CAS LX 522
Syntax I

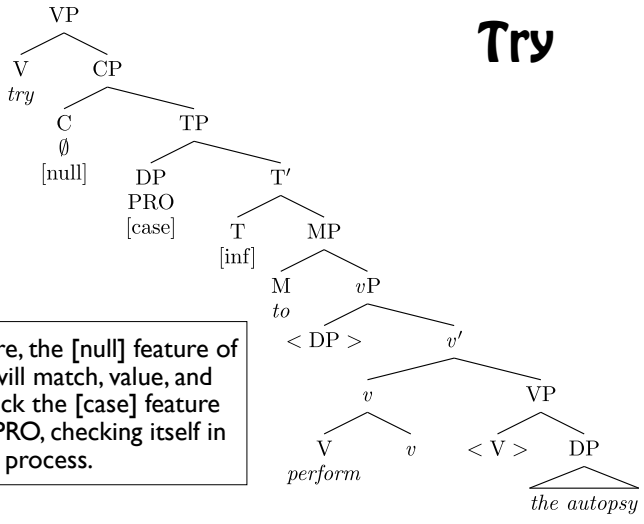
Raising, etc.
(8.2.6-8.4)

17

Reminder: Try

- *Try* embeds a nonfinite CP, headed by the special null C with the [null] case feature.
- In turn, the subject must be PRO, in order to successfully check that feature of C.
  - If the [case] feature of any other DP is valued and checked as [null], the derivation crashes: only PRO can have null case.
- The embedded clause must be nonfinite (T can't itself have a [nom] feature).
  - If the [nom] feature of T checks the [case] feature of the subject, nothing is left to check C's [null] feature.

Try



Here, the [null] feature of C will match, value, and check the [case] feature of PRO, checking itself in the process.

Believe

- Another place where nonfinite clauses can be embedded is under the verb *believe*.

  1) I believe [him to be innocent].

- Here, we have an accusative subject, and a nonfinite T that is not capable of checking case.
- How is the (accusative) case of *him* checked?
- This relates to the fact that *believe* can also simply take a DP object:

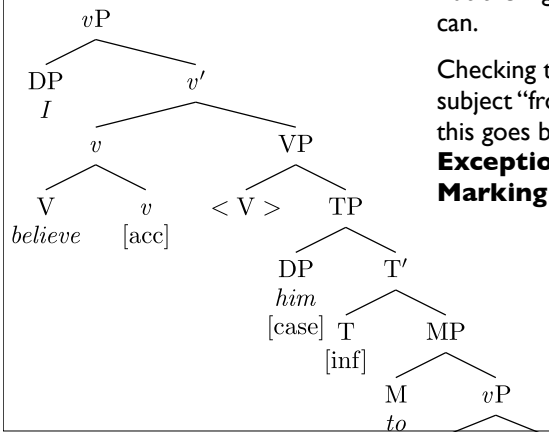
  2) I believe him.

- So, how is the accusative case of *him* checked here?

ECM

- The idea is that *believe* (actually the *v* that combines with the V *believe*) has an [acc] feature that can check the case of *him* in *I believe him*.
- Suppose that *believe* can either have a DP **or a TP** as its complement.
- What do we expect?

ECM



Nonfinite T cannot check the case feature of *him*. But the higher *v* of *believe* can.

Checking the case of a subject "from above" like this goes by the name **Exceptional Case Marking** (**ECM**).

Arranging to leave

- A somewhat similar phenomenon occurs with verbs like *arrange*.

  1) Harry arranged for Tom to leave MI-5.

- Here, we have:
  - Nonfinite T, which cannot check case.
  - An overt subject (*Tom*) in the accusative.
  - The word *for*, which we classify as C.
- *For*, as a P, checks accusative case (*He baked a cake <u>for her</u>*). If the C *for* also has an [acc] feature, it could check the [case] feature on *Tom*.

Arranging to leave

- *Arrange*-type verbs can take a CP complement.

  1) Harry arranged for Tom to leave MI-5.

- Notice that it is also possible to say

  2) Tom arranged PRO to leave MI-5.

- But this is expected.
  - Nonfinite T, cannot check case.
  - The null C with [null] case can check the case of PRO.
  - An overt subject can't get null case: *Harry arranged Tom to leave MI-5.
  - PRO cannot get anything but null case: *Tom arranged for to leave MI-5.

