

# Ling 120B: Syntax I

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## VSO order: the case of Irish I

9 percent of the world's languages is VSO. Irish is one of them.

- (1) Phóg Máire an madra.  
Kissed Mary the dog  
“Mary kissed the dog”

X-bar theory cannot generate a sentence of this type.

This is how we are going to derive the Irish order.

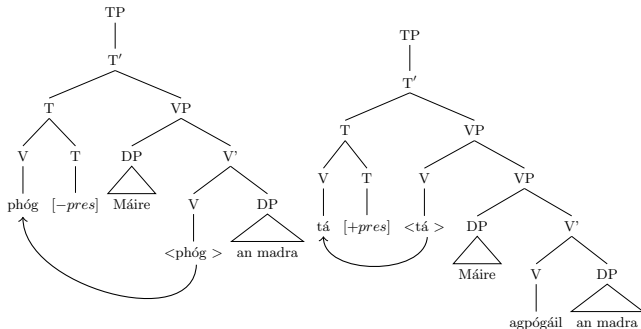
- (i) We are going to assume that VSO languages are underlyingly SVO (at D-structure);
- (ii) The verb moves to T;
- (iii) The subject stays in the VP.

Lexical verbs do not move to T when there is an auxiliary verb. In this case the underlying SVO order is visible.

## VSO order: the case of Irish II

- (2) Tá Máire ag-pógáil an madra.  
 Is Mary ing-kiss the dog  
**Aux [ S V O ]**  
 “Mary is kissing the dog”

Here are the derivations for (1) and (2):



# Wh-movement

**Phrasal Movement:** move a phrase to an empty specifier position.

It's a feature driven movement.

→ Subject raising: finite T has a EPP feature which is satisfied when the syntax provides a subject for T.

**will**      T[+tense]    epp:  $DP_{nom}/CP$     c-selects VP

→ Wh-movement is another type of phrasal movement.

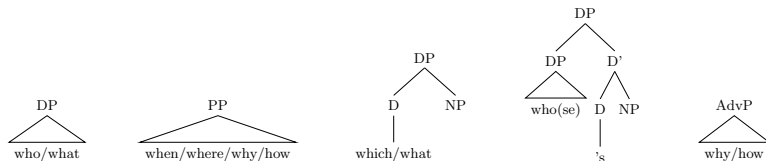
C also has a sort of EPP feature. It requires a [+wh] phrase in its specifier. We will call this feature [+wh].

# Wh-movement I

- (3) a. John ate a cookie  
b. **what** did John eat ?

→ What kind of phrases does wh-movement move in English? Phrases that contain *wh*-words. They can be arguments or adjuncts.

*who, what, which, whose, where, when. why, how...*



→ How do we know that there is movement?

- Empirical facts: relation between base position and wh-word

## Wh-movement II

- Wh-words sometimes stays in their base position

- (4)
- a. Peter bought the car in Chicago.
  - b. **Where** did Peter buy the car \_?
  - c. **What** did Peter buy \_ in Chicago?
  - d. **Where** did Peter buy **what** \_?

- Wh-movement is not a universal property: in many languages wh-words do not have to move to the beginning of the sentence and appear in their base position.

- (5) Pita-ga nani-o tabeta-ka.  
Peter-NOM what-ACC ate-C[+q]  
'What did Peter eat?'

Japanese

## Wh-movement III

→ Where do wh-phrases move to in wh-questions?

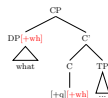
- We know that they raise past C since they are found to the left of a T that has raised to C.

A natural conclusion is to assume that they raise to the specifier of CP.  
Why can't they be CP adjuncts?

- (i) It seems that only one wh-phrase can move to that position (at least in English):

- (6) a. Who bought what?  
b.\*Who what bought?

