

## Chapter 10

# Non-finite clauses

### 10.1 Introduction

- The goal for this handout: account for the structure of various kinds of non-finite clauses including:
  - Raising structures
  - Control structures
- Show how we can integrate ideas from case, agreement, and movement theories in order to account for these structures.

### 10.2 Control

#### 10.2.1 The basics of control

- Control is a phenomenon involving non-finite clauses. We've seen non-finite clauses already.

- (10.1)
- For [Harvey to keep a camel in his garden] would annoy Louise.
  - I would hate for [Harvey to be accused of insincerity].
  - We are sure that for [there to be an increased interest in syntax] would scare the phonologists.

- Earlier, we saw that verbs can select for different values of CPs.

- (10.2)
- |         |             |
|---------|-------------|
| Phon:   | <i>hate</i> |
| Cat:    | V           |
| Select: | $C_{for}$   |

- We also treated the non-finite clause, bracketed above, as a TP headed by *to*.

- (10.3)
- |         |                 |
|---------|-----------------|
| Phon:   | <i>for</i>      |
| Cat:    | C               |
| Select: | $T_{to,[-fin]}$ |

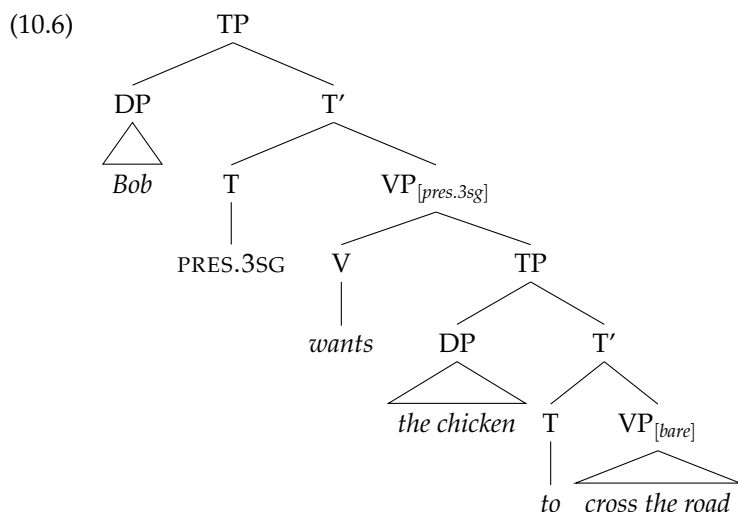
- Let's review a topic from case theory. What case does *the chicken* have in (a), and how does it get it? What is the constituency of the bracketed string?

- (10.4)
- Bob wants [the chicken to cross the road].
  - Harvey wants [his wife to own a Porsche].
  - Harvey expects [his children to be admired their teachers].

- We should make sure that the structure extends to *expect*, *believe*, *intend*, and *prove*.
- Firstly, it seems like the bracketed string is a constituent.

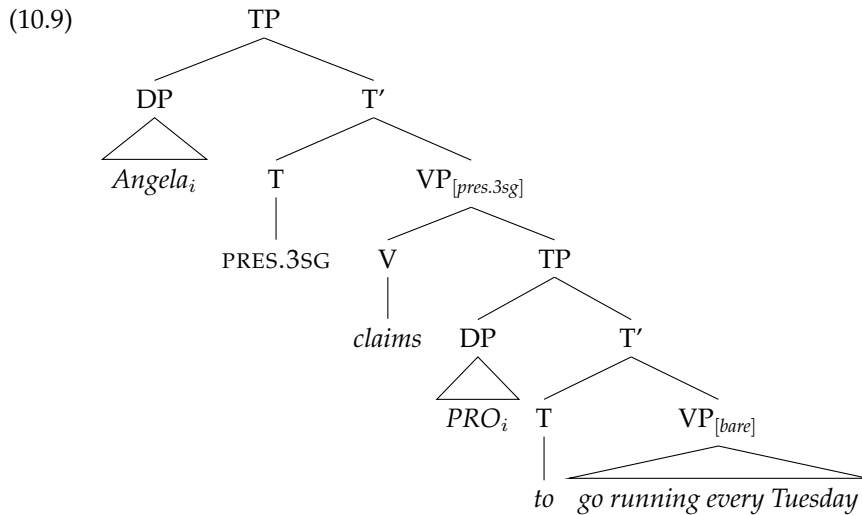
- (10.5) a. Bob wants [the chicken to cross the road] and [the marmoset to brush his hair].  
 b. Bob wants the chicken to cross the road and Fred wants that too.  
 c. Bob doesn't want the marmoset to brush his hair, but *the chicken to cross the road*, Bob wants.