Summary

- Complementizers indicate clause type (*that*/Ø for declaratives, *if*/*whether* for interrogatives).
- Some verbs embed clauses. Finite clauses are always CPs.
- Some verbs can embed nonfinite clauses, some embedding TP and others embedding CP.
  - *Believe* (*expect, …*) embed TP and check accusative case (ECM verbs).
  - *Try* (*want, …)* embed CP. This can either be:
    - C[null], checking null case on PRO.
    - *for*[acc], checking acc case on an overt subject. Not all verbs allow this option (*want* does, *try* doesn't).

Sentences inside sentences

- So, to recap: **embedded sentences**.
- Embedded sentences can be finite:

  1) Shannon claimed [that she could catch a fish].

- Or nonfinite:

  2) Michael wants [PRO to leave].

  3) Jin wants [Michael to return the watch].

  4) Sun arranged [for him to return the watch].

Embedded clauses

- Embedded finite clauses are CPs, with a complementizer (*that* or Ø).

  1) Shannon claimed [$_{\mathbf{CP}}$ that she could catch a fish].
  2) Shannon claimed [$_{\mathbf{CP}}$ Ø she could catch a fish].

- Embedded nonfinite clauses have *to* as T, and can be CPs or bare TPs— the distinction is determined by case properties of the verb.

  3) Michael wants [$_{\mathbf{CP}}$ Ø$_{\mathbf{NULL}}$ PRO$_{\mathbf{NULL}}$ to leave]
  4) Jin wants$_{\mathbf{ACC}}$ [$_{\mathbf{TP}}$ Michael$_{\mathbf{ACC}}$ to return the watch].
  5) Sun arranged [$_{\mathbf{CP}}$ for$_{\mathbf{ACC}}$ him$_{\mathbf{ACC}}$ to return the watch].

- Nonfinite T does not assign case, so the subject must get case (have its [**case**] feature checked) in some other way.

Seems

- Now, we'll turn to another kind of embedded nonfinite clause.
  - Charlie seems [to dislike bees].
- This looks a little bit like:
  - Charlie tried [to sneak away].
- Which is really:
  - Charlie tried [PRO to sneak away].
  - *Charlie* is the Agent of *try*.
  - PRO (=Charlie) is the Agent of *sneak*.
- So, what about *Charlie seems to dislike bees*? What θ-roles go to *Charlie*?

Charlie seems to receive (just) one θ-role

- Seems can also embed a finite clause, so consider the pair:
  1) Charlie seems to dislike bees.
  2) It seems that Charlie dislikes bees.
- The *it* in the second sentence is the same *it* we find in *It rained*. *It* does not get a θ-role, because *rain* doesn't have any θ-roles. We only have *it* there because sentences need subjects (EPP: T has a [*u*D*] feature).
- So what θ-roles does *seem* assign?

Seem seems to assign (just) one θ-role.

- What *seem* (and *appear*) mean when paired with an embedded sentence is that the proposition expressed by the embedded sentence appears true.
- There's only one participant in a *seem*ing, the Proposition.
  1) It seems [that *seem* assigns one θ-role].
- So, *seem* assigns a Proposition θ-role (structurally, to its sister, the CP daughter of V′), and nothing else (hence, *it* is needed to check the EPP feature).

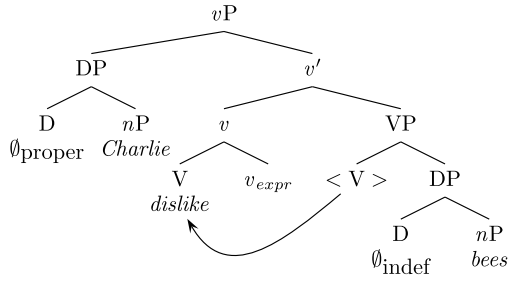
Back to Charlie

1) It seems [that Charlie dislikes bees].
2) Charlie seems [to dislike bees].