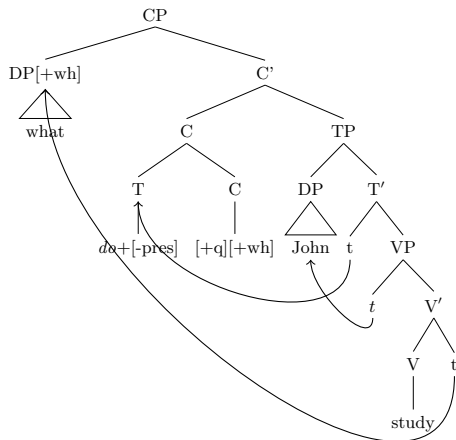
- (ii) Analogy with other feature driven movements: agreement (or feature checking) between the head and its subject (or specifier). **The feature that triggers wh-movement is [+wh].** [NB: This is different from what ISAT does: it only uses [+q] ]





## Wh-movement IV

This would be the final tree for *What did John study?*:



Two features, four possibilities:

[-Q -wh ]

ex. John thinks **that** the moon is made of cheese

[+Q -wh ]

ex. Should+**∅** John read the report?

[+Q +wh ]

ex. What should+**∅** John read?

[-Q +wh ]

ex. I wonder what **∅** John should read.

### Crosslinguistic Evidence

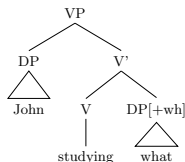
In some languages, there are special forms of complementizers that represents these features. Irish is such a language, in Irish you get

- the *go* complementizer in declarative sentences;
- the *an* complementizer in yes/no questions;
- the *a<sup>L</sup>* complementizer in wh-questions

- (7) Measann sibh **go** bhfuil an oeachair insa doras  
think you.PL that is the key in.the door  
“You think that the key is in the door” (McCloskey 1979)
- (8) **An** bhfaca tú an madra?  
Q See.PAST you the dog  
“Did you see the dog?” (Carnie 2006)
- (9) Cad **a<sup>L</sup>** tá sa seomra?  
What C-wh is in the room  
“What is the room?” (Carnie 2006)

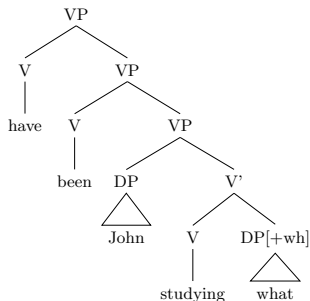
## Wh-movement VII

Here is a bottom-up step-by-step derivation of the sentence *What has John been studying?*

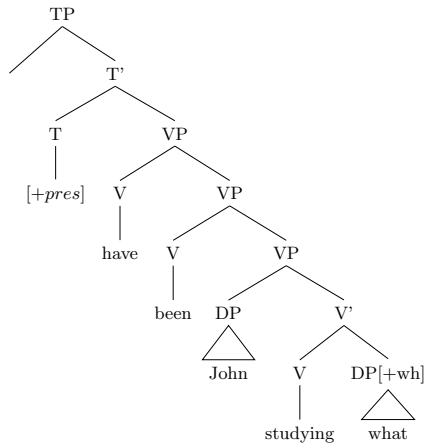


**Step 1** The VP headed by the lexical verb:

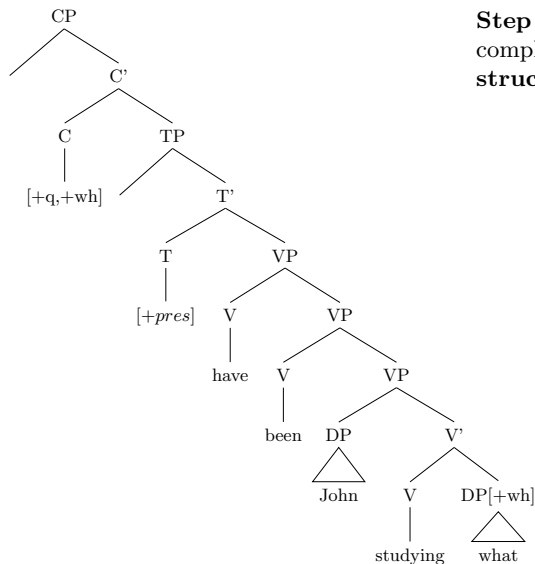
**Step 2** Higher VPs headed by auxiliary verbs (No external arguments!)



