

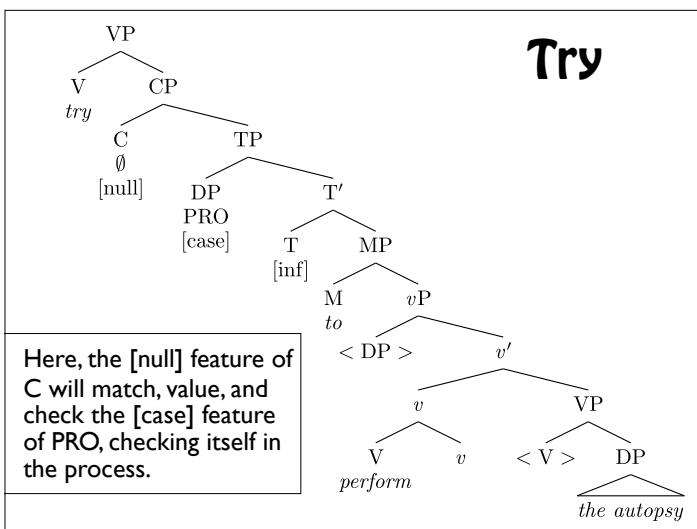
CAS LX 522 Syntax I

Raising, etc.
(8.2.6-8.4)

16

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.



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?

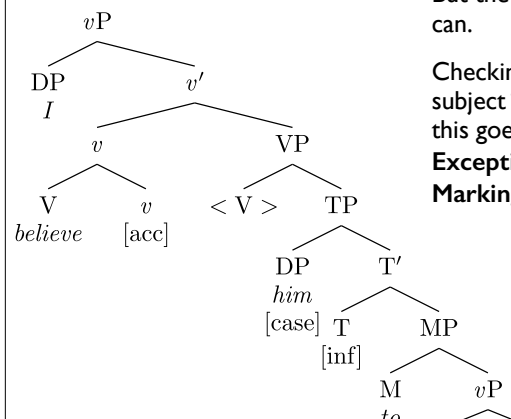
ECM

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.

- 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/∅* 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 \emptyset).

1) Shannon claimed [_{CP} that she could catch a fish].

2) Shannon claimed [_{CP} \emptyset she could catch a fish].

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

3) Michael wants [_{CP} \emptyset_{NULL} PRO_{NULL} to leave]

4) Jin wants_{ACC} [_{TP} Michael_{ACC} to return the watch].

5) Sun arranged [_{CP} *for*_{ACC} him_{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 [uD^*] 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 seeming, 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.

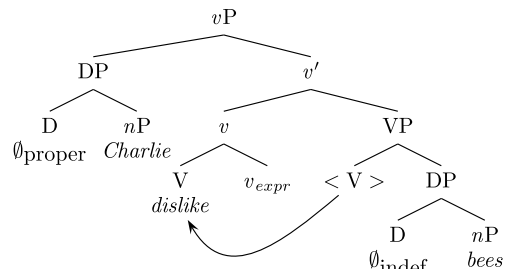
Dislike assigns two θ -roles, we might say Experiencer and Theme.

It's the same verb *dislike* in both sentences. So, we presume that the bottom of both trees will look the same...

Disliking bees

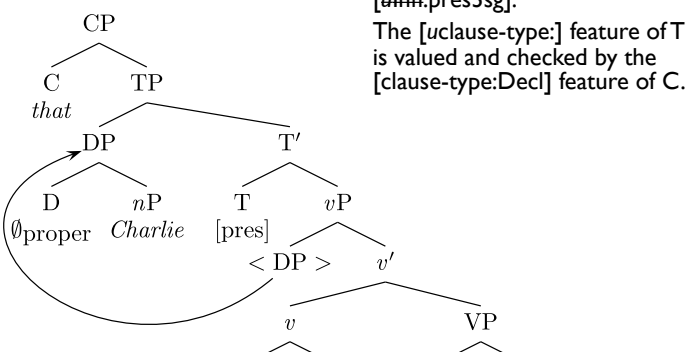
Starting with *It seems that Charlie dislikes bees*, we would build a vP that looks like this:

- V (*dislike*) assigns a Theme θ -role to the DP *bees*.
- $v_{EXPERIENCER}$ assigns an Experiencer θ -role to the DP *Charlie*.