- These two sentences mean basically the same thing.
- *Dislike* assigns two θ-roles, we might say Experiencer and Theme.
- It's the same verb *dislike* in both sentences. So, we presume that the bottom of both trees will look the same…

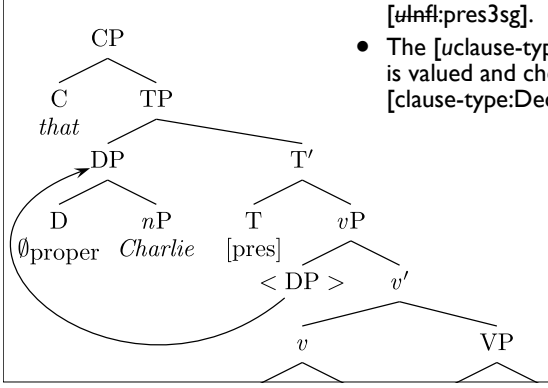
Disliking bees

- Starting with *It seems that Charlie dislikes bees*, we would build a *v*P that looks like this:
  - V (*dislike*) assigns a Theme θ-role to the DP *bees*.
  - $v_{\textbf{Experiencer}}$ assigns an Experiencer θ-role to the DP *Charlie*.



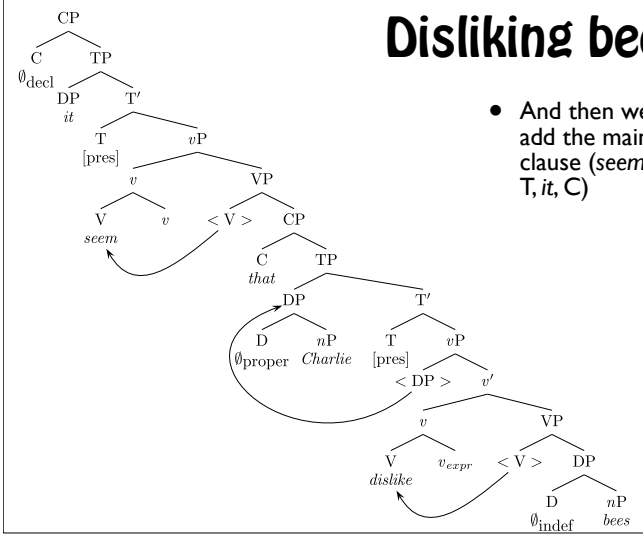
Disliking bees

- And then we add T and C to get *that Charlie dislikes bees*…

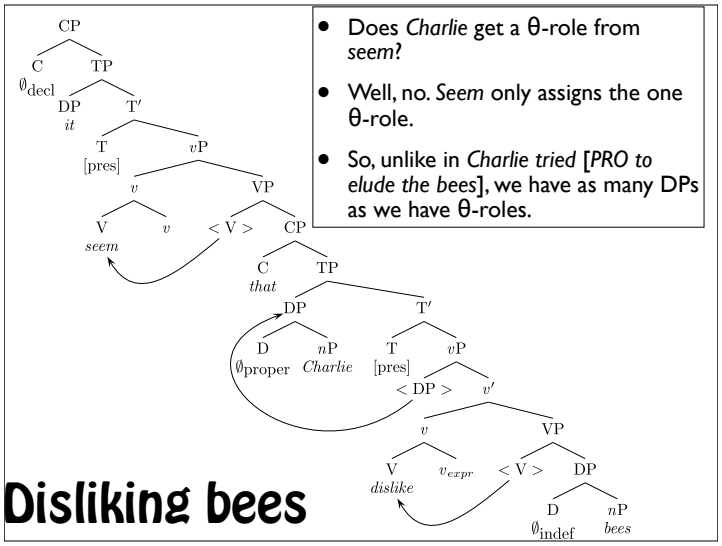


- The [case] feature of *Charlie* is valued and checked by the [nom] feature of T.
- The [*u*Infl:] feature of *v* is valued and checked by T: [~~*u*Infl~~:pres3sg].
- The [*u*clause-type:] feature of T is valued and checked by the [clause-type:Decl] feature of C.

