

November 18, 2005

CLASS 21: DP-/A-MOVEMENT

A-MOVEMENT

- Movement of $\boxed{\text{DP}}$ to an A(rgument)-position
- Examples: **passive** and **raising**


DOUBLE PUZZLE ABOUT PASSIVE


(I) Passive verbs, unlike their active counterparts, do not assign Accusative Case.

Case Filter: every DP must be assigned Case.

- (1) The war killed **him**.
- (2) a. * Was killed him.
b. * There was killed him.
c. * It was killed him.
- (3) **He** was killed.

- ECM (Exceptional Case Marking):

- (4) a. People believe [that he is a liar].
 b. People believe [**him**_A/***he**_N to be a liar].
 ECM 

- (5) a. It is believed [that he is a liar].
 b. It is believed [***him**_{ACC} to be a liar].
 no ECM 

c. **He** / ***him** is believed [___ to be a liar].

(II) Passive verbs do not assign a thematic role to the subject position.

Theta-Criterion (bi-directional): all non-expletive DPs must be assigned one theta-role and every theta-role must be assigned to one non-expletive.

- "Raising" verbs:

- (6) It seems that Tony is a liar.
expletive "it" → no thematic role
- (7) * What seems that Tony is a liar?

Compare...

- (8) a. It is on the table.
b. What is on the table?

- *Similarly with passives:*

- (9) It is believed that Tony is a liar.
expletive "it" → no thematic role
- (10) * What is believed that Tony is a liar?

- *Conclusion*

Unlike their active counterparts, passive verbs...

- (i) do not assign Accusative Case to their complements, and
- (ii) do not assign the subject thematic role.

- *Hypothesis:*

The DP in complement position at D-structure moves to the subject position at S-structure in order to receive Case [motivation for movement], so that the Case Filter is not violated [explanation].

Note the following contrasts:

- (11) a. It is likely [(that) Tony will be late].
 b. Tony is likely [____ to be late].
- (12) * It is likely [Tony to be late].
- (13) * Tony is likely [____ will be late].

• *Your textbook (p. 94):*

A DP must be assigned Case.

A more comprehensive formulation, symmetrical in the way that the theta-criterion is symmetrical:

Every DP must be assigned one Case, and every Case must be assigned to one DP.

NOM



(14) It seems [(that) Amy is a genius].



