Ling 165B: Syntax II

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

(i) Head movement (V to T, T to C, T lowering...)

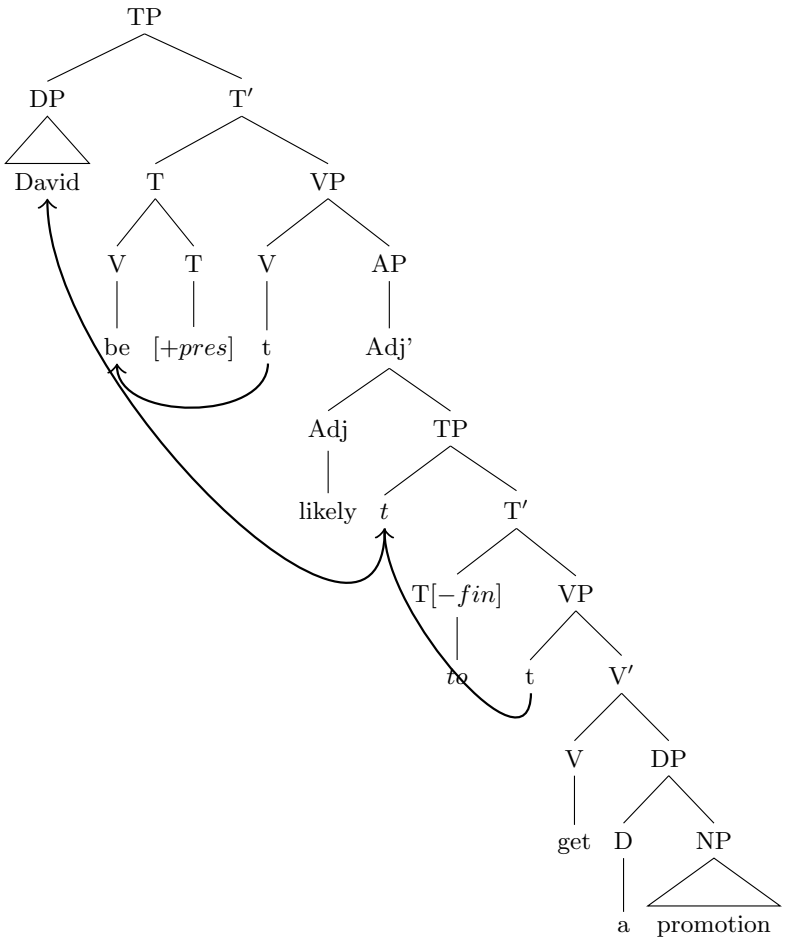
(ii) Cross-linguistic variation

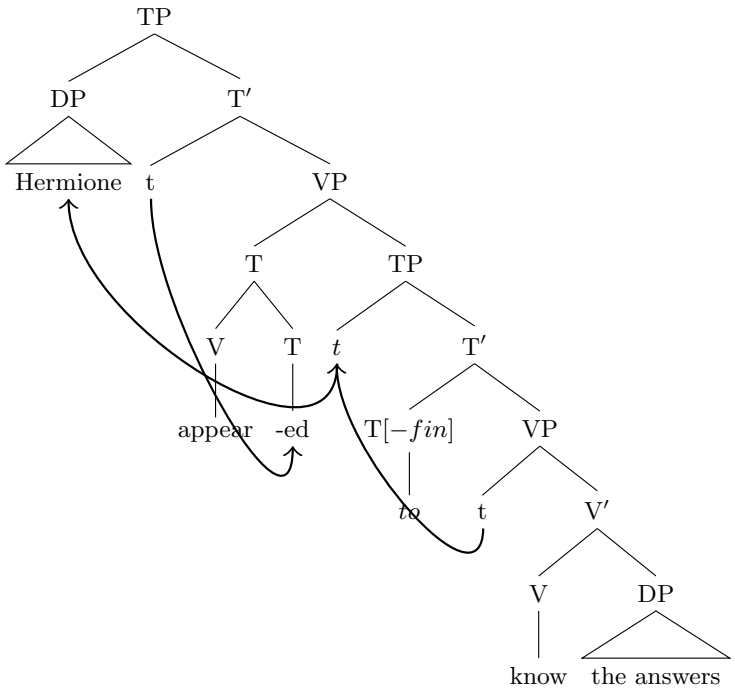
(iii) Raising verbs

How are you doing?

Trees with raising verbs and adjectives:

(1) a. David is likely to get a promotion.
b. Hermione appeared to know the answers.





Practice: Tree drawing

Draw trees for the following sentences:

(2) That waiter does not really seem to be helping the customers.

(3) Did John's husband give you an explanation?

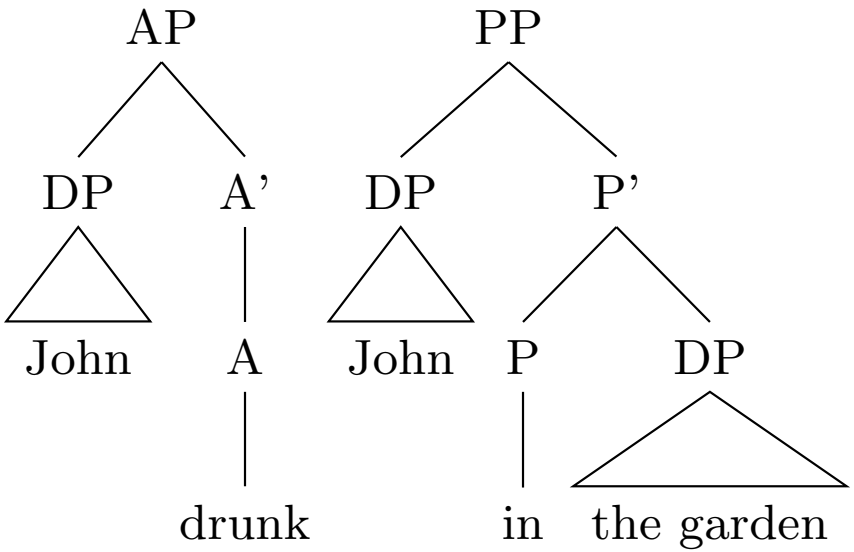
Copular Sentences

→ Copular sentences are sentences in which the predicate is not a verb and the two phrases (subject and non-verbal predicate) are linked by a copula, such as the verb *be* in English:

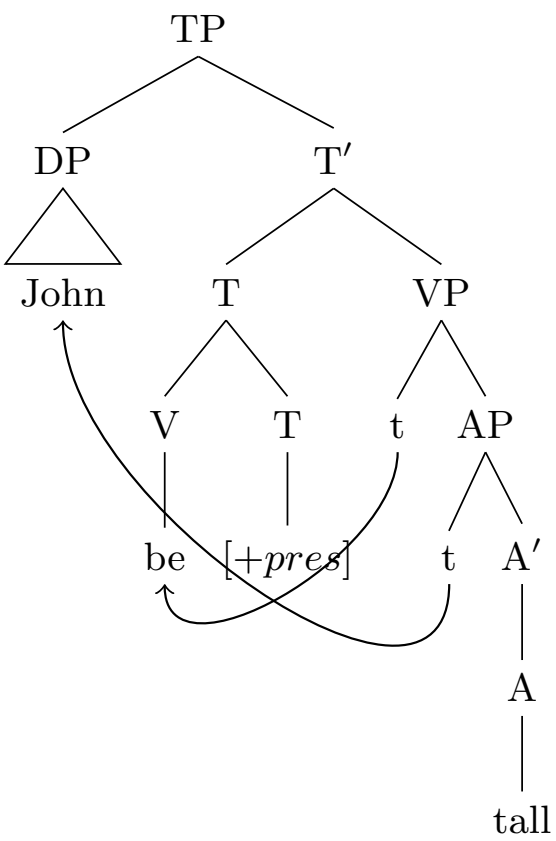
(4) a. [John] is [tall]
b. [John] is [in the garden]

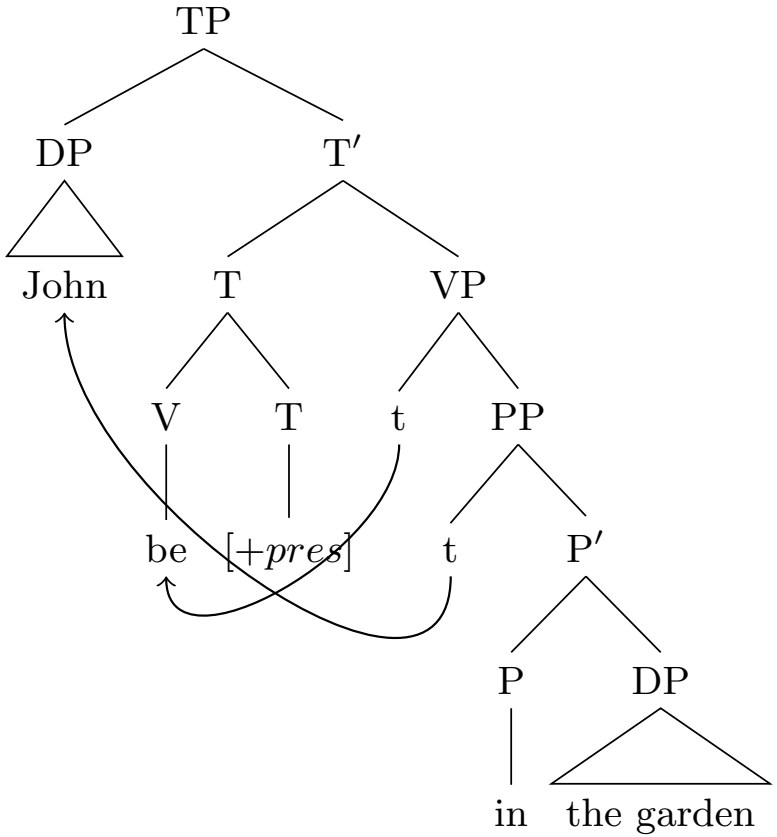
→ The verb (or copula) *be* in the examples above acts as a raising verb.

- It does not select any external arguments
- It c-selects a small clause complement (AP and PP in the examples above)



- the subject of the small clause selected by the copula raises to [Spec, TP]





Practice Draw the tree for the following sentence:

(5) Dan seems to be sick

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Control Verbs

→ The following two sentences look very similar:

(6) a. John seems to leave.
b. John hopes to leave.

→ But these sentences are structurally very different:

- (6-a) is a raising sentence.
- (6-b) is something different that does not involve any DP movement. That is what we call a **control sentence**

→ *John* is not selected by *seem* in (6-a) 'seem' does not assign a theta role to its subject.

→ *hope* is different: it takes two arguments: the person who hopes something and what is hoped by that person:

hope **V** $\underline{\text{DP}_{exp}}$ CP_{theme}

For this reason, the expletive construction is not possible with *hope*:

(7) *It hopes that John left.

→ There seems to be a problem for the theta criterion in (6-b): both *leave* and *hope* need an external argument: leave needs an *agent* and *hope* needs an *experiencer*.

- In (6-b), John is understood to be both the agent of *leave* and the 'experiencer' of *hope*
- In fact, we can provide a very close paraphrase of (6-b) with a tensed clause complement instead of an infinitive.

(8) John$_i$ hopes that he$_i$ will leave

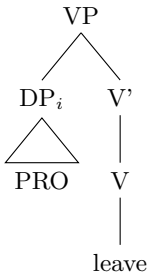
→ **Proposal** In (6-b) there is no movement and we need a silent anaphoric subject that is bound by the subject of the matrix verb.

- We'll call it **PRO**. The value of **PRO** is determined by the subject of the main clause: we say that PRO is controlled by the subject of 'hope'.
- Then, (6-b) would have the following structure:

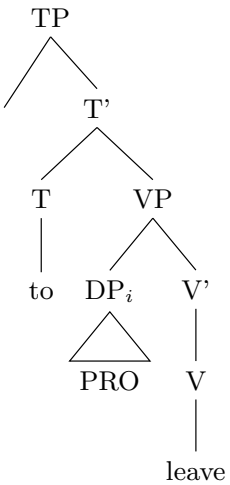
(9) John$_i$ hope [PRO$_i$ to leave]

Let's diagram!

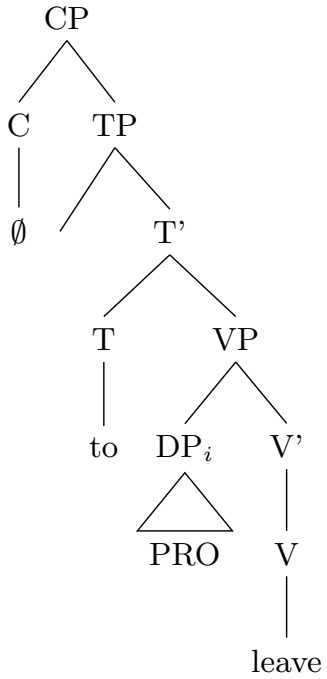
Step 1 The VP headed by the lexical verb. In this case the external argument will be PRO carrying the same index than the subject of the matrix clause



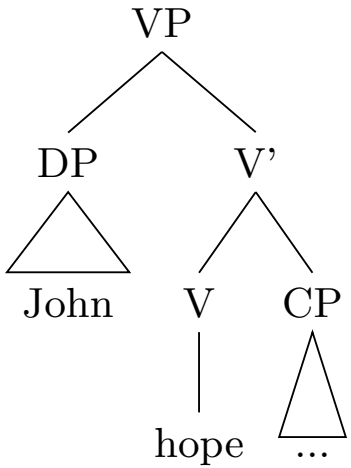
Step 2 The lower TP



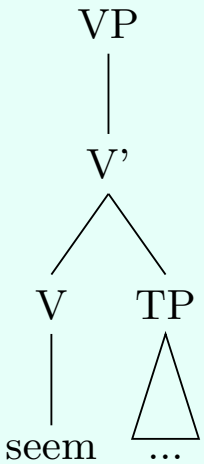
Step 3 The CP: unlike (6-a), in this case the verb *want* is selecting a CP-complement. We could say: 'John$_i$ hopes that he$_i$ will leave'