Disliking bees

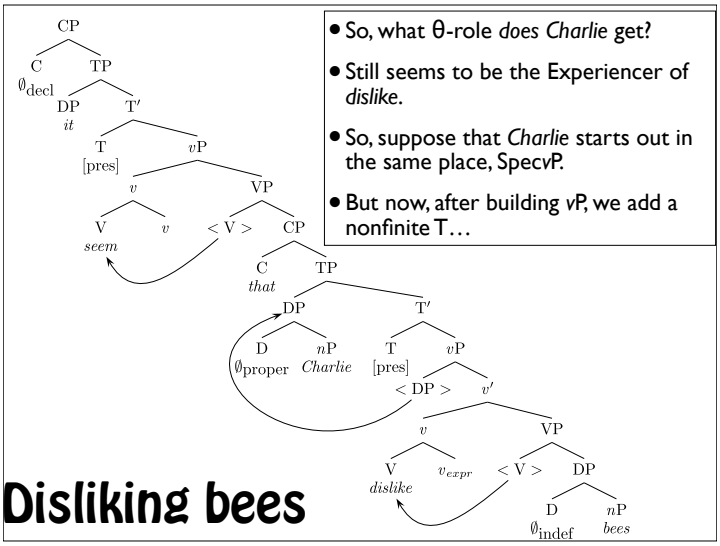


- And then we add the main clause (*seem*, *v*, T, *it*, C)



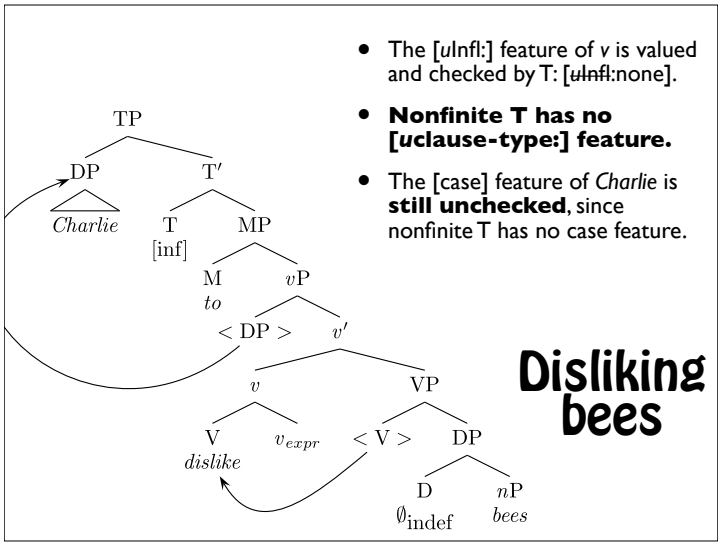
- Does *Charlie* get a θ-role from *seem*?
- Well, no. *Seem* only assigns the one θ-role.
- So, unlike in *Charlie tried [PRO to elude the bees]*, we have as many DPs as we have θ-roles.

Disliking bees



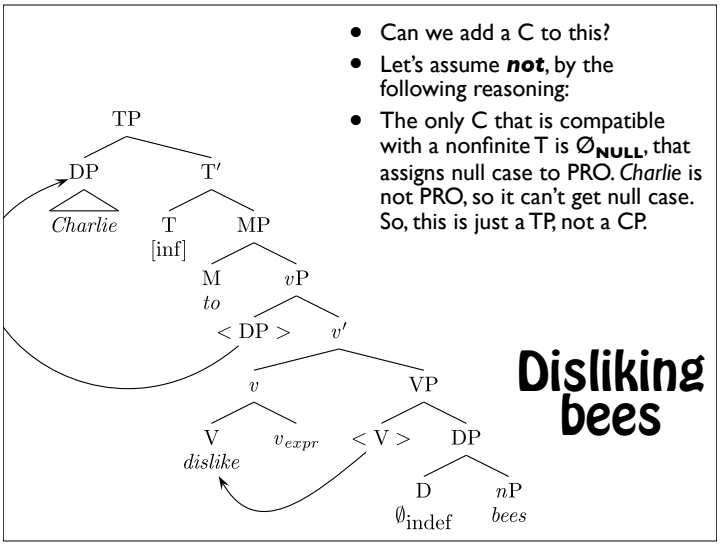
- So, what θ-role *does Charlie* get?
- Still seems to be the Experiencer of *dislike*.
- So, suppose that *Charlie* starts out in the same place, Spec*v*P.
- But now, after building *v*P, we add a nonfinite T…

