

# CAS LX 522 Syntax I

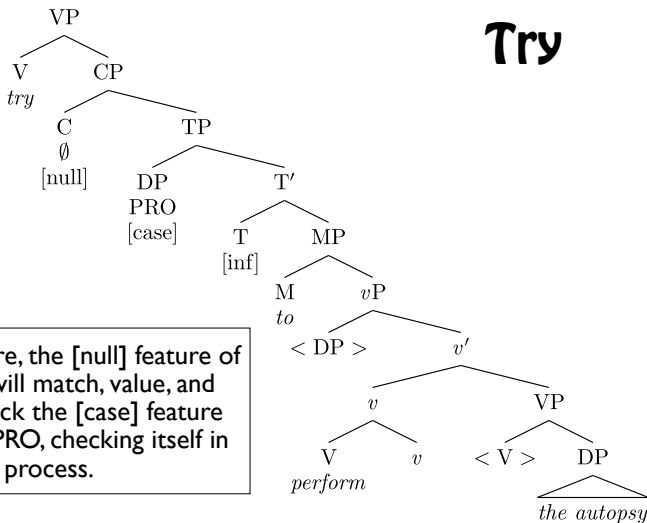
Raising, etc.  
(8.2.6-8.4)

# 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.

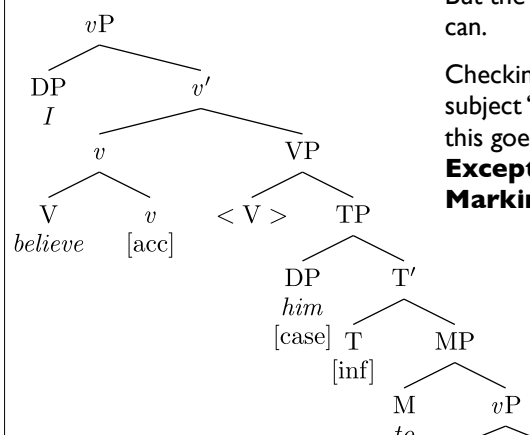
## Believe

- 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 for her*). 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.
  - 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*/∅ 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 ∅).
  - 1) Shannon claimed [<sub>CP</sub> that she could catch a fish].
  - 2) Shannon claimed [<sub>CP</sub> ∅ 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 [<sub>CP</sub> ∅<sub>NULL</sub> PRO<sub>NULL</sub> to leave]
  - 4) Jin wants<sub>ACC</sub> [<sub>TP</sub> Michael<sub>ACC</sub> to return the watch].
  - 5) Sun arranged [<sub>CP</sub> for<sub>ACC</sub> him<sub>ACC</sub> 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 $\theta$ -role

- Seems can also embed a finite clause, so consider the pair:
  - Charlie seems to dislike bees.
  - 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  $\theta$ -role, because *rain* doesn't have any  $\theta$ -roles. We only have *it* there because sentences need subjects (EPP: T has a [ $uD^*$ ] feature).
- So what  $\theta$ -roles does *seem* assign?

## Seem seems to assign (just) one $\theta$ -role.

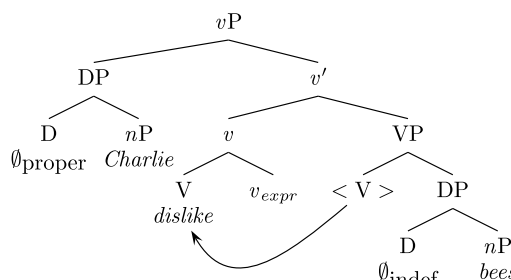
- What *seem* (and *appear*) mean when paired with an embedded sentence is that the proposition expressed by the embedded sentence appears true.
- There's only one participant in a seeming, the Proposition.
  - It seems [that *seem* assigns one  $\theta$ -role].
- So, *seem* assigns a Proposition  $\theta$ -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

- It seems [that Charlie dislikes bees].
  - Charlie seems [to dislike bees].
- These two sentences mean basically the same thing.
  - Dislike* assigns two  $\theta$ -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...

