## A versus A' Movement

## A. Two types of movement

- The two types of movements are named for the kind of position that the constituent moves to (the landing site)
- A movement: landing site is an A (rgument) position
- passive
- unaccusative advancement
- subject-to-subject raising
- $\mathrm{A}^{\prime}$ movement: landing site is an $\mathrm{A}^{\prime}$ (non-argument) position
- wh-movement
- topicalization
- relative clause formation
- A(rgument) positions: subject position, object position, complement position
- non-A(rgument) (A') positions: adjoined position, specifier of CP , other non-complement positions


## B. Differences between $A$ and $A^{\prime}$ movement

|  | A MOVEMENT | A' $^{\prime}$ MOVEMENT |
| :--- | :--- | :--- |
|  | passive, unaccusative <br> advancement, raising | Russian topicalization, English <br> wh-movement |
|  |  | A' position |
| Landing site | A position | unrestricted (DPs and other <br> categories) |
| Category of moving element | DPs only | unbounded |
| Locality | clause-bound | no new binding options, <br> BT evaluated before movement |
|  <br> Binding Theory (BT) | creates new binding options, <br> BT evaluated after movement | yes |
| Parasitic gap licensing | No | yes |
| Crossover violations | No | can only feed A' movement |
| Ordering | can feed A or A' mvt |  |

## C. Diagnostics

## 1. Category constraints

- A movement: only DPs
(1) a. The criminal was arrested the criminal (by the police).
b. *Under the bed was slept under the bed (by the dog).
- A' movement: various kinds of phrases (DP, PP, AP, etc.)
(2) a. Who will you choose whe in the election?
b. In which book has she hidden the money in which book?
c. How happy did he seem how happy to you?


## 2. Locality

- A movement: clause-bound or crossing at most a nonfinite TP
(3) a. Mary was arrested Mary.
b. Mary seems [Mary to like snails].
(4) a. *Mary seems [that Mary likes snails].
b. *Mary seems [that it is likely [Mary to like snails]].
- A' movement: potentially unbounded but subject to islands
(5) a. Who should she call whe?
b. Who did you say [that she should call whe]?
c. Who might Bob claim [that you said [that she should call whe]]?
d. etc.
- An island is a syntactic configuration out of which movement is impossible: embedded question, relative clause, clausal adjunct, subject, etc.

3. Interaction with binding
a. Binding Theory
(6) Binding Principles
A. A reflexive must be bound in its minimal clause
B. A pronoun must be free in its minimal clause
C. A Referring expression must be free everywhere
(7) a. X is bound if it is coindexed with a c-commanding antecedent
b. X is free if X is not bound

- A movement creates new binding options. The Binding Principles can be satisfied after A movement.
Principle A
(8) The children seem to each other the children to be happy.

Principle B
(9) *They seem to them they to be happy.

Principle C
(10) *She seems to Mary she to be happy.

- A' movement does not change binding options. The Binding Principles seem to apply before A' movement (so-called Reconstruction)
Principle A
(11) a. Which picture of herself do you think Mary will display which pieture of herself?
b. Who did Mary say whe killed himself?
c. Herself, we suspect she admires herself most.


## Principle B

(12) a. *Who did Mary say whe killed him?
b. *Her, I think she admires her most.

## Principle C

(13) a. *Which investigation of Don did he resent which investigation of Don most?
b. *How many claims that Don is a crook will he tolerate how many claims that Don is a crook?

## a. Bound variable interpretation of pronouns

(14) a. X is bound if it is coindexed with a c-commanding antecedent
b. X is free if X is not bound
(15) A bound variable interpretation of a pronoun requires that the pronoun be bound by a quantified noun phrase
(16) a. Everyone thinks that he will win.
(can mean "Everyone thinks about himself that he will win")
b. Who thinks that he is smart?
(can mean "Who thinks about himself that he is smart?")
c. $\quad$ He thinks that everyone will win.
(cannot mean "Everyone thinks about himself that he will win")
d. *A picture of everyone is on his desk.
(cannot mean "Every person has a picture of himself on his desk")
A movement: bound variable interpretation possible after movement
(17) Everyone seems to himself everyone to be the best choice.

A' movement: no bound variable interpretation possible after movement
(18) $\quad$ Who does his mother think that I should praise whe?
(cannot mean "Who is the person such that his mother thinks that I should praise him?")

## 4. Parasitic gaps

- A parasitic gap is a gap inside an island that is nonetheless grammatical, because of the presence of another gap elsewhere in the sentence
- A' movement: licenses parasitic gaps
(19) a. Which book did you throw away __ without first consulting with me?
b. *Which book did Mary give a talk [without first reading _ ]?
c. Which book did you throw away __ [without first reading __pg]?
- A movement: does not license parasitic gaps
(20) a. *John was arrested __ after I met __pg.
b. *John seems __ to have read the letter before we saw $\qquad$ pg.


## 5. Crossover

- Strong Crossover (SCO) configuration: an element undergoing movement crosses over a coindexed pronoun that c-commands the origin site of the moved element

- Weak Crossover (WCO) configuration: an element undergoing movement crosses over a coindexed pronoun that does not c -command the origin site of the moved element

- A' movement: Crossover configurations are ungrammatical
(23) a. *Who does he think Mary likes whe?

SCO
intended meaning: Who thinks that Mary likes him?
b. *Who did you say he made you visit whe?
intended meaning: Who did you say made you visit him?
(24) a. ??Who did his mother say Mary likes whe?

WCO
intended meaning: Whose mother said Mary likes him?
b. ??Who does his boss dislike?
intended meaning: Whose boss dislikes him?

- A movement: Crossover configurations are grammatical
(25) a. John strikes himself as Jehn the best choice.

SCO
b. John seems to his mother John to be the best candidate.

WCO

## 6. Ordering

- A movement can feed A' movement or another A movement
(26) Who whe will be invited whe?
(27) John seems to me John to have been cheated Johm.
- A' movement cannot feed A movement
(28) a. It seems that Mary likes this guy.
b. It seems [that this guy, Mary really likes this guy].
c. *This guy seems [that this gey Mary really likes this gmy].
(29) Improper Movement

Movement from an A' position to an A position in impossible

## D. Summary

- If we find a phenomenon that looks like movement, the first step is to determine whether it really is movement or not
- If it is movement
- What is moving?
- Where is it moving to?
- Under what conditions does the movement take place?
- Is this movement A or A' movement?
- There are two types of movement (A and $\mathrm{A}^{\prime}$ ) and they have different properties