Disliking bees



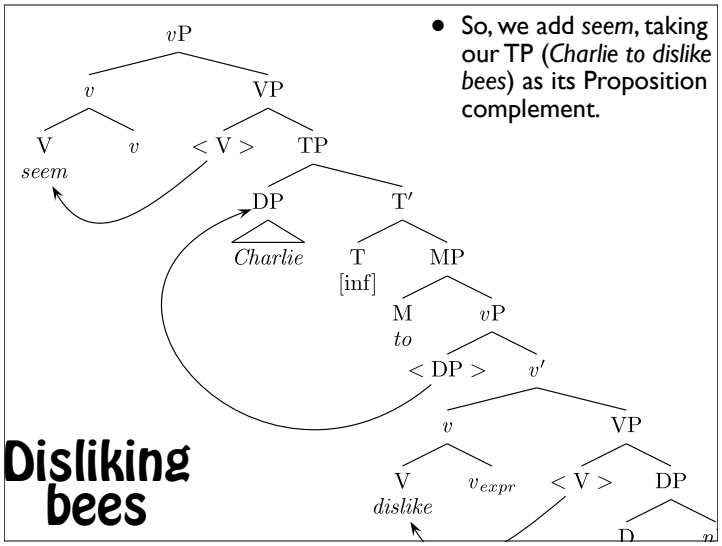
- The [*u*Infl:] feature of *v* is valued and checked by T: [~~*u*Infl~~:none].
- **Nonfinite T has no [uclause-type:] feature.**
- The [case] feature of *Charlie* is **still unchecked**, since nonfinite T has no case feature.

Disliking bees



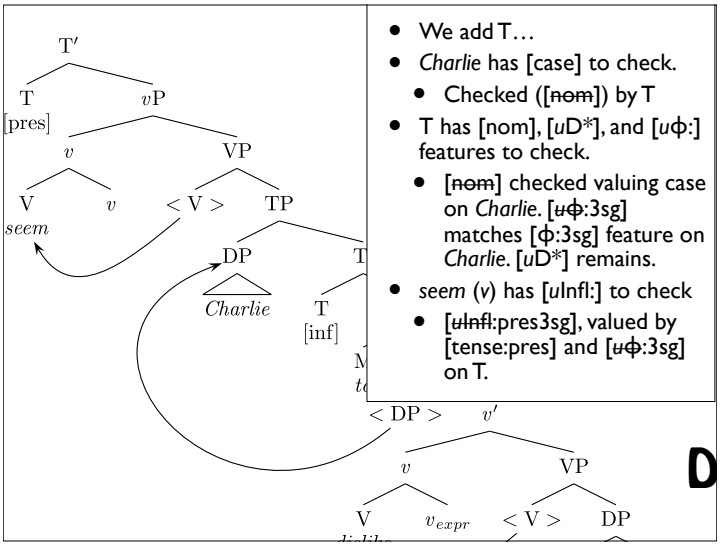
- Can we add a C to this?
- Let's assume ***not***, by the following reasoning:
- The only C that is compatible with a nonfinite T is $\emptyset_{\textbf{NULL}}$, that assigns null case to PRO. *Charlie* is not PRO, so it can't get null case. So, this is just a TP, not a CP.

Disliking bees



- So, we add *seem*, taking our TP (*Charlie to dislike bees*) as its Proposition complement.

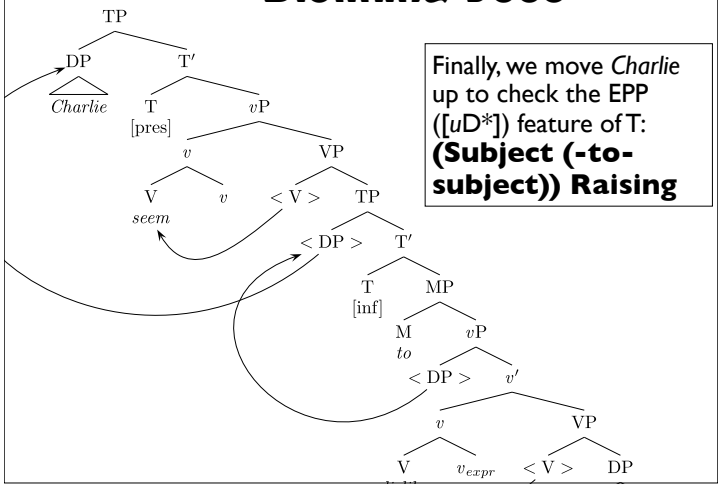
Disliking bees



- We add T…
- *Charlie* has [case] to check.
  - Checked ([~~nom~~]) by T
- T has [nom], [*u*D*], and [*u*ϕ:] features to check.
  - [~~nom~~] checked valuing case on *Charlie*. [~~*u*ϕ~~:3sg] matches [ϕ:3sg] feature on *Charlie*. [*u*D*] remains.
- *seem* (*v*) has [*u*Infl:] to check
  - [~~*u*Infl~~:pres3sg], valued by [tense:pres] and [~~*u*ϕ~~:3sg] on T.

