# Raising, Control, Null Subject

Ling 322 Read *Syntax*, Ch. 10

### **Revisiting Raising**

- (1) Pete is likely [to leave].
- Theta-grid for *likely* 
  - (2) a. It is likely [that Pete left].
    - b. [That Pete left] is likely.

```
proposition
i
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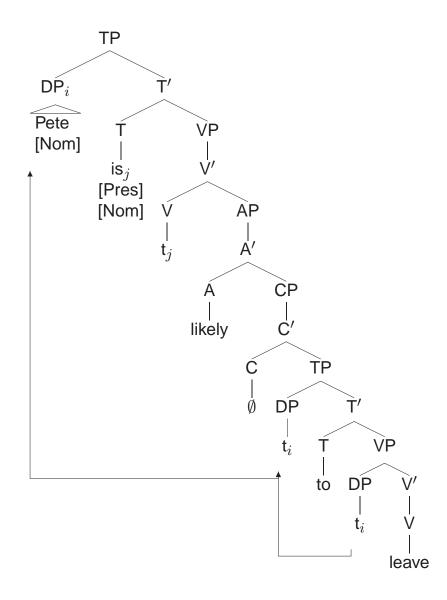
Note: Expletives do not have theta-roles. They do not appear in theta-grids.

Theta-grid for *leave*



## **Revisiting Raising (cont.)**

(3) Pete $_i$  is likely [ $t_i$  to leave].



### **Raising Look-alike: Control**

- (4) Pete is reluctant to leave.
- Theta-grid of *reluctant* 
  - (5) a. \*  $\operatorname{It}_{expl}$  is reluctant [that Pete left].
    - b. \* [That Pete left] is reluctant.

experiencer	proposition
i	k

Who is reluctant? Pete.

• Theta-grid of *leave* 

agent m

Who is doing the leaving? *Pete*.

### Raising Look-alike: Control (cont.)

- Does this mean that Pete starts out as a subject of the infinitival clause and then moves to the matrix clause?
  - (6) [Pete] $_{i/m}$  is reluctant [t $_m$  to leave] $_k$ .
- Then Pete gets two theta-roles: agent role from leave and experiencer role from reluctant.

But what about Theta-criterion?

- The problem is that there are two theta-roles here, but only one DP.
- Solution: There is a second DP, called PRO, which is unpronounced.
  - (7) [Pete]<sub>i</sub> is reluctant [PRO<sub>m</sub> to leave]<sub>k</sub>.

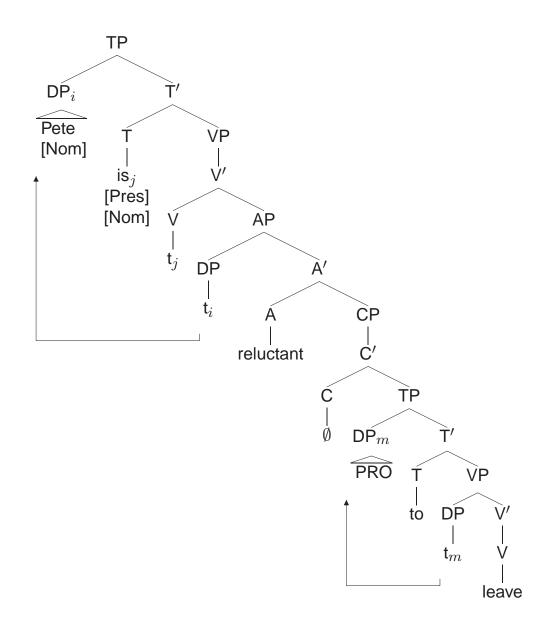
PRO can only appear in the subject position of an infinitival clause.

PRO is not pronounced because it is in a caseless position.

⇒ Subject control structure

## **Subject Control**

(8) Pete is reluctant [PRO to leave].



#### **Object Control**

- (9) Peter persuaded Robert to leave.
- Theta-role of *persuade*

agent	theme	proposition
i	m	k

• Theta-role of *leave* 

agent	
j	

• Robert is the theme of persuade. But he also did the leaving.

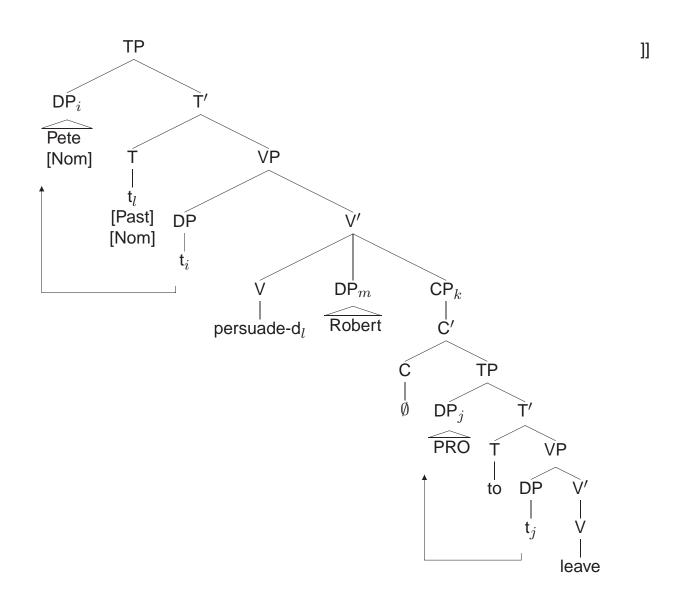
Two theta-roles, but only one DP!

- Solution: PRO as the subject of the infinitival clause.
  - (10) Pete persuaded Robert [PRO to leave].

⇒ Object control structure

## **Object Control (cont.)**

(11) Pete<sub>i</sub> persuaded Robert<sub>m</sub> [PRO<sub>j</sub> to leave]<sub>k</sub>.



#### **How PRO Fits in with the Theory So Far**

- Theta criterion
  - (12) John wants [PRO to kick Fred].

PRO serves as the slot for the agent theta-role of *kick*.

EPP: All clauses must have a subject.

PRO serves as the subject of the inifinitival clause.

- Locality in binding
  - (13) a. John<sub>i</sub> wants [PRO<sub>i</sub> to kick himself<sub>i</sub>].
    - b. The professors<sub>i</sub> persuaded the students<sub>j</sub> [PRO<sub>j</sub> to get along with each other<sub>j</sub>].

PRO serves as the antecedent of an anaphor.

#### Subject Control vs. Subject-to-Subject Raising

- Unlike raising verbs, control verbs impose selectional restrictions on their subjects, assigning theta-roles to them.
  - (14) a. The caterpillar hoped [PRO to become a butterfly].
    - b. # A week hoped [PRO to have elapsed].
- Control predicates cannot have expletive subjects because they assign theta role to the subject.
  - (15) a. \* There tried [PRO to be a problem].
    - b. \* It tried [that there is a problem].
- Subjects of idiom chunks cannot be intervened by control predicates.
  - (16) a. The cat tried [PRO to be out of the bag]. (only literal meaning)
    - b. The pot tried [PRO to call the kettle black]. (only literal meaning)

#### Object Control vs. Subject-to-Object Raising

- In object control structure, the control verb assigns theta-role to the object.