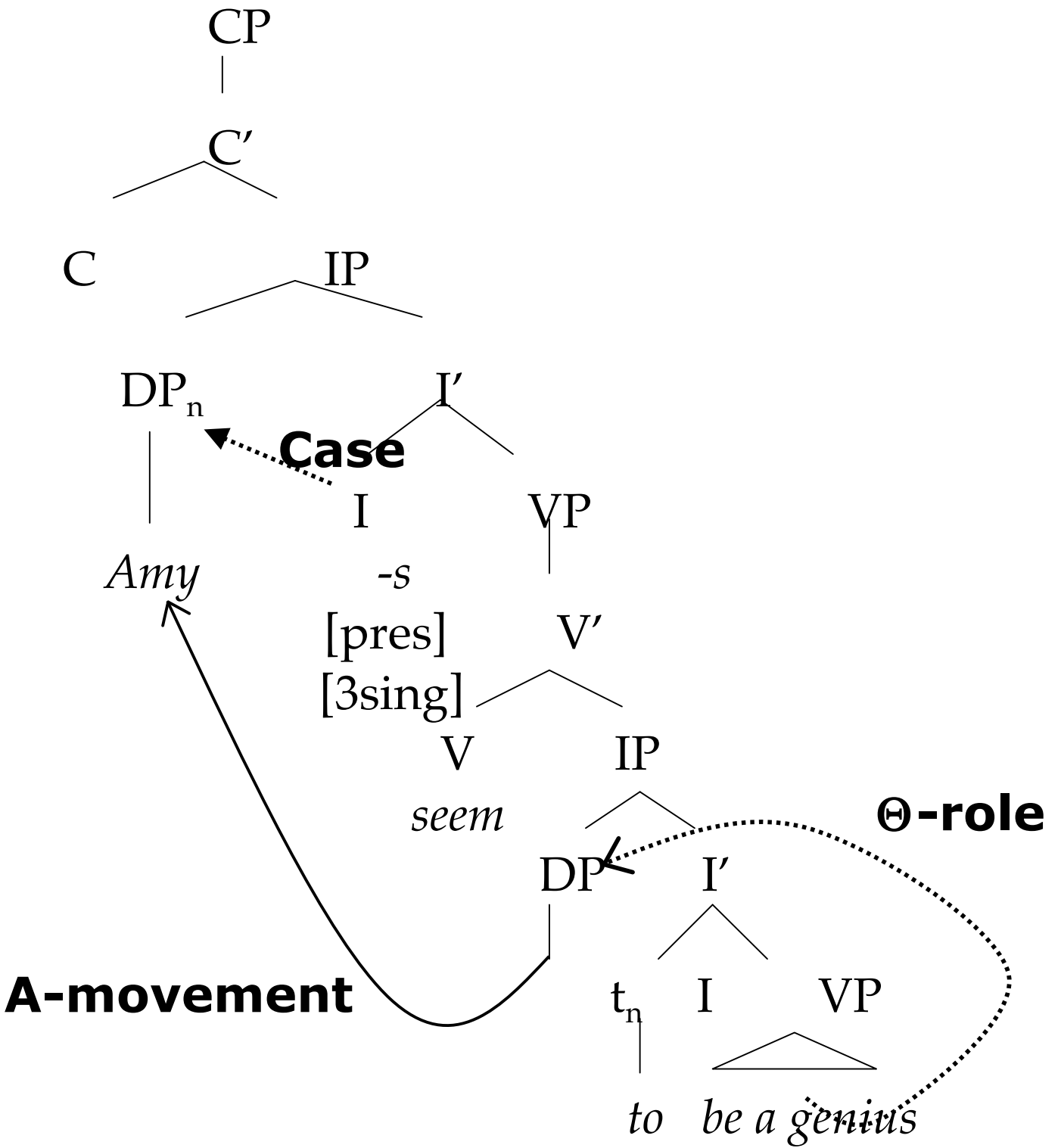
(15) NOM



NOM

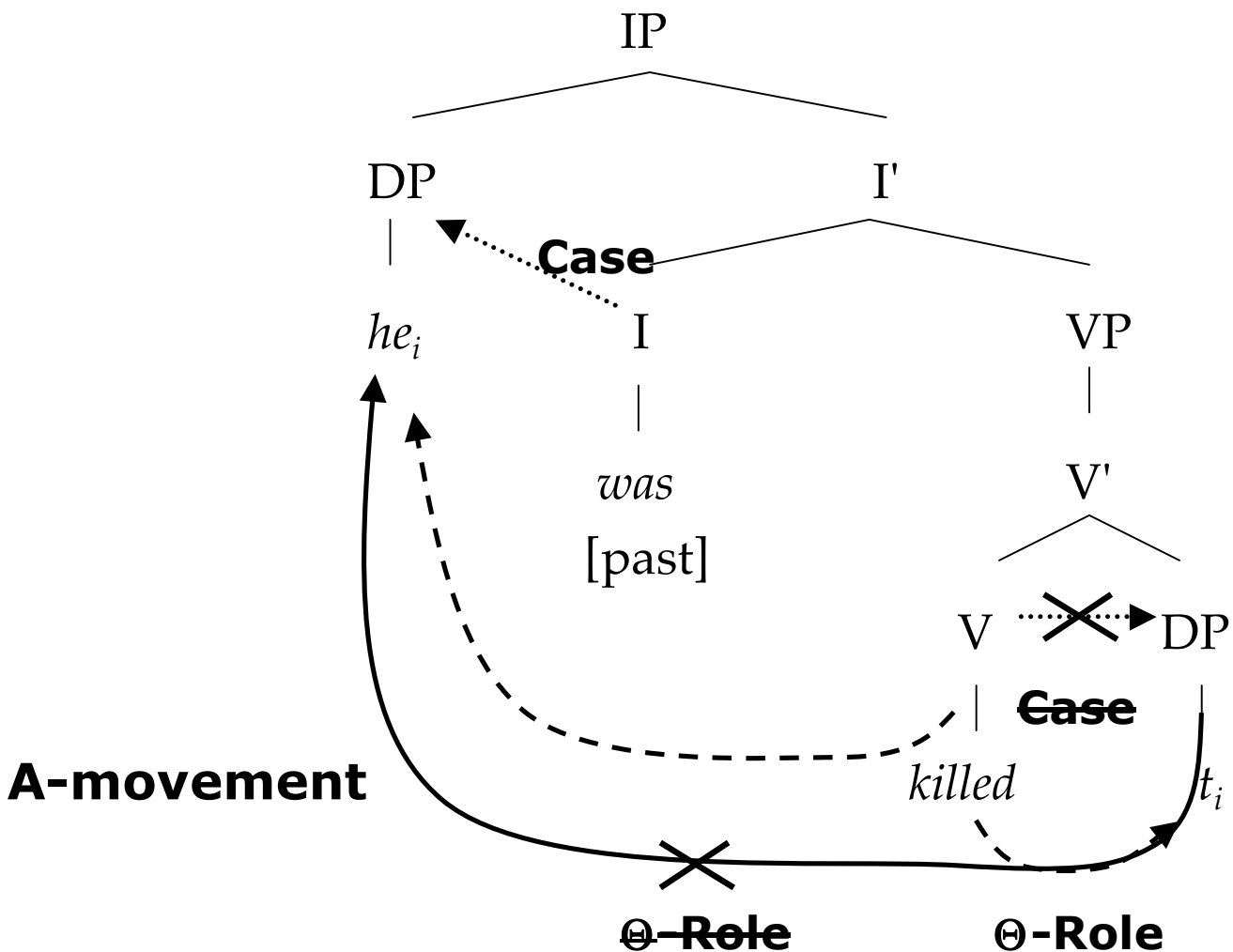
* Amy_n seems [(that) __ is a genius].

Amy seems to be a genius.



Theta-Criterion and Case Filter allowed us to account for passives (with a few more assumptions...)

- *Passive verbs do not assign accusative Case to their complements.*
 - *This creates the need to move = to get Case*
- *Passive verbs do not assign a subject theta-role to their subjects.*
 - *This creates a position for the verbal complement to move into where it can receive case*



PASSIVE

(16) The war killed **him**.

(17) a. * Was killed him.

(Case Filter and EPP)

b. * There was killed him.

(Case Filter)