## Step 3 The TP:

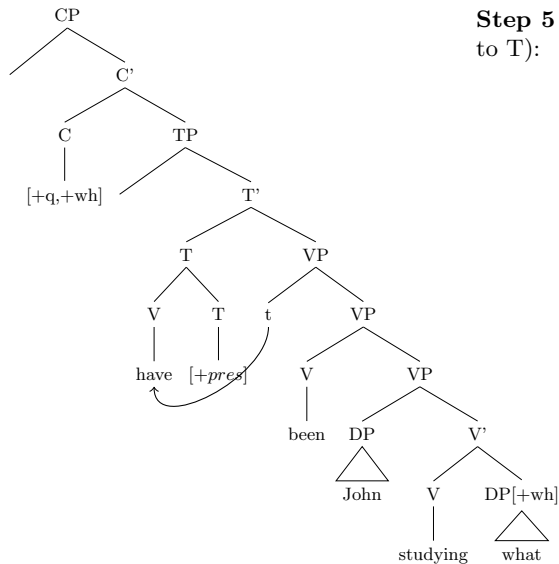


## Wh-movement IX



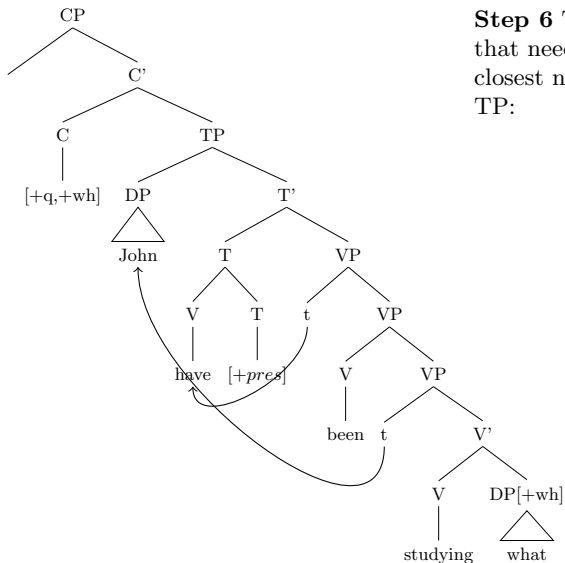
**Step 4** Now we can merge the [+q, +wh] complementizer and get our **deep structure tree**:

## Wh-movement X



**Step 5** The auxiliary can move to T (V to T):

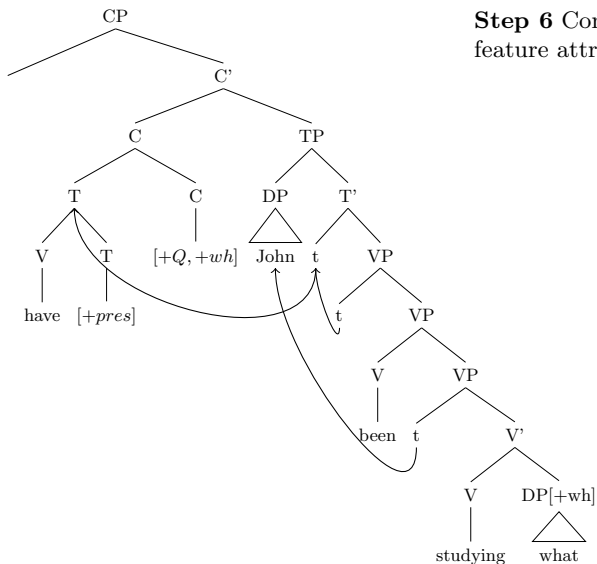
## Wh-movement XI



**Step 6** The finite T has an EPP feature that needs to be satisfied. We move the closest nominative DP to Spec, TP:

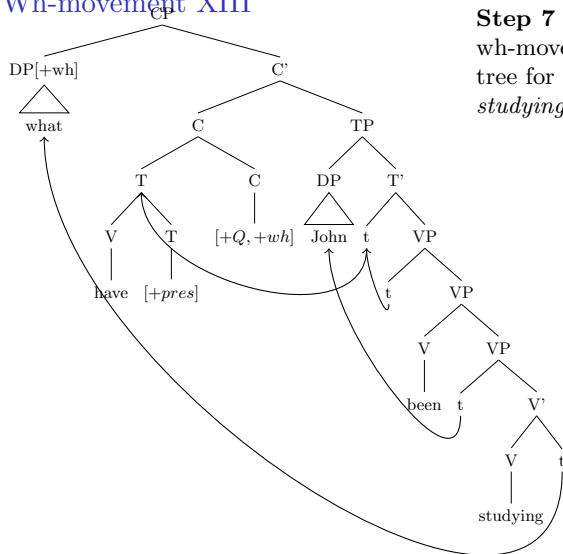


## Wh-movement XII



**Step 6** Complementizers with the [+q] feature attract what is in T:

## Wh-movement XIII



**Step 7** The feature [+wh] triggers wh-movement. This gives us the surface tree for *what has John been studying?*

Diagram the following sentences:

- (10) a. Where is Peter travelling to?  
b. Where is Peter performing?

Let's look at an example of embedded wh-question.

(11) Jenny really wonders why Maria did not like her present.

## Practice: Wh-questions and ambiguities

Roeper & De Villiers 1994 (study with children aged 3 to 5)

*“Once there was a boy who loved climbing trees in the forest. One afternoon he slipped and fell to the ground. He picked himself up and went home. That night when he had a bath, he saw a big bruise on his arm. He said to his dad, ‘I must have hurt myself when I fell this afternoon’.”*



(12) When did the boy say he hurt himself?

## The internal structure of pronouns I

- (i) Pronouns cannot be combined with determiners and behave differently than other nouns:

- (13) a. \*the she  
b. \*this he  
c. \*he of Scotland  
d. \*every you

- (ii) They can sometimes combine with noun phrases:

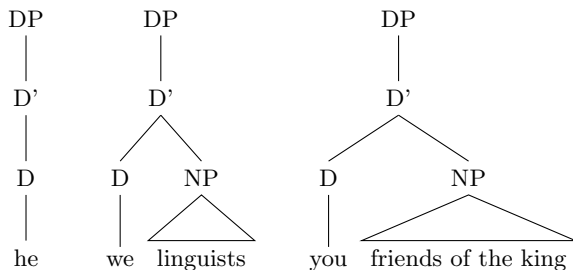
- (14) a. You always win.  
b. You **three contestants** always win.

- (15) a. We have long suspected this.  
b. We **linguists** have long suspected this.

- (16) a. I don't envy them.  
b. I don't envy them **syntacticians**. (only acceptable in certain registers)

## The internal structure of pronouns II

We conclude that pronouns are determiners, which sometimes can take NP complements:



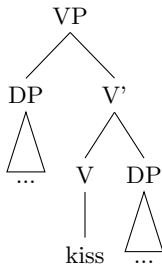
# Raising Verbs



## The Locality Constraint on Argument structures:

Arguments are generated within the phrase headed by the predicate that selects them.

kiss      V    free    DP    DP



If the principle of locality of selection is correct, then (17) is a problem.

(17) John seems to have left

→ the agent of *leaving* is John, but it appears very far away from its predicate.

**leave**      V    free    DP

→ also there seems to be no subject in the embedded clause.

→ what is/are the argument(s) of *seem*?

**seem**      V    free    ?

Well, we notice that *seem* can also take a CP argument:

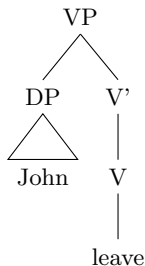
(18) It seems [that John will leave ]

→ What is the relation between (17) and (18)?

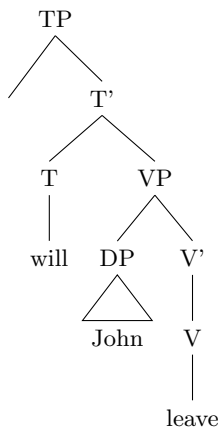
→ Why is there the expletive ‘it’ in (18)?