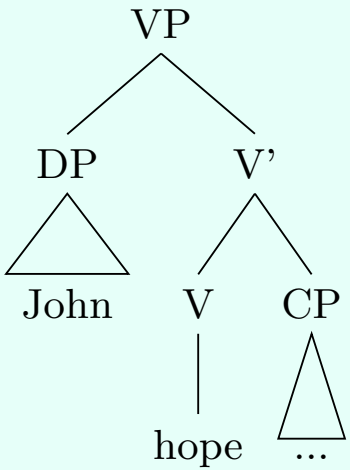


Step 4 The VP headed by the matrix verb *hope*. Unlike raising verbs, control verbs select subjects. So we expect to have the experiencer in [Spec, VP]



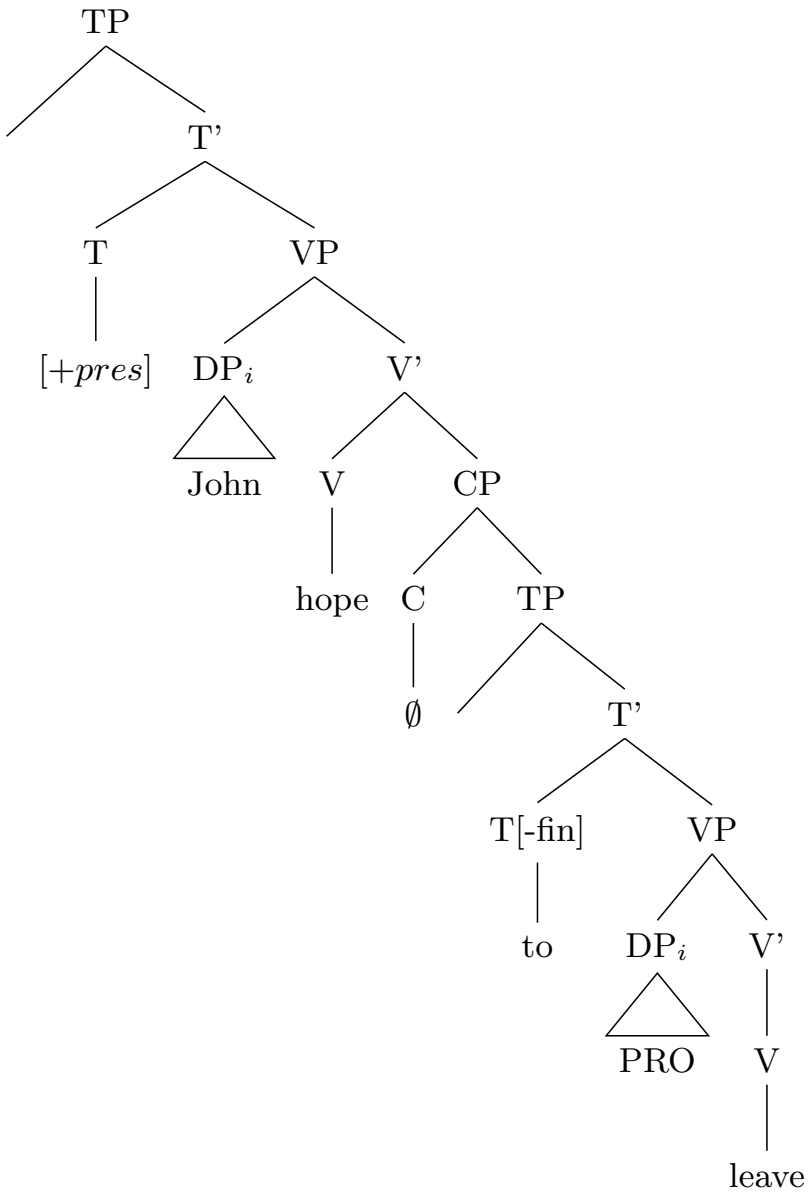
Note the difference between the phrase headed by 'seem' in (6-a) and the one headed by 'hope' in (6-b)