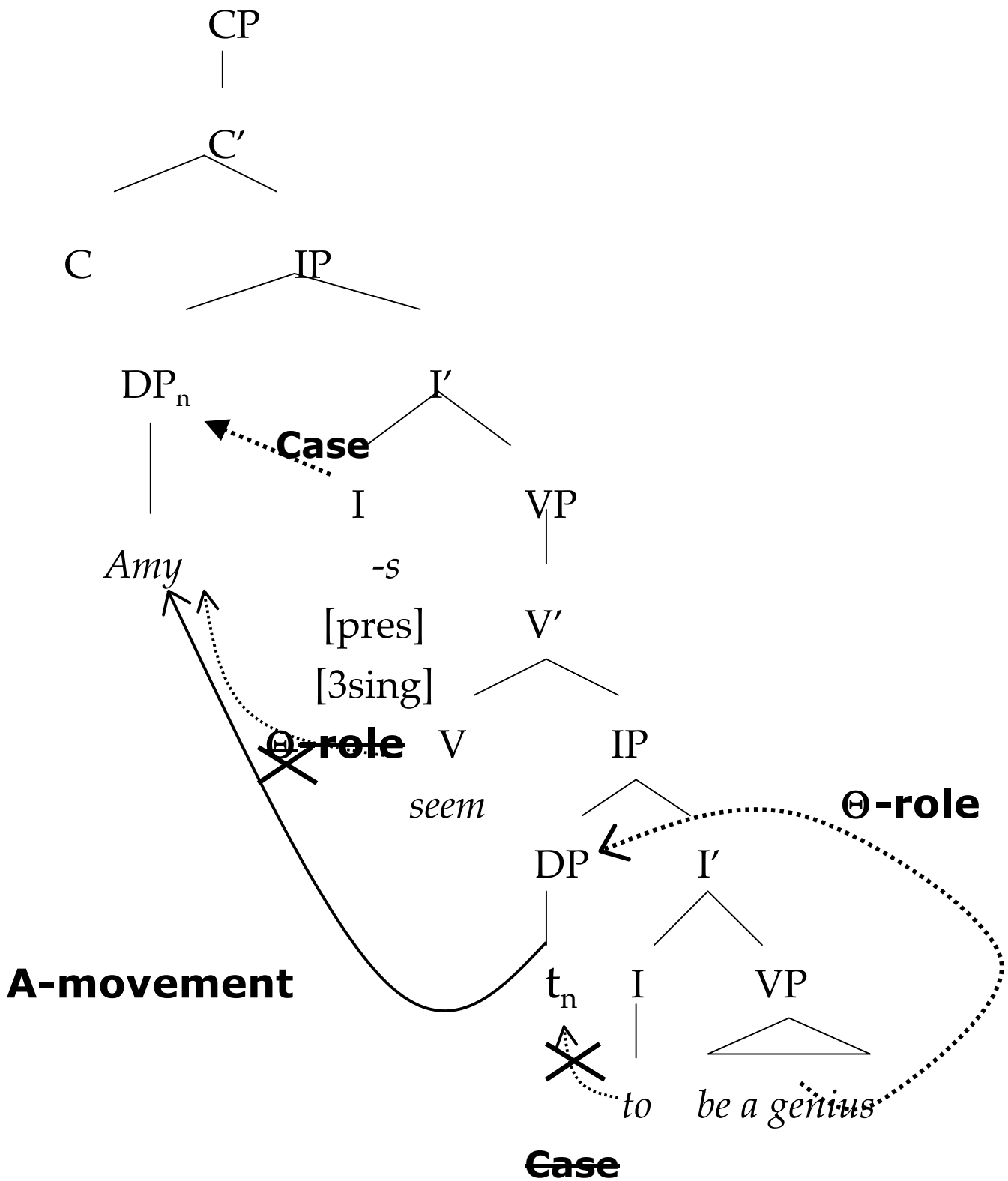
c. * It was killed him.

(Case Filter)

(18) **He** was killed.

The Theta-Criterion and the Case Filter also allowed us to account for raising...

- *Raising verbs do not assign a subject theta-role*
 - *Expletives can appear in subject position*
- *Non-finite Infl does not assign case*



RAISING

- (19) a. It seems [_{CP} that six executives like X]
 b. It is likely [_{CP} that six executives like X]
- (20) a. Six executives seem [_{IP} *t* to like X]
 b. Six executives are likely [_{IP} *t* to like X]
- (21) a. * __ seem(s) [six executives to like X]
 b. * __ is/ are likely [six executives to like X]
(Case Filter and EPP)
- (22) a. * It seems [six executives to like X]
 b. * It is likely [six executives to like X]
(Just Case Filter)

Note:

It is always a good idea to test both raising verbs like seem and raising adjectives like (be) likely.

SUCCESSIVE CYCLICITY OF A-MOVEMENT?

- (23) They are believed [_{IP} ? to be likely
 [_{IP} *t* to like the president]]

There must be a trace in the lowest clause because of the Θ -criterion. Is there one in the middle clause? Or is the movement in 'one fell swoop'?

Here's another sentence that might offer some evidence in either direction:

- (24) They are likely [*t'* to appear to each other
 [_{IP} *t* to like the president]]

Can *each other* and *they* co-refer? What does it mean if they can? (or cannot?)

SUCCESSIVE CYCLICITY OF A-MOVEMENT?

Here's what Chomsky says about (24):

"The intermediate trace is necessary in (24) to serve as the antecedent of *each other*, which requires an antecedent in the same clause in such sentences in accordance with binding theory..."

Chomsky Lectures on Government and Binding
(1981), pp. 44-45.