Let’s start by drawing the tree for (18):

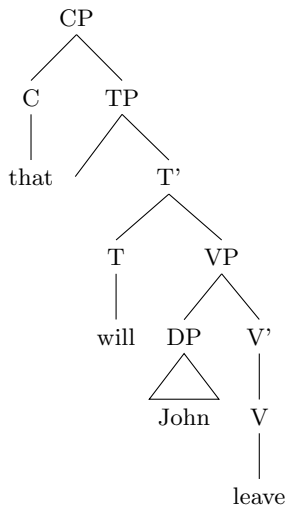
**Step 1** The VP headed by the lexical verb ‘leave’:



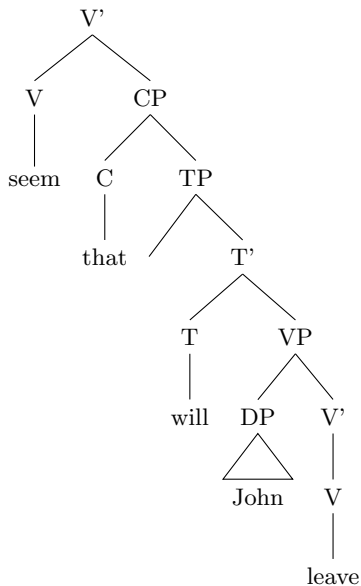
## Step 2 The TP.



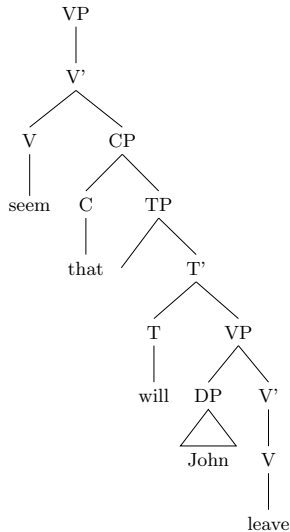
**Step 3** The CP.



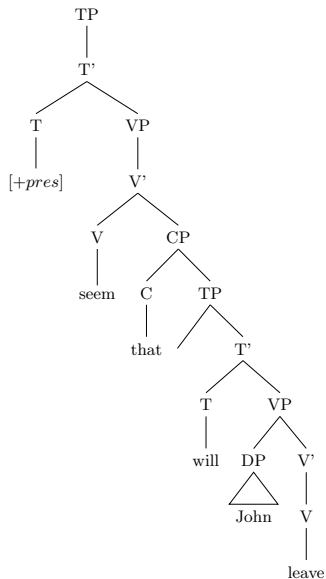
**Step 4** The CP is selected by  
'seem'.



**Step 5** Predicates like ‘seem’ do not take any external arguments:



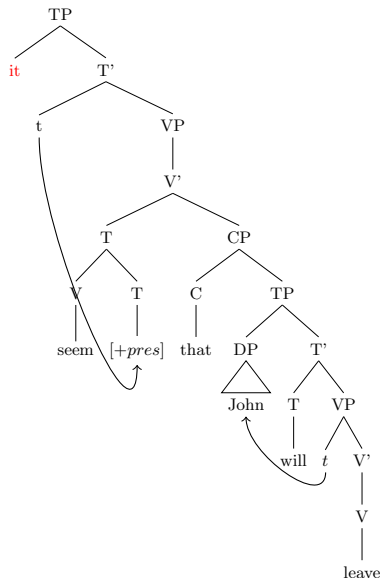
**Step 6** The rest of the deep structure tree:





**Step 7** T to V and Subject to Spec, TP.

Since the sentence needs a subject (to satisfy EPP) and no DP is available, an expletive is inserted.



Now, we can go back to (17). We said that the verb ‘seem’ does not select ‘John’. How do we know that?

(i) Semantic requirements:

The selectional relation is between the V *elapse* and the DP *time*.

(19) a. Time seems to elapse slowly in the tropics.

b. #Mary seems to elapse slowly in the tropics.

(20) a. #Time seems to swim slowly in the tropics.

b. Sharks seem to swim slowly in the tropics.

*Seem* allows weather *it* (the subject of atmospheric verbs such as *rain*, *snow*...)

(21) a. It rains/snows.

b. It seems to be raining.

c. \*It hopes to be raining.

(ii) Idiomatic meanings are available with *seem*.