Disliking bees

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



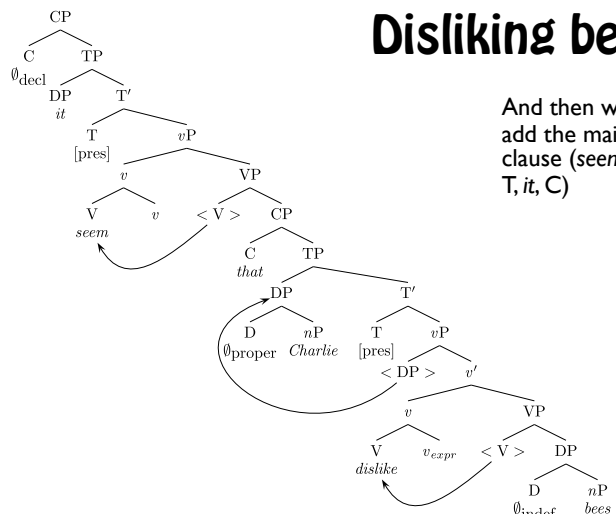
The [*case*] feature of *Charlie* is valued and checked by the [*nom*] feature of T.

The [*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 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, 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_{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

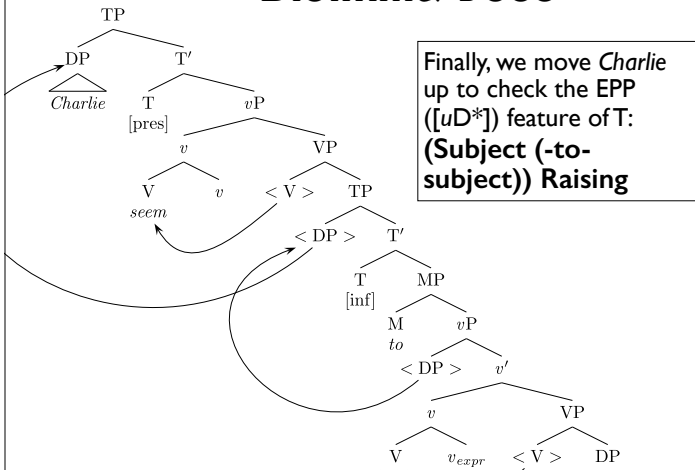
- So, we add *seem*, taking our TP (*Charlie to dislike bees*) as its Proposition complement.

Disliking bees

- We add T...
- Charlie* has $[case]$ to check.
- Checked ($[nom]$) by T
- T has $[nom]$, $[uD^*]$, and $[u\phi:]$ features to check.
- $[nom]$ 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]_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} \emptyset_{NULL} PRO_{NULL} to stay]

Again we have PRO, as we do in

- Kate tried [_{CP} \emptyset_{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 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 [_{TP} him to have told the truth].
- We find [_{TP} these truths to be self-evident]. (or *hold*)

Subject control verbs, e.g., *attempt, promise*

- Kim_k promised Jack [_{CP} \emptyset_{NULL} PRO_k to avoid kidnappers].
- Kim_k will try [_{CP} \emptyset_{NULL} PRO_k to avoid kidnappers].

Object control verbs, e.g., *convince, ask*

- I convinced her_k [_{CP} \emptyset_{NULL} PRO_k to drive to work].
- Jack asked Kim_k [_{CP} \emptyset_{NULL} PRO_k to avoid kidnappers].

Raising verbs, e.g., *appear, seem*

- I appear [_{TP} <I> to have missed the bus].
- Jack seems [_{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 [_{PP} on the hill]
[_{PP} by the tree] [_{PP} in the rain].

To express reasons and times, we also find whole CPs adjoined to our clause:

- We discussed adjuncts [_{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.