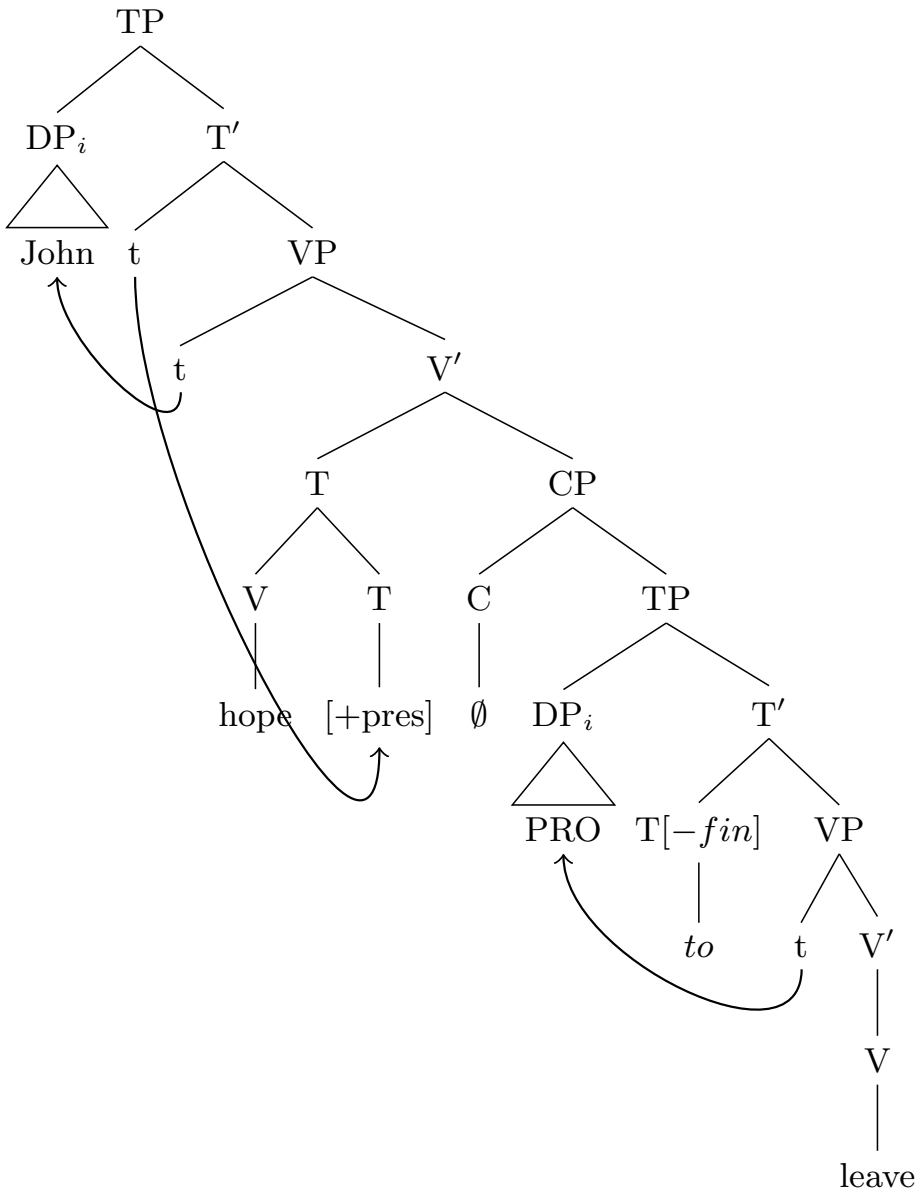


On TP *vs.* CP see ISAT §9.5.3.

Step 5 The DP structure tree

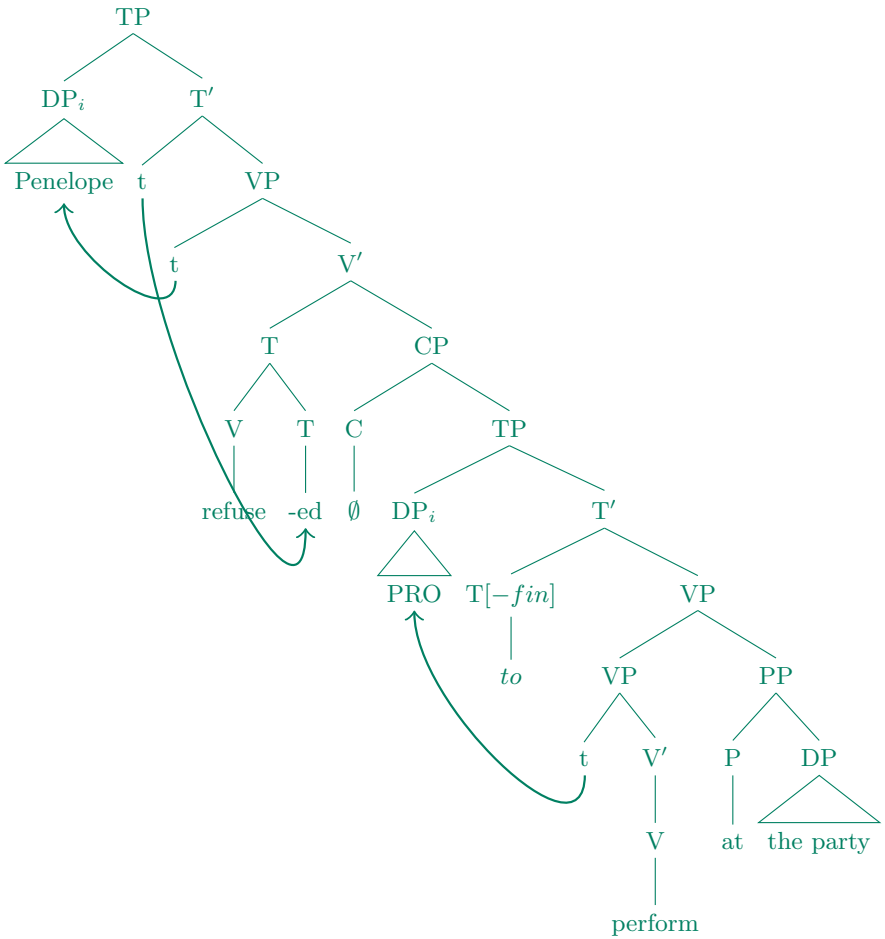


Step 6 The surface structure tree



Practice Draw the tree for the following sentence:

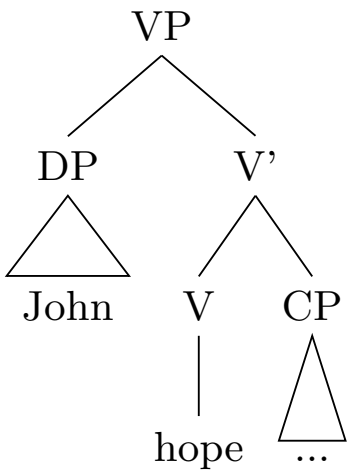
(10) Penelope refused to perform at the party



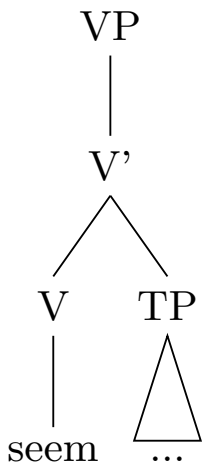
Raising to Subject vs. Control verbs I

hope	**V**	$\underline{\text{DP}_{exp}}$	CP_{theme}
seem	**V**		TP[to]_{theme}/ CP[that]_{theme}

a.



b.



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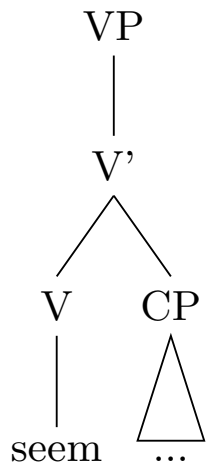

a. John hopes { [$_{\text{CP}}$ to sleep] / [$_{\text{CP}}$ that he will win] }
b. John seems [$_{\text{TP}}$ to have left]
c. It seems that [$_{\text{CP}}$ John left]

Raising to Subject vs. Control verbs II

Properties that only belong to *Raising Verbs*:

→ allow weather 'it'

(11) It seems to be raining cf.*It hopes to be raining

→ may allow expletive 'it'

(12) It seems that John left cf. *It hopes that John left

→ allow existential 'there'

(13) There seems to be a problem. cf. *There wants to be a problem.

→ allow idiom chunks.

(14) The cat seems to be out of the bag.

cf. The cat hopes to be out of the bag (no idiomatic reading)

Raising to Subject vs. Control verbs III

Properties that only belong to *Control Verbs*:

They can take a CP complement in addition to a non-expletive subject:

(15) Mary hopes that she will win. cf. *Mary seems that she will win.

Therefore, using only positive evidence:

If allow weather 'it'	→ RAISING
If allow expletive' it'	→ RAISING
If allow existential 'there'	→ RAISING
If allow idiom chunk as subject	→ RAISING
If can take CP complement and non-expletive subject	→ CONTROL

Raising to Subject vs. Control verbs IV

Not all control verbs can be paraphrased replacing the infinite clause with a tensed clause.

(16) a. John hopes to sleep
b. John hopes that he will sleep

(17) a. John tried to sleep
b.*John tried that he sleeps/slept

Want/hope-type subject control verbs can also take *for*- infinitives. Try-type subject control verbs cannot:

(18) a. John hopes for Bill to sleep.
b.*John tried for Bill to sleep.