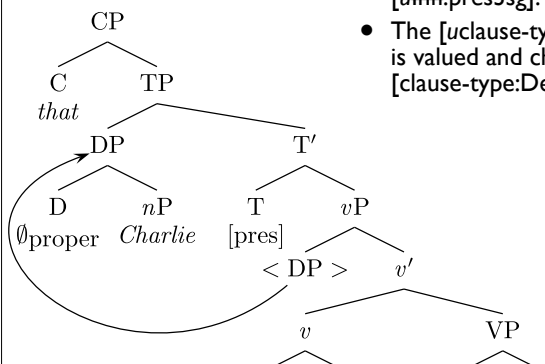
## Disliking bees

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



## Disliking bees

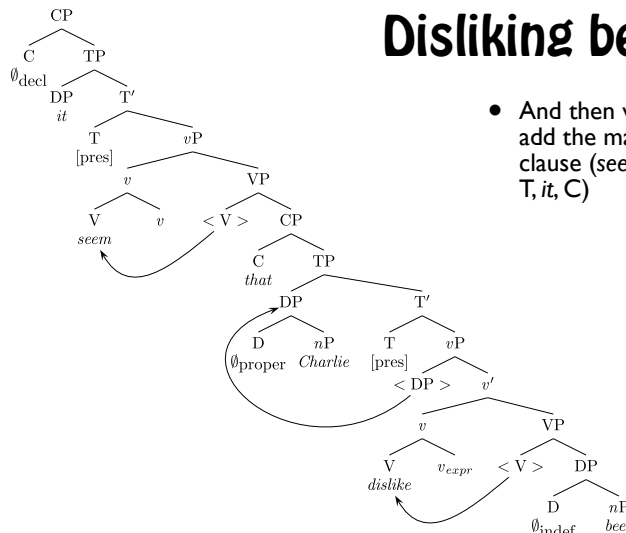
- And then we add T and C to get *that Charlie dislikes bees*...



- The [*case*] feature of *Charlie* is valued and checked by the [*nom*] feature of T.
- The [*uInfl*:] feature of *v* is valued and checked by T: [*uInfl*:pres3sg].
- The [*uclause-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  $\theta$ -role from *seem*?
- Well, no. *Seem* only assigns the one  $\theta$ -role.
- So, unlike in *Charlie tried [PRO to elude the bees]*, we have as many DPs as we have  $\theta$ -roles.

**Disliking bees**

- So, what  $\theta$ -role does *Charlie* get?
- Still *seem* to be the Experiencer of *dislike*.
- So, suppose that *Charlie* starts out in the same place, SpecvP.
- But now, after building vP, we add a nonfinite T...

**Disliking bees**

- The [*uInfl*:] feature of *v* is valued and checked by T: [*uInfl*: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  $\emptyset_{\text{NULL}}$ , 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**

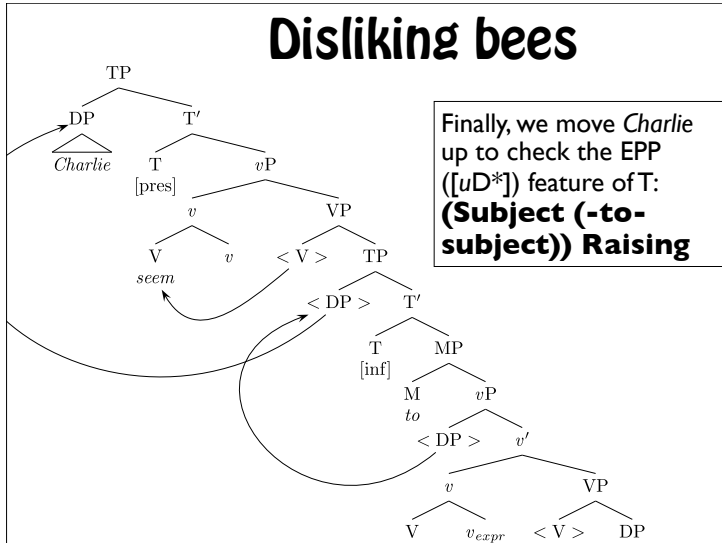
- So, we add *seem*, taking our TP (*Charlie to dislike bees*) as its Proposition complement.