D

Disliking bees



Finally, we move *Charlie* up to check the EPP ([*u*D*]) feature of T: **(Subject (-to-subject)) Raising**

Idioms

- Recall our idea about idioms: For something to have an idiomatic interpretation (an interpretation not literally derivable from its component words), the pieces need to be very close together when initially Merged.
  1) Ortega took a dive.
- Now, we have idiomatic interpretations here:
  2) It seems that the jig is up.
  3) It seems that the cat is out of the bag.
  4) It seems that the cat has your tongue.

Idioms

- If pieces of the idiom move away after the original Merge, we can still get the idiomatic interpretation:
  1) [The cat]$_i$ seems t_i to have your tongue.
  2) [The cat]$_i$ seems t_i to be out of the bag.
  3) [The jig]$_i$ seems t_i to be up.
- The important thing is that they be originally Merged together (the θ-role needs to be assigned by the predicate to the noun). Compare:
  4) [The cat] tried to have your tongue.
  5) [The cat] arranged to be out of the bag.
- (What's different? Why no idiomatic meaning?)

Other raising verbs

- So far, we've only talked about *seem*, but there are a couple of other raising verbs as well.
  - [The cat]$_i$ is likely [$_{TP}$ t_i to be out of the bag].
  - [The cat]$_i$ appears [$_{TP}$ t_i to have his tongue].
  - [The jig]$_i$ proved [$_{TP}$ t_i to be up].
  - [The cat]$_i$ began [$_{TP}$ t_i to get his tongue].
- What these verbs (in this use, anyway) have in common is that they have no external θ-role and an internal Proposition θ-role.

Object control

- One last type of nonfinite complement, those that appear with verbs like *persuade*.
  1) Sayid persuaded Kate to stay.
- Once again, we think through the "participants" to get a handle on whether we have enough DPs for the θ-roles.
  - *Stay* has only one participant, *Kate*.
  - *Persuade* has three—the one doing the persuading (*Sayid*), the one being persuaded (*Kate*), and the proposition in question ([$_{TP}$ Kate to stay]).
  - So we *don't* have enough DPs for the job— *Kate* appears to be playing two roles (one from *stay*, one from *persuade*). This sounds like a job for PRO.

Object control

- Sayid persuaded Kate to stay.
- Sayid persuaded Kate [$_{CP}$ $Ø_{NULL}$ PRO_{NULL} to stay]
- Again we have PRO, as we do in
  - Kate tried [$_{CP}$ $Ø_{NULL}$ PRO_{NULL} to see]
- But in *Sayid persuaded Kate to stay*, what "controls" PRO?

Persuasion and promises

- Not all ditransitive control verbs are *object* control verbs.
  - Though all object control verbs are ditransitives.
  1) David persuaded Sherry [PRO to leave]
  2) David promised Sherry [PRO to run for office]
  3) Chase asked Jack [PRO to be allowed to continue]
  4) Chase asked Jack [PRO to get off his case]
  - Whether a verb is a subject control verb or an object control verb is an individual property of the verb. *Promise* is recorded in our lexicon as a subject control verb, *persuade* as an object control verb.

ECM verbs

- ECM verbs also take infinitive complements, but with an overt subject (that checks accusative case with the ECM verb).
- Tony found [Michelle to be charming]
  - Tony found [that Michelle was charming]
- Jack expected [Tony to take the day off]
  - Jack expected [that Tony would take the day off]

Raising verbs

- Raising verbs have no Agent/Experiencer in Spec*v*P, and take a nonfinite complement. The subject of the embedded complement moves into their subject position:
  - Jack seems [<Jack> to be tired]
    - It seems [that Jack is tired]
  - The time appears [<the time> to have expired]
    - It appears [that the time has expired]
  - The President happened [<the P.> to have a pen]
    - It happened [that the President had a pen]