The construction ‘the cat is out of the bag’ gets its idiomatic meaning (the secret is widely known) when the expression is generated as a whole. When is not generated as a whole, it can only get a literal interpretation (‘the feline is out of the sack’). See ISAT, §8.4.2

(22) The cat seems to be out of the bag. ✓ idiomatic interpretation

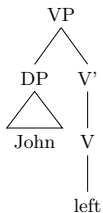
*vs.*

(23) The cat wants to be out of the bag. ✓ NO idiomatic interpretation

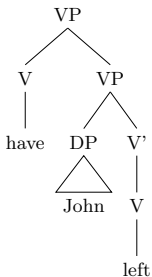


*Let's diagram!*

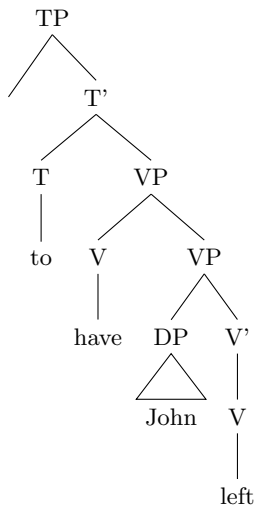
**Step 1** The VP headed by the lexical verb.



**Step 2** The V headed by the auxiliary verb.



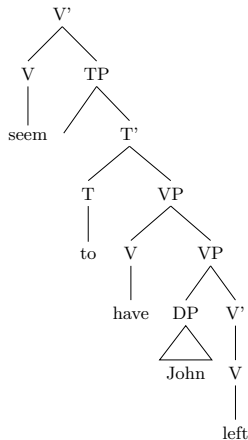
**Step 3** The non-finite TP headed by the free morpheme *to*



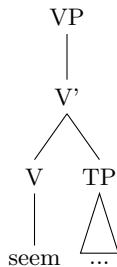
**Step 4** The non-finite TP is selected by ‘seem’.

There is no evidence for a CP-layer and complementizers cannot appear between ‘seem’ and the TP:

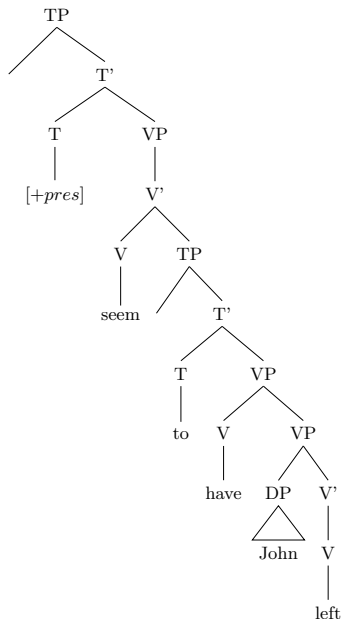
\*John seems that to have left



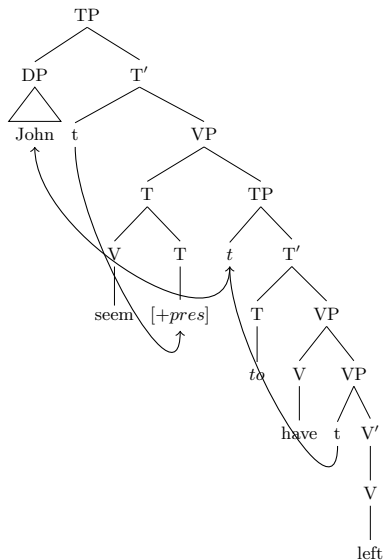
**Step 5** No external argument: no specifier.



## Step 6 The deep structure tree



## Step 7 The surface structure tree





To sum up, *seem* can take CP or TP complements:

→ When it takes a tensed CP complement, raising cannot take place:

(24)\*John seems that ~~John~~ left

and a expletive 'it' is inserted to satisfy EPP:

(25) It seems that John left.

→ When it takes a -finite TP complement, the subject is taken from the complement of 'seem'

The movement of 'John' to [Spec, TP] is called **raising to Subject**. Verbs like *seem*, whose superficial subject comes from their complements are called **raising verbs**.

Other examples of raising verbs are: *appear* and *happen*.

Examples of raising adjectives are: *likely* and *liable*.

**Practice** Draw surface tree structures for the following sentences:

(26) Peter is likely to win the race.

(27) Hermione appeared to know the answers.