More generally, control verbs come in at least two kinds (see ISAT, §9.3).

Practice

Draw a surface structure for the following sentence:

(19) Matt seem to want to eat the last cookie.

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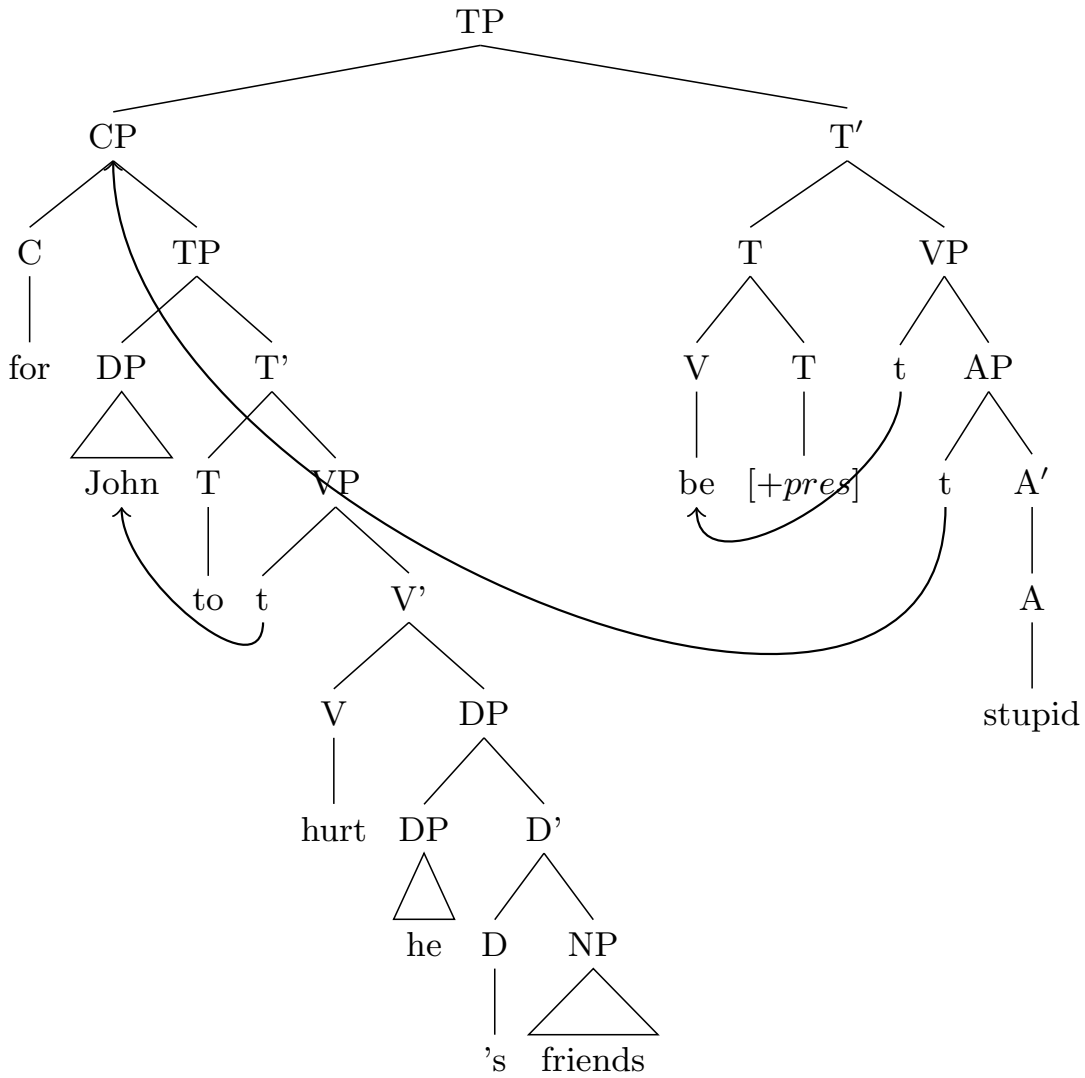
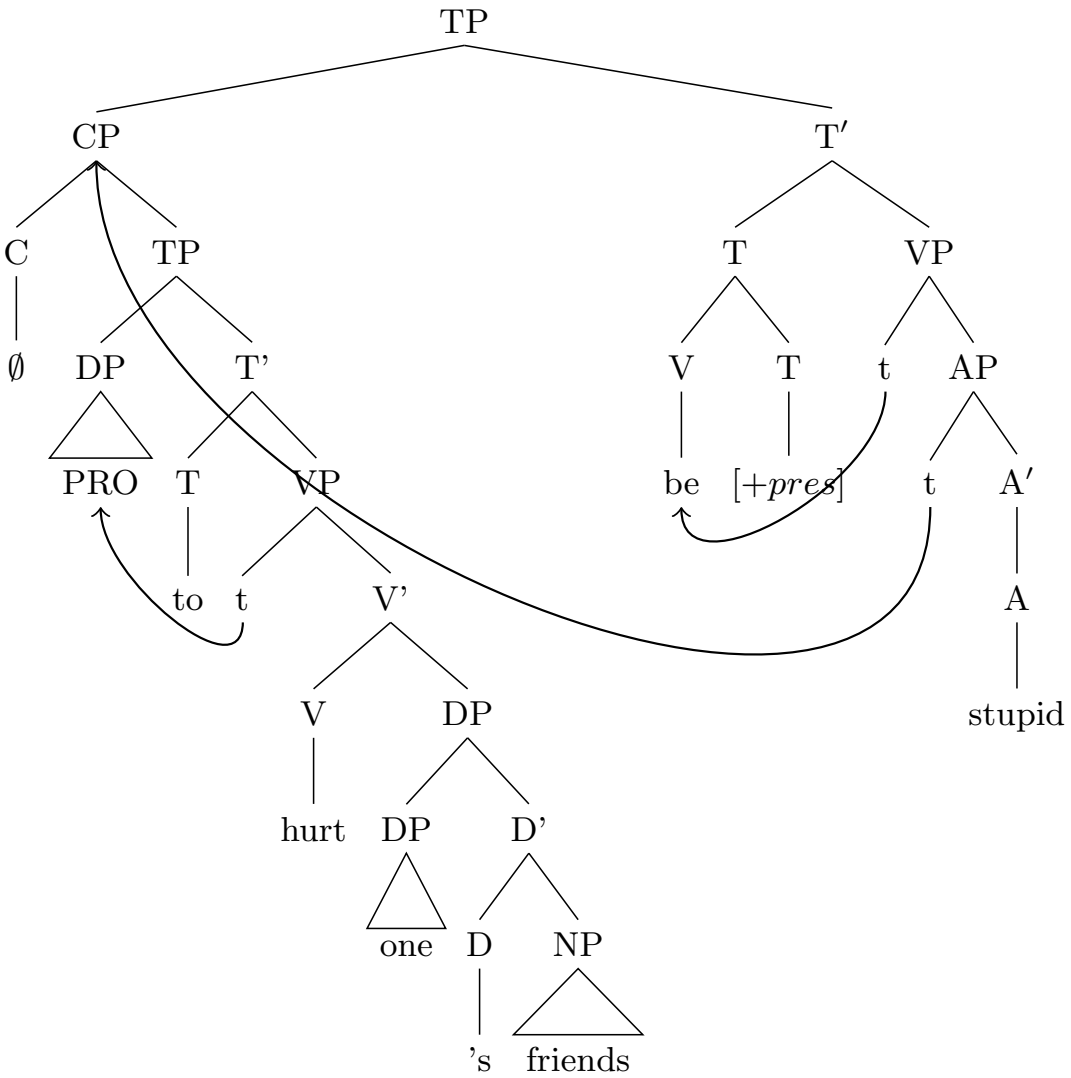
PRO in subject infinitives I