BUT, as you may recall from two classes ago, our formulation of Binding Theory does not actually require that an anaphor have an antecedent in the same clause, just in the same Governing Category. Suppose there were no intermediate trace in (24). What would the GC of *each other* be?

CHAINS

We said last class that subject-verb agreement happens before movement (at D-structure) in order to explain (25).

- (25) a. Which boy_i will he say [t_i **likes/*like** Mary]
- b. Which boys_i will he say [t_i ***likes/like** Mary]

At S-structure, the *wh*-words are not in a configuration where they can agree with their verbs, but they are at D-structure.

Recall from our previous discussions that we get the opposite effect in raising and passives: S-structure subjects agree with the verb, not D-structure subjects.

- (26) a. John_i **is/*are** likely [t_i to be here]
- b. John and Mary_i ***is/are** likely [t_i to be here]

Is subject-verb agreement at D-structure or S-structure?


SOLUTION: agreement between verbs and chains

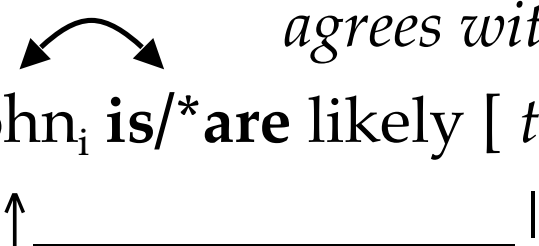
A moved element and its trace(s) form a chain.

(27) John_i **is**/***are** likely [*t*_i to be in the room]
 ↑ _____ ↓


In (27) the moved DP and its trace form a chain. We say that the chain in (27) has two members, *John* and the trace *t*. In fact, if there are multiple movements, a chain is a record of all movement stops. In the case of a single DP (like *the room*) which has not moved, we say that the DP forms a *one-membered chain*.

Now we can say that a verb can agree with the *head* (the moved element) or the *tail* (the trace) of a chain at S-structure (or, any member of a chain.)

(28) a. which boy_i will he say t_i *likes*/*like Mary.

agrees with tail

b. John_i *is*/*are likely [t_i to be in the room]

agrees with head

Recall our Case Filter question:

(29) [what]_i may Mina buy t_i


It looks as though *wh*-words like *what* can satisfy the Θ -criterion at D-structure and then move. But what about the Case Filter? The Case Filter is supposed to apply at S-structure, but there is not a DP in the case position at S-structure.

Does the Case Filter apply at D-structure? No!

(30) Six executives seem [_{IP} *t* to like the pres.]

(31) He was killed *t*

SOLUTION:

Revise the Case Filter so that it applies to *chains* not a single instance of a DP.

Revised Case Filter: (*different from p. 158*)

- i. Each DP chain must be assigned one Case,
- ii. every Case must be assigned to one DP chain.

The revised Case Filter still applies at S-structure. So, now we can say that *what* in (32) does receive Case because it is a member of a chain that receives Case.

(32) [what]_i may Mina buy *t_i*
 ↑ _____ |

Passive and Raising constructions also abide by the revised Case Filter, since the chains created by movement only receive one Case (and all Cases are assigned.)

(33) Six executives_i seem *t_i* to like the president.
 ↑ _____ |

(34) He_i was killed *t_i*
 ↑ _____ |

We also have an answer to a question brought up a few classes ago: *why don't traces need Case?*

Answer: they get Case when they are members of chains that get Case.

Traces and chains are very powerful parts of our theory. Notice what they allow us to do.

Before traces and chains, transformations changed D-structures irrecoverably. With traces and chains, we *retain* information about D-structure at S-structure (namely the starting position of the item that has moved.)

This allowed us to provide answers to the subject-verb agreement, Case Filter and EPP problems: revise each constraint so that when they apply at S-structure, they *in effect* use both D-structure and S-structure information (and actually the whole record of movement) by applying to chains.

Chains allow us to state constraints like the Case Filter and the EPP as S-structure constraints, but in effect allow them to apply to any part of the derivation. That is, the EPP can be satisfied as long as a DP is *or has been* in the Spec of IP during the derivation.