- That makes sense, the structure is very much like a small clause: a DP plus a tenseless predicate. We will call this constituent a TP, headed by a  $[-fin]$  T, *to*.
- What case is assigned to *the chicken* and why?



- Alternative ideas for this structure:
    - Accusative case is assigned by a null Voice head between T and V.
    - *Bob* and *the chicken* are underlyingly in Spec,VP, and raise to the subject position.
  - We've seen a bunch of clause-type complements:
    - CPs headed by *that/ø*,
    - CPs headed by *whether/if*,
    - CPs headed by *for* (also selecting for a  $[-fin]$  TP)
    - now non-finite TPs
  - *want*, *expect*, *consider*, and others license an accusative case DP at the front of the embedded clause. These are ECM (exceptional case marking) verbs.
  - But other verbs don't like having those DPs there at all.
- (10.7) a. Angela claims (\*Barbara) to be intelligent.  
 b. Cassidy desires (\*Dora) to leave the party.  
 c. Maureen tries (\*Angela) to put in more effort.
- We also find ECM verbs which alternatively appear in this configuration as well.
- (10.8) a. Harvey expects to be admired by his teachers.  
 b. Harvey wants to own a Posche  
 c. Harvey expects to wash himself.

- Structurally these look like ECM verbs, except they don't license the accusative DP.
- A prominent idea in GB/Minimalist accounts of these observations.



- This means that structurally, these verbs are like ECM verbs.
- Also, we can explain why Angela gets thematic roles from two sources. She is both the *claimer* and the *runner*. The *claimer* role is saturated by *Angela*, and the *runner* role by a silent pronoun bound by *Angela*.
- So when do we want to posit *PRO* and when do we not want to?

(10.10) a. \**PRO* likes chicken

b. \*I like *PRO*

c. \*Just a little bit too much of *PRO* can ruin your day.

- These above examples might demonstrate that *PRO* has to be co-indexed with something like in (10.9).
- But that generalization is not enough to explain the following:

(10.11) a. \*John<sub>i</sub> claims (that) PRO<sub>i</sub> is intelligent.

b. \*John<sub>i</sub> expects (that) PRO<sub>i</sub> will become a respectable golfer some day.

c. \*John<sub>i</sub> intends PRO<sub>i</sub> dies rich.

- We find perfectly grammatical slight variations.

(10.12) a. John<sub>i</sub> claims PRO<sub>i</sub> to be intelligent.

b. John<sub>i</sub> expects PRO<sub>i</sub> to become a respectable golfer.

c. John<sub>i</sub> intends PRO<sub>i</sub> to die rich.

- Here the following conditions are met for *PRO*:
  - *PRO* accepts a semantic role from the lower clause (also true in (10.11))
  - *PRO* is co-indexed with some higher DP (also true in (10.11))
  - *PRO* is the “subject” of a non-finite clause (only true in (10.12))
- So as far as we can see, there are two types of non-finite complements:
  - With an accusative case subject (ECM)
  - With a null subject, bound by the matrix clause subject (Control)