(20) a. [For John to hurt his friends] is stupid
b. [To hurt one's friends] is stupid §ISAT 9.2.1

PRO in subject infinitives II



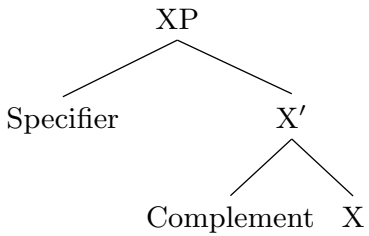
PRO in subject infinitives III



Control structures in foreign languages

Draw a tree structure for the following Japanese sentence involving a control structure.

(21) Ken-ga [kawa-o booto-de water -oo] -to shi-ta
Ken-NOM [river-ACC boat-INST cross -VOL] -comp try-pst
'Ken tried to cross the river on a boat' Nakau 1973



(a) Assume the following X-bar schema for Japanese:

(b) Adjuncts can both precede and follow the phrase they modify.

(c) -oo is a volitional marker that - for the sake of this exercise - we are going to analyze as a T head.

(d) -ga, -o and -de are case markers that you can also ignore. You can use triangles for those DPs.

Any evidence for V to T or tense lowering?

ECM and Object Control

Today we are going to look at the following cases:

(22) a. John believes Bill to have slept.
b. John convinced Bill to sleep.

→ What is the structure of the VP headed by *believe* in (22-a)?

→ What is the structure of the VP headed by *convince* in (22-b)?

→ For each case, is the surface "object" (Bill) selected by the verb that immediately precedes it?

The data below suggest that we are dealing with two new patterns.

Type 1	Type 2
John believed Bill to have slept	John convinced Bill to sleep
John believes that Bill has slept	*John convinced that Bill should sleep
*John believes Bill that Mary slept	John convinced Bill that Mary should sleep
*John believed to be sick	*John convinced to sleep

Type 1 verbs are ok with just a CP complement. Type 2 verbs are not.

(23) a. John believes [$_{CP}$ that Bill has slept]
b.*John convinced [$_{CP}$ that Bill should sleep]

Type 2 verbs can take a DP objects and a clause complement. Type 1 verbs cannot.

(24) a.*John believes [$_{DP}$ Bill] [$_{CP}$ that Mary slept]
b. John convinced [$_{DP}$ Bill] [$_{CP}$ that Mary should sleep]

We can use the diagnostic tests that allow one to distinguish between *raising* and *control* structures.

(i) Expletive *it* in object position.

(25) a. John believes it to be obvious that Bill left
b.*John convinced it to be obvious that Bill left

(ii) Weather *it*.

(26) a. John believes it to be raining
b.*John convinced it to be raining

(iii) Existential *there*.

(27) a. John believes there to be several firemen available
b.*John convinced there to be several firemen available

(iv) Idiom chunk (with idiomatic meaning).

(28) a. John believes the cat to be out of the bag
b.*John convinced the cat to be out of the bag

This data suggest that the DP following *believe* is only the subject of the following infinitival clause, but the DP following *convince* is not. Roughly:

(29) a. John believes [Bill to have slept]
b. John convinced [Bill]$_k$ [PRO$_k$ to sleep]

We can further support this difference with a new test. We can check whether the meaning is preserved in active/passive alternation.

Active/Passive alternation Test

Simple sentences: the meaning is preserved:

(30) a. Bill cooked the rice
b. The rice was cooked by Bill

(31) a. Bill visited Mary
b. Mary was visited by Bill

Our two types of verbs behave differently.

(32) a. John believes Bill to have cooked the rice
b. John believes the rice to have been cooked by Bill

(33) a. John believes Bill to have visited Mary
b. John believes Mary to have been visited by Bill

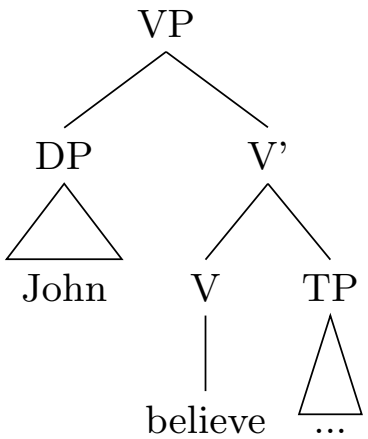
(34) a. John convinced Bill to cook the rice
b.*John convinced the rice to be cooked by Bill

(35) a. John convinced Bill to visit Mary
b#John convinced Mary to be visited by Bill

[$_{DP}$ Bill] is an argument of *convince*. Therefore it is selected by *convince*. *Convince* involves an object control construction.
[$_{DP}$ Bill] is not an argument of *believe*. *Believe* involves an ECM construction.

believe	**V**	$\underline{\text{DP}_{exp}}$		TP[to]_{theme}/ CP[that]_{theme}
convince	**V**	$\underline{\text{DP}_{agent}}$	DP_{goal}	$\text{CP}[e]_{theme}$/ CP[that]_{theme}

a.



