

CAS LX 522 Syntax I

Week 12a.
PRO & CP & V2
(chapter 8)

Projects for today

- Review PRO and control, with some additional evidence for PRO from Binding Theory.
- Look at one other place where CPs appear inside other sentences: clausal adjuncts.
- Look at the phenomenon of “V2” languages—another place where CP is important.

Before we finish embedded clauses...

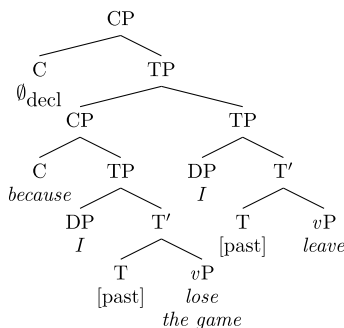
- Embedded clauses can also be modificational adjuncts.
 - Pat ate lunch [**pp** on the hill]
[**pp** by the tree] [**pp** in the rain].
- To express reasons and times, we also find whole CPs adjoined to our clause:
 - We discussed adjuncts [**cp** before we finished our discussion of embedded clauses]
 - 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].

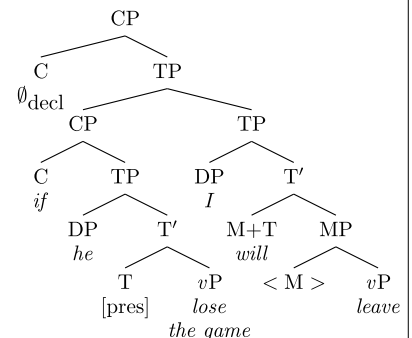
because clauses

- 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.*



Unique θ -Generalization

- *Karr accused.
- This cannot mean *Karr accused himself*, and isn't good on its own. We concluded (back in chapter 3, p. 81), that θ -role assignment is constrained by....
- **The Unique θ -Generalization**
Each θ -role must be assigned but a constituent cannot be assigned more than one θ -role.
- So, presume that's true.

PRO

- Jack tried to capture Nina
- Here, *capture* has two θ -roles (Agent and Theme), and *try* has two θ -roles (Agent and Proposition). Intuitively, *Jack* is the Agent of both the trying and the capturing. But assuming that the **Unique θ -Generalization** is true, this can't be: *Jack* can't be getting two θ -roles.
- *Something* must be getting the Agent θ -role of *capture* (*Jack* is pretty clearly getting the Agent θ -role of *try*), but we can't see it.
- **Conclusion:** There's something we can't see there, getting the Agent θ -role of *capture*. It's a little bit like a silent pronoun, so we call it PRO.

PRO

- Jack tried [to PRO capture Nina]
- PRO must be there to satisfy the U θ G.
- But something must be there in the specifier of TP: **T always has a [μ D*] feature to check** (the "EPP").
 - (except maybe in Irish and Arabic)
- Since *Jack tried to capture Nina* is grammatical, we also need PRO to move to SpecTP to satisfy the EPP.

PRO

- Jack tried [PRO to <PRO> capture Nina]
- So, we have two deep principles of the grammar that point to a need for PRO in this sentence.
 - **Unique θ -Generalization**
 - **EPP** (T has a [μ D*] feature)
- PRO acts a bit like an anaphor, in that it **must** corefer with the subject of the higher verb (*try* is a **subject control verb**).

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]

PRO

- So, we have pretty good evidence for PRO, despite its invisibility:
- We believe T has a [μ D*] feature (EPP).
 - Every TP needs a specifier.
- We believe the Unique θ -generalization.
 - No DP can get two different θ -roles.
- Binding Theory reacts as if something is there serving as a binder.

Idioms

- Idiomatic interpretation available for raising verbs:
 - [The cat]_i seems t_i to have your tongue.
 - [The cat]_i seems t_i to be out of the bag.
- *The cat* was originally Merged within the lower vP—its θ -role comes from *have/be out*.
Not so here:
 - [The cat] tried [PRO to have your tongue].
 - [The cat] arranged [PRO to be out of the bag].
 - A further argument for PRO being there and being something different from [*the cat*].

Subject control v. object control

- **Subject control verbs** take a nonfinite complement, with PRO as the subject, and PRO must refer to the higher subject.
 - Gael tried [PRO to disarm the bomb]
- **Object control verbs** are ditransitives that take an object and a nonfinite complement, with PRO as the subject, and PRO must refer to the higher object.
 - David persuaded Sherry [PRO to leave]

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].

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.

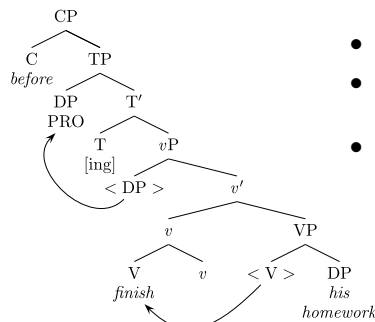
While thinking about syntax

- 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

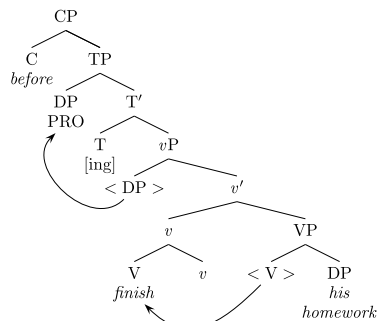
- Before PRO finishing his homework, ...
- This PRO does seem to be controlled by the subject somehow (**While raining, Ike dashed to the store*).
- The form *finishing* is not the progressive, it is the present participle, a nonfinite form.

Before PRO finishing...



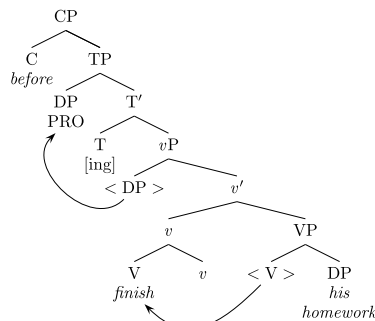
- T is not finite, so no [tense] feature.
- It is not the *infinitive* either.
- We'll say this form has the [ing] feature.
- The [**uInfl**] feature of v is matched, valued, and checked by the [ing] feature, resulting in *finishing*.

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.**

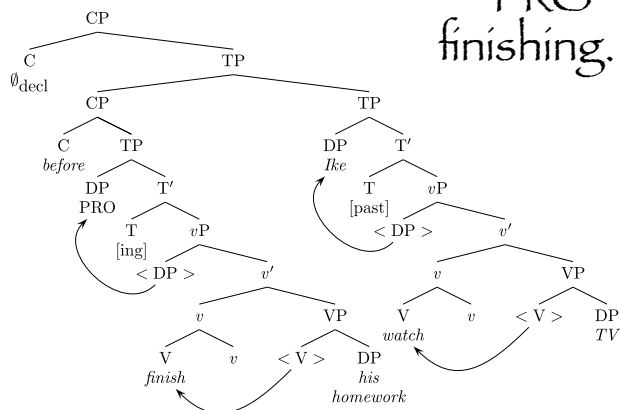
Before PRO finishing...



- 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...



Before his cooking of the t(of)urkey, Ike had never opened the oven before.

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 deverbial 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...