### 10.2.2 Control and binding

- Something that we've hinted at many times, licensing conditions on reflexives and reciprocals:
  - NB: Charnavel and Sportiche 2017 claim that at least for reflexives, we should stick to *inanimates*, as animate reflexives can be interpreted *logophorically*, i.e., bound by the implicit perspective holder.
- (10.13) a. This fountain washes itself.  
 b. These fountains wash each other.  
 c. \*Itself washes this fountain.  
 d. \*Each other wash this fountain and that fountain.  
 e. \*This fountain<sub>i</sub> demonstrates that my cat can wash itself<sub>i</sub>.  
 f. \*This fountain and that fountain demonstrate that each other are prime tourist hotspots.
- This is obviously just scratching the surface in terms of licensing reflexives/reciprocals, but what's the generalization:
    - a. The bound pronoun cannot be "higher" than the antecedent (c/d).
    - b. An antecedent cannot license a bound pronoun across a clause boundary (e/f)
  - These observations lead us to what's called *Condition A* or *Principle A*:
- (10.14) **Condition A:** (classical)  
 A reflexive/reciprocal must be co-referential with a c-commanding DP in the same clause (Klima 1964, Chomsky 1981, etc).
- Now what should we say about the following? Are these good or bad for our theory?
- (10.15) a. The fountain shows itself to be a prime tourist hotspot  
 b. The lemonade stands have proved each other to be stiff competition.
- What about the following?
- (10.16) a. The fountain allows the town square to attract tourists to itself.  
 b. The fountain allows itself to attract tourists to the town square.  
 c. The lemonade stand has proved itself to be appealing to kids.  
 d. The lemonade stand has proved kids to be attracted to itself.
- (10.17) **Condition A:** (weakened)  
 A reflexive/reciprocal must be co-referential with a c-commanding DP in the same *binding domain* (Chomsky 1986, Charnavel and Sportiche 2016, etc).
- A binding domain is a constituent with a DP-specifier.
  - Under this definition, a binding domain would be any finite clause, and any non-finite clause with a subject.
  - What about control verbs (its hard to give these inanimate subjects, as they tend to be mental attitudes).
  - Question: is the *PRO* of control clauses subject to Condition A?
- (10.18) a. \*This fountain demonstrates that Mary claims *PRO*<sub>i</sub> to be well-known.  
 b. \*The teacher said that Barbara always tries *PRO*<sub>i</sub> to grade the homework.  
 c. \*Mary claims *PRO*<sub>i</sub> to trust Angela<sub>i</sub>.  
 d. \*Barbara always tries *PRO*<sub>i</sub> to copy Maureen's work.

- The classical version of Condition A seems to work. What about the weaker version? i.e., if condition A holds here, a DP cannot bind PRO across a TP-boundary with another DP as its subject.

- (10.19) a. \*Barbara<sub>i</sub> wants Maureen to try PRO<sub>i</sub> to listen.  
b. \*Angela<sub>i</sub> expects Isabelle to expect PRO<sub>i</sub> to win.

- So imposing Condition A (weakened version) on PRO seems like a good idea.
- Now are the following problems for our theory of control clauses and bound-pronouns?

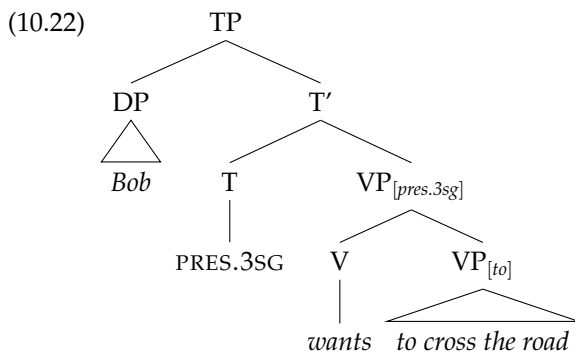
- (10.20) a. Angela claims to trust in herself.  
b. Cassidy wishes to enrol herself in karate class.  
c. Maureen tries to give herself a tattoo.

- A final problem: what should we say about the following?