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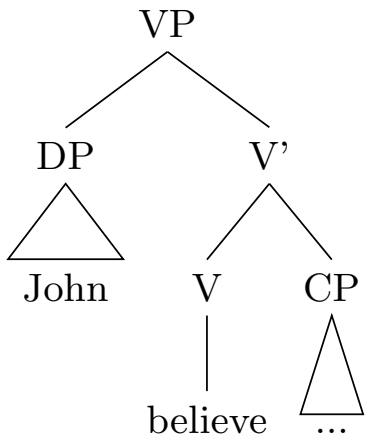

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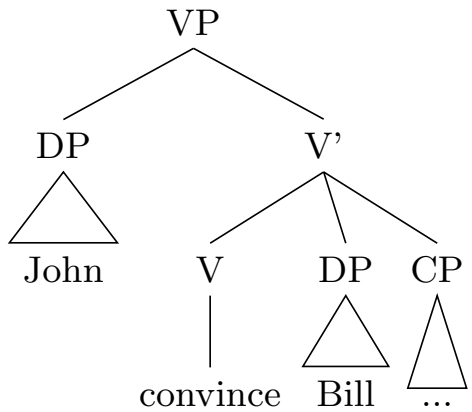
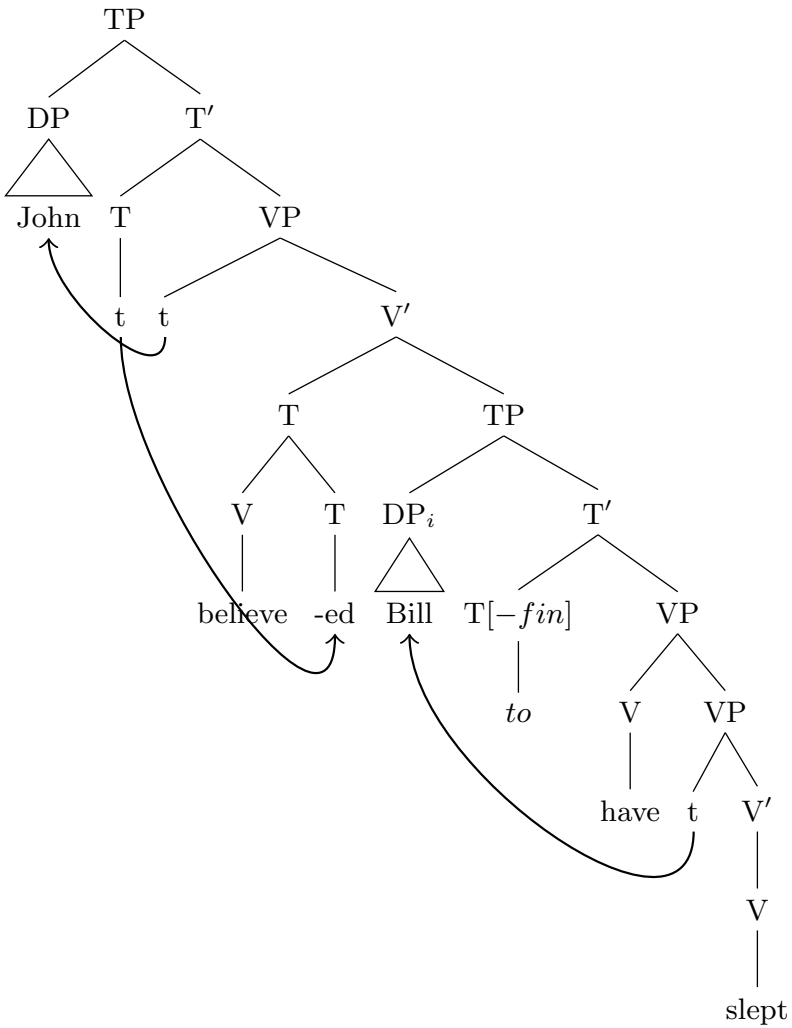
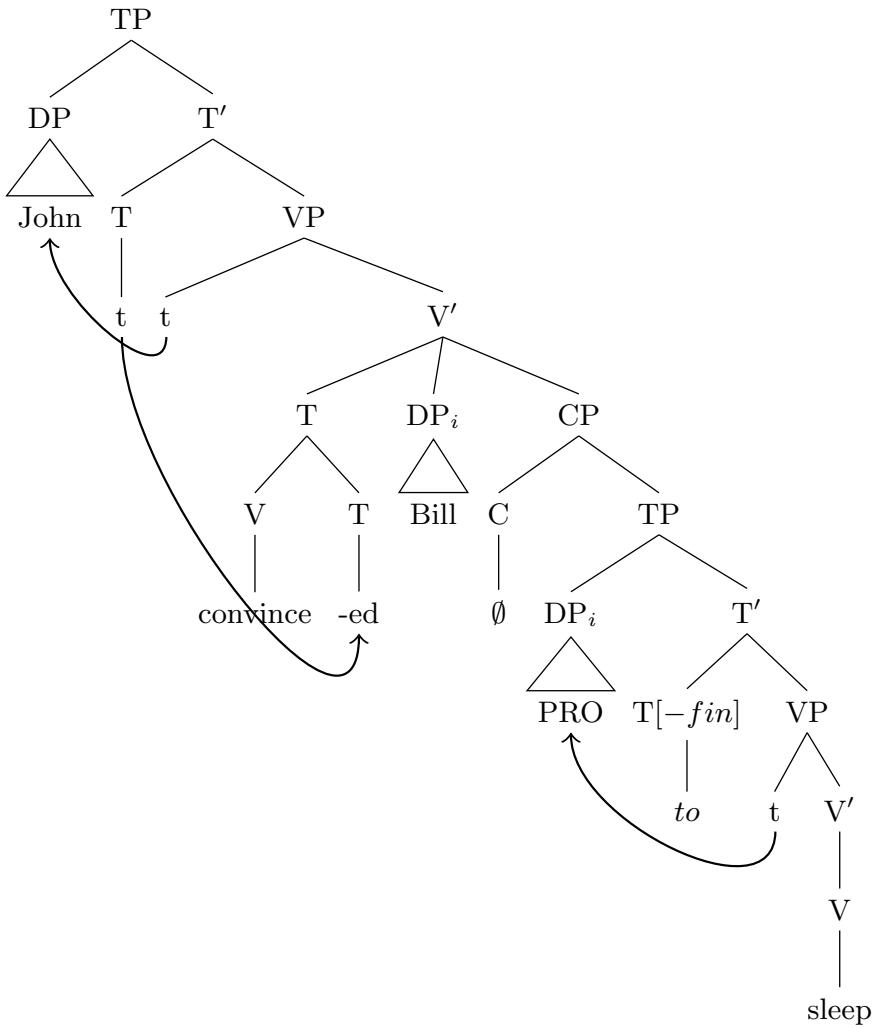


(36) a. John believed [$_{\text{TP}}$Bill to have slept]
b. John believes [$_{\text{CP}}$ that Bill has slept]
c. John convinced [$_{\text{DP}}$ Bill] [$_{\text{CP}}$ to sleep]
d. John convinced [$_{\text{DP}}$ Bill] [$_{\text{CP}}$ that Mary should sleep]

(37) John believed Bill to have slept.



(38) John convinced Bill to sleep.



Practice

Draw a surface structure for the following sentence:

(39) Peter forced the students to read Shakespeare's complete sonnets.

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Case in ECM constructions I

ECM stands for exceptional case marking verbs. Even if ISAT uses ECM and 'raising to object' se interchangeably, the analysis adopted there is a ECM analysis and not a raising analysis.

→ we said that *Bill* in (40) is not the object of *believe*. Rather, it is selected as the agent of *sleep*. We adopted an analysis where [$_{\text{DP}}$ Bill] or [$_{\text{DP}}$ him] stays in the specifier of TP.