Verb classes in summary

- ECM verbs, *e.g.*, *believe*, *find*
  - I believe [$_{\mathbf{TP}}$ him to have told the truth].
  - We find [$_{\mathbf{TP}}$ these truths to be self-evident]. (or *hold*)
- Subject control verbs, *e.g.*, *attempt, promise*
  - Kim$_{\mathbf{k}}$ promised Jack [$_{\mathbf{CP}}$ Ø$_{\mathbf{NULL}}$ PRO$_{\mathbf{k}}$ to avoid kidnappers].
  - Kim$_{\mathbf{k}}$ will try [$_{\mathbf{CP}}$ Ø$_{\mathbf{NULL}}$ PRO$_{\mathbf{k}}$ to avoid kidnappers].
- Object control verbs, *e.g.*, *convince*, *ask*
  - I convinced her$_{\mathbf{k}}$ [$_{\mathbf{CP}}$ Ø$_{\mathbf{NULL}}$ PRO$_{\mathbf{k}}$ to drive to work].
  - Jack asked Kim$_{\mathbf{k}}$ [$_{\mathbf{CP}}$ Ø$_{\mathbf{NULL}}$ PRO$_{\mathbf{k}}$ to avoid kidnappers].
- Raising verbs, *e.g.*, *appear, seem*
  - I appear [$_{\mathbf{TP}}$ <I> to have missed the bus].
  - Jack seems [$_{\mathbf{TP}}$ <Jack> to need a nap].

One more argument for PRO

- **Principle A:** An anaphor must be bound in its binding domain.
  - Jack hoped [that Kim would explain herself]
  - Jack wanted [Kim to explain herself]
  - *Jack hoped [that Kim would call himself]
  - *Jack wanted [Kim to call himself]
  - Jack hoped [PRO to see Kim]
  - Jack hoped [PRO to exonerate himself]
- **Principle B:** A pronoun must be free in its binding domain.
  - Jack hoped [that Chase would exonerate him]
  - Jack wanted [Chase to exonerate him]
  - Jack hoped [PRO to exonerate him]

Before we finish embedded clauses...

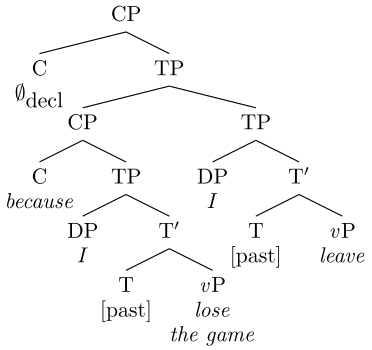
- Embedded clauses can also be modificational adjuncts.
  - Pat ate lunch [$_{\mathbf{PP}}$ on the hill] [$_{\mathbf{PP}}$ by the tree] [$_{\mathbf{PP}}$ in the rain].
- To express reasons and times, we also find whole CPs adjoined to our clause:
  - We discussed adjuncts [$_{\mathbf{CP}}$ before we finished our discussion of embedded clauses]
  - There's nothing really new here, except the observation that *before* can have category C.
    - Just like *after*, *while*, *during*, etc.

Adjunct clauses: where do they go?

- Pat cleaned poorly yesterday.
- #Pat cleaned yesterday poorly.
- Pat cleaned poorly [before Chris arrived].
- #Pat cleaned [before Chris arrived] poorly.
- Pat cleaned [before Chris arrived] yesterday.
- Pat cleaned yesterday [before Chris arrived].
- Pat heard that [before Chris arrived] [Tracy cleaned the sink].
- Pat heard [before Chris arrived] that [Tracy cleaned the sink].

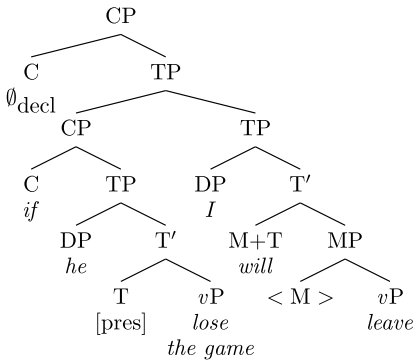
because clauses

- Reason clauses are also clausal adjuncts.
  - *Because I lost the game, I left.*
  - *I left because I lost the game.*



if clauses

- *If* clauses are like *because* clauses.
  - *If he loses the game, I will leave.*
  - *I will leave if he loses the game.*



While thinking about syntax

- Before finishing his homework, Ike watched TV.
- *Finish*: transitive (Agent, Theme)
  - Agent: ***?***
  - Theme: *his homework*
- *Watch*: transitive (Agent, Theme)
  - Agent: *Ike*
  - Theme: *TV*
- *Ike watched TV* is the main clause.
- *Before finishing his homework* is a modifier.

