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.

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?

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

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/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 [CP that she could catch a fish].
  2) Shannon claimed [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 [CP Ø NULL PRO NULL to leave]
  4) Jin wants [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 \([uD^\ominus]\) 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*.
  - vExperiencer 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 [ultInf] feature of v is valued and checked by T: \([ultInf]:\text{pres3sg}\).
  - 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)**
Disliking bees

• 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 [uinf] feature of v is valued and checked by T. [uinf: none].
  • Nonfinite T has no [clause-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 Ø 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], [vD*], and [uϕ:] features to check.
  • seem (v) has [uinf] to check
    • [uinf:pres3sg], valued by [tense:pres] and [uϕ:3sg] on T.
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.
  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], seems to have your tongue.
  2) [The cat], seems to be out of the bag.
  3) [The jig], seems 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], is likely to be out of the bag.
  • [The cat], appears to have his tongue.
  • [The jig], proved to be up.
  • [The cat], began 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 (To 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.
- Sayid persuaded Kate to stay.
- Sayid persuaded Kate [CP 0 Null PRO Null to stay]
- Again we have PRO, as we do in
  • Kate tried [CP 0 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\(\text{VP}\), and take a nonfinite complement. The subject of the embedded complement moves into their subject position:
  - Jack seems [\text{<Jack>} to be tired]
  - It seems [that Jack is tired]
  - The time appears [\text{<the time>} to have expired]
  - It appears [that the time has expired]
  - The President happened [\text{<the President>} to have a pen]
  - It happened [that the President had a pen]

**Verb classes in summary**

- ECM verbs, e.g., believe, find
  - I believe [\text{TP him to have told the truth}].
  - We find [\text{TP these truths to be self-evident}]. (or hold)
- Subject control verbs, e.g., attempt, promise
  - Kim\textsubscript{k} promised Jack [\text{CP} \text{PRO} \text{PRO to avoid kidnappers}].
  - Kim\textsubscript{k} will try [\text{CP} \text{PRO} \text{PRO to avoid kidnappers}].
- Object control verbs, e.g., convince, ask
  - I convinced her\textsubscript{k} [\text{CP} \text{null} \text{PRO} \text{to drive to work}].
  - Jack asked Kim\textsubscript{k} [\text{CP} \text{PRO} \text{PRO to avoid kidnappers}].
- Raising verbs, e.g., appear, seem
  - I appear [\text{TP} \text{<I>} to have missed the bus].
  - Jack seems [\text{TP} \text{<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 [\text{PP on the hill}]
  - Pat by the tree [\text{PP in the rain}].
- To express reasons and times, we also find whole CPs adjoined to our clause:
  - We discussed adjuncts [\text{CP before we finished our discussion of embedded clauses}]
  - There's nothing really new here, except the observation that \text{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 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 [uninf:] 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...

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(wo) turkey…
- Before quick-*(ly) finishing his homework…