- (10.21) a. The chicken is believed to have crossed the road.  
b. Close tabs are expected to be kept on my whereabouts.  
c. There are believed to be multiple solutions to this problem.  
d. There are believed to be several alternatives being pursued.  
e. Harvey expects to be admired the professors.  
f. The professors expect to admire Harvey.

- Hopefully, our theories of passives, case, control, and binding all converge here.

- Alternative analyses?: maybe *to*-phrases are only VP sized. This means *want* would select for a VP in its *to*-form (i.e., something like an inflectional category). Any objections?



### 10.3 Raising

- The analysis assuming non-finite clauses are TP-sized (with PRO) explains the behavior of *want*, *expect*, and *try*.

- Compare the following sentences.

- (10.23) a. Harvey wants to own a Porsche.  
b. Harvey seems to own a Porsche.

- (10.24) a. Harvey expects to be admired by the professors.  
b. Harvey seems to be admired by the professors.

- (10.25) a. Harvey likes to take himself seriously.  
b. Harvey seems to take himself seriously.

- So far, so similar. Though we do find that *seem* doesn't allow an accusative case non-finite subject, i.e., it is not an ECM predicate.
- (10.26) a. Harvey wants his wife to own a Porsche.  
b. \*Harvey seems his wife to own a Porsche.
- (10.27) a. Harvey expects his children to be admired by the professors.  
b. \*Harvey seems his children to be admired by the professors.
- (10.28) a. Harvey would like you to wash him.  
b. \*Harvey would seem you to wash him.
- How does *try* compare to *expect* vs. *seem*? So far, we can explain this as a difference between ECM and non-ECM non-finite clause embedding verbs.
  - But the following demonstrate that *seem* might warrant another category.
- (10.29) a. It wants the beer.  
b. \*It seems the beer.  
c. It tries the beer.
- (10.30) a. \*It wants that she is happy.  
b. It seems that she is happy.  
c. \*It tries that she is happy.
- (10.31) a. It wants her to be happy.  
b. \*It seems her to be happy.  
c. \*It tries her to be happy.
- (10.32) a. \*There wants to be beer at the party.  
b. There seems to be beer at the party.  
c. \*There tries to be beer at the party.
- (10.33) a. \*Close tabs want to be being kept on my whereabouts.  
b. Close tabs seem to be being kept on my whereabouts.  
c. \*Close tabs try to be being kept on my whereabouts.
- (10.34) a. \*It wants to be obvious that you are lying.  
b. It seems to be obvious that you are lying.  
c. \*It tries to be obvious that you are lying.
- *try* and *seem* are both non-ECM, explaining (10.31), but other than that, they behave very differently:
    - a. *seem* but not *try/want* allows non-referential DPs in its subject position.
    - b. *seem* allows a DP as its subject which idiomatically composes with the embedded VP (e.g., *close tabs are kept on X, the shit hit the fan*, etc).
    - c. *seem* can embed a finite CP.
  - Let's start with CP-embedding *seem*. How would we account for *It seems that she is happy*? What do we say about *it* here?
  - How are *want/try* and *seem* semantically different (in terms of argument structure)?
- (10.35)  $\left[ \begin{array}{l} \text{Phon: } \textit{seem} \\ \text{Cat: } \textit{V} \\ \text{Select: } \textit{C}_{\textit{that}} \end{array} \right]$

- The following should fall out of a theory which properly distinguishes *seem* from other non-finite clause embedding verbs.

- (10.36)
- a. That she wants to be happy seems to be obvious.
  - b. It seems to be obvious that she wants to be happy.
  - c. \*That she seems to be happy wants to be obvious.
  - d. \*It wants to be obvious that she seems to be happy.

- The final problem: why are the following synonymous?

- (10.37)
- a. Women seem to admire Harvey.
  - b. Harvey seems to be admired by women.

- But not the following:

- (10.38)
- a. Women want to admire Harvey.
  - b. Harvey wants to be admired by women.