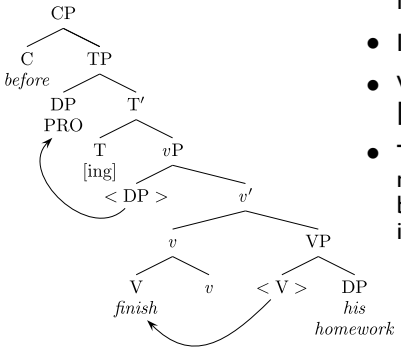
While thinking about syntax

- Before finishing his homework, Ike watched TV.
- Intuitively, it is Ike who was (at least at risk of) finishing his homework.
  - We are not going to have any particular explanation for exactly *how* the interpretation tied to the subject comes about, but it seems to be.
  - Before he finished his homework, Ike watched TV.

While PRO thinking about syntax

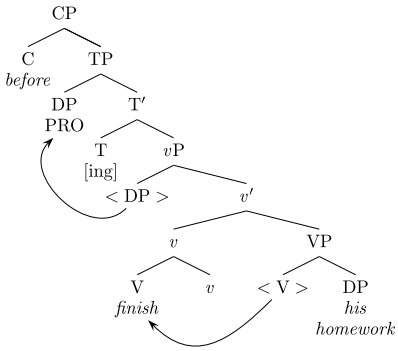
- Before PRO finishing his homework, …
- This PRO does seem to be controlled by the subject somehow (**While raining, Ike dashed to the store*).
- The form *finishing* is not the progressive, it is the present participle, a nonfinite form.

Before PRO finishing...



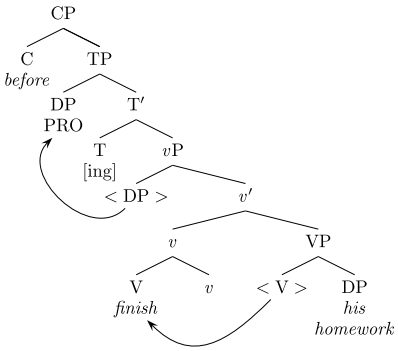
- T is not finite, so no [tense] feature.
- It is not the *infinitive* either.
- We'll say this form has the [ing] feature.
- The [***u*Infl:**] feature of *v* is matched, valued, and checked by the [ing] feature, resulting in *finishing*.

Before PRO finishing...



- How does PRO get its case feature checked?
- Some relevant sentences:
- **Before he finished his homework, Ike watched TV.**
- **Before Ike's finishing of his homework, tension was high.**

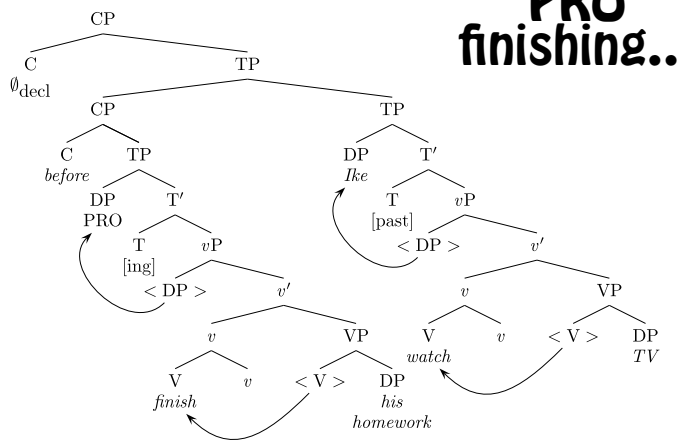
Before PRO finishing...



- Given this, the best hypothesis seems to be that the [ing] T also has a **[null]** feature, checking case with PRO just like finite T checks nominative case with other subjects.
  - **[null]** = [***u*case:null]**

The only thing left is to attach the modifier into the main clause…

Before PRO finishing...



On gerunds

- There is yet another form of the verb that shows up with *-ing* on the end of it in English: the **gerund**.
- A gerund is basically a verb acting as a noun—we've been looking at this kind of deverbal noun already. One way to tell whether you are looking at a gerund (noun) or not (a verb) is to see whether it is modified by adjectives or adverbs:
  - Before his quick(*ly) cooking of the t(of)urkey…
  - Before quick-*(ly) finishing his homework…