**Disliking bees**

- We add T...
- *Charlie* has [*case*] to check.
- Checked ( $[\text{nom}]$ ) by T
- T has [*nom*], [*uD\**], and [*u $\phi$* :] features to check.
- [ $[\text{nom}]$ ] checked valuing case on *Charlie*. [*u $\phi$* :3sg] matches [ *$\phi$* :3sg] feature on *Charlie*. [*uD\**] remains.
- *seem* (*v*) has [*uInfl*:] to check
- [*uInfl*:pres3sg], valued by [*tense*:pres] and [*u $\phi$* :3sg] on T.

**Disliking bees**

## Disliking bees



## 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]<sub>i</sub> seems <sub>t<sub>i</sub></sub> to have your tongue.

2) [The cat]<sub>i</sub> seems <sub>t<sub>i</sub></sub> to be out of the bag.

3) [The jig]<sub>i</sub> seems <sub>t<sub>i</sub></sub> to be up.

- The important thing is that they be originally Merged together (the  $\theta$ -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]<sub>i</sub> is likely [<sub>TP</sub> <sub>t<sub>i</sub></sub> to be out of the bag].
  - [The cat]<sub>i</sub> appears [<sub>TP</sub> <sub>t<sub>i</sub></sub> to have his tongue].
  - [The jig]<sub>i</sub> proved [<sub>TP</sub> <sub>t<sub>i</sub></sub> to be up].
  - [The cat]<sub>i</sub> began [<sub>TP</sub> <sub>t<sub>i</sub></sub> to get his tongue].
- What these verbs (in this use, anyway) have in common is that they have no external  $\theta$ -role and an internal Proposition  $\theta$ -role.

## Object control

- One last type of nonfinite complement, those that appear with verbs like *persuade*.
  - Sayid persuaded Kate to stay.
- Once again, we think through the "participants" to get a handle on whether we have enough DPs for the  $\theta$ -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 ([<sub>TP</sub> *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 [<sub>CP</sub>  $\emptyset_{\text{NULL}}$  PRO<sub>NULL</sub> to stay]
- Again we have PRO, as we do in
  - Kate tried [<sub>CP</sub>  $\emptyset_{\text{NULL}}$  PRO<sub>NULL</sub> 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 SpecvP, 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 [<sub>TP</sub> him to have told the truth].
  - We find [<sub>TP</sub> these truths to be self-evident ]. (or *hold*)
- Subject control verbs, e.g., *attempt, promise*
  - Kim<sub>k</sub> promised Jack [<sub>CP</sub>  $\emptyset$ <sub>NULL</sub> PRO<sub>k</sub> to avoid kidnappers ].
  - Kim<sub>k</sub> will try [<sub>CP</sub>  $\emptyset$ <sub>NULL</sub> PRO<sub>k</sub> to avoid kidnappers ].
- Object control verbs, e.g., *convince, ask*
  - I convinced her<sub>k</sub> [<sub>CP</sub>  $\emptyset$ <sub>NULL</sub> PRO<sub>k</sub> to drive to work].
  - Jack asked Kim<sub>k</sub> [<sub>CP</sub>  $\emptyset$ <sub>NULL</sub> PRO<sub>k</sub> to avoid kidnappers ].
- Raising verbs, e.g., *appear, seem*
  - I appear [<sub>TP</sub> <I> to have missed the bus].
  - Jack seems [<sub>TP</sub> <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...

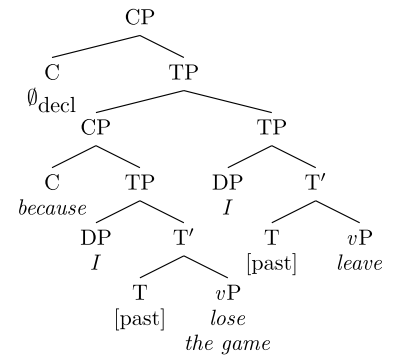
- Embedded clauses can also be modificational adjuncts.
  - Pat ate lunch [<sub>PP</sub> on the hill ]  
[<sub>PP</sub> by the tree ] [<sub>PP</sub> in the rain ].
- To express reasons and times, we also find whole CPs adjoined to our clause:
  - We discussed adjuncts [<sub>CP</sub> before we finished 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].