(40) John believes [$_{\text{TP}}$ Bill to have slept]

→ Still, we verb *believe* licenses accusative case on the DP following it:

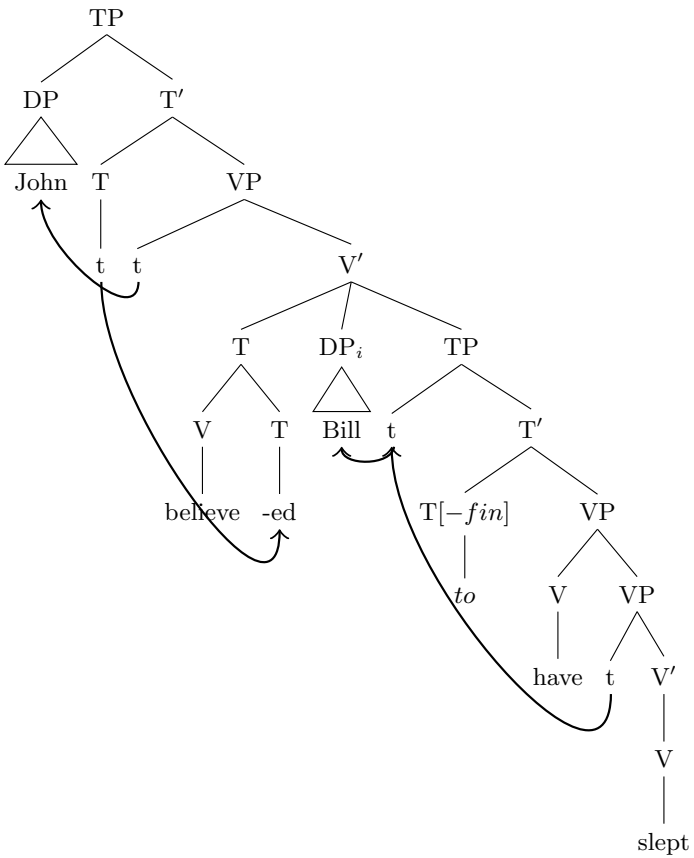
(41) John believes him/*he to have slept

→ Hence the terminology: *believe* exceptionally assigns accusative case to the pronoun even if it does not select it.

→ Under this analysis (the ECM analysis), the subject of the embedded clause does not move into the main clause.

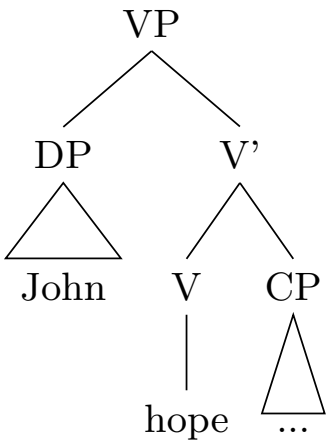
Case in ECM constructions II

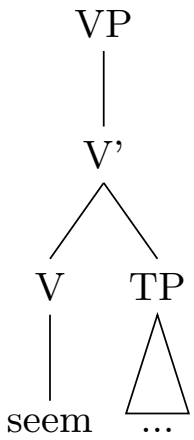
→ According to an alternative analysis, sentences like (40) involve raising the subject of the embedded clause up into an accusative Case position. This position would be outside the embedded clause. This explains the alternative terminology "raising to object". The derivation is shown below:

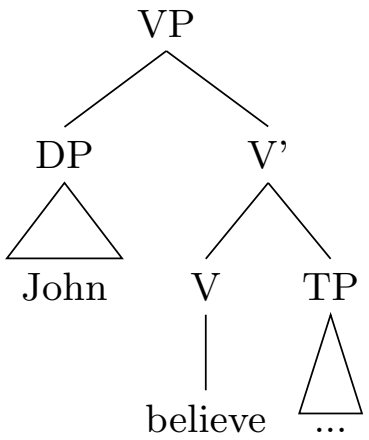


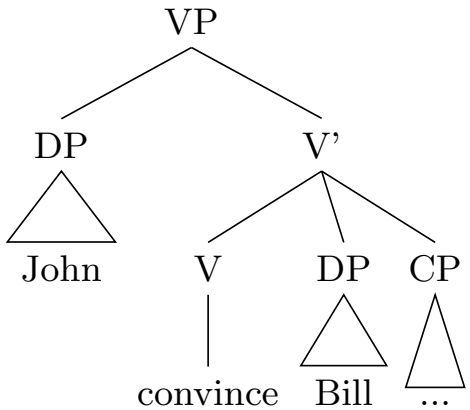
Summary: Subject/Object Control, Raising to Subject and ECM

hope	**V**	$\underline{\text{DP}_{exp}}$		CP_{theme}
seem	**V**			TP[to]_{theme}/ CP[that]_{theme}
believe	**V**	$\underline{\text{DP}_{exp}}$		TP[to]_{theme}/ CP[that]_{theme}
convince	**V**	$\underline{\text{DP}_{agent}}$	DP_{goal}	$\text{CP}[e]_{theme}$/ CP[that]_{theme}









a. John hopes [$_{\text{CP}}$ to sleep]
b. John seems [$_{\text{TP}}$ to have left]
c. John believed [$_{\text{TP}}$Bill to have slept]
d. John convinced [$_{\text{DP}}$ Bill] [$_{\text{CP}}$ to sleep]

Practice

For each of the following sentences, identify the type of underlined verb/adjective (subject control (SC), object control (OC), raising to subject (RtS) or ECM). For each of your answers, give one argument justifying your choice and write the lexical entry.

(42) a. John is able to help you.

b. Anna has known Bill to watch romantic comedies.

c. Peter told Bill to call the police.

Quantifier Scope and ambiguities I

Let's introduce two types of quantifiers.

- *Every* denotes a universal quantifier ($\forall$)
- *Some* denotes a existential quantifier ($\exists$)

In logic, the scope of a quantifier or a quantification is the range in the formula where the quantifier "engages in". It is put right after the quantifier, often in parentheses.

(43) Every student left $\forall x[\text{student}(x) \rightarrow \text{left}(x)]$

(44) Some student left $\exists x[\text{student}(x) \ \& \ \text{left}(x)]$

Quantifier Scope and ambiguities II

A scope ambiguity is an ambiguity that occurs when two quantifiers or similar expressions can take scope over each other in different ways in the meaning of a sentence. Here is an example.

(45) Some boy danced with every girl

(i) There is a unique boy, Peter, who danced with every single girl.

(46) $\exists x[\text{boy}(x) \;\&\; \forall y[\text{girl}(y) \rightarrow \text{dance}(x,y)]]$ $\exists > \forall$

(ii) Every girl is such that some boy (not necessarely the same boy danced with her.

(47) $\forall y[\text{girl}(y) \rightarrow \exists x[\text{boy}(x) \;\&\; \text{dance}(x,y)]]$ $\forall > \exists$

The surface position of the quantifiers in (45) does not predict the reading (ii). This reading is normally derived through Quantifier Raising. That is, we move the universal quantifier so that it can scope over the existential one.