   In subject-to-object raising structure, the raised object gets theta-role from the lower predicate.
  - (17) a. Pete persuaded Robert [PRO to leave].
    - b. Pete wants Robert<sub>i</sub> [t<sub>i</sub> to leave].
- While subject-to-object raising structure allows idiomatic readings, object control structure doesn't.
  - (18) a. Pete wants [the cat] $_i$  [t $_i$  to be out of the bag].
    - b. Pete persuaded the cat [PRO to be out of the bag].

#### **Control vs. Raising**

- QUESTION: Explain why the following derivations are illegal in terms of the theta-criterion.
  - (19) a. \* Mary seems [ PRO to enjoy syntax ].
    - b. \* Mary<sub>i</sub> tries [ t<sub>i</sub> to enjoy syntax].
- QUESTION: Determine whether the underlined predicates are subject-to-subject raising, subject-to-object raising, subject control or object control predicates.
  - 1. Tom tends to enjoy syntax.
  - 2. Tom is ready to leave.
  - 3. Tom <u>advised</u> Mary to leave.
  - 4. Tom intended to leave.
  - 5. Tom imagined Mary to have left.

#### PRO without a Controller: $PRO_{Arb}$

- PRO without any explicit controller within the same sentence is called arbitrary PRO (PRO $_{Arb}$ ). It gets generic impersonal reference, similar to pronoun *one*.
  - (20) a. [PRO $_{Arb}$  To walk alone late at night] is not wise.
    - b. [PRO $_{Arb}$  To smoke too much] is bad for health.
    - c. John thinks that it is important [ $PRO_{Arb}$  to behave oneself in public].

#### Little pro

Many languages allow subjects to be unpronounced.

#### (21) Italian

- a. Gianni ha parlato.Gianni has spoken
- b. Lei ha parlato.he has-3sg spoken
- c. *e* ha parlato. has-3sg spoken 'He has spoken.'
- d. Gianni ha detto [CP che [TP e ha parlato]]. Gianni has said that has-3sg spoken 'Gianni has said that he has spoken.'
- If EPP is correct, then subjectless clauses must have an unpronounced subject: null subject.

#### Little pro (cont.)

#### (22) Italian

- a. e ha parlato.has-3sg spoken'He has spoken.'
- b. Gianni ha detto [ $_{CP}$  che [ $_{TP}$  e ha parlato]]. Gianni has said that has-3sg spoken 'Gianni has said that he has spoken.'
- Is this null subject PRO? No. It has case.
- DP-trace?

No. There is no antecedent for it in (22a).

In (22b), the null subject can be coreferential with *Gianni*, but it can also refer to something else in the discourse context.

Gianni and the null subject cannot form a movement chain. If they did, theta-criterion and case theory would be violated.

#### Little pro (cont.)

- The null subjects in (22a) and (22b) are base-generated covert pronominal elements: *pro* (also called little *pro*).
- Little pro has a case and a theta-role.
- Little *pro* has a definite reference. Like a pronoun, it may refer to an entity in the discourse context, or it may be coindexed with an element in the same clause.

### **Cross-linguistic variation in** *pro-***drop**

- Null Subject Parameter: Some languages allow pro and some do not. Why?
- A correlation between richness of agreement inflection and pro

person/number	English	Italian
1sg	speak	parl-o
2sg	speak	parl-i
3sg	speak-s	parl-a
1pl	speak	parl-iamo
2pl	speak	parl-ate
3pl	speak	parl-ano

- ⇒ Little *pro* is licensed if it can be identified by agreement inflection.
- But what about East Asian languages like Korean, Japanese, and Chinese?
   None of these languages have person/number inflections, but pro is allowed.
  - James Huang (1984) proposes that *pro* is possible either in languages with rich agreement or no agreement at all.