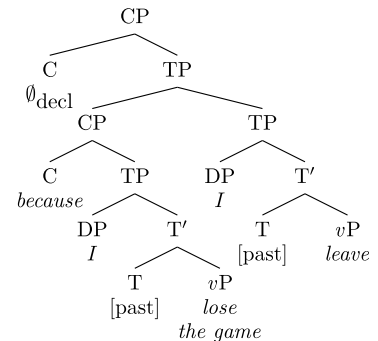
Adjunct clauses: where do they go?

- 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.

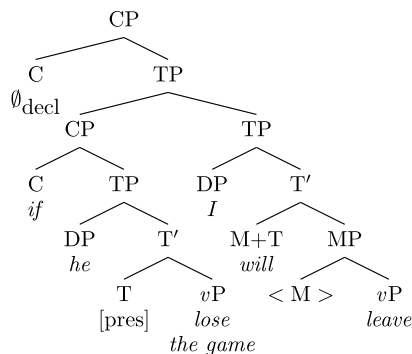
- *Because I lost the game, I left.*
- *I left because I lost the game.*



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.

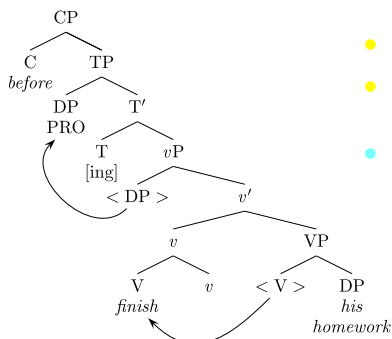
While PRO thinking about syntax

- Before PRO finishing his homework, ...

This PRO does seem to be controlled by the subject somehow (**While raining, Ike dashed to the store*).

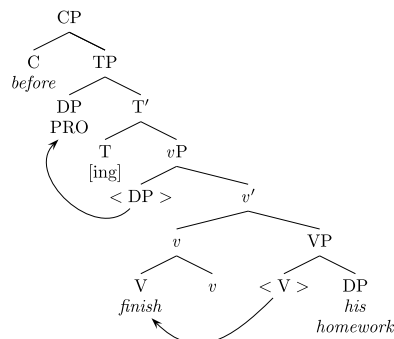
The form *finishing* is not the progressive, it is the present participle, a nonfinite form.

Before PRO finishing...



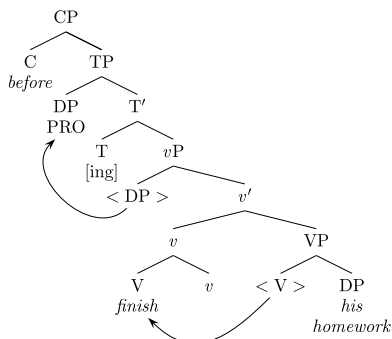
- T is not finite, so no [tense] feature.
- It is not the *infinitive* either.
- We'll say this form has the [ing] feature.
- The [uInfl:] feature of v is matched, valued, and checked by the [ing] feature, resulting in *finishing*.

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.

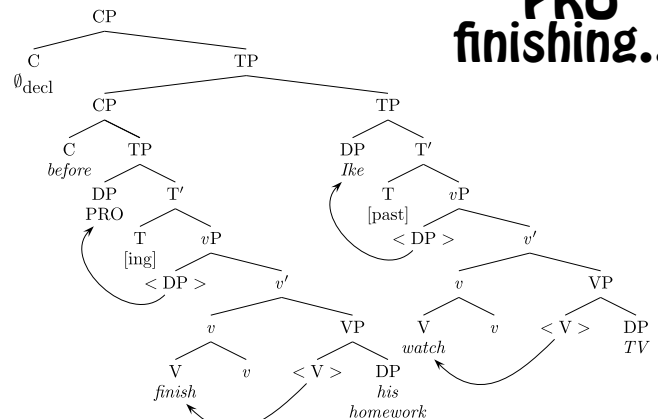
Before PRO finishing...



- 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 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)turkey...
- Before quick-*(ly) finishing his homework...