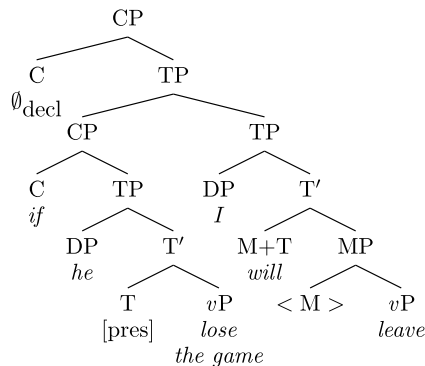
## because clauses

- 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.

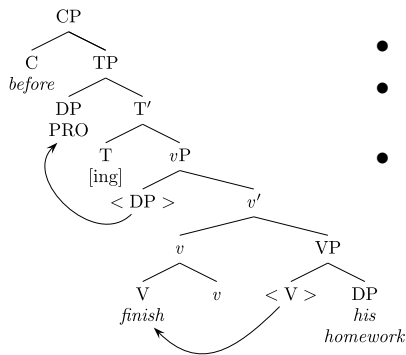
## While thinking about syntax

- 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

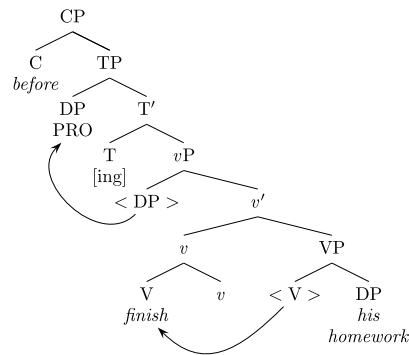
- Before PRO finishing his homework, ...
- This PRO does seem to be controlled by the subject somehow (*\*While raining, Ike dashed to the store*).
- The form *finishing* is not the progressive, it is the present participle, a nonfinite form.

## Before PRO finishing...



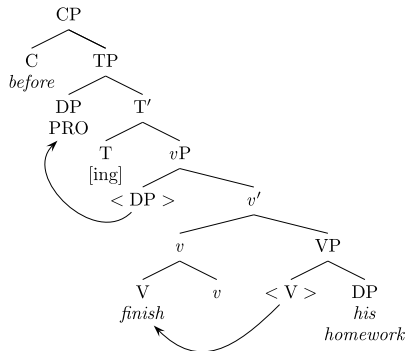
- T is not finite, so no [tense] feature.
- It is not the *infinitive* either.
- We'll say this form has the [ing] feature.
- The [**uInfl**] feature of v is matched, valued, and checked by the [ing] feature, resulting in *finishing*.

## 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.**

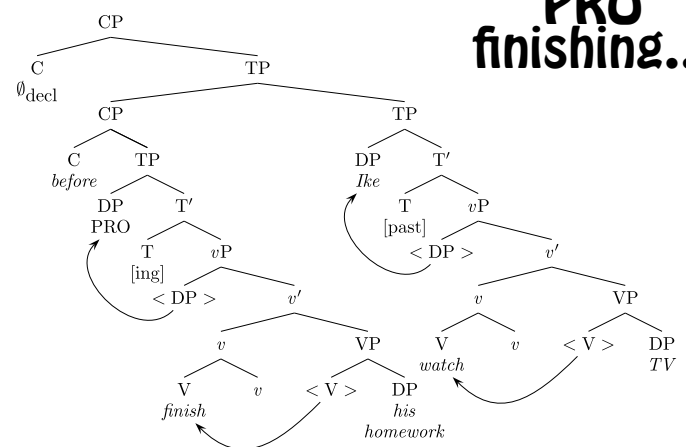
## Before PRO finishing...



- 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**] = [**ucase: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...