpha$ ;

In other words, complements and subjects are realized within the maximal projection headed by the lexical item. Nice and tidy.

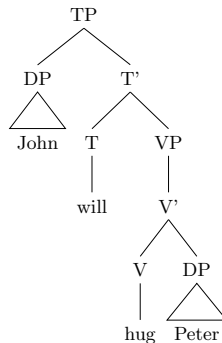
## VP-internal Subject Hypothesis I

But there is a blatant violation of this principle in what we've been doing so far.

a. I saw John hug Peter.



b. John will hug Peter.

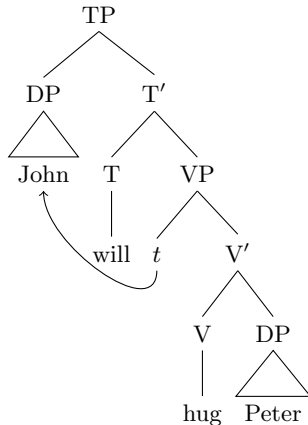




## VP-internal Subject Hypothesis II

### Proposal:

- Subjects enter the derivation in the VP.
- They end up in Spec, TP as a result of movement.

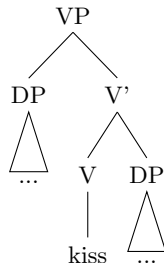


- This is called the **VP-internal Subject Hypothesis**.

## VP-internal Subject Hypothesis III

→ It applies to the selected subject of all predicates.

kiss      V    free    DP    DP



In §6.8.2. the authors of your textbook adopt the convention that the phrases selected as specifiers are underlined.

→ if subjects are VP internal, why do they move?

### **The Extended Projection Principle (EPP)**

The specifier of TP always has to be filled.

# Head Movement

**Problem** In our tree structures, present and past tense morphemes are separated from the V.

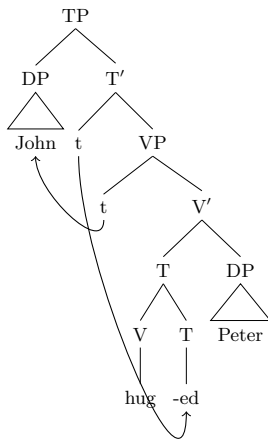
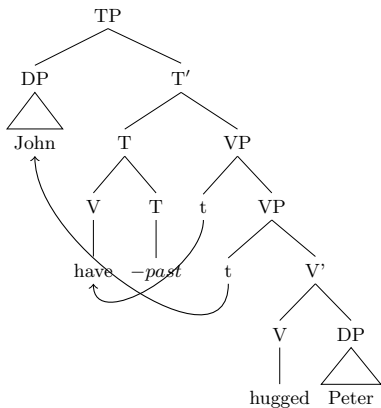
Our tree structures correctly represent the relations between head and phrases but they do not capture the way in which the heads are actually pronounced. hug<sup>ed</sup>, danced<sup>ed</sup>, runs<sup>s</sup>, finished<sup>ed</sup>...

(35) John hugged Peter

What MOVE operation could put together the verb ‘hug’ and the bound morpheme ‘-ed’ in (35)?

- (i) the V moves up to T;
- (ii) T moves down to V.

Both operations turn out to exist, but for different subclasses of verbs, the former for auxiliary verbs (like *have* and *be*), the second for all other English verbs.

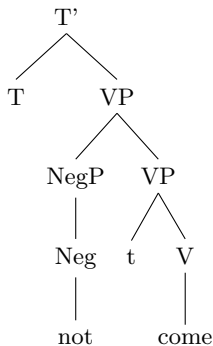


The evidence for this account comes from the distribution of (i) adverbs and (ii) negation.

→ Adverbs and negation are adjuncts to VP.

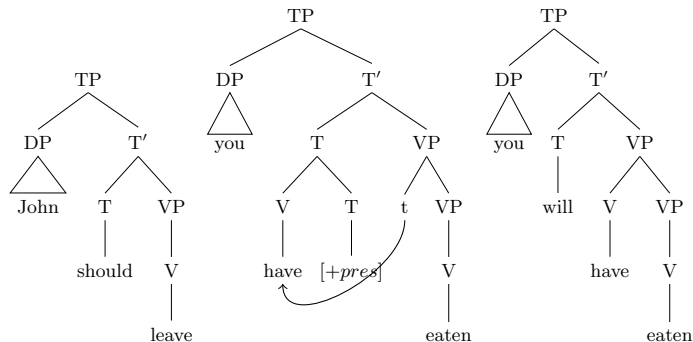
→ We use them as diagnostic for where the verb is.

- (36) a. John will **not** come.  
b.\*John **not** will come.  
c. John has **not** come.  
d.\*John **not** has come.  
e. John did **not** come  
f.\*John came **not**



# V-to-T movement I

- Modals are generated in T;
- Auxiliaries are verbs (heads of VPs). They can move to T when the position is not otherwise occupied.



## V-to-T movement II

→ Lexical verbs do not move to T in English. In other languages lexical verbs do move to T (i.e. French)

English: **Subj >> Adv/Neg >> Lex Verb >> Dir Obj**

French: **Subj >> Lex Verb >> Adv/Neg >> Dir Obj**

(37) Je mange souvent des pommes

I eat often apples

'I often eat apples'

(38) Je (ne) mange pas de pommes

I eat NEG apples

'I do not eat apples'

(39) Je (n') ai pas mangé de pommes

I AUX NEG eaten apples

'I have not eaten apple'



## V-to-T movement III

